LG&E ENERGY®

LG&E Energy LLC
220 West Main Street (40202)
P.O. Box 32030
Louisville, Kentucky 40232

December 22, 2005

Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

RE: ***Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky***
Case No. 2005-00467

Dear Ms. O'Donnell:

Enclosed please find an original and ten (10) copies of Louisville Gas and Electric Company's ("LG&E") and Kentucky Utilities Company's ("KU") Joint Application and Testimonies in the above-referenced docket.

Pursuant to 807 KAR 5:001, Section 9(2)(d) and 807 KAR 5:120, Section 2(2), the Companies are required to file maps in a scale of 1 inch equals 1,000 feet showing the proposed transmission line and alternative routes that were considered. The required maps are labeled Exhibit 2 and Exhibit 4, respectively, to this Application. Three copies of each of these maps are filed concurrently with the Commission under separate cover due to their size. Copies of these exhibits on a smaller scale are included in the bound volume for convenience.

Also filed herein is a Motion to Consolidate in which the Companies respectfully move the Commission to consolidate this proceeding with Case No. 2005-00472, *In the Matter of: Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Alternative Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky.*

Should you have any questions concerning the enclosed, please do not hesitate to contact me at (502) 627-4110.

Sincerely,

John Wolfram
Manager, Regulatory Affairs

cc: Parties of Record, Case No. 2005-00142

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	**CASE NO. 2005-00467**

* * * * * * * * * * *

MOTION TO CONSOLIDATE

Louisville Gas and Electric Company and Kentucky Utilities Company (collectively the "Companies") respectfully move the Commission to consolidate this proceeding with Case No. 2005-00472, *In the Matter of: Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Alternative Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky.* In support of the foregoing motion, the Companies state that this proceeding and Case No. 2005-00472 involve numerous common issues of fact and law, the same analyses of potential transmission line routes and the same witnesses for the Companies. There is a great deal of commonality between the two routes in that the primary portion of each route traverses the same line and impacts the same landowners. In Case No. 2005-00472 the Companies have made an alternative application for a Certificate of Public Convenience and Necessity ("CCN") for a different route between the same two points in the event the

Commission does not grant the CCN requested in this proceeding. Administrative efficiency will be enhanced if both proceedings are consolidated and proceed as one.

The Companies, therefore, pray that the Commission consolidate this proceeding with Case No. 2005-00472 for all purposes.

Dated: December 22, 2005

Respectfully submitted,

Robert M. Watt, III
Stoll, Keenon & Park, LLP
300 West Vine Street, Suite 2100
Lexington, Kentucky 40507
(859) 231-3000

J. Gregory Cornett
Ogden Newell & Welch PLLC
1700 PNC Plaza
500 West Jefferson Street
Louisville, Kentucky 40202
Telephone: (502) 582-1601

Elizabeth L. Cocanougher
Senior Regulatory Counsel
E.ON U.S. Services Inc.
220 West Main Street
Post Office Box 32010
Louisville, Kentucky 40232
Telephone: (502) 627-4850

Counsel for Louisville Gas and Electric Company and Kentucky Utilities Company

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	**CASE NO. 2005-00467**

* * * * * * * * * * *

APPLICATION

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively, the "Companies"), pursuant to KRS 278.020, et seq., 807 KAR 5:001 and 807 KAR 5:120, hereby apply to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity for the construction of certain electric transmission facilities to be located in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky. In support of this Application, the Companies state as follows:

1. Address. LG&E's full name and address is: Louisville Gas and Electric Company, P.O. Box 32010, Louisville, Kentucky 40232. KU's full name and business address is: Kentucky Utilities Company, One Quality Street, Lexington, Kentucky 40507. Both LG&E's and KU's mailing addresses are: P.O. Box 32010, Louisville, Kentucky 40232.

2. Articles of Incorporation. Certified copies of the Companies' Articles of Incorporation are already on file with the Commission in Case No. 2005-00471, *In the Matter of: Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Authority to Transfer Functional Control of their Transmission System*, and are incorporated herein by reference pursuant to 807 KAR 5:001, Section 8(3).

3. Description of Proposed Transmission Facilities. The Companies seek a certificate of public convenience and necessity to construct a 345 kV transmission line, approximately 41.9 miles in length, running from LG&E's Mill Creek Generating Station ("Mill Creek Station") through Jefferson County, Bullitt County, Meade County and Hardin County to KU's Hardin County Substation near Elizabethtown, Kentucky. LG&E will own that portion of the line beginning at the Mill Creek Station and running to the east boundary of the Fort Knox Military Reservation, and KU will own the remainder of the proposed line from the east boundary of the Fort Knox Military Reservation to the Hardin County Substation. 807 KAR 5:001, Section 9(2)(c).

4. Notice of Intent. The Companies filed their Notice of Intent to file this Application with the Commission on November 18, 2005, pursuant to 807 KAR 5:120, Section 1. A copy of the Notice of Intent is attached hereto as Exhibit 1.

5. Statement of Necessity. The proposed transmission facilities will be utilized to transmit electric power required by the projected load that will be served from the 750 MW nominal net (732 MW summer rating) supercritical pulverized coal fired base load generating unit, approved by the Commission in Case No. 2004-00507, to be located at the Trimble County Generating Station ("TC2") as well as base load that will be served from other sources. The need for these facilities was established in, and

approved by, the Commission in Case No. 2005-00142, and is described in more detail in the direct testimonies of Michael G. Toll and John Wolfram, submitted herewith. 807 KAR 5:001, Section 9(2)(a).

6. Statement of Convenience. The route of the transmission line is designed to serve the projected load with as little negative impact as can be reasonably afforded, while maximizing the use of existing facilities and utility corridors to the extent practicable. In deciding upon the route for this proposed line, the Companies addressed the Commission's directive in its final order in Case No. 2005-00142, to thoroughly review "all reasonable alternatives, including locating the line partially or fully along existing transmission corridors." The Companies also followed the five-step route-selection process identified by Commission Staff in its October 5, 2005 Intra-Agency Memorandum in Case No. 2005-00142. The Companies' process identified over 1200 potential routes for further study, and the proposed route was determined through extensive study, conducting field surveys, evaluating the topography along the routes considered and adjusting the route as appropriate, consistent with sound engineering and regulatory principles. The direct testimonies of Mark S. Johnson and Clayton M. Doherty, submitted herewith, contain detailed discussions of the reasons that the proposed construction serves the public convenience and are incorporated herein by reference. 807 KAR 5:001, Section 9(2)(a).

7. Permits or Franchises. The Companies are not required to obtain franchises from any public authorities and, thus, none are submitted herewith as required by 807 KAR 5:001, Section 9 (2)(b). Pursuant to 807 KAR 5:001, Section 9(2)(b), copies of all permits relating to the proposed construction that the Companies have

obtained from public authorities are attached hereto. The Companies may be required to obtain FAA, highway and railroad crossing permits as well as certain environmental and construction-related permits associated with the construction of the proposed transmission line. Copies of such permits, if any, will be filed with the Commission, as obtained, to the extent required by law or requested by the Commission.

8. Description of Locations and Routes. A full description of the proposed location and route of the transmission facilities and a description of the manner in which the same will be constructed is contained in the direct testimony of Mark S. Johnson, as required by 807 KAR 5:001, Section 9(2)(c). The route of this proposed line is referred to as "Mill Creek to Hardin County Route No. 1." The proposed transmission line will not compete with any public utilities, corporations or persons. The Companies are also seeking the authority to make modifications to the specific route of the proposed line, within the corridor of properties identified herein, so long as the property owner on whose property the modification has been made agrees to the change, without the need to seek any further approval from this Commission.

9. Route Maps. Pursuant to 807 KAR 5:001, Section 9(2)(d) and 807 KAR 5:120, Section 2(2), maps in a scale of 1 inch equals 1,000 feet showing the proposed transmission line, including the affected property boundaries as indicated on the counties' property valuation administrators' maps, and the location of all facilities, rights of way and easements are submitted herewith as Exhibit 2. Sketches of proposed typical transmission line support structures are attached as Exhibit 3. Separate maps showing any alternative routes that were considered are attached as Exhibit 4.

10. Financing of Construction. The Companies expect to initially finance the cost of construction of the proposed facilities with internally-generated cash and short-term debt. Ultimately, the costs will be consolidated into the capital structure and funded consistent with the Companies' overall mix of debt and equity. The debt is expected to be a combination of short-term debt, in the form of commercial paper notes, loans from affiliates via the money pool, bank loans, and/or long-term intercompany loans from E.ON affiliates. The Companies will seek the Commission's approval of any debt instruments as necessary. The additional equity will come in two forms: retaining current earnings and equity contributions from LG&E Energy. The mix of debt and equity used to finance the project will be determined so as to allow the Companies to maintain their strong investment-grade credit ratings. The Companies will continue to evaluate financing alternatives during construction of the project and will seek the approval of the Commission before entering into any alternative financing as necessary. 807 KAR 5:001, Section 9(2)(e).

11. Cost of Operation. The estimated cost of operation of the proposed transmission facilities is anticipated to be de minimis in the first six years of operation; thereafter, based on historical averages, operations and maintenance expense attributable to the transmission line is estimated to be approximately $150,000-160,000 per year. 807 KAR 5:001, Section 9(2)(f).

12. Notice to Landowners. The undersigned hereby verifies that, according to property valuation administrator records in each of the counties in which the proposed construction will be located, each property owner over whose property the transmission line is proposed to cross has been sent by first-class mail, addressed to the property owner

at the owner's address as indicated by the county property valuation administrator records, a notice containing the information set forth in 807 KAR 5:120, Section 2(3). A sample copy of each such notice is attached hereto pursuant to 807 KAR 5:120, Section 2(4) and designated Exhibit 5. A list of the names and addresses of the landowners to whom such notice was sent is attached hereto pursuant to 807 KAR 5:120, Section 2(4) and designated Exhibit 6.

13. Newspaper Notice. Notices of the intent to construct the proposed transmission lines have been published in newspapers of general circulation in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky, which notices included the information set forth in 807 KAR 5:120, Section 2(5). Copies of the newspaper notices for the transmission line are attached hereto pursuant to 807 KAR 5:120, Section 2(6) and designated, collectively, Exhibit 7.

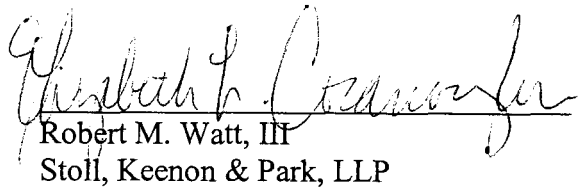
14. Effect on Financial Condition of Utility. The proposed project does not involve sufficient capital outlay to materially affect the financial condition of the Companies. 807 KAR 5:120, Section 2(7).

WHEREFORE, Louisville Gas and Electric Company and Kentucky Utilities Company respectfully request the Commission to issue an order granting them: (1) a certificate of public convenience and necessity for the construction of a 345 kV transmission line in Jefferson, Bullitt, Meade and Hardin Counties along the Mill Creek to Hardin County Route No. 1 as proposed herein; (2) the authority to make modifications to the specific route of the proposed line, within the corridor of properties identified herein, so long as the property owner on whose property the modification has

been made agrees to the change, without the need to seek any further approval from this Commission; and (3) any and all other relief to which they may be entitled.

Dated: December 22, 2005

Respectfully submitted,



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Telephone: (502) 582-1601

Elizabeth L. Cocanougher
Senior Regulatory Counsel
E.ON U.S. Services Inc.
220 West Main Street
Post Office Box 32010
Louisville, Kentucky 40232
Telephone: (502) 627-4850

Counsel for Louisville Gas and Electric Company and Kentucky Utilities Company

VERIFICATION

The undersigned, John Wolfram, Manager, Regulatory Affairs for E.ON U.S. Services Inc. on behalf of Louisville Gas and Electric Company and Kentucky Utilities Company, hereby states that he has read the foregoing Application and that the statements contained therein are true and correct to the best of my knowledge and belief this 22 day of December, 2005.

John Wolfram

STATE OF KENTUCKY)
COUNTY OF JEFFERSON)

The foregoing verification was subscribed and sworn to before me by John Wolfram as Manager, Regulatory Affairs for E.ON U.S. Services Inc., on this 22nd day of December, 2005.

My commission expires: _____.

TAMMY J. ELZY
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
My Commission Expires Nov. 9, 2006

NOTARY PUBLIC

LG&E ENERGY

LG&E Energy LLC
220 West Main Street (40202)
P.O. Box 32030
Louisville, Kentucky 40232

November 18, 2005

RECEIVED
NOV 18 2005
PUBLIC SERVICE COMMISSION

Ms. Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40601

RE: ***In the Matter of: Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky*** -- **Case No. 2005-** 00467

Dear Ms. O'Donnell:

Please take notice that, pursuant to KRS 278.020 and 807 KAR 5:120, Louisville Gas and Electric Company and Kentucky Utilities Company plan to file, on or after December 19, 2005, an application for a certificate of public convenience and necessity for the construction of a 345 kV transmission line in portions of Jefferson, Bullitt, Meade and Hardin Counties in Kentucky. Specifically, that proposed line will run from the Mill Creek Generating Station in Jefferson County to the Hardin County Substation in Hardin County.

The business address and telephone number for these utilities are:

220 West Main Street
Louisville, Kentucky 40202
Telephone: (502) 627-2000

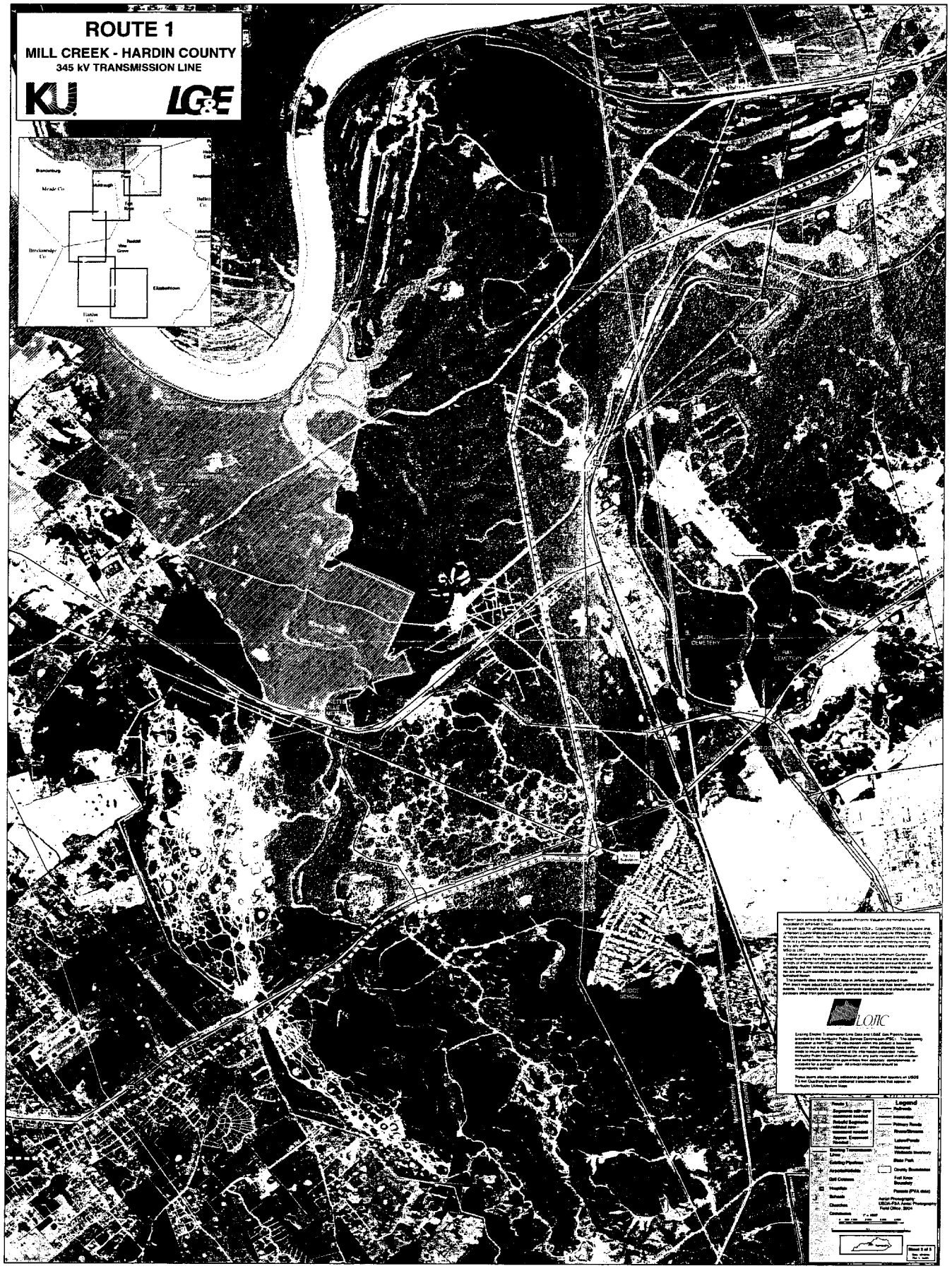
Should you have any questions, please telephone me at your earliest convenience.

Very truly yours,

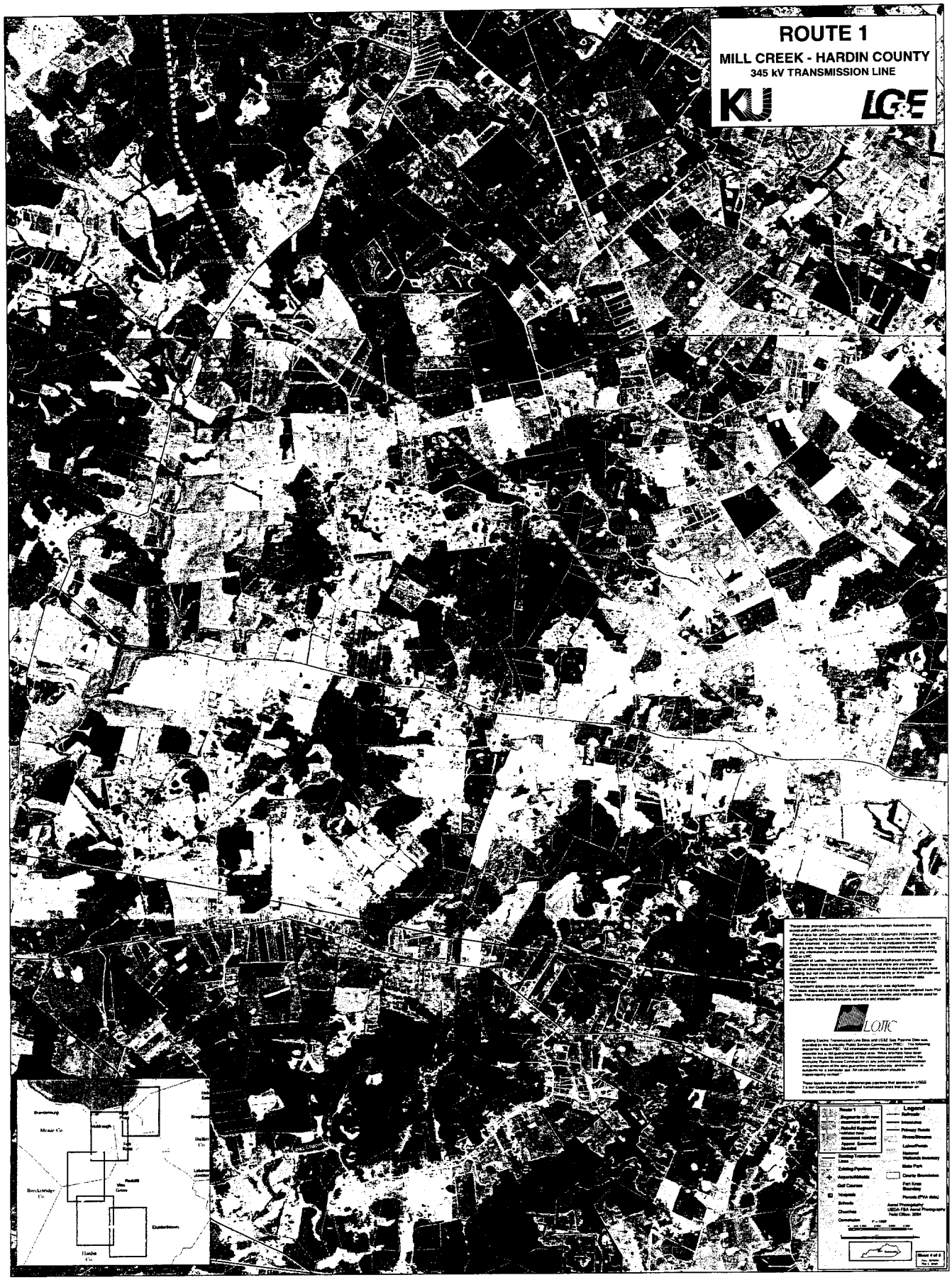
Kent W Blake

Kent W. Blake
Director, State Regulation & Rates


ROUTE 1
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
INDIANA
LOJIC
Legend
Primary Road
Secondary Road
Local Road
Water Body
Wetlands (Inventory)
County Boundary
Port Knox Boundary
Parcels (PVA data)
Meade Co.
Hardin Co.
Breckenridge Co.
Hardin Co.

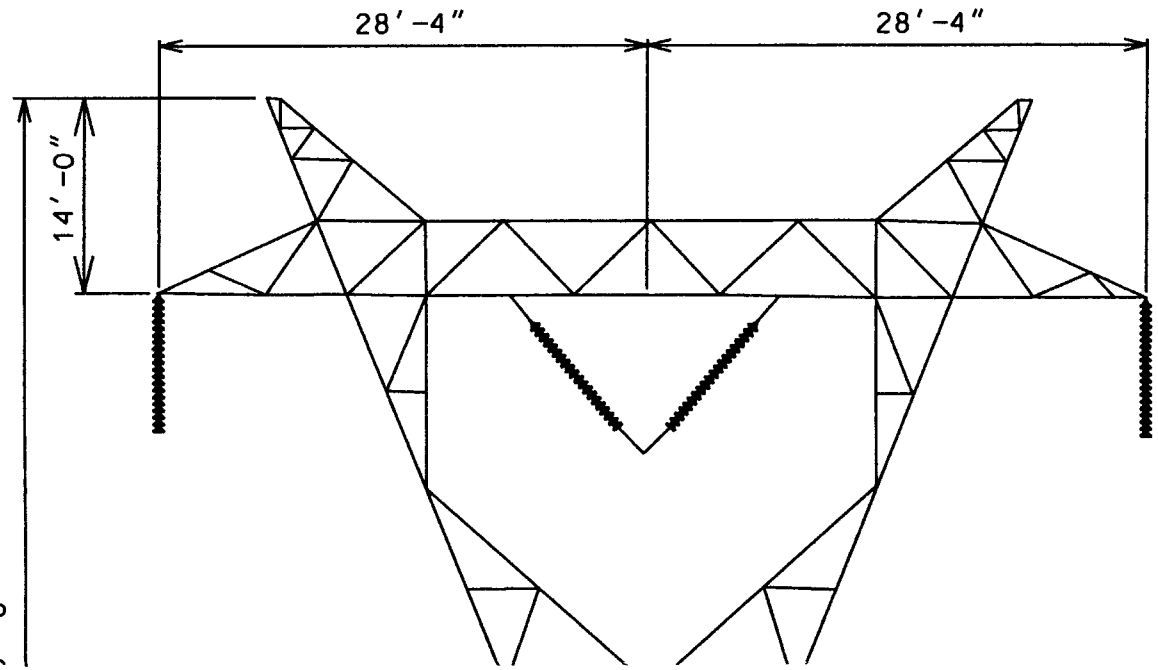

ROUTE 1
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
Legend
LOJIC


ROUTE 1
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E


ROUTE 1
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E


ROUTE 1
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
Bardstown
Meade Co.
Hardin Co.
LOJIC
Legend

Typical Tangent H-Frame Structure



Mill Creek - Hardin Co 345 KV Line
Proposed Typical Structures


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
INDIANA
OHIO RIVER
106
107
77
110
74
117
77
74
JOHNSON'S CEMETERY
SHEET 1
SHEET 2
SHEET 3
SHEET 4
SHEET 5
SHEET 6
SHEET 7
SHEET 8
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SHEET 10
SHEET 11
SHEET 12
SHEET 13
SHEET 14
SHEET 15
SHEET 16
SHEET 17
Legend


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
OHIO RIVER
MCCORMICK CEMETERY
66
73
77
74
67
59
72
32
56
47
62
INDIANA


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
SHEET 1
SHEET 2
SHEET 3
SHEET 4
SHEET 5
SHEET 6
SHEET 7
SHEET 8
SHEET 9
SHEET 10
SHEET 11
SHEET 12
SHEET 13
SHEET 14
SHEET 15
SHEET 16
SHEET 17
Meade Co
Hardin
Legend
Aerial Photography:
USDA-FSA Aerial Photography
Field Office, 2004
Sheet 3 of 17
32
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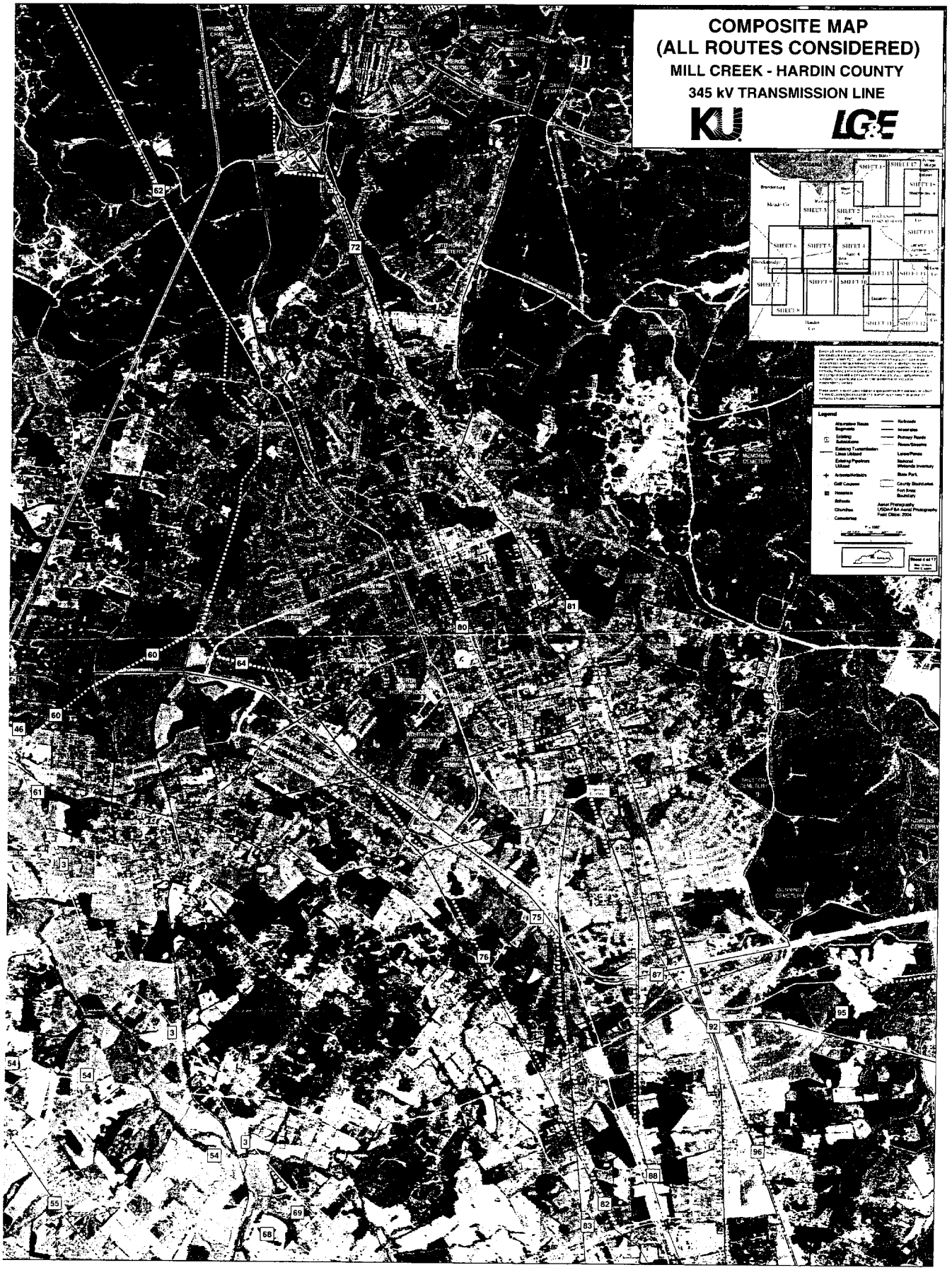
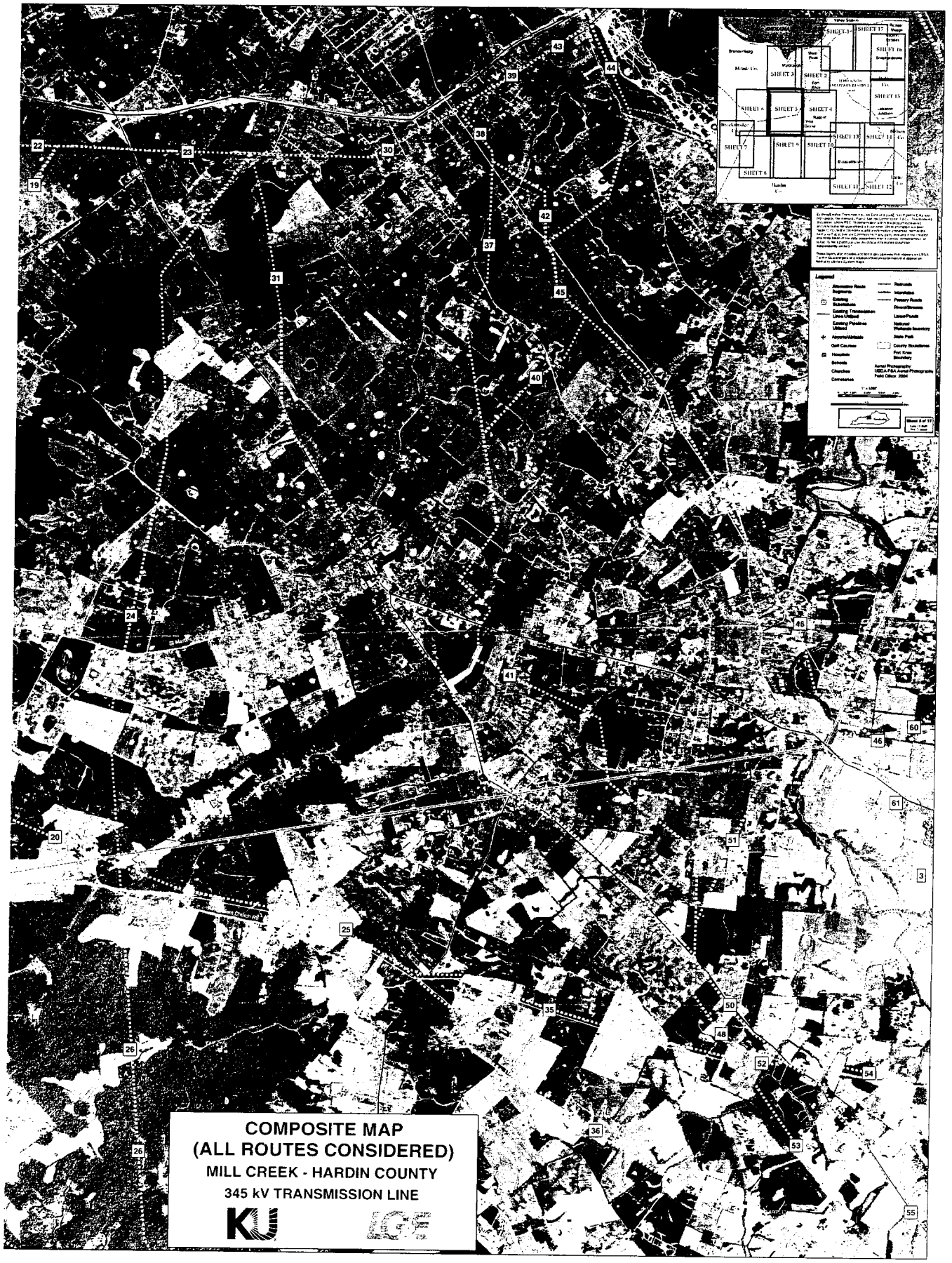

COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
Legend
Aerial Photography
USDA-FSA Aerial Photography
Field Office: 2004


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LGE


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
21
22
19
15
16
11
20
20
7
12
17
18
18
13
SALT RIVER
Legend
Index Sheet
Sheet 6 of 17


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
INDIANA
Legend


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
INDIANA
SHEET 7
SHEET 8
SHEET 9
SHEET 10
SHEET 11
SHEET 12
Legend

COMPOSITE MAP
(ALL ROUTES CONSIDERED)

MILL CREEK - HARDIN COUNTY

345 kV TRANSMISSION LINE

KU LG&E


INDIANA
Legend
Alternative Route Segments
Existing Substations
Existing Transmission Lines Utilized
Existing Pipelines Utilized
Interstates
Primary Roads
Rivers/Streams
Lakes/Ponds
Wetlands
Golf Courses
Hospitals
Schools
Churches
Cemeteries
State Park
County Boundaries
Aerial Photography: USDA FSA Aerial Photography Field Office, 2004
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103
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100
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79

COMPOSITE MAP
(ALL ROUTES CONSIDERED)

MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE

KU LG&E


156
131
125
126
124
121
102
102
COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
95
123
115
96
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108
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109
112
105
98
111
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90
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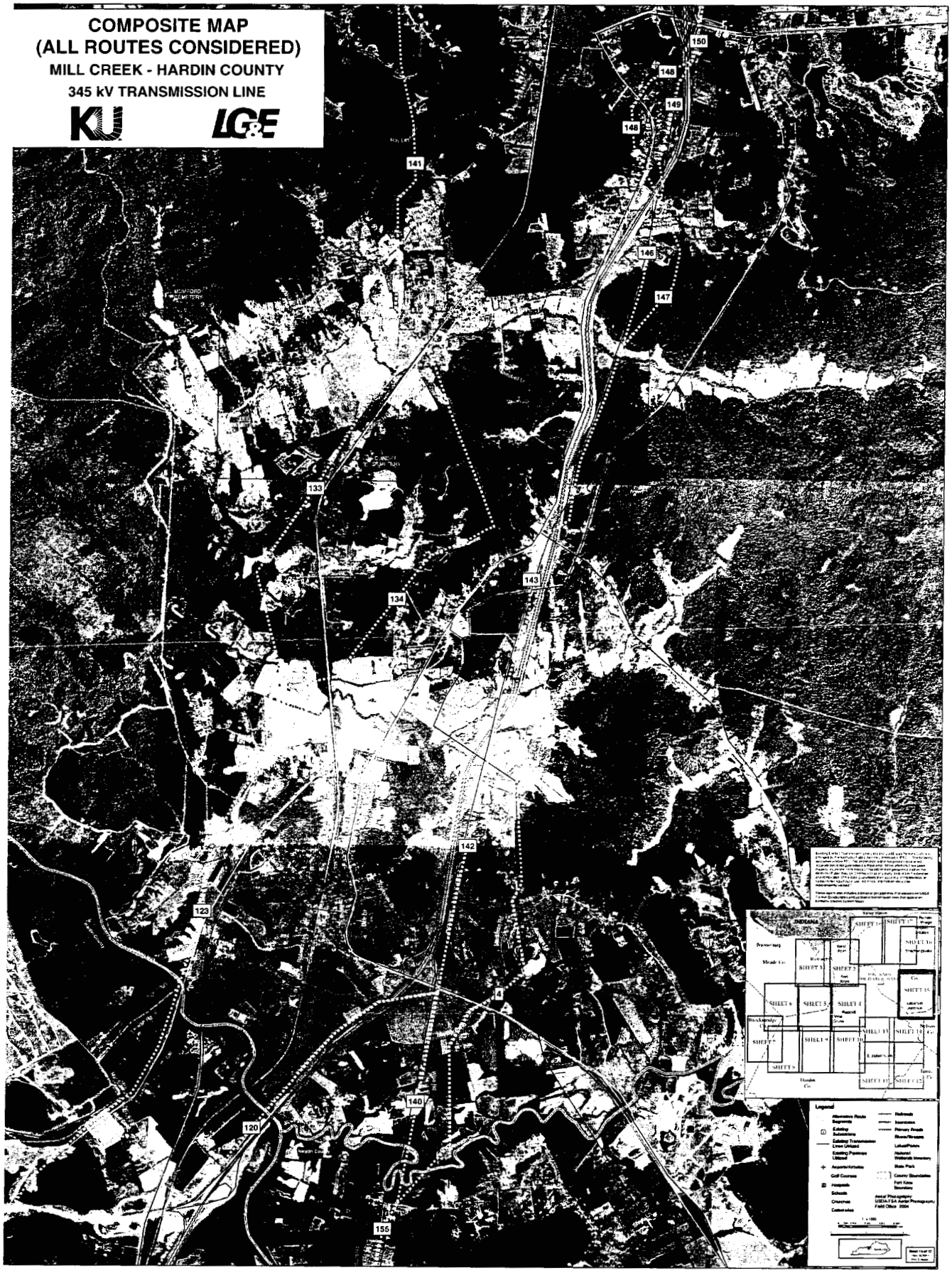
118
120
2
Legend


155
123
156
2
131
125
126
VERNON CEMETERY
HARRIS CEMETERY
COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
150
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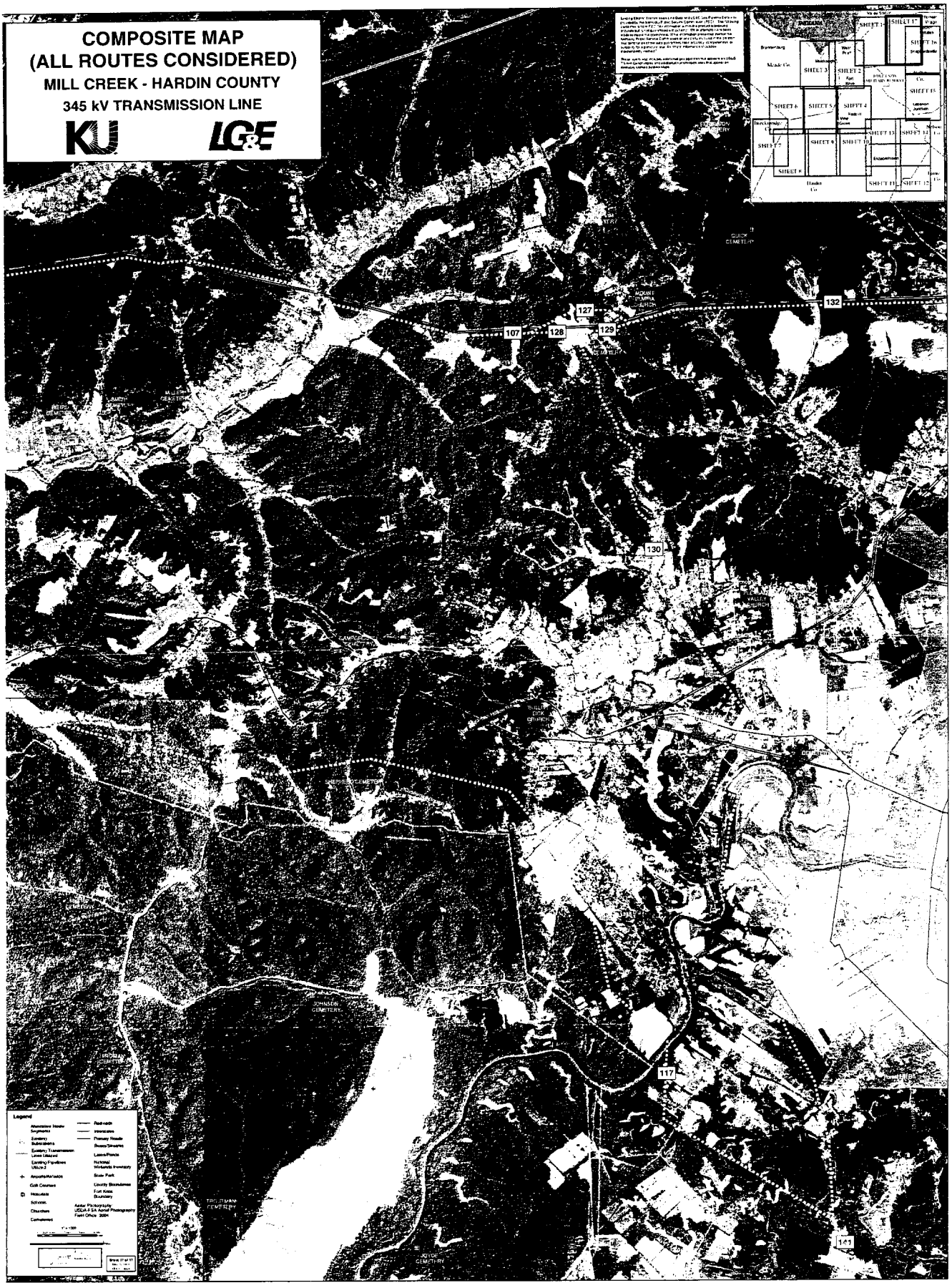
COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE

KU LG&E


COMPOSITE MAP
(ALL ROUTES CONSIDERED)
MILL CREEK - HARDIN COUNTY
345 kV TRANSMISSION LINE
KU
LG&E
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127
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132
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SHEET 1
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SHEET 16
SHEET 17
Legend

December 19, 2005

[property owner (per PVA)]
[owner's address (per PVA)]

RE: Notice of Proposed Construction of Electric Transmission Line

Dear [Mr./Ms. _____]:

[Kentucky Utilities Company (KU)] plans on constructing a 345,000 volt electric transmission line from the Mill Creek generating station in Jefferson County to our Hardin County substation. This line is part of our continuing efforts to meet the increasing energy needs of our customers. Part of the planned line would cross your property. The route of this planned line is shown on the map enclosed with this letter.

This line was the subject of a public communications effort by [KU] during the past few weeks. You may be wondering why we are writing to you again. [KU] is sending this letter to officially notify you that [KU] has notified the Kentucky Public Service Commission that we plan to apply for regulatory approval for construction of the planned line. The Commission has assigned the case docket number 2005-00467.

We have also notified the Commission that [KU] plans to apply for regulatory approval of an alternative line that varies somewhat from the preferred line. The alternative line was also the subject of a public communications effort by [KU] in recent weeks. The Commission has assigned this case docket number 2005-00472. A map of the route that the alternative line would take is also enclosed with this letter. The alternative route is [KU]'s second choice and would only be approved by the Commission if the Commission declines approval of [KU]'s preferred route. While only one of the routes can be approved, either one would cross your property the same way. The portions of the routes that differ are not on your property.

If the Commission approves construction of either line, representatives of [KU] will contact you to discuss purchasing an easement allowing us to build the planned line across a portion of your property.

In addition, under Kentucky law, after [KU] has filed its application with the Commission, you have the right to request that the Kentucky Public Service Commission hold a local public hearing regarding the planned line. You also have the right to ask to intervene in the case. If you would like to request a local public hearing, the request must be made in writing to the Executive Director of the Kentucky Public Service Commission. The Executive Director's address is:

Executive Director

Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602

Any written request for a hearing must be made no later than thirty (30) days after [KU] has filed an application for a certificate of public convenience and necessity for the planned line. We have not filed that application yet but will file it on or after December 22, 2005. Any written request for a hearing will need to include the following:

1. the docket number of the case (the docket number for the preferred route is 2005-00467 and the docket number for the alternative route is 2005-00472);
2. the name, address, and telephone number of the person requesting the hearing; and,
3. a statement as to whether the person requesting the hearing wishes to participate in an evidentiary hearing or to make unsworn public comment.

If you wish to participate in an evidentiary hearing, you will also need to intervene in the case. You may request to intervene by filing a motion pursuant to 807 KAR 5:001, Section 3(8). If you would like to contact the Executive Director's office by telephone, the number is (502) 564-3940.

The planned line is very important to the continued reliability of our electric transmission system. We welcome any further comments you have regarding the line. You are welcome to call our Right-of-Way Department collect at (502) 627-3160.

Sincerely,

Mark S. Johnson
Director - Transmission

December 19, 2005

[property owner (per PVA)]
[owner's address (per PVA)]

RE: Notice of Proposed Construction of Electric Transmission Line

Dear [Mr./Ms. _____]:

[Kentucky Utilities Company (KU)] plans on constructing a 345,000 volt electric transmission line from the Mill Creek generating station in Jefferson County to our Hardin County substation. This line is part of our continuing efforts to meet the increasing energy needs of our customers. Part of the planned line would cross your property. The route of this planned line is shown on the map enclosed with this letter.

This line was the subject of a public communications effort by [KU] during the past few weeks. You may be wondering why we are writing to you again. [KU] is sending this letter to officially notify you that [KU] has notified the Kentucky Public Service Commission that we plan to apply for regulatory approval for construction of the planned line. The Commission has assigned the case docket number 2005-00467.

We have also notified the Commission that [KU] plans to apply for regulatory approval of an alternative line that varies somewhat from the preferred line. The alternative line was also the subject of a public communications effort by [KU] in recent weeks. The Commission has assigned this case docket number 2005-00472. A map of the route that the alternative line would take is also enclosed with this letter. The alternative route is [KU]'s second choice and would only be approved by the Commission if the Commission declines approval of [KU]'s preferred route. While only one of the routes can be approved, either one would cross your property the same way. The portions of the routes that differ are not on your property.

If the Commission approves construction of either line, [KU] will build the line in an existing utility easement crossing your property.

In addition, under Kentucky law, after [KU] has filed its application with the Commission, you have the right to request that the Kentucky Public Service Commission hold a local public hearing regarding the planned line. You also have the right to ask to intervene in the case. If you would like to request a local public hearing, the request must be made in writing to the Executive Director of the Kentucky Public Service Commission. The Executive Director's address is:

Executive Director
Public Service Commission

211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602

Any written request for a hearing must be made no later than thirty (30) days after [KU] has filed an application for a certificate of public convenience and necessity for the planned line. We have not filed that application yet but will file it on or after December 22, 2005. Any written request for a hearing will need to include the following:

1. the docket number of the case (the docket number for the preferred line is 2005-00467 and the docket number for the alternative line is 2005-00472);
2. the name, address, and telephone number of the person requesting the hearing; and,
3. a statement as to whether the person requesting the hearing wishes to participate in an evidentiary hearing or to make unsworn public comment.

If you wish to participate in an evidentiary hearing, you will also need to intervene in the case. You may request to intervene by filing a motion pursuant to 807 KAR 5:001, Section 3(8). If you would like to contact the Executive Director's office by telephone, the number is (502) 564-3940.

The planned line is very important to the continued reliability of our electric transmission system. We welcome any further comments you have regarding the line. You are welcome to call our Right-of-Way Department collect at (502) 627-3160.

Sincerely,

Mark S. Johnson
Director - Transmission

December 19, 2005

[property owner (per PVA)]
[owner's address (per PVA)]

RE: Notice of Proposed Construction of Electric Transmission Line

Dear [Mr./Ms. _____]:

[Kentucky Utilities Company (KU)] plans on constructing a 345,000 volt electric transmission line from the Mill Creek generating station in Jefferson County to our Hardin County substation. This line is part of our continuing efforts to meet the increasing energy needs of our customers. Part of the planned line would cross your property. The route of the planned line is shown on the map enclosed with this letter.

This line was the subject of a public communications effort by [KU] during the past few weeks. You may be wondering why we are writing to you again. [KU] is sending this letter to officially notify you that [KU] has notified the Kentucky Public Service Commission that we plan to apply for regulatory approval for construction of the planned line. The Commission has assigned the case docket number 2005-00467. If the Commission does approve construction of the line, representatives of [KU] will contact you to discuss purchasing an easement allowing us to build the planned line across a portion of your property.

We have also notified the Commission that [KU] plans to apply for regulatory approval of an alternative line that varies somewhat from the preferred line. If the alternative route is approved, your property will not be affected. However, the alternative route is [KU]'s second choice and therefore would only be approved by the Commission if the Commission declines approval of [KU]'s preferred route.

In addition, under Kentucky law, after [KU] has filed its application with the Commission, you have the right to request that the Kentucky Public Service Commission hold a local public hearing regarding the planned line. You also have the right to ask to intervene in the case. If you would like to request a local public hearing, the request must be made in writing to the Executive Director of the Kentucky Public Service Commission. The Executive Director's address is:

Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602

Any written request for a hearing must be made no later than thirty (30) days after [KU] has filed an application for a certificate of public convenience and necessity for the planned line. We have not filed that application yet but will file it on or after December 22, 2005. Any written request for a hearing will need to include the following:

1. the docket number of the case (the docket number for this case is 2005-00467);
2. the name, address, and telephone number of the person requesting the hearing; and,
3. a statement as to whether the person requesting the hearing wishes to participate in an evidentiary hearing or to make unsworn public comment.

If you wish to participate in an evidentiary hearing, you will also need to intervene in the case. You may request to intervene by filing a motion pursuant to 807 KAR 5:001, Section 3(8). If you would like to contact the Executive Director's office by telephone, the number is (502) 564-3940.

The planned line is very important to the continued reliability of our electric transmission system. We welcome any further comments you have regarding the line. You are welcome to call our Right-of-Way Department collect at (502) 627-3160.

Sincerely,

Mark S. Johnson
Director - Transmission

Last Name 1	Name 2	Name 3	Address One	Address Two	City	State	Zip
Rosenberger	August L	Carol A	11851 Rineyville Big Springs Rd		Rineyville	KY	40162
Jent	James L	Mary K	9796 Rineyville Big Springs Rd		Rineyville	KY	40162
Jent	Richard B	Tammy	2045 S Blackbranch Rd		Cecilia	KY	42724
Gossett, et.al	William		550 St Andrews Dr		Vine Grove	KY	40175
Huffer **(2 Parcels)**	Curtis B	Carol	8998 Rineyville Big Springs Rd		Rineyville	KY	40162
Addington	Alice		7743 St John Rd		Elizabethtown	KY	42701
Addington	Phillip G	Doris	880 Harris Sch Rd		Rineyville	KY	40162
Padgett	Judy		420 Padgett Rd		Elizabethtown	KY	42701
Pearl, Jr.	Quinn F		2223 Blueball Ch Rd		Elizabethtown	KY	42701
Puckett	James H		Post Office Box 966		Elizabethtown	KY	42702
Davis	Dennis	Laura	1747 Blueball Ch Rd		Elizabethtown	KY	42701
Lovelace	Todd	Lori	1723 Blueball Ch Rd		Elizabethtown	KY	42701
Coyle **(2 Parcels)**	Samuel E		1481 Blueball Ch Rd		Elizabethtown	KY	42701
Coyle	Elwood		1171 Blueball Ch Rd		Elizabethtown	KY	42701
Beard	Ronald C	Tamberly	10032 St John Rd		Cecilia	KY	42724
French	Marion		933 Blueball Ch Rd		Elizabethtown	KY	42701
Seagraves **(2 Parcels)**	Ronald	Rita	10035 St John Rd		Cecilia	KY	42724
Woodring	Anthony M		275 Blueball Ch Rd		Elizabethtown	KY	42701
Bush	Michael E	Terry L	8706 St John Rd		Cecilia	KY	42724
Graas	George H	Willie	7363 N Long Grove Rd		Elizabethtown	KY	42701
Thomas	Charles D	Jack	7569 N Long Grove Rd		Elizabethtown	KY	42701
DLC, Inc. (Cunningham's own this parcel)			2530 N Highway 11 SE		Elizabeth	IN	47117
Cunningham	Dennis	Cathy	2530 N Highway 11 SE		Elizabeth	IN	47117
Thompson	Charles E	Geraldine	394 Bethlehem Academy Rd		Cecilia	KY	42724
Estes	Bobby N	Mary S	538 Yates Chapel Rd		Cecilia	KY	42724
Thomas	Raymond E	Donna	6770 St John Rd		Elizabethtown	KY	42724
Thompson	James K	Sandra	2162 Bethlehem Academy Rd		Cecilia	KY	42724
Dodson	Floyd		1788 Bethlehem Academy Rd		Cecilia	KY	42724

Wimp	Kenneth W	Joann	106 Wimp Ln		Cecilia	KY	42724
Monroe	Violet W		1708 Bethlehem Academy Rd		Cecilia	KY	42724

Last Name 1	Name 2	Name 3	Address One	Address Two	City	State	Zip
Kosmos Cement Co.	C/O Darrell Wiley		Post Office Box 1500		Houston	TX	77251-1500
Renfro	Thomas L	Doris J	1733 Weavers Run Rd		West Point	KY	40177
Tunis	Bradley Malcolm	Cathy Jean	1835 Weavers Run Rd		West Point	KY	40177
Grant	William		453 Cow Branch Rd		West Point	KY	40177
Hoskins	Leonard F	Winnie C	800 Nichols Hill Rd		West Point	KY	40177
Reinhardt	William D	Lyn Hobbs	9405 Hi-View Ln		Louisville	KY	40272
Warner	Norman E	Sue	1000 Cow Branch Rd		West Point	KY	40177
Blevens	Avery W	Marion	936 Cow Branch Rd		West Point	KY	40177
Gibson	Sabe	Leatrice H	974 Cow Branch Rd		West Point	KY	40177
Gathof	James K		4133 Flintlock Dr	Apt F 45	Louisville	KY	40216
Pace	Randell E	Peggy	648 Cow Branch Rd		West Point	KY	40177
Walker	Wayne C		796 Cow Branch Rd		West Point	KY	40177
PGL Builders			129 Ables Mountain Ln		West Point	KY	40177
Distler	Anthony	Julie	11006 West Highway 44		West Point	KY	40177
Mathews	Joe T	Frances S	10777 West Highway 44		West Point	KY	40177
Sumner	Winfred Lee	Nancy L	13305 Dixie Highway		Louisville	KY	40272
Brewer	Gary W	Lesia A	1065 Katherine Station Rd		West Point	KY	40177
Holloway & Son Construction	Gene Holloway		13115 Aiken Rd		Louisville	KY	40223
Perry	Gina		7310 Grand Isle Way		Prospect	KY	40059
Marshall Realty Co.			Post Office Box 7066		Louisville	KY	40207
Kueber	Frances K		415 Redmon Rd		Vine Grove	KY	40175
McGehee	Gene M	Connie	525 North Dixie Boulevard		Radcliff	KY	40160
Jones	Charles D	James Lamar Jones	1475 Flaherty Rd		Ekron	KY	40117
Straney Farms, LLC (**2 Parcels**)	C/O Kenny Straney	Annette	2021 St Martin Rd		Vine Grove	KY	40175
William Edelen Estate	Joseph L Edelen		2806 Big Spring Rd		Vine Grove	KY	40175
Hobbs	Linda		1575 Bee Knob Hill Rd		Ekron	KY	40117
Sipes	Jerry D		1299 Bee Knob Hill Rd		Ekron	KY	40117
Hobbs	Kelly, Kevin and Susan		1664 St Martin Rd		Vine Grove	KY	40175
Hobbs	Joe L		1664 St Martin Rd		Vine Grove	KY	40175
Edelen	Larry	Margarita	2806 Big Spring Rd		Vine Grove	KY	40175
Sheeran	Paul Eugene II		1945 Shot Hunt Rd		Vine Grove	KY	40175
Clarkson Farm, Inc.	C/O Robert Griffith		400 West Market St, Suite 1800		Louisville	KY	40202
Hager	George A		700 Flaherty Rd		Ekron	KY	40117

Hicks	George W		345 Sand Ridge Ln		Vine Grove	KY	40175
Harrison	Roy		2352 New Salem Ch Rd		Vine Grove	KY	40175
Holston, et.al	Glenn		8803 Grand Ridge Ct		Louisville	KY	40214
Bodine	Robert W		695 Bratcher Ln		Vine Grove	KY	40175
Snyder	Edwin W	Betty J	12356 Rineyville Big Springs Rd		Rineyville	KY	40162
Wood	William R	Kimberly R	1436 Brizendine Rd		Rineyville	KY	40162
Bewley	Lizzie Mae		5131 Salt River Rd		Rineyville	KY	40162
Farmwald	Jonas		231 Harper Cemetery Rd		Munfordville	KY	42765
Detweiler	Nevin		1164 C Mansfield Rd		Horse Cave	KY	42749
Losey	Pat		4573 Salt River Rd		Rineyville	KY	40162
Kephart	William R	Mary Ann	10840 Rineyville Big Springs Rd		Rineyville	KY	40162
Cowherd	W D		81 Spring Dr		Elizabethtown	KY	42724

Last Name 1	Name 2	Name 3	Address One	Address Two	City	State	Zip
Shultz	Oscar G		95 Fort Ave		Vine Grove	KY	40175
Gardner	Brett		165 Fort Ave		Vine Grove	KY	40175
Hatfield	Thelma Mae		3705 Highway 60		Vine Grove	KY	40175
Fuller	Wilma Louise		90 Thompson Ln S		Vine Grove	KY	40175
Burnett	Francis R		210 Thompson Ln S		Vine Grove	KY	40175
Bowman	Timothy E		Post Office Box 47		Muldraugh	KY	40155
Dawes	Mark A		149 Thompson Ln S		Vine Grove	KY	40175
Whelan, Jr.	John L		240 Rays Rd		Vine Grove	KY	40175
Higgs	Shelby E		130 Rays Rd S		Vine Grove	KY	40175
Stanley	Frank	Doris	185 Rays Rd S		Vine Grove	KY	40175
Higgs	Shelby D		121 Rays Rd S		Vine Grove	KY	40175
Fuller	Douglas		95 Finch Ct		Vine Grove	KY	40175
Fuller	Jason D		63 Center		Radcliff	KY	40160
Kiefer	Robert N		139 Finch Ct		Vine Grove	KY	40175
Lusk Properties, LLC			2099 Hobbs-Reesor Rd		Vine Grove	KY	40175
Sepulveda	Ray	Martha	4395 Highway 60		Vine Grove	KY	40175
Thompson	John R		982 Penny Royal		Brandenburg	KY	40108
Board	Gordon		1180 Hillgrove Rd		Guston	KY	40142
Sexton	William P		460 Redbird Ct		Vine Grove	KY	40175
Ashby	Wayne R	Marisa D. Creech	8011 Northern Spy Dr		Louisville	KY	40228
Mason	Michael L		110 Redbird Ct		Vine Grove	KY	40175
Watkins	Paul		160 Redbird Ct		Vine Grove	KY	40175
Morris	Richard	Sherry	460 Warren Ct		Vine Grove	KY	40175
Pugh	Bonnie Sue		455 Warren Ct		Vine Grove	KY	40175
Jennings	Kenneth D		440 Warren Ct		Vine Grove	KY	40175
Karnes	Brenda J		234 Skyview Ct		West Point	KY	40177
McGehee	Chris		Post Office Box 309		Brandenburg	KY	40108
Flory	Todd E		405 Warren Ct		Vine Grove	KY	40175
Doll	James A	Brigid	7249 Heatherly Square		Louisville	KY	40202

Dill	Kenneth L		12221 Sholic Rd		Apple Valley	CA	92308
Ware	Arthur		355 Shot Hunt Rd		Vine Grove	KY	40175
Douglas	David		155 Warren Ct		Vine Grove	KY	40175
Kirk	Joyce		210 Whispering Ct		Vine Grove	KY	40175
Armstrong, Jr.	Carl Lee		95 Warren Ct		Vine Grove	KY	40175
Sollner, Jr.	Richard F		61 Warren Ct		Vine Grove	KY	40175
Lowe	Billy W	Sandra	70 Warren Ct		Vine Grove	KY	40175
Broughton, Jr.	Kenneth W		680 Lee Rd		Vine Grove	KY	40175
Denton	Dea	Leslie R	215 Shot Hunt Rd		Vine Grove	KY	40175
Clair	Michael		149 Shot Hunt Rd		Vine Grove	KY	40175
Mowry, Sr.	Harry		70 Woodside Dr		Vine Grove	KY	40175
Nott, Jr.	Jeffrey A		150 Woodside Dr		Vine Grove	KY	40175
Sipes	Thomas B		145 Woodside Dr		Vine Grove	KY	40175
Warren	Robert A		125 Wooddale Ct		Vine Grove	KY	40175
Delaven	Michael		140 Wooddale Ct		Vine Grove	KY	40175
Barragan	Pamela		35 Woodside Dr		Vine Grove	KY	40175
Richardson	Barton L		56 Wooddale Ct		Vine Grove	KY	40175
Whelan	Joseph A	Susan M	357 Kinkead Rd		Vine Grove	KY	40175
Walker	Adrienne		5385 Highway 60		Vine Grove	KY	40175
Hobbs	David W	Miranda J	364 Kinkead Rd		Vine Grove	KY	40175
D B K Properties, LLC	C/O David Kueber		700 Shady Ln		Louisville	KY	40223
Martin	Nathan D		235 Kinkead Rd		Vine Grove	KY	40175
Brown	Tyrone	Jennifer L	270 Kinkead Rd		Vine Grove	KY	40175
Pogue	Henry		254 Kinkead Rd		Vine Grove	KY	40175
Scalf	Tyrus M	Diana	140 Kinkead Rd		Vine Grove	KY	40175
Winchester	Janice F.		140 Kinkead Rd		Vine Grove	KY	40175
Boak	Ingrid		6240 Russell Cave Rd		Lexington	KY	40511
McKinney, Jr	Thomas N		Post Office Box 806		Radcliff	KY	40159
Jameson	Johnny		230 Boak Mountain Rd		Vine Grove	KY	40175
McGehee	Gene M	Connie	525 N Dixie Blvd		Radcliff	KY	40160
Vachon	Donald S		425 Redmon Rd		Vine Grove	KY	40175

Hayden, Jr., et.al	Jacob B		2138 Hayden Sch Rd		Cecilia	KY	42724
Wimp	Joyce		309 Wimp Ln		Cecilia	KY	42724
Wimp	Mayme		308 Wimp Ln		Cecilia	KY	42724
Edwards	Edith M		Post Office Box 112		Cecilia	KY	42724
Aldridge	Howard	Lovonda	156 Sycamore St		Cecilia	KY	42724
Miller	Elta Castile		2450 Hayden Sch Rd		Cecilia	KY	42724
Elizabethtown/Hardin Co.			111 W Dixie Ave		Elizabethtown	KY	42701
Elizabethtown/Hardin Co.			200 W Dixie Ave		Elizabethtown	KY	42701
Humble	John B	Bernice	4318 Leitchfield Rd		Cecilia	KY	42701
City Of Elizabethtown			Post Office Box 550		Elizabethtown	KY	42701
Wade	CM Estate C/O Alice Wade		229 Bob Wade Rd		Elizabethtown	KY	42701
Richardson	Frances		3347 Leitchfield Rd		Cecilia	KY	42724
Bush	Charles W	Imogene	733 Bacon Crk Rd		Elizabethtown	KY	42701
Hardin County Building Commissions			Post Office Box 568		Elizabethtown	KY	42701
Bush	W R		634 Bacon Crk Rd		Elizabethtown	KY	42701

NOTARIZED PROOF OF PUBLICATION

STATE OF KENTUCKY

COUNTY OF Franklin

Before me, a Notary Public, in and for said County and State, this 19th day of December, 2005, came Rachel McCarty personally known to me, who being duly sworn, states as follows:

That she is Advertising Assistant of the Ky Press Service, Inc., and that the following publications: see attached ran the Legal Notice for Louisville Gas & Electric Co. & KY Utilities Co. Case No. 2005-00467 & Case No. 2005- 00472.

Rachel McCarty
Signed

Bonnie J. Howard
Notary Public

My commission expires 9-18-2008

KENTUCKY PRESS SERVICE

101 Consumer Lane **Frankfort, KY 40601**
(502) 223-8821 **FAX (502) 875-2624**
Rachel McCarty Advertising Dept.

List of newspapers running the Notice to Kentucky Utilities Company Customers. Attached tearsheets provide proof of publication:

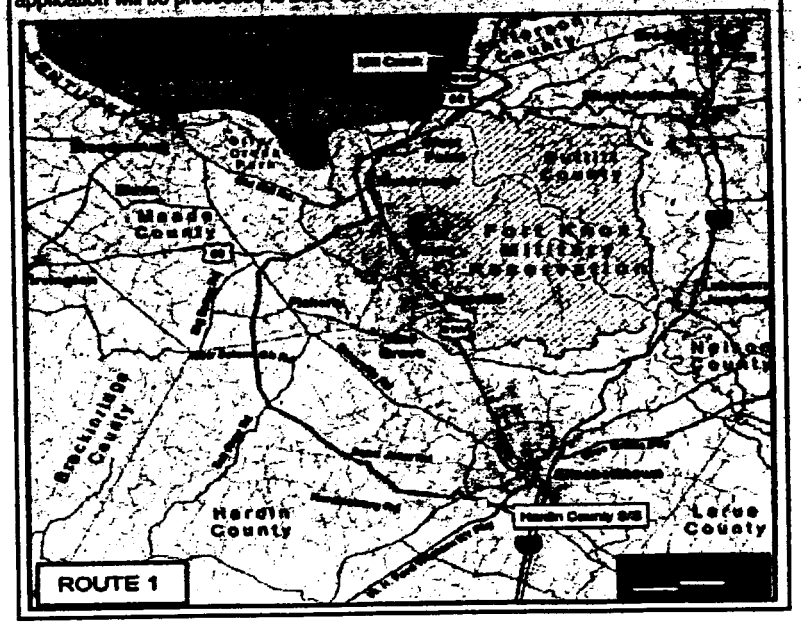
Brandenburg Messenger
Elizabethtown Hardin Co. Independent
Elizabethtown News Enterprise
Louisville Courier Journal
Shepherdsville Pioneer News

NOTICE OF PROPOSED ELECTRIC TRANSMISSION LINE CONSTRUCTION PROJECT

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company (" " propose to construct a 345 kV transmission line to run from the Mill Creek Generating Station in Jefferson County to the Hardin County Substation in Hardin County. The purpose of the proposed transmission line is to accommodate the additional generating unit to be constructed in Trimble County, approved by the Kentucky Public Service Commission ("Commission") in Case No. 2004-00507. A map showing the route of the proposed line is shown below.

LG&E and KU plan to file an application with the Commission on or about December 22, 2005, seeking a certificate of public convenience and necessity authorizing construction of the proposed transmission line. The purpose of the Commission' LG&E/KU application is to determine whether the proposed transmission line is required by the public convenience and necessity. Any interested person, including a person over whose property the proposed transmission line will cross, may request intervention in this proceeding, and may request that the Commission conduct a public hearing in Jefferson, Bullitt, Meade, and Hardin counties.

To seek intervention in the Commission's proceeding on LG&E/KU' certificate of public convenience and necessity for the proposed transmission line, or to request a local public hearing in that case, contact the Executive Director, Public Service Commission, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602, telephone number (502) 564-3940. The docket number under which this application will be processed is 2005-00467.



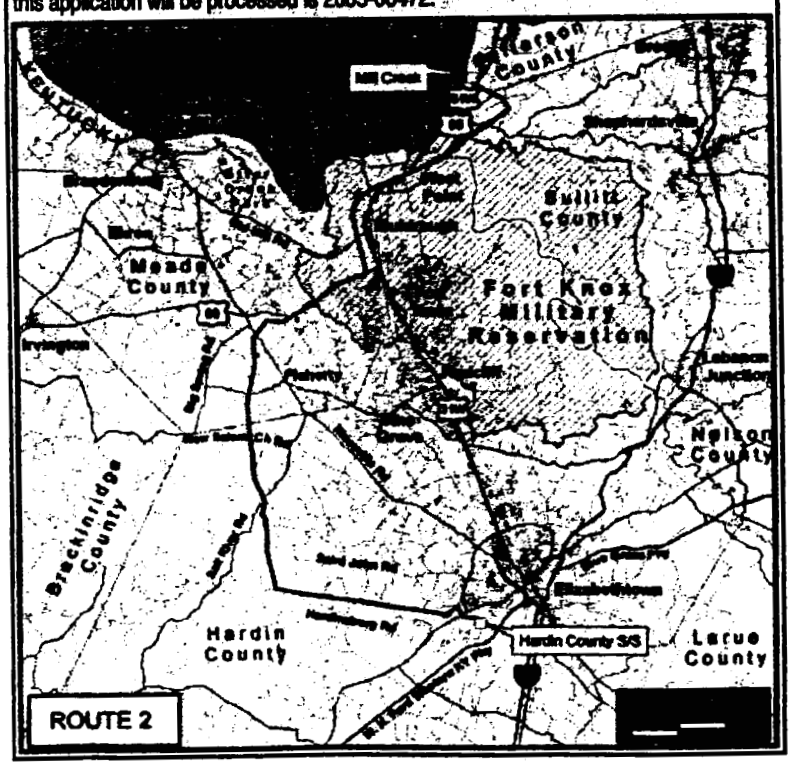
PAGE 11B
THE MEADE COUNTY MESSENGER, BRANDENBURG, KENTUCKY
DECEMBER 14, 2005

NOTICE OF PROPOSED ELECTRIC TRANSMISSION LINE CONSTRUCTION PROJECT

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company (" propose to construct an alternative 345 kV transmission line to run from the Mill Creek Generating Station in Jefferson County to the Hardin County Substation in Hardin County. The purpose of the proposed alternative transmission line is to accommodate the additional generating unit to be constructed in Trimble County, approved by the Kentucky Public Service Commission ("Commission") in Case No. 2004-00507. A map showing the route of the proposed alternative line is shown below.

LG&E and KU plan to file an application with the Commission on or about December 22, 2005, seeking a certificate of public convenience and necessity authorizing construction of the proposed alternative transmission line. LG&E/KU propose to construct this line only in the event that the application to construct a transmission line proposed in Case No. 2005-00467 is denied. The purpose of the Commission' application is to determine whether the proposed alternative transmission line is required by the public convenience and necessity. Any interested person, including a person over whose property the proposed alternative transmission line will cross, may request intervention in this proceeding, and may request that the Commission conduct a public hearing in Jefferson, Bullitt, Meade, and Hardin counties.

To seek intervention in the Commission's proceeding on LG&E/KU' certificate of public convenience and necessity for the propose sion line, or to request a local public hearing in that case, c Director, Public Service Commission, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602, telephone number (502) 564-3940. The docket number under which this application will be processed is 2005-00472.

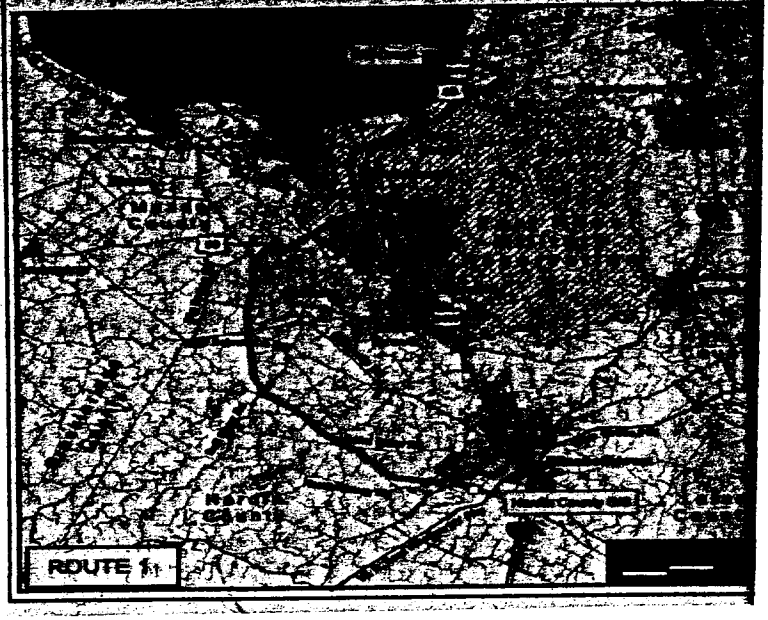


NOTICE OF PROPOSED ELECTRIC TRANSMISSION LINE CONSTRUCTION PROJECT

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") propose to construct a 345 kV transmission line [illegible] Station in Jefferson County to the Hardy [illegible] portion of the proposed transmission line [illegible] is to be constructed in Hardin County, approved by the Kentucky Public Service Commission ("Commission") in Case No. 2004-00321. A map showing the route of the proposed line is shown below.

LG&E and KU plan to file an application with the Commission [illegible] 2006, seeking a certificate of public convenience and necessity authorizing construction of the proposed transmission line. The purpose of the Commission's review of the LG&E/KU application is to determine whether the proposed transmission line is necessary for the public convenience and necessity. Any interested person, including a person whose property the proposed transmission line will cross, may request intervention in this proceeding, and may request that the Commission conduct a public hearing in Jefferson, Bullitt, Meade and Hardin counties.

To seek intervention in the Commission's proceeding on LG&E/KU's application for a certificate of public convenience and necessity for the proposed transmission line or to request a local public hearing in Hardin County, contact the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602, telephone number (502) [illegible] The docket number under which the application will be processed is [illegible]



NOTICE OF PROPOSED ELECTRIC TRANSMISSION LINE CONSTRUCTION PROJECT

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") propose to construct an alternative 345 kV transmission line to run from the Mill Creek Generating Station in Jefferson County to the Hardin County Substation in Hardin County. The purpose of the proposed alternative transmission line is to accommodate the additional generating unit to be constructed in Trimble County, approved by the Kentucky Public Service Commission ("Commission") in Case No. 2004-00507. A map showing the route of the proposed alternative line is shown below.

LG&E and KU plan to file an application with the Commission on or about December 22, 2005, seeking a certificate of public convenience and necessity authorizing construction of the proposed alternative transmission line. LG&E/KU propose to construct this line only in the event that the application to construct a transmission line proposed in Case No. 2005-00467 is denied. The purpose of the Commission's review of the LG&E/KU application is to determine whether the proposed alternative transmission line is required by the public convenience and necessity. Any interested person, including a person over whose property the proposed alternative transmission line will cross, may request intervention in this proceeding, and may request that the Commission conduct a public hearing in Jefferson, Bullitt, Meade, and Hardin counties.

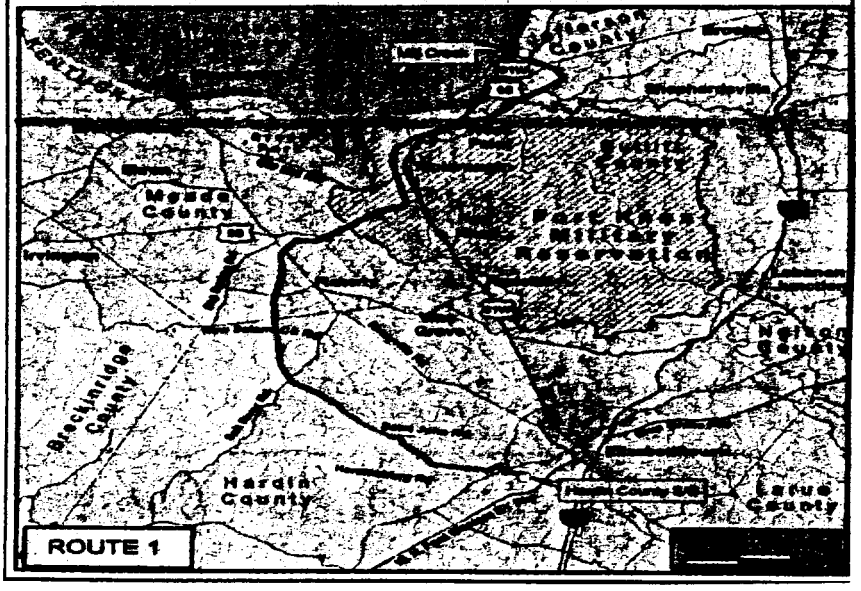
To seek intervention in the Commission's proceeding on LG&E/KU's application for a certificate of public convenience and necessity for the proposed alternative transmission line, or to request a local public hearing in that case, contact the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602, telephone number (502) 564-3940. The docket number under which the application will be processed is 2005-00467.

NOTICE OF PROPOSED ELECTRIC TRANSMISSION LINE CONSTRUCTION PROJECT

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") propose to construct a 345 kV transmission line to run from the Mill Creek Generating Station in Jefferson County to the Hardin County Substation in Hardin County. The purpose of the proposed transmission line is to accommodate the additional generating unit to be constructed in Trimble County, approved by the Kentucky Public Service Commission ("Commission") in Case No. 2004-00507. A map showing the route of the proposed line is shown below.

LG&E and KU plan to file an application with the Commission on or about December 22, 2005, seeking a certificate of public convenience and necessity authorizing construction of the proposed transmission line. The purpose of the Commission's review of the LG&E/KU application is to determine whether the proposed transmission line is required by the public convenience and necessity. Any interested person, including a person over whose property the proposed transmission line will cross, may request intervention in this proceeding, and may request that the Commission conduct a public hearing in Jefferson, Bullitt, Meade, and Hardin counties.

To seek intervention in the Commission's proceeding on LG&E/KU's application for a certificate of public convenience and necessity for the proposed transmission line, or to request a local public hearing in that case, contact the Executive Director, Public Service Commission, 211 Sower Boulevard, P. O. Box 615, Frankfort, Kentucky 40602, telephone number (502) 564-3940. The docket number under which this application will be processed is 2005-00467.



NOTICE OF PROPOSED ELECTRIC TRANSMISSION LINE CONSTRUCTION PROJECT

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") propose to construct an alternative 345 kV transmission line to run from the Mill Creek Generating Station in Jefferson County to the Hardin County Substation in Hardin County. The purpose of the proposed alternative transmission line is to accommodate the additional generating unit to be constructed in Trimble County, approved by the Kentucky Public Service Commission ("Commission") in Case No. 2004-00507. A map showing the route of the proposed alternative line is shown below.

LG&E and KU plan to file an application with the Commission on or about December 22, 2005, seeking a certificate of public convenience and necessity authorizing construction of the proposed alternative transmission line. LG&E/KU propose to construct this line only in the event that the application to construct a transmission line proposed in Case No. 2005-00467 is denied. The purpose of the Commission's review of the LG&E/KU application is to determine whether the proposed alternative transmission line is required by the public convenience and necessity. Any interested person, including a person over whose property the proposed alternative transmission line will cross, may request intervention in this proceeding, and may request that the Commission conduct a public hearing in Jefferson, Bullitt, Meade, and Hardin counties.

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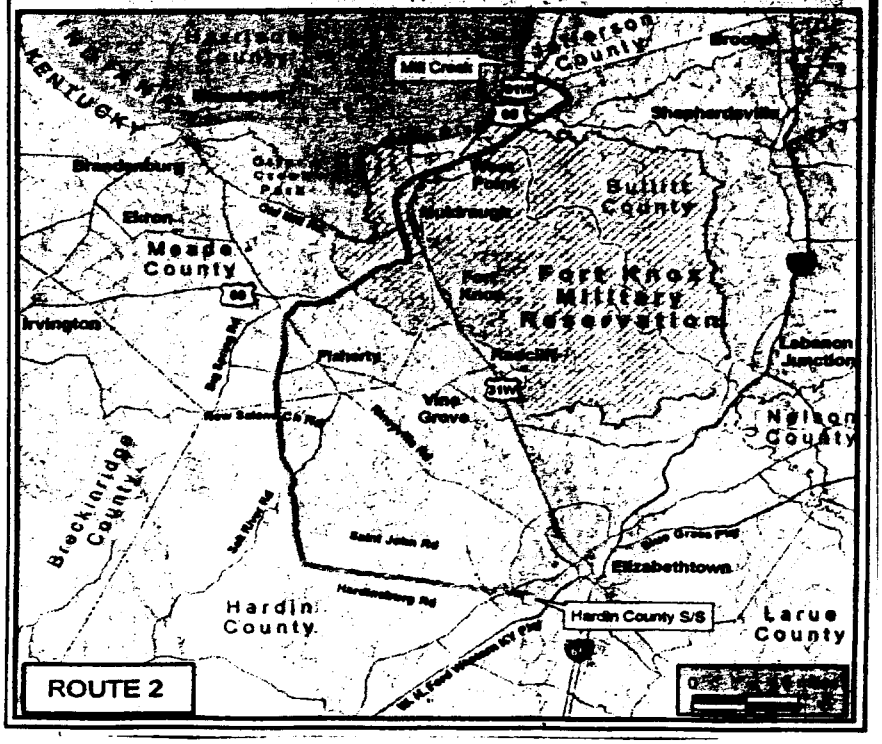

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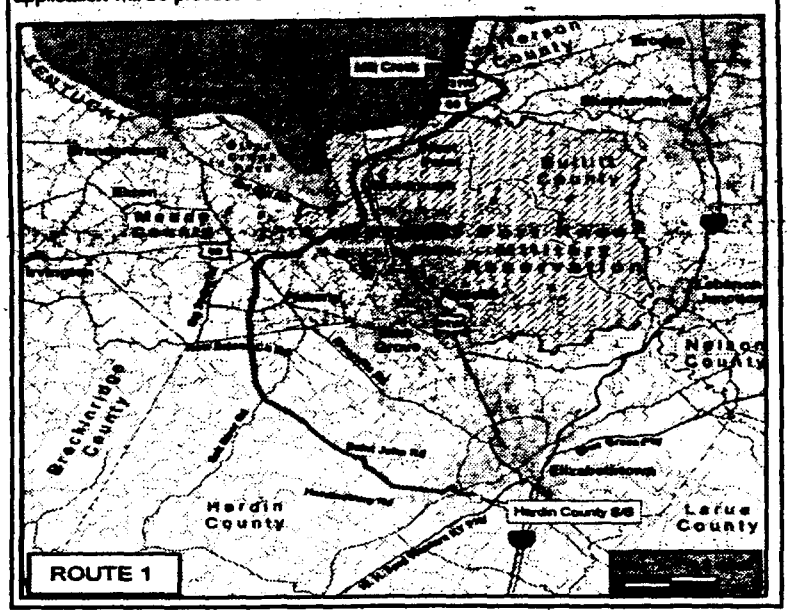

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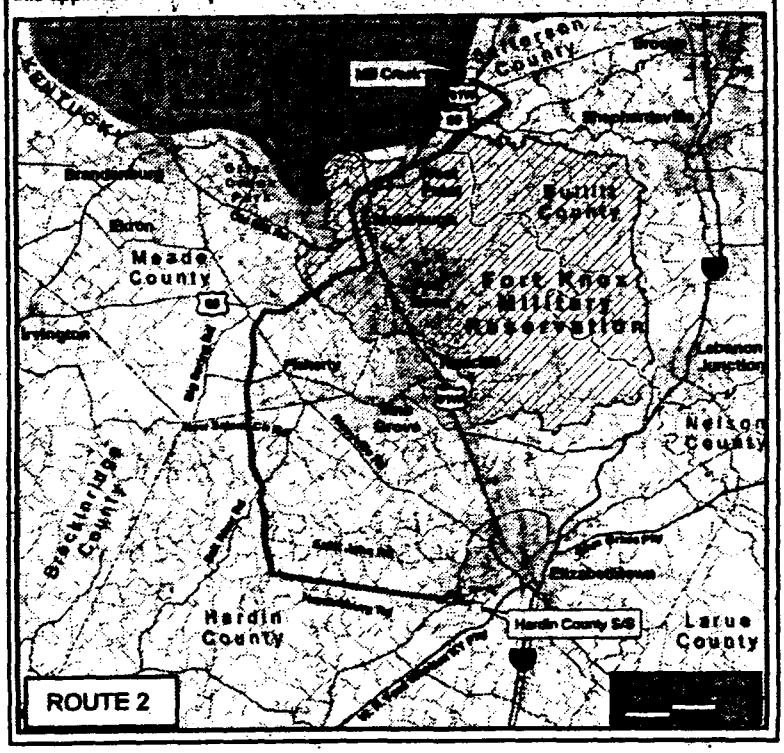


COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	CASE NO. 2005-00467

DIRECT TESTIMONY OF MARK S. JOHNSON E.ON U.S. SERVICES INC.

Filed: December 22, 2005

Q. Please state your name, position and business address.

A. My name is Mark S. Johnson. I hold the position of Director of Transmission for E.ON U.S. Services Inc. on behalf of Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (LG&E and KU are referred to collectively as the "Companies"). My business address is 220 West Main Street, P.O. Box 32020, Louisville, Kentucky 40202.

Q. Please describe your educational and professional background.

A. I received my Bachelor of Science degree in Civil Engineering Technology from Murray State University in 1980. I have 25 years of experience in the utility industry. From May 1987 to January 1985, I was employed by the Tennessee Valley Authority at the Watts Bar Nuclear Generating Station, where I held the position of Manager, Document Control and Configuration Management. From January 1985 to February 1987, I was employed by Entergy at the Grand Gulf Nuclear Generation Station as Manager, Engineering Support. From February 1987 to November 1997, I was again employed by the Tennessee Valley Authority, where I held a number of senior level positions in power generation, transmission, customer service and marketing. Most notably, I was Area Vice President, Transmission, Customer Service and Marketing for three and one-half years. Then, in November 1997, I joined LG&E Energy as Director, Distribution Operations. I remained in that position until January 2001, when I assumed my current position.

Q. Have you previously testified before this Commission?

A. Yes. I filed testimony on May 11, 2005, in the case entitled *In the Matter of: Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties*, Case No. 2005-00142. On the same date, I filed testimony in the cases entitled *In the Matter of: Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Franklin, Woodford and Anderson Counties*, Case No. 2005-00154, and *In the Matter of: Application of Louisville Gas and Electric Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Trimble County*, Case No. 2005-00155. I filed rebuttal testimony on February 9, 2004 in the case entitled *In the Matter of: Investigation Into the Membership of Louisville Gas and Electric Company and Kentucky Utilities Company in the Midwest Independent Transmission System Operator, Inc.*, Case No. 2003-00266. I also filed testimony on November 12, 2003 in the case entitled *In the Matter of: An Investigation of the Proposed Construction of 138 kV Transmission Facilities in Mason and Fleming Counties by East Kentucky Power Cooperative, Inc.*, Case No. 2003-00380.

Q. What is the purpose of your testimony?

A. My testimony will provide an overview of the transmission facilities being proposed in this proceeding, describe the route and ownership of those facilities,

describe the route selection process, and detail why the Companies' Application should be approved.

Q. Please describe the facilities which the Companies are proposing to construct.

A. The Companies are seeking a certificate of public convenience and necessity ("CCN") for a 345 kV transmission line which will be located in portions of Jefferson, Bullitt, Meade and Hardin counties in Kentucky. This is the same transmission line following much of the same route for which the Companies sought a CCN in Case No. 2005-00142. Specifically, this proposed line will be approximately 41.9 miles in length and run from LG&E's Mill Creek Generating Station ("Mill Creek Station") in Jefferson County to KU's Hardin County Substation in Hardin County (the "Mill Creek to Hardin County Route No. 1"). The Companies have filed another application for a CCN for an alternative route for the proposed transmission facilities designated as the "Mill Creek to Hardin County Route No. 2" in Case No. 2005-00472. The Companies' preferred route is the Mill Creek to Hardin County Route No. 1.

Q. How is the route in this proceeding different from the route proposed in Case No. 2005-00142?

A. It is different only to the extent that it no longer crosses the pond on the property of Dennis and Cathy Cunningham, which was described in some detail in Case No. 2005-00142, and instead circumvents the pond while remaining within the boundary of the Cunningham's property. Otherwise the route is the same as the

route proposed in Case No. 2005-00142. The reasons for the change in the route are discussed later in my testimony.

Q. Who will own the facilities along the Mill Creek to Hardin County Route No. 1?

A. LG&E will own the facilities from the Mill Creek Station to the east boundary of the Fort Knox Military Reservation and KU will own the facilities from the east boundary of the Fort Knox Military Reservation to the Hardin County Substation.

Q. Why are the Companies proposing to construct the Mill Creek to Hardin County Route No. 1?

A. In short, the Companies are proposing to construct these transmission facilities because they are needed for the Companies to be able to transmit electricity, and otherwise handle the load, produced by their new generating facility that has already been approved by the Commission. Specifically, the Commission granted the Companies a CCN for the expansion of the Trimble County Station through the construction of a 750 MW nominal net super-critical pulverized coal-fired base load generating unit ("TC2") on November 1, 2005, in Case No. 2004-00507, *In the Matter of: Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for the Expansion of the Trimble County Generating Station.* A Site Compatibility Certificate for TC2 was granted by the Commission in Case No. 2004-00507 on November 9, 2005. The Mill Creek to Hardin County Route No. 1, as well as upgrades and replacements of transmission facilities in Franklin, Anderson and Woodford

Counties and a new 345 kV transmission line in Trimble County from TC2 across the Ohio River into Indiana, are necessary to accommodate the addition of TC2 to the Companies' generation fleet and allow the Companies to continue providing reliable, low-cost power to their native load customers. We do not believe that the upgrades and replacements in Franklin, Anderson and Woodford Counties require a CCN. A CCN was granted for the Trimble County line in Case No. 2005-00155 on September 8, 2005.

Q. How did the Companies determine the need for the proposed transmission facilities?

A. As Michael G. Toll discusses in more detail in his testimony in this proceeding, the Companies determined the need based on studies performed by the Midwest Independent Transmission System Operator, Inc. ("MISO"). Those studies and testimony supporting them were submitted to the Commission in Case Nos. 2005-00142, 2005-00154 and 2005-00155. In the order of September 8, 2005, in Case No. 2005-00142, the Commission specifically concluded that the need for a 345 kV transmission line from the Mill Creek Station to the Hardin County Substation exists. John Wolfram discusses the Commission's finding of need in more detail in his testimony filed concurrently herewith in this proceeding.

Q. When will the Companies need the new transmission facilities to be in service?

A. They will need to be in service when TC2 comes on line in the second quarter of 2010. Because of the time required to acquire right-of-way and to complete

construction, the Companies need to obtain regulatory approvals promptly to meet this in-service date.

Q. Have the Companies previously conducted a route selection analysis for the proposed line from the Mill Creek Station to the Hardin County Substation?

A. Yes. In advance of the filing of Case No. 2005-00142, the Companies, together with the assistance of Photo Science, Inc., conducted a route selection analysis for transmission facilities between the Mill Creek Station and the Hardin County Substation. In the order of September 8, 2005, however, the Commission concluded that we had not adequately studied alternative routes, including the use of existing rights-of-way, transmission lines and corridors. At page 11 of that order, the Commission invited the Companies to reapply for a CCN to construct this line after we had conducted a more thorough study of all reasonable alternatives, including locating the line partially or fully along existing transmission lines.

Q. Have the Companies undertaken additional analysis of the potential routes for the line that is the subject of this proceeding?

A. Yes. Since the order of September 8, 2005, in Case No. 2005-00142 was issued, the Companies, utilizing information gathered by the Companies and Photo Science, have conducted a comprehensive analysis of all reasonable alternatives for the line, which analysis is the basis for the application in this proceeding. In conducting this analysis, the Companies followed the guidance of the Commission in other CCN orders and of the Commission Staff that was provided

at the informal conference held on October 4, 2005, and described in the testimony of John Wolfram in this proceeding.

In addition, while the Companies were conducting their route analysis, Clayton M. Doherty, a contractor for Photo Science, was working on his independent evaluation and analysis of the route selection process for this line. Using the same data the Companies used, he prepared a report of his evaluation and a copy of it is an exhibit to Mr. Doherty's testimony in this proceeding. Mr. Doherty's evaluation and analysis confirms the validity of the Companies' route selection.

Q. Did the Companies follow the guidance of the Commission Staff that was provided at the October 4, 2005, informal conference?

A. Yes. We followed the five-step process outlined by the Staff at that informal conference.

Q. What did the Companies do to comply with the first step in the process?

A. The first step in the process is the determination of the need for the facilities. As indicated above, the Commission has already found that a need for the transmission facilities has been established. Thus, no further activity was required to complete the first step in the process.

Q. Please describe the second step in the Commission Staff's route selection process and how the Companies performed it.

A. The second step is the identification of all routes that will work electrically, including routes that utilize collocation. To perform that step, we began by reviewing the information that was developed in connection with the presentation

of Case No. 2005-00142. The information developed in connection with that case can be, and is, used in the evaluation of the routes for the line in this proceeding. However, the Companies' analysis for this proceeding went beyond the analysis that was conducted in Case No. 2005-00142 in that the Companies generated the maximum number of routes that are feasible considering the Commission's directive to emphasize the use of existing corridors.

Q. Did the Companies utilize the Electric Power Research Institute ("EPRI") Standardized Method of Siting Overhead Transmission Lines for the identification of macro-corridors?

A. No. We did not identify macro corridors utilizing the EPRI methodology. Instead, the Companies followed the direction of the Commission Staff at the informal conference described in Mr. Wolfram's testimony, in which the Companies identified all routes that will "work electrically" with emphasis on existing corridors, or collocation.

Q. Then, how did the Companies identify all routes that will work electrically?

A. As the Commission knows, there are an infinite number of routes or lines that can be drawn between the Mill Creek Station and the Hardin County Substation. The Companies, therefore, approached the question from the standpoint of creating a universe of routes that might realistically be used. We identified the easternmost route with essentially 100% collocation and the westernmost route with essentially 100% collocation and used them as the outer boundaries of our inquiry area. The reasoning is that one cannot go further east or further west and gain a

greater percentage of collocation and, of course, longer lines to the east or west of those boundaries increase the cost of the lines.

Q. What was the result?

A. We studied existing power lines, gas lines and roads in the area of inquiry as well as constraints, such as buildings, forests, wetlands and the like, and identified 1,203 routes in the area of inquiry. Those routes are composed of 156 separate segments. Of course, we tried to include as many routes as we could along collocation opportunities and to avoid the constraints where we could. With respect to the 1,203 routes, in accordance with the Commission Staff's recommendation at the informal conference, we estimated the percent of each route that is collocated with other transmission lines, pipelines or roads. The routes in descending order of percentages of collocation were compiled in a spreadsheet for comparison purposes. We were able to use the United States Geological Survey quadrangle maps, aerial photography, GIS information and the other data described in Brandon Grillon's testimony in this proceeding to identify the routes and determine the amount of collocation on those routes.

Q. Please describe the third step of the Commission Staff's route selection process and how the Companies performed it.

A. The third step is an estimation of the cost of the routes we identified. Therefore, following the Commission Staff's recommendation, we made cost estimates of the routes, as more fully described in Brandon Grillon's testimony in this proceeding. We used information the Companies normally use in making early estimates of construction costs; however, these estimates are not the final cost

estimates that will be derived from more specific information and used for construction purposes. These early estimates are used uniformly for each cost element so that they are suitable for purposes of comparing the routes. That information was compiled in a spreadsheet for comparison purposes. The routes were arranged in ascending order, with the least cost route being the first one listed.

Q. Did the Companies perform the fourth step of the Commission Staff's process; that is, a determination of the rate impact resulting from the use of routes other than the least cost route?

A. Yes. That analysis and determination is set forth in the testimony of John Wolfram.

Q. How did the Companies perform the fifth step in the Commission Staff's process?

A. We applied the analysis and evaluation portion of the EPRI methodology to these routes. That is the portion of the EPRI analysis that compares routes based on built, natural and engineering criteria and which was discussed during the informal conference described above. The EPRI scores were compiled in a spreadsheet under four columns: (i) emphasis on the built environment; (ii) emphasis on the natural environment; (iii) emphasis on engineering considerations and (iv) simple average of the three criteria.

Q. Did the Companies perform any sensitivity analyses to check the validity of the results from the application of the evaluation and analysis portion of the EPRI methodology?

A. Yes. We performed a complete sensitivity analysis of the EPRI results by changing the baseline EPRI weightings of each of the constituent criteria of the model. Each criterion was changed from the base weighting to a weighting of 50% emphasis and 100% emphasis to analyze whether the high scores of the Companies' preferred and alternative routes would change if greater emphasis were placed on any of these criteria.

Q. What was the result of the sensitivity analysis?

A. As to be expected, the ranking of the routes varied when different emphases were placed on different criteria. However, even with extreme changes in emphases on different criteria, the two routes selected by the Companies scored among the highest in virtually all scenarios. This result demonstrates that, examined from a wide variety of perspectives, the preferred and alternative routes are among the very best of all the routes analyzed.

Q. Have you made exhibits of the spreadsheet containing the collocation, cost and EPRI information and the sensitivity analyses?

A. Yes. Exhibit MSJ-1 shows the fifty best routes in collocation, cost and each EPRI category. The sensitivity analyses are contained in Exhibit MSJ-2.

Q. Did the Companies take any steps to eliminate outliers from the analysis?

A. Yes. Frankly, an across the board, detailed analysis of 1,203 routes is somewhat unmanageable. So, we determined two ways to eliminate more obvious non-contenders from the analysis. First, we eliminated the routes that were unacceptable to the Fort Knox Military Reservation based on consideration of potential impacts on ongoing or planned operations, potential environmental

impacts and other such considerations. As the Commission knows, the Companies will need an easement to cross the reservation and are obligated to place their transmission facilities in locations on the reservation to which Fort Knox agrees and that are supported by Fort Knox's environmental review under the National Environmental Policy Act of 1969 ("NEPA"). Second, we eliminated routes for which the estimated cost of construction was 125% of the least cost route. We decided on this level of elimination by reference to the Commission's order of August 19, 2005, in Case No. 2005-00089, *In the Matter of: The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Transmission Line in Rowan County, Kentucky.* There, as we understand the order, the Commission suggested that East Kentucky Power should have studied more carefully a route that would cost slightly more than $1,000,000 more than the $4.9 million line that East Kentucky Power proposed to construct. Since $1,000,000 is approximately 20% of $4.9 million dollars, we decided to confine our analysis to lines whose estimated cost is within 125% of the least cost option. In this case, the least cost route would cost approximately $54.7 million. So, routes that cost more than $13.7 million more than $54.7 million were eliminated. These steps reduced the number of routes for further evaluation to approximately 700.

Q. How did the Companies select the preferred and alternative routes from the remaining alternate routes?

A. We, with the assistance of Photo Science, applied our expert judgment to all of the information and identified a preferred route and an alternative route. While

we believe that it is important to analyze potential routes utilizing a comprehensive data set, we do not believe that route selection may be accomplished by simply feeding the data into a computerized formula and picking the route that emerges. The application of expert judgment to route selection has long been the accepted practice in the electric utility business and, in fact, is one of the steps in the overall EPRI methodology. Thus, we utilized our training and experience in the routing of transmission lines to analyze the data and determine which route is the preferred route. This included such considerations as the length of the routes, the number of property owners on the routes, home relocations on the routes, practicability of collocation, congestion in built areas, proximity to airports, the number of angles required in the route, topography, river crossings, wetlands, wooded areas and the like.

During this stage of the analysis, we consulted with Mr. Doherty from time to time as he was developing his analysis and evaluation of the alternate routes to obtain his perspective on our analysis. After our decision-making process was concluded, Mr. Doherty, using his own analytical methodologies, confirmed and validated our conclusions.

Q. What was the conclusion as to route selection?

A. The Companies believe that two routes are reasonable routes and that the Mill Creek to Hardin County Route No. 1, shown on Application Exhibit 2, is the preferred route. The other reasonable route, Mill Creek to Hardin County Route No. 2, is described in Case No. 2005-00472 filed concurrently herewith and is the alternative the Companies believe should be utilized if the Commission does not

grant a CCN for Mill Creek to Hardin County Route No.1. The collocation on Route No. 1 is approximately 56% and the collocation on Route No. 2 is approximately 66%. The estimated cost of Route No. 2, however, is approximately $4.2 million higher than the estimated cost of Route No. 1. Both Route No. 1 and Route No. 2 are consistently among the fifty best scoring routes using the EPRI criteria from a variety of perspectives and sensitivities.

Q. Please summarize why the Companies recommend the preferred and the alternative route?

A. First, they are both among the least cost routes in the area of inquiry, with the preferred route costing $4.2 million less to construct than the alternative route. Second, they are both among the most direct routes from the Mill Creek Station to the Hardin County Substation. Third, both routes utilize reasonable percentages of collocation. Fourth, the EPRI scores for both routes were among the best EPRI scores under a variety of sensitivities.

Q. Will the construction of the transmission line along the Mill Creek to Hardin County Route No. 1 result in any unnecessary or wasteful duplication of facilities?

A. No.

Q. Have the Companies conducted any physical inspections of the area of inquiry?

A. Yes. While we have not been able to physically inspect the entirety of the alternative routes, we have driven through the area of inquiry and have made observations to confirm the topography and buildings shown on the photos, maps

and other sources. Where the physical inspections revealed differences with the information shown on the photos, maps and other sources, they were noted and considered in our evaluation.

Q. A portion of the Mill Creek to Hardin County Route No. 1 passes through the Fort Knox Military Reservation. How was that portion of the route selected?

A. We used the same methodology for that portion of the route as for the rest of the route. As indicated above, the Companies are obligated to place their transmission facilities in locations on the reservation to which Fort Knox agrees and that are supported by Fort Knox's environmental review. Therefore, we have had discussions with Fort Knox personnel for the purpose of identifying alternative routes across the military reservation and agreeing on a route subject to any impact avoidance, minimization or mitigation measures that may be identified as a result of the environmental review and consultation processes required for the Fort Knox segment of the line under environmental and cultural resource laws. The location of the portion of the Mill Creek to Hardin County Route No. 1 that crosses the military reservation was determined using this process. A copy of the letter dated December 8, 2005, from Colonel Mark D. Needham, Garrison Commander, Fort Knox, identifying the route to which Fort Knox would agree is attached hereto as Exhibit MSJ-3. We also had preliminary discussions with the State Historic Preservation Officer pursuant to Section 106 of the NHPA about the portion of the route that is located in Fort Knox as that portion of the line is subject to the NHPA. While the consultation with the State Historic Preservation

Officer is ongoing, we believe that the route across Fort Knox (including adjustments to pole height to address visibility from historic properties) is consistent with the requirements of that act. In addition, we are requesting the flexibility to make unsubstantial modifications to the transmission project to address any other potential impact avoidance, minimization or mitigation measures that may be identified as a result of the environmental review and consultation processes under environmental and cultural resource laws.

Q. Have the Companies had any discussions with other regulatory agencies about the route for the transmission facilities?

A. Yes. We have had discussions with the Kentucky Division of Water and the U.S. Army Corps of Engineers. A copy of an e-mail from Greg McKay, a biologist with the U.S. Army Corps of Engineers, dated November 14, 2005, is attached as Exhibit MSJ-4. We believe that our plans are consistent with those agencies' requirements.

In addition, we have had discussions with both the Kentucky Department of Fish & Wildlife Resources and the United States Fish and Wildlife Service. We believe that the Mill Creek to Hardin County Route No. 1 is consistent with their views about the protection of fish and wildlife. In fact, while Route No. 1 is essentially the same as the route proposed in Case No. 2005-00142, at the suggestion of the United States Fish and Wildlife Service and the Kentucky Department of Fish & Wildlife Resources, we made a slight adjustment to the route to avoid a pond on which there had been a whooping crane sighting as described in Case No. 2005-00142. A letter dated October 31, 2005, from the

United States Fish and Wildlife Service relating to the route adjustment is attached as Exhibit MSJ-5 and the letter dated November 7, 2005 from the Kentucky Department of Fish & Wildlife Resources relating to the same adjustment is attached hereto as Exhibit MSJ-6.

Q. Please describe how this transmission line will be constructed.

A. As discussed above, the Companies have begun environmental and cultural studies and related surveys in areas on Fort Knox Military Reservation. In addition, although NEPA and Section 106 of the National Historic Preservation Act ("NHPA") do not apply to the remainder (and vast majority) of the line, the Companies have begun similar surveys on a voluntary basis in areas where the Companies have existing easements. In areas where easements must be acquired, the voluntary environmental and cultural studies will begin once permissions from the property owners have been obtained. These surveys will be performed by the Companies' transmission line services personnel and Photo Science.

After the CCN has been issued for this project, the Companies will begin the easement acquisition, right-of-way vegetation removal, final design, material acquisition and construction phases of the project. Permission for the remaining survey and environmental study will be requested as part of the easement acquisition activity.

The cutting and removal of vegetation will begin in areas where the highest percentage of easements has been acquired. This is expected to be on the Fort Knox Military Reservation. Once the permissions to survey and/or easements

have been obtained for the new routes, then vegetation will be cleared in these areas.

The transmission line design engineering functions for this project will be performed by the Companies' transmission line services personnel located at One Quality Street in Lexington. The Companies will request qualified vendors to submit competitive bids for the material required for the completion of the work. Contractors will be requested to competitively bid on the transmission line construction. The requests for bids will specify that all work performed shall comply with all local, state and federal laws and conform to all permits and environmental requirements.

Q. What is the expected cost of construction for the transmission line?

A. The estimated cost is approximately $56.7 million.

Q. Please explain why the transmission facilities proposed by the Companies in this proceeding are required by public convenience and necessity.

A. As regulated utilities in Kentucky, KU and LG&E have an obligation to provide dependable service to customers located in their respective certified territories. The Companies have projected growth in their native loads, and have established a need for additional baseload capacity in order to serve those growing loads. The Commission has agreed with the Companies' determination of the need for TC2 to provide this baseload capacity and for new transmission facilities between Mill Creek and the Hardin County Substation. The proposed facilities are consistent with, and necessary to provide for, the public convenience and necessity because

they are required to allow the Companies to meet the needs of their growing native loads.

Q. Have the Companies been in contact with landowners who will be affected by the proposed transmission facilities?

A. Yes. The Companies are mindful of the Commission's discussion of our response to public comments in the Order of September 8, 2005, in Case No. 2005-00142. The Companies sought the assistance of the Commission Staff at the October 4, 2005, informal conference on this issue. The Staff recommended at the informal conference that utilities attempt to address property-specific complaints about the proposed line personally and individually early in the process. The Companies have begun those discussions and will continue having landowner discussions with respect to the Mill Creek to Hardin County Route No. 1. Kathleen A. Slay discusses this issue in detail in her testimony in this proceeding. The Companies' transmission line services personnel are addressing and considering landowners' comments in the design of the line and are working with Ms. Slay and her team in communicating the Companies' response back to landowners.

Q. Do you have a recommendation for this Commission?

A. Yes. For all of the reasons set forth in the Companies' Application, and in the testimony submitted with the Application, it is my recommendation that the Commission confirm its earlier finding that the Companies have established a need for the proposed transmission facilities, find that the route selected is reasonable and appropriate, and grant the Companies' Application for a CCN. Further, I recommend that the Commission provide flexibility in any orders

approving the proposed construction for the Companies to make unsubstantial modifications to the route chosen if conditions justify or compel such modifications without the need for further orders from the Commission, as described by John Wolfram in his testimony filed concurrently herewith in this proceeding.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, Mark S. Johnson, being duly sworn, deposes and says he is Director of Transmission for E.ON U.S. Services, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Mark S. Johnson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22nd day of December, 2005.

Notary Public (SEAL)

My Commission Expires:

TAMMY J. ELZY
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
My Commission Expires Nov. 9, 2006

Route AJU = Route 1
Route AJW = Route 2

Top 50 Routes by Category

Rank	Total Project Cost	Project Cost Amount	Total Collocation	Amount Collocation		Simple Composite	Natural Environment Perspective	Engineering Considerations	Built Environment Perspective
1	ROUTE AQV	$54,764,303	ROUTE ACO	97.99%		***ROUTE AJW***	ROUTE KY	ROUTE KY	***ROUTE AJW***
2	ROUTE ZJ	$54,841,292	ROUTE ACQ	97.79%		ROUTE KY	ROUTE HW	***ROUTE AJW***	ROUTE AIK
3	ROUTE AQP	$55,834,634	ROUTE A	97.15%		ROUTE KW	ROUTE KU	ROUTE KW	ROUTE AGU
4	ROUTE ZD	$55,862,858	ROUTE E	96.97%		ROUTE AIK	***ROUTE AJW***	ROUTE KU	ROUTE ADK
5	ROUTE AQS	$55,987,776	ROUTE C	96.32%		ROUTE KU	ROUTE IA	ROUTE AIK	ROUTE AHA
6	ROUTE ZG	$56,020,712	ROUTE G	96.17%		ROUTE AGU	ROUTE KW	ROUTE KS	ROUTE AGY
7	ROUTE YX	$56,150,301	ROUTE AUL	93.39%		ROUTE AHA	ROUTE HO	ROUTE HO	***ROUTE AJU***
8	ROUTE AJV	$56,533,166	ROUTE ACR	91.37%		ROUTE AGY	ROUTE KZ	ROUTE AGU	ROUTE AJX
9	ROUTE AQX	$56,602,757	ROUTE ACP	91.35%		ROUTE HO	ROUTE AU	ROUTE HW	ROUTE KY
10	ROUTE LD	$56,618,722	ROUTE AVF	91.13%		ROUTE ADK	ROUTE AGY	ROUTE IA	ROUTE AII
11	ROUTE ZL	$56,644,737	ROUTE F	90.36%		ROUTE IA	ROUTE AIK	ROUTE AU	ROUTE AGQ
12	***ROUTE AJU***	$56,742,836	ROUTE B	90.31%		ROUTE HW	ROUTE AHA	ROUTE AGY	ROUTE AIL
13	ROUTE LC	$56,885,428	ROUTE H	89.54%		ROUTE KS	ROUTE KS	ROUTE AHA	ROUTE AGV
14	ROUTE ZA	$57,040,237	ROUTE D	89.46%		ROUTE AU	ROUTE HY	ROUTE ADK	ROUTE KU
15	ROUTE AQM	$57,055,665	ROUTE AUW	88.71%		ROUTE HM	ROUTE AGU	ROUTE HM	ROUTE KW
16	ROUTE YR	$57,190,680	ROUTE ACU	87.00%		ROUTE HY	ROUTE HX	ROUTE HY	ROUTE HO
17	ROUTE YU	$57,345,988	ROUTE ACS	86.83%		ROUTE AJX	ROUTE KV	ROUTE KZ	ROUTE KS
18	ROUTE ZF	$57,669,108	ROUTE AUH	86.39%		ROUTE KZ	ROUTE LC	ROUTE AJX	ROUTE ADO
19	ROUTE AQR	$57,676,447	ROUTE AUJ	86.36%		ROUTE AIL	ROUTE AJX	ROUTE HK	ROUTE HM
20	ROUTE AQW	$57,705,146	ROUTE AUK	86.20%		***ROUTE AJU***	ROUTE IB	ROUTE AGS	ROUTE ADL
21	ROUTE ZK	$57,762,091	ROUTE M	85.83%		ROUTE KX	ROUTE HM	ROUTE KX	ROUTE AQL
22	ROUTE ZI	$57,826,001	ROUTE I	85.61%		ROUTE AGV	ROUTE ADK	ROUTE AI	ROUTE AHC
23	ROUTE AQU	$57,828,454	ROUTE AUU	85.55%		ROUTE KV	ROUTE KX	ROUTE ADE	ROUTE AGS
24	ROUTE LB	$57,896,843	ROUTE AUV	85.39%		ROUTE AGS	ROUTE HP	ROUTE AQ	ROUTE AKY
25	ROUTE YZ	$57,970,593	ROUTE O	84.96%		ROUTE LC	ROUTE CB	ROUTE ADI	ROUTE AEE
26	ROUTE LA	$58,169,056	ROUTE K	84.71%		ROUTE AHB	ROUTE YB	ROUTE HI	ROUTE AU
27	ROUTE AKZ	$58,349,345	ROUTE AUI	83.55%		ROUTE AGZ	ROUTE AV	ROUTE BO	ROUTE AMY
28	ROUTE YO	$58,384,139	ROUTE AUD	83.50%		ROUTE ADL	ROUTE KQ	ROUTE ADU	ROUTE AHB
29	ROUTE PX	$58,398,596	ROUTE ACY	82.85%		ROUTE HP	ROUTE AGZ	ROUTE AO	ROUTE ALY
30	ROUTE AKY	$58,587,909	ROUTE ADC	82.57%		ROUTE HK	ROUTE BO	ROUTE BW	ROUTE AEB
31	ROUTE PW	$58,690,061	ROUTE ACW	82.53%		ROUTE ADI	ROUTE AIL	ROUTE ADY	ROUTE IA
32	ROUTE ALV	$58,724,171	ROUTE ADA	82.24%		ROUTE ADE	***ROUTE AJU***	ROUTE AIL	ROUTE AGZ
33	ROUTE AQQ	$58,769,412	ROUTE AVC	81.67%		ROUTE AEB	ROUTE HK	ROUTE KV	ROUTE HW
34	ROUTE RP	$58,776,114	ROUTE U	81.50%		ROUTE AII	ROUTE IE	ROUTE BU	ROUTE HY
35	ROUTE ZE	$58,778,591	ROUTE AC	81.22%		ROUTE IB	ROUTE AHB	ROUTE AGV	ROUTE ADI
36	ROUTE AIT	$58,798,558	ROUTE Q	81.12%		ROUTE ADY	ROUTE BW	ROUTE HP	ROUTE AJV
37	ROUTE AQJ	$58,806,183	ROUTE Y	80.83%		ROUTE HX	ROUTE HV	ROUTE ADL	ROUTE ALE
38	ROUTE XX	$58,833,359	ROUTE W	80.58%		ROUTE ADU	ROUTE AI	ROUTE AGZ	ROUTE ANE
39	ROUTE ZC	$58,848,281	ROUTE ACV	80.55%		ROUTE AV	ROUTE KT	ROUTE AV	ROUTE LC
40	ROUTE LL	$58,886,506	ROUTE AE	80.31%		ROUTE KT	ROUTE LA	ROUTE HX	ROUTE KZ
41	ROUTE AQO	$58,899,643	ROUTE ACT	80.17%		ROUTE AQ	ROUTE AQ	ROUTE KT	ROUTE AME
42	ROUTE AQT	$58,922,850	ROUTE S	80.16%		ROUTE AGQ	ROUTE HZ	***ROUTE AJU***	ROUTE AIJ
43	ROUTE ZH	$58,936,708	ROUTE AA	79.89%		ROUTE AI	ROUTE HG	ROUTE AHB	ROUTE AGR
44	ROUTE YT	$59,014,027	ROUTE AUF	79.48%		ROUTE LA	ROUTE QI	ROUTE IB	ROUTE ADY
45	ROUTE AQL	$59,063,247	ROUTE N	79.19%		ROUTE CB	ROUTE CI	ROUTE LC	ROUTE ADE
46	ROUTE YY	$59,074,881	ROUTE AUG	79.15%		ROUTE KQ	ROUTE AGV	ROUTE HN	ROUTE KQ
47	ROUTE YB	$59,138,791	ROUTE J	78.74%		ROUTE BW	ROUTE AEB	ROUTE AEB	ROUTE HG
48	ROUTE YW	$59,168,270	ROUTE ADS	78.72%		ROUTE BO	ROUTE AQL	ROUTE CB	ROUTE KV
49	ROUTE AMZ	$59,391,449	ROUTE P	78.31%		ROUTE HN	ROUTE BC	ROUTE HV	ROUTE LA
50	ROUTE TX	$59,466,466	ROUTE ADQ	78.25%		ROUTE AHC	ROUTE QE	ROUTE HZ	ROUTE HP
			AJU-633	55.86%					
	AJW-93	$60,973,719	***AJW-240***	66.29%					

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
1	***ROUTE AJW***	***ROUTE AJW***	ROUTE KY	***ROUTE AJW***	***ROUTE AJW***	ROUTE KY	ROUTE KU	ROUTE KY	ROUTE KY	ROUTE KY	ROUTE KY	ROUTE KY	ROUTE KY	***ROUTE AJW***	***ROUTE AJW***	ROUTE KY	ROUTE KY	ROUTE KY	ROUTE KY	***ROUTE AJW***	***ROUTE AJW***	***ROUTE AJW***	***ROUTE AJW***	***ROUTE AJW***	***ROUTE AJU***
2	ROUTE KY	ROUTE KY	***ROUTE AJW***	ROUTE KY	ROUTE KY	ROUTE KU	ROUTE HW	***ROUTE AJW***	ROUTE KW	***ROUTE AJW***	ROUTE KW	***ROUTE AJW***	ROUTE KW	ROUTE AIK	ROUTE AGY	ROUTE KW	ROUTE KW	***ROUTE AJW***	ROUTE KW	ROUTE KY	ROUTE AIK	ROUTE AIK	ROUTE AIK	ROUTE KY	ROUTE AOV
3	ROUTE KW	ROUTE KW	ROUTE KW	ROUTE KW	***ROUTE AJW***	ROUTE IA	ROUTE KW	***ROUTE AJW***	ROUTE KW	ROUTE KU	ROUTE KW	***ROUTE AJW***	ROUTE KW	ROUTE AGY	ROUTE AHA	***ROUTE AJW***	ROUTE KU	ROUTE KW	ROUTE KU	ROUTE AIK	ROUTE ADK	ROUTE AGU	***ROUTE AJU***	ROUTE KY	ROUTE ZJ
4	ROUTE AIK	ROUTE AIK	ROUTE KU	ROUTE AIK	ROUTE AIK	ROUTE AIK	ROUTE HO	ROUTE KU	ROUTE KU	ROUTE KU	ROUTE HW	ROUTE KU	ROUTE KU	ROUTE AHA	ROUTE ADK	ROUTE KU	ROUTE KS	ROUTE KU	***ROUTE AJW***	ROUTE KW	ROUTE AGU	ROUTE AHA	ROUTE ADK	ROUTE KW	ROUTE LC
5	ROUTE KU	ROUTE KU	ROUTE HO	ROUTE KU	ROUTE KU	ROUTE HW	ROUTE AU	ROUTE AIK	ROUTE HW	ROUTE AIK	ROUTE IA	ROUTE AIK	ROUTE HO	ROUTE ADK	ROUTE AIK	ROUTE KS	ROUTE IA	ROUTE AIK	ROUTE HO	ROUTE AGU	ROUTE AHA	ROUTE ADK	ROUTE AHA	ROUTE LC	ROUTE AJV
6	ROUTE AGU	ROUTE AGU	ROUTE AU	ROUTE AGU	ROUTE AHA	ROUTE IA	ROUTE KS	ROUTE HW	ROUTE IA	ROUTE HW	***ROUTE AJW***	ROUTE HO	ROUTE KS	ROUTE AGU	ROUTE AGU	ROUTE AIK	ROUTE HW	ROUTE HO	ROUTE KS	ROUTE KU	ROUTE KY	ROUTE AGY	ROUTE AGY	ROUTE AIK	ROUTE AOX
7	ROUTE AHA	ROUTE AHA	ROUTE IA	ROUTE IA	ROUTE IA	ROUTE HO	ROUTE HY	ROUTE IA	ROUTE HO	ROUTE IA	ROUTE HO	ROUTE AGU	ROUTE AIK	ROUTE KY	ROUTE ADE	ROUTE IA	ROUTE HY	ROUTE AGU	ROUTE HW	ROUTE AHA	ROUTE AGY	ROUTE KY	ROUTE AJX	ROUTE AJX	ROUTE AQS
8	ROUTE AGY	ROUTE HO	ROUTE AIK	ROUTE AGY	ROUTE AGY	ROUTE KW	ROUTE KY	ROUTE HO	ROUTE AU	ROUTE HO	ROUTE AU	ROUTE KS	ROUTE HM	ROUTE KW	ROUTE ADU	ROUTE HW	***ROUTE AJW***	ROUTE KS	ROUTE HW	ROUTE AGY	ROUTE AJX	ROUTE KW	ROUTE AGS	ROUTE KU	ROUTE AOP
9	ROUTE HO	ROUTE AGY	ROUTE HW	ROUTE HO	ROUTE HW	ROUTE AGY	ROUTE AIK	ROUTE AGY	ROUTE KS	ROUTE KS	ROUTE KS	ROUTE HW	ROUTE KZ	ROUTE AJX	ROUTE ADI	ROUTE HO	ROUTE PW	ROUTE IA	ROUTE IA	ROUTE ADK	ROUTE KU	ROUTE KU	ROUTE AIL	ROUTE KZ	ROUTE LD
10	ROUTE ADK	ROUTE ADK	ROUTE KS	ROUTE IA	ROUTE AGU	ROUTE AHA	ROUTE AGY	ROUTE AHA	ROUTE AIK	ROUTE AU	ROUTE HW	ROUTE AGU	ROUTE KU	ROUTE ADY	ROUTE HY	ROUTE PW	ROUTE AHA	ROUTE HY	ROUTE HO	ROUTE AU	ROUTE AJX	ROUTE AGV	ROUTE LA	ROUTE ZL
11	ROUTE IA	ROUTE IA	ROUTE AGU	ROUTE ADK	ROUTE HO	ROUTE AGU	ROUTE AHA	ROUTE AGU	ROUTE AGY	ROUTE AGY	ROUTE HM	ROUTE IA	ROUTE KX	ROUTE HW	ROUTE AGS	ROUTE AHA	ROUTE PU	ROUTE HW	ROUTE AU	ROUTE IA	ROUTE KW	ROUTE HO	ROUTE ADI	ROUTE AII	ROUTE ZG
12	ROUTE HW	ROUTE HW	ROUTE ADK	ROUTE HW	ROUTE ADK	ROUTE AU	ROUTE HM	ROUTE AU	ROUTE HY	ROUTE AHA	ROUTE AIK	ROUTE KZ	ROUTE AJX	ROUTE IA	ROUTE AGZ	ROUTE AGY	ROUTE YB	ROUTE AGY	ROUTE AIK	ROUTE HO	ROUTE HW	ROUTE HO	ROUTE KS	***ROUTE AJU***	ROUTE ZD
13	ROUTE KS	ROUTE KS	ROUTE AHA	ROUTE KS	ROUTE AU	ROUTE KS	ROUTE AGU	ROUTE KS	ROUTE AHA	ROUTE AGU	ROUTE AGY	ROUTE AJX	ROUTE HK	ROUTE ADE	ROUTE AJX	ROUTE AU	ROUTE RU	ROUTE AU	ROUTE HK	ROUTE AU	ROUTE IA	ROUTE IA	ROUTE ADE	ROUTE AGU	ROUTE AQL
14	ROUTE AU	ROUTE AU	ROUTE HM	ROUTE AU	ROUTE KS	ROUTE ADK	ROUTE ADK	ROUTE ADK	ROUTE AHA	ROUTE ADK	ROUTE AHA	ROUTE AGY	ROUTE KV	ROUTE ADI	ROUTE AHB	ROUTE HM	ROUTE AIK	ROUTE ADK	ROUTE AGU	ROUTE KS	ROUTE HW	ROUTE AU	ROUTE ADL	ROUTE ADK	***ROUTE AJW***
15	ROUTE HM	ROUTE HM	ROUTE HY	ROUTE HM	ROUTE HY	ROUTE HY	ROUTE KW	ROUTE HY	ROUTE AGU	ROUTE HY	ROUTE KZ	ROUTE AHA	ROUTE LC	ROUTE AGS	ROUTE ADL	ROUTE AGU	ROUTE TW	ROUTE HM	ROUTE HI	ROUTE HM	ROUTE ADL	ROUTE AIL	ROUTE ADY	ROUTE AJV	ROUTE LA
16	ROUTE HY	ROUTE HY	ROUTE AGY	ROUTE HY	ROUTE HM	***ROUTE AJW***	ROUTE HM	ROUTE KZ	ROUTE HM	ROUTE AGU	ROUTE AU	ROUTE HP	ROUTE ADU	ROUTE AEB	ROUTE KZ	ROUTE YA	ROUTE HY	ROUTE KZ	ROUTE AJX	ROUTE AIL	ROUTE HW	ROUTE KY	ROUTE AKY	ROUTE YX
17	ROUTE AJX	ROUTE AJX	ROUTE KZ	ROUTE AJX	***ROUTE AJU***	ROUTE KZ	ROUTE AI	ROUTE KZ	ROUTE ADK	ROUTE KZ	ROUTE ADK	ROUTE ADK	ROUTE HI	ROUTE ADY	ROUTE AIL	ROUTE ADK	ROUTE KZ	ROUTE AJX	ROUTE AGY	ROUTE HY	ROUTE AGV	***ROUTE AJU***	ROUTE AGQ	ROUTE IA	ROUTE AQW
18	ROUTE KZ	ROUTE KZ	ROUTE AJX	ROUTE KZ	ROUTE AJX	ROUTE KV	ROUTE BO	ROUTE AJX	ROUTE KX	ROUTE AJX	ROUTE KX	ROUTE HY	ROUTE KT	ROUTE AU	ROUTE AQL	ROUTE KX	ROUTE QI	ROUTE KZ	ROUTE AHA	ROUTE KZ	ROUTE AHB	ROUTE AGS	ROUTE AII	ROUTE KQ	ROUTE AQU
19	ROUTE AIL	ROUTE AIL	ROUTE KX	***ROUTE AJU***	ROUTE LC	ROUTE HK	ROUTE HK	ROUTE KX	ROUTE AJX	ROUTE KX	ROUTE AI	ROUTE KX	ROUTE HW	ROUTE HO	ROUTE AUK	ROUTE AJX	ROUTE HO	ROUTE KX	ROUTE BO	ROUTE AIL	ROUTE AEB	ROUTE HM	ROUTE ADU	ROUTE KS	ROUTE AQR
20	***ROUTE AJU***	***ROUTE AJU***	ROUTE LC	ROUTE LC	ROUTE KZ	ROUTE AJX	ROUTE HX	ROUTE KV	ROUTE AI	ROUTE KV	ROUTE BO	ROUTE KV	ROUTE AGS	ROUTE KS	ROUTE KY	ROUTE KV	ROUTE TU	***ROUTE AJU***	ROUTE AI	***ROUTE AJU***	ROUTE AGZ	ROUTE AGV	ROUTE AHB	ROUTE HO	ROUTE AQM
21	ROUTE KX	ROUTE KX	ROUTE KV	ROUTE AIL	ROUTE AII	ROUTE AIL	ROUTE AQ	ROUTE AIL	ROUTE BO	ROUTE HK	ROUTE HK	ROUTE AIL	ROUTE AIL	ROUTE HY	***ROUTE AJU***	ROUTE LC	ROUTE LC	ROUTE KX	ROUTE LC	ROUTE LC	ROUTE AGV	ROUTE KS	ROUTE ADI	ROUTE AEB	ROUTE AGY	ROUTE YB
22	ROUTE AGV	ROUTE KV	ROUTE HP	ROUTE KX	ROUTE LA	ROUTE HX	ROUTE KV	ROUTE HK	ROUTE HK	ROUTE HK	ROUTE HX	ROUTE LC	ROUTE IA	ROUTE AGZ	ROUTE AUE	ROUTE PW	ROUTE SI	ROUTE AGS	ROUTE BW	ROUTE KX	ROUTE KZ	ROUTE HY	ROUTE AQZ	ROUTE AOV	ROUTE AKY
23	ROUTE KV	ROUTE AGV	ROUTE AV	ROUTE KV	ROUTE KX	ROUTE AI	ROUTE BW	ROUTE LC	ROUTE HX	ROUTE AIL	ROUTE AQ	ROUTE HK	ROUTE LA	ROUTE AIL	ROUTE AJY	ROUTE KT	ROUTE QG	ROUTE AIL	ROUTE AQ	ROUTE AHB	ROUTE HM	ROUTE ADL	ROUTE ADQ	ROUTE KY	ROUTE KY
24	ROUTE AGS	ROUTE LC	ROUTE IB	ROUTE AGV	ROUTE KQ	ROUTE HP	ROUTE IB	ROUTE HX	ROUTE AQ	ROUTE LC	ROUTE KV	***ROUTE AJU***	ROUTE HN	ROUTE AHB	ROUTE AGV	ROUTE KT	ROUTE AUE	ROUTE HM	ROUTE HK	ROUTE KK	ROUTE AGZ	ROUTE HY	ROUTE AHB	ROUTE KW	ROUTE YB	ROUTE AQJ
25	ROUTE LC	ROUTE AGS	***ROUTE AJU***	ROUTE AII	ROUTE AIL	ROUTE IB	ROUTE HP	***ROUTE AJU***	ROUTE KV	ROUTE BW	ROUTE AGS	***ROUTE AJU***	***ROUTE AJU***	ROUTE AHC	ROUTE IB	ROUTE KV	ROUTE AHC	ROUTE KV	ROUTE ADK	ROUTE ADL	***ROUTE AJU***	ROUTE ADE	ROUTE AEE	ROUTE LD	ROUTE ZI
26	ROUTE AHB	ROUTE AHB	ROUTE AIL	ROUTE AGS	ROUTE KV	ROUTE AGS	ROUTE AV	ROUTE AGS	ROUTE BW	ROUTE IB	ROUTE IB	ROUTE HP	ROUTE AGV	ROUTE ADL	ROUTE HW	ROUTE YB	ROUTE AHA	ROUTE AGV	ROUTE LA	ROUTE KV	ROUTE AVC	ROUTE AGZ	ROUTE AHC	ROUTE AIL	ROUTE ZA
27	ROUTE AGZ	ROUTE HP	ROUTE CB	ROUTE AHB	ROUTE AHC	ROUTE AQ	ROUTE CB	ROUTE AI	ROUTE IB	ROUTE HP	ROUTE AJX	ROUTE AGV	ROUTE AU	ROUTE HM	ROUTE ADO	ROUTE HX	ROUTE AU	ROUTE HP	ROUTE BU	ROUTE AGS	ROUTE AV	ROUTE ADY	ROUTE KU	ROUTE ADK	ROUTE ZF
28	ROUTE ADL	ROUTE AGZ	ROUTE HX	ROUTE AGZ	ROUTE AGQ	ROUTE AGZ	ROUTE HI	ROUTE HP	ROUTE LC	ROUTE AQ	ROUTE HP	ROUTE KT	ROUTE NW	ROUTE AGV	ROUTE IA	ROUTE RW	ROUTE SG	ROUTE ADI	ROUTE AQ	ROUTE LC	ROUTE KV	ROUTE AII	ROUTE AKY	ROUTE PW	ROUTE ZK
29	ROUTE HP	ROUTE ADL	ROUTE LA	ROUTE LA	ROUTE IE	ROUTE BO	ROUTE HV	ROUTE IB	ROUTE HP	ROUTE BO	ROUTE AV	ROUTE LA	ROUTE KQ	ROUTE AEB	ROUTE AEE	ROUTE LA	ROUTE AGY	ROUTE AQ	ROUTE AGS	ROUTE AEB	ROUTE ADO	ROUTE AEB	ROUTE HO	ROUTE AQX	ROUTE AJX
30	ROUTE HK	ROUTE HK	ROUTE AGV	ROUTE HP	ROUTE AHB	ROUTE AGV	ROUTE AO	ROUTE AQ	ROUTE AV	ROUTE AGS	ROUTE CB	ROUTE HI	ROUTE HY	ROUTE AHC	ROUTE AQU	***ROUTE AJU***	ROUTE NW	ROUTE ADE	ROUTE KV	ROUTE HP	ROUTE HP	ROUTE ADU	ROUTE ALY	ROUTE HW	ROUTE AII
31	ROUTE ADI	ROUTE ADI	ROUTE KT	ROUTE ADL	ROUTE AGZ	ROUTE BW	ROUTE KT	ROUTE AGZ	ROUTE CB	ROUTE BW	ROUTE HI	ROUTE HN	ROUTE HG	ROUTE AII	ROUTE AQX	ROUTE KQ	ROUTE UI	ROUTE AI	ROUTE KQ	ROUTE ADI	ROUTE ATM	ROUTE AGQ	ROUTE AU	ROUTE AMY	ROUTE LB
32	ROUTE ADE	ROUTE IB	ROUTE ADL	ROUTE HK	ROUTE ADO	ROUTE AHB	ROUTE ADE	ROUTE BO	ROUTE ADE	ROUTE AV	ROUTE HV	ROUTE KQ	ROUTE AGY	ROUTE AQT	ROUTE PU	ROUTE KT	ROUTE LA	ROUTE HP	ROUTE AII	ROUTE AQL	ROUTE KS	ROUTE AHC	ROUTE PW		
33	ROUTE AEB	ROUTE AEB	ROUTE AHB	ROUTE ADI	ROUTE HG	ROUTE ADE	ROUTE BU	ROUTE AGV	ROUTE HI	***ROUTE AJU***	ROUTE AO	ROUTE AII	ROUTE AHA	ROUTE AQL	ROUTE AQW	ROUTE AKY	ROUTE AKY	ROUTE AHB	ROUTE AJX	ROUTE ADE	ROUTE AGQ	ROUTE ADO	ROUTE AMY	ROUTE AGQ	ROUTE AMY
34	ROUTE AII	ROUTE AII	ROUTE KQ	ROUTE IB	ROUTE IB	ROUTE AV	ROUTE ADU	ROUTE AHB	ROUTE HV	ROUTE AGZ	ROUTE LC	ROUTE HG	ROUTE OI	ROUTE AEE	ROUTE AKE	ROUTE HK	ROUTE NU	ROUTE ADY	ROUTE KY	ROUTE IB	ROUTE AII	ROUTE AHC	ROUTE HM	ROUTE ZJ	ROUTE XX
35	ROUTE IB	ROUTE HX	ROUTE HN	ROUTE KQ	ROUTE HX	ROUTE ADI	ROUTE AGZ	ROUTE ADE	ROUTE ADU	ROUTE AHB	ROUTE KT	ROUTE AGQ	ROUTE NU	ROUTE AGQ	ROUTE ATS	ROUTE HP	ROUTE UG	ROUTE AGZ	ROUTE HG	ROUTE HX	ROUTE IB	ROUTE AEE	ROUTE IA	ROUTE AQS	ROUTE AKZ
36	ROUTE ADY	ROUTE ADE	ROUTE AEB	ROUTE HX	ROUTE AGV	ROUTE KX	ROUTE HZ	ROUTE BW	ROUTE AO	ROUTE AGV	ROUTE BU	ROUTE HX	ROUTE KO	ROUTE KZ	ROUTE ALC	ROUTE TW	ROUTE LC	ROUTE BW	***ROUTE AJU***	ROUTE AV	ROUTE CB	ROUTE AKY	ROUTE AQL	ROUTE KV	ROUTE YZ
37	ROUTE HX	ROUTE AV	ROUTE AGZ	ROUTE AGQ	ROUTE AGS	ROUTE ADU	ROUTE AGS	ROUTE ADI	ROUTE AGZ	ROUTE ADE	ROUTE HZ	ROUTE IB	ROUTE PW	ROUTE AKY	ROUTE ATT	ROUTE HZ	ROUTE ALY	ROUTE ADU	ROUTE ADU	ROUTE ADY	ROUTE ATI	ROUTE KX	ROUTE AGT	ROUTE AU	ROUTE YU
38	ROUTE ADU	ROUTE KT	ROUTE HG	ROUTE ADE	ROUTE BC	ROUTE CB	ROUTE ADI	ROUTE AV	ROUTE AGS	ROUTE KT	ROUTE ADE	ROUTE AI	ROUTE YB	ROUTE AI	ROUTE AUG	ROUTE AQL	ROUTE IB	ROUTE HI	ROUTE ADE	ROUTE HK	ROUTE ATG	ROUTE KV	ROUTE HW	ROUTE AQP	ROUTE YR
39	ROUTE AV	ROUTE ADY	ROUTE BC	ROUTE AEB	ROUTE HP	ROUTE KT	ROUTE AIL	ROUTE ADU	ROUTE KT	ROUTE CB	ROUTE ADU	ROUTE AQ	ROUTE AII	ROUTE AQ	ROUTE AKY	ROUTE YA	ROUTE AQL	ROUTE IB	ROUTE KQ	ROUTE AGQ	ROUTE KX	ROUTE HK	ROUTE ALE	ROUTE ZL	ROUTE KZ
40	ROUTE KT	ROUTE LA	ROUTE HZ	ROUTE AHC	ROUTE HK	ROUTE ADY	ROUTE ADY	ROUTE ADY	ROUTE BU	ROUTE ADI	ROUTE HN	ROUTE AGZ	ROUTE AJY	ROUTE ALY	ROUTE KW	ROUTE HV	ROUTE HX	ROUTE BO	ROUTE ADV	ROUTE ADU	ROUTE HX	ROUTE AQL	ROUTE ADJ	ROUTE TW	ROUTE AQT
41	ROUTE AQ	ROUTE AQ	ROUTE IE	ROUTE AV	ROUTE ADL	ROUTE ADL	ROUTE AHB	ROUTE ADL	ROUTE ADI	ROUTE ADU	ROUTE AGZ	ROUTE AHB	ROUTE HL	ROUTE HK	ROUTE ADF	ROUTE AHB	ROUTE LA	ROUTE HX	ROUTE ADI	ROUTE CB	ROUTE AEE	ROUTE LC	ROUTE HY	ROUTE AQU	ROUTE AQO
42	ROUTE AGQ	ROUTE ADU	ROUTE HK	ROUTE ADY	ROUTE AEE	ROUTE HI	ROUTE KZ	ROUTE CB	ROUTE AIL	ROUTE HI	ROUTE AGS	ROUTE ADE	ROUTE ADK	ROUTE BO	ROUTE ADV	ROUTE AHB	ROUTE HZ	ROUTE KT	ROUTE HN	ROUTE KT	ROUTE AHC	ROUTE ALY	ROUTE ADF	ROUTE IE	ROUTE AQO
43	ROUTE AI	ROUTE AGQ	ROUTE HV	ROUTE AQ	ROUTE AEB	ROUTE HN	ROUTE KT	ROUTE ADY	ROUTE ADY	ROUTE ADI	ROUTE HE	ROUTE BW	ROUTE AU	ROUTE OI	ROUTE AII	ROUTE HE	ROUTE ADO	ROUTE ADI	ROUTE HP	ROUTE AME	ROUTE HG	ROUTE KO			
44	ROUTE LA	ROUTE CB	ROUTE AQ	ROUTE ADU	ROUTE ADF	ROUTE HV	ROUTE AGV	ROUTE AEB	ROUTE HZ	ROUTE ADL	ROUTE AIL	ROUTE BO	ROUTE RW	ROUTE AMY	ROUTE AQK	ROUTE ALY	ROUTE KQ	ROUTE ADL	ROUTE HX	ROUTE AHC	ROUTE AGS	ROUTE AMY	ROUTE AJY	ROUTE AQW	ROUTE ALV
45	ROUTE CB	ROUTE AI	ROUTE AI	ROUTE AV	ROUTE HN	ROUTE ADL	ROUTE HI	ROUTE AHB	ROUTE HV	ROUTE ADY	ROUTE AV	ROUTE AGQ	ROUTE KX	ROUTE ADJ	ROUTE AGZ	ROUTE AMY	ROUTE AV	ROUTE IB	ROUTE AQ	ROUTE ADE	ROUTE AQ	ROUTE ALE	ROUTE AJV	ROUTE KO	ROUTE AU
46	ROUTE KQ	ROUTE KQ	ROUTE CI	ROUTE KT	ROUTE AQ	ROUTE HZ	ROUTE KQ	ROUTE LA	ROUTE LA	ROUTE LA	ROUTE LA	ROUTE BW	ROUTE OG	ROUTE ALE	ROUTE AII	ROUTE AQ	ROUTE HV	ROUTE KQ	ROUTE IE	ROUTE LA	ROUTE ALE	ROUTE AV	ROUTE ADZ	ROUTE HY	ROUTE TW
47	ROUTE BW	ROUTE BW	ROUTE AGQ	ROUTE ADO	ROUTE CI	ROUTE AO	ROUTE AEB	ROUTE HV	***ROUTE AJU***	ROUTE AEB	ROUTE AHB	ROUTE KO	ROUTE OI	ROUTE AJY	ROUTE ADZ	ROUTE KO	ROUTE ALE	ROUTE AEB	ROUTE CB	ROUTE AI	ROUTE LC	ROUTE AI	ROUTE ANE	ROUTE ALY	ROUTE PX
48	ROUTE BO	ROUTE HN	ROUTE ADO	ROUTE HQ	ROUTE AI	ROUTE KQ	ROUTE IE	ROUTE HN	ROUTE HN	ROUTE HZ	ROUTE KQ	ROUTE ADL	ROUTE AKE	ROUTE HK	ROUTE ALA	ROUTE AV	ROUTE ZF	ROUTE CB	ROUTE HV	ROUTE KQ	ROUTE AVF	ROUTE IB	ROUTE ANE	ROUTE HM	ROUTE AIT
49	ROUTE HN	ROUTE BO	ROUTE AI	ROUTE CB	ROUTE KQ	ROUTE LC	ROUTE HG	ROUTE HZ	ROUTE AGV	ROUTE HN	ROUTE IE	ROUTE ADU	ROUTE PU	ROUTE ADF	ROUTE ALY	ROUTE AII	ROUTE AJX	ROUTE ACQ	ROUTE AV	ROUTE HN	ROUTE ADY	ROUTE KT	ROUTE ADV	ROUTE AQR	ROUTE ZC
50	ROUTE AHC	ROUTE AHC	ROUTE BW	ROUTE AEB	ROUTE AII	ROUTE BC	ROUTE AO	ROUTE ADL	ROUTE AO	ROUTE AGV	ROUTE AGY	ROUTE ADY	ROUTE YA	ROUTE KV	ROUTE AQS	ROUTE AI	ROUTE MB	ROUTE HN	ROUTE CI	ROUTE AEE	ROUTE AUP	ROUTE HX	ROUTE AGR	ROUTE ADO	ROUTE ZH
51	ROUTE HI	ROUTE ADO	ROUTE KO	ROUTE IE	ROUTE ADY	ROUTE BU	ROUTE CI	ROUTE KO	ROUTE AEB	ROUTE KQ	ROUTE ADL	ROUTE CB	ROUTE TW	ROUTE IB	ROUTE AKU	ROUTE SI	ROUTE OG	ROUTE HG	ROUTE HZ	ROUTE BW	ROUTE ADU	ROUTE ALE	ROUTE AIV	ROUTE YA	ROUTE ZE
52	ROUTE ADO	ROUTE HG	ROUTE AHC	ROUTE BO	ROUTE KT	***ROUTE AJU***	ROUTE KX	ROUTE AII	ROUTE KQ	ROUTE BU	ROUTE AEB	ROUTE PW	ROUTE AKY	ROUTE AO	ROUTE AKX	ROUTE HI	ROUTE KO	ROUTE AO	ROUTE BC	ROUTE BO	ROUTE AIT	ROUTE BW	ROUTE AKY	ROUTE AU	ROUTE ZG
53	ROUTE HG	ROUTE HI	ROUTE HE	ROUTE AEE	ROUTE ADU	ROUTE HG	ROUTE AJX	ROUTE BU	ROUTE IE	ROUTE AII	***ROUTE AJU***	ROUTE AEB	ROUTE AQL	ROUTE ADJ	ROUTE AQV	ROUTE IE	ROUTE AGU	ROUTE BU	ROUTE AIL	ROUTE HG	ROUTE AIV	ROUTE HI	ROUTE ADM	ROUTE LB	ROUTE YA
54	ROUTE HZ	ROUTE HZ	ROUTE BA	ROUTE BC	ROUTE CB	ROUTE IE	ROUTE QE	ROUTE HG	ROUTE HG	ROUTE HG	ROUTE HG	ROUTE AKY	ROUTE AI	ROUTE AME	ROUTE HY	ROUTE HN	ROUTE ZD	ROUTE HZ	ROUTE IC	ROUTE AQL	ROUTE AME	ROUTE LA	ROUTE KZ	ROUTE ALU	ROUTE RP
55	ROUTE AEE	ROUTE HV	ROUTE AGS	ROUTE HN	ROUTE BW	ROUTE AGQ	ROUTE KO	ROUTE IE	ROUTE BC	ROUTE IE	ROUTE BC	ROUTE AQL	ROUTE SI	ROUTE ADV	ROUTE AKT	ROUTE AMY	ROUTE AME	ROUTE AHC	ROUTE PW	ROUTE HZ	ROUTE AUT	ROUTE AGT	ROUTE ADP	ROUTE AHB	ROUTE KW
56	ROUTE HV	ROUTE AEE	ROUTE AEE	ROUTE HI	ROUTE BO	ROUTE AHC	ROUTE AJ	ROUTE AGQ	ROUTE CI	ROUTE BC	ROUTE CI	ROUTE BC	ROUTE CI	ROUTE HJ	ROUTE HI	ROUTE AKW	ROUTE TU	ROUTE LX	ROUTE HV	ROUTE AII	ROUTE HV	ROUTE KT	ROUTE KQ	ROUTE AER	ROUTE AGV	ROUTE KR
57	ROUTE AO	ROUTE IE	ROUTE AQ	ROUTE KO	ROUTE IC	ROUTE BC	ROUTE PW	ROUTE AHC	ROUTE KO	ROUTE AGQ	ROUTE KO	ROUTE HE	ROUTE LD	ROUTE LC	ROUTE KU	ROUTE AGS	ROUTE ZL	ROUTE ADO	ROUTE CG	ROUTE HI	ROUTE HN	ROUTE CB	ROUTE AIU	ROUTE AGS	ROUTE AOK
58	ROUTE IE	ROUTE BC	ROUTE BO	ROUTE HZ	ROUTE HE	ROUTE ADO	ROUTE BP	ROUTE BC	ROUTE AII	ROUTE AHC	ROUTE IC	ROUTE IV	ROUTE BO	ROUTE ADZ	ROUTE ATU	ROUTE AGV	ROUTE YT	ROUTE IE	ROUTE HL	ROUTE BC	ROUTE ANE	ROUTE HN	ROUTE AHJ	ROUTE ZD	ROUTE LL
59	ROUTE AQL	ROUTE AQ	ROUTE IC	ROUTE HV	ROUTE HZ	ROUTE CI	ROUTE IC	ROUTE ADO	ROUTE AJ	ROUTE CI	ROUTE AJ	ROUTE HZ	ROUTE HX	ROUTE ADE	ROUTE ALE	ROUTE BW	ROUTE LP	ROUTE KO	ROUTE ADV	ROUTE IE	ROUTE AIQ	ROUTE BO	ROUTE AIS	ROUTE PU	ROUTE YW
60	ROUTE AKY	ROUTE AQL	ROUTE HI	ROUTE CI	ROUTE HV	ROUTE KO	ROUTE AII	ROUTE CI	ROUTE PW	ROUTE KO	ROUTE BP	ROUTE RW	ROUTE AQ	ROUTE AGT	ROUTE AQO	ROUTE CB	ROUTE ZC	ROUTE BC	ROUTE BA	ROUTE AKY	ROUTE HZ	ROUTE HQ	ROUTE AEC	ROUTE ZI	ROUTE YC
61	ROUTE BC	ROUTE KO	ROUTE AQ	ROUTE AO	ROUTE BA	ROUTE LA	ROUTE HL	ROUTE KO	ROUTE BP	ROUTE ADO	ROUTE PW	ROUTE AQ	ROUTE AGT	ROUTE AQX	ROUTE AQR	ROUTE ALE	ROUTE PX	ROUTE AEE	ROUTE AGQ	ROUTE AO	ROUTE AIS	ROUTE AME	ROUTE HK	ROUTE AQM	ROUTE YO
62	ROUTE KO	ROUTE AKY	ROUTE YB	ROUTE AKY	ROUTE HN	ROUTE AEE	ROUTE AHC	ROUTE AEE	ROUTE IC	ROUTE AEE	ROUTE HL	ROUTE ALY	ROUTE RU	ROUTE AV	ROUTE AKL	ROUTE OG	ROUTE MA	ROUTE CI	ROUTE RW	ROUTE CI	ROUTE AIU	ROUTE AJY	ROUTE AEP	ROUTE ZK	ROUTE YT
63	ROUTE BU	ROUTE CI	ROUTE ADE	ROUTE HE	ROUTE HI	ROUTE PW	ROUTE AR	ROUTE PW	ROUTE AHC	ROUTE PW	ROUTE AR	ROUTE BU	ROUTE BW	ROUTE HP	ROUTE AVC	ROUTE LV	ROUTE HE	ROUTE HC	ROUTE BO	ROUTE LC	ROUTE AO	ROUTE AEF	ROUTE AEE	ROUTE TX	
64	ROUTE CI	ROUTE BU	ROUTE CG	ROUTE BU	ROUTE AO	ROUTE HE	ROUTE BX	ROUTE YB	ROUTE YB	ROUTE HE	ROUTE HE	ROUTE IE	ROUTE XZ	ROUTE CB	ROUTE AGQ	ROUTE UI	ROUTE JD	ROUTE AKY	ROUTE PU	ROUTE ALY	ROUTE HV	ROUTE ADJ	ROUTE AHI	ROUTE AOJ	ROUTE AHC
65	ROUTE ALY	ROUTE HE	ROUTE ADY	ROUTE IC	ROUTE CG	ROUTE AKY	ROUTE HE	ROUTE AKY	ROUTE HL	ROUTE IC	ROUTE BA	ROUTE NW	ROUTE ALY	ROUTE AQU	ROUTE AQN	ROUTE NW	ROUTE XZ	ROUTE PW	ROUTE HJ	ROUTE YB	ROUTE AQX	ROUTE ADF	ROUTE AEL	ROUTE RW	ROUTE AQN
66	ROUTE HE	ROUTE ALY	ROUTE PW	ROUTE ALY	ROUTE AKY	ROUTE IC	ROUTE BA	ROUTE AQL	ROUTE AR	ROUTE YB	ROUTE BX	ROUTE AHC	ROUTE IB	ROUTE ANE	ROUTE AQQ	ROUTE AO	ROUTE RH	ROUTE IC	ROUTE TW	ROUTE BU	ROUTE AQV	ROUTE HZ	ROUTE AKE	ROUTE ALE	ROUTE PU
67	ROUTE PW	ROUTE PW	ROUTE AQ	ROUTE BA	ROUTE BU	ROUTE BA	ROUTE QA	ROUTE HE	ROUTE BX	ROUTE BA	ROUTE CG	ROUTE TW	ROUTE OG	ROUTE AQW	ROUTE ANC	ROUTE HG	ROUTE ZJ	ROUTE AQL	ROUTE RU	ROUTE ALE	ROUTE HG	ROUTE ANE	ROUTE AHD	ROUTE ZF	ROUTE ALX
68	ROUTE YB	ROUTE YB	ROUTE ADU	ROUTE PW	ROUTE ALY	ROUTE CG	ROUTE IC	ROUTE IC	ROUTE HE	ROUTE AKY	ROUTE AII	ROUTE AMY	ROUTE ALE	ROUTE AKE	ROUTE ATO	ROUTE AME	ROUTE LL	ROUTE ALY	ROUTE HA	ROUTE HE	ROUTE KQ	ROUTE BC	ROUTE AIR	ROUTE AIT	ROUTE ALS
69	ROUTE AMY	ROUTE IC	ROUTE RW	ROUTE AQL	ROUTE PW	ROUTE HL	ROUTE LC	ROUTE BA	ROUTE BA	ROUTE RW	ROUTE YB	ROUTE QI	ROUTE UI	ROUTE AQT	ROUTE ATP	ROUTE SG	ROUTE YR	ROUTE BA	ROUTE AQZ	ROUTE AMY	ROUTE YB	ROUTE AJY	ROUTE AHG	ROUTE BC	ROUTE ALP
70	ROUTE IC	ROUTE BA	ROUTE LD	ROUTE AMY	ROUTE RW	ROUTE QI	ROUTE AGQ	ROUTE RW	ROUTE AGQ	ROUTE ADO	ROUTE AQL	ROUTE AHC	ROUTE ALE	ROUTE AV	ROUTE AQK	ROUTE AMY	ROUTE ADI	ROUTE AIL	ROUTE RW	ROUTE AHB	ROUTE PW	ROUTE AJV	ROUTE IV	ROUTE YX	ROUTE XW
71	ROUTE BA	ROUTE AMY	ROUTE AQL	ROUTE CG	ROUTE AMY	ROUTE PU	ROUTE ADO	ROUTE ALY	ROUTE AGQ	ROUTE CG	ROUTE RW	ROUTE PU	ROUTE TU	ROUTE HV	ROUTE AJQ	ROUTE ADL	ROUTE LW	ROUTE YB	ROUTE BP	RO

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
88	ROUTE SI	ROUTE ADF	ROUTE LP	ROUTE AJY	ROUTE LB	ROUTE NW	ROUTE ALA	ROUTE ADZ	ROUTE SI	ROUTE ADJ	ROUTE LD	ROUTE AKY	ROUTE NU	ROUTE VW	ROUTE ALX	ROUTE AKJ	ROUTE LP	ROUTE LZ	ROUTE AJ	ROUTE AGT	ROUTE AU	ROUTE AEH	ROUTE IC	ROUTE AIO	ROUTE TU	ROUTE RW
89	ROUTE AJY	ROUTE AU	ROUTE UI	ROUTE ADJ	ROUTE AJA	ROUTE AH	ROUTE ALA	ROUTE AJV	ROUTE LD	ROUTE ADJ	ROUTE AGT	ROUTE UI	ROUTE AQK	ROUTE AIR	ROUTE AKR	ROUTE ZL	ROUTE LU	ROUTE AR	ROUTE CC	ROUTE ADZ	ROUTE AEL	ROUTE YB	ROUTE AHP	ROUTE HE	ROUTE LP
90	ROUTE ADZ	ROUTE ADZ	ROUTE ZK	ROUTE ADF	ROUTE AHD	ROUTE AP	***ROUTE AJU***	ROUTE ADV	ROUTE BV	ROUTE ADV	ROUTE ADJ	ROUTE TU	ROUTE ADI	ROUTE AT	ROUTE AQP	ROUTE BA	ROUTE JC	ROUTE ADV	ROUTE AW	ROUTE AJY	ROUTE AEP	ROUTE RW	ROUTE AV	ROUTE IC	ROUTE LF
91	ROUTE ADV	ROUTE TU	ROUTE IF	ROUTE HL	ROUTE LN	ROUTE AJY	ROUTE QG	ROUTE RU	ROUTE ADZ	ROUTE ADZ	ROUTE NW	ROUTE QG	ROUTE HH	ROUTE BC	ROUTE ALW	ROUTE MB	ROUTE XY	ROUTE ADZ	ROUTE ALY	ROUTE ADV	ROUTE ADP	ROUTE AQX	ROUTE AQW	ROUTE XX	ROUTE KU
92	ROUTE AU	ROUTE ADV	ROUTE HL	ROUTE AGR	ROUTE AIV	ROUTE TW	ROUTE NW	ROUTE AME	ROUTE ALY	ROUTE AME	ROUTE QG	ROUTE AKE	ROUTE NX	ROUTE AQN	ROUTE ATG	ROUTE ADO	ROUTE ADK	ROUTE AJY	ROUTE VW	ROUTE AGR	ROUTE ALV	ROUTE AHD	ROUTE AIY	ROUTE QI	ROUTE AOO
93	ROUTE TU	ROUTE AJY	ROUTE AR	ROUTE AIV	ROUTE AGR	ROUTE YA	ROUTE ALE	ROUTE ADZ	ROUTE RU	ROUTE AJV	ROUTE ADZ	ROUTE HJ	ROUTE ADY	ROUTE AEC	ROUTE KS	ROUTE ZF	ROUTE IX	ROUTE SI	ROUTE LB	ROUTE AQX	ROUTE ALX	ROUTE AEF	ROUTE BW	ROUTE LL	ROUTE LX
94	ROUTE AGR	ROUTE UI	ROUTE LH	ROUTE UI	ROUTE UI	ROUTE BV	ROUTE QP	ROUTE HJ	ROUTE XZ	ROUTE HJ	ROUTE AQL	ROUTE BA	ROUTE AHB	ROUTE AGO	ROUTE AKN	ROUTE LL	ROUTE RG	ROUTE BP	ROUTE AGO	ROUTE HL	ROUTE AHE	ROUTE AIT	ROUTE ALX	ROUTE ZH	ROUTE AOE
95	ROUTE UI	ROUTE AR	ROUTE ALE	ROUTE ADZ	ROUTE YA	ROUTE KR	ROUTE QV	ROUTE UI	ROUTE ALE	ROUTE NW	ROUTE XZ	ROUTE CG	ROUTE UG	ROUTE YB	ROUTE AKQ	ROUTE LJ	ROUTE VW	ROUTE BX	ROUTE NW	ROUTE UI	ROUTE AHG	ROUTE AKE	ROUTE AQU	ROUTE HX	ROUTE HG
96	ROUTE AR	ROUTE AGR	ROUTE CJ	ROUTE AIU	ROUTE ADP	ROUTE AMY	ROUTE QN	ROUTE QG	ROUTE QG	ROUTE QG	ROUTE ALY	ROUTE AIU	ROUTE ANE	ROUTE AQP	ROUTE ANE	ROUTE ZI	ROUTE RB	ROUTE NW	ROUTE YB	ROUTE AIT	ROUTE AHI	ROUTE CG	ROUTE KT	ROUTE ANE	ROUTE ANY
97	ROUTE AIV	ROUTE AIV	ROUTE AIU	ROUTE KR	ROUTE LZ	ROUTE AIJ	ROUTE JP	ROUTE ANE	ROUTE UI	ROUTE TU	ROUTE TU	ROUTE UI	ROUTE LB	ROUTE HA	ROUTE ALA	ROUTE AIJ	ROUTE XZ	ROUTE ANE	ROUTE HJ	ROUTE AMY	ROUTE AIS	ROUTE QI	ROUTE AHU	ROUTE HN	ROUTE ZC	ROUTE ALE
98	ROUTE AJ	ROUTE AJ	ROUTE AU	ROUTE ADV	ROUTE AIT	ROUTE HC	ROUTE QT	ROUTE TU	ROUTE LT	ROUTE AH	ROUTE TU	ROUTE KR	ROUTE AGO	ROUTE ALU	ROUTE ALL	ROUTE LD	ROUTE HK	ROUTE AGO	ROUTE VU	ROUTE RU	ROUTE AKE	ROUTE AEC	ROUTE AEH	ROUTE AGR	ROUTE YV
99	ROUTE NW	ROUTE QG	ROUTE LL	ROUTE LB	ROUTE AJB	ROUTE HH	ROUTE AY	ROUTE AH	ROUTE LZ	ROUTE UI	ROUTE AY	ROUTE SG	ROUTE ADL	ROUTE CI	ROUTE ATQ	ROUTE ZJ	ROUTE YX	ROUTE ANE	ROUTE NU	ROUTE AIU	ROUTE ALZ	ROUTE AJB	ROUTE AIF	ROUTE AIQ	ROUTE YQ
100	ROUTE QG	ROUTE AOX	ROUTE ZL	ROUTE AGO	ROUTE AGO	ROUTE LD	ROUTE HC	ROUTE AP	ROUTE LH	ROUTE AP	ROUTE HC	ROUTE HC	ROUTE KP	ROUTE HG	ROUTE AIS	ROUTE CG	ROUTE AJY	ROUTE AU	ROUTE YA	ROUTE ADP	ROUTE AIW	ROUTE AER	ROUTE AO	ROUTE PX	ROUTE YS
101	ROUTE AOX	ROUTE BX	ROUTE AME	ROUTE NW	ROUTE LP	ROUTE AGO	ROUTE CE	ROUTE NW	ROUTE AMY	ROUTE ANE	ROUTE SG	ROUTE AGO	ROUTE AEB	ROUTE AJB	ROUTE ALH	ROUTE LX	ROUTE ZG	ROUTE HC	ROUTE KR	ROUTE QG	ROUTE BW	ROUTE AIR	ROUTE BQ	ROUTE AHD	ROUTE ALZ
102	ROUTE AGO	ROUTE NW	ROUTE ADP	ROUTE AHD	ROUTE AJY	ROUTE SI	ROUTE KN	ROUTE LB	ROUTE LN	ROUTE BV	ROUTE CE	ROUTE AGR	ROUTE CJ	ROUTE AIQ	ROUTE AIV	ROUTE LV	ROUTE LK	ROUTE LB	ROUTE ADV	ROUTE AR	ROUTE AIY	ROUTE TW	ROUTE HG	ROUTE AIX	ROUTE AIL
103	ROUTE BX	ROUTE BP	ROUTE AGR	ROUTE ADP	ROUTE IF	ROUTE RU	ROUTE KR	ROUTE BV	ROUTE TU	ROUTE AJY	ROUTE ALE	ROUTE HH	ROUTE AIJ	ROUTE ALC	ROUTE ALK	ROUTE AEE	ROUTE IN	ROUTE UI	ROUTE HH	ROUTE AQU	ROUTE AJA	ROUTE PU	ROUTE AHO	ROUTE ZE	ROUTE AGR
104	ROUTE BP	ROUTE KR	ROUTE LJ	ROUTE AR	ROUTE HH	ROUTE AGR	ROUTE IF	ROUTE SG	ROUTE AME	ROUTE SG	ROUTE LB	ROUTE AQK	ROUTE IE	ROUTE ALW	ROUTE AMJ	ROUTE LN	ROUTE LF	ROUTE AGR	ROUTE ADF	ROUTE AHD	ROUTE ATS	ROUTE AQW	ROUTE KQ	ROUTE YU	ROUTE AGO
105	ROUTE ADP	ROUTE LB	ROUTE AJ	ROUTE AJ	ROUTE ADM	ROUTE AJV	ROUTE OI	ROUTE KR	ROUTE AY	ROUTE KR	ROUTE KR	ROUTE XZ	ROUTE VU	ROUTE AMX	ROUTE AJO	ROUTE AIV	ROUTE ZK	ROUTE KR	ROUTE ADZ	ROUTE AJ	ROUTE AQT	ROUTE AQU	ROUTE AHE	ROUTE AEB	ROUTE RO
106	ROUTE AIS	ROUTE ADP	ROUTE AIV	ROUTE QG	ROUTE AGT	ROUTE AY	ROUTE BD	ROUTE AU	ROUTE AJV	ROUTE LB	ROUTE QE	ROUTE QG	ROUTE HF	ROUTE AQM	ROUTE AJR	ROUTE LO	ROUTE TD	ROUTE QG	ROUTE ADJ	ROUTE AQV	ROUTE AGR	ROUTE AQK	ROUTE IB	ROUTE AGO	ROUTE KP
107	ROUTE KR	ROUTE AGO	ROUTE ZH	ROUTE AIT	ROUTE NW	ROUTE IF	ROUTE HH	ROUTE AJY	ROUTE HC	ROUTE HC	ROUTE IF	ROUTE AJ	ROUTE NV	ROUTE AHJ	ROUTE AMX	ROUTE ZK	ROUTE YQ	ROUTE HH	ROUTE AEC	ROUTE AQW	ROUTE ATU	ROUTE AIQ	ROUTE AMX	ROUTE ADY	ROUTE ALU
108	ROUTE AHD	ROUTE AHD	ROUTE AQW	ROUTE LP	ROUTE BD	ROUTE AME	ROUTE CJ	ROUTE LP	ROUTE SG	ROUTE AU	ROUTE OI	ROUTE UG	ROUTE AGR	ROUTE AIY	ROUTE AIR	ROUTE AUJ	ROUTE IY	ROUTE AH	ROUTE KP	ROUTE AJB	ROUTE BO	ROUTE AHG	ROUTE LX	ROUTE AMZ	ROUTE AIW
109	ROUTE LB	ROUTE AIS	ROUTE ANE	ROUTE AJB	ROUTE AIZ	ROUTE BD	ROUTE RB	ROUTE HC	ROUTE LB	ROUTE HH	ROUTE NU	ROUTE AR	ROUTE AOQ	ROUTE ALT	ROUTE AIU	ROUTE AQX	ROUTE IT	ROUTE AP	ROUTE ADM	ROUTE AKE	ROUTE AIJ	ROUTE AHI	ROUTE AIX	ROUTE AIZ	ROUTE ALR
110	ROUTE AIT	ROUTE AIU	ROUTE BX	ROUTE HH	ROUTE AEF	ROUTE AHD	ROUTE JF	ROUTE AIV	ROUTE LV	ROUTE AY	ROUTE BD	ROUTE ADF	ROUTE AJZ	ROUTE PW	ROUTE AMT	ROUTE IR	ROUTE ADM	ROUTE AJV	ROUTE AIQ	ROUTE AUK	ROUTE AIY	ROUTE CB	ROUTE LP	ROUTE IF	
111	ROUTE HJ	ROUTE AIT	ROUTE QG	ROUTE ADM	ROUTE MB	ROUTE QE	ROUTE QL	ROUTE AGO	ROUTE CE	ROUTE IF	ROUTE AMY	ROUTE AOJ	ROUTE BC	ROUTE AJA	ROUTE AMW	ROUTE ZC	ROUTE RP	ROUTE SG	ROUTE HF	ROUTE TU	ROUTE AEF	ROUTE AEL	ROUTE ALW	ROUTE AO	ROUTE AIM
112	ROUTE AIU	ROUTE HH	ROUTE LM	ROUTE AEF	ROUTE HC	ROUTE QA	ROUTE RH	ROUTE HH	ROUTE MB	ROUTE XZ	ROUTE HH	ROUTE BP	ROUTE PX	ROUTE AMU	ROUTE ADM	ROUTE LF	ROUTE YW	ROUTE BV	ROUTE XZ	ROUTE AEF	ROUTE AQR	ROUTE AJA	ROUTE AHM	ROUTE AIV	ROUTE LK
113	ROUTE SG	ROUTE HJ	ROUTE AHD	ROUTE BX	ROUTE LL	ROUTE ADM	ROUTE NU	ROUTE XZ	ROUTE LJ	ROUTE AGO	ROUTE AME	ROUTE ADV	ROUTE CI	ROUTE ALV	ROUTE AJE	ROUTE AKE	ROUTE XX	ROUTE AY	ROUTE AOQ	ROUTE LP	ROUTE AQP	ROUTE AEP	ROUTE AOT	ROUTE YR	ROUTE VT
114	ROUTE AQU	ROUTE SG	ROUTE KP	ROUTE BP	ROUTE ADJ	ROUTE OI	ROUTE JL	ROUTE LN	ROUTE LP	ROUTE BD	ROUTE CJ	ROUTE BX	ROUTE XX	ROUTE AHG	ROUTE AJH	ROUTE ZD	ROUTE YS	ROUTE AEC	ROUTE OI	ROUTE AIR	ROUTE AMY	ROUTE AQV	ROUTE AQN	ROUTE VJ	
115	ROUTE AKE	ROUTE LP	ROUTE AIR	ROUTE AJA	ROUTE ADF	ROUTE ADP	ROUTE IX	ROUTE AGR	ROUTE QE	ROUTE NU	ROUTE VW	ROUTE ADZ	ROUTE RX	ROUTE AMW	ROUTE AEC	ROUTE YZ	ROUTE RV	ROUTE NU	ROUTE AOL	ROUTE NW	ROUTE ALW	ROUTE ALX	ROUTE HX	ROUTE ADE	ROUTE VD
116	ROUTE HH	ROUTE AQW	ROUTE ZJ	ROUTE LN	ROUTE HL	ROUTE CE	ROUTE QR	ROUTE LJ	ROUTE KR	ROUTE OI	ROUTE XY	ROUTE KP	ROUTE AJ	ROUTE AER	ROUTE AJD	ROUTE LZ	ROUTE HP	ROUTE AHD	ROUTE IF	ROUTE AGQ	ROUTE ALS	ROUTE QI	ROUTE ALU	ROUTE RP	ROUTE ADO
117	ROUTE ADM	ROUTE AQU	ROUTE SG	ROUTE SG	ROUTE AY	ROUTE NU	ROUTE QZ	ROUTE AQK	ROUTE IF	ROUTE UG	ROUTE UG	ROUTE HA	ROUTE QH	ROUTE AOQ	ROUTE AML	ROUTE RT	ROUTE TT	ROUTE ADP	ROUTE XY	ROUTE BX	ROUTE ALU	ROUTE YA	ROUTE AMZ	ROUTE AIS	ROUTE AIS
118	ROUTE LP	ROUTE AEF	ROUTE AEF	ROUTE HC	ROUTE QG	ROUTE ALA	ROUTE JD	ROUTE AIU	ROUTE NW	ROUTE AGR	ROUTE AJV	ROUTE HF	ROUTE BP	ROUTE AHI	ROUTE AJG	ROUTE PX	ROUTE ZB	ROUTE AIV	ROUTE AJY	ROUTE AHJ	ROUTE ATQ	ROUTE AHH	ROUTE AQV	ROUTE YW	ROUTE OI
119	ROUTE AEF	ROUTE AQV	ROUTE LF	ROUTE IF	ROUTE AEC	ROUTE ALC	ROUTE QO	ROUTE AIS	ROUTE ZB	ROUTE CE	ROUTE AW	ROUTE VW	ROUTE AKF	ROUTE IC	ROUTE AIO	ROUTE AQX	ROUTE CJ	ROUTE KR	ROUTE ATQ	ROUTE RU	ROUTE AQR	ROUTE YY	ROUTE AMV		
120	ROUTE AQW	ROUTE AJB	ROUTE BB	ROUTE BD	ROUTE AJ	ROUTE CJ	ROUTE RF	ROUTE AY	ROUTE AQK	ROUTE AHD	ROUTE HA	ROUTE AOQ	ROUTE IC	ROUTE KO	ROUTE HM	ROUTE MA	ROUTE QX	ROUTE CE	ROUTE BD	ROUTE BP	ROUTE AMV	ROUTE HL	ROUTE AMW	ROUTE AIU	ROUTE AJB
121	ROUTE AJB	ROUTE ADM	ROUTE AGT	ROUTE AIS	ROUTE AR	ROUTE AEC	ROUTE QU	ROUTE IF	ROUTE ZH	ROUTE ADM	ROUTE CC	ROUTE XY	ROUTE QJ	ROUTE AHD	ROUTE AI	ROUTE ZG	ROUTE LN	ROUTE AEF	ROUTE SI	ROUTE AQR	ROUTE AEZ	ROUTE AQR	ROUTE BC	ROUTE AOK	ROUTE AMW
122	ROUTE AQV	ROUTE ZL	ROUTE ADJ	ROUTE AEC	ROUTE LX	ROUTE AKE	ROUTE ALI	ROUTE AHD	ROUTE ZE	ROUTE CJ	ROUTE QA	ROUTE AH	ROUTE AHC	ROUTE AIX	ROUTE ALS	ROUTE JD	ROUTE TG	ROUTE HA	ROUTE QG	ROUTE SG	ROUTE AMX	ROUTE AQT	ROUTE BU	ROUTE RU	ROUTE AIU
123	ROUTE HC	ROUTE AIR	ROUTE ZI	ROUTE AIZ	ROUTE CJ	ROUTE AEF	ROUTE IV	ROUTE AQX	ROUTE ZK	ROUTE AQK	ROUTE KP	ROUTE AP	ROUTE AR	ROUTE ALR	ROUTE ALV	ROUTE ZE	ROUTE LI	ROUTE BD	ROUTE ID	ROUTE AQS	ROUTE AHF	ROUTE AKZ	ROUTE AEZ	ROUTE ALS	ROUTE TV
124	ROUTE AQR	ROUTE HC	ROUTE IP	ROUTE LL	ROUTE AHI	ROUTE UI	ROUTE ALL	ROUTE ADM	ROUTE XY	ROUTE ADP	ROUTE QC	ROUTE AKZ	ROUTE AVC	ROUTE AKX	ROUTE AKM	ROUTE AQR	ROUTE IC	ROUTE IF	ROUTE AIJ	ROUTE LB	ROUTE AHD	ROUTE AEN	ROUTE AQJ	ROUTE AJB	ROUTE RX
125	ROUTE AIQ	ROUTE BD	ROUTE HF	ROUTE AQX	ROUTE ADV	ROUTE TU	ROUTE YB	ROUTE MB	ROUTE BD	ROUTE LP	ROUTE ID	ROUTE AIV	ROUTE BX	ROUTE AIZ	ROUTE AKP	ROUTE LR	ROUTE TB	ROUTE UG	ROUTE CH	ROUTE HH	ROUTE LL	ROUTE AQQ	ROUTE AOO	ROUTE YT	ROUTE HC
126	ROUTE AQK	ROUTE AIQ	ROUTE AQX	ROUTE MB	ROUTE ADZ	ROUTE ANE	ROUTE JB	ROUTE BD	ROUTE VW	ROUTE AEC	ROUTE AJY	ROUTE LP	ROUTE BA	ROUTE ALS	ROUTE BO	ROUTE LH	ROUTE IQ	ROUTE AQK	ROUTE UI	ROUTE AQT	ROUTE AUG	ROUTE AIZ	ROUTE AHL	ROUTE UI	ROUTE ANE
127	ROUTE AIR	ROUTE UG	ROUTE LZ	ROUTE AIR	ROUTE SG	ROUTE KP	ROUTE QS	ROUTE ZL	ROUTE HH	ROUTE AKE	ROUTE AQK	ROUTE AQJ	ROUTE PV	ROUTE AU	ROUTE ATI	ROUTE YT	ROUTE RS	ROUTE LP	ROUTE BB	ROUTE AIZ	ROUTE AUE	ROUTE AHP	ROUTE AMU	ROUTE BA	ROUTE HH
128	ROUTE ZL	ROUTE LJ	ROUTE BP	ROUTE HJ	ROUTE CE	ROUTE IR	ROUTE RN	ROUTE LH	ROUTE CJ	ROUTE KP	ROUTE ANE	ROUTE PX	ROUTE AKZ	ROUTE AOQ	ROUTE AOQ	ROUTE AIT	ROUTE IL	ROUTE KP	ROUTE SG	ROUTE AIY	ROUTE AFD	ROUTE AHF	ROUTE AHN	ROUTE HH	ROUTE KV
129	ROUTE AEC	ROUTE AP	ROUTE AIT	ROUTE AY	ROUTE KP	ROUTE RT	ROUTE ALH	ROUTE UG	ROUTE LR	ROUTE AEF	ROUTE OG	ROUTE BV	ROUTE CG	ROUTE ADP	ROUTE AQ	ROUTE IN	ROUTE RN	ROUTE ZL	ROUTE AGR	ROUTE AER	ROUTE LP	ROUTE AFD	ROUTE ALT	ROUTE LF	ROUTE ALF
130	ROUTE UG	ROUTE AQR	ROUTE LO	ROUTE UG	ROUTE BP	ROUTE HA	ROUTE RT	ROUTE ADP	ROUTE ZC	ROUTE LL	ROUTE BB	ROUTE XX	ROUTE AQJ	ROUTE AMT	ROUTE AOI	ROUTE LK	ROUTE LY	ROUTE CJ	ROUTE PX	ROUTE ALX	ROUTE AHN	ROUTE AMX	ROUTE BW	ROUTE RN	
131	ROUTE AP	ROUTE AKE	ROUTE DD	ROUTE AHJ	ROUTE BX	ROUTE AHJ	ROUTE ALK	ROUTE AJB	ROUTE ANE	ROUTE HA	ROUTE HF	ROUTE AIS	ROUTE SJ	ROUTE AEL	ROUTE AJK	ROUTE RH	ROUTE LT	ROUTE AIS	ROUTE HD	ROUTE ZL	ROUTE SI	ROUTE AIX	ROUTE HF	ROUTE CB	ROUTE QX
132	ROUTE AHJ	ROUTE LN	ROUTE AIS	ROUTE AQW	ROUTE AHO	ROUTE ALX	ROUTE AIY	ROUTE AIR	ROUTE LX	ROUTE LJ	ROUTE ADM	ROUTE LJ	ROUTE XW	ROUTE BA	ROUTE AJN	ROUTE AIS	ROUTE RF	ROUTE AQU	ROUTE UG	ROUTE ADM	ROUTE ATT	ROUTE SI	ROUTE KO	ROUTE ALP	ROUTE RH
133	ROUTE AH	ROUTE IF	ROUTE UG	ROUTE CJ	ROUTE AIR	ROUTE IL	ROUTE RL	ROUTE CE	ROUTE ZI	ROUTE AIV	ROUTE UE	ROUTE AQX	ROUTE TX	ROUTE AHF	ROUTE ALO	ROUTE ZH	ROUTE JB	ROUTE XZ	ROUTE AOK	ROUTE AJA	ROUTE AQU	ROUTE AQS	ROUTE AQQ	ROUTE IF	ROUTE RR
134	ROUTE LJ	ROUTE AH	ROUTE AQT	ROUTE LZ	ROUTE LM	ROUTE HF	ROUTE IL	ROUTE AQW	ROUTE ZF	ROUTE HF	ROUTE CH	ROUTE AJB	ROUTE ADO	ROUTE AHH	ROUTE AOQ	ROUTE LI	ROUTE NV	ROUTE HF	ROUTE RX	ROUTE LJ	ROUTE AEJ	ROUTE ALW	ROUTE HZ	ROUTE RT	ROUTE AGP
135	ROUTE AQT	ROUTE AHJ	ROUTE YY	ROUTE AIQ	ROUTE IP	ROUTE LP	ROUTE AW	ROUTE LL	ROUTE LF	ROUTE MB	ROUTE AGO	ROUTE MB	ROUTE AEE	ROUTE AMV	ROUTE ALG	ROUTE AQU	ROUTE VU	ROUTE AKE	ROUTE HB	ROUTE LL	ROUTE AIX	ROUTE ALV	ROUTE HI	ROUTE VO	
136	ROUTE BD	ROUTE AQT	ROUTE IR	ROUTE KP	ROUTE AHJ	ROUTE LB	ROUTE AHV	ROUTE ZK	ROUTE ZL	ROUTE VW	ROUTE LX	ROUTE ALZ	ROUTE RV	ROUTE RW	ROUTE AOG	ROUTE IL	ROUTE RA	ROUTE AQW	ROUTE PV	ROUTE AHH	ROUTE AHP	ROUTE LO	ROUTE AOM	ROUTE HC	ROUTE LJ
137	ROUTE AIY	ROUTE LL	ROUTE MB	ROUTE AHI	ROUTE UG	ROUTE SG	ROUTE RR	ROUTE LZ	ROUTE LL	ROUTE AIT	ROUTE VU	ROUTE ZL	ROUTE ALZ	ROUTE ALO	ROUTE ALR	ROUTE AQV	ROUTE AIU	ROUTE ALE	ROUTE AHG	ROUTE BA	ROUTE TU	ROUTE ALR	ROUTE HZ	ROUTE LR	
138	ROUTE NU	ROUTE AEC	ROUTE ADF	ROUTE AKE	ROUTE AIX	ROUTE JO	ROUTE IR	ROUTE AQU	ROUTE UG	ROUTE LF	ROUTE AEC	ROUTE AHD	ROUTE XV	ROUTE AKU	ROUTE BW	ROUTE VW	ROUTE YU	ROUTE LJ	ROUTE AHD	ROUTE HJ	ROUTE ADF	ROUTE ALZ	ROUTE AQS	ROUTE AME	ROUTE MB
139	ROUTE AQS	ROUTE AQS	ROUTE ID	ROUTE LJ	ROUTE AHH	ROUTE DH	ROUTE HA	ROUTE AEC	ROUTE AIX	ROUTE AW	ROUTE LL	ROUTE RX	ROUTE AH	ROUTE AEP	ROUTE AIQ	ROUTE ZA	ROUTE TP	ROUTE AIT	ROUTE TX	ROUTE LN	ROUTE AGT	ROUTE AHE	ROUTE ALF	ROUTE HN	ROUTE TP
140	ROUTE IF	ROUTE AIY	ROUTE HJ	ROUTE NU	ROUTE LY	ROUTE RN	ROUTE KD	ROUTE AIT	ROUTE AJA	ROUTE ZL	ROUTE LR	ROUTE AY	ROUTE ALF	ROUTE AMV	ROUTE ALJ	ROUTE HL	ROUTE IM	ROUTE OI	ROUTE RV	ROUTE AOK	ROUTE AOK	ROUTE AQJ	ROUTE AQO	ROUTE ADU	ROUTE AHA
141	ROUTE LL	ROUTE AQK	ROUTE AP	ROUTE AIY	ROUTE JB	ROUTE AHG	ROUTE KJ	ROUTE LV	ROUTE AIR	ROUTE ID	ROUTE AU	ROUTE IF	ROUTE OH	ROUTE ANA	ROUTE AOM	ROUTE AJV	ROUTE LE	ROUTE AJB	ROUTE ZL	ROUTE AQO	ROUTE AOO	ROUTE AR	ROUTE CI	ROUTE KP	ROUTE BC
142	ROUTE ALX	ROUTE LG	ROUTE LE	ROUTE AHP	ROUTE AW	ROUTE LU	ROUTE LI	ROUTE CJ	ROUTE LX	ROUTE AHD	ROUTE LK	ROUTE AEF	ROUTE AEK	ROUTE ALN	ROUTE VW	ROUTE TX	ROUTE AOQ	ROUTE AEF	ROUTE UG	ROUTE AQQ	ROUTE AOQ	ROUTE IE	ROUTE AJY	ROUTE AEE	
143	ROUTE AIZ	ROUTE AJA	ROUTE DH	ROUTE AQV	ROUTE LH	ROUTE IP	ROUTE CC	ROUTE ZI	ROUTE AIU	ROUTE XY	ROUTE LF	ROUTE ADP	ROUTE ADF	ROUTE YA	ROUTE AIT	ROUTE KR	ROUTE IH	ROUTE AQR	ROUTE ADP	ROUTE BD	ROUTE AQO	ROUTE AMT	ROUTE AI	ROUTE AOI	
144	ROUTE LN	ROUTE ZK	ROUTE CH	ROUTE AP	ROUTE AEP	ROUTE AN	ROUTE EF	ROUTE AJA	ROUTE LY	ROUTE LN	ROUTE ALC	ROUTE AQU	ROUTE AP	ROUTE AQI	ROUTE AJJ	ROUTE TT	ROUTE YY	ROUTE AQV	ROUTE AME	ROUTE AHI	ROUTE AQM	ROUTE AEH	ROUTE HV	ROUTE LX	ROUTE LN
145	ROUTE OI	ROUTE ZI	ROUTE ADZ	ROUTE AH	ROUTE AIS	ROUTE ALU	ROUTE IP	ROUTE AEF	ROUTE LG	ROUTE BB	ROUTE MB	ROUTE BD	ROUTE ADV	ROUTE AGR	ROUTE AJM	ROUTE AQK	ROUTE TC	ROUTE ZI	ROUTE ZI	ROUTE AQP	ROUTE HE	ROUTE AJ	ROUTE AET	ROUTE ADP	ROUTE AOM
146	ROUTE AIA	ROUTE AIZ	ROUTE ZE	ROUTE LX	ROUTE LO	ROUTE ID	ROUTE ADM	ROUTE AIY	ROUTE LM	ROUTE AIS	ROUTE LP	ROUTE AIY	ROUTE LU	ROUTE ALQ	ROUTE AIO	ROUTE RX	ROUTE ZH	ROUTE AIW	ROUTE OI	ROUTE AQQ	ROUTE YA	ROUTE AMW	ROUTE AOI	ROUTE AOO	ROUTE AQC
147	ROUTE AER	ROUTE ALX	ROUTE AQV	ROUTE AHH	ROUTE ID	ROUTE AHP	ROUTE AGO	ROUTE AQT	ROUTE QZ	ROUTE OG	ROUTE PY	ROUTE LV	ROUTE BV	ROUTE ANC	ROUTE AMS	ROUTE XY	ROUTE SX	ROUTE LN	ROUTE ZF	ROUTE AEN	ROUTE KO	ROUTE AHM	ROUTE AMV	ROUTE TX	ROUTE ANS
148	ROUTE BV	ROUTE BV	ROUTE ZG	ROUTE AER	ROUTE IR	ROUTE RH	ROUTE JR	ROUTE OI	ROUTE QA	ROUTE LV	ROUTE LV	ROUTE ZI	ROUTE ADJ	ROUTE CG	ROUTE AMV	ROUTE XX	ROUTE IS	ROUTE ZK	ROUTE CF	ROUTE AEC	ROUTE ATP	ROUTE AHO	ROUTE AHK	ROUTE ALU	ROUTE YP
149	ROUTE AQQ	ROUTE AER	ROUTE LK	ROUTE AQR	ROUTE HF	ROUTE RR	ROUTE KP	ROUTE AQR	ROUTE ADM	ROUTE AJB	ROUTE PX	ROUTE AIT	ROUTE AMF	ROUTE HE	ROUTE ANK	ROUTE LB	ROUTE RO	ROUTE LL	ROUTE AZ	ROUTE AIW	ROUTE ALT	ROUTE NW	ROUTE AGP	ROUTE ZB	ROUTE IC
150	ROUTE AY	ROUTE AY	ROUTE LJ	ROUTE LH	ROUTE BB	ROUTE AER	ROUTE AEC	ROUTE LE	ROUTE RF	ROUTE AQX	ROUTE AKE	ROUTE AQR	ROUTE ADZ	ROUTE AKW	ROUTE ANQ	ROUTE YX	ROUTE XW	ROUTE VW	ROUTE TV	ROUTE OI	ROUTE UI	ROUTE ALV	ROUTE BA	ROUTE ALW	ROUTE AHH
151	ROUTE ZI	ROUTE MB	ROUTE AQU	ROUTE AIX	ROUTE HN	ROUTE BB	ROUTE ZK	ROUTE ZH	ROUTE RB	ROUTE CC	ROUTE ADB	ROUTE LL	ROUTE SH	ROUTE AOM	ROUTE AJC	ROUTE LT	ROUTE RJ	ROUTE MB	ROUTE YZ	ROUTE AEL	ROUTE AMW	ROUTE AOO	ROUTE AMR	ROUTE ALZ	ROUTE UI
152	ROUTE CJ	ROUTE KP	ROUTE YZ	ROUTE ZL	ROUTE NU	ROUTE LJ	ROUTE RW	ROUTE LT	ROUTE AGO	ROUTE ZJ	ROUTE AQR	ROUTE PV	ROUTE AMZ	ROUTE AMR	ROUTE AIV	ROUTE VH	ROUTE AQT	ROUTE ANE	ROUTE IF	ROUTE AMS	ROUTE AMV	ROUTE PW	ROUTE ADM	ROUTE QJ	
153	ROUTE MB	ROUTE NU	ROUTE LT	ROUTE LO	ROUTE AQW	ROUTE ALR	ROUTE ID	ROUTE ZF	ROUTE AW	ROUTE AIO	ROUTE LJ	ROUTE CE	ROUTE TV	ROUTE AHE	ROUTE AJF	ROUTE AIZ	ROUTE TS	ROUTE AIR	ROUTE ZK	ROUTE AIU	ROUTE AET	ROUTE AMU	ROUTE AMF	ROUTE LJ	ROUTE ADM
154	ROUTE AQQ	ROUTE AQQ	ROUTE AIQ	ROUTE AHP	ROUTE LT	ROUTE AHI	ROUTE AIJ	ROUTE NU	ROUTE RR	ROUTE AOQ	ROUTE AEF	ROUTE AEC	ROUTE PB	ROUTE AMS	ROUTE ANO	ROUTE RP	ROUTE AQ	ROUTE CC	ROUTE ZC	ROUTE AQJ	ROUTE AMU	ROUTE ALQ	ROUTE AIW	ROUTE ADP	
155	ROUTE AHG	ROUTE AQO	ROUTE AHI	ROUTE HF	ROUTE AIQ	ROUTE ALW	ROUTE CV	ROUTE AIQ	ROUTE HA	ROUTE ZI	ROUTE AOQ	ROUTE AEF	ROUTE PH	ROUTE AHP	ROUTE AJB	ROUTE IZ	ROUTE YP	ROUTE AKZ	ROUTE LP	ROUTE AMW	ROUTE AQN	ROUTE AQT	ROUTE RI		
156	ROUTE KP	ROUTE ZJ	ROUTE LI	ROUTE IR	ROUTE AIY	ROUTE PY	ROUTE AHD	ROUTE AIX	ROUTE IV	ROUTE CH	ROUTE UA	ROUTE CJ	ROUTE LV	ROUTE AEN	ROUTE AHG	ROUTE LW	ROUTE TN	ROUTE ZF	ROUTE YW	ROUTE ALV	ROUTE LJ	ROUTE ALR	ROUTE AL5	ROUTE ALR	ROUTE RS
157	ROUTE ZK	ROUTE LH	ROUTE RR	ROUTE AQQ	ROUTE HA	ROUTE QC	ROUTE DH	ROUTE AQQ	ROUTE AIY	ROUTE QE	ROUTE ZD	ROUTE ZF	ROUTE MB	ROUTE ALN	ROUTE AHJ	ROUTE AIY	ROUTE HN	ROUTE AIQ	ROUTE ZH	ROUTE MB	ROUTE LN	ROUTE AMZ	ROUTE AJZ	ROUTE YO	ROUTE RC
158	ROUTE AQP	ROUTE OI	ROUTE AJA	ROUTE AEP	ROUTE MA	ROUTE IX	ROUTE AID	ROUTE AKE	ROUTE AEC	ROUTE AIZ	ROUTE ZJ	ROUTE ALF	ROUTE PN	ROUTE AOG	ROUTE AIC	ROUTE AOW	ROUTE TF	ROUTE ZJ	ROUTE OG	ROUTE ZI	ROUTE ADZ	ROUTE BX	ROUTE AOG	ROUTE CG	ROUTE HD
159	ROUTE AH

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
175	ROUTE AEL	ROUTE ALU	ROUTE CV	ROUTE AQP	ROUTE AFD	ROUTE CH	ROUTE AEF	ROUTE AIW	ROUTE QC	ROUTE AIW	ROUTE LH	ROUTE ZJ	ROUTE ZI	ROUTE AKR	ROUTE AJL	ROUTE LE	ROUTE AV	ROUTE CH	ROUTE QA	ROUTE AFD	ROUTE LD	ROUTE AMT	ROUTE AKW	ROUTE AOE	ROUTE IA
176	ROUTE IR	ROUTE ALW	ROUTE RT	ROUTE AHG	ROUTE LV	ROUTE AJB	ROUTE OK	ROUTE AHJ	ROUTE AOQ	ROUTE ALC	ROUTE RD	ROUTE ALX	ROUTE ZL	ROUTE AKS	ROUTE AOE	ROUTE YR	ROUTE AHB	ROUTE PX	ROUTE YV	ROUTE AQN	ROUTE CZ	ROUTE HC	ROUTE AJF	ROUTE SI	ROUTE CI
177	ROUTE AHP	ROUTE AEL	ROUTE ZB	ROUTE ALW	ROUTE CH	ROUTE DD	ROUTE RG	ROUTE HF	ROUTE AOT	ROUTE ZC	ROUTE LE	ROUTE XW	ROUTE OX	ROUTE ALM	ROUTE AEP	ROUTE AKZ	ROUTE VD	ROUTE IR	ROUTE VX	ROUTE AEH	ROUTE AMT	ROUTE SG	ROUTE PU	ROUTE AIY	ROUTE AMX
178	ROUTE ALW	ROUTE LV	ROUTE AOS	ROUTE AOT	ROUTE LF	ROUTE PX	ROUTE AKE	ROUTE XY	ROUTE ZA	ROUTE AKZ	ROUTE ZC	ROUTE AQS	ROUTE PO	ROUTE AOC	ROUTE ALM	ROUTE RB	ROUTE TO	ROUTE AER	ROUTE YS	ROUTE AKZ	ROUTE HI	ROUTE LP	ROUTE AOA	ROUTE AEC	ROUTE AMS
179	ROUTE ALV	ROUTE XZ	ROUTE AQQ	ROUTE AHN	ROUTE AOX	ROUTE IN	ROUTE ALO	ROUTE ZG	ROUTE RB	ROUTE LK	ROUTE IH	ROUTE RT	ROUTE WJ	ROUTE AOE	ROUTE AOK	ROUTE ALX	ROUTE TJ	ROUTE AQP	ROUTE LI	ROUTE LO	ROUTE DH	ROUTE ALO	ROUTE TW	ROUTE YQ	ROUTE AIY
180	ROUTE AEN	ROUTE AEN	ROUTE YX	ROUTE AFD	ROUTE DH	ROUTE ALO	ROUTE PX	ROUTE ALX	ROUTE KP	ROUTE IN	ROUTE RP	ROUTE AMF	ROUTE LR	ROUTE AJ	ROUTE ALP	ROUTE RD	ROUTE TV	ROUTE XY	ROUTE ZG	ROUTE ALR	ROUTE PW	ROUTE AQM	ROUTE AEQ	ROUTE PV	ROUTE AIR
181	ROUTE LV	ROUTE AEP	ROUTE AER	ROUTE DH	ROUTE QA	ROUTE AHF	ROUTE JK	ROUTE LM	ROUTE AQW	ROUTE AIR	ROUTE OJ	ROUTE AIW	ROUTE LX	ROUTE AMN	ROUTE AO	ROUTE AQS	ROUTE QA	ROUTE ZC	ROUTE MA	ROUTE ZF	ROUTE LH	ROUTE ALO	ROUTE AQM	ROUTE AOK	ROUTE AMP
182	ROUTE AOQ	ROUTE LZ	ROUTE LE	ROUTE AKZ	ROUTE ZK	ROUTE ALT	ROUTE QO	ROUTE AOQ	ROUTE ZG	ROUTE AQS	ROUTE ZI	ROUTE L1	ROUTE PA	ROUTE AJT	ROUTE BU	ROUTE AJA	ROUTE IG	ROUTE ALZ	ROUTE LH	ROUTE AOQ	ROUTE IN	ROUTE LB	ROUTE AKU	ROUTE BD	ROUTE AJA
183	ROUTE AEP	ROUTE AHP	ROUTE XX	ROUTE IN	ROUTE AEZ	ROUTE AKZ	ROUTE IW	ROUTE RT	ROUTE ZD	ROUTE RT	ROUTE MA	ROUTE LR	ROUTE BD	ROUTE AHL	ROUTE ANW	ROUTE AQQ	ROUTE VT	ROUTE LZ	ROUTE NX	ROUTE NU	ROUTE ALQ	ROUTE AHK	ROUTE AEO	ROUTE AJA	ROUTE IN
184	ROUTE AQN	ROUTE ALV	ROUTE YW	ROUTE LK	ROUTE CC	ROUTE AQK	ROUTE ALG	ROUTE LI	ROUTE RH	ROUTE ALA	ROUTE QX	ROUTE AHG	ROUTE PG	ROUTE AHN	ROUTE AOC	ROUTE LY	ROUTE YV	ROUTE ZG	ROUTE ZD	ROUTE AMU	ROUTE ALM	ROUTE AP	ROUTE AQE	ROUTE YS	ROUTE AY
185	ROUTE ZH	ROUTE LX	ROUTE IO	ROUTE ZJ	ROUTE ANA	ROUTE AFD	ROUTE QY	ROUTE AW	ROUTE RN	ROUTE AQW	ROUTE JD	ROUTE ZG	ROUTE LU	ROUTE AR	ROUTE ANB	ROUTE RS	ROUTE SW	ROUTE RT	ROUTE LZ	ROUTE ALS	ROUTE ALO	ROUTE ALA	ROUTE AMN	ROUTE RN	ROUTE BD
186	ROUTE AQM	ROUTE AQN	ROUTE LY	ROUTE LT	ROUTE LR	ROUTE AIU	ROUTE ALR	ROUTE IP	ROUTE ZJ	ROUTE LT	ROUTE DX	ROUTE IL	ROUTE MA	ROUTE AMP	ROUTE ANU	ROUTE JB	ROUTE SJ	ROUTE AHG	ROUTE QE	ROUTE LV	ROUTE IR	ROUTE AET	ROUTE YB	ROUTE ANY	ROUTE AEC
187	ROUTE HA	ROUTE ZG	ROUTE VR	ROUTE AOQ	ROUTE CZ	ROUTE RF	ROUTE MF	ROUTE AQP	ROUTE ID	ROUTE XX	ROUTE RJ	ROUTE AQP	ROUTE PJ	ROUTE AKO	ROUTE AIW	ROUTE PY	ROUTE AQZ	ROUTE AQJ	ROUTE YP	ROUTE BV	ROUTE AJY	ROUTE AH	ROUTE AEK	ROUTE ALM	ROUTE AEF
188	ROUTE AHE	ROUTE DH	ROUTE CE	ROUTE ALA	ROUTE ALW	ROUTE AHO	ROUTE JC	ROUTE IL	ROUTE IX	ROUTE AJA	ROUTE LO	ROUTE MA	ROUTE CJ	ROUTE ANW	ROUTE ANM	ROUTE TN	ROUTE TR	ROUTE LX	ROUTE YX	ROUTE AMV	ROUTE AMP	ROUTE AOK	ROUTE ANW	ROUTE VT	ROUTE AHB
189	ROUTE LX	ROUTE YZ	ROUTE TT	ROUTE ZF	ROUTE EF	ROUTE LV	ROUTE ALJ	ROUTE ID	ROUTE RT	ROUTE AQP	ROUTE LU	ROUTE YZ	ROUTE AKO	ROUTE SI	ROUTE AHE	ROUTE AHP	ROUTE RI	ROUTE ZE	ROUTE RT	ROUTE DH	ROUTE AHL	ROUTE AMS	ROUTE HL	ROUTE AY	ROUTE RB
190	ROUTE ALR	ROUTE RT	ROUTE AHF	ROUTE AMX	ROUTE AQR	ROUTE AHH	ROUTE RE	ROUTE AHJ	ROUTE JD	ROUTE LI	ROUTE PV	ROUTE SJ	ROUTE PP	ROUTE AKZ	ROUTE AOA	ROUTE TP	ROUTE VG	ROUTE LI	ROUTE XX	ROUTE LX	ROUTE AMR	ROUTE AMF	ROUTE AMP	ROUTE HL	ROUTE AJY
191	ROUTE LZ	ROUTE AHF	ROUTE RL	ROUTE MA	ROUTE AQV	ROUTE ALQ	ROUTE ML	ROUTE ALW	ROUTE YP	ROUTE ZH	ROUTE RH	ROUTE ALU	ROUTE AKR	ROUTE BP	ROUTE AIZ	ROUTE YU	ROUTE VB	ROUTE DH	ROUTE LM	ROUTE KP	ROUTE QG	ROUTE NU	ROUTE RU	ROUTE AO	ROUTE RL
192	ROUTE ZG	ROUTE HA	ROUTE AIX	ROUTE AHF	ROUTE ZE	ROUTE AEP	ROUTE ALN	ROUTE RR	ROUTE NU	ROUTE IL	ROUTE IR	ROUTE AER	ROUTE LF	ROUTE RU	ROUTE AHH	ROUTE YS	ROUTE TM	ROUTE ALU	ROUTE AMZ	ROUTE ALT	ROUTE LX	ROUTE ALP	ROUTE ALC	ROUTE RR	ROUTE AQK
193	ROUTE ALZ	ROUTE BB	ROUTE IH	ROUTE JD	ROUTE BV	ROUTE LH	ROUTE AHQ	ROUTE ZD	ROUTE IL	ROUTE AHJ	ROUTE IX	ROUTE DH	ROUTE RB	ROUTE AKQ	ROUTE HK	ROUTE XC	ROUTE AO	ROUTE QG	ROUTE LL	ROUTE AHN	ROUTE MB	ROUTE AOC	ROUTE AKT	ROUTE ALF	ROUTE HO
194	ROUTE RT	ROUTE AHE	ROUTE ALW	ROUTE AW	ROUTE AKE	ROUTE UG	ROUTE RJ	ROUTE AHG	ROUTE YV	ROUTE DH	ROUTE CZ	ROUTE AHP	ROUTE AIY	ROUTE AQA	ROUTE AMM	ROUTE RJ	ROUTE TE	ROUTE AMX	ROUTE LU	ROUTE AMW	ROUTE BU	ROUTE AOG	ROUTE ANA	ROUTE LO	ROUTE ID
195	ROUTE DH	ROUTE AQM	ROUTE LR	ROUTE DD	ROUTE AHF	ROUTE ZI	ROUTE AUK	ROUTE MA	ROUTE UE	ROUTE AQO	ROUTE DL	ROUTE JD	ROUTE LI	ROUTE AJQ	ROUTE AMP	ROUTE AIW	ROUTE QH	ROUTE AQN	ROUTE ZA	ROUTE ZG	ROUTE ADG	ROUTE BD	ROUTE ALM	ROUTE RX	ROUTE RF
196	ROUTE AHF	ROUTE LI	ROUTE ZD	ROUTE ALV	ROUTE IO	ROUTE RP	ROUTE ALQ	ROUTE BB	ROUTE YS	ROUTE MA	ROUTE LI	ROUTE RN	ROUTE AJB	ROUTE BX	ROUTE AQA	ROUTE IT	ROUTE SZ	ROUTE AIX	ROUTE AQX	ROUTE AY	ROUTE ZK	ROUTE AMQ	ROUTE ANA	ROUTE LR	ROUTE ANR
197	ROUTE YZ	ROUTE ALZ	ROUTE JB	ROUTE CH	ROUTE ZL	ROUTE IV	ROUTE IH	ROUTE YZ	ROUTE SZ	ROUTE AQJ	ROUTE RT	ROUTE RV	ROUTE PM	ROUTE AHK	ROUTE AQG	ROUTE RF	ROUTE RQ	ROUTE AHI	ROUTE LT	ROUTE ZH	ROUTE AMF	ROUTE AMO	ROUTE AEI	ROUTE AMX	ROUTE LU
198	ROUTE AFD	ROUTE IL	ROUTE AHH	ROUTE AQS	ROUTE AOQ	ROUTE ALV	ROUTE UE	ROUTE ALU	ROUTE IR	ROUTE ZA	ROUTE ANC	ROUTE ZD	ROUTE RH	ROUTE HL	ROUTE APY	ROUTE LG	ROUTE LG	ROUTE AKV	ROUTE VV	ROUTE AHM	ROUTE ZI	ROUTE UG	ROUTE AHK	ROUTE RH	ROUTE AGY
199	ROUTE AMU	ROUTE JD	ROUTE PX	ROUTE ZE	ROUTE AMW	ROUTE AQU	ROUTE AHT	ROUTE LQ	ROUTE YY	ROUTE JD	ROUTE RB	ROUTE AW	ROUTE PS	ROUTE AMM	ROUTE AQE	ROUTE AR	ROUTE RL	ROUTE AIW	ROUTE PY	ROUTE LZ	ROUTE ZG	ROUTE AY	ROUTE AKR	ROUTE AHU	ROUTE YL
200	ROUTE AQO	ROUTE LM	ROUTE ZC	ROUTE AMV	ROUTE DX	ROUTE AIY	ROUTE AHM	ROUTE DH	ROUTE AJY	ROUTE RX	ROUTE IL	ROUTE ID	ROUTE IX	ROUTE AEZ	ROUTE AHO	ROUTE AQT	ROUTE IO	ROUTE AHH	ROUTE YN	ROUTE RT	ROUTE CN	ROUTE LJ	ROUTE AEM	ROUTE AOI	ROUTE VS
201	ROUTE ZC	ROUTE IP	ROUTE AQR	ROUTE LR	ROUTE ALO	ROUTE IH	ROUTE RP	ROUTE RN	ROUTE TF	ROUTE ZE	ROUTE AIZ	ROUTE ALR	ROUTE VV	ROUTE AJS	ROUTE AHT	ROUTE ALR	ROUTE LJ	ROUTE ALW	ROUTE YU	ROUTE HF	ROUTE AKV	ROUTE ALN	ROUTE QI	ROUTE RO	ROUTE VI
202	ROUTE LI	ROUTE ZE	ROUTE CN	ROUTE LY	ROUTE OI	ROUTE LZ	ROUTE IN	ROUTE JD	ROUTE TL	ROUTE RP	ROUTE CN	ROUTE BB	ROUTE AQR	ROUTE ZL	ROUTE AHM	ROUTE AIR	ROUTE BW	ROUTE IL	ROUTE RN	ROUTE AHO	ROUTE ALA	ROUTE BV	ROUTE AR	ROUTE AOM	ROUTE LV
203	ROUTE IL	ROUTE AFD	ROUTE AQM	ROUTE AHE	ROUTE UA	ROUTE LL	ROUTE YA	ROUTE AER	ROUTE ADP	ROUTE ALX	ROUTE RN	ROUTE AMX	ROUTE JD	ROUTE ANU	ROUTE AHP	ROUTE LQ	ROUTE QY	ROUTE LM	ROUTE IR	ROUTE IN	ROUTE AKX	ROUTE LN	ROUTE ANY	ROUTE ALT	ROUTE VC
204	ROUTE BB	ROUTE ZC	ROUTE AIZ	ROUTE JB	ROUTE AQP	ROUTE AIR	ROUTE JA	ROUTE CC	ROUTE TR	ROUTE VU	ROUTE ZE	ROUTE AQM	ROUTE LI	ROUTE AKN	ROUTE AEH	ROUTE LI	ROUTE VP	ROUTE ZD	ROUTE LG	ROUTE IL	ROUTE CV	ROUTE AKK	ROUTE AKF	ROUTE AQC	ROUTE TJ
205	ROUTE AHM	ROUTE ALR	ROUTE AGO	ROUTE ALR	ROUTE AHL	ROUTE ZK	ROUTE AHP	ROUTE LI	ROUTE AQO	ROUTE AHH	ROUTE TD	ROUTE RH	ROUTE LO	ROUTE AKP	ROUTE AEN	ROUTE AJ	ROUTE BO	ROUTE RX	ROUTE LF	ROUTE AEZ	ROUTE DD	ROUTE OI	ROUTE AFC	ROUTE AQO	ROUTE TT
206	ROUTE ALT	ROUTE AOQ	ROUTE IO	ROUTE AEL	ROUTE ALX	ROUTE ZF	ROUTE RM	ROUTE AQM	ROUTE AQR	ROUTE LE	ROUTE AIT	ROUTE YW	ROUTE AKU	ROUTE AET	ROUTE AHL	ROUTE AHH	ROUTE AB	ROUTE AHP	ROUTE RH	ROUTE YZ	ROUTE ANY	ROUTE IF	ROUTE TU	ROUTE ADJ	ROUTE QG
207	ROUTE AMW	ROUTE LK	ROUTE TL	ROUTE ALZ	ROUTE JA	ROUTE QZ	ROUTE DL	ROUTE AHP	ROUTE MF	ROUTE IH	ROUTE AIW	ROUTE LU	ROUTE AKX	ROUTE ALZ	ROUTE AHO	ROUTE AQU	ROUTE VC	ROUTE AEL	ROUTE YR	ROUTE XZ	ROUTE AOC	ROUTE AOE	ROUTE AMM	ROUTE TP	ROUTE TD
208	ROUTE ALS	ROUTE AQO	ROUTE MA	ROUTE AQO	ROUTE RR	ROUTE CZ	ROUTE RS	ROUTE OE	ROUTE AOQ	ROUTE CZ	ROUTE ZK	ROUTE CV	ROUTE RN	ROUTE ANY	ROUTE AFD	ROUTE TX	ROUTE AKE	ROUTE AQM	ROUTE TT	ROUTE LI	ROUTE BD	ROUTE AMP	ROUTE YA	ROUTE LH	ROUTE LH
209	ROUTE AEH	ROUTE IN	ROUTE AMV	ROUTE AEZ	ROUTE LG	ROUTE IZ	ROUTE ALU	ROUTE LK	ROUTE QQ	ROUTE YZ	ROUTE EF	ROUTE AEL	ROUTE AIS	ROUTE OI	ROUTE AHW	ROUTE VT	ROUTE UX	ROUTE YY	ROUTE NV	ROUTE ALO	ROUTE IH	ROUTE ALC	ROUTE AJ	ROUTE CJ	ROUTE LZ
210	ROUTE AMV	ROUTE AMU	ROUTE RP	ROUTE CZ	ROUTE LJ	ROUTE AQR	ROUTE DX	ROUTE YY	ROUTE AQR	ROUTE RN	ROUTE SJ	ROUTE TT	ROUTE RT	ROUTE AJP	ROUTE AHZ	ROUTE IM	ROUTE TI	ROUTE LK	ROUTE LY	ROUTE LK	ROUTE ALN	ROUTE ANF	ROUTE NW	ROUTE ALQ	ROUTE AGS
211	ROUTE ID	ROUTE AMW	ROUTE AEN	ROUTE RT	ROUTE AKZ	ROUTE AHL	ROUTE TW	ROUTE AHF	ROUTE AQU	ROUTE AQT	ROUTE TP	ROUTE AVC	ROUTE AIV	ROUTE NU	ROUTE ANS	ROUTE AQJ	ROUTE CB	ROUTE VU	ROUTE LX	ROUTE ALZ	ROUTE DI	ROUTE ZL	ROUTE HJ	ROUTE IN	ROUTE AQG
212	ROUTE ZE	ROUTE ALT	ROUTE AHG	ROUTE ZI	ROUTE AHG	ROUTE AQW	ROUTE AHL	ROUTE ALT	ROUTE ML	ROUTE IZ	ROUTE MJ	ROUTE LK	ROUTE IL	ROUTE AJR	ROUTE AWV	ROUTE RG	ROUTE VS	ROUTE MA	ROUTE AQU	ROUTE IP	ROUTE RT	ROUTE CJ	ROUTE SI	ROUTE LV	ROUTE AQV
213	ROUTE AHN	ROUTE AEH	ROUTE VT	ROUTE XZ	ROUTE ZF	ROUTE AHE	ROUTE RK	ROUTE LY	ROUTE BB	ROUTE LW	ROUTE SX	ROUTE AHM	ROUTE AW	ROUTE AJN	ROUTE APW	ROUTE YV	ROUTE PY	ROUTE LT	ROUTE QC	ROUTE AMR	ROUTE IL	ROUTE LL	ROUTE AKQ	ROUTE VJ	ROUTE ANW
214	ROUTE IN	ROUTE LT	ROUTE AIY	ROUTE LI	ROUTE IQ	ROUTE ALN	ROUTE ALX	ROUTE AKZ	ROUTE VU	ROUTE AIX	ROUTE ZB	ROUTE IX	ROUTE IR	ROUTE UI	ROUTE HI	ROUTE AHG	ROUTE VN	ROUTE AMZ	ROUTE AQR	ROUTE ALP	ROUTE IP	ROUTE KP	ROUTE AKS	ROUTE CE	ROUTE HA
215	ROUTE LK	ROUTE AMV	ROUTE RN	ROUTE AHM	ROUTE AMQ	ROUTE AJA	ROUTE IK	ROUTE ZA	ROUTE AEF	ROUTE AQM	ROUTE TX	ROUTE AHH	ROUTE ZA	ROUTE AJH	ROUTE AQC	ROUTE TR	ROUTE VF	ROUTE ALV	ROUTE UA	ROUTE ZC	ROUTE RP	ROUTE ALM	ROUTE AFA	ROUTE UG	ROUTE AOA
216	ROUTE LM	ROUTE ZD	ROUTE RX	ROUTE CC	ROUTE ZJ	ROUTE IO	ROUTE NF	ROUTE RL	ROUTE AQX	ROUTE LM	ROUTE YR	ROUTE ZA	ROUTE ZD	ROUTE ZI	ROUTE AHK	ROUTE IK	ROUTE SH	ROUTE ALR	ROUTE YK	ROUTE ALA	ROUTE AMQ	ROUTE AJZ	ROUTE AOR	ROUTE HF	ROUTE LQ
217	ROUTE IP	ROUTE AHM	ROUTE DG	ROUTE IL	ROUTE VW	ROUTE AIT	ROUTE AQI	ROUTE ALR	ROUTE AIW	ROUTE RH	ROUTE AIQ	ROUTE CC	ROUTE YQ	ROUTE TU	ROUTE AHN	ROUTE ALZ	ROUTE AQR	ROUTE RN	ROUTE DH	ROUTE AOI	ROUTE RW	ROUTE IR	ROUTE ANC	ROUTE XZ	ROUTE AHJ
218	ROUTE AHO	ROUTE ALS	ROUTE ALX	ROUTE ALQ	ROUTE AQM	ROUTE AHN	ROUTE AHO	ROUTE CH	ROUTE HF	ROUTE AQQ	ROUTE DH	ROUTE IN	ROUTE AQO	ROUTE QG	ROUTE AHO	ROUTE TB	ROUTE TO	ROUTE XX	ROUTE AED	ROUTE CZ	ROUTE AMM	ROUTE CE	ROUTE AEG	ROUTE LE	ROUTE AHE
219	ROUTE OG	ROUTE CH	ROUTE AQN	ROUTE AQN	ROUTE AMX	ROUTE RJ	ROUTE RQ	ROUTE RH	ROUTE AIZ	ROUTE ALZ	ROUTE ZH	ROUTE AFD	ROUTE CC	ROUTE AKM	ROUTE APO	ROUTE QA	ROUTE TL	ROUTE IF	ROUTE RS	ROUTE CE	ROUTE AMO	ROUTE AOA	ROUTE AKO	ROUTE BU	ROUTE HF
220	ROUTE ZD	ROUTE PX	ROUTE YS	ROUTE AOQ	ROUTE TR	ROUTE AEN	ROUTE IO	ROUTE LU	ROUTE AIO	ROUTE IP	ROUTE TJ	ROUTE EF	ROUTE TB	ROUTE ZK	ROUTE AQU	ROUTE AMX	ROUTE VA	ROUTE TT	ROUTE XW	ROUTE ALQ	ROUTE ANF	ROUTE AMW	ROUTE AEW	ROUTE LZ	ROUTE KT
221	ROUTE PX	ROUTE AHO	ROUTE JD	ROUTE EF	ROUTE ALZ	ROUTE ALS	ROUTE NL	ROUTE DD	ROUTE CH	ROUTE AIX	ROUTE ZB	ROUTE IR	ROUTE UI	ROUTE HI	ROUTE AHG	ROUTE VN	ROUTE AMZ	ROUTE AQR	ROUTE ALP	ROUTE IP	ROUTE KP	ROUTE AKS	ROUTE CE	ROUTE HA
222	ROUTE ALA	ROUTE LR	ROUTE YU	ROUTE IZ	ROUTE ALR	ROUTE LT	ROUTE ALT	ROUTE YW	ROUTE AIT	ROUTE AHG	ROUTE MD	ROUTE YT	ROUTE EF	ROUTE ANS	ROUTE APE	ROUTE TD	ROUTE QE	ROUTE AEP	ROUTE YH	ROUTE AMS	ROUTE LR	ROUTE AMN	ROUTE AEW	ROUTE LZ	ROUTE KT
223	ROUTE LR	ROUTE CV	ROUTE AOJ	ROUTE LW	ROUTE ALV	ROUTE RS	ROUTE SI	ROUTE PX	ROUTE YQ	ROUTE CV	ROUTE RV	ROUTE ALO	ROUTE AQR	ROUTE AJO	ROUTE AJV	ROUTE VU	ROUTE RK	ROUTE ZB	ROUTE RR	ROUTE CV	ROUTE LV	ROUTE HA	ROUTE AOI	ROUTE HA	ROUTE AHN
224	ROUTE ALO	ROUTE AHN	ROUTE AEL	ROUTE RR	ROUTE AHE	ROUTE LF	ROUTE ALW	ROUTE IN	ROUTE LQ	ROUTE LU	ROUTE LY	ROUTE ANF	ROUTE ADM	ROUTE AJK	ROUTE APS	ROUTE YO	ROUTE II	ROUTE AEN	ROUTE LK	ROUTE LR	ROUTE CL	ROUTE LV	ROUTE AGP	ROUTE LD	ROUTE RS	ROUTE XZ
225	ROUTE AW	ROUTE YY	ROUTE TP	ROUTE AMV	ROUTE LS	ROUTE RD	ROUTE KI	ROUTE ALC	ROUTE TB	ROUTE TT	ROUTE AJB	ROUTE AKF	ROUTE TH	ROUTE AJE	ROUTE KZ	ROUTE AU	ROUTE AJB	ROUTE IN	ROUTE IL	ROUTE LZ	ROUTE MB	ROUTE HC	ROUTE QX	ROUTE CJ	ROUTE LQ
226	ROUTE LT	ROUTE YW	ROUTE NW	ROUTE ZH	ROUTE RF	ROUTE ZH	ROUTE AUE	ROUTE QA	ROUTE YW	ROUTE AER	ROUTE TH	ROUTE AMJ	ROUTE AEC	ROUTE AH	ROUTE ADP	ROUTE AOQ	ROUTE BU	ROUTE YT	ROUTE RB	ROUTE ZD	ROUTE SG	ROUTE DH	ROUTE AQG	ROUTE AHE	ROUTE IB
227	ROUTE AMR	ROUTE TT	ROUTE II	ROUTE ZD	ROUTE IV	ROUTE ZC	ROUTE II	ROUTE CV	ROUTE LW	ROUTE IX	ROUTE YO	ROUTE OJ	ROUTE ZG	ROUTE AJM	ROUTE HX	ROUTE ALV	ROUTE NX	ROUTE CV	ROUTE YO	ROUTE ZE	ROUTE HH	ROUTE LO	ROUTE VD	ROUTE RM
228	ROUTE RN	ROUTE OD	ROUTE LS	ROUTE VW	ROUTE AHM	ROUTE CN	ROUTE AMC	ROUTE YT	ROUTE AMX	ROUTE XW	ROUTE ALV	ROUTE ZJ	ROUTE ZH	ROUTE AET	ROUTE ALU	ROUTE VO	ROUTE JD	ROUTE TN	ROUTE AOM	ROUTE ZH	ROUTE ANA	ROUTE QG	ROUTE LW	ROUTE AME
229	ROUTE AMZ	ROUTE CZ	ROUTE AOM	ROUTE QA	ROUTE IM	ROUTE IT	ROUTE AHG	ROUTE TT	ROUTE EF	ROUTE ZB	ROUTE AKZ	ROUTE RB	ROUTE ID	ROUTE ALF	ROUTE AEZ	ROUTE HJ	ROUTE VJ	ROUTE YX	ROUTE AKE	ROUTE ALF	ROUTE IR	ROUTE LH	ROUTE AJZ	ROUTE QW	
230	ROUTE CV	ROUTE RN	ROUTE VL	ROUTE PX	ROUTE JC	ROUTE AIP	ROUTE ND	ROUTE AQJ	ROUTE LE	ROUTE EF	ROUTE JB	ROUTE TN	ROUTE YW	ROUTE XZ	ROUTE AJZ	ROUTE QX	ROUTE PH	ROUTE AFD	ROUTE JD	ROUTE AHK	ROUTE AKS	ROUTE AKU	ROUTE LH	ROUTE AMP	ROUTE AZ
231	ROUTE YW	ROUTE AW	ROUTE TN	ROUTE AOM	ROUTE LI	ROUTE AQO	ROUTE QB	ROUTE AHH	ROUTE TH	ROUTE YX	ROUTE IY	ROUTE NV	ROUTE AQU	ROUTE AP	ROUTE AEF	ROUTE KP	ROUTE AQP	ROUTE AMU	ROUTE LS	ROUTE AMT	ROUTE AQA	ROUTE AKW	ROUTE HH	ROUTE TT	ROUTE RG
232	ROUTE TT	ROUTE RR	ROUTE EF	ROUTE AOJ	ROUTE IL	ROUTE AQT	ROUTE IO	ROUTE JB	ROUTE YZ	ROUTE RJ	ROUTE CV	ROUTE LE	ROUTE YZ	ROUTE AJG	ROUTE IB	ROUTE TS	ROUTE LU	ROUTE RR	ROUTE AQW	ROUTE BB	ROUTE AKU	ROUTE ANY	ROUTE AKN	ROUTE TV	ROUTE RQ
233	ROUTE CH	ROUTE XX	ROUTE AMX	ROUTE ALU	ROUTE RT	ROUTE LX	ROUTE AHJ	ROUTE AEP	ROUTE TN	ROUTE ALU	ROUTE TT	ROUTE RP	ROUTE TN	ROUTE AJZ	ROUTE AV	ROUTE XW	ROUTE UW	ROUTE AOQ	ROUTE LR	ROUTE RN	ROUTE AKW	ROUTE XZ	ROUTE AEU	ROUTE AHN	ROUTE ADK
234	ROUTE JD	ROUTE MA	ROUTE RQ	ROUTE AHL	ROUTE AJM	ROUTE AIX	ROUTE NJ	ROUTE IX	ROUTE CV	ROUTE AHE	ROUTE YU	ROUTE AMR	ROUTE CV	ROUTE AMZ	ROUTE APK	ROUTE RV	ROUTE VR	ROUTE AHF	ROUTE TH	ROUTE LT	ROUTE TW	ROUTE AMM	ROUTE LP	ROUTE AIX	ROUTE AEO
235	ROUTE MA	ROUTE JD	ROUTE ALT	ROUTE LG	ROUTE ZD	ROUTE DX	ROUTE AIC	ROUTE AEL	ROUTE LK	ROUTE RR	ROUTE LM	ROUTE UJ	ROUTE AQX	ROUTE LP	ROUTE AKF	ROUTE QJ	ROUTE AQX	ROUTE ALA	ROUTE UE	ROUTE DD	ROUTE CJ	ROUTE ZK	ROUTE AH	ROUTE YP	ROUTE HW
236	ROUTE XX	ROUTE AMZ	ROUTE AW	ROUTE AMR	ROUTE AQA	ROUTE IK	ROUTE AIF	ROUTE ALA	ROUTE MH	ROUTE CN	ROUTE RF	ROUTE AHE	ROUTE AQR	ROUTE AQX	ROUTE SG	ROUTE APQ	ROUTE AQN	ROUTE HG	ROUTE AHE	ROUTE AQO	ROUTE TT	ROUTE ANS	ROUTE ZI	ROUTE AQE	ROUTE IR
237	ROUTE ALQ	ROUTE YX	ROUTE IM	ROUTE YZ	ROUTE PX	ROUTE AHO	ROUTE CN	ROUTE AHO	ROUTE TT	ROUTE YW	ROUTE AIV	ROUTE QH	ROUTE TT	ROUTE ZJ	ROUTE CB	ROUTE AIX	ROUTE VM	ROUTE ZA	ROUTE CV	ROUTE RP	ROUTE ANW	ROUTE LF	ROUTE KR	ROUTE ADZ	ROUTE LI
238	ROUTE CZ	ROUTE LG	ROUTE AQP	ROUTE IJ	ROUTE AMS	ROUTE ZE	ROUTE MT	ROUTE AQO	ROUTE DH	ROUTE AEN	ROUTE TB	ROUTE IH	ROUTE AHO	ROUTE ATG	ROUTE AEX	ROUTE RM	ROUTE VE	ROUTE ALT	ROUTE YM	ROUTE JD	ROUTE ZF	ROUTE IL	ROUTE AKP	ROUTE ANS	ROUTE ALN
239	ROUTE AEZ	ROUTE RP	ROUTE ZA	ROUTE AEH	ROUTE AMV	ROUTE LO	ROUTE CZ	ROUTE AHM	ROUTE PX	ROUTE RD	ROUTE LS	ROUTE AEN	ROUTE DH	ROUTE AUK	ROUTE AEQ	ROUTE LS	ROUTE AJZ	ROUTE LC	ROUTE RM	ROUTE RR	ROUTE BB	ROUTE AY	ROUTE VN	ROUTE BA	
240	ROUTE AOI	ROUTE AMR	ROUTE HA	ROUTE AMZ	ROUTE TF	ROUTE AHK	ROUTE MZ	ROUTE RF	ROUTE MN	ROUTE AHN	ROUTE AIY	ROUTE YQ	ROUTE OW	ROUTE BV	ROUTE AGJ	ROUTE AGT	ROUTE UZ	ROUTE AMW	ROUTE EF	ROUTE AHL	ROUTE AUX	ROUTE AJT	ROUTE AGP	ROUTE LQ	
241	ROUTE VY	ROUTE ZB	ROUTE TX	ROUTE IQ	ROUTE AOQ	ROUTE AOQ	ROUTE AHF	ROUTE ALV	ROUTE IT	ROUTE ALR	ROUTE YT	ROUTE CZ	ROUTE PC	ROUTE AJJ	ROUTE AEI	ROUTE IV	ROUTE AOQ	ROUTE DD	ROUTE YE	ROUTE XX	ROUTE ALC	ROUTE IP	ROUTE NU	ROUTE RL	ROUTE MA
242	ROUTE RR	ROUTE IJ	ROUTE AEC	ROUTE TT	ROUTE AHK	ROUTE AEH	ROUTE AHI	ROUTE XX	ROUTE QX	ROUTE IT	ROUTE IP	ROUTE TH	ROUTE LQ	ROUTE HJ	ROUTE ALD	ROUTE AHN	ROUTE TK	ROUTE AHM	ROUTE RL	ROUTE IH	ROUTE RN	ROUTE ADN	ROUTE AEY	ROUTE ANF	ROUTE TO
243	ROUTE ALP	ROUTE ALO	ROUTE LW	ROUTE ALP	ROUTE ALP	ROUTE JC	ROUTE JW	ROUTE YV	ROUTE ALN	ROUTE QC	ROUTE MN	ROUTE TV	ROUTE AJL	ROUTE AEO	ROUTE RO	ROUTE AKZ	ROUTE RH	ROUTE IO	ROUTE OG	ROUTE AW	ROUTE SG	ROUTE AJL	ROUTE LI	ROUTE AQI	
244	ROUTE VW	ROUTE ALQ	ROUTE IV	ROUTE ANA	ROUTE AMZ	ROUTE DG	ROUTE AFD	ROUTE LE	ROUTE IZ	ROUTE LQ	ROUTE IM	ROUTE LW	ROUTE BB	ROUTE AJD	ROUTE KX	ROUTE IY	ROUTE AIV	ROUTE RP	ROUTE AIV	ROUTE ID	ROUTE ZD	ROUTE CV	ROUTE AQA	ROUTE AR	ROUTE HK
245	ROUTE DD	ROUTE OG	ROUTE AHE	ROUTE AOM	ROUTE AQT	ROUTE AIZ	ROUTE RJ	ROUTE OG	ROUTE RD	ROUTE DX	ROUTE IV	ROUTE PT	ROUTE AKM	ROUTE ALL	ROUTE HV	ROUTE VH	ROUTE PD	ROUTE CZ	ROUTE LE	ROUTE AOQ	ROUTE RJ	ROUTE LV	ROUTE AJN	ROUTE VR	ROUTE VB
246	ROUTE RP	ROUTE AOM	ROUTE AKZ	ROUTE YY	ROUTE RM	ROUTE

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
262	ROUTE AHL	ROUTE ALF	ROUTE AOQ	ROUTE ZC	ROUTE AQK	ROUTE MA	ROUTE LV	ROUTE AHL	ROUTE RQ	ROUTE AEL	ROUTE NX	ROUTE AEH	ROUTE ALO	ROUTE AID	ROUTE NW	ROUTE TG	ROUTE VL	ROUTE IH	ROUTE IK	ROUTE AQE	ROUTE HL	ROUTE YZ	ROUTE AJM	ROUTE AHP	ROUTE HB
263	ROUTE ZA	ROUTE YT	ROUTE VN	ROUTE AMJ	ROUTE AMP	ROUTE AET	ROUTE QD	ROUTE YS	ROUTE NJ	ROUTE JB	ROUTE YW	ROUTE AMV	ROUTE AKS	ROUTE UG	ROUTE LC	ROUTE AHE	ROUTE HE	ROUTE YQ	ROUTE VN	ROUTE HA	ROUTE ANA	ROUTE ZH	ROUTE LO	ROUTE ANW	ROUTE SI
264	ROUTE RH	ROUTE RH	ROUTE RS	ROUTE LU	ROUTE AQC	ROUTE VW	ROUTE ALD	ROUTE ALN	ROUTE AQM	ROUTE UA	ROUTE QW	ROUTE CN	ROUTE IW	ROUTE ZE	ROUTE AFC	ROUTE RQ	ROUTE AQU	ROUTE AHN	ROUTE RA	ROUTE AMQ	ROUTE ADM	ROUTE CH	ROUTE AQC	ROUTE TJ	ROUTE AKV
265	ROUTE YT	ROUTE AHL	ROUTE ALZ	ROUTE IX	ROUTE AQK	ROUTE ALF	ROUTE MJ	ROUTE AEN	ROUTE AHF	ROUTE AHW	ROUTE HO	ROUTE TB	ROUTE ALR	ROUTE AIF	ROUTE AND	ROUTE VN	ROUTE AQQ	ROUTE IX	ROUTE AIS	ROUTE LG	ROUTE XK	ROUTE ZF	ROUTE AOX	ROUTE RC	ROUTE NX
266	ROUTE IO	ROUTE YV	ROUTE ALU	ROUTE AQC	ROUTE AQN	ROUTE QJ	ROUTE MB	ROUTE QZ	ROUTE AQP	ROUTE ALW	ROUTE CF	ROUTE LQ	ROUTE AKV	ROUTE YW	ROUTE HP	ROUTE IG	ROUTE LD	ROUTE YU	ROUTE TM	ROUTE ZA	ROUTE AKZ	ROUTE LX	ROUTE DD	ROUTE NU	ROUTE CF
267	ROUTE RX	ROUTE AHK	ROUTE DX	ROUTE ALS	ROUTE VF	ROUTE II	ROUTE QW	ROUTE ALS	ROUTE AQS	ROUTE YU	ROUTE AQP	ROUTE PN	ROUTE AIO	ROUTE AQG	ROUTE AEU	ROUTE RA	ROUTE ALZ	ROUTE LY	ROUTE JC	ROUTE ZB	ROUTE ANU	ROUTE LK	ROUTE KP	ROUTE AQA	ROUTE QZ
268	ROUTE AMO	ROUTE TN	ROUTE YP	ROUTE RF	ROUTE AEH	ROUTE XY	ROUTE IS	ROUTE IZ	ROUTE AHI	ROUTE ALP	ROUTE JC	ROUTE AHK	ROUTE JC	ROUTE LD	ROUTE AFA	ROUTE VP	ROUTE AHN	ROUTE ALQ	ROUTE QZ	ROUTE AOG	ROUTE AKT	ROUTE PX	ROUTE AW	ROUTE IH	ROUTE AU
269	ROUTE AOC	ROUTE TR	ROUTE IX	ROUTE AMP	ROUTE TH	ROUTE ZG	ROUTE OZ	ROUTE YX	ROUTE JA	ROUTE YY	ROUTE NH	ROUTE RD	ROUTE AIT	ROUTE AML	ROUTE IE	ROUTE RC	ROUTE UY	ROUTE VT	ROUTE RP	ROUTE ALC	ROUTE ZE	ROUTE AEO	ROUTE APU	ROUTE SG	ROUTE XV
270	ROUTE TN	ROUTE CN	ROUTE TJ	ROUTE DG	ROUTE IT	ROUTE AQS	ROUTE AEP	ROUTE RJ	ROUTE ALO	ROUTE AFD	ROUTE ANA	ROUTE AKU	ROUTE RJ	ROUTE AHV	ROUTE AMF	ROUTE TL	ROUTE ALP	ROUTE RL	ROUTE TL	ROUTE AMF	ROUTE YZ	ROUTE JD	ROUTE CJ	ROUTE ALN	ROUTE YI
271	ROUTE ALC	ROUTE RI	ROUTE TF	ROUTE ZB	ROUTE CY	ROUTE LM	ROUTE ALM	ROUTE AMT	ROUTE AQV	ROUTE TX	ROUTE DW	ROUTE AQW	ROUTE AUK	ROUTE LH	ROUTE AMZ	ROUTE AMV	ROUTE AIW	ROUTE RS	ROUTE AJB	ROUTE RH	ROUTE VT	ROUTE CC	ROUTE OI	ROUTE BB	ROUTE YN
272	ROUTE IX	ROUTE VT	ROUTE AMV	ROUTE IM	ROUTE LQ	ROUTE YZ	ROUTE PF	ROUTE YQ	ROUTE UZ	ROUTE IQ	ROUTE RI	ROUTE IT	ROUTE IH	ROUTE YY	ROUTE AFW	ROUTE AMU	ROUTE AMR	ROUTE TR	ROUTE LI	ROUTE RH	ROUTE VT	ROUTE CC	ROUTE OI	ROUTE BB	ROUTE YN
273	ROUTE LU	ROUTE LU	ROUTE XW	ROUTE YX	ROUTE TP	ROUTE RA	ROUTE IY	ROUTE ALZ	ROUTE II	ROUTE TH	ROUTE AQV	ROUTE AIR	ROUTE AHM	ROUTE LL	ROUTE BC	ROUTE SX	ROUTE PP	ROUTE AOI	ROUTE LQ	ROUTE IQ	ROUTE RL	ROUTE LI	ROUTE IO	ROUTE AJK	ROUTE BX	ROUTE YF
274	ROUTE ALN	ROUTE XY	ROUTE AHP	ROUTE AMT	ROUTE AQU	ROUTE RK	ROUTE RC	ROUTE AMR	ROUTE UA	ROUTE RL	ROUTE AQJ	ROUTE LH	ROUTE VB	ROUTE RT	ROUTE KT	ROUTE AHO	ROUTE ALX	ROUTE LW	ROUTE VH	ROUTE TN	ROUTE VP	ROUTE EF	ROUTE IP	ROUTE AVC	ROUTE VM
275	ROUTE VT	ROUTE IX	ROUTE AOG	ROUTE VT	ROUTE CV	ROUTE JA	ROUTE ALP	ROUTE TL	ROUTE DL	ROUTE AEH	ROUTE RG	ROUTE YU	ROUTE RP	ROUTE CE	ROUTE ANB	ROUTE JA	ROUTE AIS	ROUTE YS	ROUTE TG	ROUTE RJ	ROUTE YX	ROUTE DG	ROUTE CV	ROUTE TO	ROUTE TN
276	ROUTE CN	ROUTE LY	ROUTE VQ	ROUTE AOA	ROUTE YS	ROUTE PV	ROUTE MG	ROUTE AHN	ROUTE ALR	ROUTE AMV	ROUTE IO	ROUTE AEZ	ROUTE IN	ROUTE AIT	ROUTE CI	ROUTE SJ	ROUTE BC	ROUTE DG	ROUTE JB	ROUTE IZ	ROUTE LB	ROUTE MA	ROUTE LH	ROUTE ADV	ROUTE AMF
277	ROUTE AMO	ROUTE JB	ROUTE CC	ROUTE TP	ROUTE VT	ROUTE IM	ROUTE LT	ROUTE TH	ROUTE OG	ROUTE ALF	ROUTE AQM	ROUTE AOI	ROUTE AHP	ROUTE HC	ROUTE ADN	ROUTE ALS	ROUTE PC	ROUTE ALP	ROUTE TF	ROUTE VT	ROUTE DL	ROUTE AEQ	ROUTE IF	ROUTE RM	ROUTE HY
278	ROUTE AET	ROUTE TP	ROUTE TS	ROUTE LS	ROUTE ZH	ROUTE AQP	ROUTE MM	ROUTE RX	ROUTE ALU	ROUTE QX	ROUTE ALZ	ROUTE IK	ROUTE RM	ROUTE ALH	ROUTE OI	ROUTE EF	ROUTE AHU	ROUTE ALC	ROUTE AQV	ROUTE IX	ROUTE ZA	ROUTE LT	ROUTE IL	ROUTE AW	ROUTE UW
279	ROUTE VY	ROUTE IZ	ROUTE AMU	ROUTE IV	ROUTE AJL	ROUTE AOQ	ROUTE AHK	ROUTE CN	ROUTE IO	ROUTE YR	ROUTE IW	ROUTE TP	ROUTE VH	ROUTE ATT	ROUTE YA	ROUTE TM	ROUTE OX	ROUTE AMT	ROUTE AQN	ROUTE TP	ROUTE CY	ROUTE LG	ROUTE BB	ROUTE IZ	ROUTE VG
280	ROUTE RL	ROUTE YU	ROUTE RH	ROUTE ALO	ROUTE ZD	ROUTE PN	ROUTE LQ	ROUTE VF	ROUTE AHK	ROUTE NB	ROUTE DX	ROUTE DL	ROUTE ZB	ROUTE AES	ROUTE ALQ	ROUTE AIV	ROUTE JB	ROUTE RK	ROUTE RL	ROUTE AGO	ROUTE AKS	ROUTE AJP	ROUTE VS	ROUTE VQ
281	ROUTE ALM	ROUTE LW	ROUTE YT	ROUTE TX	ROUTE RE	ROUTE LZ	ROUTE ALP	ROUTE VL	ROUTE ALO	ROUTE CY	ROUTE SH	ROUTE RS	ROUTE AIC	ROUTE ZI	ROUTE TO	ROUTE AJA	ROUTE RB	ROUTE YD	ROUTE TR	ROUTE BX	ROUTE TT	ROUTE LL	ROUTE HJ	ROUTE SX
282	ROUTE AMP	ROUTE DG	ROUTE AMZ	ROUTE AET	ROUTE MZ	ROUTE LU	ROUTE AHN	ROUTE IQ	ROUTE DX	ROUTE DL	ROUTE DK	ROUTE DG	ROUTE ALU	ROUTE AQA	ROUTE ZL	ROUTE QE	ROUTE AHC	ROUTE AOM	ROUTE XV	ROUTE TR	ROUTE AKF	ROUTE DG	ROUTE AER	ROUTE TH	ROUTE SV
283	ROUTE TR	ROUTE AOC	ROUTE IG	ROUTE CN	ROUTE YZ	ROUTE LG	ROUTE PV	ROUTE YP	ROUTE AKE	ROUTE AEZ	ROUTE DD	ROUTE PH	ROUTE DK	ROUTE ANF	ROUTE AEY	ROUTE AMZ	ROUTE EF	ROUTE RJ	ROUTE VS	ROUTE JB	ROUTE AOP	ROUTE RR	ROUTE AJR	ROUTE RQ	ROUTE AEN
284	ROUTE IZ	ROUTE RJ	ROUTE AQM	ROUTE AC	ROUTE XZ	ROUTE UA	ROUTE PT	ROUTE AMQ	ROUTE ALX	ROUTE RF	ROUTE RS	ROUTE ZK	ROUTE ALX	ROUTE AKF	ROUTE AED	ROUTE VR	ROUTE AHM	ROUTE CN	ROUTE YL	ROUTE LU	ROUTE TN	ROUTE HN	ROUTE MB	ROUTE AJ	ROUTE LT
285	ROUTE LW	ROUTE AMO	ROUTE AFD	ROUTE RN	ROUTE AJS	ROUTE UE	ROUTE UI	ROUTE VU	ROUTE RX	ROUTE YO	ROUTE TF	ROUTE AKR	ROUTE IK	ROUTE QA	ROUTE ANF	ROUTE AOO	ROUTE PS	ROUTE TH	ROUTE VR	ROUTE LW	ROUTE AKR	ROUTE IH	ROUTE LM	ROUTE HD	ROUTE TR
286	ROUTE RJ	ROUTE AMO	ROUTE YR	ROUTE TH	ROUTE ANY	ROUTE RO	ROUTE AKZ	ROUTE AEH	ROUTE MR	ROUTE TJ	ROUTE AQS	ROUTE ALM	ROUTE IQ	ROUTE ALJ	ROUTE ZH	ROUTE AHK	ROUTE PN	ROUTE AEZ	ROUTE RE	ROUTE DG	ROUTE TJ	ROUTE ZG	ROUTE APS	ROUTE UX	ROUTE ADI
287	ROUTE JB	ROUTE ALN	ROUTE LQ	ROUTE ALC	ROUTE AET	ROUTE YW	ROUTE AKL	ROUTE RD	ROUTE CN	ROUTE IM	ROUTE XV	ROUTE AJA	ROUTE YO	ROUTE MB	ROUTE ZK	ROUTE RI	ROUTE AQS	ROUTE TP	ROUTE TQ	ROUTE DX	ROUTE DG	ROUTE AKO	ROUTE IO	ROUTE RV	ROUTE AOQ
288	ROUTE TP	ROUTE RS	ROUTE JA	ROUTE VR	ROUTE DW	ROUTE TT	ROUTE LJ	ROUTE AMV	ROUTE VR	ROUTE AMU	ROUTE VD	ROUTE TT	ROUTE AQM	ROUTE YV	ROUTE QE	ROUTE IS	ROUTE AOQ	ROUTE IZ	ROUTE IN	ROUTE YU	ROUTE IT	ROUTE AKQ	ROUTE AJJ	ROUTE LQ	ROUTE ADL
289	ROUTE LY	ROUTE AOG	ROUTE PV	ROUTE XX	ROUTE CN	ROUTE IG	ROUTE AJE	ROUTE TF	ROUTE MX	ROUTE AMZ	ROUTE MV	ROUTE JC	ROUTE SX	ROUTE QE	ROUTE LA	ROUTE RE	ROUTE PF	ROUTE ALF	ROUTE IO	ROUTE AVC	ROUTE PU	ROUTE RX	ROUTE AJG	ROUTE AKE	ROUTE AW
290	ROUTE YU	ROUTE AET	ROUTE AJY	ROUTE ALN	ROUTE TD	ROUTE AQM	ROUTE MK	ROUTE IT	ROUTE YO	ROUTE ANC	ROUTE RA	ROUTE VN	ROUTE AQP	ROUTE AQE	ROUTE NU	ROUTE VB	ROUTE AQJ	ROUTE YR	ROUTE AOR	ROUTE YV	ROUTE BP	ROUTE XY	ROUTE APW	ROUTE TN	ROUTE IM
291	ROUTE AOG	ROUTE AMP	ROUTE YQ	ROUTE UA	ROUTE ALT	ROUTE ZA	ROUTE RI	ROUTE AOO	ROUTE SX	ROUTE AHF	ROUTE AJA	ROUTE AOC	ROUTE YR	ROUTE XY	ROUTE AJ	ROUTE AP	ROUTE PA	ROUTE AMS	ROUTE AMJ	ROUTE ANW	ROUTE LG	ROUTE CN	ROUTE LI	ROUTE AMM	ROUTE HX
292	ROUTE AMF	ROUTE ALM	ROUTE CM	ROUTE YS	ROUTE OG	ROUTE LY	ROUTE PL	ROUTE YU	ROUTE CZ	ROUTE RS	ROUTE IK	ROUTE RM	ROUTE TD	ROUTE LF	ROUTE HN	ROUTE VD	ROUTE AQW	ROUTE RV	ROUTE IW	ROUTE AW	ROUTE IM	ROUTE YY	ROUTE CC	ROUTE RG	ROUTE PP
293	ROUTE RS	ROUTE AMF	ROUTE AOK	ROUTE AOI	ROUTE AOO	ROUTE ANA	ROUTE LP	ROUTE TP	ROUTE RA	ROUTE TR	ROUTE AQR	ROUTE YR	ROUTE VN	ROUTE RN	ROUTE PW	ROUTE CZ	ROUTE AMP	ROUTE IK	ROUTE RJ	ROUTE ANY	ROUTE IX	ROUTE YW	ROUTE AHV	ROUTE UJ	ROUTE ANU
294	ROUTE DG	ROUTE IK	ROUTE VF	ROUTE TX	ROUTE VH	ROUTE ANK	ROUTE AJH	ROUTE AMO	ROUTE AHM	ROUTE XW	ROUTE AHN	ROUTE AMS	ROUTE ALE	ROUTE ZD	ROUTE BP	ROUTE SZ	ROUTE VK	ROUTE AMO	ROUTE AIY	ROUTE AMM	ROUTE JB	ROUTE ZE	ROUTE APO	ROUTE AHK	ROUTE HL
295	ROUTE QA	ROUTE AOE	ROUTE AHL	ROUTE IT	ROUTE AQS	ROUTE LK	ROUTE IG	ROUTE AHK	ROUTE AMN	ROUTE LS	ROUTE UJ	ROUTE QX	ROUTE AHG	ROUTE LO	ROUTE IC	ROUTE AHF	ROUTE UE	ROUTE RF	ROUTE VB	ROUTE ANA	ROUTE IQ	ROUTE ZC	ROUTE AJL	ROUTE IL	ROUTE AHQ
296	ROUTE AOE	ROUTE YS	ROUTE VJ	ROUTE RD	ROUTE ZB	ROUTE YY	ROUTE ALS	ROUTE RS	ROUTE NF	ROUTE ANA	ROUTE CM	ROUTE QA	ROUTE TA	ROUTE YX	ROUTE XZ	ROUTE AMW	ROUTE AHH	ROUTE TA	ROUTE RS	ROUTE RH	ROUTE LR	ROUTE VW	ROUTE AMF	ROUTE BB	
297	ROUTE RB	ROUTE IO	ROUTE TH	ROUTE RL	ROUTE VP	ROUTE ANC	ROUTE PR	ROUTE TB	ROUTE YU	ROUTE TD	ROUTE TR	ROUTE AQT	ROUTE VT	ROUTE RR	ROUTE AR	ROUTE II	ROUTE ALV	ROUTE AOK	ROUTE IV	ROUTE LY	ROUTE RD	ROUTE LE	ROUTE ZL	ROUTE TR	ROUTE AHP
298	ROUTE TH	ROUTE DX	ROUTE TK	ROUTE LQ	ROUTE RQ	ROUTE YT	ROUTE RO	ROUTE VT	ROUTE MD	ROUTE AEP	ROUTE VP	ROUTE ALA	ROUTE AHJ	ROUTE AKL	ROUTE KQ	ROUTE TV	ROUTE AIQ	ROUTE AQC	ROUTE RD	ROUTE AKX	ROUTE AEC	ROUTE XX	ROUTE CZ	ROUTE ADN	ROUTE AHK
299	ROUTE YQ	ROUTE YQ	ROUTE QZ	ROUTE AMS	ROUTE MV	ROUTE QY	ROUTE IM	ROUTE DX	ROUTE YR	ROUTE IV	ROUTE RM	ROUTE AET	ROUTE TG	ROUTE IR	ROUTE BX	ROUTE AH	ROUTE KR	ROUTE QE	ROUTE TP	ROUTE AOA	ROUTE LW	ROUTE IX	ROUTE AJE	ROUTE AJZ	ROUTE AHI
300	ROUTE IK	ROUTE TH	ROUTE IT	ROUTE TF	ROUTE II	ROUTE CY	ROUTE ALV	ROUTE AEZ	ROUTE TD	ROUTE AHO	ROUTE TC	ROUTE TJ	ROUTE AMO	ROUTE ALG	ROUTE BA	ROUTE AMP	ROUTE LB	ROUTE AHK	ROUTE SZ	ROUTE AMN	ROUTE AKF	ROUTE IK	ROUTE XZ	ROUTE CZ	ROUTE RA
301	ROUTE DX	ROUTE TX	ROUTE ALS	ROUTE JA	ROUTE YT	ROUTE IY	ROUTE NB	ROUTE IO	ROUTE TJ	ROUTE AMR	ROUTE YS	ROUTE DL	ROUTE QE	ROUTE TT	ROUTE QA	ROUTE AMO	ROUTE AQN	ROUTE LS	ROUTE CZ	ROUTE ANF	ROUTE MA	ROUTE JB	ROUTE LI	ROUTE TH	ROUTE HM
302	ROUTE ANA	ROUTE RB	ROUTE RO	ROUTE ZA	ROUTE ZI	ROUTE PT	ROUTE LH	ROUTE AOM	ROUTE AHP	ROUTE ALT	ROUTE NL	ROUTE VH	ROUTE CN	ROUTE APY	ROUTE RW	ROUTE VS	ROUTE AMX	ROUTE ALN	ROUTE AQS	ROUTE QA	ROUTE ANC	ROUTE IO	ROUTE EF	ROUTE VL	ROUTE RK
303	ROUTE TX	ROUTE IM	ROUTE QJ	ROUTE ALF	ROUTE ALC	ROUTE RI	ROUTE AJO	ROUTE ALM	ROUTE RG	ROUTE ALM	ROUTE SZ	ROUTE RG	ROUTE AMR	ROUTE LV	ROUTE PN	ROUTE ADJ	ROUTE DX	ROUTE VN	ROUTE ALA	ROUTE RB	ROUTE ALZ	ROUTE LU	ROUTE AID	ROUTE VW	ROUTE RE
304	ROUTE ANW	ROUTE RF	ROUTE AOI	ROUTE CY	ROUTE YX	ROUTE TN	ROUTE NH	ROUTE IK	ROUTE RM	ROUTE YV	ROUTE AJU	ROUTE AMP	ROUTE CZ	ROUTE ATU	ROUTE CG	ROUTE CV	ROUTE AHK	ROUTE AMQ	ROUTE AQP	ROUTE IM	ROUTE YY	ROUTE AEX	ROUTE IN	ROUTE IP	ROUTE LH
305	ROUTE RF	ROUTE ALC	ROUTE ALQ	ROUTE ANY	ROUTE NJ	ROUTE AQJ	ROUTE ATS	ROUTE AMN	ROUTE AMQ	ROUTE VT	ROUTE UX	ROUTE QE	ROUTE YU	ROUTE ANO	ROUTE PT	ROUTE ALT	ROUTE AQS	ROUTE XW	ROUTE VM	ROUTE TH	ROUTE VR	ROUTE LY	ROUTE CH	ROUTE JO	ROUTE SJ
306	ROUTE YS	ROUTE QA	ROUTE VS	ROUTE RS	ROUTE AMT	ROUTE LS	ROUTE DK	ROUTE QX	ROUTE NL	ROUTE TB	ROUTE AQX	ROUTE ALC	ROUTE AQS	ROUTE AUG	ROUTE AQR	ROUTE ALF	ROUTE ALM	ROUTE RM	ROUTE YI	ROUTE RX	ROUTE ZB	ROUTE AEO	ROUTE LZ	ROUTE CH	ROUTE LU
307	ROUTE IM	ROUTE TL	ROUTE XZ	ROUTE AOG	ROUTE VU	ROUTE AMU	ROUTE AHE	ROUTE YR	ROUTE YX	ROUTE IK	ROUTE MP	ROUTE PB	ROUTE TJ	ROUTE ZA	ROUTE AUX	ROUTE ALM	ROUTE PO	ROUTE DX	ROUTE VL	ROUTE IK	ROUTE YW	ROUTE AKP	ROUTE TO	ROUTE AQ	
308	ROUTE RD	ROUTE VR	ROUTE RM	ROUTE YW	ROUTE AJT	ROUTE RC	ROUTE AJG	ROUTE RQ	ROUTE MJ	ROUTE SJ	ROUTE AJP	ROUTE TS	ROUTE AFD	ROUTE AHZ	ROUTE PL	ROUTE TO	ROUTE AMO	ROUTE TL	ROUTE RO	ROUTE RD	ROUTE VN	ROUTE RP	ROUTE AIF	ROUTE LG	ROUTE TI
309	ROUTE IO	ROUTE VN	ROUTE AHN	ROUTE AMO	ROUTE DL	ROUTE XX	ROUTE LN	ROUTE SZ	ROUTE AMT	ROUTE ALQ	ROUTE AIX	ROUTE ZH	ROUTE AQV	ROUTE AQI	ROUTE PR	ROUTE ADF	ROUTE PJ	ROUTE IO	ROUTE QJ	ROUTE RF	ROUTE OJ	ROUTE AJT	ROUTE LF	ROUTE AMT	ROUTE TS
310	ROUTE VN	ROUTE LS	ROUTE RV	ROUTE XY	ROUTE ALN	ROUTE LE	ROUTE ANC	ROUTE AMS	ROUTE AHG	ROUTE AMS	ROUTE AHN	ROUTE AKO	ROUTE YX	ROUTE YT	ROUTE ZG	ROUTE TA	ROUTE ALU	ROUTE TS	ROUTE QY	ROUTE XY	ROUTE VJ	ROUTE TR	ROUTE JD	ROUTE VB	ROUTE LG
311	ROUTE AMN	ROUTE YR	ROUTE DL	ROUTE TN	ROUTE TQ	ROUTE VV	ROUTE DW	ROUTE VR	ROUTE ANC	ROUTE DG	ROUTE ML	ROUTE AIX	ROUTE TP	ROUTE AEQ	ROUTE ZJ	ROUTE HH	ROUTE AIU	ROUTE RD	ROUTE TK	ROUTE IT	ROUTE TN	ROUTE IO	ROUTE IM	ROUTE CZ	
312	ROUTE AOA	ROUTE IV	ROUTE JC	ROUTE IK	ROUTE AQM	ROUTE YQ	ROUTE AHH	ROUTE AHI	ROUTE TP	ROUTE YO	ROUTE AQO	ROUTE AQG	ROUTE TM	ROUTE AQC	ROUTE OG	ROUTE ALA	ROUTE ALQ	ROUTE LO	ROUTE IH	ROUTE VN	ROUTE CM	ROUTE VI	ROUTE AJO	ROUTE QZ	ROUTE VW
313	ROUTE YR	ROUTE RD	ROUTE SZ	ROUTE VP	ROUTE AQJ	ROUTE CM	ROUTE TU	ROUTE TJ	ROUTE IW	ROUTE RV	ROUTE SH	ROUTE LT	ROUTE TS	ROUTE AHT	ROUTE YW	ROUTE PY	ROUTE BA	ROUTE YP	ROUTE II	ROUTE TJ	ROUTE NW	ROUTE AQI	ROUTE DX	ROUTE CC	ROUTE TX
314	ROUTE AMM	ROUTE PV	ROUTE AMS	ROUTE ALM	ROUTE VD	ROUTE IS	ROUTE ATT	ROUTE DG	ROUTE RS	ROUTE JC	ROUTE YY	ROUTE AQI	ROUTE AMU	ROUTE AEI	ROUTE LI	ROUTE YZ	ROUTE TC	ROUTE DH	ROUTE IM	ROUTE VG	ROUTE IO	ROUTE AJR	ROUTE RS	ROUTE LV	ROUTE LH
315	ROUTE TL	ROUTE TJ	ROUTE AEZ	ROUTE IY	ROUTE RE	ROUTE TH	ROUTE AUG	ROUTE RM	ROUTE AMW	ROUTE YS	ROUTE AHK	ROUTE IW	ROUTE DG	ROUTE LZ	ROUTE QI	ROUTE RK	ROUTE QW	ROUTE VR	ROUTE YF	ROUTE TL	ROUTE IZ	ROUTE LU	ROUTE LC	ROUTE UZ	
316	ROUTE IT	ROUTE IT	ROUTE SJ	ROUTE RQ	ROUTE RL	ROUTE AKX	ROUTE NE	ROUTE ALF	ROUTE AHJ	ROUTE AET	ROUTE AVC	ROUTE AMW	ROUTE AMK	ROUTE YU	ROUTE HG	ROUTE VJ	ROUTE AHG	ROUTE ALM	ROUTE AIR	ROUTE VP	ROUTE AKM	ROUTE RH	ROUTE LG	ROUTE VI	ROUTE AV
317	ROUTE PV	ROUTE AOA	ROUTE TO	ROUTE VV	ROUTE AQJ	ROUTE TR	ROUTE NK	ROUTE VN	ROUTE JC	ROUTE RO	ROUTE TO	ROUTE YO	ROUTE AEL	ROUTE RL	ROUTE QV	ROUTE VF	ROUTE AHO	ROUTE ANA	ROUTE VF	ROUTE VR	ROUTE AJT	ROUTE IM	ROUTE ZK	ROUTE VF	ROUTE ADY
318	ROUTE ANY	ROUTE LQ	ROUTE AMQ	ROUTE AMN	ROUTE ZC	ROUTE KN	ROUTE AET	ROUTE DL	ROUTE IK	ROUTE QZ	ROUTE TL	ROUTE TD	ROUTE YE	ROUTE AMU	ROUTE VY	ROUTE AQC	ROUTE AQV	ROUTE JC	ROUTE IZ	ROUTE YQ	ROUTE AKO	ROUTE RL	ROUTE IK	ROUTE XY	ROUTE CC
319	ROUTE LQ	ROUTE ANW	ROUTE RD	ROUTE YR	ROUTE QE	ROUTE AMR	ROUTE SG	ROUTE JC	ROUTE SY	ROUTE AMW	ROUTE ALF	ROUTE PP	ROUTE AER	ROUTE IL	ROUTE YY	ROUTE QW	ROUTE AIX	ROUTE IX	ROUTE JA	ROUTE CY	ROUTE AKQ	ROUTE YX	ROUTE AHZ	ROUTE AHF	ROUTE IL
320	ROUTE AKX	ROUTE AMN	ROUTE AHM	ROUTE VH	ROUTE RS	ROUTE LW	ROUTE MP	ROUTE AET	ROUTE AVC	ROUTE AMP	ROUTE VJ	ROUTE AKV	ROUTE YH	ROUTE TN	ROUTE QC	ROUTE QH	ROUTE OJ	ROUTE AMP	ROUTE TE	ROUTE CC	ROUTE BB	ROUTE ZD	ROUTE LK	ROUTE BP	ROUTE AEB
321	ROUTE VR	ROUTE VP	ROUTE NU	ROUTE VU	ROUTE IK	ROUTE DW	ROUTE AEZ	ROUTE QJ	ROUTE IO	ROUTE IG	ROUTE SW	ROUTE IM	ROUTE AJX	ROUTE VW	ROUTE ZC	ROUTE HC	ROUTE PR	ROUTE AOG	ROUTE AJZ	ROUTE QJ	ROUTE IG	ROUTE AJN	ROUTE JD	ROUTE AMO	ROUTE AMT
322	ROUTE TJ	ROUTE TS	ROUTE VK	ROUTE RJ	ROUTE YR	ROUTE AMW	ROUTE ALB	ROUTE II	ROUTE TE	ROUTE CY	ROUTE TV	ROUTE AOK	ROUTE QW	ROUTE ANK	ROUTE ZF	ROUTE AMS	ROUTE CI	ROUTE RQ	ROUTE AJA	ROUTE IV	ROUTE AJL	ROUTE DX	ROUTE RT	ROUTE AKV	ROUTE AMO
323	ROUTE IV	ROUTE QJ	ROUTE VH	ROUTE TO	ROUTE AMN	ROUTE YS	ROUTE AMY	ROUTE AOG	ROUTE TK	ROUTE AOO	ROUTE ALV	ROUTE ZE	ROUTE IS	ROUTE LM	ROUTE AH	ROUTE DX	ROUTE PM	ROUTE TB	ROUTE QX	ROUTE LQ	ROUTE RF	ROUTE TX	ROUTE APQ	ROUTE LY	ROUTE IT
324	ROUTE LS	ROUTE RM	ROUTE TM	ROUTE PV	ROUTE AJR	ROUTE PN	ROUTE ZC	ROUTE AMZ	ROUTE VB	ROUTE TL	ROUTE YP	ROUTE OH	ROUTE ALM	ROUTE DH	ROUTE ZB	ROUTE AHL	ROUTE AMZ	ROUTE TJ	ROUTE TJ	ROUTE VW	ROUTE RS	ROUTE CY	ROUTE AJI	ROUTE AHM	ROUTE JD
325	ROUTE QJ	ROUTE CY	ROUTE RB	ROUTE PY	ROUTE ZG	ROUTE JP	ROUTE MV	ROUTE AMP	ROUTE MT	ROUTE RM	ROUTE MI	ROUTE VB	ROUTE IY	ROUTE RP	ROUTE PU	ROUTE AMV	ROUTE QJ	ROUTE AQJ	ROUTE YR	ROUTE AJN	ROUTE AKN	ROUTE MA	ROUTE AMQ	ROUTE AMO	
326	ROUTE ANF	ROUTE XW	ROUTE ALR	ROUTE TL	ROUTE AOG	ROUTE PH	ROUTE PZ	ROUTE UE	ROUTE AJD	ROUTE AMF	ROUTE NF	ROUTE RA	ROUTE RC	ROUTE ADN	ROUTE ZE	ROUTE VQ	ROUTE PE	ROUTE AET	ROUTE ALC	ROUTE YS	ROUTE IV	ROUTE VU	ROUTE ZI	ROUTE OI	ROUTE XY
327	ROUTE RM	ROUTE RQ	ROUTE TV	ROUTE DL	ROUTE NL	ROUTE QW	ROUTE LB	ROUTE QC	ROUTE AEP	ROUTE VP	ROUTE JL	ROUTE XV	ROUTE ALP	ROUTE AHW	ROUTE UE	ROUTE AHO	ROUTE QZ	ROUTE IT	ROUTE CN	ROUTE DL	ROUTE OG	ROUTE YV	ROUTE AJF	ROUTE QW	ROUTE CH
328	ROUTE TS	ROUTE ANA	ROUTE YO	ROUTE AMF	ROUTE PV	ROUTE YX	ROUTE AJQ	ROUTE AOC	ROUTE TQ	ROUTE IY	ROUTE AIR	ROUTE AMM	ROUTE AHK	ROUTE APU	ROUTE AOX	ROUTE TI	ROUTE AOT	ROUTE AMF	ROUTE ALX	ROUTE ANS	ROUTE IK	ROUTE YT	ROUTE CN	ROUTE AEZ	ROUTE AEM
329	ROUTE JC	ROUTE JC	ROUTE OI	ROUTE II	ROUTE AMU	ROUTE TB	ROUTE ZF	ROUTE YO	ROUTE VH	ROUTE SX	ROUTE AQU	ROUTE TM	ROUTE YK	ROUTE YQ	ROUTE AGP	ROUTE ALN	ROUTE AMM	ROUTE YO	ROUTE TD	ROUTE RM	ROUTE RB	ROUTE AEM	ROUTE VC	ROUTE IP	
330	ROUTE VP	ROUTE ANY	ROUTE TD	ROUTE QE	ROUTE TE	ROUTE PR	ROUTE NI	ROUTE VL	ROUTE VN	ROUTE AMO	ROUTE ALM	ROUTE RO	ROUTE AHN	ROUTE AEK	ROUTE TW	ROUTE DD	ROUTE AQC	ROUTE VH	ROUTE XU	ROUTE LS	ROUTE RO	ROUTE PV	ROUTE RX	ROUTE ANU	ROUTE HZ
331	ROUTE XW	ROUTE AMM	ROUTE AOE	ROUTE RB	ROUTE TL	ROUTE TL	ROUTE AJT	ROUTE RK	ROUTE MZ	ROUTE AHL	ROUTE VH	ROUTE UH	ROUTE YN	ROUTE TR	ROUTE NF	ROUTE UA	ROUTE YH	ROUTE AGP	ROUTE DX	ROUTE AKU	ROUTE IO	ROUTE LW	ROUTE ZB	ROUTE DH	ROUTE AID
332	ROUTE CY	ROUTE ANF	ROUTE AOA	ROUTE AOE	ROUTE ALO	ROUTE AKU	ROUTE ZB	ROUTE TD	ROUTE CJ	ROUTE TF	ROUTE AHE	ROUTE AQN	ROUTE QA	ROUTE APW	ROUTE XY	ROUTE IO	ROUTE CZ	ROUTE QZ	ROUTE VQ	ROUTE AKV	ROUTE QX	ROUTE ZH	ROUTE IH	ROUTE AHO	ROUTE NU
333	ROUTE QE	ROUTE RO	ROUTE UZ	ROUTE TS	ROUTE VU	ROUTE AME	ROUTE ANC	ROUTE AJG	ROUTE RG	ROUTE YV	ROUTE VP	ROUTE UX	ROUTE IP	ROUTE NL	ROUTE TE	ROUTE ALS	ROUTE VP	ROUTE AQM	ROUTE TS	ROUTE RU	ROUTE JC	ROUTE VU	ROUTE AEO	ROUTE AX	
334	ROUTE RQ	ROUTE YP	ROUTE TB	ROUTE VF	ROUTE ALS	ROUTE AMO

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
349	ROUTE YQ	ROUTE RV	ROUTE TI	ROUTE YQ	ROUTE AMO	ROUTE AKW	ROUTE ZL	ROUTE RE	ROUTE AER	ROUTE VJ	ROUTE AEZ	ROUTE RI	ROUTE AHH	ROUTE AED	ROUTE YU	ROUTE AMM	ROUTE OH	ROUTE TD	ROUTE ALU	ROUTE TF	ROUTE AJQ	ROUTE AJS	ROUTE AHT	ROUTE AEP	ROUTE VA
350	ROUTE RG	ROUTE ANU	ROUTE AET	ROUTE IW	ROUTE AMS	ROUTE MN	ROUTE ZH	ROUTE VF	ROUTE AQJ	ROUTE AMQ	ROUTE MT	ROUTE VJ	ROUTE AUG	ROUTE CV	ROUTE OL	ROUTE VM	ROUTE AHL	ROUTE AJZ	ROUTE DL	ROUTE II	ROUTE AJS	ROUTE VN	ROUTE JC	ROUTE RA	ROUTE HN
351	ROUTE AJZ	ROUTE RG	ROUTE VD	ROUTE QJ	ROUTE SZ	ROUTE VU	ROUTE AZ	ROUTE ANW	ROUTE AJE	ROUTE IS	ROUTE TS	ROUTE IP	ROUTE VJ	ROUTE RJ	ROUTE PQ	ROUTE VQ	ROUTE YF	ROUTE IG	ROUTE VK	ROUTE VJ	ROUTE CH	ROUTE RQ	ROUTE RN	ROUTE AFD	ROUTE AEZ
352	ROUTE ANS	ROUTE SJ	ROUTE TE	ROUTE TB	ROUTE XX	ROUTE PB	ROUTE OX	ROUTE SX	ROUTE TG	ROUTE OW	ROUTE PP	ROUTE ALW	ROUTE SW	ROUTE LG	ROUTE PB	ROUTE ADV	ROUTE PQ	ROUTE VL	ROUTE ALR	ROUTE VL	ROUTE AKN	ROUTE QJ	ROUTE APK	ROUTE VG	ROUTE TL
353	ROUTE RV	ROUTE VJ	ROUTE AMN	ROUTE ANF	ROUTE AOI	ROUTE QH	ROUTE ZK	ROUTE RO	ROUTE TM	ROUTE VR	ROUTE RE	ROUTE VS	ROUTE AET	ROUTE APO	ROUTE OR	ROUTE TK	ROUTE PL	ROUTE IW	ROUTE QH	ROUTE CM	ROUTE TU	ROUTE RM	ROUTE PV	ROUTE TL	ROUTE VE
354	ROUTE VL	ROUTE TM	ROUTE QX	ROUTE VL	ROUTE AJG	ROUTE YU	ROUTE XY	ROUTE TQ	ROUTE AHK	ROUTE AOC	ROUTE VN	ROUTE HB	ROUTE AMM	ROUTE LK	ROUTE YX	ROUTE SW	ROUTE CG	ROUTE AMM	ROUTE AMX	ROUTE SJ	ROUTE AJI	ROUTE RF	ROUTE LU	ROUTE RE	ROUTE TF
355	ROUTE AKU	ROUTE TQ	ROUTE ALP	ROUTE VD	ROUTE VE	ROUTE AJT	ROUTE PD	ROUTE RA	ROUTE ALV	ROUTE TO	ROUTE TA	ROUTE CM	ROUTE VP	ROUTE RS	ROUTE PH	ROUTE AOM	ROUTE ADI	ROUTE VS	ROUTE IG	ROUTE YO	ROUTE YT	ROUTE IT	ROUTE AJC	ROUTE ALA	ROUTE CB
356	ROUTE SJ	ROUTE CM	ROUTE AQC	ROUTE AJN	ROUTE ALM	ROUTE MZ	ROUTE AJJ	ROUTE VP	ROUTE AJH	ROUTE SZ	ROUTE OX	ROUTE TA	ROUTE TC	ROUTE VT	ROUTE RN	ROUTE SH	ROUTE AMS	ROUTE RK	ROUTE AHJ	ROUTE YP	ROUTE VH	ROUTE RB	ROUTE YY	ROUTE YL	ROUTE IQ
357	ROUTE TM	ROUTE RK	ROUTE VB	ROUTE RE	ROUTE TG	ROUTE TP	ROUTE ALF	ROUTE VB	ROUTE TS	ROUTE RA	ROUTE ALX	ROUTE AVF	ROUTE AEZ	ROUTE TL	ROUTE RT	ROUTE UZ	ROUTE AQO	ROUTE TQ	ROUTE XT	ROUTE RG	ROUTE RQ	ROUTE IG	ROUTE TX	ROUTE PP	ROUTE IG
358	ROUTE VJ	ROUTE VS	ROUTE RG	ROUTE YP	ROUTE VL	ROUTE PL	ROUTE QH	ROUTE IG	ROUTE MG	ROUTE VD	ROUTE RR	ROUTE VM	ROUTE CC	ROUTE QG	ROUTE AMW	ROUTE YN	ROUTE SJ	ROUTE VE	ROUTE PV	ROUTE QZ	ROUTE YU	ROUTE ZJ	ROUTE CN	ROUTE AQC
359	ROUTE IW	ROUTE IW	ROUTE ALO	ROUTE VS	ROUTE TN	ROUTE AMV	ROUTE LR	ROUTE AMF	ROUTE AHN	ROUTE QH	ROUTE AHJ	ROUTE RC	ROUTE AOI	ROUTE LJ	ROUTE RL	ROUTE ANY	ROUTE AMF	ROUTE ANC	ROUTE AIQ	ROUTE AKR	ROUTE AJF	ROUTE ZA	ROUTE IJ	ROUTE CX	
360	ROUTE VS	ROUTE ANS	ROUTE VW	ROUTE QX	ROUTE IS	ROUTE NX	ROUTE AJM	ROUTE TM	ROUTE YD	ROUTE II	ROUTE QJ	ROUTE VD	ROUTE AMP	ROUTE AKJ	ROUTE OZ	ROUTE AFD	ROUTE QY	ROUTE HD	ROUTE IY	ROUTE AJZ	ROUTE VD	ROUTE RV	ROUTE ZF	ROUTE TB	ROUTE IY
361	ROUTE UA	ROUTE JA	ROUTE SX	ROUTE SZ	ROUTE ALF	ROUTE QP	ROUTE HD	ROUTE ANU	ROUTE PV	ROUTE NX	ROUTE MM	ROUTE PM	ROUTE VS	ROUTE AGP	ROUTE HE	ROUTE BD	ROUTE YE	ROUTE ANY	ROUTE AIZ	ROUTE TM	ROUTE RM	ROUTE QA	ROUTE TB	ROUTE IX	ROUTE AR
362	ROUTE CM	ROUTE TO	ROUTE ANF	ROUTE TO	ROUTE NF	ROUTE LX	ROUTE CY	ROUTE DG	ROUTE TM	ROUTE AHM	ROUTE IS	ROUTE AOO	ROUTE IN	ROUTE PF	ROUTE DL	ROUTE ANW	ROUTE AKX	ROUTE TI	ROUTE AKS	ROUTE DW	ROUTE AJH	ROUTE RS	ROUTE TI	ROUTE PJ	
363	ROUTE AKV	ROUTE IY	ROUTE AMP	ROUTE AKX	ROUTE UE	ROUTE VN	ROUTE CF	ROUTE SJ	ROUTE MM	ROUTE AOE	ROUTE QL	ROUTE OX	ROUTE AUP	ROUTE PN	ROUTE RR	ROUTE QC	ROUTE CY	ROUTE ANF	ROUTE QW	ROUTE RI	ROUTE YR	ROUTE AJK	ROUTE IV	ROUTE TF	ROUTE PT
364	ROUTE RK	ROUTE RI	ROUTE ANU	ROUTE ANS	ROUTE RB	ROUTE AOI	ROUTE ANA	ROUTE AOE	ROUTE AHE	ROUTE UJ	ROUTE QF	ROUTE AKM	ROUTE CM	ROUTE HA	ROUTE ZA	ROUTE ALC	ROUTE CN	ROUTE VB	ROUTE VJ	ROUTE IY	ROUTE RI	ROUTE DL	ROUTE ALL	ROUTE IG	ROUTE PD
365	ROUTE AKW	ROUTE ANC	ROUTE VE	ROUTE CM	ROUTE VS	ROUTE YR	ROUTE PA	ROUTE UZ	ROUTE NB	ROUTE VB	ROUTE RQ	ROUTE LG	ROUTE QC	ROUTE DD	ROUTE ZD	ROUTE PH	ROUTE AMW	ROUTE VJ	ROUTE ANA	ROUTE VS	ROUTE AJK	ROUTE AJM	ROUTE YW	ROUTE DX	ROUTE VX
366	ROUTE TQ	ROUTE SZ	ROUTE VI	ROUTE RM	ROUTE AHZ	ROUTE AJH	ROUTE OQ	ROUTE QY	ROUTE YG	ROUTE JA	ROUTE ALQ	ROUTE TO	ROUTE CY	ROUTE APS	ROUTE YQ	ROUTE VQ	ROUTE NL	ROUTE JA	ROUTE CM	ROUTE PT	ROUTE AJM	ROUTE CM	ROUTE VT	ROUTE JB	ROUTE AHM
367	ROUTE IY	ROUTE VF	ROUTE TG	ROUTE AJM	ROUTE YV	ROUTE PF	ROUTE VW	ROUTE IY	ROUTE QW	ROUTE AOM	ROUTE AEN	ROUTE DW	ROUTE XB	ROUTE YP	ROUTE YT	ROUTE AMN	ROUTE ALA	ROUTE NX	ROUTE TC	ROUTE TO	ROUTE II	ROUTE YS	ROUTE CM	ROUTE UZ	ROUTE ATQ
368	ROUTE RI	ROUTE UA	ROUTE AMQ	ROUTE TG	ROUTE RC	ROUTE SZ	ROUTE PG	ROUTE RI	ROUTE IS	ROUTE TV	ROUTE AET	ROUTE ANS	ROUTE TI	ROUTE AVF	ROUTE UI	ROUTE VA	ROUTE ADE	ROUTE PA	ROUTE PT	ROUTE IW	ROUTE AJH	ROUTE AEG	ROUTE IZ	ROUTE BV	ROUTE AHF
369	ROUTE TO	ROUTE VB	ROUTE QY	ROUTE VQ	ROUTE MR	ROUTE AKO	ROUTE AQK	ROUTE TK	ROUTE YJ	ROUTE TS	ROUTE TM	ROUTE AHF	ROUTE AMS	ROUTE LR	ROUTE YP	ROUTE AY	ROUTE ADL	ROUTE SZ	ROUTE VD	ROUTE RK	ROUTE ID	ROUTE YQ	ROUTE XX	ROUTE CF	ROUTE ADZ
370	ROUTE JA	ROUTE AJZ	ROUTE IS	ROUTE AJT	ROUTE RJ	ROUTE AJN	ROUTE MC	ROUTE VJ	ROUTE AHH	ROUTE RK	ROUTE QY	ROUTE YY	ROUTE TO	ROUTE CJ	ROUTE QP	ROUTE AEN	ROUTE DK	ROUTE RI	ROUTE DW	ROUTE TQ	ROUTE TF	ROUTE LQ	ROUTE ALD	ROUTE AKS	ROUTE SG
371	ROUTE VB	ROUTE SX	ROUTE QH	ROUTE YV	ROUTE ALI	ROUTE NX	ROUTE TG	ROUTE NH	ROUTE ANY	ROUTE PJ	ROUTE II	ROUTE DO	ROUTE AZ	ROUTE AEM	ROUTE QT	ROUTE AGR	ROUTE ANS	ROUTE ANU	ROUTE UY	ROUTE VD	ROUTE LS	ROUTE AQA	ROUTE JA	ROUTE PT	ROUTE AI
372	ROUTE PT	ROUTE AKU	ROUTE AKE	ROUTE SJ	ROUTE AJK	ROUTE PP	ROUTE LU	ROUTE RV	ROUTE IY	ROUTE QW	ROUTE JP	ROUTE PG	ROUTE AEH	ROUTE AEI	ROUTE YS	ROUTE CY	ROUTE ALT	ROUTE CM	ROUTE AER	ROUTE AKT	ROUTE AP	ROUTE IW	ROUTE AVC	ROUTE TC	ROUTE AHO
373	ROUTE AGP	ROUTE TV	ROUTE XY	ROUTE TV	ROUTE MY	ROUTE AMW	ROUTE MI	ROUTE AVC	ROUTE RC	ROUTE ANF	ROUTE AX	ROUTE ALT	ROUTE AMV	ROUTE TP	ROUTE QV	ROUTE SY	ROUTE AOK	ROUTE TO	ROUTE ALO	ROUTE VB	ROUTE TB	ROUTE JA	ROUTE ANB	ROUTE YN	ROUTE XU
374	ROUTE PY	ROUTE VD	ROUTE DK	ROUTE VJ	ROUTE AMM	ROUTE AJZ	ROUTE MA	ROUTE ANY	ROUTE RI	ROUTE AMN	ROUTE AMP	ROUTE LY	ROUTE AEN	ROUTE RB	ROUTE LP	ROUTE AOE	ROUTE YL	ROUTE IY	ROUTE AMU	ROUTE SX	ROUTE TO	ROUTE AJR	ROUTE RV	ROUTE IY	ROUTE NV
375	ROUTE SZ	ROUTE AKW	ROUTE ANY	ROUTE RC	ROUTE XY	ROUTE QT	ROUTE PJ	ROUTE CM	ROUTE YM	ROUTE VL	ROUTE AQO	ROUTE VM	ROUTE ALC	ROUTE ANM	ROUTE QN	ROUTE AOA	ROUTE AHF	ROUTE VF	ROUTE UJ	ROUTE JA	ROUTE SX	ROUTE AQE	ROUTE RL	ROUTE AMN	ROUTE QY
376	ROUTE VF	ROUTE DW	ROUTE UX	ROUTE IS	ROUTE AMF	ROUTE AKT	ROUTE QY	ROUTE RC	ROUTE IG	ROUTE DK	ROUTE ALU	ROUTE AEP	ROUTE UE	ROUTE PY	ROUTE NB	ROUTE AEL	ROUTE DD	ROUTE UE	ROUTE XN	ROUTE SZ	ROUTE IY	ROUTE TJ	ROUTE LR	ROUTE HB	ROUTE AJR
377	ROUTE AKR	ROUTE TG	ROUTE SY	ROUTE RK	ROUTE AMW	ROUTE MH	ROUTE AKG	ROUTE TE	ROUTE QP	ROUTE RE	ROUTE II	ROUTE DO	ROUTE AZ	ROUTE AEM	ROUTE QT	ROUTE AGR	ROUTE ANS	ROUTE ANU	ROUTE UY	ROUTE VD	ROUTE LS	ROUTE AQA	ROUTE JA	ROUTE PT	ROUTE AI
378	ROUTE SX	ROUTE AGP	ROUTE QA	ROUTE AKW	ROUTE AOE	ROUTE VR	ROUTE AKQ	ROUTE IS	ROUTE RG	ROUTE PT	ROUTE AHG	ROUTE ANA	ROUTE YC	ROUTE AEO	ROUTE HH	ROUTE LH	ROUTE PP	ROUTE IF	ROUTE RE	ROUTE SH	ROUTE VF	ROUTE AH	ROUTE AEW	ROUTE IG	ROUTE AH	ROUTE ADU
379	ROUTE RA	ROUTE RA	ROUTE SH	ROUTE TE	ROUTE ML	ROUTE AQC	ROUTE PP	ROUTE VD	ROUTE SJ	ROUTE AVC	ROUTE PH	ROUTE AHQ	ROUTE YF	ROUTE ATP	ROUTE NH	ROUTE PN	ROUTE YC	ROUTE PT	ROUTE AHG	ROUTE DW	ROUTE JC	ROUTE AFA	ROUTE LS	ROUTE AET	ROUTE CN
380	ROUTE TG	ROUTE RE	ROUTE ALM	ROUTE UE	ROUTE AJH	ROUTE AOM	ROUTE PE	ROUTE TQ	ROUTE IM	ROUTE ANW	ROUTE AMF	ROUTE RL	ROUTE XN	ROUTE PR	ROUTE YK	ROUTE UE	ROUTE NH	ROUTE ADN	ROUTE AMR	ROUTE UJ	ROUTE VP	ROUTE ZE	ROUTE CV	ROUTE DH	
381	ROUTE VD	ROUTE UJ	ROUTE RC	ROUTE YQ	ROUTE UZ	ROUTE VH	ROUTE AKJ	ROUTE TA	ROUTE QV	ROUTE HD	ROUTE MG	ROUTE JB	ROUTE CF	ROUTE UE	ROUTE LN	ROUTE HF	ROUTE XV	ROUTE SX	ROUTE IS	ROUTE ATM	ROUTE XW	ROUTE RQ	ROUTE TS	ROUTE AHL	ROUTE TM
382	ROUTE DW	ROUTE PY	ROUTE ANW	ROUTE VB	ROUTE TB	ROUTE AJQ	ROUTE AKR	ROUTE VS	ROUTE XW	ROUTE TI	ROUTE RK	ROUTE UX	ROUTE XT	ROUTE MA	ROUTE TN	ROUTE VI	ROUTE PK	ROUTE QC	ROUTE VO	ROUTE PY	ROUTE HJ	ROUTE AJL	ROUTE NB	ROUTE VW	ROUTE AJL
383	ROUTE TV	ROUTE AKV	ROUTE VG	ROUTE AJZ	ROUTE TC	ROUTE HD	ROUTE AJC	ROUTE DW	ROUTE TX	ROUTE UX	ROUTE QV	ROUTE QW	ROUTE AUT	ROUTE QC	ROUTE TU	ROUTE VE	ROUTE HL	ROUTE VM	ROUTE AHP	ROUTE RA	ROUTE PJ	ROUTE RD	ROUTE AHQ	ROUTE AKP	ROUTE DX
384	ROUTE RE	ROUTE PT	ROUTE RA	ROUTE AGP	ROUTE CM	ROUTE MT	ROUTE LF	ROUTE ANS	ROUTE ANU	ROUTE VF	ROUTE AEH	ROUTE UA	ROUTE YI	ROUTE LE	ROUTE YN	ROUTE AEZ	ROUTE MZ	ROUTE VD	ROUTE XH	ROUTE AKO	ROUTE PN	ROUTE SJ	ROUTE RP	ROUTE TM	ROUTE XP
385	ROUTE UJ	ROUTE TK	ROUTE AMM	ROUTE AJL	ROUTE TJ	ROUTE NJ	ROUTE LS	ROUTE OW	ROUTE AJP	ROUTE TQ	ROUTE AMZ	ROUTE ALQ	ROUTE YL	ROUTE RF	ROUTE TT	ROUTE HA	ROUTE YK	ROUTE DW	ROUTE AIW	ROUTE AKP	ROUTE PR	ROUTE TQ	ROUTE RQ	ROUTE XV	ROUTE SW
386	ROUTE RC	ROUTE VQ	ROUTE TC	ROUTE SX	ROUTE VG	ROUTE TJ	ROUTE AIY	ROUTE VQ	ROUTE MP	ROUTE AJZ	ROUTE AGW	ROUTE PY	ROUTE ANS	ROUTE VN	ROUTE NE	ROUTE DW	ROUTE AOI	ROUTE TK	ROUTE ANC	ROUTE RV	ROUTE AIF	ROUTE TM	ROUTE AML	ROUTE UH	ROUTE TG
387	ROUTE VM	ROUTE VM	ROUTE QG	ROUTE AJS	ROUTE VM	ROUTE ALK	ROUTE AJF	ROUTE SY	ROUTE JP	ROUTE TC	ROUTE NV	ROUTE TI	ROUTE PY	ROUTE RM	ROUTE AY	ROUTE AQO	ROUTE AQA	ROUTE ANS	ROUTE SW	ROUTE TG	ROUTE AJP	ROUTE TF	ROUTE LW	ROUTE DD	ROUTE LS
388	ROUTE AKS	ROUTE RL	ROUTE ADQ	ROUTE UZ	ROUTE YP	ROUTE AGP	ROUTE LL	ROUTE ANF	ROUTE AOA	ROUTE VS	ROUTE AMV	ROUTE AOR	ROUTE UW	ROUTE YR	ROUTE YJ	ROUTE AMF	ROUTE YG	ROUTE RC	ROUTE UX	ROUTE AGP	ROUTE QE	ROUTE VS	ROUTE RH	ROUTE IK	ROUTE TQ
389	ROUTE AKT	ROUTE TI	ROUTE UY	ROUTE TM	ROUTE QX	ROUTE AMS	ROUTE LY	ROUTE UX	ROUTE AQG	ROUTE AQG	ROUTE HB	ROUTE VG	ROUTE ANY	ROUTE AKG	ROUTE TL	ROUTE AQG	ROUTE ADY	ROUTE VQ	ROUTE PN	ROUTE RC	ROUTE VF	ROUTE TB	ROUTE YV	ROUTE ALC	ROUTE HJ
390	ROUTE TK	ROUTE IS	ROUTE UH	ROUTE MZ	ROUTE VQ	ROUTE AKQ	ROUTE AJB	ROUTE TI	ROUTE AJS	ROUTE TA	ROUTE NJ	ROUTE ANC	ROUTE VC	ROUTE JD	ROUTE NK	ROUTE CJ	ROUTE CM	ROUTE AKU	ROUTE AQO	ROUTE RE	ROUTE YS	ROUTE VL	ROUTE VR	ROUTE EF	ROUTE AKE
391	ROUTE IS	ROUTE VO	ROUTE ATM	ROUTE VO	ROUTE AJI	ROUTE KJ	ROUTE PM	ROUTE PT	ROUTE UX	ROUTE PP	ROUTE CD	ROUTE DK	ROUTE ATU	ROUTE IH	ROUTE MH	ROUTE ANS	ROUTE NK	ROUTE LU	ROUTE DK	ROUTE VM	ROUTE VS	ROUTE VH	ROUTE ALK	ROUTE QA	ROUTE HV
392	ROUTE UE	ROUTE QH	ROUTE TA	ROUTE AKV	ROUTE JX	ROUTE AKV	ROUTE PS	ROUTE VM	ROUTE MV	ROUTE ANS	ROUTE AMM	ROUTE AMW	ROUTE ALA	ROUTE CZ	ROUTE SG	ROUTE ANA	ROUTE AMT	ROUTE AED	ROUTE ALT	ROUTE IS	ROUTE VB	ROUTE AJP	ROUTE ZG	ROUTE TQ	ROUTE IX
393	ROUTE VQ	ROUTE UZ	ROUTE AZ	ROUTE VG	ROUTE MU	ROUTE TS	ROUTE UG	ROUTE DK	ROUTE AOM	ROUTE AZ	ROUTE PT	ROUTE UE	ROUTE UA	ROUTE TH	ROUTE YM	ROUTE AEP	ROUTE NF	ROUTE TA	ROUTE AEL	ROUTE IT	ROUTE YO	ROUTE IY	ROUTE DL	ROUTE CY	ROUTE ADF
394	ROUTE TI	ROUTE AKR	ROUTE HD	ROUTE AJR	ROUTE MT	ROUTE AID	ROUTE AKN	ROUTE NL	ROUTE ALZ	ROUTE SH	ROUTE AQN	ROUTE RF	ROUTE DR	ROUTE VR	ROUTE TR	ROUTE VK	ROUTE KN	ROUTE QH	ROUTE PH	ROUTE PN	ROUTE VO	ROUTE RG	ROUTE ZC	ROUTE VU	ROUTE ALJ
395	ROUTE QH	ROUTE UE	ROUTE UA	ROUTE RI	ROUTE VW	ROUTE YO	ROUTE AKQ	ROUTE UJ	ROUTE VJ	ROUTE AGP	ROUTE NG	ROUTE QC	ROUTE AOE	ROUTE RQ	ROUTE MN	ROUTE PD	ROUTE ADU	ROUTE TI	ROUTE DF	ROUTE AKG	ROUTE RK	ROUTE AVC	ROUTE TL	ROUTE IO	ROUTE AEG
396	ROUTE NK	ROUTE ADN	ROUTE ANS	ROUTE TC	ROUTE QJ	ROUTE TD	ROUTE LI	ROUTE MN	ROUTE VD	ROUTE AOA	ROUTE PB	ROUTE YV	ROUTE VI	ROUTE TJ	ROUTE CF	ROUTE PB	ROUTE AEB	ROUTE IS	ROUTE AFD	ROUTE PP	ROUTE UA	ROUTE RK	ROUTE QJ	ROUTE VK	ROUTE AEQ
397	ROUTE PN	ROUTE UX	ROUTE VC	ROUTE PT	ROUTE ANF	ROUTE ML	ROUTE AIX	ROUTE QH	ROUTE ANA	ROUTE QY	ROUTE PK	ROUTE ED	ROUTE ANG	ROUTE NI	ROUTE PR	ROUTE MV	ROUTE AZ	ROUTE ALO	ROUTE AJT	ROUTE AHZ	ROUTE QZ	ROUTE RM	ROUTE TG	ROUTE BX	
398	ROUTE ADN	ROUTE TA	ROUTE QW	ROUTE UJ	ROUTE ANS	ROUTE AJE	ROUTE ANE	ROUTE AKO	ROUTE YE	ROUTE PN	ROUTE QP	ROUTE TR	ROUTE AOK	ROUTE AEG	ROUTE MF	ROUTE CE	ROUTE AOE	ROUTE XS	ROUTE VO	ROUTE AJC	ROUTE YR	ROUTE AIJ	ROUTE AKU	ROUTE AEY	
399	ROUTE VQ	ROUTE DX	ROUTE VA	ROUTE TK	ROUTE AJP	ROUTE OZ	ROUTE LO	ROUTE AJT	ROUTE NI	ROUTE AKX	ROUTE VF	ROUTE LS	ROUTE VO	ROUTE AFC	ROUTE ML	ROUTE UH	ROUTE ANF	ROUTE VG	ROUTE AMW	ROUTE YO	ROUTE TV	ROUTE VN	ROUTE JC	ROUTE PO	
400	ROUTE AVC	ROUTE TE	ROUTE ALA	ROUTE ADN	ROUTE AJF	ROUTE AMP	ROUTE AJA	ROUTE VK	ROUTE AET	ROUTE UZ	ROUTE AFD	ROUTE TC	ROUTE OZ	ROUTE IQ	ROUTE KN	ROUTE UW	ROUTE ALC	ROUTE AKW	ROUTE XR	ROUTE VQ	ROUTE DK	ROUTE PW	ROUTE AKW	ROUTE AMN	
401	ROUTE UZ	ROUTE AKT	ROUTE VU	ROUTE DK	ROUTE NI	ROUTE AJK	ROUTE PK	ROUTE AJH	ROUTE AMM	ROUTE TK	ROUTE AQT	ROUTE VX	ROUTE PF	ROUTE PL	ROUTE PI	ROUTE AEH	ROUTE YI	ROUTE VO	ROUTE AMO	ROUTE AKF	ROUTE AJJ	ROUTE AJE	ROUTE IT	ROUTE VA	ROUTE LI
402	ROUTE AKO	ROUTE NX	ROUTE SW	ROUTE AKR	ROUTE MN	ROUTE AJS	ROUTE ATU	ROUTE TC	ROUTE VP	ROUTE VO	ROUTE AMS	ROUTE PO	ROUTE ATO	ROUTE APQ	ROUTE SV	ROUTE CM	ROUTE VX	ROUTE QY	ROUTE VI	ROUTE QH	ROUTE AJE	ROUTE PT	ROUTE YX	ROUTE YI	ROUTE JB
403	ROUTE QC	ROUTE QY	ROUTE CF	ROUTE MX	ROUTE DK	ROUTE MK	ROUTE AKU	ROUTE TV	ROUTE YH	ROUTE PH	ROUTE VX	ROUTE AHL	ROUTE WX	ROUTE TS	ROUTE PO	ROUTE PS	ROUTE ID	ROUTE PN	ROUTE AHI	ROUTE AVF	ROUTE BV	ROUTE AJG	ROUTE DW	ROUTE QY	ROUTE AJF
404	ROUTE TA	ROUTE VG	ROUTE ADN	ROUTE RA	ROUTE SX	ROUTE PJ	ROUTE PQ	ROUTE PR	ROUTE YK	ROUTE SW	ROUTE AUF	ROUTE IV	ROUTE LT	ROUTE LU	ROUTE AUP	ROUTE AKX	ROUTE XU	ROUTE TE	ROUTE XB	ROUTE PR	ROUTE AJG	ROUTE AEY	ROUTE TJ	ROUTE ANA	ROUTE NH
405	ROUTE PP	ROUTE AKS	ROUTE ATG	ROUTE QC	ROUTE VB	ROUTE ON	ROUTE AKK	ROUTE VG	ROUTE AEZ	ROUTE CF	ROUTE ND	ROUTE YS	ROUTE XO	ROUTE QZ	ROUTE OX	ROUTE AJZ	ROUTE AOM	ROUTE AKV	ROUTE AHM	ROUTE UE	ROUTE TQ	ROUTE AJJ	ROUTE TP	ROUTE PJ	ROUTE YE
406	ROUTE PR	ROUTE PN	ROUTE AGP	ROUTE NL	ROUTE SJ	ROUTE AIF	ROUTE NJ	ROUTE MZ	ROUTE AMP	ROUTE AQN	ROUTE YH	ROUTE AUN	ROUTE CT	ROUTE ALB	ROUTE PD	ROUTE NV	ROUTE MN	ROUTE AKR	ROUTE VC	ROUTE AJN	ROUTE SZ	ROUTE YP	ROUTE TO	ROUTE VE	ROUTE AKU
407	ROUTE UX	ROUTE VK	ROUTE QE	ROUTE VE	ROUTE VC	ROUTE EH	ROUTE PN	ROUTE AMS	ROUTE TE	ROUTE YF	ROUTE XU	ROUTE LZ	ROUTE PP	ROUTE YE	ROUTE ANU	ROUTE VT	ROUTE MO	ROUTE UX	ROUTE MZ	ROUTE VU	ROUTE TM	ROUTE AQC	ROUTE AVF	ROUTE AKR	ROUTE AKW
408	ROUTE DK	ROUTE PR	ROUTE UW	ROUTE UX	ROUTE VJ	ROUTE JL	ROUTE LG	ROUTE NJ	ROUTE UY	ROUTE VM	ROUTE VR	ROUTE VA	ROUTE APO	ROUTE YO	ROUTE RJ	ROUTE PJ	ROUTE NG	ROUTE DK	ROUTE PJ	ROUTE UX	ROUTE TI	ROUTE QE	ROUTE HD	ROUTE YF	ROUTE ALA
409	ROUTE VG	ROUTE TC	ROUTE PR	ROUTE PR	ROUTE AGP	ROUTE ANW	ROUTE NG	ROUTE ML	ROUTE AEH	ROUTE NL	ROUTE NA	ROUTE AMT	ROUTE DF	ROUTE IX	ROUTE RP	ROUTE UY	ROUTE NB	ROUTE QW	ROUTE AOI	ROUTE UZ	ROUTE XZ	ROUTE AJO	ROUTE TH	ROUTE SZ	ROUTE AKM
410	ROUTE AKP	ROUTE QC	ROUTE ANA	ROUTE AJK	ROUTE RK	ROUTE VB	ROUTE AIS	ROUTE AJN	ROUTE DK	ROUTE PJ	ROUTE AMR	ROUTE QZ	ROUTE XG	ROUTE TB	ROUTE PA	ROUTE PF	ROUTE YM	ROUTE CF	ROUTE NL	ROUTE DK	ROUTE IS	ROUTE NX	ROUTE RF	ROUTE AEM	ROUTE AKR
411	ROUTE QV	ROUTE QW	ROUTE PY	ROUTE QY	ROUTE AKW	ROUTE AZ	ROUTE LM	ROUTE AKW	ROUTE YN	ROUTE MN	ROUTE SR	ROUTE VQ	ROUTE APU	ROUTE CN	ROUTE RM	ROUTE ADP	ROUTE AJZ	ROUTE TC	ROUTE PR	ROUTE ADN	ROUTE IW	ROUTE TO	ROUTE VS	ROUTE OQ	ROUTE MV
412	ROUTE AKQ	ROUTE PP	ROUTE PT	ROUTE AKQ	ROUTE MP	ROUTE AOG	ROUTE AIV	ROUTE NF	ROUTE AMV	ROUTE AKV	ROUTE KD	ROUTE TL	ROUTE PL	ROUTE VL	ROUTE OQ	ROUTE BB	ROUTE HJ	ROUTE PR	ROUTE CT	ROUTE ATG	ROUTE JA	ROUTE APU	ROUTE NX	ROUTE DL	ROUTE BO
413	ROUTE TE	ROUTE AVC	ROUTE AED	ROUTE AJH	ROUTE YQ	ROUTE AMZ	ROUTE DR	ROUTE AGP	ROUTE AJU	ROUTE ANU	ROUTE MX	ROUTE SW	ROUTE PR	ROUTE ATQ	ROUTE VW	ROUTE AET	ROUTE XH	ROUTE VK	ROUTE ALV	ROUTE AUP	ROUTE RG	ROUTE TD	ROUTE IY	ROUTE OG	ROUTE AO
414	ROUTE AJT	ROUTE SH	ROUTE ATI	ROUTE NX	ROUTE QC	ROUTE JX	ROUTE ET	ROUTE MH	ROUTE VE	ROUTE VG	ROUTE UZ	ROUTE PI	ROUTE AX	ROUTE EF	ROUTE PG	ROUTE DK	ROUTE MY	ROUTE PP	ROUTE AOC	ROUTE TA	ROUTE AY	ROUTE APY	ROUTE XW	ROUTE PD	ROUTE SH
415	ROUTE QW	ROUTE VI	ROUTE AX	ROUTE VM	ROUTE ADN	ROUTE TX	ROUTE AKT	ROUTE AKU	ROUTE VK	ROUTE PD	ROUTE AER	ROUTE AMQ	ROUTE XJ	ROUTE LY	ROUTE RS	ROUTE PG	ROUTE MT	ROUTE PH	ROUTE PB	ROUTE AKM	ROUTE RC	ROUTE AEU	ROUTE SJ	ROUTE IV	ROUTE OI
416	ROUTE TC	ROUTE HD	ROUTE UE	ROUTE NJ	ROUTE AIF	ROUTE ND	ROUTE UP	ROUTE HD	ROUTE AEN	ROUTE PR	ROUTE TE	ROUTE YP	ROUTE LW	ROUTE RK	ROUTE MT	ROUTE AKR	ROUTE AKR	ROUTE HB	ROUTE AEP	ROUTE TV	ROUTE UA	ROUTE VJ	ROUTE ANQ	ROUTE AOR	ROUTE YJ
417	ROUTE AED	ROUTE AED	ROUTE HB	ROUTE MV	ROUTE YU	ROUTE ADN	ROUTE AJO	ROUTE AJS	ROUTE DW	ROUTE MZ	ROUTE XU	ROUTE TF	ROUTE ADN	ROUTE ALO	ROUTE RK	ROUTE AW	ROUTE ANU	ROUTE SH	ROUTE UH	ROUTE DW	ROUTE AJZ	ROUTE RI	ROUTE ZB	ROUTE AJR	ROUTE YG
418	ROUTE PH	ROUTE AKO	ROUTE MX	ROUTE TI	ROUTE ND	ROUTE ALH	ROUTE ED	ROUTE VE	ROUTE AJM	ROUTE AED	ROUTE VC	ROUTE ADN	ROUTE XP	ROUTE RD	ROUTE MZ	ROUTE ADM	ROUTE YD	ROUTE VA	ROUTE XM	ROUTE OC	ROUTE PL	ROUTE AJF	ROUTE TM	ROUTE QE	ROUTE QR
419	ROUTE AKF	ROUTE AJT	ROUTE DB	ROUTE AED	ROUTE MJ	ROUTE AJG	ROUTE AKW	ROUTE AJQ	ROUTE RV	ROUTE AKU	ROUTE YL	ROUTE YN	ROUTE LN	ROUTE AEW	ROUTE OY	ROUTE NJ	ROUTE AKT	ROUTE ALN	ROUTE VG	ROUTE AHC	ROUTE DX	ROUTE AND	ROUTE YK	ROUTE DV	
420	ROUTE AJN	ROUTE AKQ	ROUTE PL	ROUTE AKU	ROUTE AJQ	ROUTE PD	ROUTE AJR	ROUTE AJQ	ROUTE VQ	ROUTE NH	ROUTE AJC	ROUTE PC	ROUTE ANC	ROUTE JB	ROUTE RQ	ROUTE PL	ROUTE NE	ROUTE VI	ROUTE MN	ROUTE PH	ROUTE PX	ROUTE AJI	ROUTE RJ	ROUTE SW	ROUTE CY
421	ROUTE VK	ROUTE AJN	ROUTE ALC	ROUTE HD	ROUTE NK	ROUTE PS	ROUTE UV	ROUTE SW	ROUTE CM	ROUTE VI	ROUTE MU	ROUTE PR	ROUTE XM	ROUTE APK	ROUTE PE

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
436	ROUTE AJH	ROUTE AQI	ROUTE ANC	ROUTE AJI	ROUTE AJZ	ROUTE AJP	ROUTE SL	ROUTE AJZ	ROUTE AOI	ROUTE UH	ROUTE UW	ROUTE CF	ROUTE AEW	ROUTE LS	ROUTE QZ	ROUTE AKO	ROUTE AOG	ROUTE PB	ROUTE PG	ROUTE AJK	ROUTE AHV	ROUTE YO	ROUTE VP	ROUTE TK	ROUTE AEP
437	ROUTE PB	ROUTE AKN	ROUTE AEO	ROUTE AJP	ROUTE NF	ROUTE MR	ROUTE ATO	ROUTE SH	ROUTE XV	ROUTE AJH	ROUTE YI	ROUTE AOG	ROUTE AFC	ROUTE QX	ROUTE QO	ROUTE AKW	ROUTE KD	ROUTE AKP	ROUTE PL	ROUTE AJS	ROUTE ALB	ROUTE PY	ROUTE YU	ROUTE CM	ROUTE ATO
438	ROUTE AJK	ROUTE AJS	ROUTE PQ	ROUTE AZ	ROUTE AEQ	ROUTE QR	ROUTE AOR	ROUTE AKT	ROUTE NK	ROUTE VA	ROUTE NK	ROUTE AKT	ROUTE CL	ROUTE ID	ROUTE VR	ROUTE CC	ROUTE NA	ROUTE UH	ROUTE ALS	ROUTE AUT	ROUTE AEQ	ROUTE AIF	ROUTE ANO	ROUTE UA	ROUTE IS
439	ROUTE VC	ROUTE AJH	ROUTE AJM	ROUTE AJF	ROUTE AZ	ROUTE AOK	ROUTE TH	ROUTE AZ	ROUTE TO	ROUTE OX	ROUTE ALW	ROUTE AOX	ROUTE ATQ	ROUTE NL	ROUTE LI	ROUTE AEC	ROUTE MH	ROUTE NL	ROUTE ANW	ROUTE AJM	ROUTE RE	ROUTE DK	ROUTE QA	ROUTE II	ROUTE MJ
440	ROUTE AJR	ROUTE AJK	ROUTE YN	ROUTE SH	ROUTE XW	ROUTE AKP	ROUTE YP	ROUTE UY	ROUTE MI	ROUTE AKP	ROUTE MO	ROUTE II	ROUTE CX	ROUTE LW	ROUTE RF	ROUTE MZ	ROUTE YJ	ROUTE PF	ROUTE DB	ROUTE PS	ROUTE CE	ROUTE PN	ROUTE DK	ROUTE PB	ROUTE JC
441	ROUTE AZ	ROUTE AKM	ROUTE MV	ROUTE MT	ROUTE SY	ROUTE TG	ROUTE AJI	ROUTE AJP	ROUTE AOO	ROUTE PL	ROUTE JR	ROUTE YH	ROUTE OY	ROUTE IV	ROUTE AUT	ROUTE AKS	ROUTE XG	ROUTE YK	ROUTE XQ	ROUTE ATI	ROUTE RA	ROUTE AES	ROUTE YQ	ROUTE AJT	ROUTE PN
442	ROUTE AJS	ROUTE PB	ROUTE CX	ROUTE PF	ROUTE VK	ROUTE AIC	ROUTE SR	ROUTE YN	ROUTE SV	ROUTE AQI	ROUTE AMU	ROUTE PF	ROUTE WW	ROUTE SZ	ROUTE QU	ROUTE PI	ROUTE XB	ROUTE AX	ROUTE DR	ROUTE VA	ROUTE QW	ROUTE AJD	ROUTE VH	ROUTE TA	ROUTE ADV
443	ROUTE UH	ROUTE AJR	ROUTE ND	ROUTE VI	ROUTE TM	ROUTE JF	ROUTE AQN	ROUTE PP	ROUTE AJK	ROUTE MT	ROUTE KN	ROUTE VL	ROUTE APK	ROUTE RG	ROUTE LO	ROUTE YH	ROUTE JP	ROUTE AKF	ROUTE PF	ROUTE SW	ROUTE TG	ROUTE PR	ROUTE TJ	ROUTE IW	ROUTE QX
444	ROUTE AJL	ROUTE UY	ROUTE AKT	ROUTE MH	ROUTE PE	ROUTE CF	ROUTE YS	ROUTE AJD	ROUTE OZ	ROUTE AKW	ROUTE YH	ROUTE AOA	ROUTE PE	ROUTE VH	ROUTE YI	ROUTE PE	ROUTE MX	ROUTE UY	ROUTE MH	ROUTE PB	ROUTE TC	ROUTE AOX	ROUTE TK	ROUTE AJF	ROUTE PH
445	ROUTE PF	ROUTE AJM	ROUTE PJ	ROUTE AKS	ROUTE AKV	ROUTE TQ	ROUTE SZ	ROUTE PF	ROUTE AZ	ROUTE AJN	ROUTE ALN	ROUTE XC	ROUTE BB	ROUTE TJ	ROUTE AKQ	ROUTE QV	ROUTE MZ	ROUTE AHH	ROUTE AQI	ROUTE OJ	ROUTE APW	ROUTE QH	ROUTE TE	ROUTE IO	
446	ROUTE AJM	ROUTE PF	ROUTE MT	ROUTE VA	ROUTE AKR	ROUTE VP	ROUTE ATP	ROUTE VI	ROUTE VA	ROUTE NB	ROUTE AHI	ROUTE RK	ROUTE APQ	ROUTE IZ	ROUTE NA	ROUTE NH	ROUTE MS	ROUTE PO	ROUTE ALP	ROUTE PD	ROUTE UE	ROUTE AHZ	ROUTE TB	ROUTE DW	ROUTE PR
447	ROUTE PD	ROUTE NL	ROUTE AJZ	ROUTE AHZ	ROUTE PT	ROUTE JR	ROUTE AJL	ROUTE PB	ROUTE AJN	ROUTE AJR	ROUTE ADN	ROUTE UW	ROUTE LS	ROUTE KP	ROUTE QS	ROUTE NF	ROUTE AKO	ROUTE PM	ROUTE AMV	ROUTE SY	ROUTE VK	ROUTE APS	ROUTE UJ	ROUTE AJN	ROUTE AKF
448	ROUTE AEQ	ROUTE CF	ROUTE PF	ROUTE AJO	ROUTE RA	ROUTE ALJ	ROUTE CT	ROUTE MR	ROUTE JF	ROUTE MD	ROUTE MK	ROUTE JA	ROUTE CS	ROUTE PB	ROUTE TP	ROUTE XV	ROUTE AJV	ROUTE YM	ROUTE AMN	ROUTE VC	ROUTE AJD	ROUTE TI	ROUTE QZ	ROUTE AKT	ROUTE QA
449	ROUTE NL	ROUTE AJL	ROUTE ML	ROUTE SW	ROUTE RI	ROUTE AED	ROUTE AQQ	ROUTE NH	ROUTE PF	ROUTE PF	ROUTE AHL	ROUTE WJ	ROUTE LY	ROUTE RI	ROUTE YL	ROUTE NI	ROUTE XV	ROUTE XP	ROUTE VE	ROUTE RX	ROUTE APO	ROUTE VM	ROUTE CX	ROUTE AHL	
450	ROUTE NV	ROUTE AEQ	ROUTE AJS	ROUTE PN	ROUTE NB	ROUTE MJ	ROUTE TF	ROUTE MJ	ROUTE QL	ROUTE AJF	ROUTE TK	ROUTE AUP	ROUTE DE	ROUTE VJ	ROUTE LG	ROUTE AKM	ROUTE ND	ROUTE AJQ	ROUTE AHL	ROUTE AEQ	ROUTE NH	ROUTE SX	ROUTE PR	ROUTE JA	ROUTE ATI
451	ROUTE MZ	ROUTE MZ	ROUTE CT	ROUTE AKO	ROUTE NX	ROUTE AJR	ROUTE GD	ROUTE AKV	ROUTE PL	ROUTE VK	ROUTE VI	ROUTE VF	ROUTE AEN	ROUTE AOR	ROUTE NG	ROUTE QW	ROUTE AP	ROUTE AJH	ROUTE MY	ROUTE AJO	ROUTE PO	ROUTE VO	ROUTE IS	ROUTE CD	ROUTE ANM
452	ROUTE PM	ROUTE PD	ROUTE YJ	ROUTE MR	ROUTE AUP	ROUTE AJD	ROUTE DF	ROUTE AKQ	ROUTE MS	ROUTE HB	ROUTE SV	ROUTE RE	ROUTE AEK	ROUTE AEU	ROUTE MD	ROUTE PK	ROUTE AKV	ROUTE AOR	ROUTE ALF	ROUTE PF	ROUTE OX	ROUTE AID	ROUTE ANK	ROUTE NH	ROUTE ALC
453	ROUTE OJ	ROUTE UW	ROUTE AKV	ROUTE ML	ROUTE AID	ROUTE OX	ROUTE ZG	ROUTE AJR	ROUTE VG	ROUTE AKF	ROUTE AJH	ROUTE YE	ROUTE QZ	ROUTE VS	ROUTE LM	ROUTE YL	ROUTE MI	ROUTE AKN	ROUTE NK	ROUTE UH	ROUTE SH	ROUTE VD	ROUTE TO	ROUTE UY	ROUTE AJO
454	ROUTE CF	ROUTE NV	ROUTE NH	ROUTE NF	ROUTE MK	ROUTE MV	ROUTE OJ	ROUTE AJF	ROUTE VM	ROUTE AKO	ROUTE NE	ROUTE TO	ROUTE AKQ	ROUTE TK	ROUTE TM	ROUTE AKT	ROUTE XP	ROUTE UW	ROUTE AOG	ROUTE HD	ROUTE PS	ROUTE RC	ROUTE HB	ROUTE VX	ROUTE AJT
455	ROUTE UV	ROUTE YN	ROUTE PS	ROUTE UY	ROUTE UY	ROUTE PM	ROUTE CP	ROUTE AJJ	ROUTE QH	ROUTE PS	ROUTE VG	ROUTE VV	ROUTE AEQ	ROUTE TD	ROUTE LV	ROUTE AKF	ROUTE JL	ROUTE AJK	ROUTE AEN	ROUTE AJF	ROUTE PB	ROUTE SH	ROUTE AMJ	ROUTE AQG	ROUTE BU
456	ROUTE YN	ROUTE OJ	ROUTE AEQ	ROUTE CF	ROUTE TA	ROUTE UZ	ROUTE ZJ	ROUTE AEO	ROUTE JL	ROUTE UW	ROUTE ALT	ROUTE DZ	ROUTE RF	ROUTE AEY	ROUTE MJ	ROUTE OH	ROUTE MO	ROUTE AEQ	ROUTE MX	ROUTE NL	ROUTE PY	ROUTE AJC	ROUTE TG	ROUTE AKO	ROUTE XJ
457	ROUTE AJE	ROUTE PM	ROUTE AJN	ROUTE MY	ROUTE CF	ROUTE ANU	ROUTE GP	ROUTE AKO	ROUTE ALH	ROUTE NJ	ROUTE YN	ROUTE ANU	ROUTE AIX	ROUTE II	ROUTE TS	ROUTE MN	ROUTE XC	ROUTE CO	ROUTE PQ	ROUTE AJE	ROUTE NL	ROUTE TE	ROUTE PN	ROUTE YC	ROUTE CV
458	ROUTE UW	ROUTE ATM	ROUTE AKU	ROUTE PD	ROUTE AHV	ROUTE AJJ	ROUTE YW	ROUTE YM	ROUTE PR	ROUTE YN	ROUTE JK	ROUTE AKN	ROUTE AJA	ROUTE IM	ROUTE MB	ROUTE MV	ROUTE JW	ROUTE YH	ROUTE CS	ROUTE AZ	ROUTE PE	ROUTE RE	ROUTE AEG	ROUTE XT	
459	ROUTE AQG	ROUTE PQ	ROUTE NF	ROUTE AIF	ROUTE TI	ROUTE AMF	ROUTE AML	ROUTE CF	ROUTE QR	ROUTE VE	ROUTE YE	ROUTE YL	ROUTE PK	ROUTE PM	ROUTE UP	ROUTE MT	ROUTE AH	ROUTE AKM	ROUTE PP	ROUTE AJP	ROUTE AHQ	ROUTE TA	ROUTE RD	ROUTE AKQ	ROUTE XD
460	ROUTE PO	ROUTE PO	ROUTE MW	ROUTE PL	ROUTE AKP	ROUTE AHQ	ROUTE AQU	ROUTE MV	ROUTE KN	ROUTE ML	ROUTE AGP	ROUTE AQG	ROUTE XI	ROUTE PF	ROUTE IL	ROUTE NJ	ROUTE BX	ROUTE OJ	ROUTE AOA	ROUTE OJ	ROUTE AEJ	ROUTE TU	ROUTE MV	ROUTE DL	
461	ROUTE AJO	ROUTE AJP	ROUTE PH	ROUTE UH	ROUTE PH	ROUTE AHW	ROUTE YZ	ROUTE AQI	ROUTE MY	ROUTE MP	ROUTE QT	ROUTE UZ	ROUTE IV	ROUTE NF	ROUTE AW	ROUTE YM	ROUTE WX	ROUTE PQ	ROUTE NJ	ROUTE MZ	ROUTE ALL	ROUTE VG	ROUTE SH	ROUTE OX	ROUTE EF
462	ROUTE PQ	ROUTE HB	ROUTE MN	ROUTE AKN	ROUTE PP	ROUTE SJ	ROUTE DB	ROUTE YK	ROUTE VS	ROUTE AJL	ROUTE AED	ROUTE QY	ROUTE PQ	ROUTE LO	ROUTE TK	ROUTE YE	ROUTE JR	ROUTE YL	ROUTE PA	ROUTE AJG	ROUTE AEG	ROUTE UZ	ROUTE NV	ROUTE PS	ROUTE ALB
463	ROUTE AJP	ROUTE AJE	ROUTE DA	ROUTE AJE	ROUTE VM	ROUTE NB	ROUTE TN	ROUTE PJ	ROUTE HD	ROUTE AJQ	ROUTE AHF	ROUTE XT	ROUTE APW	ROUTE CH	ROUTE IR	ROUTE YF	ROUTE MO	ROUTE AJS	ROUTE EC	ROUTE AJJ	ROUTE AEO	ROUTE PP	ROUTE VF	ROUTE XU	ROUTE AJI
464	ROUTE AJF	ROUTE AQG	ROUTE AJT	ROUTE PS	ROUTE AHW	ROUTE AJF	ROUTE AQX	ROUTE VC	ROUTE ALK	ROUTE AJE	ROUTE PF	ROUTE TK	ROUTE JB	ROUTE PX	ROUTE UV	ROUTE OY	ROUTE AKM	ROUTE MN	ROUTE CP	ROUTE PM	ROUTE AEK	ROUTE ALB	ROUTE YP	ROUTE AEY	ROUTE AJN
465	ROUTE AJQ	ROUTE AJO	ROUTE XV	ROUTE ND	ROUTE OW	ROUTE PG	ROUTE YV	ROUTE OZ	ROUTE CF	ROUTE AKM	ROUTE MY	ROUTE AEQ	ROUTE XO	ROUTE TQ	ROUTE KD	ROUTE AKN	ROUTE OR	ROUTE NF	ROUTE MM	ROUTE PO	ROUTE MV	ROUTE QY	ROUTE CF	ROUTE AUP	ROUTE ANA
466	ROUTE AJI	ROUTE AJG	ROUTE YL	ROUTE MP	ROUTE JW	ROUTE QL	ROUTE AX	ROUTE AJL	ROUTE XF	ROUTE AX	ROUTE VS	ROUTE AUT	ROUTE AQC	ROUTE VB	ROUTE UN	ROUTE AJT	ROUTE BP	ROUTE AQG	ROUTE OZ	ROUTE AZ	ROUTE MZ	ROUTE AIC	ROUTE ZA	ROUTE AJO	ROUTE TA
467	ROUTE OZ	ROUTE AJJ	ROUTE AEI	ROUTE MJ	ROUTE MS	ROUTE AJL	ROUTE TT	ROUTE NB	ROUTE XL	ROUTE MX	ROUTE AJE	ROUTE DF	ROUTE LG	ROUTE RA	ROUTE MG	ROUTE NK	ROUTE XS	ROUTE AJM	ROUTE DZ	ROUTE PQ	ROUTE ADN	ROUTE PH	ROUTE RI	ROUTE DF	ROUTE OJ
468	ROUTE OX	ROUTE OZ	ROUTE PK	ROUTE MW	ROUTE QH	ROUTE AOE	ROUTE OW	ROUTE MD	ROUTE XR	ROUTE PO	ROUTE QB	ROUTE YI	ROUTE LM	ROUTE IT	ROUTE TQ	ROUTE KN	ROUTE SV	ROUTE PO	ROUTE AHE	ROUTE OX	ROUTE VG	ROUTE PS	ROUTE SZ	ROUTE AJH	ROUTE TK
469	ROUTE AJU	ROUTE NF	ROUTE AJJ	ROUTE AKF	ROUTE AID	ROUTE TA	ROUTE AQT	ROUTE XV	ROUTE YC	ROUTE AKT	ROUTE AJZ	ROUTE AQA	ROUTE AKT	ROUTE HF	ROUTE LT	ROUTE NB	ROUTE AFD	ROUTE AJR	ROUTE ALM	ROUTE UW	ROUTE VC	ROUTE UE	ROUTE PS	ROUTE OI	ROUTE CW
470	ROUTE AEK	ROUTE AEK	ROUTE YK	ROUTE NK	ROUTE AHT	ROUTE AKM	ROUTE YY	ROUTE AKS	ROUTE UJ	ROUTE AJK	ROUTE YK	ROUTE TE	ROUTE RL	ROUTE DX	ROUTE KJ	ROUTE MX	ROUTE ADO	ROUTE PG	ROUTE AMS	ROUTE AOG	ROUTE QY	ROUTE APQ	ROUTE CT	ROUTE UE	ROUTE BP
471	ROUTE NF	ROUTE AJF	ROUTE MP	ROUTE KN	ROUTE MF	ROUTE TK	ROUTE FF	ROUTE AJO	ROUTE QS	ROUTE AJO	ROUTE VA	ROUTE PQ	ROUTE AKW	ROUTE PQ	ROUTE MM	ROUTE YI	ROUTE XN	ROUTE OZ	ROUTE MI	ROUTE AEM	ROUTE TF	ROUTE PL	ROUTE RA	ROUTE PY	ROUTE AP
472	ROUTE PG	ROUTE AJI	ROUTE XR	ROUTE AEQ	ROUTE AJE	ROUTE VJ	ROUTE TL	ROUTE AKN	ROUTE PB	ROUTE OZ	ROUTE PC	ROUTE AX	ROUTE RR	ROUTE VF	ROUTE UT	ROUTE YG	ROUTE XF	ROUTE MT	ROUTE AHN	ROUTE UY	ROUTE TA	ROUTE QC	ROUTE ALG	ROUTE XP	ROUTE AFK
473	ROUTE ATM	ROUTE NJ	ROUTE CL	ROUTE UW	ROUTE MM	ROUTE PQ	ROUTE ADN	ROUTE AJC	ROUTE YF	ROUTE AJC	ROUTE PR	ROUTE XN	ROUTE AIR	ROUTE NJ	ROUTE YE	ROUTE AJH	ROUTE ML	ROUTE AJL	ROUTE XJ	ROUTE AEK	ROUTE SW	ROUTE ALL	ROUTE VK	ROUTE YJ	ROUTE DD
474	ROUTE MN	ROUTE AEQ	ROUTE NV	ROUTE AVC	ROUTE SW	ROUTE RV	ROUTE PC	ROUTE YJ	ROUTE AUK	ROUTE YL	ROUTE QN	ROUTE APU	ROUTE AIU	ROUTE VM	ROUTE LZ	ROUTE MY	ROUTE AKU	ROUTE OX	ROUTE AMP	ROUTE OZ	ROUTE ALD	ROUTE AVF	ROUTE VJ	ROUTE NL	ROUTE AES
475	ROUTE HB	ROUTE MN	ROUTE AEM	ROUTE AJD	ROUTE JP	ROUTE ALG	ROUTE AQW	ROUTE YH	ROUTE YI	ROUTE AKQ	ROUTE AJR	ROUTE VF	ROUTE LI	ROUTE RE	ROUTE IJ	ROUTE NU	ROUTE MG	ROUTE VX	ROUTE MS	ROUTE AJC	ROUTE TK	ROUTE AHW	ROUTE VB	ROUTE AJI	ROUTE TE
476	ROUTE AEM	ROUTE MT	ROUTE NI	ROUTE AUP	ROUTE PD	ROUTE QU	ROUTE LQ	ROUTE PD	ROUTE PH	ROUTE PM	ROUTE OQ	ROUTE AEK	ROUTE IP	ROUTE SX	ROUTE CC	ROUTE MH	ROUTE MW	ROUTE YJ	ROUTE XD	ROUTE NF	ROUTE AOQ	ROUTE AHT	ROUTE YR	ROUTE YE	ROUTE AFC
477	ROUTE AEO	ROUTE OX	ROUTE DZ	ROUTE PJ	ROUTE VA	ROUTE MD	ROUTE TR	ROUTE MP	ROUTE AMF	ROUTE YK	ROUTE OZ	ROUTE CT	ROUTE YP	ROUTE AES	ROUTE TB	ROUTE MP	ROUTE MR	ROUTE NJ	ROUTE AEH	ROUTE AEO	ROUTE UH	ROUTE TC	ROUTE AKL	ROUTE AIJ	ROUTE VV
478	ROUTE MT	ROUTE AEM	ROUTE AJL	ROUTE PQ	ROUTE SH	ROUTE NK	ROUTE FR	ROUTE UW	ROUTE PN	ROUTE NB	ROUTE MS	ROUTE VQ	ROUTE AQN	ROUTE IG	ROUTE IP	ROUTE AQI	ROUTE QU	ROUTE DF	ROUTE NE	ROUTE NH	ROUTE AQI	ROUTE NV	ROUTE AX	ROUTE AEK	ROUTE ALG
479	ROUTE NH	ROUTE MX	ROUTE PO	ROUTE AKM	ROUTE VI	ROUTE VS	ROUTE HB	ROUTE AKP	ROUTE YL	ROUTE UY	ROUTE ANY	ROUTE AFC	ROUTE YS	ROUTE JC	ROUTE YH	ROUTE VX	ROUTE AKQ	ROUTE AJE	ROUTE MR	ROUTE MN	ROUTE AGP	ROUTE VI	ROUTE QE	ROUTE MJ	ROUTE ALL
480	ROUTE NJ	ROUTE NH	ROUTE MY	ROUTE AHV	ROUTE JR	ROUTE AJO	ROUTE CD	ROUTE AJI	ROUTE AMZ	ROUTE MF	ROUTE AQI	ROUTE XH	ROUTE SZ	ROUTE OZ	ROUTE SL	ROUTE XT	ROUTE QP	ROUTE AVC	ROUTE PK	ROUTE AIF	ROUTE NB	ROUTE UX	ROUTE TD	ROUTE PL	ROUTE PI
481	ROUTE AOR	ROUTE PG	ROUTE MF	ROUTE NB	ROUTE MO	ROUTE ANY	ROUTE LW	ROUTE PS	ROUTE PT	ROUTE AJS	ROUTE VM	ROUTE SY	ROUTE AOQ	ROUTE TG	ROUTE TH	ROUTE ND	ROUTE ANC	ROUTE MX	ROUTE AEZ	ROUTE MT	ROUTE PI	ROUTE CF	ROUTE TE	ROUTE MZ	ROUTE UR
482	ROUTE AVF	ROUTE XV	ROUTE OZ	ROUTE JX	ROUTE AJC	ROUTE MP	ROUTE AGP	ROUTE YG	ROUTE AJO	ROUTE AJI	ROUTE PO	ROUTE ED	ROUTE TF	ROUTE CY	ROUTE YD	ROUTE YJ	ROUTE AU	ROUTE NH	ROUTE DA	ROUTE MV	ROUTE ANB	ROUTE UH	ROUTE DE	ROUTE APW	ROUTE IV
483	ROUTE XV	ROUTE MV	ROUTE AJP	ROUTE NV	ROUTE AUT	ROUTE TE	ROUTE AFD	ROUTE UH	ROUTE AJR	ROUTE PQ	ROUTE ANF	ROUTE CD	ROUTE DI	ROUTE VQ	ROUTE SR	ROUTE YC	ROUTE AEZ	ROUTE AEK	ROUTE AMF	ROUTE NJ	ROUTE PM	ROUTE QW	ROUTE PL	ROUTE YG	ROUTE PS
484	ROUTE YK	ROUTE YK	ROUTE OJ	ROUTE NI	ROUTE MI	ROUTE VD	ROUTE AKM	ROUTE NK	ROUTE ALI	ROUTE AJG	ROUTE OW	ROUTE DU	ROUTE YN	ROUTE SZ	ROUTE AJR	ROUTE QB	ROUTE YE	ROUTE PJ	ROUTE AJD	ROUTE NF	ROUTE VE	ROUTE VO	ROUTE PB	ROUTE QE	
485	ROUTE MV	ROUTE YM	ROUTE DE	ROUTE AEO	ROUTE JL	ROUTE QO	ROUTE VU	ROUTE MM	ROUTE UN	ROUTE CD	ROUTE AMQ	ROUTE YC	ROUTE AES	ROUTE TI	ROUTE MK	ROUTE XJ	ROUTE AOK	ROUTE PK	ROUTE AJN	ROUTE OZ	ROUTE SY	ROUTE ANM	ROUTE AFC	ROUTE PC	
486	ROUTE MX	ROUTE DF	ROUTE AVC	ROUTE MU	ROUTE MH	ROUTE ALB	ROUTE AKP	ROUTE YE	ROUTE ANS	ROUTE YH	ROUTE AUK	ROUTE APO	ROUTE YV	ROUTE PD	ROUTE YG	ROUTE XU	ROUTE WJ	ROUTE MV	ROUTE DQ	ROUTE AJZ	ROUTE VA	ROUTE PY	ROUTE AEO	ROUTE AEQ	
487	ROUTE AQA	ROUTE PK	ROUTE AKS	ROUTE PB	ROUTE AEO	ROUTE MM	ROUTE AIW	ROUTE YI	ROUTE ALL	ROUTE AVF	ROUTE PL	ROUTE AUK	ROUTE AEY	ROUTE ANB	ROUTE TF	ROUTE NG	ROUTE SR	ROUTE YI	ROUTE ANU	ROUTE NV	ROUTE PJ	ROUTE VG	ROUTE PF	ROUTE NB	
488	ROUTE PI	ROUTE AOR	ROUTE AEK	ROUTE HB	ROUTE UW	ROUTE AJC	ROUTE NV	ROUTE OX	ROUTE NA	ROUTE NK	ROUTE OH	ROUTE AQC	ROUTE AQT	ROUTE DL	ROUTE JP	ROUTE AJQ	ROUTE XJ	ROUTE XT	ROUTE WJ	ROUTE AHV	ROUTE ALK	ROUTE HB	ROUTE TI	ROUTE PI	ROUTE NL
489	ROUTE AFC	ROUTE AX	ROUTE NB	ROUTE AJC	ROUTE UH	ROUTE QB	ROUTE AIZ	ROUTE XN	ROUTE XB	ROUTE MR	ROUTE QD	ROUTE VK	ROUTE YY	ROUTE PK	ROUTE CV	ROUTE NE	ROUTE JK	ROUTE AJP	ROUTE ND	ROUTE CF	ROUTE ALG	ROUTE DF	ROUTE UA	ROUTE AJQ	ROUTE AJC
490	ROUTE PK	ROUTE ATG	ROUTE PM	ROUTE PO	ROUTE PQ	ROUTE PA	ROUTE ATM	ROUTE JP	ROUTE UT	ROUTE PI	ROUTE AOK	ROUTE XB	ROUTE TL	ROUTE UZ	ROUTE DH	ROUTE ML	ROUTE AKS	ROUTE AJG	ROUTE CX	ROUTE YN	ROUTE ALI	ROUTE AML	ROUTE UH	ROUTE APQ	ROUTE AJH
491	ROUTE YM	ROUTE YL	ROUTE AJK	ROUTE OZ	ROUTE AKT	ROUTE TO	ROUTE PI	ROUTE AKM	ROUTE ANY	ROUTE MM	ROUTE AJO	ROUTE AEW	ROUTE AQW	ROUTE QY	ROUTE OW	ROUTE XH	ROUTE MH	ROUTE PE	ROUTE MX	ROUTE AEI	ROUTE PB	ROUTE AMG	ROUTE XT	ROUTE AKT	
492	ROUTE AJC	ROUTE PI	ROUTE AJG	ROUTE MH	ROUTE AJC	ROUTE AJI	ROUTE PO	ROUTE PQ	ROUTE NG	ROUTE KN	ROUTE QK	ROUTE PE	ROUTE TR	ROUTE ND	ROUTE PC	ROUTE MR	ROUTE JF	ROUTE AQA	ROUTE MG	ROUTE PI	ROUTE AMJ	ROUTE PM	ROUTE TA	ROUTE CL	ROUTE YD
493	ROUTE DF	ROUTE AVF	ROUTE AKQ	ROUTE KJ	ROUTE HB	ROUTE MY	ROUTE AOQ	ROUTE MY	ROUTE AOE	ROUTE AJM	ROUTE ANS	ROUTE AEM	ROUTE QD	ROUTE PQ	ROUTE NC	ROUTE MM	ROUTE WW	ROUTE PI	ROUTE DN	ROUTE AFC	ROUTE AED	ROUTE QJ	ROUTE PP	ROUTE AJC	ROUTE MP
494	ROUTE NB	ROUTE AFC	ROUTE AEM	ROUTE AEM	ROUTE AFA	ROUTE AKF	ROUTE LE	ROUTE PM	ROUTE XH	ROUTE PE	ROUTE JP	ROUTE XD	ROUTE DR	ROUTE CK	ROUTE MZ	ROUTE RI	ROUTE AJH	ROUTE PD	ROUTE PK	ROUTE AML	ROUTE ALD	ROUTE QX	ROUTE AJS	ROUTE QB	
495	ROUTE AJD	ROUTE AQA	ROUTE MJ	ROUTE NG	ROUTE KI	ROUTE QF	ROUTE AJZ	ROUTE AHV	ROUTE XN	ROUTE YI	ROUTE AEP	ROUTE VE	ROUTE QF	ROUTE IW	ROUTE MP	ROUTE AJL	ROUTE AER	ROUTE AEO	ROUTE MF	ROUTE AQA	ROUTE QC	ROUTE PF	ROUTE SY	ROUTE MZ	
496	ROUTE AQE	ROUTE AQE	ROUTE XT	ROUTE PG	ROUTE MD	ROUTE ALD	ROUTE LK	ROUTE YD	ROUTE AOK	ROUTE VX	ROUTE WJ	ROUTE XP	ROUTE CW	ROUTE NH	ROUTE RQ	ROUTE JP	ROUTE AKF	ROUTE AJO	ROUTE XO	ROUTE AEG	ROUTE MP	ROUTE APK	ROUTE CP	ROUTE DK	ROUTE AKO
497	ROUTE AUP	ROUTE AUP	ROUTE PD	ROUTE AHW	ROUTE NE	ROUTE PK	ROUTE AKS	ROUTE NI	ROUTE SL	ROUTE PC	ROUTE PI	ROUTE CX	ROUTE AEG	ROUTE AND	ROUTE MV	ROUTE JX	ROUTE XR	ROUTE PA	ROUTE AHK	ROUTE AQC	ROUTE VE	ROUTE PQ	ROUTE PH	ROUTE AJK	ROUTE AKO
498	ROUTE AQC	ROUTE AUD	ROUTE AUP	ROUTE AUT	ROUTE AX	ROUTE NV	ROUTE AKV	ROUTE AVF	ROUTE SH	ROUTE AKN	ROUTE AMW	ROUTE APW	ROUTE AEM	ROUTE RX	ROUTE DD	ROUTE YD	ROUTE QQ	ROUTE AJF	ROUTE AMM	ROUTE AQE	ROUTE MJ	ROUTE ALK	ROUTE PB	ROUTE CM	
499	ROUTE AHV	ROUTE AJC	ROUTE NK	ROUTE AQG	ROUTE AEQ	ROUTE QO	ROUTE AIQ	ROUTE MK	ROUTE QO	ROUTE YM	ROUTE AJL	ROUTE QY	ROUTE QY	ROUTE MN	ROUTE VU	ROUTE MU	ROUTE QL	ROUTE YG	ROUTE WX	ROUTE AEI	ROUTE MT	ROUTE ALI	ROUTE UZ	ROUTE ATI	ROUTE DG
500	ROUTE AIF	ROUTE AEI	ROUTE ED	ROUTE AX	ROUTE DB	ROUTE VM	ROUTE DJ	ROUTE NE	ROUTE AJI	ROUTE PQ	ROUTE AMN	ROUTE ATS	ROUTE RE	ROUTE TA	ROUTE MS	ROUTE AJK	ROUTE XM	ROUTE AJI	ROUTE MW	ROUTE ALL	ROUTE AQC	ROUTE YN	ROUTE AGI	ROUTE ALL	ROUTE UA
501	ROUTE PA	ROUTE ND	ROUTE AUT	ROUTE AID	ROUTE AKN	ROUTE NE	ROUTE AIT	ROUTE MG	ROUTE SR	ROUTE MY	ROUTE AQE	ROUTE AEG	ROUTE ALN	ROUTE VK	ROUTE MY	ROUTE MS	ROUTE AKW	ROUTE AEM	ROUTE MV	ROUTE NB	ROUTE MX	ROUTE AHQ	ROUTE CX	ROUTE MN	ROUTE QL
502	ROUTE AX	ROUTE MH	ROUTE AQI	ROUTE AFC	ROUTE PE	ROUTE ANS	ROUTE DV	ROUTE QV	ROUTE XT	ROUTE YF	ROUTE PG	ROUTE AUE	ROUTE ALQ	ROUTE CM	ROUTE QX	ROUTE MO	ROUTE MK	ROUTE AFC	ROUTE PO	ROUTE ALB	ROUTE MN	ROUTE SW	ROUTE OJ	ROUTE PC	ROUTE CT
503	ROUTE MH	ROUTE AQC	ROUTE CO	ROUTE KH	ROUTE PL	ROUTE SV	ROUTE AIU	ROUTE ALL	ROUTE AMQ	ROUTE KJ	ROUTE QU	ROUTE APQ	ROUTE IA	ROUTE YK	ROUTE VJ	ROUTE AJS	ROUTE MF	ROUTE AQE	ROUTE AQG	ROUTE DF	ROUTE VA	ROUTE VC	ROUTE PM	ROUTE NB	ROUTE DJ
504	ROUTE AEG	ROUTE AEG	ROUTE PB	ROUTE OJ	ROUTE PS	ROUTE UX	ROUTE ATG	ROUTE YI	ROUTE QU	ROUTE NG	ROUTE AVF	ROUTE XJ	ROUTE UZ	ROUTE RC	ROUTE RD	ROUTE NI	ROUTE QT	ROUTE CT	ROUTE CO	ROUTE MJ	ROUTE AQG	ROUTE ANB	ROUTE AT	ROUTE OV	
505	ROUTE YI	ROUTE ML	ROUTE MH	ROUTE MF	ROUTE AKU	ROUTE PE	ROUTE VH	ROUTE HB	ROUTE AHV	ROUTE AJP	ROUTE XP	ROUTE UY	ROUTE NZ	ROUTE VD	ROUTE VP	ROUTE XN	ROUTE HC	ROUTE NK	ROUTE NI	ROUTE XV	ROUTE UW	ROUTE AX	ROUTE DA	ROUTE AQA	ROUTE ATS
506	ROUTE AEI	ROUTE MR	ROUTE YG	ROUTE AQI	ROUTE KD	ROUTE PO	ROUTE XX	ROUTE AQG	ROUTE AJL	ROUTE MI	ROUTE WX	ROUTE CL	ROUTE VF	ROUTE OX	ROUTE LE	ROUTE XP	ROUTE AEE	ROUTE ML	ROUTE AET	ROUTE MU	ROUTE AEY	ROUTE UY	ROUTE PD	ROUTE AJM	ROUTE XO
507	ROUTE AHZ	ROUTE NB	ROUTE YI	ROUTE DF	ROUTE NA	ROUTE VQ	ROUTE UL	ROUTE OJ	ROUTE KD	ROUTE XT	ROUTE NI	ROUTE AEY	ROUTE AHL	ROUTE JA	ROUTE RA	ROUTE QV	ROUTE OO	ROUTE ND	ROUTE NH	ROUTE AIC	ROUTE SY	ROUTE PO	ROUTE VE	ROUTE DV	ROUTE DW
508	ROUTE ATG	ROUTE YH	ROUTE AJQ	ROUTE MS	ROUTE ALB	ROUTE QS	ROUTE UZ	ROUTE AKF	ROUTE MO	ROUTE PA	ROUTE YG	ROUTE XS	ROUTE RK	ROUTE TE	ROUTE VM

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
523	ROUTE AEW	ROUTE DB	ROUTE JX	ROUTE MO	ROUTE AEV	ROUTE OY	ROUTE ANO	ROUTE ALI	ROUTE NX	ROUTE YJ	ROUTE YM	ROUTE DJ	ROUTE AMQ	ROUTE VG	ROUTE VB	ROUTE AJE	ROUTE QS	ROUTE CX	ROUTE AQA	ROUTE AFW	ROUTE APW	ROUTE UW	ROUTE PB	ROUTE PG	ROUTE PL
524	ROUTE YJ	ROUTE MY	ROUTE CS	ROUTE YM	ROUTE ALI	ROUTE AUK	ROUTE AFC	ROUTE AEQ	ROUTE DX	ROUTE PK	ROUTE YD	ROUTE CS	ROUTE TK	ROUTE SY	ROUTE IN	ROUTE JR	ROUTE ANO	ROUTE AEI	ROUTE AKX	ROUTE HB	ROUTE HA	ROUTE CD	ROUTE UE	ROUTE ED	ROUTE ATG
525	ROUTE MY	ROUTE PC	ROUTE MK	ROUTE CD	ROUTE QT	ROUTE MW	ROUTE CL	ROUTE DF	ROUTE AML	ROUTE YC	ROUTE XH	ROUTE NF	ROUTE TO	ROUTE YJ	ROUTE TO	ROUTE AJI	ROUTE HA	ROUTE ED	ROUTE KN	ROUTE YL	ROUTE AQA	ROUTE AMJ	ROUTE PK	ROUTE NF	ROUTE JA
526	ROUTE CT	ROUTE CX	ROUTE PE	ROUTE MK	ROUTE ED	ROUTE VK	ROUTE AQP	ROUTE AUP	ROUTE PD	ROUTE MS	ROUTE ANW	ROUTE AJO	ROUTE AMT	ROUTE ML	ROUTE VH	ROUTE VV	ROUTE HF	ROUTE YD	ROUTE CW	ROUTE YM	ROUTE MR	ROUTE CX	ROUTE DZ	ROUTE DB	ROUTE AVF
527	ROUTE YI	ROUTE YH	ROUTE NE	ROUTE CX	ROUTE AX	ROUTE DY	ROUTE XN	ROUTE PJ	ROUTE AIF	ROUTE AHT	ROUTE AJT	ROUTE XG	ROUTE AMW	ROUTE IY	ROUTE UL	ROUTE MD	ROUTE AEH	ROUTE AJC	ROUTE PI	ROUTE NK	ROUTE MH	ROUTE ED	ROUTE VX	ROUTE MD	ROUTE ANB
528	ROUTE OH	ROUTE APU	ROUTE AKF	ROUTE AEK	ROUTE QB	ROUTE PI	ROUTE YR	ROUTE PO	ROUTE AUX	ROUTE KD	ROUTE AJQ	ROUTE EC	ROUTE YD	ROUTE VI	ROUTE UZ	ROUTE DF	ROUTE AJT	ROUTE XR	ROUTE NB	ROUTE APW	ROUTE JX	ROUTE PI	ROUTE CL	ROUTE ALG	ROUTE PF
529	ROUTE APY	ROUTE AEW	ROUTE XP	ROUTE ALL	ROUTE AKM	ROUTE VA	ROUTE PE	ROUTE DN	ROUTE NA	ROUTE PM	ROUTE MT	ROUTE QD	ROUTE NX	ROUTE MC	ROUTE XS	ROUTE UR	ROUTE OH	ROUTE APU	ROUTE AFA	ROUTE ML	ROUTE DE	ROUTE YM	ROUTE AMM	ROUTE ATP
530	ROUTE ALB	ROUTE AFA	ROUTE NG	ROUTE PC	ROUTE PB	ROUTE JK	ROUTE ATQ	ROUTE PA	ROUTE ADN	ROUTE QR	ROUTE VQ	ROUTE AJK	ROUTE ALD	ROUTE KN	ROUTE LU	ROUTE QB	ROUTE AY	ROUTE AEG	ROUTE PC	ROUTE OH	ROUTE AND	ROUTE NF	ROUTE PO	ROUTE NJ	ROUTE NG
531	ROUTE CD	ROUTE APY	ROUTE DV	ROUTE AEY	ROUTE PC	ROUTE TV	ROUTE AEU	ROUTE NG	ROUTE PP	ROUTE JF	ROUTE UF	ROUTE YJ	ROUTE YG	ROUTE PA	ROUTE UR	ROUTE AJP	ROUTE BD	ROUTE AHV	ROUTE OP	ROUTE APY	ROUTE PC	ROUTE AND	ROUTE QW	ROUTE XD	ROUTE QF
532	ROUTE AEY	ROUTE OH	ROUTE AJD	ROUTE AQC	ROUTE APS	ROUTE JW	ROUTE VN	ROUTE AID	ROUTE XU	ROUTE MC	ROUTE SQ	ROUTE MH	ROUTE AEP	ROUTE TC	ROUTE VF	ROUTE SV	ROUTE AQI	ROUTE AEW	ROUTE DJ	ROUTE MY	ROUTE PG	ROUTE CP	ROUTE CO	ROUTE YD	ROUTE ANG
533	ROUTE APW	ROUTE ALL	ROUTE AKN	ROUTE PK	ROUTE PJ	ROUTE CT	ROUTE ANO	ROUTE MI	ROUTE AVF	ROUTE YG	ROUTE UY	ROUTE AJE	ROUTE UF	ROUTE YL	ROUTE MI	ROUTE AIF	ROUTE UU	ROUTE APY	ROUTE ANS	ROUTE ALI	ROUTE AES	ROUTE XT	ROUTE DR	ROUTE MT	ROUTE ANQ
534	ROUTE AFA	ROUTE ATI	ROUTE XN	ROUTE CX	ROUTE ANB	ROUTE PC	ROUTE TA	ROUTE APY	ROUTE DZ	ROUTE AHT	ROUTE MW	ROUTE ATU	ROUTE YJ	ROUTE DJ	ROUTE MA	ROUTE XJ	ROUTE UP	ROUTE MM	ROUTE JP	ROUTE AML	ROUTE AFA	ROUTE NJ	ROUTE PG	ROUTE CW	ROUTE XN
535	ROUTE CX	ROUTE AEY	ROUTE MD	ROUTE APU	ROUTE AVF	ROUTE VE	ROUTE CX	ROUTE AQR	ROUTE AUE	ROUTE DF	ROUTE UX	ROUTE VM	ROUTE PE	ROUTE IK	ROUTE KI	ROUTE ED	ROUTE NE	ROUTE MD	ROUTE AIF	ROUTE AEW	ROUTE AUP	ROUTE UY	ROUTE ALD	ROUTE WX	
536	ROUTE DB	ROUTE ALB	ROUTE AJQ	ROUTE JR	ROUTE AKF	ROUTE AEK	ROUTE VT	ROUTE QN	ROUTE ALG	ROUTE PE	ROUTE YJ	ROUTE YG	ROUTE TV	ROUTE TX	ROUTE YC	ROUTE QP	ROUTE AEP	ROUTE MF	ROUTE SV	ROUTE CT	ROUTE CC	ROUTE ALG	ROUTE UX	ROUTE QV	ROUTE XH
537	ROUTE AIC	ROUTE APW	ROUTE AQG	ROUTE ALK	ROUTE ANO	ROUTE SW	ROUTE AFA	ROUTE KJ	ROUTE VX	ROUTE ALL	ROUTE AJN	ROUTE ALB	ROUTE ANU	ROUTE PV	ROUTE UU	ROUTE XF	ROUTE AHD	ROUTE YC	ROUTE WW	ROUTE CX	ROUTE NX	ROUTE ANO	ROUTE AKJ	ROUTE AEW	ROUTE MU
538	ROUTE YF	ROUTE MF	ROUTE QX	ROUTE AEI	ROUTE AML	ROUTE ED	ROUTE TG	ROUTE ALH	ROUTE CP	ROUTE QP	ROUTE AQI	ROUTE DQ	ROUTE VE	ROUTE NE	ROUTE IC	ROUTE APU	ROUTE QD	ROUTE OY	ROUTE MU	ROUTE ATS	ROUTE ANQ	ROUTE YM	ROUTE DN	ROUTE AEI	ROUTE AJQ
539	ROUTE AID	ROUTE YE	ROUTE NE	ROUTE MO	ROUTE AQG	ROUTE NG	ROUTE VL	ROUTE APU	ROUTE ALJ	ROUTE AQG	ROUTE ALJ	ROUTE XO	ROUTE AOA	ROUTE VA	ROUTE SX	ROUTE QR	ROUTE UB	ROUTE XH	ROUTE AEQ	ROUTE XT	ROUTE ANG	ROUTE ANK	ROUTE XT	ROUTE QB	ROUTE LE
540	ROUTE AHT	ROUTE VX	ROUTE DR	ROUTE JL	ROUTE AOR	ROUTE DB	ROUTE AMO	ROUTE YC	ROUTE AQP	ROUTE XP	ROUTE AJD	ROUTE AJR	ROUTE ATT	ROUTE MR	ROUTE YF	ROUTE MK	ROUTE AJR	ROUTE ALL	ROUTE AQE	ROUTE MD	ROUTE ANK	ROUTE OH	ROUTE YK	ROUTE VV	ROUTE AJS
541	ROUTE AHW	ROUTE YG	ROUTE KJ	ROUTE MI	ROUTE XR	ROUTE AFC	ROUTE RX	ROUTE AEO	ROUTE WX	ROUTE NI	ROUTE XT	ROUTE CW	ROUTE ALB	ROUTE IS	ROUTE LS	ROUTE ED	ROUTE AJN	ROUTE XP	ROUTE CK	ROUTE ALK	ROUTE OH	ROUTE PA	ROUTE CW	ROUTE MX	ROUTE CK
542	ROUTE APO	ROUTE AID	ROUTE YD	ROUTE ED	ROUTE AHQ	ROUTE QQ	ROUTE SQ	ROUTE DB	ROUTE AEO	ROUTE AHZ	ROUTE XB	ROUTE NH	ROUTE OV	ROUTE MF	ROUTE TD	ROUTE AJG	ROUTE AQT	ROUTE MS	ROUTE NG	ROUTE AX	ROUTE KD	ROUTE MN	ROUTE AFK	ROUTE OZ	ROUTE AH
543	ROUTE VX	ROUTE ED	ROUTE AJF	ROUTE YL	ROUTE DV	ROUTE CO	ROUTE AMG	ROUTE JL	ROUTE DB	ROUTE JR	ROUTE JW	ROUTE ALD	ROUTE PZ	ROUTE MV	ROUTE KI	ROUTE XG	ROUTE DV	ROUTE MO	ROUTE OH	ROUTE DB	ROUTE APY	ROUTE VX	ROUTE OH	ROUTE XN	ROUTE OG
544	ROUTE YG	ROUTE AIC	ROUTE AFC	ROUTE XT	ROUTE ALJ	ROUTE VO	ROUTE SY	ROUTE XL	ROUTE AHO	ROUTE QF	ROUTE AHQ	ROUTE QB	ROUTE VK	ROUTE DW	ROUTE AJW	ROUTE AJJ	ROUTE AQO	ROUTE AHK	ROUTE AKU	ROUTE AHQ	ROUTE RV	ROUTE PE	ROUTE EC	ROUTE APK	ROUTE DE
545	ROUTE MD	ROUTE MO	ROUTE ANP	ROUTE APS	ROUTE JK	ROUTE SV	ROUTE VR	ROUTE CD	ROUTE ANF	ROUTE MC	ROUTE AKP	ROUTE YD	ROUTE AOG	ROUTE AUT	ROUTE JF	ROUTE AHZ	ROUTE UQ	ROUTE APW	ROUTE APO	ROUTE YH	ROUTE JR	ROUTE MT	ROUTE OZ	ROUTE NG	ROUTE DU
546	ROUTE OW	ROUTE XN	ROUTE XU	ROUTE YH	ROUTE MG	ROUTE YN	ROUTE AMR	ROUTE AIF	ROUTE APS	ROUTE MK	ROUTE VK	ROUTE AJL	ROUTE MH	ROUTE MJ	ROUTE LY	ROUTE AHV	ROUTE UL	ROUTE AFA	ROUTE DU	ROUTE ALD	ROUTE MF	ROUTE AUT	ROUTE VC	ROUTE AFA	ROUTE AOX
547	ROUTE OY	ROUTE AHW	ROUTE MM	ROUTE AML	ROUTE QX	ROUTE AEO	ROUTE CS	ROUTE AEK	ROUTE AKN	ROUTE CX	ROUTE ALD	ROUTE MV	ROUTE VQ	ROUTE VE	ROUTE II	ROUTE JW	ROUTE AW	ROUTE VV	ROUTE DJ	ROUTE AUK	ROUTE JL	ROUTE MK	ROUTE SW	ROUTE ATQ	ROUTE QQ
548	ROUTE MF	ROUTE XR	ROUTE PG	ROUTE PI	ROUTE DX	ROUTE ATG	ROUTE AMJ	ROUTE VX	ROUTE ATS	ROUTE QB	ROUTE XN	ROUTE OF	ROUTE AOM	ROUTE YH	ROUTE TA	ROUTE XL	ROUTE AQR	ROUTE CP	ROUTE AKR	ROUTE KJ	ROUTE NG	ROUTE YH	ROUTE PD	ROUTE AIF	ROUTE AEW
549	ROUTE ED	ROUTE NE	ROUTE APY	ROUTE AEG	ROUTE YM	ROUTE MI	ROUTE TE	ROUTE CT	ROUTE APY	ROUTE XN	ROUTE LV	ROUTE AJF	ROUTE MN	ROUTE QV	ROUTE JL	ROUTE WJ	ROUTE UT	ROUTE OW	ROUTE OW	ROUTE CW	ROUTE YJ	ROUTE OW	ROUTE TV	ROUTE AJK	ROUTE AJK
550	ROUTE ALI	ROUTE OY	ROUTE AJE	ROUTE KD	ROUTE APU	ROUTE AML	ROUTE AMN	ROUTE XH	ROUTE AX	ROUTE ALJ	ROUTE AJK	ROUTE MJ	ROUTE UB	ROUTE NI	ROUTE IO	ROUTE AQA	ROUTE BB	ROUTE AIF	ROUTE QT	ROUTE MF	ROUTE PA	ROUTE CL	ROUTE AUT	ROUTE AOX	ROUTE XR
551	ROUTE XN	ROUTE AHT	ROUTE XQ	ROUTE JW	ROUTE AMU	ROUTE UY	ROUTE DE	ROUTE SV	ROUTE AHT	ROUTE SV	ROUTE ALG	ROUTE XI	ROUTE XF	ROUTE SW	ROUTE XT	ROUTE AQC	ROUTE AJL	ROUTE DE	ROUTE MI	ROUTE AES	ROUTE NK	ROUTE NH	ROUTE NL	ROUTE AJP	ROUTE AJM
552	ROUTE NE	ROUTE CP	ROUTE AKO	ROUTE XV	ROUTE OJ	ROUTE OW	ROUTE YU	ROUTE AML	ROUTE AKQ	ROUTE MW	ROUTE AKV	ROUTE AQE	ROUTE NF	ROUTE YI	ROUTE IX	ROUTE WX	ROUTE DF	ROUTE JP	ROUTE MO	ROUTE APO	ROUTE PE	ROUTE KN	ROUTE PE	ROUTE MU	ROUTE SY
553	ROUTE AME	ROUTE NI	ROUTE MO	ROUTE DZ	ROUTE AQC	ROUTE MU	ROUTE AQS	ROUTE AHT	ROUTE XD	ROUTE AEQ	ROUTE AKF	ROUTE CK	ROUTE NL	ROUTE OY	ROUTE TG	ROUTE AJC	ROUTE CE	ROUTE NI	ROUTE AJN	ROUTE JP	ROUTE PC	ROUTE XR	ROUTE AUT	ROUTE UB	
554	ROUTE APS	ROUTE MM	ROUTE CK	ROUTE NA	ROUTE XF	ROUTE SH	ROUTE TJ	ROUTE MU	ROUTE XJ	ROUTE XH	ROUTE AKM	ROUTE ATO	ROUTE XL	ROUTE PC	ROUTE XL	ROUTE JF	ROUTE EC	ROUTE AEY	ROUTE AEK	ROUTE YI	ROUTE AEU	ROUTE ANM	ROUTE YJ	ROUTE XR	ROUTE MI
555	ROUTE YF	ROUTE QB	ROUTE XR	ROUTE ANQ	ROUTE DR	ROUTE AEK	ROUTE PI	ROUTE OY	ROUTE AIC	ROUTE OR	ROUTE AJO	ROUTE XR	ROUTE MP	ROUTE JO	ROUTE QT	ROUTE DR	ROUTE AHZ	ROUTE APY	ROUTE OY	ROUTE CX	ROUTE DR	ROUTE PI	ROUTE ANB	ROUTE AEI	
556	ROUTE ATI	ROUTE MS	ROUTE JP	ROUTE ATG	ROUTE SV	ROUTE AUE	ROUTE AMQ	ROUTE OY	ROUTE AKT	ROUTE AQC	ROUTE DV	ROUTE NB	ROUTE MT	ROUTE DK	ROUTE SQ	ROUTE MC	ROUTE APU	ROUTE CL	ROUTE AJT	ROUTE JX	ROUTE MJ	ROUTE AMG	ROUTE DV	ROUTE XH	ROUTE AFA
557	ROUTE MM	ROUTE JP	ROUTE DY	ROUTE PA	ROUTE UT	ROUTE OV	ROUTE CO	ROUTE JX	ROUTE AQE	ROUTE AUP	ROUTE UP	ROUTE XC	ROUTE AND	ROUTE MD	ROUTE CN	ROUTE CX	ROUTE CJ	ROUTE APS	ROUTE NA	ROUTE YJ	ROUTE DF	ROUTE DZ	ROUTE AUP	ROUTE DJ	ROUTE UL
558	ROUTE JP	ROUTE OW	ROUTE AOR	ROUTE ALJ	ROUTE JF	ROUTE CP	ROUTE AQV	ROUTE APS	ROUTE QK	ROUTE QL	ROUTE AHV	ROUTE XR	ROUTE MZ	ROUTE YE	ROUTE SY	ROUTE ALL	ROUTE AIF	ROUTE MW	ROUTE AFC	ROUTE APQ	ROUTE MV	ROUTE PA	ROUTE MH	ROUTE ALJ	
559	ROUTE APQ	ROUTE KJ	ROUTE AEU	ROUTE VX	ROUTE MC	ROUTE NA	ROUTE YX	ROUTE XU	ROUTE AKW	ROUTE YD	ROUTE AKS	ROUTE DU	ROUTE OL	ROUTE AUT	ROUTE XR	ROUTE CT	ROUTE AJO	ROUTE DR	ROUTE DI	ROUTE NE	ROUTE MY	ROUTE CS	ROUTE DY	ROUTE AL1	ROUTE ALK
560	ROUTE AOX	ROUTE CL	ROUTE YF	ROUTE AQA	ROUTE AEI	ROUTE ATS	ROUTE GO	ROUTE NA	ROUTE PE	ROUTE CT	ROUTE ALL	ROUTE AEO	ROUTE OR	ROUTE QP	ROUTE SJ	ROUTE CZ	ROUTE XM	ROUTE AJH	ROUTE NG	ROUTE APS	ROUTE NG	ROUTE APU	ROUTE NK	ROUTE MZ	ROUTE UV
561	ROUTE MS	ROUTE MW	ROUTE JR	ROUTE YG	ROUTE UB	ROUTE AEW	ROUTE OH	ROUTE MC	ROUTE XP	ROUTE ALD	ROUTE QS	ROUTE NK	ROUTE DN	ROUTE QP	ROUTE TE	ROUTE XO	ROUTE AJK	ROUTE XL	ROUTE AKW	ROUTE AOX	ROUTE QB	ROUTE DA	ROUTE XN	ROUTE DE	ROUTE PM
562	ROUTE KJ	ROUTE NG	ROUTE OY	ROUTE AEW	ROUTE XT	ROUTE QK	ROUTE TP	ROUTE AHZ	ROUTE PK	ROUTE AHQ	ROUTE OL	ROUTE AJI	ROUTE MD	ROUTE MY	ROUTE IV	ROUTE QU	ROUTE OV	ROUTE MU	ROUTE QO	ROUTE APS	ROUTE AOX	ROUTE XR	ROUTE AKG	ROUTE AHZ	ROUTE AND
563	ROUTE ALK	ROUTE APO	ROUTE YE	ROUTE AHQ	ROUTE YG	ROUTE VI	ROUTE AEQ	ROUTE AOC	ROUTE JK	ROUTE ALI	ROUTE DJ	ROUTE MP	ROUTE MJ	ROUTE RV	ROUTE JB	ROUTE AIC	ROUTE CX	ROUTE XS	ROUTE QN	ROUTE AEU	ROUTE TV	ROUTE XN	ROUTE VV	ROUTE ANQ	ROUTE OW
564	ROUTE XR	ROUTE APS	ROUTE OH	ROUTE APQ	ROUTE ATM	ROUTE YK	ROUTE DA	ROUTE ALJ	ROUTE OQ	ROUTE OY	ROUTE PE	ROUTE AJC	ROUTE DZ	ROUTE NG	ROUTE DG	ROUTE HD	ROUTE DU	ROUTE OV	ROUTE AKO	ROUTE MM	ROUTE AKJ	ROUTE ND	ROUTE CK	ROUTE AJJ	ROUTE PQ
565	ROUTE NG	ROUTE XU	ROUTE XF	ROUTE OV	ROUTE DA	ROUTE AEI	ROUTE AGI	ROUTE XF	ROUTE HB	ROUTE QT	ROUTE CX	ROUTE MD	ROUTE MG	ROUTE MM	ROUTE HA	ROUTE SR	ROUTE DJ	ROUTE ALB	ROUTE MC	ROUTE MS	ROUTE AKL	ROUTE YI	ROUTE AFE	ROUTE ALK	ROUTE PG
566	ROUTE XU	ROUTE XP	ROUTE AQC	ROUTE CT	ROUTE QR	ROUTE DZ	ROUTE TM	ROUTE AFC	ROUTE PQ	ROUTE ALB	ROUTE AOA	ROUTE DB	ROUTE ANB	ROUTE YG	ROUTE MO	ROUTE AQE	ROUTE AJS	ROUTE APO	ROUTE AJH	ROUTE MU	ROUTE JF	ROUTE MY	ROUTE YL	ROUTE ML	ROUTE NF
567	ROUTE AES	ROUTE JX	ROUTE XJ	ROUTE QB	ROUTE VX	ROUTE MC	ROUTE AEI	ROUTE APO	ROUTE CD	ROUTE ED	ROUTE PZ	ROUTE KN	ROUTE ATP	ROUTE KJ	ROUTE MU	ROUTE APQ	ROUTE UF	ROUTE KJ	ROUTE UV	ROUTE NI	ROUTE MH	ROUTE YH	ROUTE OH	ROUTE PY	
568	ROUTE NI	ROUTE MU	ROUTE DJ	ROUTE ANB	ROUTE YN	ROUTE AFA	ROUTE AKF	ROUTE ED	ROUTE DR	ROUTE AQA	ROUTE AKR	ROUTE APY	ROUTE MM	ROUTE QT	ROUTE EF	ROUTE APO	ROUTE APQ	ROUTE DZ	ROUTE AJK	ROUTE ED	ROUTE NE	ROUTE OY	ROUTE DQ	ROUTE XO	ROUTE AJE
569	ROUTE ALJ	ROUTE AEU	ROUTE NA	ROUTE APY	ROUTE APQ	ROUTE VC	ROUTE TS	ROUTE KD	ROUTE ED	ROUTE XJ	ROUTE AQR	ROUTE AUX	ROUTE AKL	ROUTE VC	ROUTE QW	ROUTE OL	ROUTE UK	ROUTE AOX	ROUTE AEO	ROUTE CD	ROUTE OY	ROUTE ML	ROUTE UW	ROUTE APY	ROUTE AJG
570	ROUTE AEU	ROUTE AML	ROUTE AHZ	ROUTE KI	ROUTE PK	ROUTE MO	ROUTE AMJ	ROUTE AEI	ROUTE CT	ROUTE AEM	ROUTE AJS	ROUTE MP	ROUTE CP	ROUTE OW	ROUTE JR	ROUTE DV	ROUTE AJF	ROUTE MG	ROUTE AEW	ROUTE ANB	ROUTE NI	ROUTE XU	ROUTE XU	ROUTE APQ	ROUTE NJ
571	ROUTE XP	ROUTE DE	ROUTE AEY	ROUTE OY	ROUTE AEU	ROUTE YH	ROUTE AEQ	ROUTE CP	ROUTE AUP	ROUTE AHW	ROUTE ALI	ROUTE MM	ROUTE QP	ROUTE JP	ROUTE VI	ROUTE DR	ROUTE UN	ROUTE XB	ROUTE AJO	ROUTE ANO	ROUTE QV	ROUTE MR	ROUTE NJ	ROUTE ATO	ROUTE AMU
572	ROUTE JX	ROUTE ALI	ROUTE AQA	ROUTE MG	ROUTE ANM	ROUTE CX	ROUTE TK	ROUTE QR	ROUTE XQ	ROUTE XR	ROUTE PQ	ROUTE WW	ROUTE AJE	ROUTE SV	ROUTE JX	ROUTE QF	ROUTE AHZ	ROUTE ATM	ROUTE AQC	ROUTE CL	ROUTE QR	ROUTE YG	ROUTE XS	ROUTE QL	ROUTE AUT
573	ROUTE CL	ROUTE ALK	ROUTE XS	ROUTE DV	ROUTE AVC	ROUTE AKL	ROUTE AMK	ROUTE JF	ROUTE UH	ROUTE CL	ROUTE AQM	ROUTE XL	ROUTE QV	ROUTE XT	ROUTE RC	ROUTE AJD	ROUTE DE	ROUTE JX	ROUTE QS	ROUTE ALG	ROUTE CL	ROUTE YE	ROUTE KN	ROUTE NK	ROUTE DR
574	ROUTE CP	ROUTE AOX	ROUTE MI	ROUTE YK	ROUTE SR	ROUTE YM	ROUTE AUT	ROUTE AKO	ROUTE SR	ROUTE AUT	ROUTE APS	ROUTE AJH	ROUTE AGI	ROUTE VO	ROUTE XQ	ROUTE AQG	ROUTE XJ	ROUTE QB	ROUTE AMJ	ROUTE DB	ROUTE DV	ROUTE OX	ROUTE ATS	ROUTE MT	
575	ROUTE MU	ROUTE AES	ROUTE AID	ROUTE AEU	ROUTE XH	ROUTE OH	ROUTE AMT	ROUTE XB	ROUTE APQ	ROUTE APU	ROUTE AKX	ROUTE DI	ROUTE DB	ROUTE MS	ROUTE UX	ROUTE DB	ROUTE ADJ	ROUTE ALJ	ROUTE AKT	ROUTE XN	ROUTE CT	ROUTE CW	ROUTE NF	ROUTE WJ	
576	ROUTE MW	ROUTE APQ	ROUTE PC	ROUTE XP	ROUTE DY	ROUTE AEM	ROUTE YE	ROUTE XP	ROUTE DF	ROUTE XD	ROUTE CL	ROUTE AEI	ROUTE APS	ROUTE APE	ROUTE LQ	ROUTE AHT	ROUTE CT	ROUTE AML	ROUTE AKQ	ROUTE MW	ROUTE APS	ROUTE DY	ROUTE UR	ROUTE XI	
577	ROUTE ALD	ROUTE ALJ	ROUTE KD	ROUTE ANQ	ROUTE AEK	ROUTE PZ	ROUTE AMW	ROUTE AIC	ROUTE ANO	ROUTE AML	ROUTE XF	ROUTE JP	ROUTE NB	ROUTE NA	ROUTE VD	ROUTE XC	ROUTE AJI	ROUTE DV	ROUTE AJE	ROUTE ALH	ROUTE MO	ROUTE AKL	ROUTE XL	ROUTE APS	ROUTE XS
578	ROUTE AHQ	ROUTE YD	ROUTE EC	ROUTE QT	ROUTE XP	ROUTE QD	ROUTE AFW	ROUTE PC	ROUTE UI	ROUTE WJ	ROUTE ANU	ROUTE AHV	ROUTE JP	ROUTE YD	ROUTE IG	ROUTE AEQ	ROUTE CC	ROUTE AEU	ROUTE UP	ROUTE ATU	ROUTE APK	ROUTE XP	ROUTE MK	ROUTE QF	ROUTE XC
579	ROUTE DE	ROUTE DR	ROUTE AEW	ROUTE CP	ROUTE UV	ROUTE AQI	ROUTE YH	ROUTE AHQ	ROUTE AKR	ROUTE ALG	ROUTE OV	ROUTE NE	ROUTE NH	ROUTE MG	ROUTE VA	ROUTE JK	ROUTE DZ	ROUTE AID	ROUTE QR	ROUTE XP	ROUTE MI	ROUTE EC	ROUTE DJ	ROUTE PK	ROUTE AKN
580	ROUTE XH	ROUTE AJC	ROUTE AMU	ROUTE CP	ROUTE DN	ROUTE YD	ROUTE MO	ROUTE AKU	ROUTE DV	ROUTE OY	ROUTE CP	ROUTE NE	ROUTE KD	ROUTE LW	ROUTE AJM	ROUTE ALB	ROUTE DQ	ROUTE CS	ROUTE JX	ROUTE ATT	ROUTE APO	ROUTE OW	ROUTE YG	ROUTE MY	ROUTE DK
581	ROUTE QV	ROUTE DZ	ROUTE AKM	ROUTE OH	ROUTE YH	ROUTE XV	ROUTE YG	ROUTE JR	ROUTE PA	ROUTE AEK	ROUTE AMJ	ROUTE XF	ROUTE NK	ROUTE QN	ROUTE IM	ROUTE AHW	ROUTE APO	ROUTE AIC	ROUTE AEI	ROUTE CP	ROUTE MS	ROUTE ANG	ROUTE PC	ROUTE DR	ROUTE MX
582	ROUTE YD	ROUTE QV	ROUTE MG	ROUTE XH	ROUTE DE	ROUTE ATT	ROUTE YK	ROUTE AEM	ROUTE APU	ROUTE XB	ROUTE AKO	ROUTE ALL	ROUTE APY	ROUTE UW	ROUTE UV	ROUTE CH	ROUTE AHT	ROUTE AJM	ROUTE QV	ROUTE MW	ROUTE MU	ROUTE NK	ROUTE CP	ROUTE QP	
583	ROUTE DR	ROUTE ALD	ROUTE PA	ROUTE YK	ROUTE QY	ROUTE AEU	ROUTE UF	ROUTE APQ	ROUTE AQA	ROUTE AJP	ROUTE AJR	ROUTE AFA	ROUTE QJ	ROUTE UK	ROUTE DE	ROUTE OR	ROUTE XF	ROUTE KJ	ROUTE YE	ROUTE MM	ROUTE DN	ROUTE MT	ROUTE AHT	ROUTE APO	
584	ROUTE YC	ROUTE XL	ROUTE AIF	ROUTE YJ	ROUTE YL	ROUTE UW	ROUTE YN	ROUTE DZ	ROUTE UR	ROUTE ALK	ROUTE ED	ROUTE MS	ROUTE XQ	ROUTE MW	ROUTE UY	ROUTE APW	ROUTE ADF	ROUTE AES	ROUTE AFA	ROUTE XR	ROUTE AZ	ROUTE XS	ROUTE MN	ROUTE AMU	ROUTE AIF
585	ROUTE ANQ	ROUTE AHQ	ROUTE QT	ROUTE DE	ROUTE PM	ROUTE YE	ROUTE ATI	ROUTE CX	ROUTE AKX	ROUTE DB	ROUTE PK	ROUTE QV	ROUTE AQE	ROUTE XN	ROUTE VE	ROUTE QN	ROUTE AIC	ROUTE AMC	ROUTE AKV	ROUTE KD	ROUTE YN	ROUTE CO	ROUTE XQ	ROUTE PA	ROUTE QT
586	ROUTE MG	ROUTE DV	ROUTE JL	ROUTE ATI	ROUTE ATG	ROUTE CL	ROUTE YJ	ROUTE APW	ROUTE PG	ROUTE VV	ROUTE AOG	ROUTE DZ	ROUTE MV	ROUTE YF	ROUTE UQ	ROUTE APS	ROUTE ALL	ROUTE ALK	ROUTE APW	ROUTE AUE	ROUTE QF	ROUTE MP	ROUTE XP	ROUTE AJD	ROUTE IF
587	ROUTE APK	ROUTE YC	ROUTE UB	ROUTE ALI	ROUTE AEG	ROUTE YJ	ROUTE DI	ROUTE AHW	ROUTE PM	ROUTE AFC	ROUTE XR	ROUTE MG	ROUTE AJQ	ROUTE MK	ROUTE IT	ROUTE AML	ROUTE AJE	ROUTE AHW	ROUTE AJS	ROUTE YF	ROUTE AKG	ROUTE XH	ROUTE YI	ROUTE XS	ROUTE CP
588	ROUTE DV	ROUTE MG	ROUTE XH	ROUTE ANO	ROUTE AEW	ROUTE AEG	ROUTE UX	ROUTE AEW	ROUTE AMG	ROUTE QN	ROUTE AIC	ROUTE ANB	ROUTE AJT	ROUTE QR	ROUTE XJ	ROUTE CL	ROUTE AHV	ROUTE MI	ROUTE QF	ROUTE YG	ROUTE HD	ROUTE XL	ROUTE XH	ROUTE WX	ROUTE OH
589	ROUTE XL	ROUTE QB	ROUTE ALB	ROUTE OW	ROUTE AEM	ROUTE DV	ROUTE YM	ROUTE ALG	ROUTE AQG	ROUTE AOX	ROUTE XC	ROUTE AEU	ROUTE MS	ROUTE NV	ROUTE SW	ROUTE PZ	ROUTE AJM	ROUTE NA	ROUTE APQ	ROUTE JL	ROUTE XV	ROUTE NE	ROUTE DU	ROUTE CK	ROUTE DZ
590	ROUTE DZ	ROUTE MK	ROUTE AVF	ROUTE AES	ROUTE XD	ROUTE YG	ROUTE VO	ROUTE DR	ROUTE PS	ROUTE APQ	ROUTE AKU	ROUTE ALI	ROUTE KN	ROUTE UJ	ROUTE IZ	ROUTE AID	ROUTE CW	ROUTE DA	ROUTE UU	ROUTE QB	ROUTE QT	ROUTE JP	ROUTE YE	ROUTE PE	ROUTE ATT
591	ROUTE KD	ROUTE VV	ROUTE APW	ROUTE DN	ROUTE AEY	ROUTE DU	ROUTE QL	ROUTE AMJ	ROUTE AQE	ROUTE AUX	ROUTE ATQ	ROUTE MY	ROUTE XR	ROUTE XP	ROUTE ALI	ROUTE CL	ROUTE XM	ROUTE JL	ROUTE JR	ROUTE KI	ROUTE NI	ROUTE WJ	ROUTE ND	ROUTE APY	
592	ROUTE ALH	ROUTE NA	ROUTE YC	ROUTE SV	ROUTE AQI	ROUTE UV	ROUTE AES	ROUTE XJ	ROUTE AUQ	ROUTE DR	ROUTE AMG	ROUTE AND	ROUTE SV	ROUTE QV	ROUTE TC	ROUTE ALJ	ROUTE AQC	ROUTE QB	ROUTE UT	ROUTE APK	ROUTE QP	ROUTE YF	ROUTE MY	ROUTE DZ	ROUTE MH
593	ROUTE QB	ROUTE XJ	ROUTE WJ	ROUTE XF	ROUTE QS	ROUTE ANC	ROUTE OW	ROUTE XG	ROUTE AMJ	ROUTE AJM	ROUTE QR	ROUTE AUK	ROUTE OH	ROUTE IF	ROUTE XI	ROUTE DI	ROUTE MO	ROUTE AKN	ROUTE NA	ROUTE QL	ROUTE VV	ROUTE XM	ROUTE KJ	ROUTE APS	
594	ROUTE NA	ROUTE JR	ROUTE JW	ROUTE EC	ROUTE DE	ROUTE AMW	ROUTE ALD	ROUTE XM	ROUTE AEG	ROUTE AHZ	ROUTE DN	ROUTE AJN	ROUTE DZ	ROUTE AJP	ROUTE XM	ROUTE XD	ROUTE AJG	ROUTE DE	ROUTE CP	ROUTE MM	ROUTE ND	ROUTE ANG	ROUTE AHZ		
595	ROUTE ANB	ROUTE MI	ROUTE AHV	ROUTE DA	ROUTE UR	ROUTE UH	ROUTE AQJ	ROUTE AEG	ROUTE QB	ROUTE KI	ROUTE DR	ROUTE UB	ROUTE OQ	ROUTE YC	ROUTE XS	ROUTE QO	ROUTE APK	ROUTE AJJ	ROUTE AKX	ROUTE XU	ROUTE SV	ROUTE MS	ROUTE NH	ROUTE QP	ROUTE ML
596

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
610	ROUTE XF	ROUTE DN	ROUTE ANB	ROUTE DN	ROUTE CL	ROUTE ATU	ROUTE VJ	ROUTE UV	ROUTE DV	ROUTE ALH	ROUTE XG	ROUTE JL	ROUTE QO	ROUTE MO	ROUTE NX	ROUTE AEK	ROUTE AJG	ROUTE DJ	ROUTE QQ	ROUTE XL	ROUTE QN	ROUTE XF	ROUTE YF	ROUTE XB	ROUTE PZ
611	ROUTE DA	ROUTE SV	ROUTE XD	ROUTE XL	ROUTE QU	ROUTE EC	ROUTE SW	ROUTE AEY	ROUTE AHZ	ROUTE AEW	ROUTE ALK	ROUTE NA	ROUTE DA	ROUTE SH	ROUTE XF	ROUTE AHQ	ROUTE ALI	ROUTE QT	ROUTE AJD	ROUTE ATO	ROUTE UV	ROUTE MD	ROUTE MS	ROUTE AML	ROUTE ANK
612	ROUTE OT	ROUTE QP	ROUTE QN	ROUTE JK	ROUTE OW	ROUTE UT	ROUTE CK	ROUTE XS	ROUTE CL	ROUTE UV	ROUTE AUG	ROUTE AIC	ROUTE QU	ROUTE MC	ROUTE DX	ROUTE QS	ROUTE ADV	ROUTE ATG	ROUTE JW	ROUTE QP	ROUTE UR	ROUTE XM	ROUTE MM	ROUTE MO	ROUTE MY
613	ROUTE ANK	ROUTE QT	ROUTE AIC	ROUTE ALG	ROUTE XV	ROUTE ANO	ROUTE AMM	ROUTE DV	ROUTE UU	ROUTE XS	ROUTE UK	ROUTE XQ	ROUTE AEI	ROUTE JR	ROUTE CJ	ROUTE CW	ROUTE ALB	ROUTE ANQ	ROUTE SL	ROUTE AND	ROUTE SL	ROUTE XB	ROUTE APE	ROUTE CS	ROUTE AJP
614	ROUTE XD	ROUTE DJ	ROUTE JF	ROUTE UB	ROUTE AQA	ROUTE YI	ROUTE VP	ROUTE APK	ROUTE AEU	ROUTE APK	ROUTE XS	ROUTE KD	ROUTE ALI	ROUTE QO	ROUTE JW	ROUTE UP	ROUTE AJJ	ROUTE AHQ	ROUTE AEG	ROUTE SV	ROUTE XR	ROUTE YC	ROUTE KJ	ROUTE QQ	ROUTE XL
615	ROUTE DJ	ROUTE XD	ROUTE XB	ROUTE YD	ROUTE OH	ROUTE SL	ROUTE TC	ROUTE ANO	ROUTE QD	ROUTE APY	ROUTE AKQ	ROUTE ALJ	ROUTE ALL	ROUTE UP	ROUTE UW	ROUTE CS	ROUTE CK	ROUTE XG	ROUTE AJL	ROUTE YC	ROUTE JK	ROUTE MG	ROUTE XO	ROUTE AHW	ROUTE XF
616	ROUTE DN	ROUTE VV	ROUTE QF	ROUTE EC	ROUTE XL	ROUTE DA	ROUTE VM	ROUTE AOX	ROUTE AQR	ROUTE DZ	ROUTE ALH	ROUTE MO	ROUTE AEO	ROUTE JF	ROUTE VC	ROUTE UR	ROUTE AOX	ROUTE ALH	ROUTE KI	ROUTE QR	ROUTE XN	ROUTE MK	ROUTE XG	ROUTE KN	ROUTE QK
617	ROUTE QR	ROUTE WJ	ROUTE ALK	ROUTE XS	ROUTE DJ	ROUTE AMG	ROUTE AOI	ROUTE QS	ROUTE CX	ROUTE AMG	ROUTE ATU	ROUTE AHW	ROUTE NA	ROUTE AZ	ROUTE XI	ROUTE AGP	ROUTE APW	ROUTE XO	ROUTE AEY	ROUTE AUG	ROUTE YM	ROUTE KD	ROUTE NB	ROUTE ANK	ROUTE QU
618	ROUTE WJ	ROUTE EC	ROUTE APJ	ROUTE UV	ROUTE AUG	ROUTE AKJ	ROUTE AMP	ROUTE WX	ROUTE AJZ	ROUTE AUT	ROUTE AOX	ROUTE DA	ROUTE NG	ROUTE CT	ROUTE IS	ROUTE AMJ	ROUTE AMM	ROUTE AUT	ROUTE AKF	ROUTE YD	ROUTE XJ	ROUTE QB	ROUTE JX	ROUTE XI	ROUTE JX
619	ROUTE VV	ROUTE OR	ROUTE AHT	ROUTE SR	ROUTE XS	ROUTE XN	ROUTE CW	ROUTE UT	ROUTE AKM	ROUTE APS	ROUTE XM	ROUTE MC	ROUTE UP	ROUTE XH	ROUTE IY	ROUTE ALG	ROUTE AID	ROUTE OR	ROUTE ALL	ROUTE QT	ROUTE YK	ROUTE AKJ	ROUTE MF	ROUTE ALH	ROUTE DA
620	ROUTE ANO	ROUTE JF	ROUTE PZ	ROUTE APK	ROUTE ALD	ROUTE YF	ROUTE AEG	ROUTE AMG	ROUTE APK	ROUTE QQ	ROUTE APQ	ROUTE NJ	ROUTE AJO	ROUTE UT	ROUTE XQ	ROUTE HB	ROUTE AQE	ROUTE MC	ROUTE AJR	ROUTE JF	ROUTE YI	ROUTE DU	ROUTE MP	ROUTE XF	ROUTE AJJ
621	ROUTE JF	ROUTE MC	ROUTE AOX	ROUTE QP	ROUTE QF	ROUTE AQA	ROUTE VS	ROUTE XQ	ROUTE AFA	ROUTE AES	ROUTE AKW	ROUTE AJS	ROUTE AHV	ROUTE KI	ROUTE OJ	ROUTE ALD	ROUTE DA	ROUTE CO	ROUTE QD	ROUTE CS	ROUTE DJ	ROUTE JL	ROUTE NG	ROUTE MF	ROUTE AEU
622	ROUTE AMG	ROUTE XM	ROUTE QR	ROUTE XU	ROUTE YJ	ROUTE QL	ROUTE AOO	ROUTE SL	ROUTE JW	ROUTE DE	ROUTE UU	ROUTE JR	ROUTE AJR	ROUTE QS	ROUTE ID	ROUTE AEY	ROUTE NZ	ROUTE WX	ROUTE UB	ROUTE CW	ROUTE CW	ROUTE QV	ROUTE MJ	ROUTE ANO	ROUTE MC
623	ROUTE MC	ROUTE XQ	ROUTE XI	ROUTE DV	ROUTE VV	ROUTE DQ	ROUTE VK	ROUTE ANK	ROUTE AKP	ROUTE QO	ROUTE AKN	ROUTE QR	ROUTE UV	ROUTE XJ	ROUTE WX	ROUTE DN	ROUTE AHQ	ROUTE ALG	ROUTE JK	ROUTE XS	ROUTE UF	ROUTE JR	ROUTE MK	ROUTE JL	ROUTE MM
624	ROUTE EC	ROUTE ANO	ROUTE UV	ROUTE UT	ROUTE QQ	ROUTE XH	ROUTE AOG	ROUTE DE	ROUTE AKS	ROUTE ANQ	ROUTE DZ	ROUTE AHQ	ROUTE KD	ROUTE SL	ROUTE XD	ROUTE SQ	ROUTE CP	ROUTE AMJ	ROUTE AKM	ROUTE QF	ROUTE DZ	ROUTE NA	ROUTE XD	ROUTE EC	ROUTE UP
625	ROUTE XM	ROUTE ANK	ROUTE QP	ROUTE XQ	ROUTE APO	ROUTE UN	ROUTE AEM	ROUTE ATS	ROUTE AEI	ROUTE XQ	ROUTE DU	ROUTE JF	ROUTE MO	ROUTE AFE	ROUTE CT	ROUTE AEW	ROUTE ALG	ROUTE CK	ROUTE AJF	ROUTE MC	ROUTE DR	ROUTE XQ	ROUTE SR	ROUTE ALH	ROUTE XG
626	ROUTE ANM	ROUTE CO	ROUTE DI	ROUTE DY	ROUTE APW	ROUTE APU	ROUTE RV	ROUTE QQ	ROUTE NV	ROUTE AEI	ROUTE AQC	ROUTE QV	ROUTE KJ	ROUTE OB	ROUTE GD	ROUTE AEO	ROUTE ALK	ROUTE DQ	ROUTE QK	ROUTE DJ	ROUTE DE	ROUTE XD	ROUTE MU	ROUTE DA	ROUTE JL
627	ROUTE QF	ROUTE QF	ROUTE ALL	ROUTE VV	ROUTE AMG	ROUTE XR	ROUTE VQ	ROUTE AES	ROUTE APQ	ROUTE UR	ROUTE AUE	ROUTE MX	ROUTE MU	ROUTE XS	ROUTE DF	ROUTE UT	ROUTE AJD	ROUTE JF	ROUTE SQ	ROUTE DA	ROUTE PZ	ROUTE MI	ROUTE XI	ROUTE NE	ROUTE PK
628	ROUTE AND	ROUTE CK	ROUTE SR	ROUTE XJ	ROUTE ANK	ROUTE AQE	ROUTE AOM	ROUTE XM	ROUTE OW	ROUTE QD	ROUTE OQ	ROUTE AJM	ROUTE SL	ROUTE OR	ROUTE LB	ROUTE QK	ROUTE AGO	ROUTE ANB	ROUTE UR	ROUTE XB	ROUTE UT	ROUTE XG	ROUTE QB	ROUTE XC	ROUTE UT
629	ROUTE XQ	ROUTE KI	ROUTE APQ	ROUTE ANK	ROUTE UN	ROUTE CO	ROUTE ALZ	ROUTE WJ	ROUTE AKV	ROUTE AFA	ROUTE APK	ROUTE AKL	ROUTE AJI	ROUTE CF	ROUTE DU	ROUTE AGR	ROUTE QF	ROUTE AJI	ROUTE KI	ROUTE AOR	ROUTE MO	ROUTE MG	ROUTE MC	ROUTE PA	
630	ROUTE KI	ROUTE XO	ROUTE WX	ROUTE QN	ROUTE XG	ROUTE AKG	ROUTE XB	ROUTE UP	ROUTE APW	ROUTE CW	ROUTE AUP	ROUTE ML	ROUTE SR	ROUTE XB	ROUTE ANQ	ROUTE AMG	ROUTE ON	ROUTE AES	ROUTE XD	ROUTE UP	ROUTE ATM	ROUTE KD	ROUTE UL	ROUTE PE	
631	ROUTE XO	ROUTE AMG	ROUTE UN	ROUTE AMG	ROUTE SQ	ROUTE YC	ROUTE TI	ROUTE DJ	ROUTE AEO	ROUTE PZ	ROUTE AKT	ROUTE AJG	ROUTE AJL	ROUTE AUX	ROUTE XW	ROUTE DQ	ROUTE ANQ	ROUTE UV	ROUTE ALI	ROUTE DN	ROUTE UL	ROUTE KI	ROUTE JR	ROUTE NI	ROUTE ND
632	ROUTE JW	ROUTE ANM	ROUTE ANQ	ROUTE XB	ROUTE XN	ROUTE DY	ROUTE UB	ROUTE ATT	ROUTE PC	ROUTE XM	ROUTE DN	ROUTE ALG	ROUTE JR	ROUTE UN	ROUTE CP	ROUTE QD	ROUTE APY	ROUTE QU	ROUTE AJO	ROUTE ANG	ROUTE XL	ROUTE AKG	ROUTE KJ	ROUTE ATP	ROUTE AJD
633	ROUTE CK	ROUTE JW	ROUTE UF	ROUTE YC	ROUTE XO	ROUTE ATO	ROUTE XV	ROUTE DA	ROUTE PI	ROUTE UP	ROUTE DB	ROUTE CO	ROUTE JX	ROUTE HD	ROUTE GP	ROUTE CF	ROUTE CO	ROUTE DY	ROUTE UF	ROUTE XF	ROUTE YJ	ROUTE SV	ROUTE JL	ROUTE MS	ROUTE XM
634	ROUTE CO	ROUTE AND	ROUTE AML	ROUTE CS	ROUTE YD	ROUTE CW	ROUTE AMS	ROUTE KI	ROUTE AQC	ROUTE DN	ROUTE DI	ROUTE ANQ	ROUTE AMI	ROUTE OH	ROUTE DK	ROUTE DA	ROUTE ALD	ROUTE ANK	ROUTE AML	ROUTE JW	ROUTE QU	ROUTE DI	ROUTE NA	ROUTE ATT	ROUTE VW
635	ROUTE UV	ROUTE QN	ROUTE QS	ROUTE PZ	ROUTE UU	ROUTE XB	ROUTE TO	ROUTE UN	ROUTE DY	ROUTE UF	ROUTE APW	ROUTE ND	ROUTE QK	ROUTE CP	ROUTE DB	ROUTE UU	ROUTE ALH	ROUTE KI	ROUTE AHV	ROUTE WJ	ROUTE CK	ROUTE AGI	ROUTE MO	ROUTE UF	ROUTE QD
636	ROUTE QN	ROUTE UV	ROUTE JK	ROUTE QU	ROUTE CO	ROUTE APO	ROUTE XH	ROUTE JK	ROUTE PO	ROUTE UB	ROUTE CW	ROUTE AJP	ROUTE JF	ROUTE MV	ROUTE AEG	ROUTE ANM	ROUTE XI	ROUTE AJC	ROUTE QQ	ROUTE JW	ROUTE AHQ	ROUTE XG			
637	ROUTE WX	ROUTE WX	ROUTE ALD	ROUTE DU	ROUTE QL	ROUTE XL	ROUTE WR	ROUTE VV	ROUTE QV	ROUTE XG	ROUTE ATS	ROUTE QL	ROUTE QQ	ROUTE XM	ROUTE DW	ROUTE ALH	ROUTE ANB	ROUTE JW	ROUTE UL	ROUTE ATQ	ROUTE DN	ROUTE QT	ROUTE WX	ROUTE QU	ROUTE AMG
638	ROUTE QL	ROUTE UB	ROUTE APQ	ROUTE QF	ROUTE AOX	ROUTE ANM	ROUTE AMV	ROUTE XG	ROUTE UF	ROUTE ANM	ROUTE ANM	ROUTE ATM	ROUTE ALG	ROUTE CX	ROUTE QF	ROUTE CK	ROUTE ADM	ROUTE DU	ROUTE QV	ROUTE ATP	ROUTE DA	ROUTE QP	ROUTE MO	ROUTE PZ	ROUTE AML
639	ROUTE XG	ROUTE SR	ROUTE ALH	ROUTE XQ	ROUTE APK	ROUTE AOR	ROUTE XF	ROUTE CS	ROUTE VF	ROUTE QK	ROUTE AND	ROUTE DY	ROUTE ALJ	ROUTE OL	ROUTE CH	ROUTE AFA	ROUTE ANK	ROUTE QL	ROUTE ALK	ROUTE SR	ROUTE CS	ROUTE JF	ROUTE MI	ROUTE AMG	ROUTE MR
640	ROUTE ATS	ROUTE DQ	ROUTE XG	ROUTE UR	ROUTE YK	ROUTE VX	ROUTE YC	ROUTE ALE	ROUTE CO	ROUTE CS	ROUTE APU	ROUTE QU	ROUTE AHQ	ROUTE QQ	ROUTE KR	ROUTE UL	ROUTE ADP	ROUTE SR	ROUTE UQ	ROUTE UV	ROUTE AX	ROUTE QF	ROUTE QV	ROUTE XM	ROUTE DN
641	ROUTE SR	ROUTE XG	ROUTE AHQ	ROUTE AND	ROUTE QF	ROUTE APY	ROUTE YF	ROUTE JW	ROUTE ATP	ROUTE QS	ROUTE CP	ROUTE UV	ROUTE AHT	ROUTE UR	ROUTE PX	ROUTE UF	ROUTE AFC	ROUTE ANQ	ROUTE ANQ	ROUTE QN	ROUTE XH	ROUTE XI	ROUTE XC	ROUTE MW	ROUTE AIC
642	ROUTE QU	ROUTE QL	ROUTE UR	ROUTE CO	ROUTE ANG	ROUTE UR	ROUTE XN	ROUTE ANM	ROUTE WW	ROUTE AND	ROUTE WR	ROUTE AMJ	ROUTE UL	ROUTE UH	ROUTE XV	ROUTE ANB	ROUTE AEY	ROUTE AMG	ROUTE ALH	ROUTE EC	ROUTE XD	ROUTE WX	ROUTE QF	ROUTE DN	ROUTE QN
643	ROUTE DQ	ROUTE DY	ROUTE QL	ROUTE QS	ROUTE AND	ROUTE XF	ROUTE XT	ROUTE EC	ROUTE DA	ROUTE ANB	ROUTE CK	ROUTE MR	ROUTE UR	ROUTE XQ	ROUTE NZ	ROUTE DY	ROUTE ANG	ROUTE ATI	ROUTE UK	ROUTE UB	ROUTE YH	ROUTE AFW	ROUTE PZ	ROUTE OY	ROUTE XQ
644	ROUTE UB	ROUTE QU	ROUTE ALJ	ROUTE XG	ROUTE SL	ROUTE APS	ROUTE XL	ROUTE CO	ROUTE XC	ROUTE EC	ROUTE ANG	ROUTE AJJ	ROUTE ANK	ROUTE ED	ROUTE HH	ROUTE AMG	ROUTE ANO	ROUTE UB	ROUTE ALB	ROUTE CK	ROUTE YF	ROUTE MC	ROUTE UB	ROUTE JP	ROUTE AUG
645	ROUTE ANG	ROUTE DU	ROUTE UP	ROUTE WJ	ROUTE XB	ROUTE XU	ROUTE XR	ROUTE QQ	ROUTE AEW	ROUTE XI	ROUTE AQG	ROUTE MF	ROUTE UU	ROUTE CL	ROUTE QB	ROUTE ADN	ROUTE AEQ	ROUTE ANM	ROUTE ANK	ROUTE XM	ROUTE VU	ROUTE UB	ROUTE JF	ROUTE SV	ROUTE AHW
646	ROUTE AUK	ROUTE PZ	ROUTE ANQ	ROUTE QL	ROUTE XC	ROUTE CK	ROUTE UJ	ROUTE XO	ROUTE XI	ROUTE ANK	ROUTE APO	ROUTE AUD	ROUTE ANQ	ROUTE QK	ROUTE RX	ROUTE AES	ROUTE AEW	ROUTE PZ	ROUTE AID	ROUTE XO	ROUTE UN	ROUTE PZ	ROUTE SV	ROUTE KD	ROUTE MF
647	ROUTE DU	ROUTE XI	ROUTE QU	ROUTE ANG	ROUTE XJ	ROUTE AOC	ROUTE YI	ROUTE UR	ROUTE AFC	ROUTE UL	ROUTE EC	ROUTE SR	ROUTE KI	ROUTE UL	ROUTE OH	ROUTE AX	ROUTE AEC	ROUTE XC	ROUTE ALJ	ROUTE CO	ROUTE OV	ROUTE QR	ROUTE QT	ROUTE XQ	ROUTE SL
648	ROUTE DY	ROUTE ANG	ROUTE ALI	ROUTE CK	ROUTE UP	ROUTE XP	ROUTE YL	ROUTE DY	ROUTE XQ	ROUTE UT	ROUTE XQ	ROUTE NZ	ROUTE AIC	ROUTE JW	ROUTE CL	ROUTE AEI	ROUTE AEF	ROUTE UP	ROUTE AHZ	ROUTE XQ	ROUTE OR	ROUTE UV	ROUTE JK	ROUTE DI	ROUTE SV
649	ROUTE PZ	ROUTE JK	ROUTE SL	ROUTE WX	ROUTE UQ	ROUTE ANG	ROUTE AND	ROUTE CW	ROUTE ANG	ROUTE XQ	ROUTE AID	ROUTE ANK	ROUTE SQ	ROUTE XD	ROUTE CX	ROUTE DI	ROUTE ANO	ROUTE QQ	ROUTE ALD	ROUTE QU	ROUTE QD	ROUTE JK	ROUTE MC	ROUTE XG	ROUTE UK
650	ROUTE XI	ROUTE UT	ROUTE AMJ	ROUTE QD	ROUTE YE	ROUTE UL	ROUTE ANS	ROUTE ANG	ROUTE AEK	ROUTE CK	ROUTE AQA	ROUTE QO	ROUTE AIF	ROUTE UU	ROUTE WW	ROUTE LN	ROUTE AEM	ROUTE ANO	ROUTE AIF	ROUTE AKL	ROUTE WJ	ROUTE QU	ROUTE QP	ROUTE JR	ROUTE UU
651	ROUTE JK	ROUTE UP	ROUTE APK	ROUTE DQ	ROUTE CS	ROUTE DU	ROUTE UW	ROUTE DQ	ROUTE ANM	ROUTE AEU	ROUTE ANQ	ROUTE UP	ROUTE AMG	ROUTE JK	ROUTE XC	ROUTE ANK	ROUTE AES	ROUTE JK	ROUTE ANQ	ROUTE WX	ROUTE HB	ROUTE XC	ROUTE WW	ROUTE DN	ROUTE NE
652	ROUTE UP	ROUTE SL	ROUTE AND	ROUTE XM	ROUTE YI	ROUTE ATP	ROUTE ANY	ROUTE ATU	ROUTE DQ	ROUTE SQ	ROUTE DQ	ROUTE AMG	ROUTE AMJ	ROUTE DE	ROUTE CS	ROUTE ANM	ROUTE HD	ROUTE UT	ROUTE ALG	ROUTE JK	ROUTE XU	ROUTE QN	ROUTE QT	ROUTE UP	ROUTE DQ
653	ROUTE AKL	ROUTE ATS	ROUTE XC	ROUTE UP	ROUTE WX	ROUTE UU	ROUTE VC	ROUTE QK	ROUTE AEQ	ROUTE XC	ROUTE DE	ROUTE KI	ROUTE JW	ROUTE QB	ROUTE QJ	ROUTE OV	ROUTE AKL	ROUTE DI	ROUTE AHT	ROUTE PZ	ROUTE QS	ROUTE AFK	ROUTE UV	ROUTE MG	ROUTE NI
654	ROUTE SL	ROUTE UR	ROUTE QD	ROUTE SL	ROUTE WJ	ROUTE ANB	ROUTE AMF	ROUTE XI	ROUTE EC	ROUTE ATS	ROUTE AEY	ROUTE SL	ROUTE AHW	ROUTE XU	ROUTE DE	ROUTE CO	ROUTE AEK	ROUTE QS	ROUTE AMJ	ROUTE SL	ROUTE QO	ROUTE SR	ROUTE QD	ROUTE UT	ROUTE AHQ
655	ROUTE UT	ROUTE QO	ROUTE ANM	ROUTE XC	ROUTE DQ	ROUTE UB	ROUTE SH	ROUTE UL	ROUTE CS	ROUTE DU	ROUTE ANK	ROUTE ATG	ROUTE AHZ	ROUTE XQ	ROUTE CO	ROUTE UQ	ROUTE AFA	ROUTE SL	ROUTE WR	ROUTE UP	ROUTE QK	ROUTE QL	ROUTE UF	ROUTE MK	ROUTE AHW
656	ROUTE QO	ROUTE QS	ROUTE UL	ROUTE UN	ROUTE CK	ROUTE AND	ROUTE AMZ	ROUTE ANO	ROUTE ATQ	ROUTE DA	ROUTE CS	ROUTE JW	ROUTE ANG	ROUTE SQ	ROUTE AEU	ROUTE WR	ROUTE UR	ROUTE AHW	ROUTE DQ	ROUTE CO	ROUTE UF	ROUTE QN	ROUTE QK	ROUTE KD	ROUTE AID
657	ROUTE UR	ROUTE DI	ROUTE QQ	ROUTE UU	ROUTE UL	ROUTE APW	ROUTE TV	ROUTE ANB	ROUTE DE	ROUTE ANG	ROUTE AKP	ROUTE OR	ROUTE UK	ROUTE DR	ROUTE EH	ROUTE ANO	ROUTE AKJ	ROUTE QQ	ROUTE AIC	ROUTE DU	ROUTE SQ	ROUTE UT	ROUTE AUX	ROUTE DQ	ROUTE KN
658	ROUTE ATT	ROUTE UF	ROUTE ALG	ROUTE UF	ROUTE SQ	ROUTE AOE	ROUTE CK	ROUTE UK	ROUTE ANO	ROUTE AES	ROUTE AKJ	ROUTE ANM	ROUTE QF	ROUTE DA	ROUTE AEO	ROUTE AEG	ROUTE ANG	ROUTE OR	ROUTE VV	ROUTE CD	ROUTE UP	ROUTE QR	ROUTE UQ	ROUTE MS	
659	ROUTE QS	ROUTE XC	ROUTE ANK	ROUTE AKL	ROUTE YC	ROUTE XJ	ROUTE VI	ROUTE QD	ROUTE ALB	ROUTE DQ	ROUTE AEM	ROUTE JK	ROUTE UQ	ROUTE WX	ROUTE DR	ROUTE CO	ROUTE HB	ROUTE WW	ROUTE ANQ	ROUTE UR	ROUTE XF	ROUTE QS	ROUTE CO	ROUTE MW	
660	ROUTE XC	ROUTE QQ	ROUTE UU	ROUTE UF	ROUTE XU	ROUTE UF	ROUTE AOK	ROUTE UF	ROUTE UQ	ROUTE ATU	ROUTE ATT	ROUTE ATP	ROUTE MF	ROUTE AX	ROUTE ET	ROUTE AND	ROUTE AEO	ROUTE UF	ROUTE ANG	ROUTE UT	ROUTE DD	ROUTE UT	ROUTE JF	ROUTE CD	
661	ROUTE ATU	ROUTE AUK	ROUTE QO	ROUTE DI	ROUTE DI	ROUTE VO	ROUTE XC	ROUTE AOX	ROUTE QV	ROUTE APS	ROUTE ANM	ROUTE WR	ROUTE DZ	ROUTE QD	ROUTE AVC	ROUTE AZ	ROUTE QD	ROUTE FR	ROUTE XG	ROUTE WX	ROUTE QO	ROUTE QO	ROUTE JR		
662	ROUTE AUE	ROUTE QD	ROUTE SQ	ROUTE DI	ROUTE AFW	ROUTE APQ	ROUTE WX	ROUTE UB	ROUTE OL	ROUTE UN	ROUTE AKG	ROUTE NI	ROUTE ML	ROUTE CS	ROUTE ED	ROUTE ANG	ROUTE AEU	ROUTE UN	ROUTE ANB	ROUTE DY	ROUTE XS	ROUTE WW	ROUTE UP	ROUTE SL	ROUTE DY
663	ROUTE DI	ROUTE UN	ROUTE AMG	ROUTE XI	ROUTE AKL	ROUTE XS	ROUTE ANB	ROUTE PZ	ROUTE AKF	ROUTE WW	ROUTE AEG	ROUTE QQ	ROUTE NB	ROUTE XG	ROUTE KP	ROUTE OR	ROUTE AKG	ROUTE UU	ROUTE GP	ROUTE XI	ROUTE YG	ROUTE AFE	ROUTE SR	ROUTE WW	ROUTE QO
664	ROUTE UF	ROUTE AKL	ROUTE WW	ROUTE UL	ROUTE QO	ROUTE XD	ROUTE XD	ROUTE SQ	ROUTE PZ	ROUTE AUE	ROUTE ET	ROUTE OL	ROUTE NJ	ROUTE XI	ROUTE DN	ROUTE UK	ROUTE AX	ROUTE AKL	ROUTE OL	ROUTE UF	ROUTE XO	ROUTE SL	ROUTE UU	ROUTE DY	ROUTE QS
665	ROUTE QQ	ROUTE ATT	ROUTE ANG	ROUTE QD	ROUTE OV	ROUTE QQ	ROUTE AQI	ROUTE AUG	ROUTE QR	ROUTE DI	ROUTE AQE	ROUTE UR	ROUTE MR	ROUTE DA	ROUTE DZ	ROUTE AKL	ROUTE AEI	ROUTE UL	ROUTE ET	ROUTE QO	ROUTE YE	ROUTE UF	ROUTE QL	ROUTE KJ	ROUTE MG
666	ROUTE QO	ROUTE UL	ROUTE UQ	ROUTE UQ	ROUTE AKJ	ROUTE XM	ROUTE XU	ROUTE UU	ROUTE AES	ROUTE CO	ROUTE AFC	ROUTE AKG	ROUTE MK	ROUTE CD	ROUTE PV	ROUTE OL	ROUTE CF	ROUTE QK	ROUTE ANM	ROUTE AKJ	ROUTE YC	ROUTE QQ	ROUTE OV	ROUTE QO	ROUTE MK
667	ROUTE UN	ROUTE UU	ROUTE QK	ROUTE AKJ	ROUTE XM	ROUTE APK	ROUTE APO	ROUTE QP	ROUTE OH	ROUTE QR	ROUTE ANB	ROUTE MW	ROUTE ES	ROUTE QQ	ROUTE ATG	ROUTE CD	ROUTE SQ	ROUTE FF	ROUTE QQ	ROUTE DU	ROUTE UN	ROUTE UN	ROUTE AID	ROUTE JF	
668	ROUTE UL	ROUTE WW	ROUTE UK	ROUTE OV	ROUTE FR	ROUTE WX	ROUTE XQ	ROUTE WW	ROUTE AEY	ROUTE UU	ROUTE EH	ROUTE ANG	ROUTE DN	ROUTE XU	ROUTE AVF	ROUTE QP	ROUTE OV	ROUTE AND	ROUTE QS	ROUTE EC	ROUTE UU	ROUTE QQ	ROUTE AUG	ROUTE JP	
669	ROUTE AKJ	ROUTE SQ	ROUTE OV	ROUTE QK	ROUTE QK	ROUTE ATQ	ROUTE APU	ROUTE OV	ROUTE AEG	ROUTE DY	ROUTE DY	ROUTE MK	ROUTE GD	ROUTE VX	ROUTE SJ	ROUTE ATM	ROUTE FR	ROUTE AUK	ROUTE QD	ROUTE ATG	ROUTE NZ	ROUTE JW	ROUTE SO		
670	ROUTE UU	ROUTE ATU	ROUTE FR	ROUTE WW	ROUTE QD	ROUTE XG	ROUTE APE	ROUTE DI	ROUTE UB	ROUTE AUG	ROUTE AKL	ROUTE QK	ROUTE APE	ROUTE OV	ROUTE TX	ROUTE NZ	ROUTE QQ	ROUTE ATS	ROUTE NZ	ROUTE DI	ROUTE AGI	ROUTE OV	ROUTE JW	ROUTE SO	
671	ROUTE WW	ROUTE QK	ROUTE QP	ROUTE OR	ROUTE OR	ROUTE XQ	ROUTE VX	ROUTE AKL	ROUTE AEM	ROUTE ATT	ROUTE NZ	ROUTE UL	ROUTE GP	ROUTE HB	ROUTE HF	ROUTE OQ	ROUTE GD	ROUTE UQ	ROUTE OQ	ROUTE UL	ROUTE UU	ROUTE OS	ROUTE UN	ROUTE UN	
672	ROUTE QK	ROUTE AUE	ROUTE NZ	ROUTE AFW	ROUTE XI	ROUTE AOX	ROUTE APS	ROUTE ATO	ROUTE DI	ROUTE AKL	ROUTE ANO	ROUTE ALK	ROUTE MK	ROUTE CO	ROUTE FF	ROUTE AKJ	ROUTE ET	ROUTE AKJ	ROUTE EH	ROUTE UN	ROUTE APE	ROUTE SL	ROUTE UU	ROUTE OY	
673	ROUTE SQ	ROUTE OV	ROUTE OR	ROUTE UK	ROUTE AGI	ROUTE WJ	ROUTE XJ	ROUTE AUX	ROUTE WR	ROUTE UQ	ROUTE APY	ROUTE AID	ROUTE QN	ROUTE CW	ROUTE FR	ROUTE ATI	ROUTE FF	ROUTE AUE	ROUTE ANG	ROUTE XC	ROUTE UQ	ROUTE UL	ROUTE SQ	ROUTE UN	ROUTE AUK
674	ROUTE QV	ROUTE AKJ	ROUTE FF	ROUTE AKG	ROUTE WW	ROUTE VV	ROUTE XP	ROUTE ATP	ROUTE DU	ROUTE OL	ROUTE AEW	ROUTE UU	ROUTE QT	ROUTE UQ	ROUTE AKG	ROUTE AGP	ROUTE OR	ROUTE GO	ROUTE AUX	ROUTE XQ	ROUTE QK	ROUTE FR	ROUTE AUE	ROUTE AUE	
675	ROUTE ATQ	ROUTE UQ	ROUTE AFW	ROUTE ATS	ROUTE UK	ROUTE NZ	ROUTE XM	ROUTE UQ	ROUTE AND	ROUTE AKJ	ROUTE AEQ	ROUTE QT	ROUTE FF	ROUTE DJ	ROUTE RV	ROUTE ATS	ROUTE ES	ROUTE ATT	ROUTE ES	ROUTE AKG	ROUTE XM	ROUTE AUX	ROUTE ATM	ROUTE JK	ROUTE JW
676	ROUTE AUG	ROUTE ATO	ROUTE AKL	ROUTE AGI	ROUTE GP	ROUTE UQ	ROUTE AQA	ROUTE OR	ROUTE CK	ROUTE UK	ROUTE DA	ROUTE ATI	ROUTE AJK	ROUTE EC	ROUTE UB	ROUTE AUP	ROUTE EH	ROUTE UK	ROUTE AKL	ROUTE OV	ROUTE XI	ROUTE ATS	ROUTE QK	ROUTE SQ	ROUTE AKJ
677	ROUTE AKG	ROUTE AUG	ROUTE ATT	ROUTE AGI	ROUTE NZ	ROUTE GP	ROUTE XS	ROUTE UK	ROUTE CW	ROUTE AUX	ROUTE AEK	ROUTE AJG	ROUTE CK	ROUTE CK	ROUTE WR	ROUTE APE	ROUTE AKG	ROUTE APE	ROUTE QK	ROUTE YD	ROUTE ATI	ROUTE UL	ROUTE UK	ROUTE AGI	
678	ROUTE UQ	ROUTE AKG	ROUTE GD	ROUTE AUK	ROUTE AFK	ROUTE XO	ROUTE AQG	ROUTE AKJ	ROUTE ATQ	ROUTE AKG	ROUTE CO	ROUTE ALH	ROUTE FR	ROUTE UK	ROUTE CW	ROUTE GP	ROUTE ADN	ROUTE ATU	ROUTE AKG	ROUTE SQ	ROUTE DI	ROUTE UQ	ROUTE AKJ	ROUTE JK	
679	ROUTE ATP	ROUTE OR	ROUTE AGI	ROUTE NZ	ROUTE AKG	ROUTE AGI	ROUTE ANF	ROUTE ATQ	ROUTE AKL	ROUTE ATQ	ROUTE AUT	ROUTE QN	ROUTE ATM	ROUTE XC	ROUTE AZ	ROUTE AUE	ROUTE ATG	ROUTE OL	ROUTE AFW	ROUTE UU	ROUTE DY	ROUTE OR	ROUTE GD	ROUTE AKL	ROUTE OR
680	ROUTE OR	ROUTE UK	ROUTE ET	ROUTE FR	ROUTE QQ	ROUTE UK	ROUTE APY	ROUTE OL	ROUTE EH	ROUTE ATQ	ROUTE ATQ	ROUTE OQ	ROUTE NI	ROUTE UB	ROUTE DJ	ROUTE ATQ	ROUTE ATI	ROUTE AUG	ROUTE AGI	ROUTE WW	ROUTE DQ	ROUTE OR	ROUTE OR	ROUTE AUK	
681	ROUTE ATQ	ROUTE ATP	ROUTE OL	ROUTE OL	ROUTE FF	ROUTE ET	ROUTE XQ	ROUTE AKG	ROUTE ET	ROUTE OQ	ROUTE GP	ROUTE UQ	ROUTE AJP	ROUTE PZ	ROUTE GH	ROUTE FR	ROUTE AED	ROUTE NZ	ROUTE AFK	ROUTE OR	ROUTE UK	ROUTE ATT	ROUTE FF	ROUTE AGI	ROUTE AFW
682	ROUTE UK	ROUTE ATQ	ROUTE ATS	ROUTE ATU	ROUTE ET	ROUTE FR	ROUTE UH	ROUTE OQ	ROUTE ANB	ROUTE NZ	ROUTE GD	ROUTE ANO	ROUTE AJS	ROUTE DQ	ROUTE DV	ROUTE ATU	ROUTE AVF	ROUTE ATO	ROUTE AKG	ROUTE UQ	ROUTE AFK	ROUTE UK	ROUTE GO	ROUTE OV	ROU

Route AJU = Route 1
Route AJW = Route 2

Mill Creek - Hardin County 345 kV Line
Sensitivity Analysis

Rank	Baseline	50% RES ROW	100% RES ROW	50% 300' RES	100% 300' RES	50% PROP DEV	100% PROP DEV	50% C BLDG	100% C BLDG	50% I BLDG	100% I BLDG	50% School	100% School	50% NRHP	100% NRHP	50% Forests	100% Forests	50% Stream	100% Stream	50% Wetland	100% Wetland	50% Floodplain	100% Floodplain	50% Cost	100% Cost
697	ROUTE WR	ROUTE EH	ROUTE APE	ROUTE GO	ROUTE ATO	ROUTE WR	ROUTE AUT	ROUTE ES	ROUTE NZ	ROUTE ES	ROUTE AFW	ROUTE FF	ROUTE UT	ROUTE FF	ROUTE HD	ROUTE AFK	ROUTE AUK	ROUTE EH	ROUTE ATO	ROUTE EH	ROUTE EH	ROUTE ATP	ROUTE ATP	ROUTE NZ	ROUTE OQ
698	ROUTE EH	ROUTE WR	ROUTE AUE	ROUTE WR	ROUTE AUE	ROUTE APE	ROUTE AVF	ROUTE ATM	ROUTE ATM	ROUTE ATM	ROUTE ATM	ROUTE EH	ROUTE ATI	ROUTE EH	ROUTE WJ	ROUTE ES	ROUTE AUP	ROUTE AUX	ROUTE ATP	ROUTE WR	ROUTE GO	ROUTE AUE	ROUTE ATQ	ROUTE EH	ROUTE GO
699	ROUTE GO	ROUTE GO	ROUTE AUX	ROUTE EH	ROUTE ATQ	ROUTE AVC	ROUTE AUX	ROUTE ATG	ROUTE ATG	ROUTE ATG	ROUTE ATI	ROUTE GO	ROUTE AID	ROUTE GO	ROUTE VV	ROUTE AFE	ROUTE AUT	ROUTE GO	ROUTE ATQ	ROUTE GO	ROUTE WR	ROUTE ATQ	ROUTE AUE	ROUTE GO	ROUTE ES
700	ROUTE ES	ROUTE ES	ROUTE AUG	ROUTE ES	ROUTE AUG	ROUTE AUX	ROUTE AVC	ROUTE ATI	ROUTE ATI	ROUTE ATI	ROUTE ATG	ROUTE ES	ROUTE ANO	ROUTE ES	ROUTE HB	ROUTE AUX	ROUTE AUX	ROUTE ES	ROUTE AUX	ROUTE ES	ROUTE ES	ROUTE AUG	ROUTE AUG	ROUTE ES	ROUTE NZ

DEPARTMENT OF THE ARMY
HEADQUARTERS, US ARMY GARRISON
FORT KNOX, KENTUCKY 40121-5000

REPLY TO
ATTENTION OF:

DEC 0 8 2005

Directorate of Public Works

Mark S. Johnson
Director, Transmission
LG&E Energy LLC
P.O. Box 32020
Louisville, Kentucky 40232

Dear Mr. Johnson:

The three electric transmission routes proposed in your letter of September 28 have been evaluated. I concur with Route #2, following the existing gas line south to the Tip Top substation and the south side of US 60 West to the installation boundary. This route has little to no adverse impact to current or future training at Fort Knox. Proposed routes are identified on attached map.

Proposed Route #1 south of US 60 would segment a major maneuver training area causing significant adverse impact to current and future training and therefore is not acceptable.

Proposed Route #3 is parallel to US 31W on the west side from Muldraugh south to the installation boundary. The height of the electric line and support towers would significantly increase the safety risk factor for rotary and fixed wing aircraft operating from Godman Army Airfield and therefore is not acceptable.

Proposed Route #2 is the recommended route, and no other routes would be agreeable to Fort Knox.

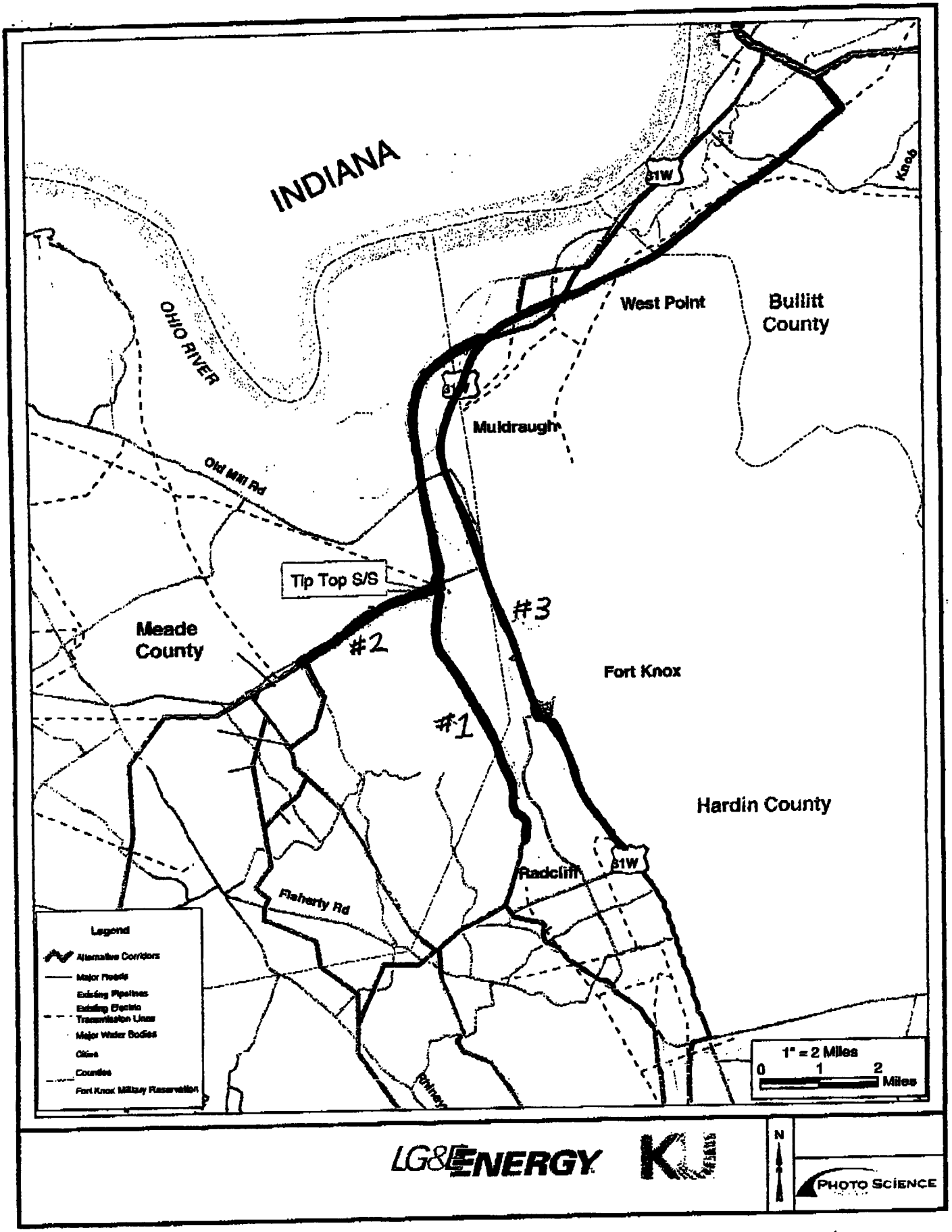
This evaluation should satisfy the Public Service Commission's requirement and allow your project to continue.

Please contact Mr. Bill W. Hickok, 502-624-8515, if you have any questions.

Sincerely,

Mark D. Needham
Colonel, US Army
Garrison Commander

Enclosure


INDIANA
OHIO RIVER
31W
Knob
West Point
Bullitt County
Muldraugh
Old Mill Rd
Tip Top S/S
#3
#2
#1
Meade County
Fort Knox
Hardin County
Radcliff
31W
Flaherty Rd
Legend
Alternative Corridors
Major Roads
Existing Pipelines
Existing Electric Transmission Lines
Major Water Bodies
Cities
Counties
Fort Knox Military Reservation
1" = 2 Miles
0 1 2
Miles
LG&E ENERGY
KU
N
PHOTO SCIENCE

Enclosure

From: McKay, Gregory A LRL [mailto:Gregory.A.McKay@lrl02.usace.army.mil]
Sent: Monday, November 14, 2005 4:47 PM
To: Winkler, Michael
Cc: Devine, Lee Anne LRL
Subject: Tree clearing in transmission line right-of-way

Mr. Winkler,

This is a follow-up to our previous conversations about tree clearing along proposed aerial transmission line corridors that cross federally jurisdictional wetlands. To reiterate, any discharge of dredged or fill material into waters of the U.S., including wetlands, will require a Department of the Army (DA) permit under Section 404 of the Clean Water Act. Similarly, any project involving a crossing of a navigable waterway requires a permit under Section 10 of the Rivers and Harbors Act.

Per our discussions, it is my understanding that you intend to avoid impacts involving the discharge of dredged or fill material in all of the wetlands located along the proposed transmission line corridors. Your projects will require tree clearing within the wetlands but would be limited to felling trees and cutting other vegetation only to ground level. A DA permit is not required in these circumstances, provided no mechanized land clearing is necessary and the sites can be accessed using low ground pressure equipment or construction mats (i.e. no fill is necessary to construct access roads or work platforms). It is my recommendation that all felled trees and other vegetation be left in place where it falls. No windrowing or brush piles should be created. If you determine that it is not possible to complete the project in this manner, you should contact me for further evaluation of the project.

Please contact me if you have any questions or need further clarification.

Greg McKay
Biologist
US Army Corps of Engineers
Louisville District
PO Box 59
Louisville, KY 40201

Phone (502) 315-6685
Fax (502) 315-6677

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3761 Georgetown Road
Frankfort, Kentucky 40601

October 31, 2005

Mr. Mike Winkler
LG&E Energy Corp.
P.O. Box 32010
Louisville, Kentucky 32010

Subject: FWS #06-0109; Technical Assistance Request for a Portion of a Proposed Electric Transmission Line in Hardin County, Kentucky

Dear Mr. Winkler:

Thank you for meeting with us recently regarding Louisville Gas & Electric Company's (LG&E) proposed construction of a section of 345 kV transmission line. LG&E should note that this letter is only in response to the specific section in Hardin County and does not represent the Fish and Wildlife Service (Service) comments for the entire transmission line project. At this time, only a limited amount of information has been submitted to our office regarding the proposed transmission line project. Comments from the Service pertaining to additional areas proposed for construction will be submitted once this office has received further detailed information and survey results. With that said, the intent of our comments is to provide technical assistance to your specific questions regarding the section in Hardin County. Specifically, you have requested our input regarding the original route's proposal to traverse a large pond and adjacent forested wetland complex that has been documented to be utilized heavily by migratory birds and a whooping crane (*Grus americana*) in late February 2005.

LG&E has provided the Service with both an original and alternative route for the proposed transmission line. The alternate route proposed by LG&E would avoid the forested wetland areas and the pond while still remaining on the same property. Based on a site visit by biologists from the Service and Kentucky Department of Fish and Wildlife Resources (KDFWR) on June 13, 2005, it was concluded that high quality habitat for migratory birds (e.g., sandhill cranes, whooping cranes, ducks, geese, etc...) exists on the property. The pond that is proposed to be crossed by the transmission line has both shallow and deep water which provide a food source for a variety of wading/shorebirds and diving waterfowl. Also, the forested wetlands adjacent on both sides of the pond provide additional foraging, roosting/resting, and cover for birds and other wildlife. The forested wetlands are intact with little to no invasive species, and consist of a wide variety of mature hard-mast producing species. These wetlands are also connected to a significantly larger wetland complex found directly south and east of the property visited. We believe that the combination of the forested wetlands, the pond, and the surrounding agriculture create a favorable area for wildlife, thus providing an optimal stopover location for migrating birds.

As mentioned, a whooping crane traveling with several sandhill cranes was documented at the pond during late winter 2005. The whooping crane is known for being the tallest bird in North America standing 5 feet tall. The crane nests in marshy areas among bulrushes, cattails, and sedges that provide protection from predators. When migrating, whooping cranes stop along the way to roost and feed in a variety of wetlands and croplands. Whooping cranes are federally listed as endangered; however, this particular bird is part of an established Nonessential Experimental Population (NEP) of whooping cranes from Florida. NEPs are the most common and flexible type of experimental population established by the Service because they allow for the reintroduction and protection of species, but their associated regulatory burden is far less stringent. The federal NEP rule was necessary to carry out the Whooping Crane Eastern reintroduction. Even though NEP whooping cranes are not afforded the same kind of protection as an endangered whooping crane, these birds are still extremely valuable for the species' recovery efforts. Because suitable habitat for the whooping crane exists in Hardin County and has been documented on the pond and adjacent wetlands in question, we have strongly encouraged LG&E to make every effort to avoid transmission line construction in areas that may provide suitable habitat for whooping cranes.

In an effort to meet the Service's recommendations regarding migratory birds, LG&E has proposed an alternate route for the transmission line, which would be considered the "least damaging to the environment" alternative. The alternate transmission line corridor would utilize an open field to the north and east of the pond and would avoid impacting all of the forested wetland areas while still remaining on the same property ownership. Based on habitat characterization work done by the Service in occupied whooping crane habitat, we have determined that a 328-foot buffer is required between foraging roosting/resting sites and transmission line structures in order to avoid collisions with transmission lines. This is because birds, especially large birds such as cranes, herons, and egrets, are not adept at avoiding such lines. In order to prevent collisions, diverter devices can be placed on the transmission lines to increase line visibility to the birds and divert them away. The alternate route proposed would exceed the buffer requirement by 72 feet, thus negating the need for any mitigative measures such as bird flight diverters. With the documented large number of shorebirds and waterfowl that have used the pond and adjacent wetlands in the past and because the pond's future use by migratory birds is highly probable based on the available surrounding cover, foraging, and resting/roosting habitat, the Service strongly recommends that LG&E select the alternate route as the preferred alternative.

The original proposed transmission corridor would cross a large portion of the forested wetlands adjacent to the pond on the property and also span the pond. A 200-foot right-of-way (ROW) is also proposed for the transmission line, which would require clearing of trees and maintenance activities. We recommend that all woody vegetation be left inside the ROW and only the trees classified as hazard trees be topped to fifteen feet and girdled in order to provide habitat for wildlife such as other migratory birds and small mammals. In order to maintain the habitat within the ROW, we have provided below recommendations LG&E should consider implementing during regularly scheduled maintenance activities for the ROW.

1. No removal or felling of trees that are 6-inches in diameter or larger and that have loose bark, exfoliating bark, and/or broken branches should occur between April 1 and October 31.
2. No removal or side-trimming of tree branches that are larger than 4-inches and that have dead or loose bark should occur between April 1 and October 31.
3. No use of herbicides should occur.

As mentioned earlier, forested wetlands provide important foraging and roosting habitat for whooping cranes, but they also provide cover and foraging habitat for other wildlife such as deer, turkey, and migratory birds. Based on the information provided to us, the ROW would result in the loss of a substantial amount of mature hard-mast producing trees which would in turn decrease the quality of the wetlands and reduce the forage base for wildlife. Therefore, we would recommend LG&E consider off-site protection of similar quality habitat within the same watershed as mitigation for the loss of such important resources. We offer our assistance in identifying and selecting suitable properties, if necessary.

In addition to the above mentioned mitigation measures, the Service also recommends that LG&E use bird diverting structures over the section of transmission line proposed to span the pond in order to reduce the potential for avian collisions if the original transmission line route is used. If LG&E decides to adopt the alternative route instead of the original route, bird-diverting devices would not be necessary. However, if the original route is chosen, this office will provide more detailed information to LG&E on the number, type, and positioning of bird diverter structures that will need to be used in order to minimize avian collisions associated with the transmission line.

Thank you for the opportunity to provide comments on this specific request for technical assistance. We look forward to further coordinating with LG&E and providing additional recommendations for mitigation measures if the original route is chosen. The comments we have provided to you in this letter have been in coordination with the Kentucky Department for Fish and Wildlife Resources. If you have any questions regarding the information that we have provided, please contact Mindi Lawson at (502) 695-0468 (ext. 229).

Sincerely,

Virgil Lee Andrews

Virgil Lee Andrews, Jr.
Field Supervisor

cc: Mr. Mike Hardin, KDFWR, Frankfort, KY

KENTUCKY COMMERCE CABINET
DEPARTMENT OF FISH & WILDLIFE RESOURCES

Ernie Fletcher
Governor

#1 Game Farm Road
Frankfort, Kentucky 40601
Phone (502) 564-3400
(800) 858-1549
Fax (502) 564-0506
www.kentucky.gov

W. James Host
Secretary

Dr. Jonathan W. Gassett
Commissioner

November 7, 2005

Mr. Mike Winkler
LG&E Energy Corp.
P.O. Box 32010
Louisville, Kentucky 32010

RE: Technical Assistance Request for a Portion of a Proposed LG& E Electric Transmission Line in Hardin County, Kentucky

Dear Mr. Winkler:

We appreciate the opportunity to work with the Louisville Gas & Electric Company (LG &E) and the United States Fish & Wildlife Service Kentucky Field Office (USFWS) concerning a specific section of a proposed 345 kV transmission line. Accordingly, we offer the following project summary and recommendations.

On May 16th, 2005 LG&E met USFWS and KDFWR to discuss a proposed transmission line that would extend from Mill Creek in Jefferson County to Hardin County. LG&E has expressed concern about a wetland complex located in Hardin County that had been used by a whooping crane (*Grus Americana*) and requested technical guidance on this specific issue relative to the proposed project. On June 13th, 2005 biologists from the USFWS and KDFWR visited the site in question. Based on this site visit we determined that habitat for migratory birds do exist in the wetlands within the project vicinity. The pond and the adjacent forested wetland provide a favorable habitat for migratory birds. The corridor initially proposed would fragment the forested wetlands and traverse the pond, making it difficult for migratory birds to land. The transmission lines could pose a risk of mortality to large migratory birds such as cranes, egrets, and herons as initially proposed. In an effort to avoid impacts to migratory birds and the wetland complex LG&E has proposed an alternate route that would be the "least damaging to the environment". The alternate route would avoid the wetland complex by crossing an open field to the north and east of the pond. We believe the alternate transmission line route would significantly reduce the risk to migratory birds and would negate the need for additional mitigative measures.

The Kentucky Department of Fish and Wildlife Resources concurs with the recommendations and findings provided by the U. S. Fish & Wildlife Service in their guidance

letter to LG&E dated October 31, 2005. We recommend the selection of the alternate route. In the event that the original route is chosen we request the adoption of mitigative measures recommended by USFWS and request that LG&E continue to work with us to minimize impacts to the wetland complex and migratory birds.

We appreciate the opportunity to comment on this specific request for technical guidance. Should you require any additional information, please contact Doug Dawson at 502/564-7109, ext. 366.

Sincerely,

Mike Hardin,
Environmental Section Chief

MDH/DAD

cc: Lee Andrews, USFWS, Frankfort, KY
Environmental Section Files

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	CASE NO. 2005-00467

DIRECT TESTIMONY OF BRANDON GRILLON E.ON U.S. SERVICES INC.

Filed: December 22, 2005

Q. Please state your name, position and business address.

A. My name is Brandon Grillon. I am Senior Transmission Engineer for E.ON U.S. Services, Inc. on behalf of Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively the "Companies"). My business address is One Quality Street, Lexington, Kentucky 40507. My background and work experience are described in Appendix A.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe how data was gathered and analyzed in connection with the process by which the Companies evaluated potential routes for the proposed transmission facilities in this proceeding.

Q. Please describe how the Companies gathered data for the analysis of the alternative routes for the line that is the subject of this proceeding.

A. As Mr. Johnson states in his testimony, we identified an area of inquiry that is bounded by the easternmost and westernmost routes with approximately 100% collocation. Those routes may be seen as the outer routes on Application Exhibit 4. We were able to use the USGS topographic quadrangle maps, aerial photography, GIS information from publicly available resources such as the Kentucky Division of Geographic Information, National Park's National Registry of Historic Places, and digital parcels from the county property valuation administrator offices, and heads up digitized data from the aerial photography collected by Photo Science, Inc. in connection with Case No. 2005-00142 to prepare the maps and evaluate the routes. We identified 1,203 routes within the area of inquiry.

Q. After the potential routes were identified what was done?

A. After identifying the routes, data was compiled on each of these routes by Photo Science. We estimated the percent of each route that would be collocated with other transmission lines, pipelines or roads through the heads up digitization of aerial photography, field visits, and available GIS data from the Commission. That information was compiled in a spreadsheet for comparison purposes and is designated as Exhibit MSJ-1.

Q. What was the next step in the process?

A. We made cost estimates of the routes. We used historical construction and material data along with recently quoted material and labor prices to estimate the costs of the lines evaluated. In these estimates we also made the assumption of using 100% of fair market value according to public records in the property valuation administrators' offices to estimate the values of the easements for route comparison purposes only. That information was compiled in the spreadsheet designated as Exhibit MSJ-1 for comparison purposes.

Q. With whom did you work in compiling and evaluating the data described above?

A. I worked with the Companies' transmission line services personnel, real estate and right of way, environmental affairs and regulatory personnel and Photo Science, Inc. compiling and evaluating data for the Companies' decision-making process. In addition, I compiled data for Clayton M. Doherty, a contractor with Photo Science who also prepared a report that is filed in this proceeding and that contains an additional analysis of the route selection process.

Q. Did Mr. Doherty include the data that you helped to gather in his Report?

A. Yes. The data for all 1,203 routes is included in a CD Appendix to Mr. Doherty's Report.

Q. Have the Companies determined the type of transmission structures that will be utilized in the construction of the line?

A. Yes. Application Exhibit 3 contains diagrams of the typical types of structures that we anticipate using on this project. The structure required at any location along the route is primarily driven by the angle between the line "coming into" the tower and the line "going out of" the tower. To state it in non-technical terms, tighter turns require stronger towers. Exhibit 3 shows different structures for the typical tension tower, the typical large angle tower, and the typical tangent tower that we expect to utilize at various junctures along the route.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF FAYETTE)

The undersigned, Brandon Grillon, being duly sworn, deposes and says he is Senior Transmission Engineer for E.ON U.S. Services, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Brandon Grillon

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 19 day of December, 2005.

(SEAL)
Notary Public

My Commission Expires:
March 24-2009

Appendix A

Benjamin Brandon Grillon

Senior Transmission Engineer
E.ON U.S. Services, Inc.
One Quality Street
Lexington, Kentucky 40507

Education and Certifications

University of Kentucky, B.S. in Civil Engineering – 1998
Professional Engineering Certification – 2003

Previous Positions

Messer Construction Company, Lexington, Kentucky
1998-1999 Project Engineer

Kentucky Utilities Company, Lexington, Kentucky
1995-1998 Student Engineer

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	CASE NO. 2005-00467

DIRECT TESTIMONY OF CLAYTON M. DOHERTY LINEAR PROJECTS, INC.

Filed: December 22, 2005

Q. Please state your name, position and business address.

A. My name is Clayton M. Doherty. I hold the position of President of Linear Projects, Inc. My business address is 608 Herb River Drive, Savannah, Georgia 31406-3217. A statement of my qualifications is attached as Appendix A.

Q. What is the purpose of your testimony?

A. My testimony will introduce the report which I prepared as a contractor for Photo Science, Inc. detailing the route evaluation process used by me to test and confirm the routes selected by Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively, the "Companies") for a new 345 kV transmission line proposed to be constructed by the Companies from LG&E's Mill Creek Generating Station (the "Mill Creek Station") to KU's Hardin County Substation.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring Exhibit CMD-1, Route Analysis and Evaluation, Mill Creek – Hardin County 345 kV Transmission Line dated December 2005 (the "Report").

Q. How was the Report prepared?

A. The specific steps in its preparation are set forth in the Report. I obtained information from Photo Science and from Brandon Grillon, a member of the Companies' transmission line services group in Lexington, Kentucky, and other engineering and regulatory personnel with the Companies which I used in the preparation of the Report.

Q. What is your conclusion with respect to the analysis of the possible routes for the line from the Mill Creek Station to the Hardin County Substation?

A. I have concluded that the two routes selected by the Companies are reasonable routes for the transmission line. They are designated as the Mill Creek to Hardin County Route No. 1 (Route AJU in the Report) and the Mill Creek to Hardin County Route No. 2 (Route AJW in the Report). I understand that the Companies have stated that they prefer to construct the line along Route No. 1. I agree that it is the preferred route and I believe that such route is reasonable and does not amount to wasteful duplication. In my opinion, this Commission should grant the Companies' requested Certificate of Public Convenience and Necessity ("CCN") for the Mill Creek to Hardin County Route No. 1. If the Commission, however, chooses not to grant a CCN for Route No. 1, then the Mill Creek to Hardin County Route No. 2 is also a reasonable route, does not amount to wasteful duplication and is one for which a CCN should be granted.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

STATE OF GEORGIA)
)
COUNTY OF Chatham) **SS:**

The undersigned, Clayton M. Doherty, being duly sworn, deposes and says he is President of Linear Projects, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Clayton M. Doherty

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 19th day of December, 2005.

Lauren Williams
(SEAL)
Notary Public

My Commission Expires:
2/24/09

APPENDIX A

CLAYTON M. DOHERTY

Linear Projects, Inc.
608 Herb River Drive
Savannah, GA 31406

Experience

Environmental & Regulatory Coordinator, electric transmission line and substation projects (1986-2001; 2005 – present). Manage land planning and environmental and regulatory compliance activities on over one hundred significant electric utility projects ($300,000 - $56,000,000). Conduct land use analysis; identify regulatory requirements; siting and routing studies; obtain local, state, and federal approvals. Prepare environmental reports and environmental assessments. Public scoping meetings, public officials briefings, agency coordination, expert witness testimony.

Senior Planner, City of Key West: zoning and land use, variance analysis, and development plan review. Prepare staff reports to planning board and city commission. Update City of Key West 2004 Statistical Abstract. State and federal emergency management training and exercises. Migrate planning department GIS software from ArcView 3.3 to ArcGIS 8.2.

Expertise

Prepare alternatives analyses and site/route selection documentation. Identify federal, state, and local government regulatory requirements. Initiate and manage contracts for environmental, cultural resource, and special needs surveys. Present land use and environmental considerations in project team meetings, public meetings, elected officials briefings, and government agency consultations. Develop and implement strategies for resolving complex regulatory compliance issues. Prepare environmental reports, environmental assessments and regulatory permit applications.

Technical editing of complex environmental and planning documents.

Analyze zoning and land use issues. Research and apply land development regulations. Determine project consistency with local government comprehensive plans.

Policy Groups

Secretary-Treasurer and Board Member, *The National Wetlands Coalition.*
Board Member, *National Endangered Species Act Reform Coalition.*
Policy Committee and Section 404 Task Force, *Utility Water Act Group.*
Corporate Liaison, *National Rural Electric Environmental Association.*

Employment

Linear Projects, Inc. Savannah, GA 31406. 2005 - present.
City of Key West Planning Department. Key West, FL 33040. 2003 - 2004.
Georgia Transmission Corporation. Tucker, GA 30084. 1986 - 2001.
Park-Land Planners, Ltd. Atlanta, GA. 1985 - 1986.
Takeda Landscape Design. Seattle, WA. 1984 - 1985.

Education

Master of Landscape Architecture, 1983. School of Environmental Design, University of Georgia. Thesis passed with distinction. Graduate electives in Land Planning and Historic Preservation.

Bachelor of Arts, English, with General Honors, 1971. College of Arts and Sciences, University of Georgia.

Benedictine Military School. Savannah, GA. 1967.

Training

Federal Wetland Regulation. Wetland Training Institute [1990].

National Environmental Policy Act. Hunton & Williams [1990].

Wetland Functions and Values. Wetland Training Institute [1992].

Advanced Wetland Delineation. Wetland Training Institute [1993].

Medusa (Unix-based CAD) Rev. 13. [1994].

Total Quality Management. Qualtec Institute for Competitive Advantage [1994].

The Role of Environmental Audits and Site Assessments in Property Transfers. Georgia Tech [1994].

Introduction to Federal Projects and Historic Preservation Law. GSA Interagency Training [1995].

Advanced Seminar on Preparing Agreement Documents (NHPA Section 106). GSA Interagency Training [1997].

Introduction to ArcView GIS. ESRI [1999].

Community Emergency Response Team (CERT) - Train the Trainer. Florida Dept. of Community Affairs [2003].

Governor's Hurricane Conference. Florida Dept. of Community Affairs and Florida Emergency Preparedness Association [2003].

National Interagency Incident Management System (NIIMS) Incident Command System (ICS). U.S. Coast Guard [2003].

Introduction to ArcGIS. Photo Science, Inc. / ESRI [2004].

PC Training. Excel; Word; Access; PowerPoint; Desktop Publishing.

Corporate Culture Training. Team Building; Conflict Management; Giving and Receiving Feedback; Negotiating; Writing Goals and Objectives; Essentials of Project Management; Tools and Concepts for Continuous Improvement.

Community

Rotary International. Community Service Committee Member and Fundraising Event Treasurer, Savannah Sunrise Rotary, 2004-present. Sunrise Rotary Club of the Conch Republic (Key West), 2003 - 2004.

Martin des Porres Society. Volunteer, 2004 - present.

Habitat for Humanity. Board Member and Chair, Site Selection Committee, Habitat for Humanity of Key West and the Lower Florida Keys [2002-2004].

TRANSMISSION PROJECTS

NEW TRANSMISSION LINES

Siting Studies and Environmental Reports

- Warrenton – Cedar Rock 115 kV Transmission Line
- Clark Road 115 kV Transmission Line Loop
- Gum Log Tap 115 kV Transmission Line
- Huntsville – Battlefield 115 kV Transmission Line
- Nord Kaolin Tap 115 kV Transmission Line
- Douglasville – Groover Lake – Factory Shoals 115 kV Transmission Line
- Due West – Brookstone – Cobb Water 115 kV Transmission Line
- Copper Pine Tap 46 kV Transmission Line
- Mitchell Prison Tap 46 kV Transmission Line
- Lost Mountain – Due West Tap 115 kV Transmission Line
- Peavey Tap 46 kV Transmission Line
- Brookstone Loop 115 kV Transmission Line Loop
- Big Canoe – Juno 115 kV Transmission Line
- Doles Tap 115 kV Transmission Line
- Georgia Feed Tap 46 kV Transmission Line
- Northeast Emanuel Tap 46 kV Transmission Line
- Jimps Tap 115 kV Transmission Line
- Morris Express Feeder 46 kV Transmission Line
- Sunset – Tallokas 115 kV Transmission Line
- ECI Tap 46 kV Transmission Line
- Collins Chip Mill Tap 115 kV Transmission Line
- Offerman Chip Mill Tap 115 kV Transmission Line
- Georgia Chip Mill Tap 115 kV Transmission Line
- Hopeful – Mount Olive 46 kV Transmission Line
- Sapelo River Tap 46 kV Transmission Line
- Barnesville Chip Mill Tap 69 kV Transmission Line
- North Lakeland Tap 115 kV Transmission Line
- Cane Creek – Juno 115 kV Transmission Line
- Town Creek 115 kV Transmission Line
- Long Reach Tap 115 kV Transmission Line
- North Americus – Weyerhaeuser 115 kV Transmission Line
- St. George Tap 115 kV Transmission Line
- Langboard Tap 115 kV Transmission Line
- Willacoochee – Langboard 46 kV Transmission Line
- Flint Headquarters Tap 46 kV Transmission Line
- SKC – Covington #3 115 kV Transmission Line
- Hercules – SKC 115 kV Transmission Line
- Rumble Road Loop 115 kV Transmission Line
- Tank Road Tap 115 kV Transmission Line
- Palmyra – Century 115 kV Transmission Line
- Georgia Feed Bio – Filter Tap
- Douglas – Baker Highway 115 kV Transmission Line

- Sterling Creek Tap 115 kV Transmission Line
- Baker Highway – Langboard 115 kV Transmission Line
- St. George – Macedonia 115 kV Transmission Line
- Willacoochee Tap 115 kV Transmission Line
- Millen – Midville 115 kV Transmission Line Rebuild
- Flint River – Smithville – Americus 115 kV Transmission Line Rebuild
- Rumble Road – Forsyth #2 115 kV Transmission Line Rebuild
- South Covington Tap 115 kV Transmission Line
- Arlington Junction – Crestview 115 kV Transmission Line
- Dailey Mill Tap 115 kV Transmission Line
- Nashville #1 – Weber 115 kV Transmission Line
- Barnesville Primary – Barnesville #1 115 kV Transmission Line
- Aldora Mills – Barnesville #2 115 kV Transmission Line
- East Moultrie – West Valdosta 230 kV Transmission Line

In Progress

Siting Studies, Environmental Assessments, and Regulatory Permitting

- Environmental Assessment for Granting a Utility Easement on Ft. Knox
- Clearing Specifications for proposed Fort Knox easement
- Siting Study for proposed Mill Creek – Hardin County 345 kV Transmission Line

TRANSMISSION LINE RELOCATIONS AND MODIFICATIONS

Siting Studies and Environmental Reports

- Huntsville – Battlefield Tap 115 kV Transmission Line Rebuild
- Martins Landing – Holcomb Bridge 230 kV Transmission Line Rebuild and Relocation
- Due West Tap 115 kV Transmission Line Relocation
- Lost Mountain – Powder Springs 115 kV Transmission Line Relocation
- Millen – Midville 46 kV Transmission Line Modification
- Asbury – Nord Kaolin 115 kV Transmission Line Relocation
- Flint River – Smithville 115 kV Transmission Line Relocation
- Tallokas – Berlin 46 kV Transmission Line Relocation and Modification
- Branch – Bonaire 230 kV Transmission Line Modification
- Cedar Creek Tap 115 kV Transmission Line Modification
- Pine Grove – Thomasville 230 kV Transmission Line Modification
- Northrop B 115 kV Transmission Line Relocation
- Lumpkin – Providence 46 kV Transmission Line

NEW SUBSTATIONS

Siting Studies and Environmental Reports

- Reno (Grady County EMC #15) 115/25 kV Substation
- Roddenberry (Grady County EMC #16) 115/25 kV Substation

- Cedar Rock 115/46 kV Transmission Substation
- Clark Road (Jefferson EMC #20) 115/12 kV Substation
- Gum Log (Hart County EMC #15) 115/25 kV Substation
- Battlefield (GreyStone Power #23) 115/25 kV Substation
- Groover Lake (GreyStone Power #24) 115/25 kV Substation
- Nord Kaolin (Oconee EMC #14) 115/25 kV Substation
- Bleckley (Ocmulgee EMC #10) 115/25 kV Substation
- Webb Road (Troup EMC #18) 115/25 kV Substation
- Lake Arrowhead (Amicalola EMC #14) 115/12 kV Substation
- Copper Pine (Jackson EMC #5) 46/25 kV Substation
- Brookstone (Cobb EMC #30) 115/12 kV Substation
- Mitchell Prison (Mitchell EMC #21) 46/12 kV Substation
- Peavey (Middle Georgia EMC #10) 46/25 kV Substation
- Dasher (Colquitt EMC #14) 115/25 kV Substation
- Juno (Amicalola EMC #16) 115/25 kV Substation
- Azalea Park (Colquitt EMC #30) 115/25 kV Substation
- Pavo (Grady County EMC #10) 69/12 kV Substation
- Doles (Mitchell EMC #7) 115/25 kV Substation
- Georgia Feed (Pataula EMC #7) 46/0.48 kV Substation
- Stillmore (Excelsior EMC #6; Altamaha EMC #18) 115/12x25 kV Substation
- East Thomson (Jefferson EMC #27) 115/25 kV Substation
- Northeast Emanuel (Excelsior EMC #7) 46/12 kV Substation
- North Thomas (Grady County EMC #22) 12 kV Switching Station
- Wright's Chapel (Slash Pine EMC #11) 115/25 kV Substation
- Jimps (Excelsior EMC #13) 115/12 kV Substation
- Ellabelle (Canoochee EMC #13) 115/25 kV Substation
- East Warrenton (Jefferson EMC #28) 115/25 kV Substation
- ECI (Excelsior EMC #3) 46/25 kV Substation
- Banks Creek (Excelsior EMC #5) 115/25 kV Substation
- Pony Express (Snapping Shoals EMC #10) 46/12 kV Substation
- Collins Chip Mill (The Satilla REMC #10) 115/4.16 kV Substation
- Offerman Chip Mill (The Satilla REMC #11) 115/4.16 kV Substation
- Georgia Chip Mill (Ocmulgee EMC #12) 46/4.16 kV Substation
- North Dudley (Oconee EMC #3) 46/25 kV Substation
- Sleepy Hollow (Flint EMC #2) 115/25 kV Substation
- Sapelo River (Coastal EMC #1) 46/25 kV Substation
- Barnesville Chip Mill (Lamar EMC #14) 69/4.16 kV Substation
- Sterling Pulp (Colquitt EMC #31) 230/25 kV Substation
- North Lakeland (Slash Pine EMC #1) 115/25 kV Substation
- Browntown (Okefenoke REMC #15) 115/25 kV Substation
- Town Creek (Tri-County EMC #9) 115/12 kV Substation
- Long Reach (Coastal EMC #9) 115/25 kV Substation
- North Zebulon (Lamar EMC #15) 46/12 kV (115 spec.) Substation
- Kirkland (Snapping Shoals EMC #3) 230/25 kV Substation
- Wesley (Flint EMC #7) 115/25 kV Substation
- St. George (Okefenoke REMC #16) 115/25 kV Substation
- Langboard Temporary (The Satilla REMC #5) 46/25 kV Substation
- Langboard (The Satilla REMC #5) 115/46/12 kV Substation

- West Newton (Mitchell EMC #23) 46/25 kV Substation
- Gunns (Washington EMC #14) 46/14.4 kV Substation
- Flint Headquarters (Flint EMC #18) 46/12 kV Substation
- SKC America Temporary (Snapping Shoals EMC #20) 46/25 kV Substation
- Mesena (Jefferson EMC #29) 46/25 kV (115 spec.) Substation
- Camilla (Mitchell EMC #1) 46/25 kV Substation
- North Nicholls (The Satilla REMC #23) 115/25 kV Substation
- Highway 99 (Okefenoke REMC #17) 115/25 kV Substation
- South Glennville (Canoochee EMC #8) 115/25 kV Substation
- Tobesofke Creek (Lamar EMC #2) 69/12 kV (115 spec.) Substation
- West Wrightsville (Washington EMC #4) 46/25 kV Substation
- Tank Road (The Satilla REMC #14) 115/25 kV Substation
- New Sumner (Mitchell EMC #24) 46/25 kV (115 spec.) Substation
- Hangdog Crossing (Grady County EMC #3) 69/25 kV Switching Station
- Pinetucky (Jefferson EMC #1) 46/25 Substation
- College Avenue (The Satilla REMC #24) 115/25 Substation
- Baker Highway (The Satilla REMC #15) 115/25 kV Substation
- Gunn Road (Flint EMC #19) 230/12 kV Substation
- Cookville (Sumter EMC #26) 115/25 kV Substation
- Best Buy (Little Ocmulgee EMC #11) 46/12 kV Substation
- Sterling Creek (Coastal EMC #10) 115/25 kV Substation
- Kinards Mill (Central Georgia EMC #10) 115/25 kV Substation
- Highway 127 (Flint EMC #40) 115/12 kV Substation
- South Covington (Snapping Shoals EMC #7) 115/25 kV Substation
- Crestview (Mitchell EMC #12) 46/12 kV Substation
- Dailey Mill (Central Georgia EMC #3) 115/25 kV Substation
- Weber (Colquitt EMC #32) 115/25 kV Substation

SUBSTATIONS SITE ADVANCED LAND PURCHASES

Siting Studies

- Lake Arrowhead (Amicalola EMC #14) 115/12 kV Substation
- Juno (Amicalola EMC #16) 115/25 kV Substation
- Lavender Road (Jackson EMC #36) 115/25 kV Substation
- St. George (Okefenoke REMC #2) 115/25 kV Substation
- Brookstone (Cobb EMC #30) 115/12 kV Substation
- Highway 127 (Flint EMC #18) 115/12 kV Substation
- Peeksville (Central Georgia EMC #4) 115/25 kV Substation

SUBSTATION MODIFICATIONS

Environmental Reports

- Hi-Hat (Okefenoke REMC #10) 115/25 kV Substation
- Lost Mountain (Cobb EMC #12) 115/12 kV Substation
- Lanes Bridge (Satilla EMC #12) 46/25 kV Substation

- Pine Grove (Satilla EMC #1) 115/25 kV Substation
- Brookfield (Colquitt EMC #6) 46/25 kV Substation
- Willacoochee (Satilla REMC #6) 46/25 kV Substation
- Highway 301 (Excelsior EMC #7) 46/25 kV Substation
- Dublin (Altamaha EMC #4) 46/25 kV Substation
- Quitman (Colquitt EMC #13) 69/12 kV Substation (drainage)
- Screven (Satilla REMC #13) 115/25 kV Substation
- Snipesville (Satilla REMC #4) 46/25 kV Substation
- Jimps (Excelsior EMC #13) 115/25 kV Substation
- Quitman (Colquitt EMC #13) 69/12 kV Substation (capacity)
- Hawkinsville #1 (Middle Georgia EMC #5) 46/25 kV Substation
- North Dudley (Oconee EMC #3) 46/25 kV Substation
- South Brooks (Colquitt EMC #20) 69/25 kV Substation
- Pavo (Grady EMC #10) 69/12 kV Substation
- Rose Hill (Colquitt EMC #19) 115/25 kV Substation
- East Wrightsville (Washington EMC #3) 46/25 kV Substation
- West Thomson (Jefferson EMC #8) 46/25 kV Substation
- Hopeful (Mitchell EMC #8) 46/25 kV Substation
- Forrest Road (ITS) 115/69/12 kV Substation (cap bank)
- Charing (Flint EMC #6) 46/25 kV Substation
- Forrest Road (ITS) 115/69/12 kV Substation (third feeder)
- West Homerville (Slash Pine #7) 115/25 kV Substation
- Bolingbroke (Central Georgia EMC #11) 115/12 kV Substation
- Smarr (Central Georgia EMC #22) 115/12 kV Substation
- Geneva (Flint EMC #9) 46/25 kV Substation
- Century (Sumter #10) 115/12 kV Substation
- Tallokas (Colquitt EMC #7) 46/25 kV Substation
- Hangdog Crossing (Grady EMC #3) 115/25 kV Substation
- Roddenbery (Grady EMC #16) 115/25 kV Substation
- Georgia Feed (Pataula EMC #8) 46/0.48 kV Substation
- West Leslie (Sumter #7) 46/25 kV Substation
- Cool Branch (Pataula EMC #7) 46/12 kV Substation
- Culloden (Lamar EMC #6) 115/12 kV Substation

GENERATION PROJECTS

HYDROELECTRIC FACILITIES

Tallassee Shoals Hydroelectric Project

- GaDNR Surface Water Withdrawal Permit Revision
- FERC Post-Construction Aquatic Sampling Program
- FERC Filing: Minimum Instantaneous Flow Issue
- FERC Filing: Site Planning for Public Access Area
- FERC Filing: Revision to Public Access Plan
- GaDNR Annual Surface Water Withdrawal Reports
- FERC Annual Minimum Instantaneous Flow Compliance Reports

Pickens County Pumped Storage Hydroelectric Project

Transmission Line Macro-Corridor Study

- Siting Methodology Development
- Preliminary Data Collection
- Constraint Mapping and Analysis
- Macro-Corridor Selection

COGENERATION FACILITIES

Stone Container Corporation Cogeneration Project

Transmission Line Macro-Corridor Study

FOSSIL FUEL FACILITIES

Plants Wansley and Scherer

Dual Rail Service Development Study Group

MISCELLANEOUS PROJECT SUPPORT

FACILITY SITE PLANNING

- Electric Cooperative Training Center, Smarr, GA
- Public Access Areas: Tallassee Shoals Hydroelectric Project
- Hephzibah Regional Operating Headquarters: Jefferson EMC

LANDSCAPE PLANS

- Reno Substation
- Tallassee Shoals Public Access Area
- Sugarloaf Substation
- Northeast Emanuel Substation
- Ellabelle Substation

INDUSTRIAL PARK FEASIBILITY STUDIES

- Winder-Barrow County Airport Industrial Park (complete)
- Banks Crossing Industrial Park (inventory and analysis)
- Unadilla Industrial Park (inventory and analysis)

PSC AND LOCAL ZONING RESEARCH

- Virginia City – Clinch River 138 kV Transmission Line

TECHNICAL EDITING

Decentralized Stormwater Controls for Urban Retrofit and CSO Reduction, Low Impact Development, Inc., Water Environment Research Foundation.

EMC SUPPORT

ENVIRONMENTAL ASSESSMENTS

- Hephzibah Regional Operating Headquarters, Jefferson EMC

ENVIRONMENTAL PERMITTING

- Section 10 Permit, Kings Ferry Crossing, St. Mary's River, Okefenoke REMC
- Section 10 Permit, St. George Crossing, St. Mary's River, Okefenoke REMC

ENVIRONMENTAL ISSUES

- EPRI EMDEX Project Site Coordinator (EMF Exposure Assessment Project, 1988-1989)
- Clean Water Act/Wetlands Delineation, Functional Assessment, and Permitting
- Section 7 Interagency Coordination, Endangered Species Act
- Section 106 and Agreement Documents

PROFESSIONAL AFFILIATIONS

- Secretary-Treasurer, Board of Directors, and Director of Membership Development, The National Wetlands Coalition, 1994 - 2001.
- Board of Directors, National Endangered Species Act Reform Coalition, 1995 - 1996.
- Chairman, Water Quality Subcommittee, G&T Manager's Association Technical Advisory Committee, 1996 - 1999.
- Member, Transmission Environmental Subcommittee, G&T Manager's Association Technical Advisory Committee, 1996 - 1999.
- Member, Policy Committee, Utility Water Act Group, 1994 - 1996.
- Member, Section 404 Task Force, Utility Water Act Group, 1994 - 1996.
- Member, Society of Wetlands Scientists, 1991-2001.
- EMDEX Site Coordinator, EPRI EMDEX Project, 1988-1989.
- Mobile River Basin Aquatic Ecosystem Recovery Plan Coalition, 1995 - 1996.
- Newsletter Editor for the Professional Environmental Marketing Association, 1995 - 1996.
- National Rural Electric Environmental Association, 1994 - 1997.
- American Water Resources Association, 1998.

TRAINING

- EPRI EMDEX Project Workshops. Boston, Dallas, and Palo Alto. 1988-1989.
- Electric Utilities: Environmental Compliance. R. W. Beck & Assoc. American Public Power Association. Atlanta, GA. 1989.
- Federal Wetland Regulation. Wetland Training Institute, Savannah, GA. 1990.

- National Environmental Policy Act. Hunton & Williams, Atlanta, GA. 1990.
- Wetland Functions and Values. Wetland Training Institute, Seattle, WA. 1992.
- Advanced Wetland Delineation. Wetland Training Institute, Charleston, SC. 1993.
- EPRI Wetlands Ecology and Management (WEM) Project. Palo Alto, CA. 1993.
- Medusa Rev. 13 (Unix-based CAD). 1994
- TQM Team Member Training, Qualtec Institute for Competitive Advantage, Atlanta, GA. 1994.
- The Role of Environmental Audits and Site Assessments in Property Transfers. Georgia Institute of Technology, Atlanta, GA. 1994.
- Introduction to Federal Projects and Historic Preservation Law. GSA Interagency Training, Memphis, TN. 1995.
- Advanced Seminar on Preparing Agreement Documents (National Historic Preservation Act Section 106). GSA Interagency Training, Reno, NV. 1997.
- Introduction to ArcView GIS. ESRI: McLean, VA. 1999.
- G-317 Community Emergency Response Team (CERT) Train the Trainer Course. Florida Dept. of Community Affairs: Key Largo, FL. 2003.
- National Interagency Incident Management System (NIIMS) based Incident Command System (ICS). U.S. Coast Guard: Key West FL. 2003.
- Introduction to ArcGIS I. Photo Science, Inc./ESRI: Atlanta, GA. 2004.
- PC Training. Intro to PC/DOS/Windows; Lotus 1-2-3 for Windows; Introduction to Excel; MS Word for Windows; DEC TeamLinks; MS PowerPoint, MS Word Desktop Publishing. Oglethorpe Power/Georgia Transmission Corporation. 1993-2001.
- Various Corporate Culture Training Programs. Team Building; Conflict Management; Giving and Receiving Feedback; Negotiating; Writing Goals and Objectives; Essentials of Project Management; Tools and Concepts for Continuous Improvement. Oglethorpe Power/Georgia Transmission Corporation. 1992-2001.

CONFERENCES

- International Federation of Landscape Architects (IFLA) Annual Conference, Kobe, Japan, 1984.
- Rural Preservation: Issues Facing Georgia. Georgia Historic Preservation Section and Georgia Planning and Development Commission. 1986.
- American Society of Landscape Architects (ASLA). Annual Conference, San Francisco, CA, 1987.
- Red Clay Conferences: Environmental Law in the Public Interest. Environmental Law Association, School of Law, University of Georgia. Various years.
- Annual Conference, Society of Wetland Scientists. Edmonton, Alberta, Canada. 1993.
- EPRI Wetlands and Surface Water Discharge Compliance Workshop, Birmingham, AL. 1994.
- National Rural Electric Environmental Association, various meetings, Colorado, Alabama, Missouri, South Carolina, Washington, D.C. 1994-1999. Presented paper "The Implications of the *Tulloch* Rule for Utility Landclearing in Wetlands" in Colorado.
- National Hydropower Association, Adirondack Policy Forum, Lake George, NY. 1995.
- International Right-of-Way Association, 41st Annual International Education Seminar, Louisville, KY, 1995. Presented paper "Utility Industry Impacts on Environmental Biodiversity."
- Edison Electric Institute, Natural Resources Management Subcommittee 1996 National Workshop. Bellevue, WA. 1996.

- Electric Power Research Institute. 6th International Symposium on Environmental Concerns in Right-of-Way Management. New Orleans, LA. 1997
- Edison Electric Institute Natural Resources Management Subcommittee 1997 National Workshop. Mobile, AL. 1997.
- Electric Power Research Institute. Right-of-Way Environmental Management Workshop, Golden, CO. 1997
- Terrene Institute: First Annual National Wetland Mitigation Banking Conference, Washington, DC. 1998
- Terrene Institute: Second Annual National Wetland Mitigation Banking Conference, Atlanta, GA. 1999
- Governor's Hurricane Conference. Tampa, FL. 2003

COMMUNITY SERVICES AFFILIATIONS

- Rotary International. Community Service Committee Member and Fundraising Event Treasurer, Savannah Sunrise Rotary, 2004-present. Sunrise Rotary Club of the Conch Republic, 2003 - 2004.
- Martin des Porres Society. volunteer.
- Habitat for Humanity. Board Member and Chair, Site Selection Committee, Habitat for Humanity of Key West and the Lower Florida Keys [2002-2004].

ROUTE ANALYSIS AND EVALUATION

FOR THE PROPOSED
MILL CREEK – HARDIN COUNTY
345 KV TRANSMISSION LINE

Prepared for

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Louisville, KY 40202

Kentucky Utilities Company
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For Submission to

Kentucky Public Service Commission
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December 2005

Executive Summary

ROUTE ANALYSIS AND EVALUATION

FOR THE PROPOSED
MILL CREEK – HARDIN COUNTY
345 KV TRANSMISSION LINE

Louisville Gas and Electric Company and Kentucky Utilities Company (LG&E/KU) have conducted a comprehensive routing analysis for the proposed Mill Creek to Hardin County 345 kV Transmission Line project. LG&E/KU's analysis followed a five-step process outlined by staff of the Kentucky Public Service Commission (KPSC) during an informal conference on October 4, 2005. LG&E/KU's comprehensive analysis reviewed GIS-based data provided by Photo Science as well as internal cost data for 1,203 routing alternatives. This analysis resulted in the recommendation of a preferred route and an alternate route.

Linear Projects Inc., a subcontractor for Photo Science, was asked to prepare a parallel analysis and evaluation of alternate transmission line routes available to LG&E/KU, using the same data available to LG&E/KU to analyze and evaluate the same 1,203 routing alternatives. While Linear Projects' analysis and evaluation methodology differs from that used by LG&E/KU, Linear Projects' *Route Analysis and Evaluation* validates and confirms LG&E/KU's conclusions regarding the reasonableness of the preferred and alternate routes. Furthermore, it is the opinion of Linear Projects that neither the preferred route nor the alternate route results in a "wasteful duplication of facilities" and that either of the two routes may reasonably be granted a Certificate of Public Convenience and Necessity.

Table of Contents

1.0 Introduction

Louisville Gas and Electric Company and Kentucky Utilities Company (LG&E/KU) propose to construct approximately 41.9 miles of new 345 kV transmission line originating at the existing Mill Creek Generating Station in Jefferson County and terminating at the existing Hardin County Substation (Figure 1.0).

1.1 Route Selection Process Background

In 2003, LG&E/KU requested Photo Science Inc. (PSI) to assemble GIS (Geographic Information System) mapping for use in analysis and evaluation of routes for its Mill Creek - Hardin County 345 kV Transmission Line project. Route identification was performed using mapped information and field visits to identify constraints and opportunities for developing and evaluating routing alternatives.

Electric utility professionals typically approach transmission line routing by identifying available opportunities which avoid and/or minimize adverse effects of the project to the built and natural environments while considering relevant engineering considerations, including collocation and costs. The use of GIS-based mapping makes this process far more efficient. Where various resource-based maps were once available only on paper and at different scales and map projections, ArcGIS software assembles this information in a digital format and converts data to the same scale and projection. Once this digital database has been assembled, a professional may map various routing alternatives and inventory potential impacts to the built and natural environments. Similarly, the digital ArcGIS database assembles engineering data and evaluates routing alternatives according to technical criteria.

The original routing exercise performed by LG&E/KU and PSI followed this approach, which resulted in LG&E/KU selecting a preferred route and submitting a request for a Certificate of Public Convenience and Necessity ("CPCN") for that route to the Kentucky Public Service Commission (KPSC) on May 11, 2005 (Case Number 2005-00142).

On September 8, 2005, KPSC issued an order stating its intention to apply a CPCN standard focused on determining (1) whether the facilities are needed, and (2) whether construction will result in a "duplication of facilities" [*Kentucky Utilities Company v. Public Service Commission*, 252 S.W.2d 885 (Ky. 1952)]. KPSC agreed that the Mill Creek – Hardin County 345 kV Transmission Line is needed, but stated that LG&E/KU did not fully document its transmission line siting decision in a sufficiently comprehensive manner to allow the KPSC to determine whether the standards set forth in the *Kentucky Utilities* case with reference to "duplication of facilities" are satisfied. On page 10, the order states

in particular that "...the Commission finds that LG&E/KU failed to adequately consider the use of existing rights-of-way, transmission lines, and corridors."

Many collocation alternatives were in fact considered during the original route selection process but were quickly discarded for reasons that were readily obvious to utility professionals. However, LG&E/KU's original KPSC filing did not fully document these routes and the reasons why they were not believed to be good routing alternatives for the Mill Creek – Hardin County project.

LG&E/KU and representatives of interveners met informally with KPSC staff on October 4, 2005 to better understand KPSC's expectations with respect to routing documentation. Among those expectations are that the utility look for all possible routes that will work electrically, with emphasis on existing corridors, and that the utility perform a comprehensive evaluation designed to show that the chosen route is reasonable. KPSC staff emphasized the need for a thorough, well-documented evaluation, and stated that there must be documentation for all routes considered.

Following guidance in other CPCN orders and recommendations of KPSC staff provided at the informal conference, LG&E/KU conducted a comprehensive analysis of all reasonable routing alternatives for the proposed transmission line. At the same time, LG&E/KU asked Linear Projects to develop an independent analysis and evaluation of the routes as a means of providing an alternate perspective on LG&E/KU's routing analysis. Linear Projects worked closely with Photo Science and LG&E/KU to ensure that the same data and other pertinent information was used. While LG&E/KU's decision-making was independent of Linear Projects' analysis and evaluation, Linear Projects' analysis and evaluation validates and confirms LG&E/KU's conclusions.

1.2 Revised Route Selection Process

The routes evaluated in this study represent both those routes originally considered by utility professionals to be good routing alternatives (alternatives which avoid and/or minimize impacts to the built and natural environment while considering engineering and technical criteria) as well as all other alternatives which are technically feasible and focus on collocation (rebuilding and/or paralleling existing transmission lines and other corridors).

After reviewing existing power lines, natural gas lines, and roads in the project area (Figure 1.2), a total of 1,203 routes, composed of various combinations of 156 discrete segments, was analyzed and evaluated using the *Alternative Route Analysis and Evaluation* model (hereafter, *Analysis and Evaluation* model) taken from the EPRI (Electric Power Research Institute) and GTC (Georgia Transmission Corp.) Standardized Methodology for Siting Overhead Electric Transmission Lines (hereafter, Standardized Methodology). In the interest of

making this report manageable, the data for all 1,203 routes is issued as a CD appendix to this report.

1.3 Overview of Alternate Route Analysis and Evaluation

It is beyond the scope of this siting study to provide an exhaustive explanation of the Standardized Methodology. However, it should be noted that the criteria used in the *Analysis and Evaluation* model to score and rank routes are the kinds of criteria typically considered by utility professionals going through a route selection process. Utility land planners and transmission line design engineers would normally consider information derived from aerial photography, property parcel maps, and such off-the-shelf mapped information as soils surveys, National Wetland Inventory maps, the location of historic resources listed on the National Register of Historic Places, etc., in evaluating transmission line routes and proposing a preferred route.

Furthermore, the "weighting" of each criterion in the *Analysis and Evaluation* model represents the input of a comprehensive slate of stakeholders representing the interests of utilities, state and federal resource agencies, environmental groups, property owner groups, and others. The process that generated the weights used in the *Analysis and Evaluation* model, therefore, was based on the willingness and ability of competing interests to arrive at a consensus with respect to the relative values of paired resources. At the very least, taken as a whole, this *Analysis and Evaluation* model provides a transparent and representative process for arriving at routing decisions.

A final step involves "normalizing" the data. Normalizing places all of the criteria on an identical scale ranging from zero to one. Normalizing is necessary in order to more readily compare dissimilar criteria having different weights. Once normalized, values approaching zero represent the least impact while values approaching one represent the greatest impact. For three Engineering Considerations criteria, such as collocation with existing transmission lines, "more is better;" in these cases, the values are first normalized and then inverted so that routes with the highest degree of collocation score low (a low score equaling "desirable").

In summation, the *Analysis and Evaluation* model is a GIS-database application which does four things: (1) for each route, the methodology counts the number and magnitude of impacts; (2) for all routes, the methodology weighs the relative importance of resources impacted and the magnitude of those impacts; (3) for all routes, with respect to three different "perspectives," the methodology evaluates how each route compares to all other routes; and, (4) finally, for all routes, the methodology evaluates how each route compares to all other routes when all three of the different "perspectives" are weighted equally.

Metadata (information about the data) for all criteria used in this application of the *Analysis and Evaluation* model is included in Appendix 11.0.

1.3.1 *Built Environment* Perspective

The Built Environment perspective considers how each route compares to all other routes when impacts to the Built Environment are considered to be *five times more important* than impacts to the Natural Environment or to Engineering Considerations.

Resources the *Analysis and Evaluation* model considers for the Built Environment perspective and their weights include:

1. Residences Within ROW (44.3%) – Residences within the right-of-way of a routing alternative would be razed and families would have to be relocated; this is the most heavily weighted criterion in the Built Environment perspective.
2. Proximity to Residences (13.1%) – Residences outside the right-of-way but within 300 feet of the right-of-way are considered to feel more of an impact from the route than residences farther away.
3. Proposed Developments (5.4%) – Areas that were identified as being under construction from the aerial photography were included.
4. Proximity to Commercial Buildings (3.6%) – Somewhat greater impact to properties within 300 feet of commercial buildings than if the line is farther away.
5. Proximity Industrial Buildings (1.8%) - Slightly greater impact to properties within 300 feet of industrial buildings than if the line is farther away.
6. Schools, Churches, Cemeteries, and Parks (16.3%) – Crossing these kinds of land uses is considered to be more of an impact to the community than crossing other kinds of properties.
7. NRHP-listed Structures and Districts (15.5%) – For purposes of this project, NRHP properties within 3,000 feet of a route are considered in the evaluation.

1.3.2 *Natural Environment* Perspective

The Natural Environment perspective considers how each route compares to all other routes when impacts to the Natural Environment are considered to be *five times more important* than impacts to the Built Environment or to Engineering Considerations.

Resources the *Analysis and Evaluation* model considers for the Natural Environment perspective and their weights include:

1. Natural Forests (9.3%) – Natural forests are valued for aesthetic and biodiversity reasons, and clearing forested areas can erode soil and cause sedimentation of waterways; crossing natural forests, therefore, is weighted as a somewhat greater impact than crossing other land cover types.
2. Stream / River Crossings (38%) – Streams and rivers are best protected by leaving them, their banks, and their streamside buffers intact; crossing streams and rivers, therefore, is one of two more heavily weighted criteria in the Natural Environment perspective.
3. Wetland Areas (40.3%) – Wetlands are valued as important habitats and for their ability to filter and sequester pollutants before they enter receiving streams; they also function best when left undisturbed. Depending on the nature of the activities performed in wetlands and the jurisdictions in which they occur, there may be significant permitting issues as well. Crossing wetlands is therefore one of two more heavily weighted criteria in the Natural Environment perspective.
4. Floodplain Areas (12.4%) – Floodplains trap sediments and provide wildlife habitat. Because floodplain development is often restricted, floodplain forests are often the last stands of mature hardwood forest in the developed landscape. Crossing floodplain areas, therefore, is weighted as a somewhat greater impact than crossing uplands in general.

1.3.3 *Engineering Considerations* Perspective

The Engineering Considerations perspective considers how each route compares to all other routes when Engineering Considerations are considered to be *five times more important* than impacts to the Built Environment or to the Natural Environment.

Resources the *Analysis and Evaluation* model considers for the Engineering Considerations perspective and their weights include:

1. Length (Miles) – In general, longer lines affect more landowners and land and require more resources to build and maintain a new transmission line; more right-of-way must be cleared and kept cleared; the longer the line, the more that facility is exposed to outage-causing events.
2. Percent of Rebuild with Existing T/L (65.6%) – Double-circuiting an existing transmission line is viewed favorably because minimal (sometimes, no) new land rights are required; however, double-circuiting is not completely favorable, since it exposes two lines on the same set of support structures to outages from accidents or structural defects that result in failure of a structure. Also, visual impacts to important community resources may result from the greater height needed to accommodate both lines.
3. Percent of Collocation with Existing Utilities (19.2%) – Paralleling existing transmission lines or gas pipelines can be very favorable, since it

consolidates similar utility land uses and may minimize adverse impacts on properties and communities. Like rebuilding, however, paralleling existing lines is sometimes not completely favorable, since whatever homes, churches, wetlands, or streams are adjacent to the existing line will be impacted by the new line.

4. Percent of Collocation with Roads (7.8%) – Paralleling roads can be slightly favorable, since it consolidates linear rights-of-way across the landscape. Like rebuilding, however, paralleling existing roads is not necessarily completely favorable, since the built environment rises up next to roads; this is especially true with regard to historic structures. Also, since most roads don't stay straight for very long, properties are more heavily impacted by guy wires needed to turn angles to follow roads. Finally, to the extent that visual impacts rely on having observers, roads are clearly one of the places where greater numbers of people will be present to see a transmission line.
5. Total Project Costs (7.4%) – Transmission is an expense that a utility would avoid, wherever possible, preferring to serve existing and new loads from existing transmission resources. Furthermore, costs of new transmission must be borne by ratepayers. Nevertheless, project cost is not weighted as heavily in the Engineering Considerations perspective as collocation opportunities.

1.3.4 Simple Composite

The Simple Composite considers how each route compares to all other routes when impacts to the Built Environment, to the Natural Environment, and to Engineering Considerations are considered to be *equally important.*

- Built Environment Perspective (33.33%)
- Natural Environment Perspective (33.33%)
- Engineering Considerations Perspective (33.33%)

1.3.5 Finalist Routes and Expert Judgment

The *Analysis and Evaluation* model does two things very well. First, the model handles the raw number-crunching involved in counting things which can be counted (e.g., the number of streams crossed by a route's centerline or the number of residences within a route's right-of-way). Secondly, the model can apply the weights (i.e., the expressions of relative importance between and among affected resources) to the impacts for each route and ranks the routes in terms of how they affect the built and natural environments and how well they address engineering considerations.

The application of the *Analysis and Evaluation* model to a set of routing alternatives is not intended to yield the one perfect or preferred route, simply

because the model is merely a tool that measures, compares, and ranks only those things that can be measured, compared, and ranked. There are, however, other considerations involved in selecting a route that are less susceptible to measurement and which fall within the realms of local knowledge, complex regulatory requirements, and other factors which may be considered to fall within the realm of Expert Judgment. Examples of considerations which might fall within the realm of Expert Judgment include:

- visual impact issues;
- local community concerns;
- risks of schedule delay;
- special permitting requirements;
- construction and maintenance accessibility;
- number of properties crossed;
- amount of new right-of-way required;
- other case-by-case issues that may have a bearing on final routing decisions.

But if the *Analysis and Evaluation* model should not be relied upon by itself to select one preferred route, it does an excellent job of identifying those routes which have the least impact on the built and natural environments or which best address engineering and technical criteria. For purposes of this application of the *Analysis and Evaluation* model, the top five routes in the three perspectives within each basket of routes as well as the top five routes in the Simple Composite within each basket of routes are considered first cut routes which advance to an additional evaluation by expert judgment. Also, for routes which cross over between baskets of routes, the top five routes in the three perspectives within the cross over routes basket of routes as well as the top five routes in the Simple Composite within the cross over routes basket of routes are considered first cut routes as well.

These first cut routes, called "Top Fives" routes in this report, will be compared with one another on the basis of how well they rank when examined against significant criteria. Routes which emerge from that initial analysis will again be evaluated against each other until two routes remain. The goal of this comprehensive analysis is to identify two reasonable routes which best meet the requirements of this project while avoiding wasteful duplication.

1.3.6 *Analysis and Evaluation* Model Limitations

In the Standardized Methodology, an important step takes place before the application of the *Analysis and Evaluation* model – a high-level but comprehensive analysis of the project area which examines all opportunities and constraints for routing a transmission line. The purpose of this initial screening is to identify areas comprising the top three percent (3%) of all routing possibilities available. Utility professionals then draw up several practicable

routes based on those "top three percent" corridors. The *Analysis and Evaluation* model phase of the Standardized Methodology then analyzes and evaluates those several top routing alternatives.

This first step of the Standardized Methodology, this high-level GIS-based screening of the project area, was not performed for this project. After KPSC rejected KU's initial proposed route due to lack of emphasis on collocation opportunities and a lack of appropriate siting documentation in general, the project team undertook an exhaustive analysis of collocation opportunities within the project area, focusing on all collocation opportunities which would work from an electrical standpoint. The project area was determined to be bounded only when collocation opportunities nearing 100% were achieved on the east (various electric transmission lines, gas pipelines, and roads which comprise the East basket of routes) and on the west (existing Tip Top – Cloverport 138 kV Transmission Line, a Big Rivers 69 kV transmission line, and the Hardinsburg – Hardin County 138 kV Transmission Line which comprise the BREC routes). Other collocation opportunities evaluated include (1) exiting Tip Top Substation south through Fort Knox and (2) exiting Fort Knox to the west of Tip Top Substation. These collocation opportunities and their variations raised the total number of routes to be evaluated to 1,203. Many of these routes, going through intensively developed areas, would require tens and even hundreds of residential relocations, affecting homes, churches, parks, schools and other places of importance to communities to such a degree that they have little to recommend them as routes other than that they are collocation routes.

Normally, using the EPRI model, it would be a simple matter to discard such routes because the model would have already done its job of minimizing residential relocations while it identified the top three percent corridors. However, once the 1,203 collocation-inspired routes were submitted to the same analytic procedures, some pretty extreme values were normalized (see Section 1.3 of this report), which created unforeseen difficulties for the *Analysis and Evaluation* model.

First, when working as intended, the model effectively draws distinctions among several truly good routes by "normalizing" project impact data to a common scale of zero to one. For example, one of four routing alternatives might require one residential relocation. The model would normalize this impact and assign the three routes not requiring a relocation a value of zero (lower is better) and assign the route which requires relocation a one (higher is worse).

The effect of allowing hundreds of routes that require tens and hundreds of residential relocations into the analysis is that, when the model normalizes the data, routes that require ten, twenty, or thirty relocations don't appear significantly bad next to routes that require 155 such relocations. That is, they may be assigned a normalized value of 0.1 or 0.2, with higher (worse) scores going to alternatives that relocate over one hundred homes. While it is true that

affecting ten or twenty homes is much less of an impact than affecting hundreds, it is still many more than the zero homes requiring relocation that is normally any utility's preferred goal. Because the range in this application is so great, though, an impact to several dozen homes appears quite reasonable to the model.

Second, as it currently exists, there is no provision in the *Analysis and Evaluation* model whereby extremely long routes and very costly routing alternatives can be discarded. At 7.4 percent of the Engineering Considerations perspective, cost accounts for only about 2.5% of an route's overall scoring in the Simple Composite. In the *Analysis and Evaluation* model applied to every conceivable route, a route that collocates 100% might be two or three times longer than a route of more efficient length and still earn 84.8% in the Engineering Considerations perspective, or 28.3% of a route's overall scoring in the Simple Composite.

We therefore considered ways to reign in the potential for runaway scoring for collocation in the *Analysis and Evaluation* model. It seems a reasonable solution to these normalization and weighting difficulties to allow the *Analysis and Evaluation* model to perform its task within several groups of similar routes and to apply the Expert Judgment phase to as wide a cross-section of top-scoring routes as could reasonably be handled. For the purposes of this study, then, the following is a synopsis of Linear Projects' methodology.

1.3.7 *Analysis and Evaluation* Applied to Baskets of Routes

As discussed in Section 1.1, both the September 8, 2005, KPSC order and the October 4, 2005 informal conference with KPSC staff identified the requirement to comprehensively evaluate all electrically-equivalent options for routing a proposed transmission line. This exercise should be focused on avoiding a wasteful duplication of facilities (i.e., emphasis on collocation).

Route Creation. In response to KPSC staff guidance, the LG&E/KU project team identified a comprehensive collection of routing alternatives between Mill Creek Generating Station and Hardin County Substation. The routes were drawn in as segments (156 segments total). Segments were delineated that (1) collocate with existing linear infrastructure - existing electric transmission lines, gas pipelines, and highways/roads, (2) consist of cross country routes that minimize impacts to the built and/or natural environments, and (3) consist of collocation and cross country segments that connect corridors of existing linear infrastructure. All possible segment combinations from Mill Creek Generating Station to Hardin County were identified that (1) do not cause routes to travel away from the source or (2) do not create angles greater than 90 degrees. The major focus of this exercise was to comprehensively identify all routes which collocate with existing corridor infrastructure. The total number of routes developed in this exercise was 1,203.

Statistics.

PSI collected statistics for each of the 1,203 routes. These same metrics were used by LG&E/KU in their decision-making process as well as by Linear Projects in this validation and confirmation exercise. See tables in digital appendix for complete route metrics.

Baskets of Routes.

Routes were organized and allocated into five major "baskets," or groups of routes, having similar characteristics: East, Tip-Top South, East-Central, West-Central, and BREC. There are also many routing possibilities which cross over from basket to basket; these "cross over" routes are evaluated within their own Cross Over Routes basket. The baskets of routes used here are intended to be comprehensive and to consist of all possible routes that will work electrically with an emphasis on existing corridors.

Weighting Routes.

The top routes within each basket of routes were determined by placing all routes assigned to a particular basket into an *Analysis and Evaluation* model.

As with the EPRI Methodology, the criteria by which routes are analyzed and evaluated are grouped into three perspectives: Built Environment, Natural Environment, and Engineering Concerns. As described earlier, emphasis is placed on each of these perspectives by weighting the perspectives, each in turn, at fives times the value of the other two. This determines which routes are statistically better from each of the perspectives without disregarding any perspective. All three perspectives are then considered to be equally important, resulting in a Simple Composite ranking.

After the routes within each basket of routes are evaluated, the top five routes for each of these four categories for all baskets of routes will graduate to the beginning of an expert judgment phase. As will be seen, a total of forty-nine "Top Fives" routes results from this harvesting (some routes appear in more than one top five list).

Expert Judgment and Evaluation.

At this point in the evaluation process, a reasonable number of routes will have been identified which will be thoroughly and efficiently evaluated by expert judgment. Successive "cuts" will be made until two reasonable routes remain.

2.0 Routes Considered

As described previously, the KPSC order of September 8, 2005 denied the application for issuance of a CPCN for the proposed route of the Mill Creek – Hardin County 345 kV Transmission Line. The objections of the KPSC were two-fold:

- material submitted in support of the preferred route does not constitute a "comprehensive study and does not constitute substantial evidence to support a final decision on the location of a major transmission line (Order, page 9); and
- "the applicant must comprehensively consider existing corridors and utility lines when it applies for a transmission line CPCN."

The LG&E/KU project team looked for all possible routes that will work electrically, with emphasis on collocation with existing electric transmission lines, gas transmission lines, and road corridors. At the end of this route identification process, the team identified 156 *route segments* that can be combined to form some 1,203 routes.

> Route Segments. For purposes of this study, a route segment is any section of a route that begins where two or more routing opportunities diverge or is formed where two or more routing opportunities merge. Each of the 1,203 routes identified can be defined as a series of *segments* (e.g., in this study, Route A is composed of Segments 1, 3, 5, 8, 10, 12, 16, 24, 31, 32, and 36, while Route B is composed of Segments 1, 3, 5, 8, 10, 12, 16, 24, 31, 32, 35, and 37). Table 2.0 in the digital appendix shows the route segments which combine to form the 1,203 routes which were analyzed and evaluated for this report.

Figure 2.0(a) shows a high-level overview of all 1,203 routes that were comprehensively analyzed and evaluated for this project. The routes are initially organized into five baskets of routes, or major routing "themes," as shown in Figure 2.0(b) and described in the following sections. Figure 2.0(c) shows the baskets of routes overlaid on available collocation opportunities. Finally, a "cross over routes" basket is created which captures all routing alternatives which "cross over" between baskets.

2.1 East Routes

The East basket of routes consists of routes which leave Mill Creek Generating Station and proceed around the east side of Fort Knox Army Reservation towards Hardin County Substation. Figure 2.1 shows the East routes.

2.1.1 Collocation Opportunities

Collocation opportunities within the East basket of routes include:

- Line 4532 and Line 4531 (two existing 345 kV transmission lines that run between Mill Creek Generating Station and Blue Lick Substation)
- LG&E's Lines 5401 and 5402 (two existing 161 kV transmission lines that run southeast from Blue Lick Substation, turn south towards Lebanon Junction, and pass to the east of Elizabethtown)
- Interstate 65 south of Shepherdsville to southeast of Elizabethtown
- various natural gas transmission lines
- eastern boundary of Fort Knox (collocation with a major jurisdictional change)
- KU's Elizabethtown – Bardstown 161 kV Transmission Line
- EKPC's Bardstown – Elizabethtown 69 kV Transmission Line
- KU's Hardin County – Brown 345 kV Transmission Line

2.1.2 Route Metrics

There are twenty routing alternatives within the East basket of routes. The first two tables describe the range of impacts to the Built and Natural Environments within the East basket of routes. The routes are also scored against Engineering Considerations.

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
Minimum	11	135	0	0	7	0	0
Maximum	155	676	6	130	154	4	8
Average	84	397	2	46	63	2	3

Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
Minimum	428.34	60	2.79	146.86
Maximum	563.22	93	6.17	289.89
Average	495.86	74.7	3.48	198.04

Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L	Percent of Route of Colocated with Existing Utilities*	Percent of Route Colocated with Roads*	Total Project Cost
Minimum	37.83	0.00%	42.74%	0.00%	60,685,362
Maximum	54.39	0.00%	93.39%	33.79%	81,498,224
Average	45.11	0.00%	68.61%	9.16%	72,266,647

2.2 Tip Top South Routes

All other baskets of routes leave Mill Creek Generating Station and proceed west and south, paralleling existing transmission lines and natural gas pipelines near West Point and/or through the northern portion of Fort Knox Army Reservation to areas near the existing Tip Top Substation, located south of U.S. Highway 60 and west of U.S. Highway 31W. The Tip Top South routes proceed south from the area near the Tip Top Substation, paralleling either a natural gas pipeline or U.S. Highway 31W, leaving the Fort Knox Reservation and proceeding through the towns of Radcliffe and Vine Grove. The Tip Top South routes parallel various electric transmission lines, natural gas pipelines, and roads south through Elizabethtown to the Hardin County Substation. Figure 2.2 shows the Tip Top South basket of routes.

2.2.1 Collocation Opportunities

Collocation opportunities within the Tip Top South basket of routes include:

- KU's Rogersville – Radcliffe 69 kV Transmission Line
- KU's Elizabethtown – Rogersville 69 kV Transmission Line
- EKPC's Vine Grove – Radcliffe 69 kV Transmission Line
- EKPC's Elizabethtown – Vine Grove 69 kV Transmission Line
- KU's Rogersville – Hardin County 138 kV Transmission Line
- EKPC's Elizabethtown – Stephensburg 69 kV Transmission Line
- U.S. 31W (aka Dixie Highway)
- several natural gas transmission lines

2.2.2 Route Metrics

There are 83 routes within the Tip Top South basket of routes. The first two tables describe the range of impacts to the Built and Natural Environments

within the Tip Top South routes. The routes are also scored against Engineering Considerations.

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
Minimum	4	67	0	1	9	1	1
Maximum	129	779	1	338	234	7	10
Average	41.0	254.3	0.1	55.4	43.9	2.1	6.0

Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
Minimum	173.60	32	7.37	105.42
Maximum	394.91	64	19.17	185.97
Average	306.25	49.7	14.67	150.57

Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L*	Percent of Route of Co-located with Existing Utilities*	Percent of Route Co-located with Roads*	Total Project Cost
Minimum	31.68	0.00%	17.84%	0.99%	49,615,438
Maximum	35.84	1.50%	81.75%	77.09%	82,597,365
Average	33.6	0.89%	63.84%	20.23%	58,216,418

2.3 East-Central Routes

The first part of the East-Central basket of routes leaves Mill Creek Generating Station in the same fashion as the Tip Top South routes. That is, these routes proceed west and south, paralleling existing transmission lines and natural gas pipelines near West Point and/or through the northern portion of Fort Knox Army Reservation to areas near the existing Tip Top Substation, located south of

U.S. Highway 60 and west of U.S. Highway 31W. The East-Central routes then proceed west from the area near the Tip Top Substation, paralleling the Tip Top – Cloverport 138 kV Transmission Line, leaves the Fort Knox Reservation, and proceeds south-southeast towards Hardin County Substation. Portions of the routes that make up the East-Central basket parallel natural gas pipelines, Rineyville Road, or pick their way cross country through rural residential land uses. Figure 2.3 shows the East-Central routes.

2.3.1 Collocation Opportunities

Collocation opportunities within the East-Central basket of routes include:

- Tip Top – Cloverport 138 kV Transmission Line
- natural gas transmission lines
- Rineyville Road
- KU's Hardinsburg – Hardin County 138 kV Transmission Line

2.3.2 Route Metrics

There are 348 routing alternatives within the East-Central basket of routes. The first two tables describe the range of impacts to the Built and Natural Environments within the East-Central routes. The routes are also scored against Engineering Considerations.

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
Minimum	4	64	0	0	2	0	1
Maximum	81	327	1	18	39	4	12
Average	32.3	171.9	0.8	6.6	18.3	1.7	7.5

Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
Minimum	230.72	32	11.934	105.727
Maximum	384.10	66	20.237	175.37
Average	285.24	47.9	14.89	145.45

Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L*	Percent of Route of Co-located with Existing Utilities*	Percent of Route Co-located with Roads*	Total Project Cost
Minimum	35.22	0.00%	35.04%	2.37%	54,764,303
Maximum	42.84	10.97%	71.68%	36.27%	74,523,635
Average	38.70	2.63%	49.75%	14.84%	65,031,982

2.4 West-Central Routes

The first part of the West-Central basket of routes leaves Mill Creek Generating Station in the same fashion as the Tip Top South routes. That is, these routes proceed west and south, paralleling existing transmission lines and natural gas pipelines near West Point and/or through the northern portion of Fort Knox Army Reservation to areas near the existing Tip Top Substation, located south of U.S. Highway 60 and west of U.S. Highway 31W.

The West-Central basket of routes then proceeds west from the area near the Tip Top Substation, rebuilding the Tip Top – Cloverport 138 kV Transmission Line, and continues paralleling that transmission line for another two to three miles after it leaves the Fort Knox Reservation. The West-Central routes then proceed south-southeast towards Hardin County Substation, generally in a cross-country fashion. Portions of the routes that make up the West-Central basket parallel natural gas pipelines, local county roads, or pick their way cross country through rural residential land uses. The West-Central routes parallel KU's Hardinsburg – Hardin County 138 kV Transmission Line on the final approach to Hardin County Substation. Figure 2.4 shows the West-Central routes.

2.4.1 Collocation Opportunities

Collocation opportunities within the West-Central basket of routes include:

- KU's Tip Top – Cloverport 138 kV Transmission Line
- KU's Hardinsburg – Hardin County 138 kV Transmission Line
- Rineyville Road
- Berrytown Road
- several natural gas transmission lines

2.4.2 Route Metrics

There are eighteen routes within the West-Central basket. The first two tables describe the range of impacts to the Built and Natural Environments within the West-Central basket of routes. The routes are also scored against Engineering Considerations.

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
Minimum	0	12	1	0	3	0	2
Maximum	40	195	1	21	24	0	13
Average	14.3	88.2	1.0	7.3	10.3	0.0	8.7

Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
Minimum	263.33	27	11.93	104.61
Maximum	439.57	56	20.50	161.77
Average	343.14	38.8	15.76	139.69

Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L*	Percent of Route of Co-located with Existing Utilities*	Percent of Route Co-located with Roads*	Total Project Cost
Minimum	38.81	9.31%	31.78%	1.35%	56,533,166
Maximum	44.35	30.61%	39.89%	16.36%	63,174,947
Average	41.19	17.92%	35.50%	6.27%	60,201,744

2.5 BREC Routes

The first part of the BREC routes leaves Mill Creek Generating Station in the same fashion as the Tip Top South routes. That is, these routes proceed west and south, paralleling existing transmission lines and natural gas pipelines near West

Point and/or through the northern portion of Fort Knox Army Reservation to areas near the existing Tip Top Substation, located south of U.S. Highway 60 and west of U.S. Highway 31W.

The BREC routes then proceed west from the area near the Tip Top Substation, paralleling the Tip Top – Cloverport 138 kV Transmission Line and rebuilding that transmission line for another four to five and one-half miles after it leaves the Fort Knox Reservation. The BREC routes are focused on paralleling a Big Rivers Electric Corporation (BREC) 69 kV transmission line which runs roughly northeast to southwest in eastern Meade County and western Breckinridge County, an area served by Meade County Rural Electric Cooperative. This BREC line is a collocation (parallel) opportunity connecting KU's Tip Top – Cloverport 138 kV Transmission Line with KU's Hardinsburg – Hardin County 138 kV Transmission Line. Portions of the routes that make up the BREC basket of routes parallel natural gas pipelines, local county roads, or pick their way cross-country through rural residential land uses. The BREC routes parallel KU's Hardinsburg – Hardin County 138 kV Transmission Line on the final approach to Hardin County Substation. Figure 2.5 shows the BREC basket of routes.

2.5.1 Collocation Opportunities

Collocation opportunities within the BREC basket of routes include:

- KU's Tip Top – Cloverport 138 kV Transmission Line
- KU's Hardinsburg – Hardin County 138 kV Transmission Line
- BREC 69 kV Transmission Line
- Big Spring Road
- several natural gas transmission lines

2.5.2 Route Metrics

There are 54 routing alternatives within the BREC basket of routes. The first two tables describe the range of impacts to the Built and Natural Environments within the BREC basket of routes. The routes are also scored against Engineering Considerations.

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
Minimum	0	17	0	0	1	0	1
Maximum	21	141	0	1	4	0	10
Average	10.6	80.2	0.0	0.7	2.3	0.0	6.7

Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
Minimum	312.09	23	11.93	103.14
Maximum	544.89	51	19.41	155.60
Average	418.03	34.1	15.17	135.46

Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L	Percent of Route of Collocated with Existing Utilities	Percent of Route Collocated with Roads	Total Project Cost
Minimum	49.62	25.26%	29.61%	0.00%	69,640,630
Maximum	56.99	42.13%	60.75%	4.27%	76,022,034
Average	52.87	33.11%	47.16%	1.24%	72,252,865

2.6 Cross Over Routes

Routes within the baskets of routes were analyzed within their peer groups to mitigate the adverse effects on the model resulting from outlier values stretching data normalization. This allows the best routes within each basket to be more confidently identified and compared to top routes in the other baskets. There are, however, a great number of routing alternatives which "cross over" from one basket to another. We wanted to continue to analyze and evaluate such routes, but we chose to analyze and evaluate them separately from the "purer" baskets of routes by putting them in their own basket of "Cross Over Routes."

2.6.1 Collocation Opportunities

Collocation opportunities among the Cross Over Routes are essentially the same as the sum of the cross over opportunities among the five baskets of routes.

2.6.2 Route Metrics

Because these cross over routes originate within one basket and cross over to another or to several others, they are as varied as all five baskets taken together, which is to say they are characteristic of the study area in general. They share nothing more in common, and are assembled into this group simply to ensure that all practicable routes are analyzed, evaluated, and given an opportunity to move on to the expert judgment phase of the route selection process.

3.0 Routes Eliminated from Further Consideration

3.1 Routes Incompatible with Fort Knox

Fort Knox Army Reservation determined that routes which follow Tip Top – Cloverport 138 kV Transmission Line west from Tip Top Substation (Segment 47) are preferable to the Tip Top South routes. All Tip Top South routes parallel either a natural gas pipeline (Segment 62) or U.S. 31W (Segment 72) south from the area around Tip Top Substation. Both of these segments come close to Godman Army Air Field and to Van Voorhis Manor base housing, as well as to an elementary school which serves Van Voorhis Manor children. Locating the line along the west side of US 31W would eliminate tree buffers between housing units and the highway and army air field. See letter to LG&E from the Garrison Commander, Fort Knox in the section 10.0 appendix to this report.

This eliminated some 138 routing alternatives from further consideration. Note that routes which cross over from the East basket or the East-Central basket to utilize segments of the Tip Top South routes *after* they leave Fort Knox are not eliminated; only routing alternatives which utilize Segments 62 or 72 are eliminated at this point. This cut leaves 1,066 routes (Figure 3.1) which may be considered to be practicable routes, the term "practicable" in this case meaning simply "capable of being done."

3.2 Routes Compatible with Fort Knox

3.2.1 Least Cost Practicable Route

The least cost practicable route was identified at this point. This is Route AQV, shown in Figure 3.2.1, which is estimated to cost approximately $54,764,303.

3.2.2 Range of Metrics for all Practicable Routes

Table 3.1 in the digital appendix shows the metrics for the remaining 1,066 Mill Creek – Hardin County alternatives which are compatible with Fort Knox. These constitute the universe of practicable routes. Table 3.1(a) in the digital appendix shows additional route metrics (estimated number of parcels and approximate acres of new easement required) for the routes which are compatible with Fort Knox. The first two tables below describe the range of impacts to the Built and Natural Environments for all practicable routes. All practicable routes are also scored against Engineering Considerations.

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
Minimum	0	12	0	0	1	0	0
Maximum	155	676	6	130	154	4	13
Average	33.3	164.2	0.5	10.3	20.9	1.7	7.5

Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
Minimum	230.72	23	2.33	103.14
Maximum	563.22	93	24.64	290.64
Average	337.26	49.1	14.71	147.59

Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L*	Percent of Route of Co-located with Existing Utilities*	Percent of Route Co-located with Roads*	Total Collocation Percentage	Total Project Cost
Minimum	35.22	0.00%	29.61%	0.00%	44.01%	54,764,303
Maximum	56.99	42.13%	93.39%	46.75%	98.85%	83,132,539
Average	43.19	7.54%	51.64%	13.52%	72.69%	66,655,620

3.2.3 Collocation Routes

All available collocation opportunities which work electrically were analyzed and evaluated and then ranked by percent collocation. The top fifty routes which maximize collocation are shown in Figure 3.2.3.

Metrics from the top fifty maximum collocation routes considered are presented below. The first two tables describe the range of impacts to the Built and Natural Environments for the top fifty maximum collocation routes. The top fifty maximum collocation routes are also scored against Engineering Considerations.

Built	Residences within ROW	Proximity to Residences (within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
Least	2	21	0	0
Most	155	676	4	10
Average	55.0	236.4	1.9	5.2

Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
Least	241.10	23	2.33	103.14
Most	543.37	88	19.41	289.51
Average	387.44	47.8	11.68	158.46

Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L*	Percent of Route of Co-located with Existing Utilities*	Percent of Route Co-located with Roads*	Total Collocation Percentage	Total Project Cost
Least	37.76	0.00%	37.45%	0.00%	87.27%	66,139,802
Most	56.99	42.13%	93.39%	46.75%	98.85%	80,545,031
Average	46.26	15.47%	58.39%	17.25%	91.11%	71,613,063

4.0 *Analysis and Evaluation* Model Application

As described in Section 1.3.7, all routes were analyzed and evaluated first by comparison to their peer routes within each basket of routes or within the cross over basket. The following sections identify the routes within each basket of routes (or within the cross over basket) which emerged as a "top five" route through application of the Analysis and Evaluation Model. Information about these "Top Fives" routes is provided in Tables 4.1 through 4.5 in the digital appendix.

4.1 East Routes

4.1.1 Built Environment Perspective

As discussed in Section 1.3.1, the Built Environment perspective considers impacts to the built environment to be more important than impacts to the natural environment and more important than engineering considerations. The Built Environment perspective accomplishes this preference by assigning a weight to the built environment module that is five times that assigned to the Natural Environment or Engineering Considerations modules.

The top routing alternatives for the Built Environment perspective within the East basket of routes were Routes AVD, AVC, AVE, AVF, and AUT. These are among the top East routes shown in Figure 4.1. Data for the top five Built Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.1 in the digital appendix.

4.1.2 Natural Environment Perspective

As discussed in Section 1.3.2, the Natural Environment perspective considers impacts to the natural environment to be more important than impacts to the built environment and more important than engineering considerations. The Natural Environment perspective accomplishes this preference by assigning a weight to the natural environment module that is five times that assigned to the Built Environment or Engineering Considerations modules.

The top routing alternatives for the Natural Environment perspective within the East basket of routes were Routes AUD, AUL, AUT, AUP, and ATZ. These are among the top East routes shown in Figure 4.1. Data for the top five Natural Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.1 in the digital appendix.

4.1.3 Engineering Considerations

As discussed in Section 1.3.3, the Engineering Considerations perspective considers engineering and technical criteria to be more important than impacts to the built environment or to the natural environment. The Engineering Considerations perspective accomplishes this preference by assigning a weight to the engineering considerations module that is five times that assigned to the Built Environment or Natural Environment modules.

The top routing alternatives for the Engineering Considerations perspective within the East basket of routes were Routes AVC, AUL, AUP, AVF, and AUX. These are among the top East routes shown in Figure 4.1. Data for the top five Engineering Considerations routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.1 in the digital appendix.

4.1.4 Simple Composite

As discussed in Section 1.3.4, the Simple Composite perspective considers impacts to the built environment, impacts to the natural environment, and engineering considerations to be equally important. The Simple Composite accomplishes this by assigning equal weights to each of the three perspectives.

The top routing alternatives for the Simple Composite perspective within the East basket of routes were Routes AVC, AVD, AUP, AUT, and AUD. These are among the top East routes shown in Figure 4.1. Data for the top five Simple Composite routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.1 in the digital appendix.

4.1.5 "Top Fives" East Routes

As can be seen from this table, even though there are twenty individual slots in the East basket of routes "Top Fives" matrix, there are only ten different routes among the "Top Fives" finalists. This is because some routes appear more than once in the rankings by perspective and/or in the simple composite.

East Basket			
Built	**Engineering**	**Natural**	**Simple**
ROUTE AVD	ROUTE AVC	ROUTE AUD	ROUTE AVC
ROUTE AVC	ROUTE AUL	ROUTE AUL	ROUTE AVD
ROUTE AVE	ROUTE AUP	ROUTE AUT	ROUTE AUP
ROUTE AVF	ROUTE AVF	ROUTE AUP	ROUTE AUT
ROUTE AUT	ROUTE AUX	ROUTE ATZ	ROUTE AUD

4.2 East-Central Routes

4.2.1 Built Environment Perspective

As discussed in Section 1.3.1, the Built Environment perspective considers impacts to the built environment to be more important than impacts to the natural environment and more important than engineering considerations. The Built Environment perspective accomplishes this preference by assigning a weight to the built environment module that is five times that assigned to the Natural Environment or Engineering Considerations modules.

The top routing alternatives for the Built Environment perspective within the East-Central basket of routes were Routes ALE, AQL, AME, ANE, and QI. These are among the top East-Central routes shown in Figure 4.2. Data for the top five Built Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.2 in the digital appendix.

4.2.2 Natural Environment Perspective

As discussed in Section 1.3.2, the Natural Environment perspective considers impacts to the natural environment to be more important than impacts to the built environment and more important than engineering considerations. The Natural Environment perspective accomplishes this preference by assigning a weight to the natural environment module that is five times that assigned to the Built Environment or Engineering Considerations modules.

The top routing alternatives for the Natural Environment perspective within the East-Central basket of routes were Routes YB, QE, QA, SE, and QI. These are among the top East-Central routes shown in Figure 4.2. Data for the top five Natural Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.2 in the digital appendix.

4.2.3 Engineering Considerations

As discussed in Section 1.3.3, the Engineering Considerations perspective considers engineering and technical criteria to be more important than impacts to the built environment or to the natural environment. The Engineering Considerations perspective accomplishes this preference by assigning a weight to the engineering considerations module that is five times that assigned to the Built Environment or Natural Environment modules.

The top routing alternatives for the Engineering Considerations perspective within the East-Central basket of routes were Routes QI, ALE, QG, SI, and AME. These are among the top East-Central routes shown in Figure 4.2. Data for the top five Engineering Considerations routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.2 in the digital appendix.

4.2.4 Simple Composite

As discussed in Section 1.3.4, the Simple Composite perspective considers impacts to the built environment, impacts to the natural environment, and engineering considerations to be equally important. The Simple Composite accomplishes this by assigning equal weights to each of the three perspectives.

The top routing alternatives for the Simple Composite perspective within the East-Central basket of routes were Routes AQL, ALE, QI, YB, AME. These are among the top East-Central routes shown in Figure 4.2. Data for the top five Simple Composite routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.0 in the digital appendix.

4.2.5 "Top Fives" East-Central Routes

As can be seen from this table, even though there are twenty individual slots in the East-Central basket of routes "Top Fives" matrix, there are only eleven different routes among the "Top Fives" finalists. This is because some routes appear more than once in the rankings by perspective and/or in the simple composite.

East-Central Basket			
Built	**Engineering**	**Natural**	**Simple**
ROUTE ALE	ROUTE QI	ROUTE YB	ROUTE AQL
ROUTE AQL	ROUTE ALE	ROUTE QE	ROUTE ALE
ROUTE AME	ROUTE QG	ROUTE QA	ROUTE QI
ROUTE ANE	ROUTE SI	ROUTE SE	ROUTE YB
ROUTE QI	ROUTE AME	ROUTE QI	ROUTE AME

4.3 West-Central Routes

4.3.1 Built Environment Perspective

As discussed in Section 1.3.1, the Built Environment perspective considers impacts to the built environment to be more important than impacts to the natural environment and more important than engineering considerations. The Built Environment perspective accomplishes this preference by assigning a weight to the built environment module that is five times that assigned to the Natural Environment or Engineering Considerations modules.

The top routing alternatives for the Built Environment perspective within the West-Central basket of routes were Routes AJW, AJU, KY, AJX, and KW. These are among the top West-Central routes shown in Figure 4.3. Data for the top five Built Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.3 in the digital appendix.

4.3.2 Natural Environment Perspective

As discussed in Section 1.3.2, the Natural Environment perspective considers impacts to the natural environment to be more important than impacts to the built environment and more important than engineering considerations. The Natural Environment perspective accomplishes this preference by assigning a weight to the natural environment module that is five times that assigned to the Built Environment or Engineering Considerations modules.

The top routing alternatives for the Natural Environment perspective within the West-Central basket of routes were Routes KY, AJW, KW, KZ, and AJX. These are among the top West-Central routes shown in Figure 4.3. Data for the top five Natural Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.3 in the digital appendix.

4.3.3 Engineering Considerations

As discussed in Section 1.3.3, the Engineering Considerations perspective considers engineering and technical criteria to be more important than impacts to the built environment or to the natural environment. The Engineering Considerations perspective accomplishes this preference by assigning a weight to the engineering considerations module that is five times that assigned to the Built Environment or Natural Environment modules.

The top routing alternatives for the Engineering Considerations perspective within the West-Central basket of routes were Routes AJW, KY, KW, AJX, and AJU. These are among the top West-Central routes shown in Figure 4.3. Data for the top five Engineering Considerations routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.3 in the digital appendix.

4.3.4 Simple Composite

As discussed in Section 1.3.4, the Simple Composite perspective considers impacts to the built environment, impacts to the natural environment, and engineering considerations to be equally important. The Simple Composite accomplishes this by assigning equal weights to each of the three perspectives.

The top routing alternatives for the Simple Composite perspective within the West-Central basket of routes were Routes AJW, KY, KW, AJX, AJU. These are among the top West-Central routes shown in Figure 4.3. Data for the top five Simple Composite routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.3 in the digital appendix.

4.3.5 "Top Fives" West-Central Routes

As can be seen from this table, even though there are twenty individual slots in the West-Central basket of routes "Top Fives" matrix, there are only six different

routes among the "Top Fives" finalists. This is because some routes appear more than once in the rankings by perspective or in the simple composite.

West-Central Basket			
Built	**Engineering**	**Natural**	**Simple**
ROUTE AJW	ROUTE AJW	ROUTE KY	ROUTE AJW
ROUTE AJU	ROUTE KY	ROUTE AJW	ROUTE KY
ROUTE KY	ROUTE KW	ROUTE KW	ROUTE KW
ROUTE AJX	ROUTE AJX	ROUTE KZ	ROUTE AJX
ROUTE KW	ROUTE AJU	ROUTE AJX	ROUTE AJU

4.4 BREC Routes

4.4.1 Built Environment Perspective

As discussed in Section 1.3.1, the Built Environment perspective considers impacts to the built environment to be more important than impacts to the natural environment and more important than engineering considerations. The Built Environment perspective accomplishes this preference by assigning a weight to the built environment module that is five times that assigned to the Natural Environment or Engineering Considerations modules.

The top routing alternatives for the Built Environment perspective within the BREC basket of routes were Routes ADC, ACQ, AGW, ADS, and ACU. These are among the top BREC routes shown in Figure 4.4. Data for the top five Built Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.4 in the digital appendix.

4.4.2 Natural Environment Perspective

As discussed in Section 1.3.2, the Natural Environment perspective considers impacts to the natural environment to be more important than impacts to the built environment and more important than engineering considerations. The Natural Environment perspective accomplishes this preference by assigning a weight to the natural environment module that is five times that assigned to the Built Environment or Engineering Considerations modules.

The top routing alternatives for the Natural Environment perspective within the BREC basket of routes were Routes HS, G, AGW, BK, and ACQ. These are among the top BREC routes shown in Figure 4.4. Data for the top five Natural Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.4 in the digital appendix.

4.4.3 Engineering Considerations

As discussed in Section 1.3.3, the Engineering Considerations perspective considers engineering and technical criteria to be more important than impacts to the built environment or to the natural environment. The Engineering Considerations perspective accomplishes this preference by assigning a weight to the engineering considerations module that is five times that assigned to the Built Environment or Natural Environment modules.

The top routing alternatives for the Engineering Considerations perspective within the BREC basket of routes were Routes G, ACQ, E, HS, and AGW. These are among the top BREC routes shown in Figure 4.4. Data for the top five Engineering Considerations routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.4 in the digital appendix.

4.4.4 Simple Composite

As discussed in Section 1.3.4, the Simple Composite perspective considers impacts to the built environment, impacts to the natural environment, and engineering considerations to be equally important. The Simple Composite accomplishes this by assigning equal weights to each of the three perspectives.

The top routing alternatives for the Simple Composite perspective within the BREC basket of routes were Routes ACQ, G, AGW, ADC, and HS. These are among the top BREC routes shown in Figure 4.4. Data for the top five Simple Composite routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.4 in the digital appendix.

4.4.5 "Top Fives" BREC Routes

As can be seen from this table, even though there are twenty individual slots in the BREC basket of routes "Top Fives" matrix, there are only nine different routes among the "Top Fives" finalists. This is because some routes appear more than once in the rankings by perspective or in the simple composite.

BREC Basket			
Built	**Engineering**	**Natural**	**Simple**
ROUTE ADC	ROUTE G	ROUTE HS	ROUTE ACQ
ROUTE ACQ	ROUTE ACQ	ROUTE G	ROUTE G
ROUTE AGW	ROUTE E	ROUTE AGW	ROUTE AGW
ROUTE ADS	ROUTE HS	ROUTE BK	ROUTE ADC
ROUTE ACU	ROUTE AGW	ROUTE ACQ	ROUTE HS

4.5 Cross Over Routes

4.5.1 Built Environment Perspective

As discussed in Section 1.3.1, the Built Environment perspective considers impacts to the built environment to be more important than impacts to the natural environment and more important than engineering considerations. The Built Environment perspective accomplishes this preference by assigning a weight to the built environment module that is five times that assigned to the Natural Environment or Engineering Considerations modules.

The top routing alternatives for the Built Environment perspective within the Cross Over Routes basket of routes were Routes AVD, AVC, AVE, AVF, and AUT. These are among the top Cross Over routes shown in Figure 4.5. Data for the top five Built Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.5 in the digital appendix.

4.5.2 Natural Environment Perspective

As discussed in Section 1.3.2, the Natural Environment perspective considers impacts to the natural environment to be more important than impacts to the built environment and more important than engineering considerations. The Natural Environment perspective accomplishes this preference by assigning a weight to the natural environment module that is five times that assigned to the Built Environment or Engineering Considerations modules.

The top routing alternatives for the Natural Environment perspective within the Cross Over Routes basket of routes were Routes AUD, AUL, AUT, AUP, and ATZ. These are among the top Cross Over routes shown in Figure 4.5. Data for the top five Natural Environment routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.5 in the digital appendix.

4.5.3 Engineering Considerations

As discussed in Section 1.3.3, the Engineering Considerations perspective considers engineering and technical criteria to be more important than impacts to the built environment or to the natural environment. The Engineering Considerations perspective accomplishes this preference by assigning a weight to the engineering considerations module that is five times that assigned to the Built Environment or Natural Environment modules.

The top routing alternatives for the Engineering Considerations perspective within the Cross Over Routes basket of routes were Routes AVC, AUL, AUP, AVF, and AUX. These are among the top Cross Over routes shown in Figure 4.5. Data for the top five Engineering Considerations routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.0 in the digital appendix.

4.5.4 Simple Composite

As discussed in Section 1.3.4, the Simple Composite perspective considers impacts to the built environment, impacts to the natural environment, and engineering considerations to be equally important. The Simple Composite accomplishes this by assigning equal weights to each of the three perspectives.

The top routing alternatives for the Simple Composite perspective within the Cross Over Routes basket of routes were Routes AVC, AVD, AUP, AUT, and AUD. These are among the top Cross Over routes shown in Figure 4.5. Data for the top five Simple Composite routes, taken from the *Analysis and Evaluation* model, is provided in Table 4.5 in the digital appendix.

4.5.5 "Top Fives" Cross Over Routes

As can be seen from this table, even though there are twenty individual slots in the Cross Over basket of routes "Top Fives" matrix, there are only thirteen different routes among the "Top Fives" finalists. This is because some routes appear more than once in the rankings by perspective or in the simple composite.

Cross Over Routes Basket			
Built	**Engineering**	**Natural**	**Simple**
ROUTE AIK	ROUTE KU	ROUTE HW	ROUTE AIK
ROUTE AGU	ROUTE AIK	ROUTE KU	ROUTE KU
ROUTE ADK	ROUTE KS	ROUTE IA	ROUTE AGU
ROUTE AHA	ROUTE HO	ROUTE BS	ROUTE AGY
ROUTE ADG	ROUTE AM	ROUTE HO	ROUTE AHA

5.0 "Top Fives" Routes

Within each basket of routes, the top five routes in each of the three perspectives and in the simple composite are the routing alternatives which will be considered next as semi-finalist routes in an expert judgment phase. There are forty-nine (49) such "Top Fives" routes which graduate to further consideration.

All forty-nine "Top Fives" routes are further evaluated within decision matrices based on the Built Environment (Section 5.1), Natural Environment (Section 5.2), and Engineering Considerations (Section 5.3).

5.1 Built Environment

Table 5.1 shows all forty-nine of the "Top Fives" routes from the five baskets of routes ranked against significant built environment criteria.

For all forty-nine "Top Fives" routes, minimum and maximum values are identified and averages (statistical mean) and standard deviations (STD DEV) are calculated. The standard deviation is added to the minimum value under each Built Environment criterion to establish a cautionary threshold.

Table 5.1 Built Environment Screening					
Built Environment Perspective		Residences within ROW	Proximity to Residences (within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
ROUTE ACQ		2	23	0	1
ROUTE ACU		2	21	0	1
ROUTE ADC		0	17	0	1
ROUTE ADS		2	22	0	1
ROUTE AGW		3	18	0	1
ROUTE AJU		0	12	0	**4**
ROUTE AJW		0	13	0	2
ROUTE AJX		2	50	0	**4**
ROUTE ALE		10	75	0	3
ROUTE AME		9	71	0	3
ROUTE ANE		7	64	0	3
ROUTE AQL		5	75	0	2
ROUTE ATZ		**98**	**531**	**4**	0
ROUTE AUD		**98**	**538**	**4**	0
ROUTE AUL		**155**	**676**	**2**	0
ROUTE AUP		**34**	144	**1**	**8**
ROUTE AUT		**32**	147	**1**	**8**
ROUTE AUX		**82**	**284**	**1**	**7**
ROUTE AVC		**36**	**199**	0	1
ROUTE AVD		11	**165**	0	1
ROUTE AVE		18	135	0	**4**
ROUTE AVF		**35**	**152**	0	**4**
ROUTE BK		4	48	0	**8**
ROUTE E		5	54	0	**8**
ROUTE G		4	49	0	**8**
ROUTE HS		5	44	0	**8**
ROUTE KW		3	44	0	**9**
ROUTE KY		2	39	0	**9**
ROUTE KZ		4	76	0	**11**
ROUTE QA		**41**	**156**	**2**	**10**
ROUTE QE		**49**	**207**	**2**	**10**
ROUTE QG		13	106	0	**10**
ROUTE QI		12	101	0	**10**
ROUTE SE		**48**	**203**	**2**	**10**
ROUTE SI		11	97	0	**10**
ROUTE YB		7	101	0	**9**
ROUTE ADG		3	27	**1**	1
ROUTE ADK		0	22	**1**	1
ROUTE AGU		0	19	0	2
ROUTE AGY		6	28	**1**	1
ROUTE AHA		3	23	**1**	1
ROUTE AIK		1	15	0	2
ROUTE AM		5	53	**1**	**8**
ROUTE BS		7	58	**1**	**8**
ROUTE HO		2	45	0	**9**
ROUTE HW		8	54	**1**	**8**
ROUTE IA		5	49	**1**	**8**
ROUTE KS		4	46	0	**9**
ROUTE KU		3	41	0	**9**
AVERAGE		18.3	106.9	0.6	5.2
MINIMUM		0.0	12.0	0.0	0.0
MAXIMUM		155.0	676.0	4.0	11.0
STD DEV		30.7	136.6	0.9	3.7
Threshhold		**30.7**	**148.6**	**0.9**	**3.7**

For purposes of further analyzing the forty-nine "Top Fives" routes for impacts to the Built Environment, the analysis first eliminated considerations pertaining to proposed developments, proximity to commercial buildings, and proximity to industrial buildings. These criteria are simply not as significant as, for example, residences within the proposed right-of-way or building through heavily residential areas (higher number of homes within 300 feet of the right-of-way).

For routes that have a value beyond one standard deviation in either "residences within right-of-way" or "proximity to residences (within 300 feet)," those routes are considered to exceed a cautionary threshold for impacts to the built environment.

Two other criteria for the built environment are (1) school, church, cemetery, and park parcels crossed and (2) National Register of Historic Places-listed Structures and Districts within 3,000 feet of the centerline. These are potentially significant issues but we are not sure that they automatically rise to the level of directly affecting residences and crossing through residential neighborhoods. However, for routes that have a value beyond one standard deviation in both of these criteria, those routes are considered to exceed a cautionary threshold for impacts to the built environment.

In Table 5.1, the standard deviation and threshold values are provided along the bottom rows of the table. Where those values are exceeded under the various criteria considered, those values are bolded. If a route's values across the criteria exceed the threshold values in the manner identified above, the route names themselves are bolded, and those routes will be considered to exceed a cautionary threshold for impacts to the built environment.

5.2 Natural Environment

Table 5.2 shows all forty-nine of the "Top Fives" routes from the five baskets of routes ranked against significant natural environment criteria.

For all forty-nine "Top Fives" routes further evaluated, minimum and maximum values are identified and averages (statistical mean) and standard deviations are calculated. The standard deviation (SD) is added to the minimum value under each Natural Environment criterion to establish a cautionary threshold.

For purposes of further analyzing the forty-nine "Top Fives" routes for impacts to the Natural Environment, this analysis considers all four natural environment criteria to be equally significant. All routes exceed the cautionary threshold in either two or three respects. Therefore, for routes that have a value beyond one

standard deviation in three of the four criteria, those routes are considered to exceed a cautionary threshold for impacts to the natural environment.

In Table 5.2, the standard deviation and threshold values are provided along the bottom rows of the table. Where those threshold values are exceeded under the various criteria considered, those values are bolded. If a route's values across the criteria exceed the threshold values in the manner identified above, that is, by falling above the standard deviation in three or more criteria, the routes themselves are bolded, and they will be considered to have exceeded the cautionary threshold for impacts to the natural environment.

Table 5.2 / Natural Environment Screening					
Natural Environment Perspective		Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
ROUTE ACQ		**445.50**	40	**12.15**	103.14
ROUTE ACU		**523.07**	**46**	**12.15**	103.14
ROUTE ADC		**458.70**	42	**11.93**	103.14
ROUTE ADS		**459.11**	40	**11.93**	103.14
ROUTE AGW		**397.61**	39	**11.93**	103.14
ROUTE AJU		**429.82**	43	**14.15**	108.73
ROUTE AJW		**402.88**	40	**11.93**	104.61
ROUTE AJX		**412.63**	**45**	**11.93**	106.79
ROUTE ALE		327.92	**57**	**12.44**	106.79
ROUTE AME		328.06	**57**	**12.81**	106.79
ROUTE ANE		**333.70**	**57**	**12.75**	106.79
ROUTE AQL		326.55	**53**	**12.05**	107.07
ROUTE ATZ		**476.42**	**65**	2.94	**289.89**
ROUTE AUD		**492.83**	**61**	2.79	**246.37**
ROUTE AUL		**452.51**	**60**	3.14	**246.00**
ROUTE AUP		**540.36**	**74**	2.97	**162.70**
ROUTE AUT		**561.06**	**72**	2.86	**155.58**
ROUTE AUX		**507.52**	**75**	3.25	**149.76**
ROUTE AVC		**515.55**	**80**	3.25	**151.80**
ROUTE AVD		**563.22**	**83**	3.15	**148.90**
ROUTE AVE		**562.59**	**93**	6.07	**159.12**
ROUTE AVF		**512.19**	**88**	6.17	**162.02**
ROUTE BK		**373.59**	27	**12.62**	**146.00**
ROUTE E		**364.26**	28	**14.95**	**151.75**
ROUTE G		**359.98**	27	**12.83**	**146.00**
ROUTE HS		312.09	26	**12.62**	**146.00**
ROUTE KW		321.64	28	**14.74**	**153.22**
ROUTE KY		317.36	27	**12.62**	**147.47**
ROUTE KZ		327.11	32	**12.62**	**149.65**
ROUTE QA		240.94	39	**12.78**	**150.03**
ROUTE QE		237.45	37	**12.62**	**148.59**
ROUTE QG		246.68	**45**	**15.24**	**155.41**
ROUTE QI		242.40	**44**	**13.12**	**149.66**
ROUTE SE		237.58	37	**12.99**	**148.59**
ROUTE SI		242.53	**44**	**13.49**	**149.66**
ROUTE YB		241.03	40	**12.74**	**149.93**
ROUTE ADG		**466.93**	**46**	**11.93**	105.53
ROUTE ADK		**467.77**	**47**	**11.93**	104.61
ROUTE AGU		**464.23**	**44**	**12.82**	104.61
ROUTE AGY		**405.84**	43	**11.93**	105.53
ROUTE AHA		**406.68**	**44**	**11.93**	104.61
ROUTE AIK		**402.73**	43	**12.82**	104.61
ROUTE AM		**381.40**	33	**12.62**	**148.39**
ROUTE BS		**381.81**	31	**12.62**	**148.39**
ROUTE HO		**378.71**	31	**13.51**	**147.47**
ROUTE HW		320.32	30	**12.62**	**148.39**
ROUTE IA		321.16	31	**12.62**	**147.47**
ROUTE KS		321.49	31	**15.63**	**153.22**
ROUTE KU		317.21	30	**13.51**	**147.47**
AVERAGE		390	46	11	141
MINIMUM		237	26	3	103
MAXIMUM		563	93	16	290
STD DEV		94.8	17.1	3.8	38.0
Threshhold		**332.3**	**43.1**	**6.6**	**141.1**

5.3 Engineering Considerations

Table 5.3 shows all forty-nine of the "Top Fives" routes from the five baskets of routes ranked against engineering and technical criteria.

For all forty-nine "Top Fives" routes, minimum and maximum values are identified and averages (statistical mean) and standard deviations are calculated. The standard deviation (SD) is added to the minimum value under each Engineering Considerations criterion to establish a cautionary threshold.

For purposes of further analyzing the forty-nine "Top Fives" routes for impacts to Engineering Considerations, this analysis considers first of all that routes estimated to cost greater than 125% of the estimated cost of the least cost practicable route (Route AQV, estimated to cost approximately $54,764,303) are not cost effective. Furthermore, routes should be considered to fail for impacts to engineering considerations when other of three criteria (length of line, number of landowners affected, acres of new right-of-way required) also exceed their standard deviation-based thresholds in specific ways.

It is at least arguable that some combination of these criteria should merit consideration as a restraint on the requirement for collocation, since the longer a transmission line is forced to collocate rather than take a more direct approach to its termination, the more expensive the line, the more land taken from citizens of the Commonwealth as right-of-way, and the greater number of property owners it is likely to impact. In fact, no Kentucky landowner already having a transmission line cross his property could view with equanimity the prospect of new transmission lines coming at him, unconstrained by cost, length, amount of parcels affected, or acres of new right-of-way required so long as collocation is maximized at the expense of these other considerations.

We concur with the KPSC that all "electrically equivalent" transmission line routes should be evaluated, and with this study of alternatives, they are indeed analyzed and evaluated. In this analysis, a "Top Fives" route will be considered a poor route for engineering considerations reasons if

(1) a route exceeds 125% of the estimated cost of the least cost practicable route (Route AQV at $54,764,303). This would affect routes estimated to cost more than $68,455,379, or $13,691,076 more than Route AQV);

(2) a route exceeds the standard deviation-based threshold for total estimated cost and also exceeds the standard deviation-based threshold for (a) length of line, (b) number of parcels affected, or (c) acres of new easement required;

(3) a route exceeds the standard deviation-based threshold for all three of the standard deviation-based thresholds for (a) length of line, (b) number of parcels affected, and (c) acres of new easement required.

In Table 5.3, the standard deviation and threshold values are provided along the bottom rows of the table. Where those values are exceeded under the various criteria considered, those values are bolded. If a route's values across the criteria exceed the threshold values in the manner identified above, that is, by falling above the standard deviation in three or more criteria, the routes themselves are bolded, and they will be considered to have failed the first cut in the engineering considerations evaluation.

Table 5.3 / Engineering Considerations Screening									
Engineering Cosiderations Perspective		Length (Miles)	Percent of Route Rebuilt with Existing T/L	Percent of Route Collocated with Existing Utilities	Percent Rebuild or Parallel Utilities	Total Project Costs	Percent Over Least Cost Route (AJW)	Estimated No. of Parcels	Approx. Acres of New Easement
ROUTE ACQ		**56.52**	40.69%	57.09%	97.79%	**$74,588,719**	**36.2%**	116	812.61
ROUTE ACU		**55.53**	35.15%	51.85%	87.00%	**$73,144,888**	**33.6%**	126	**872.97**
ROUTE ADC		**54.05**	36.11%	46.46%	82.57%	**$71,488,948**	**30.5%**	116	837.09
ROUTE ADS		**54.13**	36.06%	42.66%	78.72%	**$72,272,345**	**32.0%**	121	839.03
ROUTE AGW		**51.55**	37.87%	34.14%	72.01%	**$69,836,908**	**27.5%**	108	776.48
ROUTE AJU		41.87	17.05%	38.81%	55.86%	$56,742,836	3.6%	110	841.94
ROUTE AJW		**43.88**	29.26%	37.03%	66.29%	$60,973,719	11.3%	104	752.48
ROUTE AJX		**44.35**	21.74%	36.64%	58.38%	$60,786,966	11.0%	161	841.45
ROUTE ALE		40.34	10.29%	44.92%	55.21%	**$63,018,945**	15.1%	198	**877.33**
ROUTE AME		40.87	10.15%	44.73%	54.88%	**$66,172,832**	20.8%	200	**890.18**
ROUTE ANE		40.41	7.92%	44.32%	52.24%	**$64,056,129**	17.0%	180	**902.06**
ROUTE AQL		38.49	8.31%	55.11%	63.42%	$59,063,247	7.8%	175	**855.52**
ROUTE ATZ		**44.01**	0.00%	76.98%	76.98%	**$78,488,555**	**43.3%**	**739**	**1066.91**
ROUTE AUD		**44.60**	0.00%	83.50%	83.50%	**$80,545,031**	**47.1%**	**751**	**1081.21**
ROUTE AUL		40.72	0.00%	93.39%	93.39%	**$75,661,706**	**38.2%**	**681**	**987.15**
ROUTE AUP		**45.70**	0.00%	50.11%	50.11%	**$65,275,814**	19.2%	**398**	**1107.88**
ROUTE AUT		**46.07**	0.00%	42.74%	42.74%	**$68,433,328**	25.0%	**406**	**1116.85**
ROUTE AUX		**46.78**	0.00%	73.22%	73.22%	**$67,137,000**	22.6%	**510**	**1134.06**
ROUTE AVC		**46.58**	0.00%	81.67%	81.67%	**$60,685,362**	10.8%	**398**	**1129.21**
ROUTE AVD		**48.06**	0.00%	56.26%	56.26%	**$69,636,782**	**27.2%**	**368**	**1165.09**
ROUTE AVE		**54.39**	0.00%	74.54%	74.54%	**$73,856,378**	**34.9%**	**397**	**1318.55**
ROUTE AVF		**53.43**	0.00%	91.13%	91.13%	**$66,271,710**	21.0%	**405**	**1295.27**
ROUTE BK		**52.20**	37.39%	38.93%	76.32%	**$72,402,291**	**32.2%**	143	792.24
ROUTE E		**54.82**	41.96%	55.02%	96.97%	**$76,022,034**	**38.8%**	160	771.39
ROUTE G		**54.59**	42.13%	54.04%	96.17%	**$74,724,438**	**36.4%**	138	765.82
ROUTE HS		**49.62**	39.34%	29.89%	69.23%	**$69,981,206**	**27.8%**	131	729.70
ROUTE KW		**42.18**	30.44%	33.52%	63.96%	**$62,443,199**	14.0%	148	711.27
ROUTE KY		41.95	30.61%	32.13%	62.74%	$61,124,054	11.6%	126	705.70
ROUTE KZ		**42.42**	22.73%	31.78%	54.50%	$60,870,262	11.1%	183	794.67
ROUTE QA		38.39	10.81%	36.08%	46.89%	**$66,522,120**	21.5%	**279**	830.06
ROUTE QE		37.83	10.97%	36.61%	47.58%	**$66,515,994**	21.5%	**346**	816.48
ROUTE QG		38.64	10.74%	41.43%	52.17%	**$64,376,228**	17.6%	242	836.12
ROUTE QI		38.41	10.80%	39.96%	50.77%	**$63,067,687**	15.2%	220	830.55
ROUTE SE		38.36	10.82%	36.52%	47.34%	**$69,649,272**	**27.2%**	**348**	829.33
ROUTE SI		38.94	10.66%	39.83%	50.49%	**$66,219,303**	20.9%	222	843.39
ROUTE YB		36.56	8.75%	50.44%	59.19%	$59,138,791	8.0%	197	808.73
ROUTE ADG		**52.11**	24.64%	53.50%	78.14%	**$68,983,012**	**26.0%**	141	**952.0**
ROUTE ADK		**50.95**	25.20%	49.28%	74.48%	**$67,838,885**	23.9%	140	**923.9**
ROUTE AGU		**50.04**	25.66%	46.14%	71.80%	**$66,872,241**	22.1%	128	**901.8**
ROUTE AGY		**49.61**	25.88%	41.06%	66.94%	**$67,325,163**	22.9%	133	**891.4**
ROUTE AHA		**48.45**	26.50%	36.33%	62.83%	**$66,185,518**	20.9%	132	**863.3**
ROUTE AIK		**47.46**	27.05%	37.08%	64.14%	**$64,431,826**	17.7%	115	839.3
ROUTE AM		**50.18**	25.59%	50.04%	75.63%	**$69,096,945**	**26.2%**	163	**905.2**
ROUTE BS		**50.26**	25.55%	45.94%	71.49%	**$69,870,924**	**27.6%**	167	**907.2**
ROUTE HO		**48.11**	26.69%	42.24%	68.93%	**$66,997,119**	22.3%	150	**855.0**
ROUTE HW		**47.68**	26.93%	36.91%	63.84%	**$67,444,235**	23.2%	155	844.6
ROUTE IA		**46.52**	27.60%	31.88%	59.48%	**$66,303,710**	21.1%	154	816.5
ROUTE KS		**45.76**	28.06%	33.85%	61.91%	**$65,855,714**	20.3%	159	798.1
ROUTE KU		**45.53**	28.20%	32.57%	60.77%	**$64,568,932**	17.9%	137	792.5
AVERAGE		46	19.44%	47.97%	67.40%	$67,407,536		235	895
MINIMUM		37	0.00%	29.89%	42.74%	$56,742,836		104	706
MAXIMUM		57	42.13%	93.39%	97.79%	$80,545,031		751	1319
STD DEV		5.6	13.64%	15.87%	14.20%	$5,147,249		160.5	140.6
Threshhold		**42.12**	**28.49%**	**77.53%**	**83.59%**	**$61,890,085**	**25%**	**264.5**	**846.3**

5.4 Routes Screened Against All Three Perspectives

Following the individual perspective screenings as described in Sections 5.1 through 5.3, the routes were then ranked in a simple matrix with either an "X" indicating that the route failed the first cut in the evaluation by that perspective, or with no mark, indicating that the route fell within the range of acceptable levels of impact as defined for that perspective. The results are shown in Table 5.4, Screening Against All Three Criteria.

As can be seen in Table 5.4, once the "Top Five" routes were ranked in competition with this smaller subset of better routes, the evaluation concluded that

- eleven of the "Top Five" routes performed poorly in all three perspectives;
- sixteen "Top Five" routes performed poorly in two of the three perspectives;
- sixteen "Top Five" routes performed poorly in one of the three perspectives; and,
- six "top Fives" routes performed well enough in each perspective to rank among the better routes in all three perspectives.

These six "top Fives" routes which performed well in all three perspectives are considered to be semi-finalist routes which will be evaluated in a manner similar to that in which the original field of forty-nine "Top Fives" routes was winnowed down to these six semi-finalist routes.

Table 5.4 Screening Against All Three Criteria				
	Built	Natural	Engineering	Composite
ROUTE ACQ			X	1
ROUTE ACU		X	X	2
ROUTE ADC			X	1
ROUTE ADS			X	1
ROUTE AGW			X	1
ROUTE AJU				0
ROUTE AJW				0
ROUTE AJX		X		1
ROUTE ALE			X	1
ROUTE AME			X	1
ROUTE ANE		X	X	2
ROUTE AQL				0
ROUTE ATZ	X	X	X	3
ROUTE AUD	X	X	X	3
ROUTE AUL	X	X	X	3
ROUTE AUP	X	X	X	3
ROUTE AUT	X	X	X	3
ROUTE AUX	X	X	X	3
ROUTE AVC	X	X	X	3
ROUTE AVD	X	X	X	3
ROUTE AVE		X	X	2
ROUTE AVF	X	X	X	3
ROUTE BK		X	X	2
ROUTE E		X	X	2
ROUTE G		X	X	2
ROUTE HS			X	1
ROUTE KW			X	1
ROUTE KY				0
ROUTE KZ				0
ROUTE QA	X		X	2
ROUTE QE	X		X	2
ROUTE QG		X		1
ROUTE QI		X		1
ROUTE SE	X		X	2
ROUTE SI		X		1
ROUTE YB				0
ROUTE ADG		X	X	2
ROUTE ADK		X	X	2
ROUTE AGU		X	X	2
ROUTE AGY			X	1
ROUTE AHA		X	X	2
ROUTE AIK			X	1
ROUTE AM	X	X	X	3
ROUTE BS	X	X	X	3
ROUTE HO		X	X	2
ROUTE HW	X		X	2
ROUTE IA	X		X	2
ROUTE KS			X	1
ROUTE KU			X	1

6.0 Semi-Finalist and Finalist Routes Evaluated

6.1 Built Environment

Table 6.1 shows the six semi-finalist routes again ranked against significant built environment criteria.

For all six semi-finalist routes, minimum and maximum values are again identified and averaged (statistical mean) and standard deviations are calculated. As before, the standard deviation (STD DEV) is added to the minimum value under each Built Environment criterion to establish a cautionary threshold.

As before, for routes that have a value beyond one standard deviation in either "residences within right-of-way" or "proximity to residences (within 300 feet)," those routes are considered to exceed a cautionary threshold for impacts to the built environment.

In Table 6.1, the standard deviation and threshold values are provided along the bottom rows of the table. Where those values are exceeded under the various criteria considered, those values are bolded. If a route's values across the criteria exceed the threshold values in the manner identified above, the routes themselves are bolded, and they will be considered to exceed a cautionary threshold for impacts to the built environment.

Table 6.1 / Built Environment Screening

Built Environment Perspective	Residences within ROW	Proximity to Residences (within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
ROUTE AJU	0	12	0	4
ROUTE AJW	0	13	0	2
ROUTE AQL	**5**	**75**	0	2
ROUTE KY	2	39	0	**9**
ROUTE KZ	**4**	**76**	0	**11**
ROUTE YB	**7**	**101**	0	**9**
Average	3	53	0	6
Minimum	0	12	0	2
Maximum	7	101	0	11
STD DEV	2.6	33.6	0.0	3.6
Threshold	**2.6**	**45.6**	**0.0**	**5.6**

Three of the six routes (AQL, KZ, and YB) exceed both significant cautionary thresholds; Route KY exceeds the NRHP-listed resources threshold.

6.2 Natural Environment

Table 6.2 shows the six semi-finalist routes again ranked against significant natural environment criteria.

For all six semi-finalist routes, minimum and maximum values are again identified and averaged (statistical mean) and standard deviations are calculated. As before, the standard deviation (STD DEV) is added to the minimum value under each Natural Environment criterion to establish a cautionary threshold.

As before, those routes which have a value beyond one standard deviation in three of the four criteria are considered to exceed a cautionary threshold for impacts to the natural environment.

In Table 6.2, the standard deviation and threshold values are provided along the bottom rows of the table. Where those values are exceeded under the various criteria considered, those values are bolded. If a route's values across the criteria exceed the threshold values in the manner identified above, the routes themselves are bolded, and they will be considered to exceed a cautionary threshold for impacts to the natural environment.

Table 6.2 / Natural Environment Screening

Natural Environment Perspective	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
ROUTE AJU	**429.82**	**43**	**14.15**	108.73
ROUTE AJW	**402.88**	**40**	11.93	104.61
ROUTE AQL	**326.55**	**53**	12.05	107.07
ROUTE KY	**317.36**	27	12.62	**147.47**
ROUTE KZ	**327.11**	32	12.62	**149.65**
ROUTE YB	241.03	**40**	**12.74**	**149.93**
Average	340.79	39.2	12.69	127.91
Minimum	241.03	27	11.93	104.61
Maximum	429.82	53	14.15	149.93
STD DEV	61.47	8.2	0.72	21.16
Threshold	**302.50**	**35.2**	**12.66**	**125.77**

Two of the six routes (AJU and YB) exceed three of the four natural environment criteria.

6.3 Engineering Considerations

Table 6.3 shows the six semi-finalist routes again ranked against significant engineering criteria.

For all six semi-finalist routes, minimum and maximum values are once again identified and averaged (statistical mean) and standard deviations are calculated. As before, the standard deviation (STD DEV) is added to the minimum value under each Engineering Considerations criterion to establish a cautionary threshold.

In Table 6.3, the standard deviation and threshold values are provided along the bottom rows of the table. Where those values are exceeded under the various criteria considered, those values are bolded. If a route's values across the criteria exceed the threshold values in the manner identified above, the routes themselves are bolded, and they will be considered to exceed a cautionary threshold for impacts to the natural environment.

Table 6.3 / Engineering Considerations Screening

Engineering Considerations Perspective	Length (Miles)	Percent of Route Rebuilt with Existing T/L	Percent of Route Collocated with Existing Utilities	Percent Rebuild or Collocate with utilities	Percent of Route Collocated with Roads	Total Project Costs	Estimated No. of Parcels	Approx. Acres of New Easement
ROUTE AJU	41.87	17.05%	38.81%	**55.86%**	1.43%	$56,742,836	110	**841.94**
ROUTE AJW	43.88	29.26%	37.03%	66.29%	1.37%	**$60,973,719**	104	752.48
ROUTE AQL	38.49	8.31%	55.11%	63.42%	3.35%	**$59,063,247**	**175**	**855.52**
ROUTE KY	41.95	30.61%	32.13%	62.74%	3.00%	**$61,124,054**	126	705.70
ROUTE KZ	42.42	22.73%	31.78%	**54.50%**	2.97%	**$60,870,262**	**183**	**794.67**
ROUTE YB	36.56	8.75%	50.44%	**59.19%**	5.33%	**$59,138,791**	**197**	**808.73**
Average	40.86	19.45%	40.88%	60.34%	2.91%	$59,652,152	149.2	793.17
Minimum	36.56	8.31%	31.78%	54.50%	1.37%	$56,742,836	104.0	705.70
Maximum	43.88	30.61%	55.11%	66.29%	5.33%	$61,124,054	197.0	855.52
STD DEV	2.51	8.90%	8.87%	4.21%	1.33%	$1,553,024	37.0	51.34
Threshold	**39.07**	**21.70%**	**46.23%**	**62.09%**	**4.00%**	**$58,295,859**	**141.0**	**757.04**

Five of the six routes exceed the total project costs threshold. Three of those five routes also exceed both the number of parcels affected and the acres of new easement cautionary thresholds, and are therefore considered to be poorer routes than the other three with respect to engineering considerations.

6.4 Semi-finalist Routes Screened Against All Three Perspectives

Following the re-screenings against the three perspectives as described in Sections 6.1 through 6.3, the routes were again ranked in a simple matrix with either an "X" indicating that the route exceeded the cautionary threshold for that perspective, or with no mark, which indicates that the route fell within the range of acceptable levels of impact as defined for that perspective. The results are shown in Table 6.4, Screening Against All Three Criteria.

Table 6.4 / Screening Against All Three Perspectives

	Built	Natural	Engineering	Composite
ROUTE AJU		X		1
ROUTE AJW				0
ROUTE AQL	X		X	2
ROUTE KY				0
ROUTE KZ	X		X	2
ROUTE YB	X	X	X	3

As can be seen in Table 6.4, once the semi-finalist routes are ranked in competition with one another, the evaluation concludes that

- one semi-finalist route, Route YB, exceeded the cautionary threshold in all three perspectives;
- two of the semi-finalist routes, Routes AQL and KZ, exceeded the cautionary threshold in two of the three perspectives;
- one semi-finalist route, Route AJU, exceeded the cautionary threshold in only one of the three perspectives; and,
- two semi-finalist routes, Route AJW and Route KY, did not exceed the cautionary threshold in any of the three perspectives.

The semi-finalist routes which exceeded the cautionary threshold in two or three of the screenings were eliminated from further consideration. The other three routes are considered to be finalist routes.

6.5 Finalist Routes Discussion

These three finalist routes are very closely related, being three different variations on the same route. Nevertheless, there are important distinctions to be made regarding the three routes and the decision to build one of them.

6.5.1 Built Environment

Table 6.5.1 shows the three finalist routes compared with respect to impacts on the built environment.

Table 6.5.1 Finalist Built Environment Screening				
Built Environment Perspective	Residences within ROW	Proximity to Residences (within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)
ROUTE AJU	0	12	0	4
ROUTE AJW	0	13	0	2
ROUTE KY	**2**	**39**	0	**9**
Average	1	21	0	5
Minimum	0	12	0	2
Maximum	2	39	0	9
SD	0.9	12.5	0.0	2.9
Threshold	**0.9**	**24.5**	**0.0**	**4.9**

With one minor exception, Route AJU [Figure 6.5.1(a)] is the route originally proposed to KPSC as the preferred route for this project; the exception is a route change which avoids a pond where a whooping crane was previously observed. Route AJW [Figure 6.5.1(b)] is identical to Route AJU except that, after crossing Salt River Road, it continues in a more or less southerly direction for 4.34 miles, passing to the east of Mays Run and arriving at the Hardinsburg – Hardin County 138 kV Transmission Line. In contrast, after crossing Salt River Road, Route AJU turns roughly southeast, taking a more direct cross-country route for 8.0 miles towards Hardin County Substation. These different route segments account for the differences between Route AJU and AJW which can be seen in the tables that follow.

Like Route AJW, Route KY [Figure 6.5.1(c)] is yet another version of Route AJU. Along the southern portion of the route, Route KY is identical to Route AJW, proceeding in a more or less southerly direction after crossing Salt River Road, passing to the east of Mays Run, and arriving at the Hardinsburg – Hardin County 138 kV Transmission Line. However, Route KY differs from both Routes AJU and AJW at the northern end of the project area, where it follows gas pipelines and Dixie Highway (U.S. 31W) southeast towards the town of West Point after leaving Mill Creek Generating Station. It is in these segments that Route KY picks up greater impacts to residential land uses, a greater number of properties, historic resources around the town of West Point, and floodplains.

Table 6.5.1 shows that Route KY requires two relocations and comes within 300 feet of three times as many homes as Route AJU and AJW. Route KY also comes closer to the West Point historic district as well as the individual resources located there. In the built environment perspective, Routes AJU and AJW avoid residences, community-oriented land uses, and potentially affect fewer National Register-listed historic resources.

On balance, Route KY appears to be the least desirable finalist route from a built environment perspective, while Routes AJU and AJW appear to do an equally good job at avoiding impacts to the built environment.

6.5.2 Natural Environment

Table 6.5.2 shows the three finalist routes compared with respect to impacts on the natural environment.

Table 6.5.2 Finalist Natural Environment Screening

Natural Environment Perspective	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)
ROUTE AJU	**429.82**	**43**	**14.15**	108.73
ROUTE AJW	**402.88**	**40**	11.93	104.61
ROUTE KY	317.36	27	12.62	**147.47**
Average	383.35	36.7	12.90	120.27
Minimum	317.36	27	11.93	104.61
Maximum	429.82	43	14.15	147.47
SD	47.95	6.9	0.93	19.31
Threshold	**365.30**	**33.9**	**12.86**	**123.92**

In the natural environment, Route AJU picks up additional impacts to wetlands and stream crossings in its last cross county turn towards Hardinsburg – Hardin County Transmission Line and Hardin County Substation. This would be especially true after the route crosses St. John Road and passes to the south of West Rhudes Creek The other two routes score somewhat better in the natural environment category because they continue south after crossing Salt River Road, generally staying on higher ground.

Route KY affects about 100 acres less of forested lands due to its paralleling gas pipelines through a more intensively developed area in the northern part of the project area. Where all three routes leave Mill Creek Generating Station, Routes AJU and AJW go farther south than Route KY before turning west, where they cross more undeveloped, forested areas. The existing transmission line which Routes AJU and AJW parallel through this area crosses near or over Cow Branch, Knob Creek, Salt River, and various minor tributary streams, driving up the counts for natural forest acres affected and stream crossings. On the other hand, Route KY crosses significantly greater areas of floodplain than do Routes AJU or AJW.

On balance, Route AJU appears to be a somewhat less desirable finalist route from a natural environment perspective, while Route KY appears to do a better job at avoiding impacts to the natural environment.

6.5.3 Engineering Considerations

Table 6.5.3 shows the three finalist routes compared with respect to Engineering Considerations.

Table 6.5.3 Finalist Engineering Considerations Screening

Engineering Considerations Perspective	Length (Miles)	Percent of Route Rebuilt with Existing T/L	Percent of Route Collocated with Existing Utilities	Percent Rebuild/Collocate with utilities	Percent of Route Co-located with Roads	Total Project Costs	Estimated No. of Parcels	Approx. Acres of New Easement
ROUTE AJU	41.87	17.05%	38.81%	55.86%	1.43%	$56,742,836	110	**841.94**
ROUTE AJW	43.88	29.26%	37.03%	66.29%	1.37%	**$60,973,719**	104	752.48
ROUTE KY	41.95	30.61%	32.13%	62.74%	3.00%	**$61,124,054**	**126**	705.70
Average	42.57	25.64%	35.99%	61.63%	1.93%	$59,613,536	113.3	766.71
Minimum	41.87	17.05%	32.13%	55.86%	1.37%	$56,742,836	104.0	705.70
Maximum	43.88	30.61%	38.81%	66.29%	3.00%	$61,124,054	126.0	841.94
SD	0.93	6.10%	2.82%	4.33%	0.76%	$2,030,820	9.3	56.52
Threshold	**42.80**	**24.51%**	**35.99%**	**61.96%**	**2.25%**	**$58,773,655**	**113.3**	**762.22**

Route AJU rebuilds less of the Hardinsburg – Hardin County 138 kV Transmission Line, resulting in a greater number of acres of new right-of-way required (841.94 acres) and the least percentage of rebuild/paralleling (55.9%) of the three finalist routes. However, at an estimated cost of $56,742,836, it is about $4.23 million less expensive than Route AJW and affects fewer property owners than Route KY.

Route AJW is the route having the greatest percentage of collocation (66.3%) of the three finalist routes. However, it is about two miles longer and is estimated to cost $60,973,719, or about $4,231,000 more than the most cost-effective finalist route, Route AJU.

Route KY is the most expensive of the three finalist routes ($61,124,054) and affects the greatest number of property owners (126). At 62.74% rebuild or paralleling existing utilities, it has better collocation than Route AJU but not as good as Route AJW.

On balance, Route AJU appears to be the most cost-effective route from an engineering considerations perspective. Route AJW is more expensive, but achieves a greater percentage of collocation and requires less new easement. Route KY appears to be the most expensive of the finalist routes and its alignment affects the most property owners.

6.5.4 Findings

The difference among the three finalist routes is largely a difference between a route which appears to minimize environmental impacts (Route KY) and routes which appear to minimize impacts to the built environment (Routes AJU and AJW).

Routes AJU and AJW affect larger areas of forested lands and a greater number of stream crossings. These are not negligible effects; however, the impacts to these resources can be mitigated through sensitive land clearing techniques, establishment of buffer areas, and standard long-term vegetation management practices. Impacts to residences and communities of the kind created by Route KY are more difficult to ameliorate.

On balance, with greater impacts to residences within the right-of-way, residences within 300 feet, and historic properties listed on the National Register, as well as greater estimated cost and greater estimated number of properties affected, Route KY is the least reasonable of the three finalist routes.

Routes AJU and AJW are reasonable routes which are clearly superior to Route KY in terms of the built environment and engineering considerations. Route AJW is about two miles (5%) longer and $4,231,000 (7%) more expensive. For that extra two miles in length and additional four and a quarter million dollars, Route AJW buys an additional ten percent of collocation over Route AJU.

Proposed Routes. This analysis and evaluation report validates and confirms LG&E/KU's conclusion that Route AJU is a reasonable route which meets the goals of the project while avoiding a wasteful duplication of facilities.

Alternatively, for a better collocation ratio and somewhat improved natural environment metrics, this analysis and evaluation report validates and confirms LG&E/KU's conclusion that Route AJW is a reasonable and acceptable alternative.

7.0 Conclusion

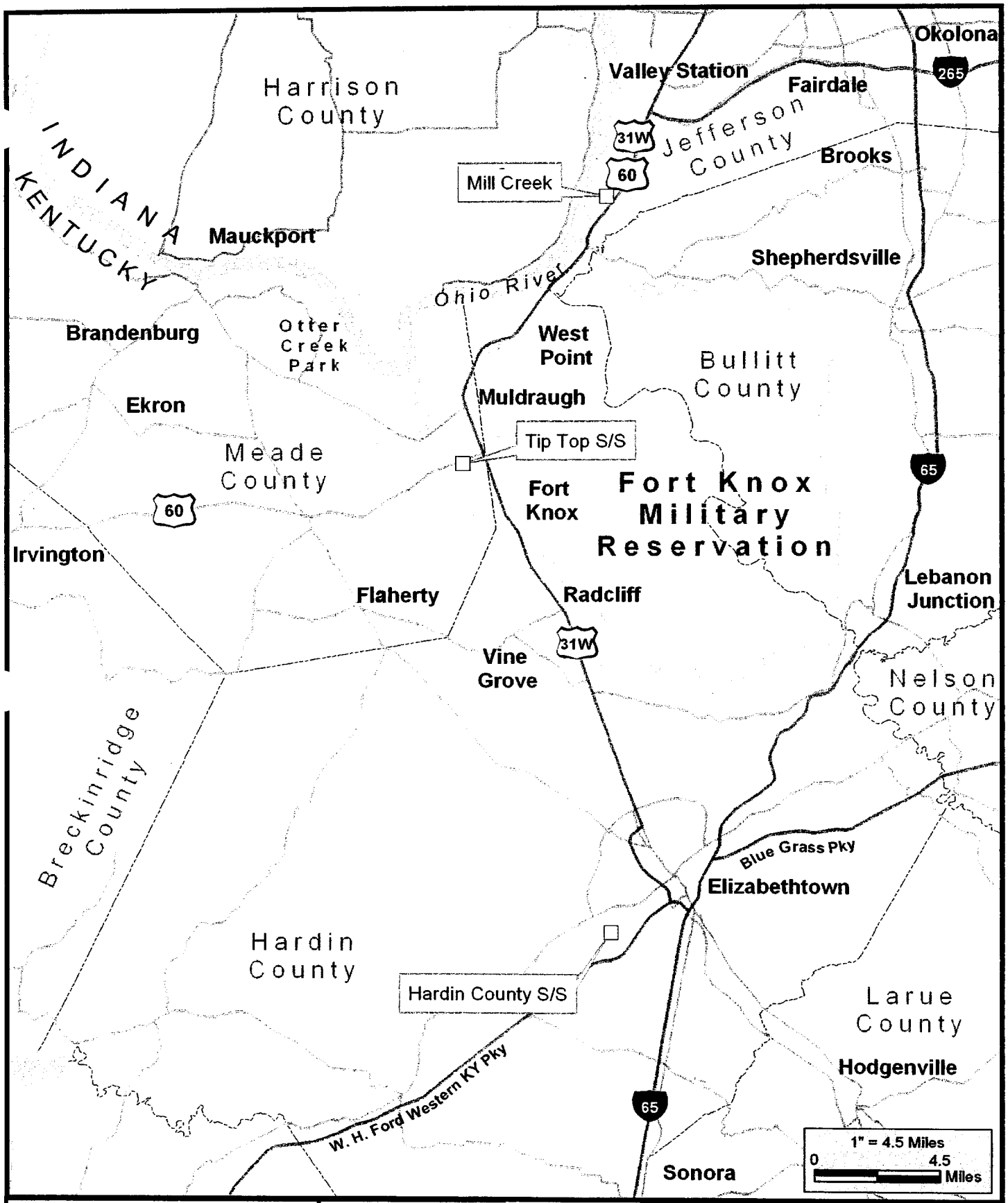
This report represents a reasoned and good faith effort to validate and confirm LG&E/KU's conclusions regarding the reasonableness of Routes AJU and AJW as routing alternatives. This conclusion is based on analyzing and documenting with careful consideration the same routes and the same metrics available to LG&E/KU.

At 55.86% collocation, Route AJU appears to comply with KPSC's statutory requirement for identifying and seriously evaluating collocation wherever

collocated lines are electrically equivalent. Route AJU's more expensive sister route, Route AJW, is a reasonable and acceptable alternative, should KPSC wish to achieve greater collocation at higher cost.

8.0 Figures

Figure 1.0 Project Area



Project Area

Mill Creek - Hardin County
345 kV Transmission Line

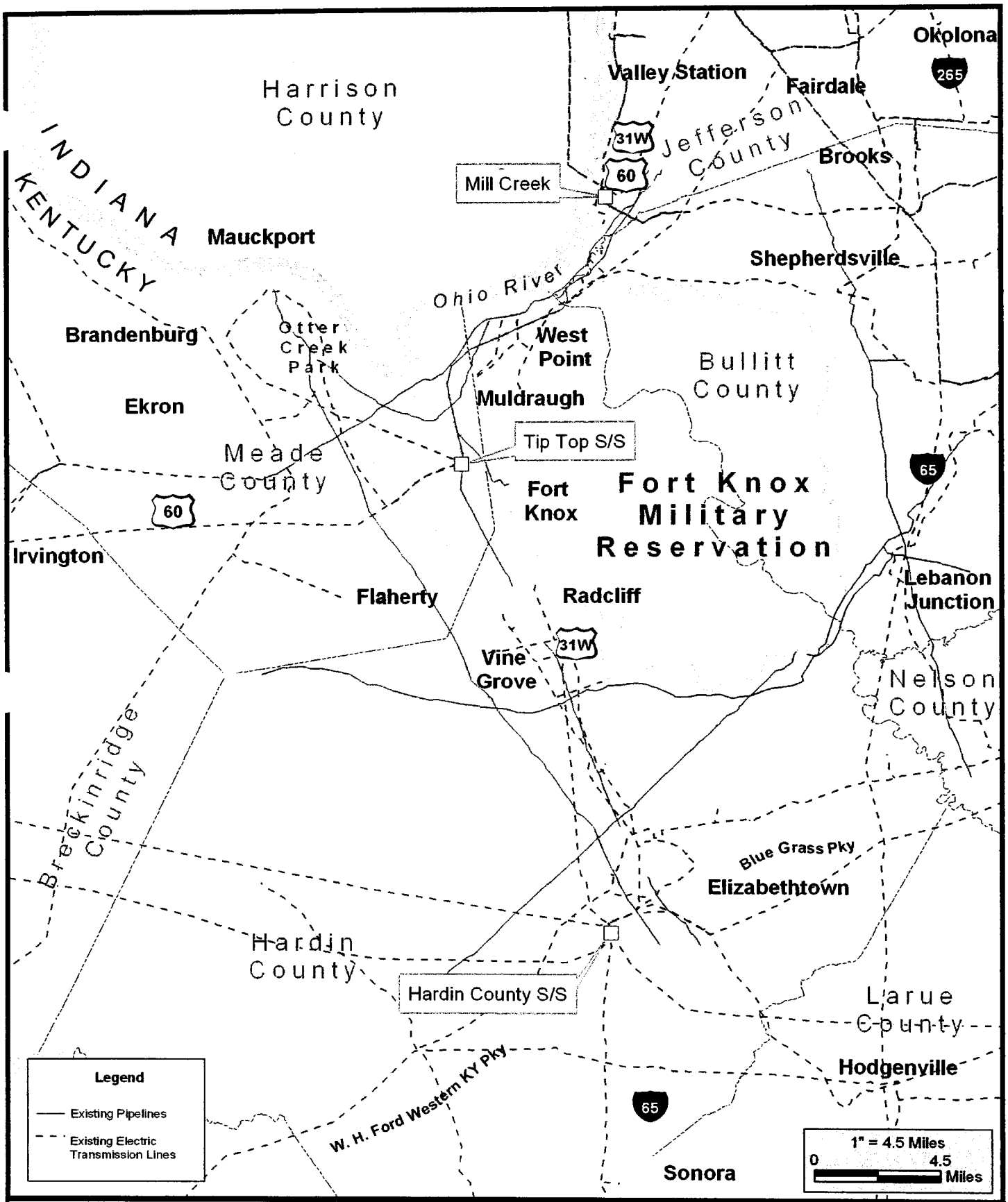
KU LG&E

N

FIGURE 1.0

PHOTO SCIENCE

Figure 1.2 Existing Electric Power and Natural Gas Lines



Existing Electric Power and Natural Gas Lines

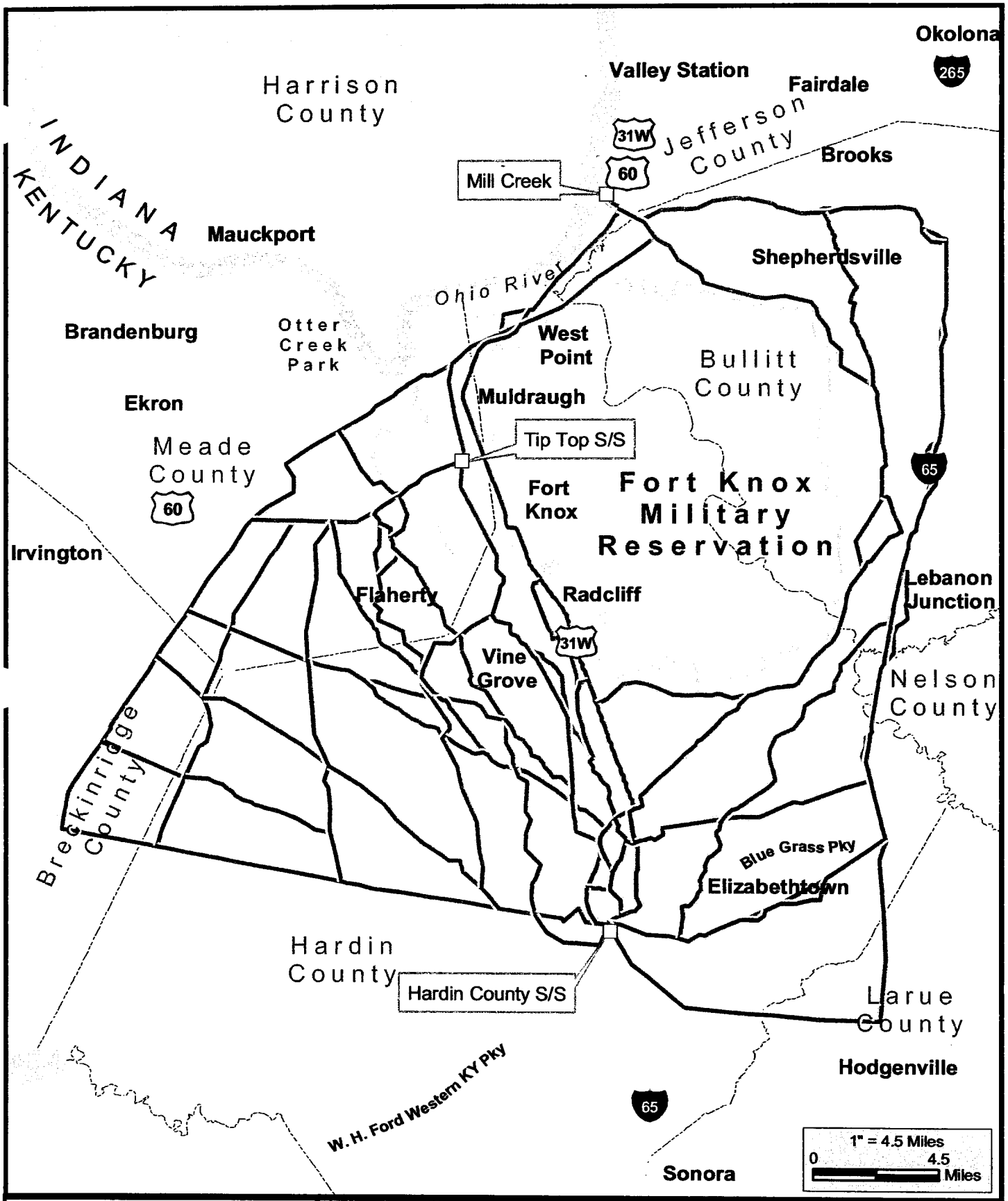
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 1.2

PHOTO SCIENCE

Figure 2.0(a) All Routes Evaluated



All Routes Evaluated

Mill Creek - Hardin County
345 kV Transmission Line

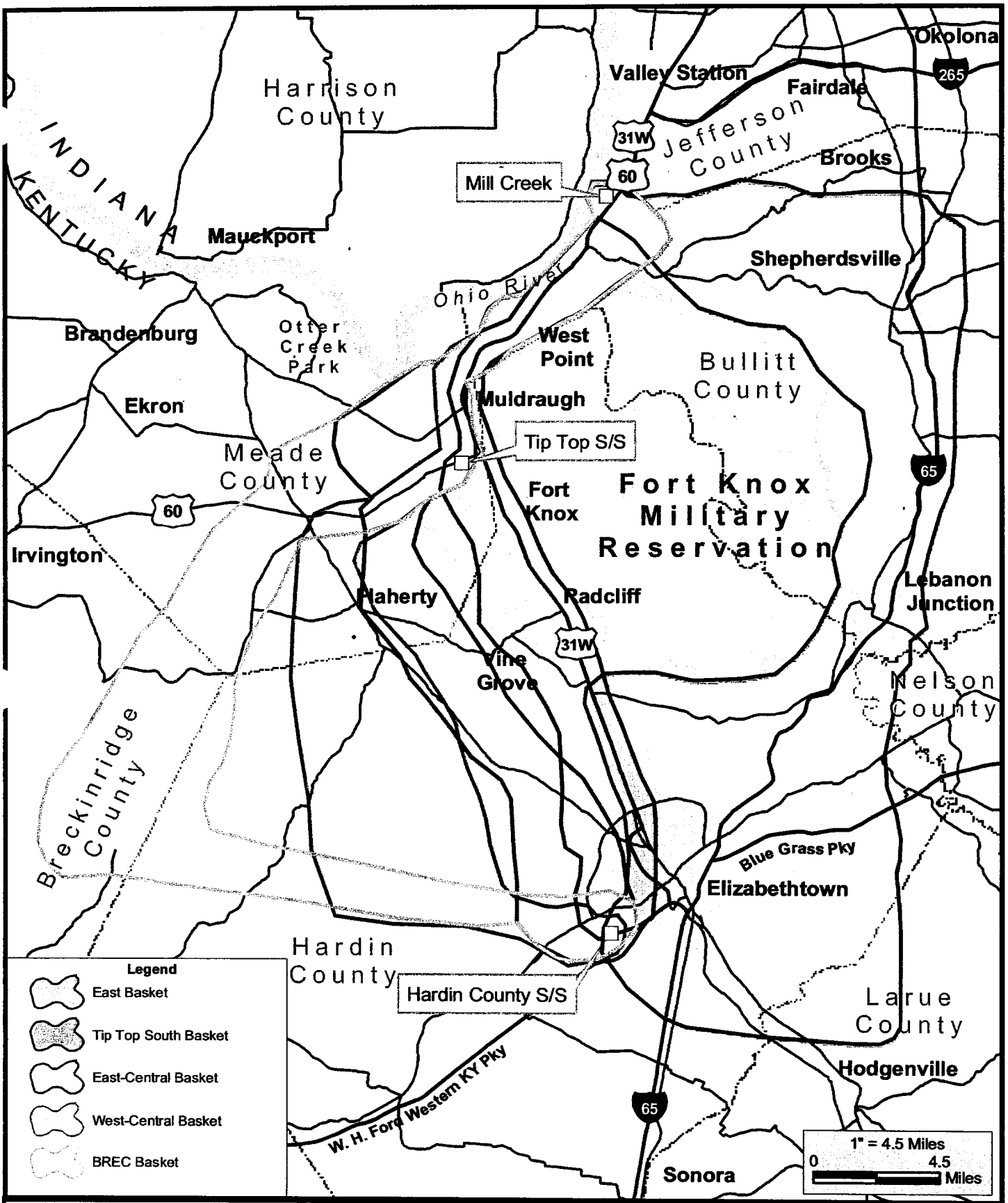
KU LG&E

N

FIGURE 2.0(a)

PHOTO SCIENCE

Figure 2.0(b) Overview of Baskets



Overview of Baskets

Mill Creek - Hardin County
345 kV Transmission Line

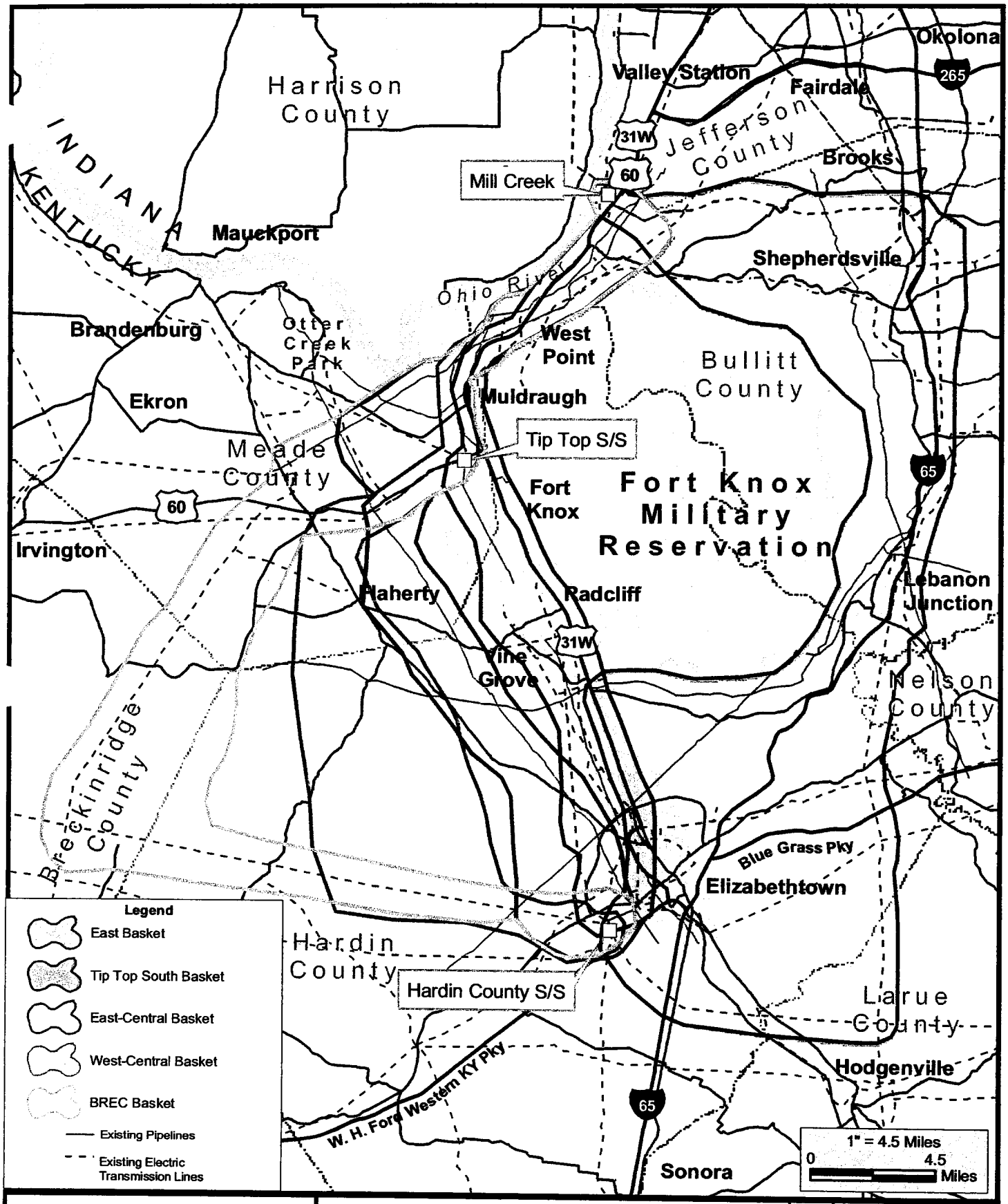
KU LG&E

N

FIGURE 2.0(b)

PHOTO SCIENCE

Figure 2.0(c) Overview of Baskets and Collocation Opportunities



Overview of Baskets and Collocation Opportunities

Mill Creek - Hardin County
345 kV Transmission Line

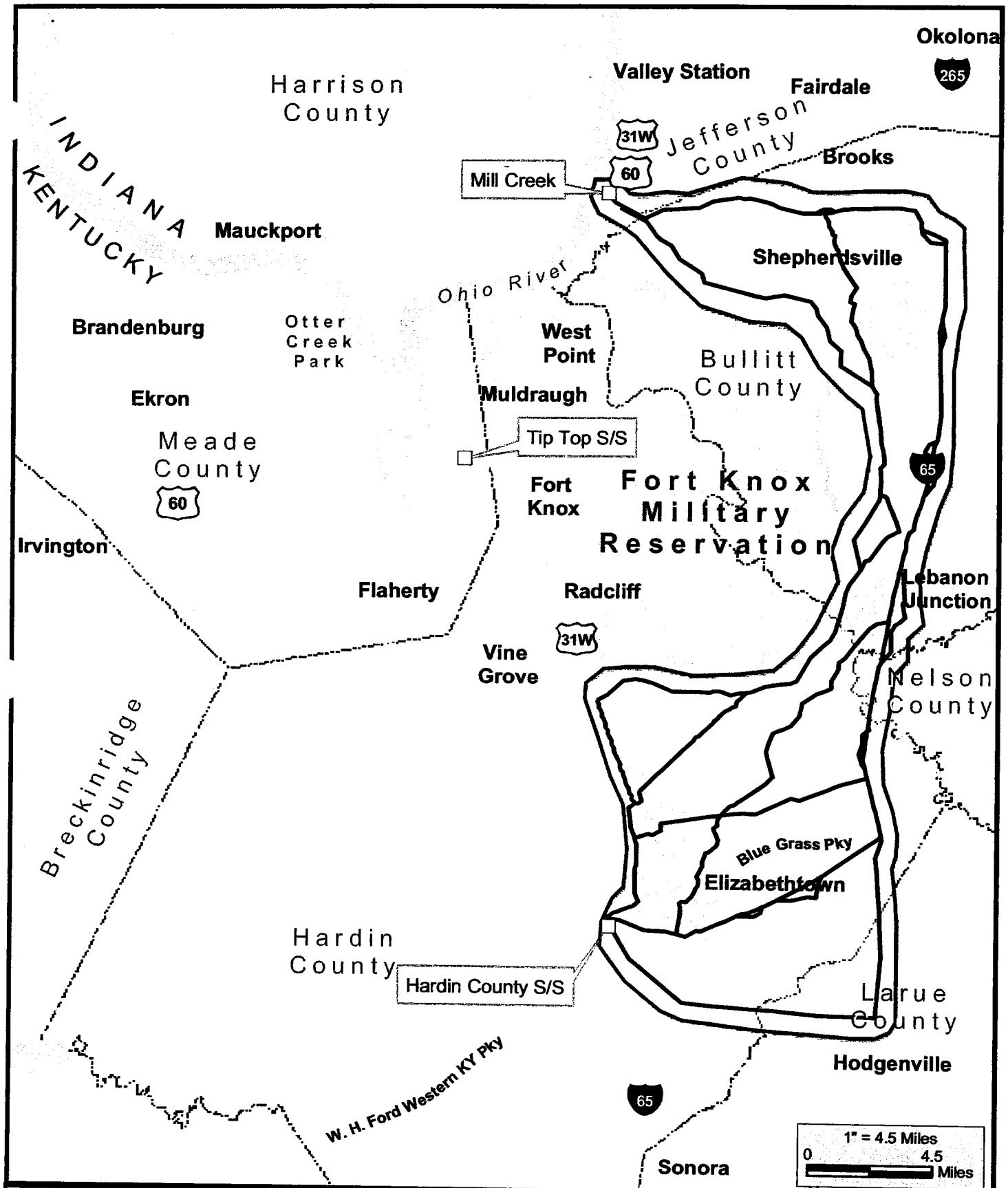
KU LG&E

N

FIGURE 2.0(c)

PHOTO SCIENCE

Figure 2.1 East Basket



East Basket

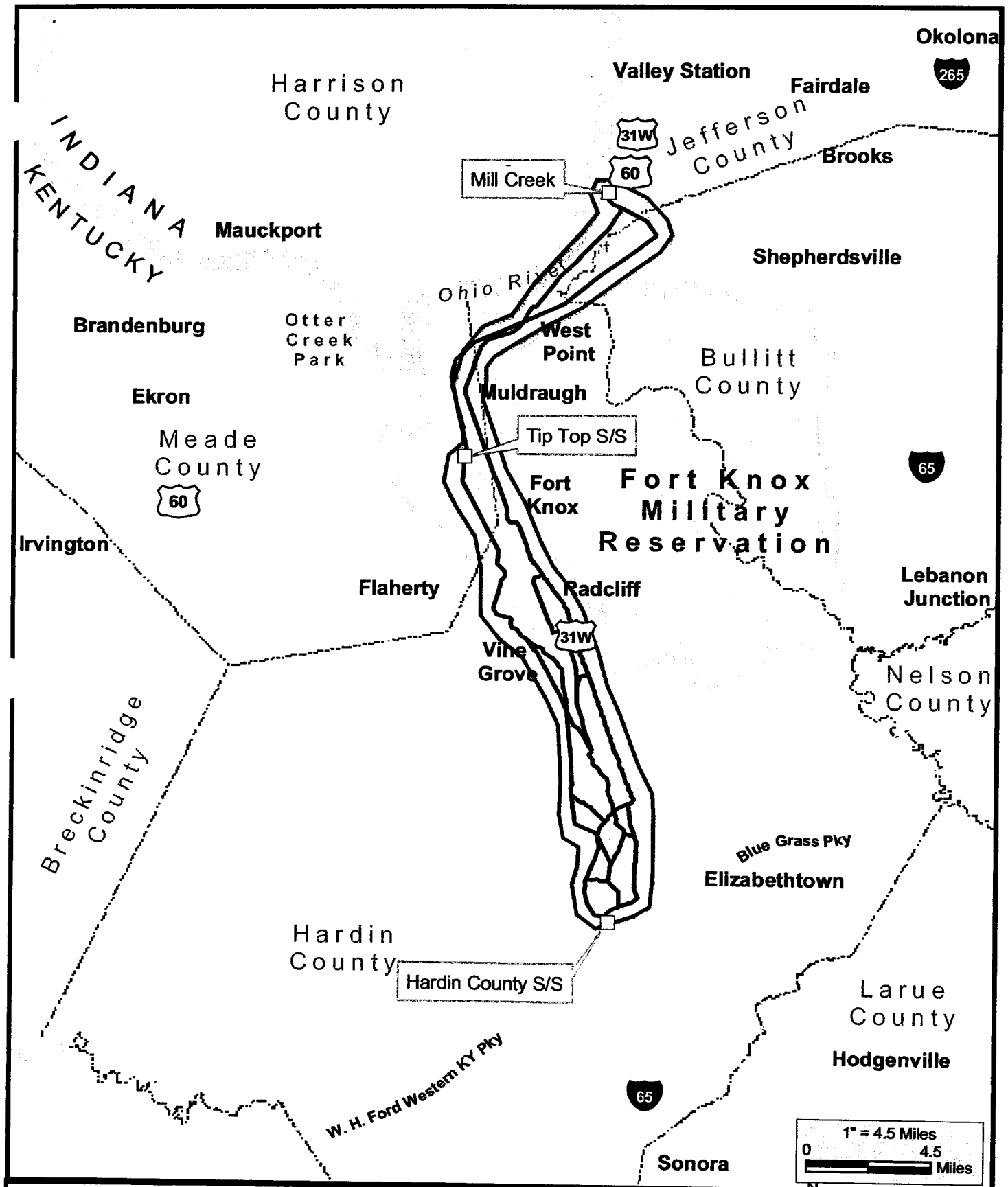
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 2.1

PHOTO SCIENCE

Figure 2.2 Tip Top South Basket



Tip Top South Basket

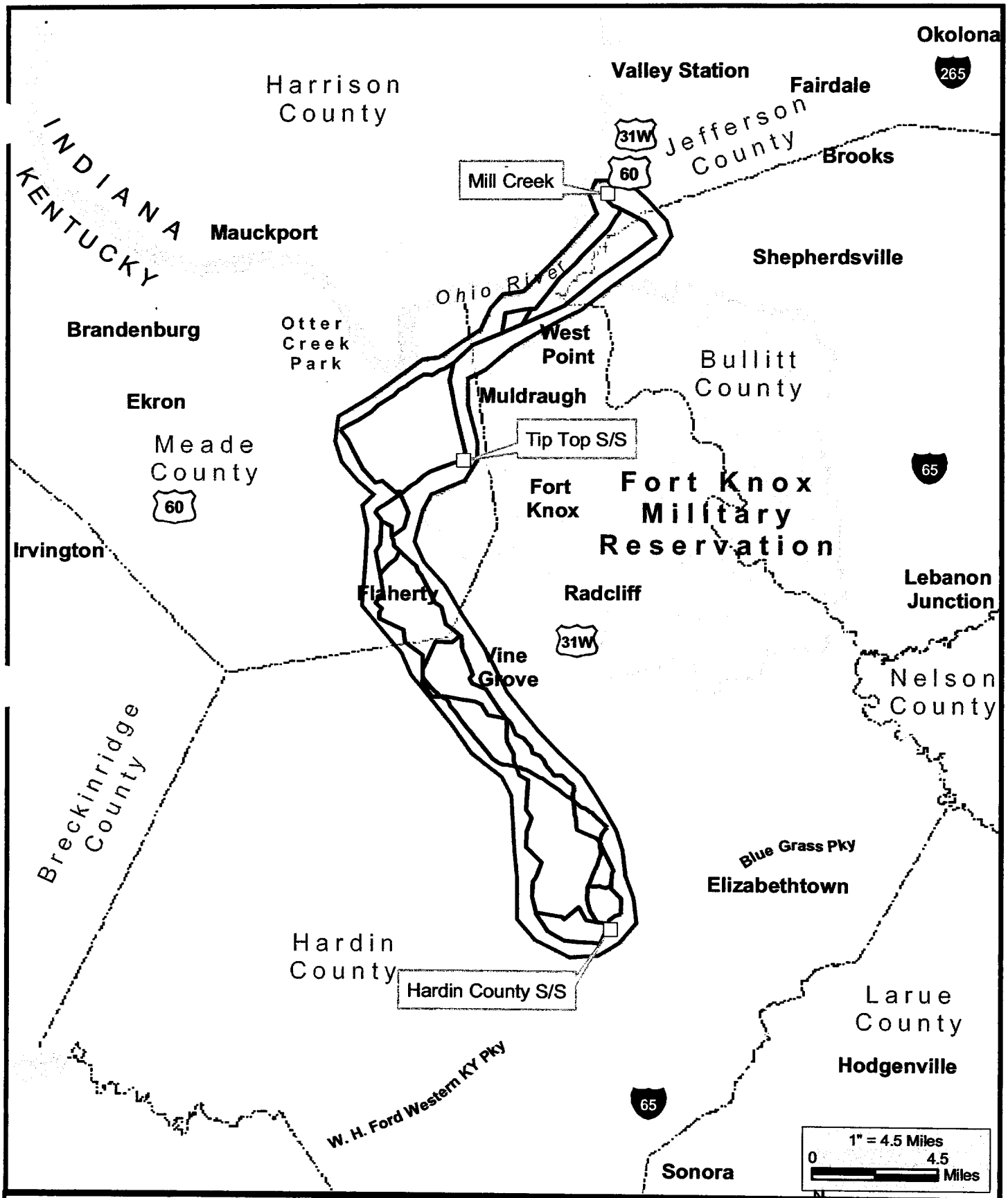
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 2.2

PHOTO SCIENCE

Figure 2.3 East-Central Basket



East-Central Basket

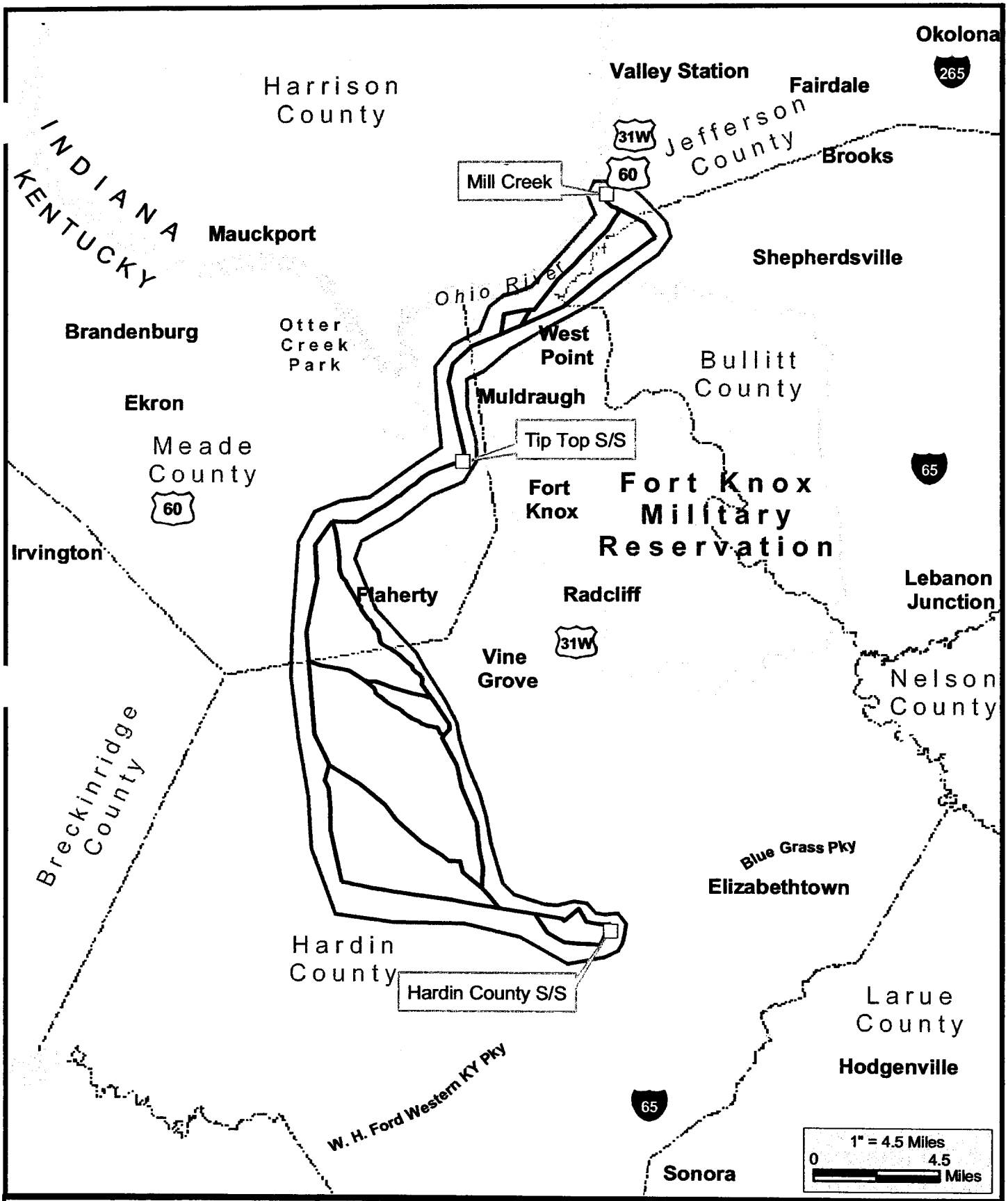
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 2.3

PHOTO SCIENCE

Figure 2.4 West-Central Basket



West-Central Basket

Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

N

FIGURE 2.4

PHOTO SCIENCE

Figure 2.5 BREC Basket

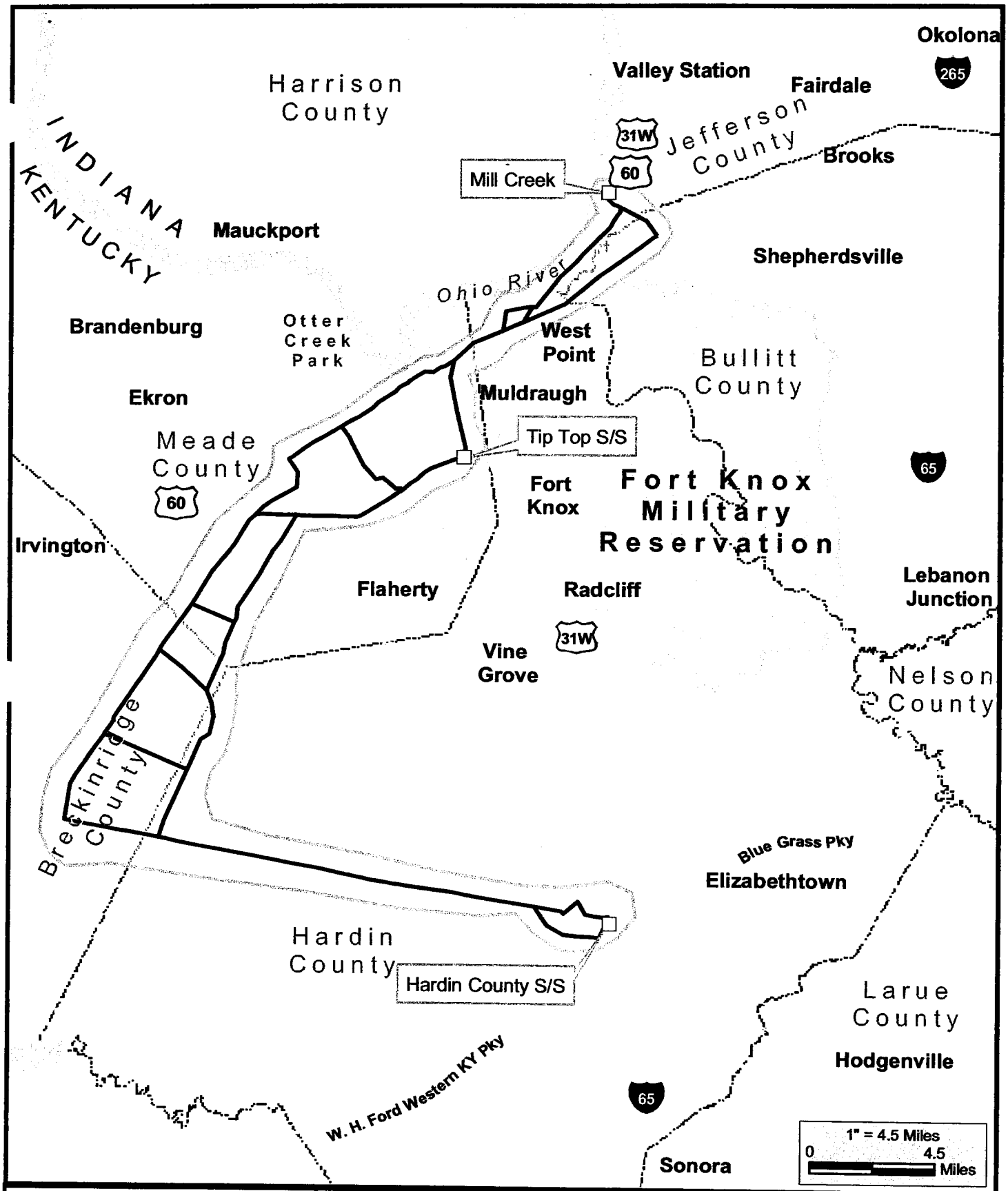
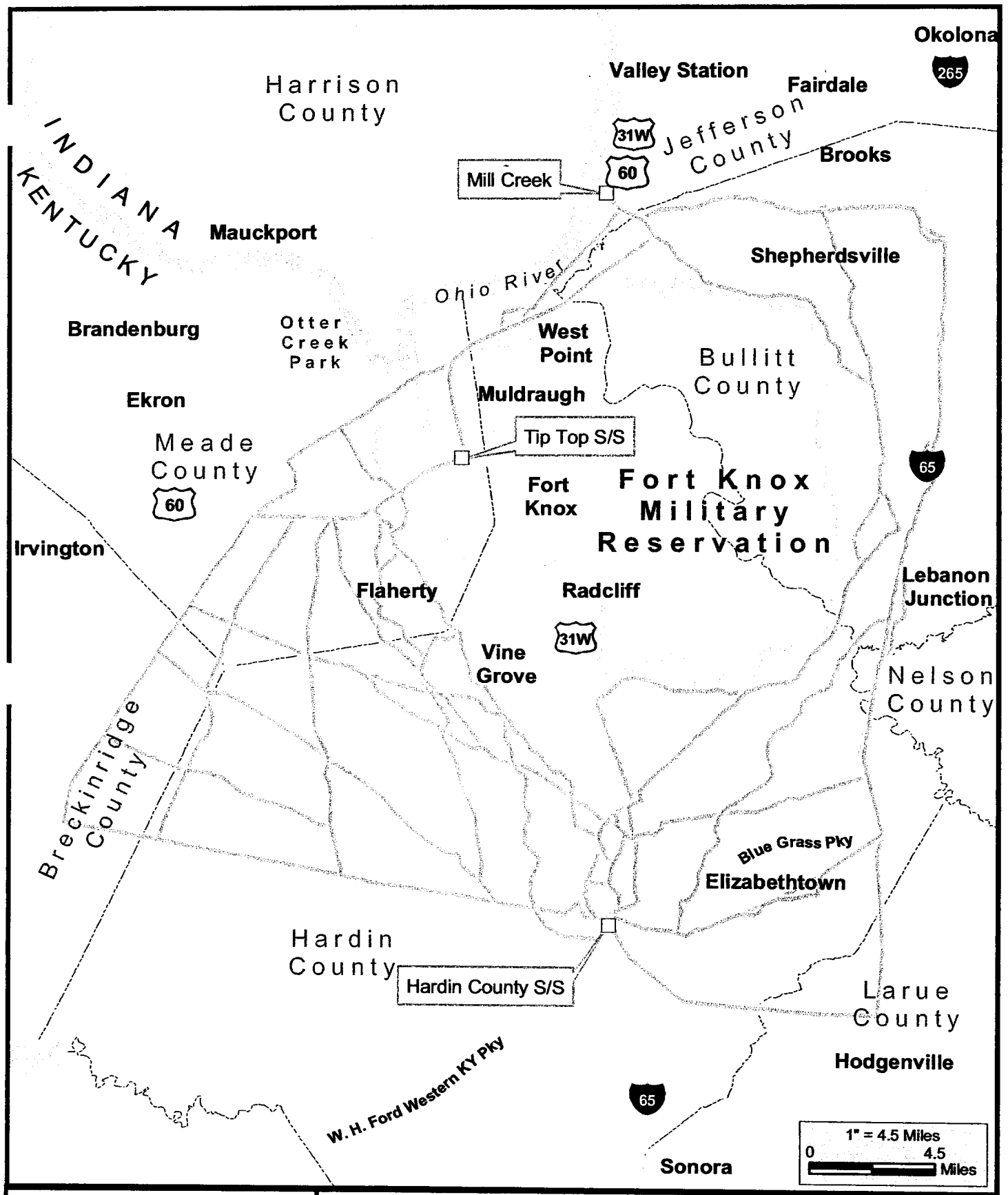

Okolona
265
Valley Station
Fairdale
Harrison County
INDIANA
KENTUCKY
31W
Jefferson County
Brooks
Mill Creek
60
Mauckport
Shepherdsville
Ohio River
Brandenburg
Otter Creek Park
West Point
Bullitt County
Ekron
Muldraugh
Tip Top S/S
Meade County
60
65
Fort Knox
Fort Knox Military Reservation
Irvington
Flaherty
Radcliff
Lebanon Junction
31W
Vine Grove
Nelson County
Breckinridge County
Blue Grass Pky
Elizabethtown
Hardin County
Hardin County S/S
Larue County
Hodgenville
W. H. Ford Western KY Pky
65
Sonora
1" = 4.5 Miles
0
4.5
Miles
BREC Basket
Mill Creek - Hardin County
345 kV Transmission Line
KU
LG&E
N
FIGURE 2.5
PHOTO SCIENCE

Figure 3.1 All Routes Compatible with Fort Knox



All Routes Compatible with Fort Knox

Mill Creek - Hardin County
345 kV Transmission Line

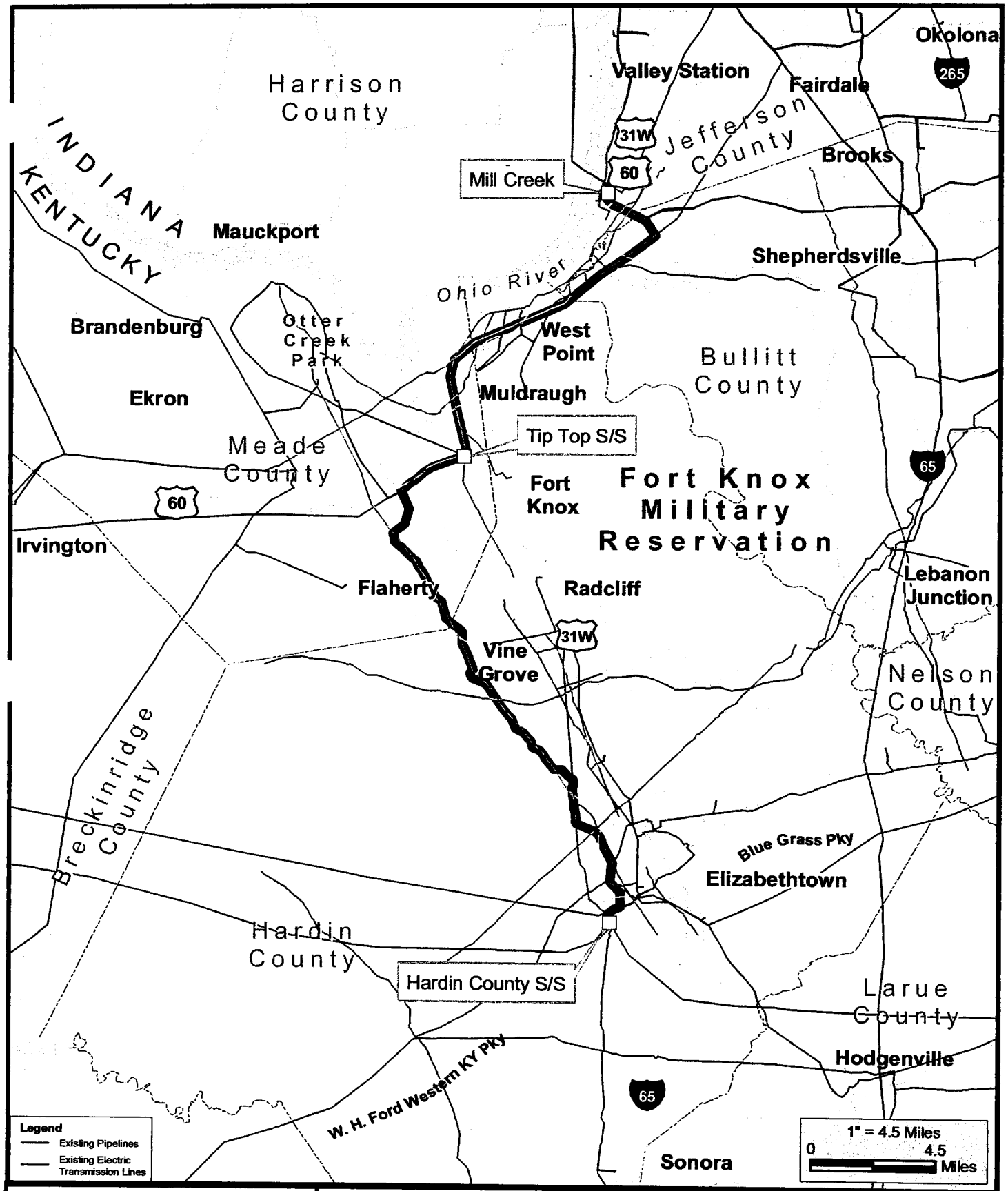
KU LG&E

N

FIGURE 3.1

PHOTO SCIENCE

Figure 3.2.1 Least Cost Practicable Route



Least Cost Practicable Route: Route AQV

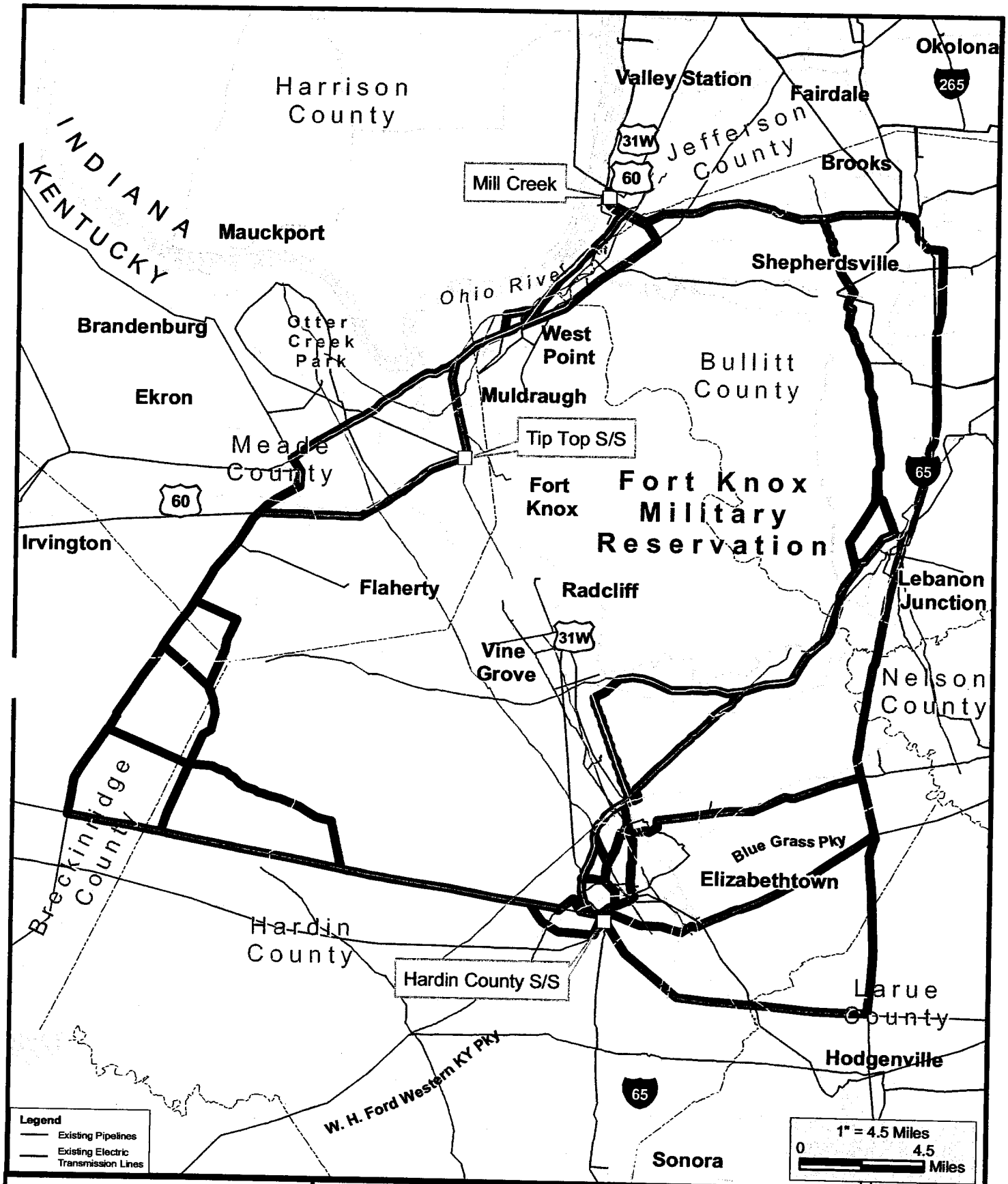
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 3.2.1

PHOTO SCIENCE

Figure 3.2.3 Top Fifty Routes with Maximum Collocation



Top Fifty Routes with Maximum Collocation

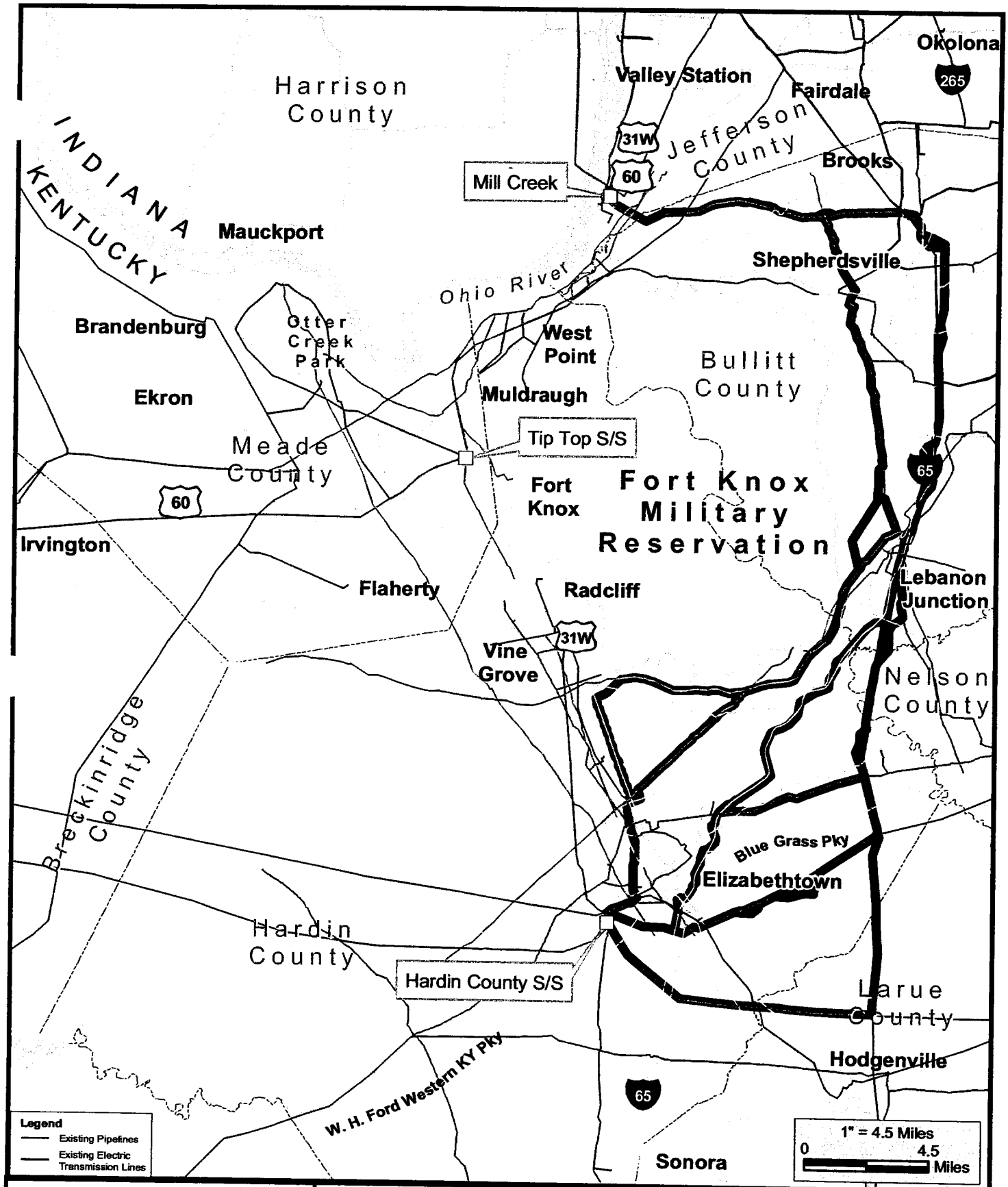
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 3.2.3

PHOTO SCIENCE

Figure 4.1 Top East Routes



Top East Routes

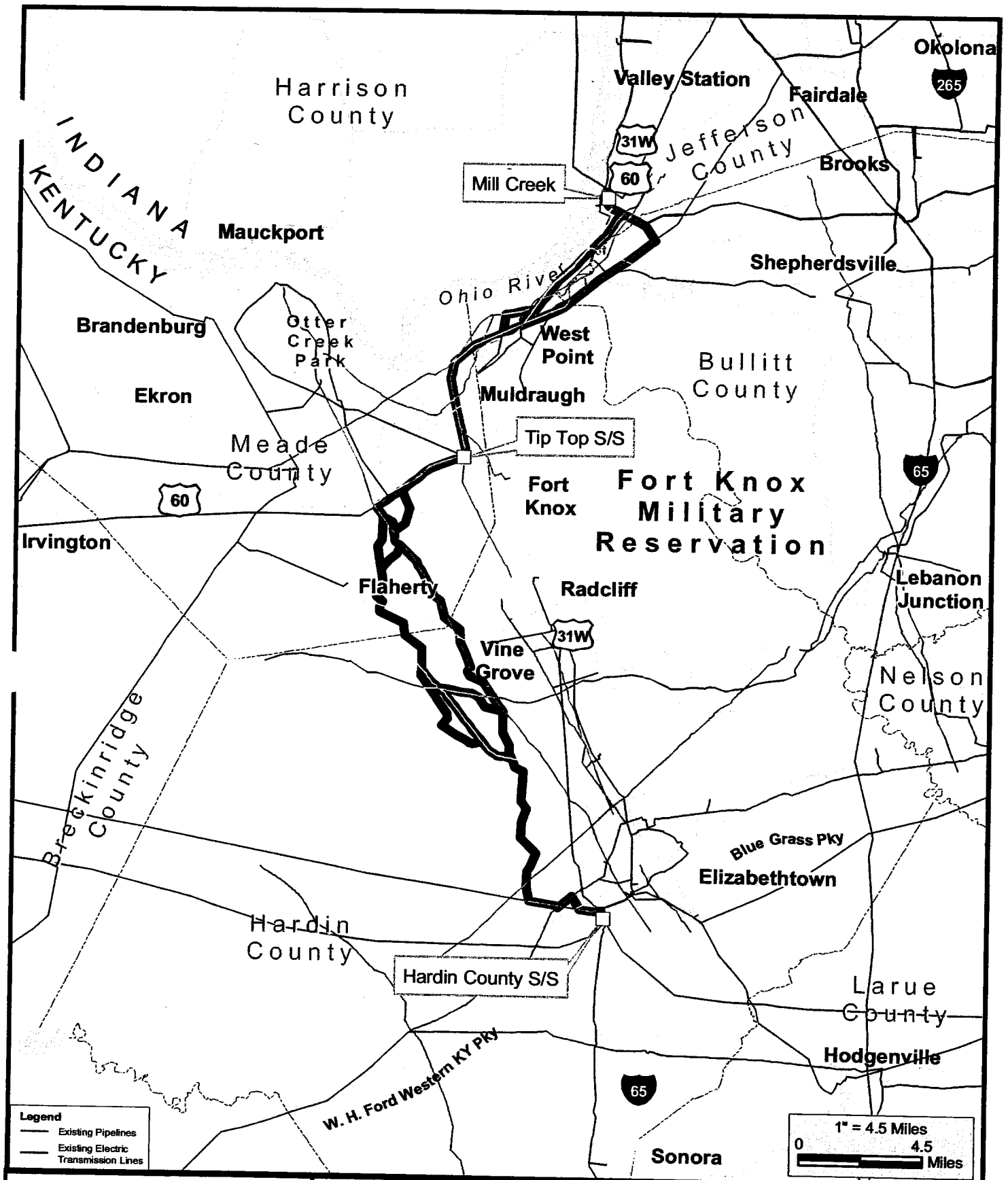
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 4.1

PHOTO SCIENCE

Figure 4.2 Top East-Central Routes



Top East-Central Routes

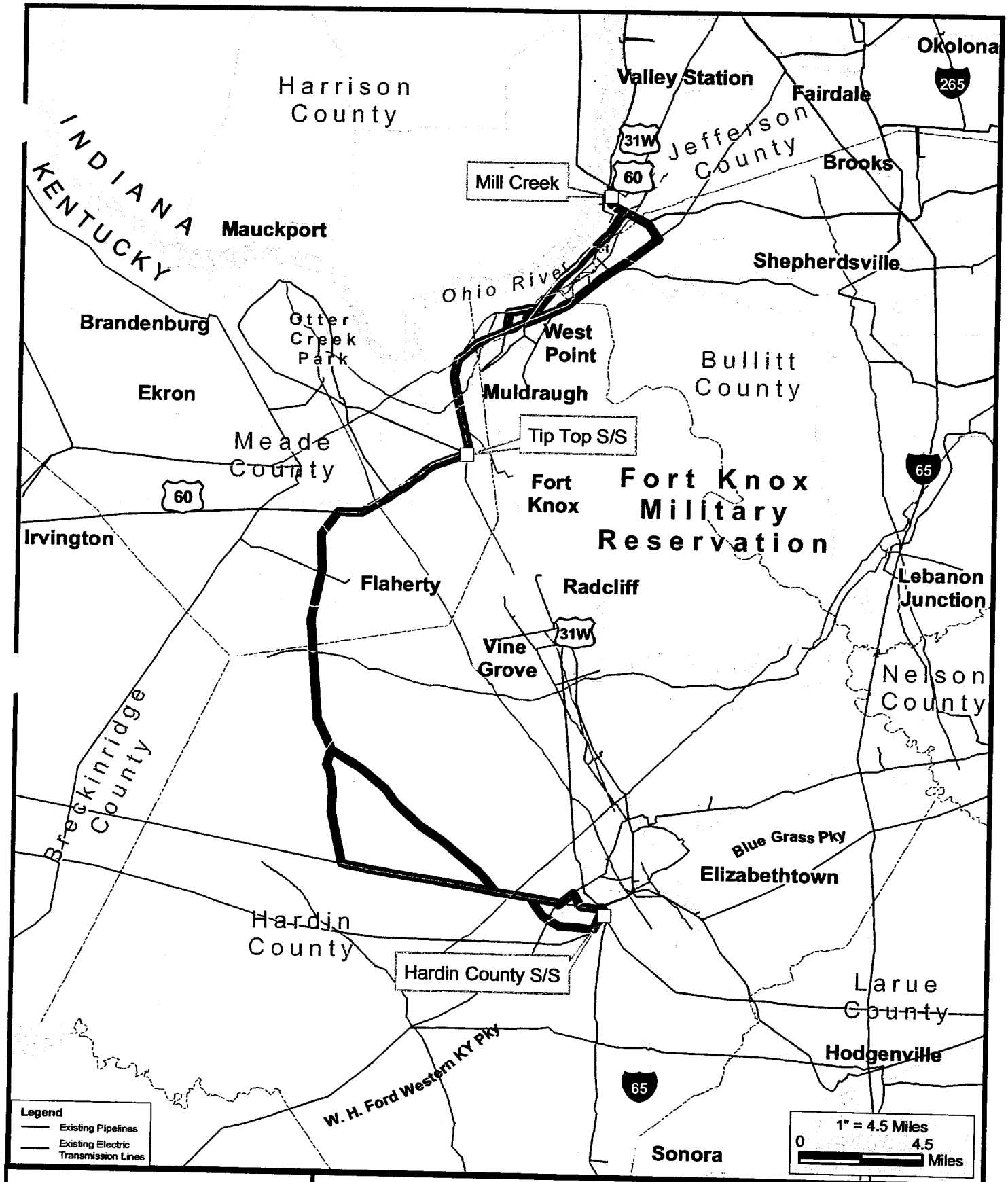
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 4.2

PHOTO SCIENCE

Figure 4.3 Top West-Central Routes



Top West-Central Routes

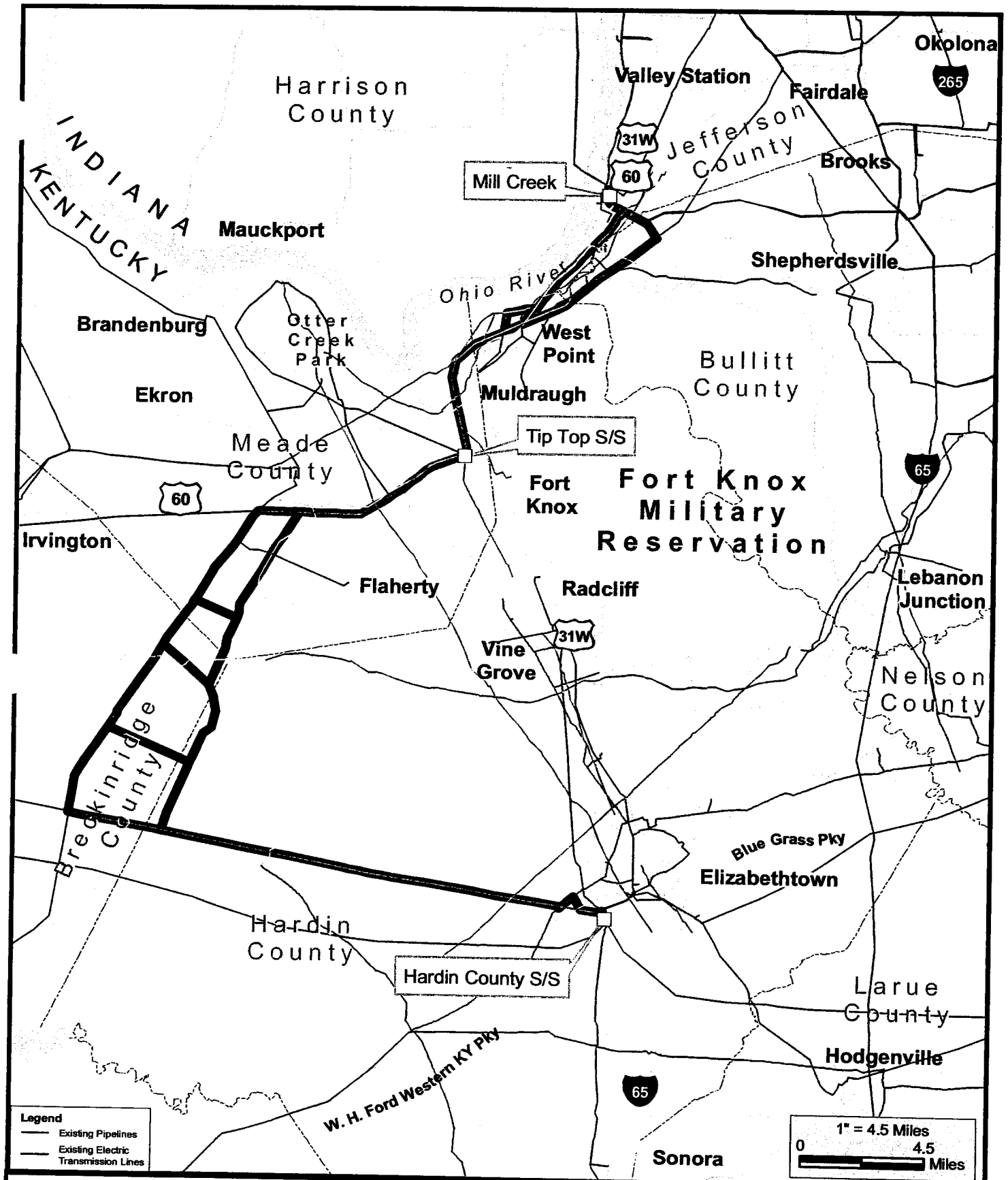
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 4.3

PHOTO SCIENCE

Figure 4.4 Top BREC Routes



Top BREC Routes

Mill Creek - Hardin County
345 kV Transmission Line

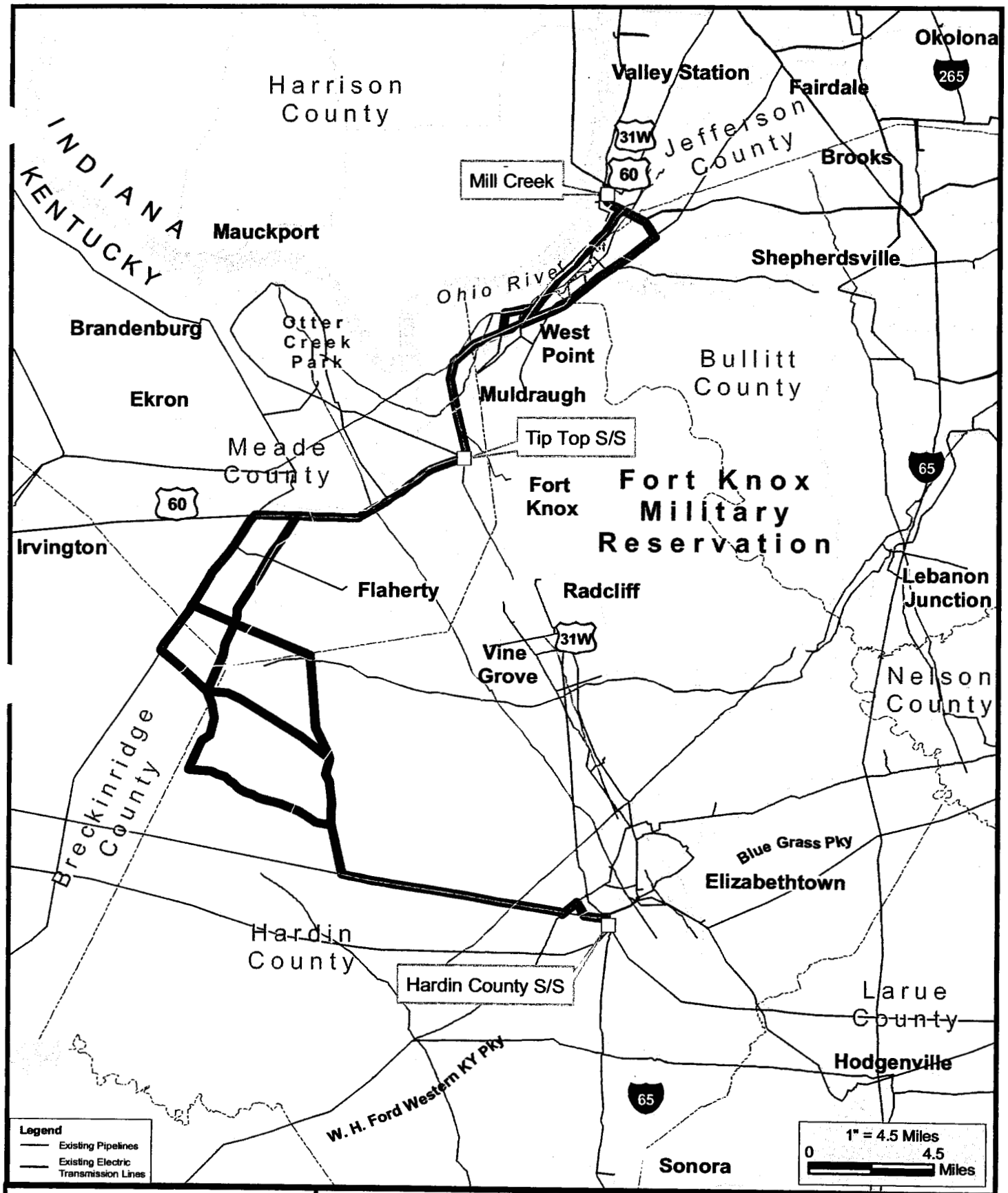
KU LG&E

N

FIGURE 4.4

PHOTO SCIENCE

Figure 4.5 Top Crossover Routes



Top Crossover Routes

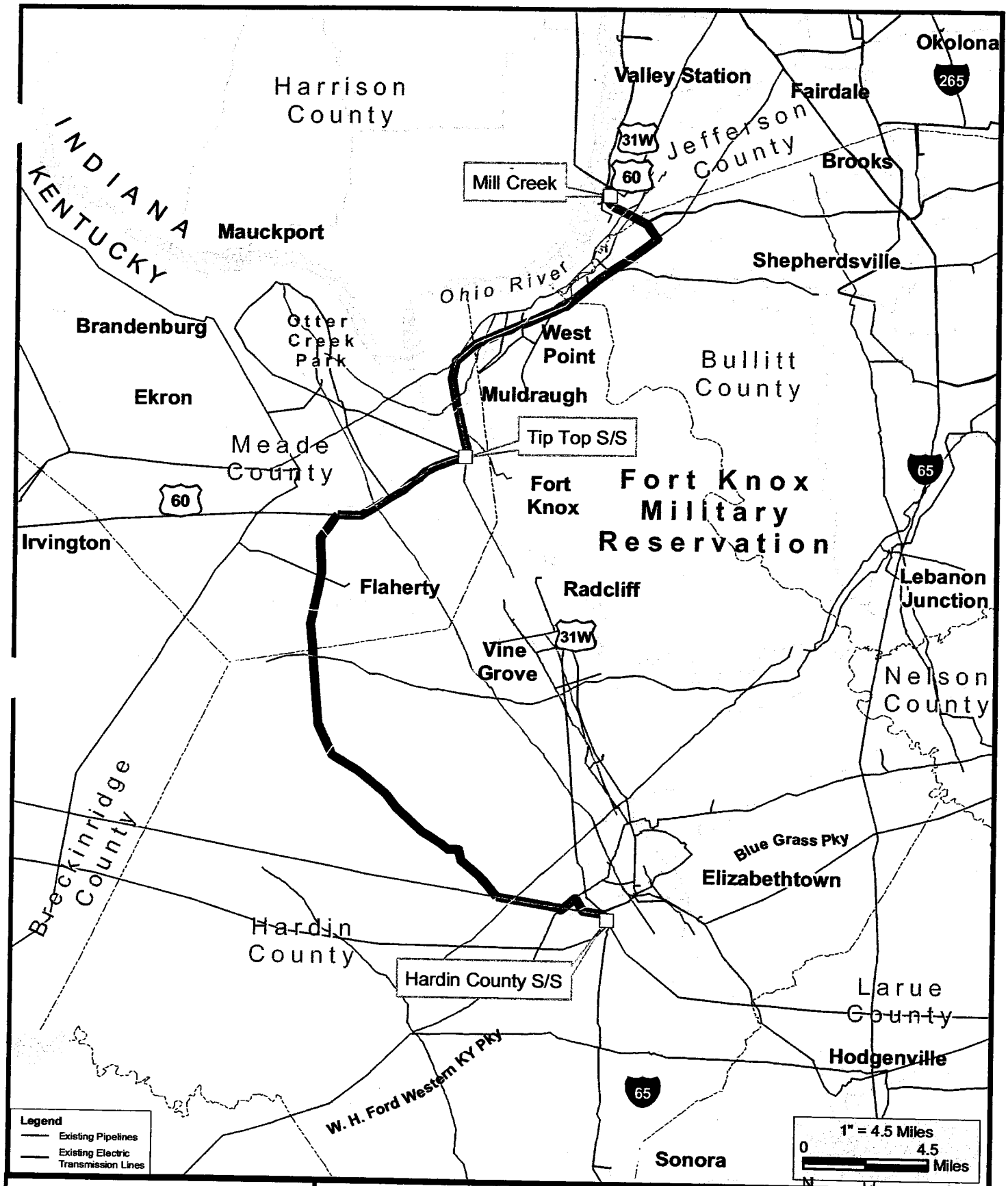
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 4.5

PHOTO SCIENCE

Figure 6.5.1(a) Route AJU



Route AJU

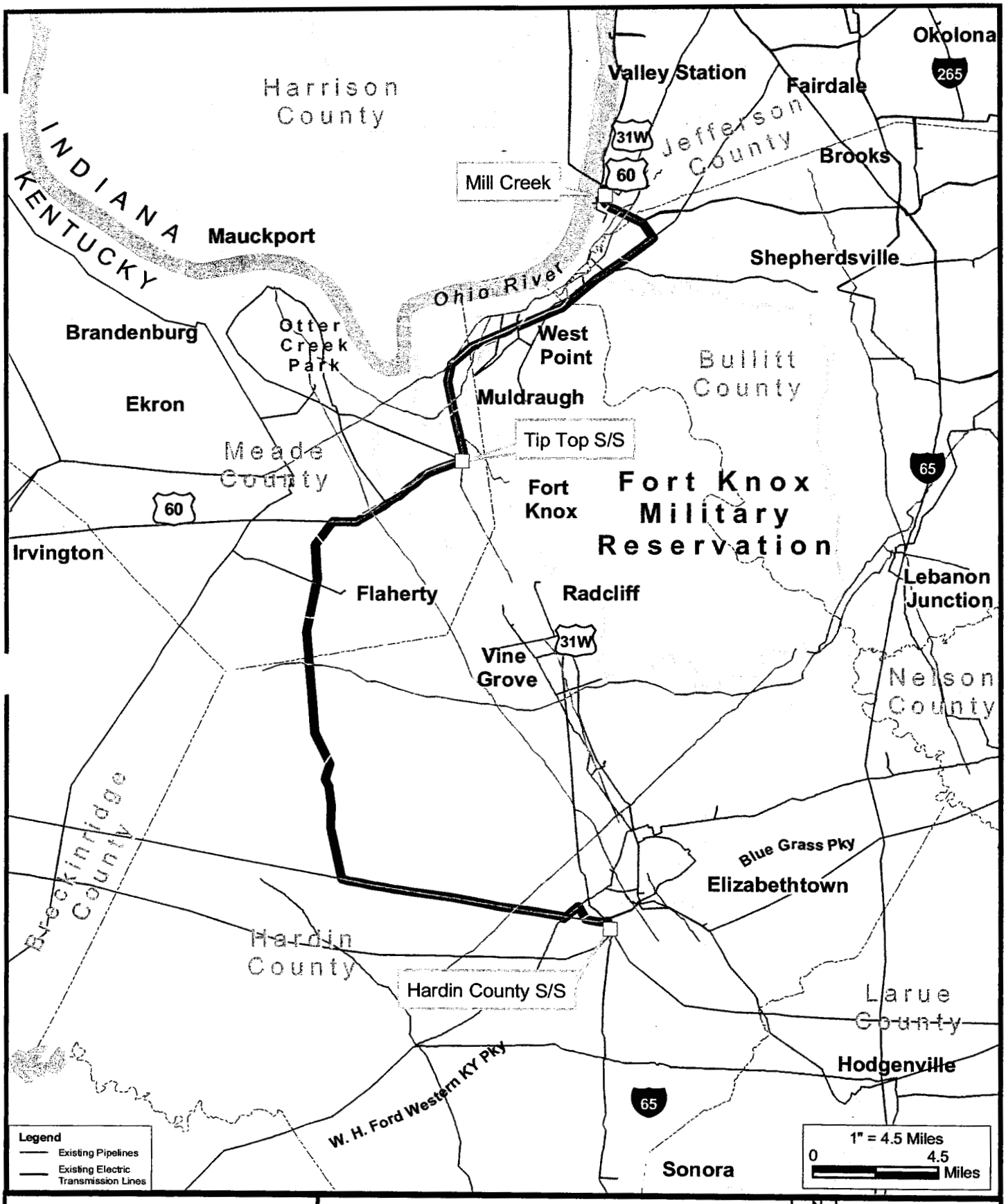
Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

FIGURE 6.5.1(a)

PHOTO SCIENCE

Figure 6.5.1(b) Route AJW



Route AJW

Mill Creek - Hardin County
345 kV Transmission Line

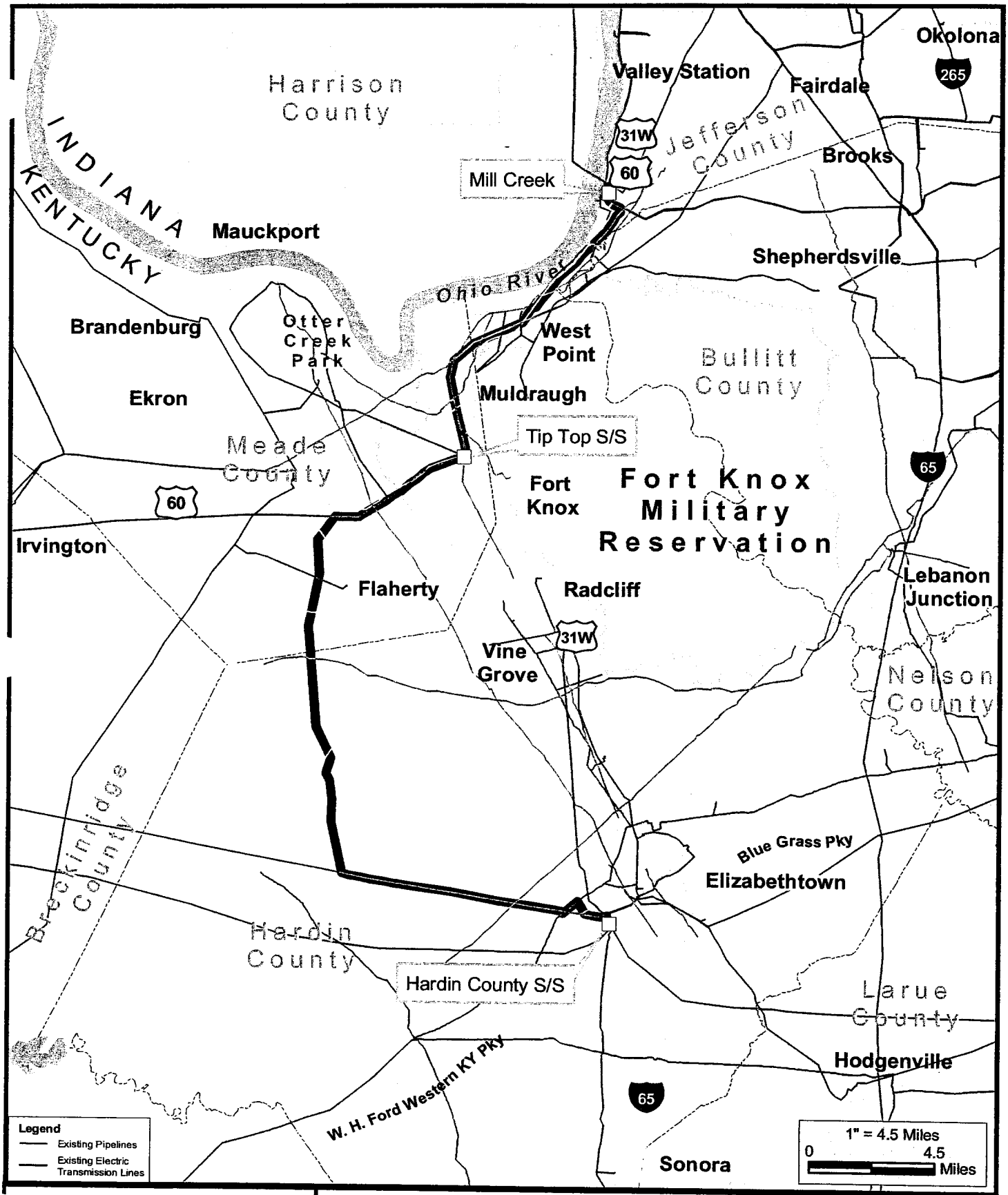
KU LG&E

N

FIGURE 6.5.1(b)

PHOTO SCIENCE

Figure 6.5.1(c) Route KY



Route KY

Mill Creek - Hardin County
345 kV Transmission Line

KU LG&E

N

FIGURE 6.5.1(c)

PHOTO SCIENCE

9.0 List of Digital Tables

These are very large tables of data. All tables referenced here are available on CD in a digital appendix.

Table 2.0 Route Segments
(digital appendix)

Table 3.1 Routes by Segments
(All routes compatible with Fort Knox)
(digital appendix)

Table 3.1(a) Additional Route Metrics
(digital appendix)

Table 3.2.3 Top 50 Routes for Maximum Collocation
(All Routes Compatible with Fort Knox)
(digital appendix)

Table 4.1 Metrics for East Routes
(digital appendix)

Table 4.2 Metrics for East-Central Routes
(digital appendix)

Table 4.3 Metrics for West-Central Routes
(digital appendix)

Table 4.4 Metrics for BREC Routes
(digital appendix)

Table 4.5 Metrics for Cross Over Routes
(digital appendix)

Table 2.0
Route Segments

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)	Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)	Engineering	Length (Miles)	Percent of Route Rebuilt with Existing T/L*	Percent of Route of Co-located with Existing Utilities*	Percent of Route Co-located with Roads*
Segment 1	0	0	0	0	0	0	0		0.00	0	0.00	0.00		0.00	0	0.00	0
Segment 2	43	139	0	1	1	1	0		52.87	13	0.00	0.00		5.53	0	5.53	0
Segment 3	1	13	0	0	2	0	0		13.65	2	0.12	0.00		3.21	0	2.36	0
Segment 4	1	9	0	0	3	0	0		38.45	12	0.00	36.67		3.76	0	0.00	0.52
Segment 5	0	0	0	0	0	0	0		0.00	0	0.00	0.00		0.00	0	0.00	0
Segment 6	0	5	0	0	0	0	0		41.82	3	0.00	0.00		6.96	3.48	3.48	0
Segment 7	2	4	0	0	0	0	0		50.71	1	0.21	0.00		3.68	0	3.68	0
Segment 8	0	1	0	0	0	0	0		71.38	5	0.00	0.00		3.23	0	0.00	0
Segment 9	0	2	0	0	0	0	0		48.01	4	0.00	0.00		2.74	0	0.00	0
Segment 10	0	0	0	0	0	0	0		0.00	0	0.00	0.00		6.68	6.68	0.00	0
Segment 11	0	1	0	0	0	0	0		29.51	2	0.00	0.00		2.02	0	2.02	0
Segment 12	0	0	0	0	0	0	0		30.37	0	0.00	0.00		2.25	0	0.00	0
Segment 13	0	1	0	0	0	0	0		27.34	2	0.00	0.00		3.18	0	0.00	0
Segment 14	3	11	0	0	0	1	0		46.97	8	0.00	2.39		5.65	0	2.77	2.88
Segment 15	0	6	0	0	0	0	0		41.59	1	0.00	0.00		4.00	0	4.00	0
Segment 16	0	0	0	0	0	0	0		27.81	0	0.00	0.00		1.65	0	0.00	0
Segment 17	2	6	0	0	0	0	0		32.48	0	0.00	0.00		2.70	0	0.00	0
Segment 18	0	2	0	0	0	1	0		59.31	5	0.00	0.00		5.17	0	0.00	0.75
Segment 19	1	3	0	0	0	0	0		10.38	0	0.00	0.00		4.56	0	0.00	0.86
Segment 20	0	0	0	0	0	0	1		11.93	3	0.89	0.00		2.96	0	0.00	0
Segment 21	6	27	0	0	0	0	0		21.76	1	0.00	0.00		5.15	0	4.70	0
Segment 22	0	1	0	0	0	0	0		2.48	0	0.00	0.00		1.49	0	1.49	0
Segment 23	0	0	0	0	0	0	0		3.15	0	0.00	0.00		1.35	0	1.35	0
Segment 24	0	1	1	0	2	0	1		25.60	0	0.00	0.00		5.29	0	0.00	0
Segment 25	0	3	0	0	0	0	0		11.31	1	0.05	0.00		2.15	0	1.64	0
Segment 26	0	0	0	0	0	0	0		75.91	1	0.00	0.00		3.92	0	0.00	0
Segment 27	0	5	0	0	0	0	0		15.84	6	0.00	1.47		2.50	0	0.00	0
Segment 28	0	5	0	0	0	0	2		51.85	8	2.22	5.59		7.04	0	0.00	0
Segment 29	0	1	0	0	0	0	0		9.27	0	0.00	0.00		1.83	0	0.00	0
Segment 30	0	0	0	0	0	0	0		0.00	0	0.00	0.00		1.69	1.69	0.00	0
Segment 31	32	106	1	20	20	0	0		29.48	3	0.62	0.00		6.83	0	0.00	5.09
Segment 32	8	24	0	0	0	0	0		82.20	3	4.80	6.60		4.76	0	4.76	0
Segment 33	14	40	0	0	0	0	0		23.82	0	0.00	0.00		3.48	0	2.30	0.28
Segment 34	0	0	0	0	0	0	0		0.00	0	0.00	0.00		5.70	5.7	0.00	0
Segment 35	0	3	0	0	0	0	0		11.36	3	0.14	0.00		2.45	0	2.45	0
Segment 36	3	22	0	0	0	0	0		13.78	6	0.06	0.00		3.58	0	0.00	3.58
Segment 37	1	4	0	0	0	0	0		0.16	0	0.00	0.00		1.99	0	0.00	0
Segment 38	2	13	0	0	1	0	0		0.00	0	0.00	0.00		0.55	0	0.37	0
Segment 39	0	0	0	0	0	0	0		0.00	0	0.00	0.00		0.59	0.59	0.00	0
Segment 40	0	0	0	0	0	0	0		0.00	0	0.31	0.00		1.11	0	0.00	0
Segment 41	1	11	0	0	0	0	0		18.93	1	0.00	0.00		4.53	0	0.00	0
Segment 42	0	0	1	0	0	0	0		0.17	0	0.06	0.00		0.79	0	0.00	0
Segment 43	0	0	0	0	0	0	0		0.00	0	0.00	0.00		0.36	0.36	0.00	0
Segment 44	0	6	1	0	1	0	0		5.82	0	0.00	0.00		1.83	0	0.00	0.69
Segment 45	0	0	0	0	0	0	0		0.12	0	0.00	0.00		0.62	0	0.16	0
Segment 46	1	19	0	0	0	0	0		8.03	1	0.00	1.98		3.85	0	2.44	0
Segment 47	0	0	0	0	0	0	0		34.99	3	0.00	4.92		2.61	0	2.01	0.6
Segment 48	0	0	0	0	0	0	0		0.28	0	0.00	0.00		0.82	0	0.00	0
Segment 49	0	0	0	0	0	0	0		0.00	0	0.00	0.00		0.25	0	0.00	0
Segment 50	1	11	0	0	0	0	0		3.00	1	0.00	1.24		0.98	0	0.00	0.98
Segment 51	1	10	0	0	0	0	0		1.87	3	0.25	6.99		2.08	0	0.00	0
Segment 52	0	0	0	0	0	0	0		0.46	1	0.00	1.42		0.33	0	0.33	0
Segment 53	1	3	0	0	0	0	1		9.52	3	0.16	2.69		1.64	0	0.00	0
Segment 54	2	5	0	0	0	0	1		8.16	6	0.50	2.41		2.63	0	1.50	0
Segment 55	17	65	0	1	1	0	1		6.20	2	0.00	0.00		2.69	0	0.00	2.69
Segment 56	2	12	0	0	0	0	1		33.12	11	4.98	5.15		5.83	0	0.00	0
Segment 57	9	22	0	2	2	0	0		2.90	2	0.00	0.00		1.77	0	0.00	1.77
Segment 58	0	0	0	0	0	0	0		51.27	5	0.34	0.00		3.67	0	3.67	0
Segment 59	0	0	0	0	0	0	0		37.89	3	6.61	21.30		2.06	0	2.06	0
Segment 60	0	0	0	0	1	0	0		16.88	0	1.69	0.00		1.41	0	0.00	0
Segment 61	0	6	0	0	0	0	0		1.25	1	0.00	1.95		0.52	0	0.00	0
Segment 62	0	19	0	0	0	0	0		100.57	6	0.00	4.73		6.01	0	3.66	0
Segment 63	22	52	0	13	16	2	1		1.52	2	0.00	1.34		1.19	0	0.00	1.19
Segment 64	2	19	0	0	3	0	0		0.98	0	0.00	0.00		1.79	0	0.70	0.34
Segment 65	0	0	0	0	0	0	0		0.00	0	0.00	0.00		1.30	1.3	0.00	0
Segment 66	1	5	0	0	1	0	0		25.41	4	4.12	40.56		1.67	0	1.44	0
Segment 67	0	0	0	0	0	0	0		16.66	2	0.32	17.95		0.78	0	0.78	0
Segment 68	0	6	0	0	0	0	1		4.51	5	0.00	0.00		1.83	0	0.00	0
Segment 69	1	30	0	0	0	0	0		36.94	11	0.00	0.00		3.60	0	1.56	0
Segment 70	10	34	0	1	1	0	0		9.16	4	0.19	0.00		2.41	0	0.00	2.41
Segment 71	3	19	0	0	0	0	0		16.91	11	0.00	0.00		5.93	0	0.00	0
Segment 72	2	159	0	94	29	1	1		102.13	12	2.70	41.33		11.01	0	0.00	11.01
Segment 73	0	0	0	0	2	0	0		4.46	1	1.68	16.86		0.66	0	0.00	0.66
Segment 74	0	5	0	0	4	0	1		105.77	13	3.45	47.15		5.77	0	5.77	0
Segment 75	1	6	0	4	3	0	0		9.60	8	0.00	15.31		3.31	0	1.53	1.77
Segment 76	29	72	0	1	1	0	0		17.80	7	0.00	3.58		3.02	0	3.02	0
Segment 77	2	32	0	1	0	0	8		45.32	6	2.68	84.25		4.89	0	4.06	0
Segment 78	0	0	0	0	0	0	0		0.00	0	0.00	0.00		2.72	2.72	0.00	0
Segment 79	2	37	0	0	0	0	2		9.75	5	0.00	2.18		3.67	0	0.00	0
Segment 80	116	307	0	2	4	0	1		16.90	2	0.00	0.00		5.06	0	5.06	0
Segment 81	12	157	0	104	39	2	1		10.46	2	0.00	0.00		4.16	0	0.00	4.16
Segment 82	22	56	0	0	0	0	0		8.90	6	1.10	1.08		1.75	0	1.75	0
Segment 83	0	9	0	0	0	0	0		19.18	6	4.39	0.00		2.52	0	2.52	0
Segment 84	1	1	0	0	0	0	0		6.25	1	0.00	0.00		0.57	0	0.57	0
Segment 85	3	34	0	0	1	0	0		0.18	2	0.00	0.00		1.58	0	0.00	1.58
Segment 86	0	5	0	0	0	0	0		1.99	4	0.00	0.00		2.03	0	1.07	0
Segment 87	1	7	0	0	0	0	0		3.52	1	0.00	0.00		0.67	0	0.00	0.29
Segment 88	3	31	1	0	0	0	0		23.16	6	2.96	13.34		2.46	0	2.46	0
Segment 89	2	8	0	2	8	0	0		0.00	4	0.00	5.71		1.72	0	0.00	1.72
Segment 90	0	0	0	0	9	0	0		3.45	2	0.00	0.07		0.88	0	0.20	0
Segment 91	0	5	0	0	4	1	0		0.84	1	0.00	0.00		1.36	0	0.77	0.27
Segment 92	1	11	0	13	14	0	0		0.00	0	0.00	0.00		0.88	0	0.00	0.88
Segment 93	4	33	0	0	0	0	0		6.62	2	0.14	0.00		2.58	0	1.04	0
Segment 94	0	0	0	0	0	0	0		0.00	0	0.00	0.00		0.48	0.48	0.00	0
Segment 95	0	12	0	0	1	0	0		88.29	6	0.00	2.47		5.76	0	4.60	0
Segment 96	5	72	0	94	109	2	0		8.46	5	0.00	0.00		4.16	0	0.00	4.16
Segment 97	0	0	0	0	0	0	0		0.00	1	0.00	0.00		0.60	0	0.00	0.6
Segment 98	0	0	0	0	0	0	0		2.58	2	0.00	4.02		1.15	0	1.15	0
Segment 99	0	1	0	0	0	0	0		0.06	1	0.00	0.00		0.50	0	0.00	0.5
Segment 100	0	2	0	0	0	0	0		1.25	2	0.00	2.79		0.53	0	0.53	0
Segment 101	0	3	1	0	0	0	1		22.83	2	0.00	4.99		2.62	0	0.00	0
Segment 102	8	38	0	0	0	0	4		111.77	29	2.92	16.38		17.85	0	17.85	0
Segment 103	0	0	0	0	2	0	0		3.03	5	0.03	11.11		1.20	0	0.00	0
Segment 104	0	0	0	0	2	1	0		0.00	0	0.00	0.09		0.54	0	0.54	0
Segment 105	23	89	0	1	1	0	0		12.37	2	0.53	1.77		1.23	0	1.23	0

Table 2.0
Route Segments

Segment 106	0	0	0	0	0	0	0		0.13	0	0.99	0.72		0.90	0	0.90	0
Segment 107	3	26	0	0	1	0	0		122.47	10	1.79	15.00		8.13	0	8.13	0
Segment 108	0	2	0	0	0	0	0		1.73	1	0.00	0.95		0.67	0	0.00	0.67
Segment 109	0	16	0	4	4	0	0		7.23	3	0.00	0.84		0.95	0	0.34	0
Segment 110	0	1	0	0	0	0	0		29.54	7	0.23	11.10		1.71	0	1.06	0
Segment 111	5	79	0	28	35	2	0		5.09	3	0.46	15.43		3.14	0	3.14	0
Segment 112	3	21	0	0	0	0	0		2.17	2	0.00	0.84		0.36	0	0.00	0.36
Segment 113	68	265	0	0	0	0	0		0.03	1	0.00	0.00		1.22	0	1.22	0
Segment 114	1	2	0	4	4	0	0		0.00	0	0.00	0.00		0.13	0	0.00	0.13
Segment 115	62	222	0	3	11	0	0		56.43	10	0.34	2.10		6.04	0	5.39	0.33
Segment 116	55	181	0	25	25	0	3		14.15	4	0.00	0.46		3.48	0	3.01	0
Segment 117	2	30	0	0	0	0	0		165.16	28	1.05	83.95		10.46	0	0.00	0
Segment 118	12	29	0	9	17	0	6		61.34	4	0.00	0.05		5.17	0	0.00	5.17
Segment 119	1	57	0	0	4	0	0		12.78	6	0.00	0.00		2.35	0	1.17	0
Segment 120	6	26	0	0	1	1	1		133.74	23	0.25	96.63		10.27	0	0.00	10.27
Segment 121	3	10	1	0	0	0	0		8.95	3	0.00	0.00		1.01	0	1.01	0
Segment 122	0	6	1	0	0	0	0		2.52	2	0.00	0.00		1.13	0	0.00	0
Segment 123	4	20	0	0	0	0	0		78.43	8	0.16	50.76		6.63	0	6.14	0
Segment 124	0	0	0	0	0	0	0		5.79	2	0.00	0.00		0.59	0	0.59	0
Segment 125	5	15	1	0	0	0	0		17.57	3	0.00	0.00		1.84	0	1.84	0
Segment 126	0	2	0	0	0	0	0		21.27	2	0.00	0.00		2.24	0	0.00	0
Segment 127	0	4	0	0	0	0	0		12.48	1	0.00	0.00		0.76	0	0.00	0
Segment 128	0	0	0	0	0	0	0		5.41	1	0.00	0.00		0.32	0	0.32	0
Segment 129	3	7	0	0	0	0	0		3.76	0	0.00	0.00		0.39	0	0.39	0
Segment 130	12	43	0	4	4	0	0		74.69	15	0.39	102.99		6.92	0	6.92	0
Segment 131	0	0	0	0	0	0	0		47.22	5	0.00	1.17		2.59	0	2.59	0
Segment 132	1	17	1	0	1	0	0		46.10	6	0.00	0.00		3.66	0	2.61	0
Segment 133	0	0	0	0	0	0	0		37.93	11	0.15	70.66		3.04	0	0.00	0
Segment 134	0	7	0	0	0	0	0		54.34	7	0.00	27.15		3.63	0	3.36	0
Segment 135	0	5	0	0	0	0	0		31.82	3	0.00	0.00		1.51	0	0.00	0
Segment 136	9	21	1	0	0	0	0		11.21	3	0.00	0.00		1.37	0	1.37	0
Segment 137	0	0	0	0	0	0	0		8.72	0	0.00	0.00		0.38	0	0.38	0
Segment 138	1	1	0	0	0	0	0		0.11	1	0.00	0.00		0.21	0	0.21	0
Segment 139	0	1	0	0	0	0	0		0.08	1	0.00	0.00		0.26	0	0.00	0
Segment 140	1	4	0	0	0	0	0		13.59	3	0.00	32.45		1.51	0	1.51	0
Segment 141	0	10	0	0	0	0	0		54.35	3	0.00	29.79		4.03	0	2.88	0
Segment 142	5	9	0	0	0	0	0		15.75	2	0.00	0.00		1.85	0	1.85	0
Segment 143	0	9	0	0	3	0	0		35.63	6	0.01	2.37		2.90	0	2.90	0
Segment 144	3	13	0	0	4	0	0		4.02	0	0.00	0.00		1.09	0	0.00	0
Segment 145	0	2	0	0	0	0	0		8.91	2	0.00	3.57		1.16	0	0.61	0
Segment 146	0	6	0	0	0	0	0		10.94	1	0.15	0.00		1.08	0	1.08	0
Segment 147	0	1	0	0	0	0	0		23.30	1	0.05	0.00		1.21	0	0.87	0
Segment 148	2	9	0	0	1	0	0		12.06	0	0.00	0.00		1.24	0	0.00	0
Segment 149	3	8	0	0	1	0	0		2.64	0	0.00	0.00		1.01	0	1.01	0
Segment 150	0	0	0	0	1	0	0		29.57	4	0.78	8.29		3.33	0	3.33	0
Segment 151	1	1	0	0	0	0	0		1.50	2	0.00	6.47		1.03	0	0.67	0
Segment 152	0	0	0	0	0	0	0		2.02	2	0.00	2.92		1.06	0	0.00	0
Segment 153	0	1	1	0	0	0	0		39.76	11	0.00	25.34		2.78	0	0.00	0
Segment 154	0	0	0	0	0	0	0		0.20	1	0.00	0.00		0.98	0	0.00	0
Segment 155	0	1	0	0	0	0	0		14.39	4	0.53	51.24		2.35	0	2.35	0
Segment 156	0	1	0	0	0	0	0		29.94	3	0.00	0.92		2.12	0	2.12	0

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE A	106, 77, 66, 59, 32, 21, 15, 11, 7, 6, 10, 34, 65, 78, 94
ROUTE B	106, 77, 66, 59, 32, 21, 15, 11, 7, 6, 10, 34, 65, 79
ROUTE C	106, 77, 67, 73, 59, 32, 21, 15, 11, 7, 6, 10, 34, 65, 78, 94
ROUTE D	106, 77, 67, 73, 59, 32, 21, 15, 11, 7, 6, 10, 34, 65, 79
ROUTE E	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 6, 10, 34, 65, 78, 94
ROUTE F	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 6, 10, 34, 65, 79
ROUTE G	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 6, 10, 34, 65, 78, 94
ROUTE H	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 6, 10, 34, 65, 79
ROUTE I	106, 77, 66, 59, 32, 21, 15, 11, 7, 8, 9, 10, 34, 65, 78, 94
ROUTE J	106, 77, 66, 59, 32, 21, 15, 11, 7, 8, 9, 10, 34, 65, 79
ROUTE K	106, 77, 67, 73, 59, 32, 21, 15, 11, 7, 8, 9, 10, 34, 65, 78, 94
ROUTE L	106, 77, 67, 73, 59, 32, 21, 15, 11, 7, 8, 9, 10, 34, 65, 79
ROUTE M	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 9, 10, 34, 65, 78, 94
ROUTE N	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 9, 10, 34, 65, 79
ROUTE O	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 9, 10, 34, 65, 78, 94
ROUTE P	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 9, 10, 34, 65, 79
ROUTE Q	106, 77, 66, 59, 32, 21, 15, 11, 7, 8, 14, 29, 34, 65, 78, 94
ROUTE R	106, 77, 66, 59, 32, 21, 15, 11, 7, 8, 14, 29, 34, 65, 79
ROUTE S	106, 77, 67, 73, 59, 32, 21, 15, 11, 7, 8, 14, 29, 34, 65, 78, 94
ROUTE T	106, 77, 67, 73, 59, 32, 21, 15, 11, 7, 8, 14, 29, 34, 65, 79
ROUTE U	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 14, 29, 34, 65, 78, 94
ROUTE V	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 14, 29, 34, 65, 79
ROUTE W	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 14, 29, 34, 65, 78, 94
ROUTE X	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 14, 29, 34, 65, 79
ROUTE Y	106, 77, 66, 59, 32, 21, 15, 11, 12, 13, 9, 10, 34, 65, 78, 94
ROUTE Z	106, 77, 66, 59, 32, 21, 15, 11, 12, 13, 9, 10, 34, 65, 79
ROUTE AA	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 13, 9, 10, 34, 65, 78, 94
ROUTE AB	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 13, 9, 10, 34, 65, 79
ROUTE AC	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 9, 10, 34, 65, 78, 94
ROUTE AD	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 9, 10, 34, 65, 79
ROUTE AE	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 9, 10, 34, 65, 78, 94
ROUTE AF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 9, 10, 34, 65, 79
ROUTE AG	106, 77, 66, 59, 32, 21, 15, 11, 12, 13, 14, 29, 34, 65, 78, 94
ROUTE AH	106, 77, 66, 59, 32, 21, 15, 11, 12, 13, 14, 29, 34, 65, 79
ROUTE AI	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 13, 14, 29, 34, 65, 78, 94
ROUTE AJ	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 13, 14, 29, 34, 65, 79
ROUTE AK	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 14, 29, 34, 65, 78, 94
ROUTE AL	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 14, 29, 34, 65, 79
ROUTE AM	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 14, 29, 34, 65, 78, 94
ROUTE AN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 14, 29, 34, 65, 79
ROUTE AO	106, 77, 66, 59, 32, 21, 15, 11, 12, 18, 27, 29, 34, 65, 78, 94
ROUTE AP	106, 77, 66, 59, 32, 21, 15, 11, 12, 18, 27, 29, 34, 65, 79
ROUTE AQ	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 18, 27, 29, 34, 65, 78, 94
ROUTE AR	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 18, 27, 29, 34, 65, 79
ROUTE AS	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 27, 29, 34, 65, 78, 94
ROUTE AT	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 27, 29, 34, 65, 79
ROUTE AU	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 27, 29, 34, 65, 78, 94
ROUTE AV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 27, 29, 34, 65, 79
ROUTE AW	106, 77, 66, 59, 32, 21, 15, 11, 12, 18, 28, 154, 65, 78, 94
ROUTE AX	106, 77, 66, 59, 32, 21, 15, 11, 12, 18, 28, 154, 65, 79
ROUTE AY	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 18, 28, 154, 65, 78, 94
ROUTE AZ	106, 77, 67, 73, 59, 32, 21, 15, 11, 12, 18, 28, 154, 65, 79
ROUTE BA	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 28, 154, 65, 78, 94
ROUTE BB	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 28, 154, 65, 79
ROUTE BC	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 28, 154, 65, 78, 94
ROUTE BD	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 28, 154, 65, 79
ROUTE BE	106, 77, 66, 59, 32, 21, 15, 16, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE BF	106, 77, 66, 59, 32, 21, 15, 16, 17, 13, 9, 10, 34, 65, 79
ROUTE BG	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE BH	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 13, 9, 10, 34, 65, 79
ROUTE BI	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE BJ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 9, 10, 34, 65, 79
ROUTE BK	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE BL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 9, 10, 34, 65, 79
ROUTE BM	106, 77, 66, 59, 32, 21, 15, 16, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE BN	106, 77, 66, 59, 32, 21, 15, 16, 17, 13, 14, 29, 34, 65, 79
ROUTE BO	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE BP	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 13, 14, 29, 34, 65, 79
ROUTE BQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE BR	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 14, 29, 34, 65, 79
ROUTE BS	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE BT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 14, 29, 34, 65, 79
ROUTE BU	106, 77, 66, 59, 32, 21, 15, 16, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE BV	106, 77, 66, 59, 32, 21, 15, 16, 17, 18, 27, 29, 34, 65, 79
ROUTE BW	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE BX	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 18, 27, 29, 34, 65, 79
ROUTE BY	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE BZ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 27, 29, 34, 65, 79
ROUTE CA	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE CB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 27, 29, 34, 65, 79
ROUTE CC	106, 77, 66, 59, 32, 21, 15, 16, 17, 18, 28, 154, 65, 78, 94
ROUTE CD	106, 77, 66, 59, 32, 21, 15, 16, 17, 18, 28, 154, 65, 79
ROUTE CE	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 18, 28, 154, 65, 78, 94
ROUTE CF	106, 77, 67, 73, 59, 32, 21, 15, 16, 17, 18, 28, 154, 65, 79
ROUTE CG	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 28, 154, 65, 78, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE CH	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 28, 154, 65, 79
ROUTE CI	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 28, 154, 65, 78, 94
ROUTE CJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 28, 154, 65, 79
ROUTE CK	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE CL	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE CM	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE CN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE CO	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE CP	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE CQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE CR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE CS	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE CT	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE CU	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE CV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE CW	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE CX	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE CY	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE CZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE DA	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE DB	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE DC	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE DD	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE DE	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE DF	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE DG	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE DH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE DI	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE DJ	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE DK	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE DL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE DM	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE DN	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE DO	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE DP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE DQ	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE DR	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE DS	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE DT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE DU	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE DV	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE DW	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE DX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE DY	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE DZ	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE EA	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE EB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE EC	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE ED	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE EE	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE EF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE EG	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE EH	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE EI	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE EJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE EK	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE EL	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE EM	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE EN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE EO	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE EP	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE EQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE ER	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE ES	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE ET	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE EU	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE EV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE EW	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE EX	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE EY	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE EZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE FA	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE FB	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE FC	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE FD	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE FE	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE FF	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE FG	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE FH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE FI	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE FJ	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE FK	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE FL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE FM	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE FN	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE FO	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE FP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE FQ	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE FR	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE FS	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE FT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE FU	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE FV	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE FW	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE FX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE FY	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE FZ	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE GA	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE GB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE GC	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE GD	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE GE	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE GF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE GG	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE GH	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE GI	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE GJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE GK	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE GL	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE GM	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE GN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE GO	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE GP	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE GQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE GR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE GS	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE GT	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE GU	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE GV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE GW	106, 77, 66, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE GX	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE GY	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE GZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE HA	106, 77, 66, 59, 32, 21, 15, 16, 20, 26, 28, 154, 65, 78, 94
ROUTE HB	106, 77, 66, 59, 32, 21, 15, 16, 20, 26, 28, 154, 65, 79
ROUTE HC	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 26, 28, 154, 65, 78, 94
ROUTE HD	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 26, 28, 154, 65, 79
ROUTE HE	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 28, 154, 65, 78, 94
ROUTE HF	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 28, 154, 65, 79
ROUTE HG	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 28, 154, 65, 78, 94
ROUTE HH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 28, 154, 65, 79
ROUTE HI	106, 77, 66, 59, 32, 21, 15, 16, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE HJ	106, 77, 66, 59, 32, 21, 15, 16, 20, 26, 27, 29, 34, 65, 79
ROUTE HK	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE HL	106, 77, 67, 73, 59, 32, 21, 15, 16, 20, 26, 27, 29, 34, 65, 79
ROUTE HM	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE HN	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 27, 29, 34, 65, 79
ROUTE HO	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE HP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 27, 29, 34, 65, 79
ROUTE HQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE HR	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 9, 10, 34, 65, 79
ROUTE HS	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE HT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 9, 10, 34, 65, 79
ROUTE HU	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE HV	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 14, 29, 34, 65, 79
ROUTE HW	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE HX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 14, 29, 34, 65, 79
ROUTE HY	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE HZ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 27, 29, 34, 65, 79
ROUTE IA	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE IB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 27, 29, 34, 65, 79
ROUTE IC	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 28, 154, 65, 78, 94
ROUTE ID	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 28, 154, 65, 79
ROUTE IE	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 28, 154, 65, 78, 94
ROUTE IF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 28, 154, 65, 79
ROUTE IG	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE IH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE II	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE IJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE IK	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE IL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE IM	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE IN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE IO	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE IP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE IQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE IR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE IS	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE IT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE IU	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE IV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE IW	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE IX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE IY	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE IZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE JA	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE JB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE JC	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE JD	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE JE	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE JF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE JG	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE JH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE JI	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE JJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE JK	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE JL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE JM	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE JN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE JO	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE JP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE JQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE JR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE JS	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE JT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE JU	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE JV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE JW	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE JX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE JY	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE JZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE KA	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE KB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE KC	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE KD	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE KE	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE KF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE KG	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE KH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE KI	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE KJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE KK	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE KL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE KM	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE KN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE KO	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 28, 154, 65, 78, 94
ROUTE KP	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 28, 154, 65, 79
ROUTE KQ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 28, 154, 65, 78, 94
ROUTE KR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 28, 154, 65, 79
ROUTE KS	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE KT	106, 77, 66, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 27, 29, 34, 65, 79
ROUTE KU	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE KV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 27, 29, 34, 65, 79
ROUTE KW	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 26, 27, 29, 34, 65, 78, 94
ROUTE KX	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 26, 27, 29, 34, 65, 79
ROUTE KY	106, 77, 73, 67, 59, 58, 47, 43, 39, 30, 24, 26, 27, 29, 34, 65, 78, 94
ROUTE KZ	106, 77, 73, 67, 59, 58, 47, 43, 39, 30, 24, 26, 27, 29, 34, 65, 79
ROUTE LA	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 26, 28, 65, 154, 78, 94
ROUTE LB	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 26, 28, 65, 154, 79
ROUTE LC	106, 77, 73, 67, 59, 58, 47, 43, 39, 30, 24, 26, 28, 65, 154, 78, 94
ROUTE LD	106, 77, 73, 67, 59, 58, 47, 43, 39, 30, 24, 26, 28, 65, 154, 79
ROUTE LE	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE LF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE LG	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE LH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE LI	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE LJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE LK	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE LL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE LM	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE LN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE LO	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE LP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE LQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE LR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE LS	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE LT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE LU	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE LV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE LW	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE LX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE LY	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE LZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE MA	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE MB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE MC	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE MD	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE ME	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE MF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE MG	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE MH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE MI	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE MJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE MK	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE ML	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE MM	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE MN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE MO	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE MP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE MQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE MR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE MS	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE MT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE MU	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE MV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE MW	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE MX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE MY	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE MZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE NA	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE NB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE NC	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE ND	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE NE	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE NF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE NG	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE NH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE NI	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE NJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE NK	106, 77, 66, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE NL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE NU	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 48, 53, 56, 154, 65, 78, 94
ROUTE NV	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 48, 53, 56, 154, 65, 79
ROUTE NW	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 48, 53, 56, 154, 65, 78, 94
ROUTE NX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 48, 53, 56, 154, 65, 79
ROUTE NY	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 48, 53, 57, 63, 71, 78, 94
ROUTE NZ	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 48, 53, 57, 63, 71, 79
ROUTE OA	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 48, 53, 57, 63, 71, 78, 94
ROUTE OB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 48, 53, 57, 63, 71, 79
ROUTE OC	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 71, 78, 94
ROUTE OD	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 71, 79
ROUTE OE	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 71, 78, 94
ROUTE OF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 71, 79
ROUTE OG	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 71, 78, 94
ROUTE OH	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 71, 79
ROUTE OI	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 71, 78, 94
ROUTE OJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 71, 79
ROUTE OK	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE OL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE OM	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE ON	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE OO	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE OP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE OQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE OR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE OS	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE OT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE OU	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE OV	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE OW	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE OX	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE OY	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE OZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE PA	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE PB	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE PC	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE PD	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE PE	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE PF	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE PG	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE PH	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE PI	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE PJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84 85, 97, 98, 104, 103, 100
ROUTE PK	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE PL	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE PM	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE PN	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE PO	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE PP	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE PQ	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE PR	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE PS	106, 77, 66, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE PT	106, 77, 67, 73, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE PU	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE PV	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE PW	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE PX	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE PY	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE PZ	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE QA	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE QB	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE QC	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE QD	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 71, 79
ROUTE QE	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE QF	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 71, 79
ROUTE QG	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE QH	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 71, 79
ROUTE QI	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE QJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 71, 79
ROUTE QK	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE QL	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE QM	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE QN	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE QO	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE QP	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE QQ	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE QR	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE QS	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE QT	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE QU	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE QV	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE QW	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE QX	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE QY	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE QZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE RA	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE RB	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE RC	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE RD	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE RE	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE RF	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE RG	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE RH	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE RI	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE RJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 103, 100
ROUTE RK	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE RL	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE RM	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE RN	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE RO	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE RP	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE RQ	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE RR	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE RS	106, 77, 66, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE RT	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE RU	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE RV	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE RW	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE RX	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE RY	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE RZ	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE SA	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE SB	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE SC	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE SD	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE SE	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE SF	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE SG	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE SH	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE SI	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE SJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE SK	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE SL	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE SM	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE SN	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE SO	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE SP	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE SQ	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE SR	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE SS	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE ST	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE SU	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE SV	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE SW	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE SX	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE SY	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE SZ	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE TA	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE TB	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE TC	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE TD	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE TE	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE TF	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE TG	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE TH	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE TI	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE TJ	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 103, 100
ROUTE TK	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE TL	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE TM	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE TN	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE TO	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE TP	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE TQ	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE TR	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE TS	106, 77, 66, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE TT	106, 77, 67, 73, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE TU	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE TV	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE TW	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE TX	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE TY	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE TZ	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE UA	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE UB	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE UC	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE UD	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE UE	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE UF	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE UG	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE UH	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE UI	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE UJ	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE UK	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE UL	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE UM	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE UN	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE UO	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE UP	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE UQ	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE UR	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE US	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE UT	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE UU	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE UV	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE UW	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE UX	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE UY	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE UZ	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE VA	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE VB	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE VC	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE VD	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE VE	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE VF	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE VG	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE VH	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE VI	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE VJ	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 103, 100
ROUTE VK	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE VL	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE VM	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE VN	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE VO	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE VP	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE VQ	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE VR	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE VS	106, 77, 66, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE VT	106, 77, 67, 73, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE VU	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE VV	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE VW	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE VX	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE VY	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE VZ	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE WA	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE WB	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE WC	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE WD	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE WE	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE WF	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE WG	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE WH	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE WI	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE WJ	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE WK	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE WL	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE WM	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE WN	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE WO	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE WP	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE WQ	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE WR	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE WS	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE WT	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE WU	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE WV	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE WW	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE WX	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE WY	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE WZ	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE XA	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE XB	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE XC	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE XD	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE XE	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE XF	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE XG	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE XH	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE XI	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE XJ	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 103, 100
ROUTE XK	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE XL	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE XM	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE XN	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE XO	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE XP	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE XQ	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE XR	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE XS	106, 77, 66, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE XT	106, 77, 67, 73, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE XU	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 71, 79
ROUTE XV	106, 77, 73, 67, 59, 32, 33, 44, 45, 46, 61, 3, 68, 71, 79
ROUTE XW	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 71, 79
ROUTE XX	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 71, 79
ROUTE XY	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 71, 78, 94
ROUTE XZ	106, 77, 73, 67, 59, 32, 33, 44, 45, 46, 61, 3, 68, 71, 78, 94
ROUTE YA	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 71, 78, 94
ROUTE YB	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 71, 78, 94
ROUTE YC	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE YD	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE YE	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 70, 85, 97, 89, 91, 94
ROUTE YF	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 103, 100
ROUTE YG	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE YH	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 68, 70, 86, 89, 91, 94
ROUTE YI	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE YJ	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE YK	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 69, 84, 85, 97, 89, 91, 94
ROUTE YL	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 103, 100
ROUTE YM	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE YN	106, 77, 66, 59, 32, 33, 44, 45, 46, 61, 3, 69, 84, 86, 89, 91, 94
ROUTE YO	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE YP	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE YQ	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 89, 91, 94
ROUTE YR	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 103, 100
ROUTE YS	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE YT	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 89, 91, 94
ROUTE YU	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE YV	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE YW	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 89, 91, 94
ROUTE YX	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 103, 100
ROUTE YY	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE YZ	106, 77, 66, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 89, 91, 94
ROUTE ZA	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE ZB	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE ZC	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 89, 91, 94
ROUTE ZD	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 103, 100
ROUTE ZE	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE ZF	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 89, 91, 94
ROUTE ZG	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE ZH	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE ZI	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 89, 91, 94
ROUTE ZJ	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 103, 100
ROUTE ZK	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE ZL	106, 77, 73, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 89, 91, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE ACO	106, 110, 67, 74, 59, 32, 21, 15, 11, 7, 6, 10, 34, 65, 78, 94
ROUTE ACP	106, 110, 67, 74, 59, 32, 21, 15, 11, 7, 6, 10, 34, 65, 79
ROUTE ACQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 6, 10, 34, 65, 78, 94
ROUTE ACR	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 6, 10, 34, 65, 79
ROUTE ACS	106, 110, 67, 74, 59, 32, 21, 15, 11, 7, 8, 9, 10, 34, 65, 78, 94
ROUTE ACT	106, 110, 67, 74, 59, 32, 21, 15, 11, 7, 8, 9, 10, 34, 65, 79
ROUTE ACU	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 9, 10, 34, 65, 78, 94
ROUTE ACV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 9, 10, 34, 65, 79
ROUTE ACW	106, 110, 67, 74, 59, 32, 21, 15, 11, 7, 8, 14, 29, 34, 65, 78, 94
ROUTE ACX	106, 110, 67, 74, 59, 32, 21, 15, 11, 7, 8, 14, 29, 34, 65, 79
ROUTE ACY	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 14, 29, 34, 65, 78, 94
ROUTE ACZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 7, 8, 14, 29, 34, 65, 79
ROUTE ADA	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 13, 9, 10, 34, 65, 78, 94
ROUTE ADB	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 13, 9, 10, 34, 65, 79
ROUTE ADC	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 9, 10, 34, 65, 78, 94
ROUTE ADD	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 9, 10, 34, 65, 79
ROUTE ADE	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 13, 14, 29, 34, 65, 78, 94
ROUTE ADF	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 13, 14, 29, 34, 65, 79
ROUTE ADG	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 14, 29, 34, 65, 78, 94
ROUTE ADH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 13, 14, 29, 34, 65, 79
ROUTE ADI	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 18, 27, 29, 34, 65, 78, 94
ROUTE ADJ	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 18, 27, 29, 34, 65, 79
ROUTE ADK	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 27, 29, 34, 65, 78, 94
ROUTE ADL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 27, 29, 34, 65, 79
ROUTE ADM	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 18, 28, 154, 65, 78, 94
ROUTE ADN	106, 110, 67, 74, 59, 32, 21, 15, 11, 12, 18, 28, 154, 65, 79
ROUTE ADO	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 28, 154, 65, 78, 94
ROUTE ADP	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 11, 12, 18, 28, 154, 65, 79
ROUTE ADQ	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE ADR	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 13, 9, 10, 34, 65, 79
ROUTE ADS	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE ADT	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 9, 10, 34, 65, 79
ROUTE ADU	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE ADV	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 13, 14, 29, 34, 65, 79
ROUTE ADW	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE ADX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 13, 14, 29, 34, 65, 79
ROUTE ADY	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE ADZ	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 18, 27, 29, 34, 65, 79
ROUTE AEA	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE AEB	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 27, 29, 34, 65, 79
ROUTE AEC	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 18, 28, 154, 65, 78, 94
ROUTE AED	106, 110, 67, 74, 59, 32, 21, 15, 16, 17, 18, 28, 154, 65, 79
ROUTE AEE	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 28, 154, 65, 78, 94
ROUTE AEF	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 17, 18, 28, 154, 65, 79
ROUTE AEG	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AEH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AEI	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AEJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AEK	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AEL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AEM	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AEN	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AEO	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AEP	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AEQ	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE AER	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE AES	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE AET	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE AEU	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AEV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AEW	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE AEX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE AEY	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE AEZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE AFA	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AFB	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AFC	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE AFD	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE AFE	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AFF	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AFG	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AFH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AFI	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE AFJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE AFK	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE AFL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE AFM	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AFN	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AFO	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE AFP	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE AFQ	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AFR	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AFS	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AFT	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AFU	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE AFV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE AFW	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AFX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AFY	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AFZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AGA	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE AGB	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE AGC	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AGD	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AGE	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AGF	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AGG	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE AGH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE AGI	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AGJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AGK	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AGL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AGM	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE AGN	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE AGO	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 26, 28, 154, 65, 78, 94
ROUTE AGP	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 26, 28, 154, 65, 79
ROUTE AGQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 28, 154, 65, 78, 94
ROUTE AGR	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 28, 154, 65, 79
ROUTE AGS	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE AGT	106, 110, 67, 74, 59, 32, 21, 15, 16, 20, 26, 27, 29, 34, 65, 79
ROUTE AGU	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE AGV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 22, 15, 16, 20, 26, 27, 29, 34, 65, 79
ROUTE AGW	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 9, 10, 34, 65, 78, 94
ROUTE AGX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 9, 10, 34, 65, 79
ROUTE AGY	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 14, 29, 34, 65, 78, 94
ROUTE AGZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 13, 14, 29, 34, 65, 79
ROUTE AHA	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 27, 29, 34, 65, 78, 94
ROUTE AHB	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 27, 29, 34, 65, 79
ROUTE AHC	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 28, 154, 65, 78, 94
ROUTE AHD	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 17, 18, 28, 154, 65, 79
ROUTE AHE	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AHF	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AHG	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AHH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AHI	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AHJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE AHK	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE AHL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AHM	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE AHN	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE AHO	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AHP	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE AHQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AHR	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AHS	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE AHT	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE AHU	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AHV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE AHW	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AHX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AHY	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE AHZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AIA	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AIB	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE AIC	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AID	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AIE	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE AIF	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AIG	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AIH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE AII	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 28, 154, 65, 78, 94
ROUTE AIJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 28, 154, 65, 79
ROUTE AIK	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 27, 29, 34, 65, 78, 94
ROUTE AIL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 23, 19, 20, 26, 27, 29, 34, 65, 79
ROUTE AIQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AIR	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AIS	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AIT	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AIU	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AIV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 69, 84, 86, 89, 91, 94
ROUTE AIW	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE AIX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AIY	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE AIZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE AJA	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AJB	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 54, 68, 70, 86, 89, 91, 94
ROUTE AJC	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AJD	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AJE	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE AJF	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 98, 104, 103, 100

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE AJG	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AJH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 52, 55, 63, 70, 86, 89, 91, 94
ROUTE AJI	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AJJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AJK	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE AJL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AJM	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AJN	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 35, 53, 57, 63, 70, 86, 89, 91, 94
ROUTE AJO	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AJP	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AJQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 85, 97, 89, 91, 94
ROUTE AJR	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 98, 104, 103, 100
ROUTE AJS	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AJT	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 25, 36, 57, 63, 70, 86, 89, 91, 94
ROUTE AJU	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 26, 28, 154, 65, 78, 94
ROUTE AJV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 26, 28, 154, 65, 79
ROUTE AJW	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 26, 27, 29, 34, 65, 78, 94
ROUTE AJX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 24, 26, 27, 29, 34, 65, 79
ROUTE AJY	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 48, 53, 56, 154, 65, 78, 94
ROUTE AJZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 48, 53, 56, 154, 65, 79
ROUTE AKA	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 48, 53, 57, 63, 71, 78, 94
ROUTE AKB	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 48, 53, 57, 63, 71, 79
ROUTE AKC	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 71, 78, 94
ROUTE AKD	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 71, 79
ROUTE AKE	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 71, 78, 94
ROUTE AKF	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 71, 79
ROUTE AKG	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AKH	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AKI	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE AKJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE AKK	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AKL	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE AKM	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE AKN	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AKO	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE AKP	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE AKQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AKR	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE AKS	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AKT	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84 85, 97, 98, 104, 90, 91, 94
ROUTE AKU	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AKV	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AKW	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AKX	106, 110, 67, 74, 59, 58, 47, 43, 39, 30, 31, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE AKY	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE AKZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE ALA	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE ALB	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE ALC	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE ALD	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 71, 79
ROUTE ALE	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE ALF	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 71, 79
ROUTE ALG	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE ALH	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE ALI	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE ALJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE ALK	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE ALL	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE ALM	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE ALN	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE ALO	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE ALP	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE ALQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE ALR	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE ALS	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE ALT	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE ALU	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE ALV	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE ALW	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE ALX	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 37, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE ALY	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE ALZ	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE AMA	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE AMB	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE AMC	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94, 57, 52
ROUTE AMD	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE AME	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE AMF	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE AMG	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE AMH	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AMI	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE AMJ	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE AMK	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE AML	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE AMM	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE AMN	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AMO	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE AMP	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE AMQ	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AMR	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE AMS	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AMT	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AMU	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AMV	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AMW	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AMX	106, 110, 67, 74, 59, 58, 47, 43, 39, 38, 42, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE AMY	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE AMZ	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE ANA	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE ANB	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE ANC	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE AND	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE ANE	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE ANF	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE ANG	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE ANI	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE ANK	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE ANM	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE ANO	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE ANQ	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE ANS	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE ANU	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE ANW	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE ANY	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE AOA	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AOC	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE AOE	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AOG	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AOI	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AOK	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AOM	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AOO	106, 110, 67, 74, 59, 58, 47, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE AOQ	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 78, 94
ROUTE AOR	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 56, 154, 65, 79
ROUTE AOS	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 78, 94
ROUTE AOT	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 48, 53, 57, 63, 71, 79
ROUTE AOU	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 71, 78, 94
ROUTE AOV	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 71, 79
ROUTE AOW	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 71, 78, 94
ROUTE AOX	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 71, 79
ROUTE AOY	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 103, 100
ROUTE APA	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE APC	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 85, 97, 89, 91, 94
ROUTE APE	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 103, 100
ROUTE APG	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 98, 104, 90, 91, 94
ROUTE API	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 55, 63, 70, 86, 89, 91, 94
ROUTE APK	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE APM	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE APO	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 85, 97, 89, 91, 94
ROUTE APQ	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 103, 100
ROUTE APS	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE APU	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 68, 70, 86, 89, 91, 94
ROUTE APW	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE APY	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AQA	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 85, 97, 89, 91, 94
ROUTE AQC	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 103, 100
ROUTE AQE	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AQG	106, 110, 67, 74, 59, 32, 33, 44, 45, 40, 41, 49, 50, 54, 69, 84, 86, 89, 91, 94
ROUTE AQI	106, 110, 74, 67, 59, 32, 33, 44, 45, 46, 61, 3, 68, 71, 79
ROUTE AQJ	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 71, 79
ROUTE AQK	106, 110, 74, 67, 59, 32, 33, 44, 45, 46, 61, 3, 68, 71, 78, 94
ROUTE AQL	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 71, 78, 94
ROUTE AQM	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 103, 100
ROUTE AQN	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 98, 104, 90, 91, 94
ROUTE AQO	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 85, 97, 89, 91, 94
ROUTE AQP	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 103, 100
ROUTE AQQ	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 98, 104, 90, 91, 94
ROUTE AQR	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 68, 70, 86, 89, 91, 94
ROUTE AQS	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 103, 100
ROUTE AQT	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 98, 104, 90, 91, 94
ROUTE AQU	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 85, 97, 89, 91, 94
ROUTE AQV	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 103, 100
ROUTE AQW	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 98, 104, 90, 91, 94
ROUTE AQX	106, 110, 74, 67, 59, 58, 47, 44, 45, 46, 61, 3, 69, 84, 86, 89, 91, 94
ROUTE ATG	106, 110, 117, 141, 133, 123, 95, 96, 114, 108, 99, 97, 89, 91, 94
ROUTE ATH	106, 110, 117, 141, 133, 123, 95, 96, 114, 108, 99, 97, 98, 104, 90, 91, 94
ROUTE ATI	106, 110, 117, 141, 133, 123, 95, 96, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE ATJ	106, 110, 117, 141, 133, 123, 95, 96, 114, 113, 111, 100
ROUTE ATK	106, 110, 117, 141, 134, 123, 95, 96, 114, 108, 99, 97, 89, 91, 94
ROUTE ATL	106, 110, 117, 141, 134, 123, 95, 96, 114, 108, 99, 97, 98, 104, 90, 91, 94

Table 3.1
Routes by Segments
(All Routes Compatible with Fort Knox)

Routes	Segments
ROUTE ATM	106, 110, 117, 141, 134, 123, 95, 96, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE ATN	106, 110, 117, 141, 134, 123, 95, 96, 114, 113, 111, 100
ROUTE ATO	106, 110, 117, 141, 133, 123, 115, 114, 108, 99, 97, 89, 91, 94
ROUTE ATP	106, 110, 117, 141, 133, 123, 115, 114, 108, 99, 97, 98, 104, 90, 91, 94
ROUTE ATQ	106, 110, 117, 141, 133, 123, 115, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE ATR	106, 110, 117, 141, 133, 123, 115, 114, 113, 111, 100
ROUTE ATS	106, 110, 117, 141, 134, 123, 115, 114, 108, 99, 97, 89, 91, 94
ROUTE ATT	106, 110, 117, 141, 134, 123, 115, 114, 108, 99, 97, 98, 104, 90, 91, 94
ROUTE ATU	106, 110, 117, 141, 134, 123, 115, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE ATV	106, 110, 117, 141, 134, 123, 115, 114, 113, 111, 100
ROUTE ATW	107, 128, 130, 141, 133, 123, 95, 96, 114, 108, 99, 97, 89, 91, 94
ROUTE ATX	107, 128, 130, 141, 133, 123, 95, 96, 114, 108, 99, 97, 98, 104, 90, 91, 94
ROUTE ATY	107, 128, 130, 141, 133, 123, 95, 96, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE ATZ	107, 128, 130, 141, 133, 123, 95, 96, 114, 113, 111, 100
ROUTE AUA	107, 128, 130, 141, 134, 123, 95, 96, 114, 108, 99, 97, 89, 91, 94
ROUTE AUB	107, 128, 130, 141, 134, 123, 95, 96, 114, 108, 99, 97, 98, 104, 90, 91, 94
ROUTE AUC	107, 128, 130, 141, 134, 123, 95, 96, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE AUD	107, 128, 130, 141, 134, 123, 95, 96, 114, 113, 111, 100
ROUTE AUE	107, 128, 130, 141, 133, 123, 115, 114, 108, 99, 97, 89, 91, 94
ROUTE AUF	107, 128, 130, 141, 133, 123, 115, 114, 108, 99, 97, 98, 104, 90, 91, 94
ROUTE AUG	107, 128, 130, 141, 133, 123, 115, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE AUH	107, 128, 130, 141, 133, 123, 115, 114, 113, 111, 100
ROUTE AUI	107, 128, 130, 141, 134, 123, 115, 114, 108, 99, 97, 89, 91, 94
ROUTE AUJ	107, 128, 130, 141, 134, 123, 115, 114, 108, 99, 97, 98, 104, 90, 91, 94
ROUTE AUK	107, 128, 130, 141, 134, 123, 115, 114, 108, 99, 97, 98, 104, 103, 100
ROUTE AUL	107, 128, 130, 141, 134, 123, 115, 114, 113, 111, 100
ROUTE AUM	107, 128, 129, 145, 151, 149, 146, 143, 142, 120, 116, 112, 105, 104, 90, 91, 94, 132, 150, 153
ROUTE AUN	107, 128, 129, 145, 151, 149, 146, 143, 142, 120, 116, 112, 105, 104, 103, 100, 132, 150, 153
ROUTE AUO	107, 128, 129, 145, 151, 149, 146, 143, 142, 120, 116, 111, 100, 132, 150, 153
ROUTE AUP	107, 128, 129, 145, 151, 149, 146, 143, 142, 120, 118, 101, 132, 150, 153
ROUTE AUQ	107, 127, 144, 152, 148, 147, 143, 142, 120, 116, 112, 105, 104, 90, 91, 94, 132, 150, 153
ROUTE AUR	107, 127, 144, 152, 148, 147, 143, 142, 120, 116, 112, 105, 104, 103, 100, 132, 150, 153
ROUTE AUS	107, 127, 144, 152, 148, 147, 143, 142, 120, 116, 111, 100, 132, 150, 153
ROUTE AUT	107, 127, 144, 152, 148, 147, 143, 142, 120, 118, 101, 132, 150, 153
ROUTE AUU	107, 128, 129, 145, 151, 149, 146, 143, 142, 140, 138, 136, 137, 2, 116, 112, 105, 104, 90, 91, 94, 132, 150, 153, 155
ROUTE AUV	107, 128, 129, 145, 151, 149, 146, 143, 142, 140, 138, 136, 137, 2, 116, 112, 105, 104, 103, 100, 132, 150, 153, 155
ROUTE AUW	107, 128, 129, 145, 151, 149, 146, 143, 142, 140, 138, 136, 137, 2, 116, 111, 100, 132, 150, 153, 155
ROUTE AUX	107, 128, 129, 145, 151, 149, 146, 143, 142, 140, 138, 136, 137, 2, 118, 101, 132, 150, 153, 155
ROUTE AUY	107, 127, 144, 152, 148, 147, 143, 4, 155, 139, 135, 137, 2, 116, 112, 105, 104, 90, 91, 94, 132, 150, 153
ROUTE AUZ	107, 127, 144, 152, 148, 147, 143, 4, 155, 139, 135, 137, 2, 116, 112, 105, 104, 103, 100, 132, 150, 153
ROUTE AVA	107, 127, 144, 152, 148, 147, 143, 4, 155, 139, 135, 137, 2, 116, 111, 100, 132, 150, 153
ROUTE AVB	107, 127, 144, 152, 148, 147, 143, 4, 155, 139, 135, 137, 2, 118, 101, 132, 150, 153
ROUTE AVC	107, 128, 129, 145, 151, 149, 146, 143, 142, 140, 138, 136, 137, 156, 131, 125, 124, 121, 119, 101, 132, 150, 153, 155
ROUTE AVD	107, 127, 144, 152, 148, 147, 143, 4, 155, 139, 135, 137, 156, 131, 126, 124, 122, 119, 101, 132, 150, 153
ROUTE AVE	107, 127, 144, 152, 148, 147, 143, 4, 155, 139, 135, 137, 156, 102, 132, 150, 153
ROUTE AVF	107, 128, 129, 136, 138, 142, 145, 146, 149, 151, 137, 156, 140, 155, 132, 143, 150, 153, 102

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE A	256	790.5
ROUTE B	313	879.5
ROUTE C	234	785.0
ROUTE D	291	873.9
ROUTE E	160	771.4
ROUTE F	217	860.4
ROUTE G	138	765.8
ROUTE H	195	854.8
ROUTE I	266	850.9
ROUTE J	323	939.9
ROUTE K	244	845.3
ROUTE L	301	934.3
ROUTE M	170	831.8
ROUTE N	227	920.7
ROUTE O	148	826.2
ROUTE P	205	915.2
ROUTE Q	290	965.8
ROUTE R	347	1054.8
ROUTE S	268	960.2
ROUTE T	325	1049.2
ROUTE U	194	946.7
ROUTE V	251	1035.6
ROUTE W	172	941.1
ROUTE X	229	1030.1
ROUTE Y	257	815.0
ROUTE Z	314	904.0
ROUTE AA	234	809.5
ROUTE AB	291	898.4
ROUTE AC	161	795.9
ROUTE AD	218	884.8
ROUTE AE	138	790.3
ROUTE AF	195	879.3
ROUTE AG	281	929.9
ROUTE AH	338	1018.9
ROUTE AI	259	924.4
ROUTE AJ	316	1013.3
ROUTE AK	185	910.8
ROUTE AL	242	999.8
ROUTE AM	163	905.2
ROUTE AN	220	994.2
ROUTE AO	280	901.8
ROUTE AP	337	990.8
ROUTE AQ	258	896.2
ROUTE AR	315	985.2
ROUTE AS	184	882.7
ROUTE AT	241	971.6
ROUTE AU	162	877.1
ROUTE AV	219	966.1
ROUTE AW	287	991.3
ROUTE AX	344	1080.2
ROUTE AY	265	985.7
ROUTE AZ	321	1074.7
ROUTE BA	191	972.1
ROUTE BB	248	1061.1
ROUTE BC	169	966.5
ROUTE BD	225	1055.5
ROUTE BE	261	817.0
ROUTE BF	318	905.9
ROUTE BG	239	811.4
ROUTE BH	296	900.4
ROUTE BI	165	797.8
ROUTE BJ	222	886.8
ROUTE BK	143	792.2
ROUTE BL	200	881.2
ROUTE BM	285	931.9
ROUTE BN	342	1020.8

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE BO	263	926.3
ROUTE BP	320	1015.3
ROUTE BQ	189	912.7
ROUTE BR	246	1001.7
ROUTE BS	167	907.2
ROUTE BT	224	996.1
ROUTE BU	285	903.8
ROUTE BV	342	992.7
ROUTE BW	263	898.2
ROUTE BX	320	987.2
ROUTE BY	189	884.6
ROUTE BZ	246	973.6
ROUTE CA	167	879.0
ROUTE CB	224	968.0
ROUTE CC	291	993.2
ROUTE CD	348	1082.2
ROUTE CE	269	987.6
ROUTE CF	326	1076.6
ROUTE CG	195	974.1
ROUTE CH	252	1063.0
ROUTE CI	173	968.5
ROUTE CJ	230	1057.5
ROUTE CK	375	1099.9
ROUTE CL	353	1094.3
ROUTE CM	279	1080.7
ROUTE CN	256	1075.2
ROUTE CO	394	1112.2
ROUTE CP	372	1106.7
ROUTE CQ	298	1093.1
ROUTE CR	276	1087.5
ROUTE CS	405	1091.6
ROUTE CT	382	1086.1
ROUTE CU	309	1072.5
ROUTE CV	286	1066.9
ROUTE CW	334	1096.2
ROUTE CX	312	1090.7
ROUTE CY	238	1077.1
ROUTE CZ	216	1071.5
ROUTE DA	353	1108.6
ROUTE DB	331	1103.0
ROUTE DC	257	1089.5
ROUTE DD	235	1083.9
ROUTE DE	364	1088.0
ROUTE DF	341	1082.4
ROUTE DG	268	1068.8
ROUTE DH	245	1063.3
ROUTE DI	419	1101.6
ROUTE DJ	397	1096.0
ROUTE DK	323	1082.4
ROUTE DL	301	1076.8
ROUTE DM	438	1113.9
ROUTE DN	416	1108.4
ROUTE DO	342	1094.8
ROUTE DP	320	1089.2
ROUTE DQ	449	1093.3
ROUTE DR	427	1087.8
ROUTE DS	353	1074.2
ROUTE DT	331	1068.6
ROUTE DU	378	1097.9
ROUTE DV	356	1092.4
ROUTE DW	282	1078.8
ROUTE DX	260	1073.2
ROUTE DY	397	1110.3
ROUTE DZ	375	1104.7
ROUTE EA	301	1091.2
ROUTE EB	279	1085.6

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE EC	408	1089.7
ROUTE ED	386	1084.1
ROUTE EE	312	1070.5
ROUTE EF	290	1065.0
ROUTE EG	545	1087.5
ROUTE EH	523	1081.9
ROUTE EI	449	1068.4
ROUTE EJ	427	1062.8
ROUTE EK	564	1099.9
ROUTE EL	542	1094.3
ROUTE EM	468	1080.7
ROUTE EN	446	1075.2
ROUTE EO	575	1079.3
ROUTE EP	553	1073.7
ROUTE EQ	479	1060.1
ROUTE ER	457	1054.5
ROUTE ES	504	1083.9
ROUTE ET	482	1078.3
ROUTE EU	408	1064.7
ROUTE EV	386	1059.2
ROUTE EW	523	1096.2
ROUTE EX	501	1090.7
ROUTE EY	427	1077.1
ROUTE EZ	405	1071.5
ROUTE FA	534	1075.6
ROUTE FB	512	1070.1
ROUTE FC	438	1056.5
ROUTE FD	416	1050.9
ROUTE FE	492	1097.0
ROUTE FF	470	1091.4
ROUTE FG	396	1077.8
ROUTE FH	374	1072.2
ROUTE FI	511	1109.3
ROUTE FJ	489	1103.8
ROUTE FK	415	1090.2
ROUTE FL	393	1084.6
ROUTE FM	522	1088.7
ROUTE FN	500	1083.2
ROUTE FO	426	1069.6
ROUTE FP	404	1064.0
ROUTE FQ	451	1093.3
ROUTE FR	429	1087.8
ROUTE FS	355	1074.2
ROUTE FT	333	1068.6
ROUTE FU	470	1105.7
ROUTE FV	448	1100.1
ROUTE FW	374	1086.5
ROUTE FX	352	1081.0
ROUTE FY	481	1085.1
ROUTE FZ	459	1079.5
ROUTE GA	385	1065.9
ROUTE GB	363	1060.4
ROUTE GC	505	1084.6
ROUTE GD	483	1079.0
ROUTE GE	409	1065.5
ROUTE GF	387	1059.9
ROUTE GG	524	1097.0
ROUTE GH	502	1091.4
ROUTE GI	428	1077.8
ROUTE GJ	406	1072.2
ROUTE GK	535	1076.4
ROUTE GL	513	1070.8
ROUTE GM	439	1057.2
ROUTE GN	417	1051.6
ROUTE GO	464	1081.0
ROUTE GP	442	1075.4

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE GQ	368	1061.8
ROUTE GR	346	1056.2
ROUTE GS	483	1093.3
ROUTE GT	461	1087.8
ROUTE GU	387	1074.2
ROUTE GV	365	1068.6
ROUTE GW	494	1072.7
ROUTE GX	472	1067.2
ROUTE GY	398	1053.6
ROUTE GZ	376	1048.0
ROUTE HA	274	969.2
ROUTE HB	331	1058.2
ROUTE HC	252	963.6
ROUTE HD	309	1052.6
ROUTE HE	178	950.1
ROUTE HF	235	1039.0
ROUTE HG	156	944.5
ROUTE HH	213	1033.5
ROUTE HI	268	879.8
ROUTE HJ	325	968.7
ROUTE HK	246	874.2
ROUTE HL	303	963.2
ROUTE HM	172	860.6
ROUTE HN	229	949.6
ROUTE HO	150	855.0
ROUTE HP	207	944.0
ROUTE HQ	153	735.3
ROUTE HR	210	824.2
ROUTE HS	131	729.7
ROUTE HT	187	818.7
ROUTE HU	177	850.2
ROUTE HV	234	939.2
ROUTE HW	155	844.6
ROUTE HX	212	933.6
ROUTE HY	176	822.1
ROUTE HZ	233	911.0
ROUTE IA	154	816.5
ROUTE IB	211	905.5
ROUTE IC	183	911.5
ROUTE ID	240	1000.5
ROUTE IE	161	905.9
ROUTE IF	218	994.9
ROUTE IG	266	1018.2
ROUTE IH	244	1012.6
ROUTE II	285	1030.5
ROUTE IJ	263	1025.0
ROUTE IK	296	1009.9
ROUTE IL	274	1004.4
ROUTE IM	225	1014.5
ROUTE IN	203	1009.0
ROUTE IO	244	1026.9
ROUTE IP	222	1021.3
ROUTE IQ	255	1006.3
ROUTE IR	233	1000.7
ROUTE IS	310	1019.9
ROUTE IT	288	1014.3
ROUTE IU	330	1032.2
ROUTE IV	307	1026.7
ROUTE IW	340	1011.6
ROUTE IX	318	1006.1
ROUTE IY	269	1016.2
ROUTE IZ	247	1010.7
ROUTE JA	289	1028.6
ROUTE JB	266	1023.0
ROUTE JC	299	1008.0
ROUTE JD	277	1002.4

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE JE	436	1005.8
ROUTE JF	414	1000.2
ROUTE JG	455	1018.2
ROUTE JH	433	1012.6
ROUTE JI	466	997.6
ROUTE JJ	444	992.0
ROUTE JK	395	1002.2
ROUTE JL	373	996.6
ROUTE JM	414	1014.5
ROUTE JN	392	1009.0
ROUTE JO	425	993.9
ROUTE JP	403	988.4
ROUTE JQ	383	1015.3
ROUTE JR	361	1009.7
ROUTE JS	403	1027.6
ROUTE JT	380	1022.1
ROUTE JU	413	1007.0
ROUTE JV	391	1001.5
ROUTE JW	342	1011.6
ROUTE JX	320	1006.1
ROUTE JY	362	1024.0
ROUTE JZ	339	1018.4
ROUTE KA	372	1003.4
ROUTE KB	350	997.8
ROUTE KC	396	1002.9
ROUTE KD	374	997.3
ROUTE KE	416	1015.3
ROUTE KF	393	1009.7
ROUTE KG	426	994.7
ROUTE KH	404	989.1
ROUTE KI	355	999.3
ROUTE KJ	333	993.7
ROUTE KK	375	1011.6
ROUTE KL	352	1006.1
ROUTE KM	385	991.0
ROUTE KN	363	985.5
ROUTE KO	166	887.5
ROUTE KP	223	976.5
ROUTE KQ	143	881.9
ROUTE KR	200	970.9
ROUTE KS	159	798.1
ROUTE KT	216	887.0
ROUTE KU	137	792.5
ROUTE KV	194	881.5
ROUTE KW	148	711.3
ROUTE KX	205	800.2
ROUTE KY	126	705.7
ROUTE KZ	183	794.7
ROUTE LA	155	800.7
ROUTE LB	212	889.7
ROUTE LC	132	795.2
ROUTE LD	189	884.1
ROUTE LE	255	931.4
ROUTE LF	233	925.8
ROUTE LG	274	943.8
ROUTE LH	252	938.2
ROUTE LI	285	923.2
ROUTE LJ	263	917.6
ROUTE LK	214	927.8
ROUTE LL	192	922.2
ROUTE LM	233	940.1
ROUTE LN	211	934.5
ROUTE LO	244	919.5
ROUTE LP	222	913.9
ROUTE LQ	299	933.1
ROUTE LR	277	927.5

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE LS	318	945.5
ROUTE LT	296	939.9
ROUTE LU	329	924.8
ROUTE LV	307	919.3
ROUTE LW	258	929.5
ROUTE LX	236	923.9
ROUTE LY	278	941.8
ROUTE LZ	255	936.2
ROUTE MA	288	921.2
ROUTE MB	266	915.6
ROUTE MC	425	919.0
ROUTE MD	403	913.5
ROUTE ME	444	931.4
ROUTE MF	422	925.8
ROUTE MG	455	910.8
ROUTE MH	433	905.2
ROUTE MI	384	915.4
ROUTE MJ	362	909.8
ROUTE MK	403	927.8
ROUTE ML	381	922.2
ROUTE MM	414	907.2
ROUTE MN	392	901.6
ROUTE MO	372	928.5
ROUTE MP	350	922.9
ROUTE MQ	392	940.8
ROUTE MR	369	935.3
ROUTE MS	402	920.2
ROUTE MT	380	914.7
ROUTE MU	331	924.8
ROUTE MV	309	919.3
ROUTE MW	351	937.2
ROUTE MX	328	931.6
ROUTE MY	361	916.6
ROUTE MZ	339	911.0
ROUTE NA	385	916.1
ROUTE NB	363	910.5
ROUTE NC	404	928.5
ROUTE ND	382	922.9
ROUTE NE	415	907.9
ROUTE NF	393	902.3
ROUTE NG	344	912.5
ROUTE NH	322	906.9
ROUTE NI	364	924.8
ROUTE NJ	341	919.3
ROUTE NK	374	904.2
ROUTE NL	352	898.7
ROUTE NU	283	773.3
ROUTE NV	340	862.3
ROUTE NW	261	767.8
ROUTE NX	318	856.7
ROUTE NY	394	823.8
ROUTE NZ	451	912.7
ROUTE OA	372	818.2
ROUTE OB	429	907.2
ROUTE OC	461	810.2
ROUTE OD	518	899.2
ROUTE OE	439	804.6
ROUTE OF	496	893.6
ROUTE OG	335	824.2
ROUTE OH	392	913.2
ROUTE OI	313	818.7
ROUTE OJ	370	907.6
ROUTE OK	551	860.6
ROUTE OL	529	855.0
ROUTE OM	570	873.0
ROUTE ON	548	867.4

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE OO	581	852.4
ROUTE OP	559	846.8
ROUTE OQ	510	857.0
ROUTE OR	488	851.4
ROUTE OS	530	869.3
ROUTE OT	507	863.8
ROUTE OU	540	848.7
ROUTE OV	518	843.2
ROUTE OW	425	874.7
ROUTE OX	403	869.1
ROUTE OY	445	887.0
ROUTE OZ	422	881.5
ROUTE PA	455	866.4
ROUTE PB	433	860.8
ROUTE PC	384	871.0
ROUTE PD	362	865.5
ROUTE PE	404	883.4
ROUTE PF	381	877.8
ROUTE PG	414	862.8
ROUTE PH	392	857.2
ROUTE PI	381	873.0
ROUTE PJ	359	867.4
ROUTE PK	400	885.3
ROUTE PL	378	879.8
ROUTE PM	411	864.7
ROUTE PN	389	859.2
ROUTE PO	340	869.3
ROUTE PP	318	863.8
ROUTE PQ	359	881.7
ROUTE PR	337	876.1
ROUTE PS	370	861.1
ROUTE PT	348	855.5
ROUTE PU	190	785.2
ROUTE PV	247	874.2
ROUTE PW	168	779.6
ROUTE PX	225	868.6
ROUTE PY	301	835.6
ROUTE PZ	358	924.6
ROUTE QA	279	830.1
ROUTE QB	335	919.0
ROUTE QC	368	822.1
ROUTE QD	425	911.0
ROUTE QE	346	816.5
ROUTE QF	403	905.5
ROUTE QG	242	836.1
ROUTE QH	299	925.1
ROUTE QI	220	830.5
ROUTE QJ	277	919.5
ROUTE QK	458	872.5
ROUTE QL	436	866.9
ROUTE QM	477	884.8
ROUTE QN	455	879.3
ROUTE QO	488	864.2
ROUTE QP	466	858.7
ROUTE QQ	417	868.8
ROUTE QR	395	863.3
ROUTE QS	436	881.2
ROUTE QT	414	875.6
ROUTE QU	447	860.6
ROUTE QV	425	855.0
ROUTE QW	332	886.5
ROUTE QX	310	881.0
ROUTE QY	351	898.9
ROUTE QZ	329	893.3
ROUTE RA	362	878.3
ROUTE RB	340	872.7

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE RC	291	882.9
ROUTE RD	269	877.3
ROUTE RE	310	895.3
ROUTE RF	288	889.7
ROUTE RG	321	874.7
ROUTE RH	299	869.1
ROUTE RI	288	884.8
ROUTE RJ	266	879.3
ROUTE RK	307	897.2
ROUTE RL	285	891.6
ROUTE RM	318	876.6
ROUTE RN	296	871.0
ROUTE RO	247	881.2
ROUTE RP	225	875.6
ROUTE RQ	266	893.6
ROUTE RR	244	888.0
ROUTE RS	277	873.0
ROUTE RT	255	867.4
ROUTE RU	192	798.1
ROUTE RV	249	887.0
ROUTE RW	170	792.5
ROUTE RX	227	881.5
ROUTE RY	303	848.5
ROUTE RZ	360	937.5
ROUTE SA	280	842.9
ROUTE SB	337	931.9
ROUTE SC	370	834.9
ROUTE SD	427	923.9
ROUTE SE	348	829.3
ROUTE SF	404	918.3
ROUTE SG	244	849.0
ROUTE SH	301	937.9
ROUTE SI	222	843.4
ROUTE SJ	279	932.4
ROUTE SK	460	885.3
ROUTE SL	438	879.8
ROUTE SM	479	897.7
ROUTE SN	457	892.1
ROUTE SO	490	877.1
ROUTE SP	468	871.5
ROUTE SQ	419	881.7
ROUTE SR	397	876.1
ROUTE SS	438	894.1
ROUTE ST	416	888.5
ROUTE SU	449	873.5
ROUTE SV	427	867.9
ROUTE SW	334	899.4
ROUTE SX	312	893.8
ROUTE SY	353	911.8
ROUTE SZ	331	906.2
ROUTE TA	364	891.2
ROUTE TB	342	885.6
ROUTE TC	293	895.8
ROUTE TD	271	890.2
ROUTE TE	312	908.1
ROUTE TF	290	902.5
ROUTE TG	323	887.5
ROUTE TH	301	881.9
ROUTE TI	290	897.7
ROUTE TJ	268	892.1
ROUTE TK	309	910.1
ROUTE TL	287	904.5
ROUTE TM	320	889.5
ROUTE TN	297	883.9
ROUTE TO	249	894.1
ROUTE TP	227	888.5

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE TQ	268	906.4
ROUTE TR	246	900.8
ROUTE TS	279	885.8
ROUTE TT	257	880.2
ROUTE TU	172	809.9
ROUTE TV	229	898.9
ROUTE TW	150	804.4
ROUTE TX	207	893.3
ROUTE TY	283	860.4
ROUTE TZ	340	949.3
ROUTE UA	261	854.8
ROUTE UB	318	943.8
ROUTE UC	350	846.8
ROUTE UD	407	935.8
ROUTE UE	328	841.2
ROUTE UF	385	930.2
ROUTE UG	224	860.8
ROUTE UH	281	949.8
ROUTE UI	202	855.3
ROUTE UJ	259	944.2
ROUTE UK	440	897.2
ROUTE UL	418	891.6
ROUTE UM	459	909.6
ROUTE UN	437	904.0
ROUTE UO	470	889.0
ROUTE UP	448	883.4
ROUTE UQ	399	893.6
ROUTE UR	377	888.0
ROUTE US	418	905.9
ROUTE UT	396	900.4
ROUTE UU	429	885.3
ROUTE UV	407	879.8
ROUTE UW	314	911.3
ROUTE UX	292	905.7
ROUTE UY	333	923.6
ROUTE UZ	311	918.1
ROUTE VA	344	903.0
ROUTE VB	322	897.5
ROUTE VC	273	907.6
ROUTE VD	251	902.1
ROUTE VE	293	920.0
ROUTE VF	270	914.4
ROUTE VG	303	899.4
ROUTE VH	281	893.8
ROUTE VI	270	909.6
ROUTE VJ	248	904.0
ROUTE VK	289	921.9
ROUTE VL	267	916.4
ROUTE VM	300	901.3
ROUTE VN	278	895.8
ROUTE VO	229	905.9
ROUTE VP	207	900.4
ROUTE VQ	248	918.3
ROUTE VR	226	912.7
ROUTE VS	259	897.7
ROUTE VT	237	892.1
ROUTE VU	267	857.5
ROUTE VV	324	946.4
ROUTE VW	245	851.9
ROUTE VX	302	940.8
ROUTE VY	377	907.9
ROUTE VZ	434	996.8
ROUTE WA	355	902.3
ROUTE WB	412	991.3
ROUTE WC	445	894.3
ROUTE WD	501	983.3

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE WE	422	888.7
ROUTE WF	479	977.7
ROUTE WG	319	908.4
ROUTE WH	376	997.3
ROUTE WI	296	902.8
ROUTE WJ	353	991.8
ROUTE WK	535	944.7
ROUTE WL	513	939.2
ROUTE WM	554	957.1
ROUTE WN	532	951.5
ROUTE WO	565	936.5
ROUTE WP	542	930.9
ROUTE WQ	494	941.1
ROUTE WR	472	935.5
ROUTE WS	513	953.5
ROUTE WT	491	947.9
ROUTE WU	524	932.8
ROUTE WV	501	927.3
ROUTE WW	409	958.8
ROUTE WX	387	953.2
ROUTE WY	428	971.2
ROUTE WZ	406	965.6
ROUTE XA	439	950.5
ROUTE XB	417	945.0
ROUTE XC	368	955.2
ROUTE XD	346	949.6
ROUTE XE	387	967.5
ROUTE XF	365	961.9
ROUTE XG	398	946.9
ROUTE XH	376	941.3
ROUTE XI	365	957.1
ROUTE XJ	342	951.5
ROUTE XK	384	969.5
ROUTE XL	362	963.9
ROUTE XM	394	948.8
ROUTE XN	372	943.3
ROUTE XO	324	953.5
ROUTE XP	301	947.9
ROUTE XQ	343	965.8
ROUTE XR	321	960.2
ROUTE XS	354	945.2
ROUTE XT	331	939.6
ROUTE XU	371	950.8
ROUTE XV	349	945.2
ROUTE XW	277	903.3
ROUTE XX	254	897.7
ROUTE XY	314	861.8
ROUTE XZ	292	856.2
ROUTE YA	220	814.3
ROUTE YB	197	808.7
ROUTE YC	404	912.2
ROUTE YD	423	924.6
ROUTE YE	434	904.0
ROUTE YF	363	908.6
ROUTE YG	383	921.0
ROUTE YH	393	900.4
ROUTE YI	360	910.5
ROUTE YJ	379	922.9
ROUTE YK	390	902.3
ROUTE YL	319	906.9
ROUTE YM	338	919.3
ROUTE YN	349	898.7
ROUTE YO	310	864.7
ROUTE YP	329	877.1
ROUTE YQ	340	856.5
ROUTE YR	269	861.1

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE YS	288	873.5
ROUTE YT	299	852.8
ROUTE YU	265	863.0
ROUTE YV	285	875.4
ROUTE YW	295	854.8
ROUTE YX	225	859.4
ROUTE YY	244	871.8
ROUTE YZ	254	851.2
ROUTE ZA	288	859.2
ROUTE ZB	307	871.5
ROUTE ZC	317	850.9
ROUTE ZD	247	855.5
ROUTE ZE	266	867.9
ROUTE ZF	277	847.3
ROUTE ZG	243	857.5
ROUTE ZH	262	869.8
ROUTE ZI	273	849.2
ROUTE ZJ	202	853.8
ROUTE ZK	222	866.2
ROUTE ZL	232	845.6
ROUTE ZM	302	828.6
ROUTE ZN	322	841.0
ROUTE ZO	332	820.4
ROUTE ZP	262	825.0
ROUTE ZQ	281	837.3
ROUTE ZR	291	816.7
ROUTE ZS	258	826.9
ROUTE ZT	277	839.3
ROUTE ZU	288	818.7
ROUTE ZV	217	823.3
ROUTE ZW	236	835.6
ROUTE ZX	247	815.0
ROUTE ZY	280	823.0
ROUTE ZZ	299	835.4
ROUTE AAA	310	814.8
ROUTE AAB	239	819.4
ROUTE AAC	258	831.8
ROUTE AAD	269	811.2
ROUTE AAE	236	821.3
ROUTE AAF	255	833.7
ROUTE AAG	266	813.1
ROUTE AAH	195	817.7
ROUTE AAI	214	830.1
ROUTE AAJ	225	809.5
ROUTE AAK	160	775.3
ROUTE AAL	217	864.2
ROUTE AAM	182	780.8
ROUTE AAN	239	869.8
ROUTE AAO	338	812.1
ROUTE AAP	395	901.1
ROUTE AAQ	360	817.7
ROUTE AAR	417	906.7
ROUTE AAS	190	772.6
ROUTE AAT	247	861.6
ROUTE AAU	212	778.2
ROUTE AAV	269	867.2
ROUTE AAW	315	787.2
ROUTE AAX	335	799.5
ROUTE AAY	345	778.9
ROUTE AAZ	275	783.5
ROUTE ABA	294	795.9
ROUTE ABB	304	775.3
ROUTE ABC	247	794.2
ROUTE ABD	267	806.5
ROUTE ABE	277	785.9
ROUTE ABF	206	790.5

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE ABG	226	802.9
ROUTE ABH	236	782.3
ROUTE ABI	343	791.0
ROUTE ABJ	362	803.4
ROUTE ABK	373	782.8
ROUTE ABL	275	798.1
ROUTE ABM	294	810.4
ROUTE ABN	305	789.8
ROUTE ABO	338	792.7
ROUTE ABP	357	805.1
ROUTE ABQ	368	784.5
ROUTE ABR	297	789.1
ROUTE ABS	316	801.5
ROUTE ABT	327	780.8
ROUTE ABU	270	799.8
ROUTE ABV	289	812.1
ROUTE ABW	299	791.5
ROUTE ABX	229	796.1
ROUTE ABY	248	808.5
ROUTE ABZ	258	787.9
ROUTE ACA	365	796.6
ROUTE ACB	384	809.0
ROUTE ACC	395	788.4
ROUTE ACD	297	803.6
ROUTE ACE	316	816.0
ROUTE ACF	327	795.4
ROUTE ACG	411	814.3
ROUTE ACH	479	807.3
ROUTE ACJ	389	808.7
ROUTE ACK	392	801.9
ROUTE ACL	460	794.9
ROUTE ACM	370	796.4
ROUTE ACN	438	789.3
ROUTE ACO	212	831.8
ROUTE ACP	269	920.7
ROUTE ACQ	116	812.6
ROUTE ACR	173	901.6
ROUTE ACS	222	892.1
ROUTE ACT	279	981.1
ROUTE ACU	126	873.0
ROUTE ACV	183	961.9
ROUTE ACW	246	1007.0
ROUTE ACX	303	1096.0
ROUTE ACY	150	987.9
ROUTE ACZ	207	1076.8
ROUTE ADA	212	856.2
ROUTE ADB	269	945.2
ROUTE ADC	116	837.1
ROUTE ADD	173	926.1
ROUTE ADE	237	971.2
ROUTE ADF	293	1060.1
ROUTE ADG	141	952.0
ROUTE ADH	197	1041.0
ROUTE ADI	236	943.0
ROUTE ADJ	293	1032.0
ROUTE ADK	140	923.9
ROUTE ADL	197	1012.8
ROUTE ADM	242	1032.5
ROUTE ADN	299	1121.5
ROUTE ADO	146	1013.3
ROUTE ADP	203	1102.3
ROUTE ADQ	217	858.2
ROUTE ADR	274	947.2
ROUTE ADS	121	839.0
ROUTE ADT	178	928.0
ROUTE ADU	241	973.1

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE ADV	298	1062.1
ROUTE ADW	145	953.9
ROUTE ADX	202	1042.9
ROUTE ADY	241	945.0
ROUTE ADZ	298	1033.9
ROUTE AEA	145	925.8
ROUTE AEB	202	1014.8
ROUTE AEC	247	1034.4
ROUTE AED	304	1123.4
ROUTE AEE	151	1015.3
ROUTE AEF	208	1104.2
ROUTE AEG	330	1141.1
ROUTE AEH	234	1121.9
ROUTE AEI	350	1153.5
ROUTE AEJ	254	1134.3
ROUTE AEK	360	1132.8
ROUTE AEL	264	1113.7
ROUTE AEM	290	1137.5
ROUTE AEN	194	1118.3
ROUTE AEO	309	1149.8
ROUTE AEP	213	1130.7
ROUTE AEQ	319	1129.2
ROUTE AER	223	1110.1
ROUTE AES	375	1142.8
ROUTE AET	279	1123.6
ROUTE AEU	394	1155.2
ROUTE AEV	298	1136.0
ROUTE AEW	405	1134.5
ROUTE AEX	309	1115.4
ROUTE AEY	334	1139.2
ROUTE AEZ	238	1120.0
ROUTE AFA	353	1151.5
ROUTE AFB	257	1132.4
ROUTE AFC	364	1130.9
ROUTE AFD	268	1111.8
ROUTE AFE	501	1128.7
ROUTE AFF	405	1109.6
ROUTE AFG	520	1141.1
ROUTE AFH	424	1121.9
ROUTE AFI	530	1120.5
ROUTE AFJ	434	1101.3
ROUTE AFK	460	1125.1
ROUTE AFL	364	1105.9
ROUTE AFM	479	1137.5
ROUTE AFN	383	1118.3
ROUTE AFO	490	1116.8
ROUTE AFP	394	1097.7
ROUTE AFQ	448	1138.2
ROUTE AFR	352	1119.0
ROUTE AFS	467	1150.5
ROUTE AFT	371	1131.4
ROUTE AFU	478	1129.9
ROUTE AFV	382	1110.8
ROUTE AFW	407	1134.5
ROUTE AFX	311	1115.4
ROUTE AFY	426	1146.9
ROUTE AFZ	330	1127.8
ROUTE AGA	437	1126.3
ROUTE AGB	341	1107.2
ROUTE AGC	461	1125.8
ROUTE AGD	365	1106.7
ROUTE AGE	480	1138.2
ROUTE AGF	384	1119.0
ROUTE AGG	491	1117.6
ROUTE AGH	395	1098.4
ROUTE AGI	420	1122.2

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE AGJ	324	1103.0
ROUTE AGK	439	1134.5
ROUTE AGL	343	1115.4
ROUTE AGM	450	1113.9
ROUTE AGN	354	1094.8
ROUTE AGO	230	1010.4
ROUTE AGP	287	1099.4
ROUTE AGQ	134	991.3
ROUTE AGR	191	1080.2
ROUTE AGS	224	921.0
ROUTE AGT	281	1009.9
ROUTE AGU	128	901.8
ROUTE AGV	185	990.8
ROUTE AGW	108	776.5
ROUTE AGX	165	865.5
ROUTE AGY	133	891.4
ROUTE AGZ	190	980.4
ROUTE AHA	132	863.3
ROUTE AHB	189	952.2
ROUTE AHC	139	952.7
ROUTE AHD	196	1041.7
ROUTE AHE	222	1059.4
ROUTE AHF	241	1071.8
ROUTE AHG	252	1051.2
ROUTE AHH	181	1055.8
ROUTE AHI	200	1068.1
ROUTE AHJ	211	1047.5
ROUTE AHK	266	1061.1
ROUTE AHL	285	1073.5
ROUTE AHM	296	1052.8
ROUTE AHN	225	1057.5
ROUTE AHO	244	1069.8
ROUTE AHP	255	1049.2
ROUTE AHQ	392	1047.0
ROUTE AHR	411	1059.4
ROUTE AHS	422	1038.8
ROUTE AHT	351	1043.4
ROUTE AHU	370	1055.8
ROUTE AHV	381	1035.2
ROUTE AHW	339	1056.5
ROUTE AHX	358	1068.8
ROUTE AHY	369	1048.2
ROUTE AHZ	298	1052.8
ROUTE AIA	317	1065.2
ROUTE AIB	328	1044.6
ROUTE AIC	352	1044.1
ROUTE AID	371	1056.5
ROUTE AIE	382	1035.9
ROUTE AIF	311	1040.5
ROUTE AIG	330	1052.8
ROUTE AIH	341	1032.2
ROUTE AII	121	928.7
ROUTE AIJ	178	1017.7
ROUTE AIK	115	839.3
ROUTE AIL	172	928.2
ROUTE AIQ	211	972.6
ROUTE AIR	230	985.0
ROUTE AIS	241	964.4
ROUTE AIT	170	969.0
ROUTE AIU	189	981.3
ROUTE AIV	200	960.7
ROUTE AIW	255	974.3
ROUTE AIX	274	986.7
ROUTE AIY	285	966.1
ROUTE AIZ	214	970.7
ROUTE AJA	233	983.0

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE AJB	244	962.4
ROUTE AJC	381	960.2
ROUTE AJD	400	972.6
ROUTE AJE	411	952.0
ROUTE AJF	340	956.6
ROUTE AJG	359	969.0
ROUTE AJH	370	948.4
ROUTE AJI	328	969.7
ROUTE AJJ	347	982.1
ROUTE AJK	358	961.5
ROUTE AJL	287	966.1
ROUTE AJM	306	978.4
ROUTE AJN	317	957.8
ROUTE AJO	341	957.3
ROUTE AJP	360	969.7
ROUTE AJQ	371	949.1
ROUTE AJR	300	953.7
ROUTE AJS	319	966.1
ROUTE AJT	330	945.5
ROUTE AJU	110	841.9
ROUTE AJV	167	930.9
ROUTE AJW	104	752.5
ROUTE AJX	161	841.5
ROUTE AJY	239	814.5
ROUTE AJZ	296	903.5
ROUTE AKA	350	865.0
ROUTE AKB	407	953.9
ROUTE AKC	417	851.4
ROUTE AKD	474	940.4
ROUTE AKE	291	865.5
ROUTE AKF	348	954.4
ROUTE AKG	507	901.8
ROUTE AKH	526	914.2
ROUTE AKI	537	893.6
ROUTE AKJ	466	898.2
ROUTE AKK	485	910.5
ROUTE AKL	496	889.9
ROUTE AKM	381	915.9
ROUTE AKN	400	928.2
ROUTE AKO	411	907.6
ROUTE AKP	340	912.2
ROUTE AKQ	359	924.6
ROUTE AKR	370	904.0
ROUTE AKS	337	914.2
ROUTE AKT	356	926.5
ROUTE AKU	367	905.9
ROUTE AKV	296	910.5
ROUTE AKW	315	922.9
ROUTE AKX	326	902.3
ROUTE AKY	146	826.4
ROUTE AKZ	203	915.4
ROUTE ALA	256	876.8
ROUTE ALB	313	965.8
ROUTE ALC	324	863.3
ROUTE ALD	381	952.2
ROUTE ALE	198	877.3
ROUTE ALF	255	966.3
ROUTE ALG	414	913.7
ROUTE ALH	433	926.1
ROUTE ALI	444	905.5
ROUTE ALJ	373	910.1
ROUTE ALK	392	922.4
ROUTE ALL	403	901.8
ROUTE ALM	288	927.8
ROUTE ALN	307	940.1
ROUTE ALO	318	919.5

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE ALP	247	924.1
ROUTE ALQ	266	936.5
ROUTE ALR	277	915.9
ROUTE ALS	244	926.1
ROUTE ALT	263	938.4
ROUTE ALU	274	917.8
ROUTE ALV	203	922.4
ROUTE ALW	222	934.8
ROUTE ALX	233	914.2
ROUTE ALY	148	839.3
ROUTE ALZ	205	928.2
ROUTE AMA	258	889.7
ROUTE AMB	315	978.7
ROUTE AMC	362	927.0
ROUTE AMD	382	965.1
ROUTE AME	200	890.2
ROUTE AMF	257	979.2
ROUTE AMG	416	926.5
ROUTE AMH	435	938.9
ROUTE AMI	446	918.3
ROUTE AMJ	375	922.9
ROUTE AMK	394	935.3
ROUTE AML	405	914.7
ROUTE AMM	290	940.6
ROUTE AMN	309	953.0
ROUTE AMO	320	932.4
ROUTE AMP	249	937.0
ROUTE AMQ	268	949.3
ROUTE AMR	279	928.7
ROUTE AMS	246	938.9
ROUTE AMT	265	951.3
ROUTE AMU	275	930.7
ROUTE AMV	205	935.3
ROUTE AMW	224	947.6
ROUTE AMX	235	927.0
ROUTE AMY	128	851.2
ROUTE AMZ	185	940.1
ROUTE ANA	239	901.6
ROUTE ANB	296	990.5
ROUTE ANC	306	888.0
ROUTE AND	363	977.0
ROUTE ANE	180	902.1
ROUTE ANF	237	991.0
ROUTE ANG	396	938.4
ROUTE ANI	415	950.8
ROUTE ANK	426	930.2
ROUTE ANM	355	934.8
ROUTE ANO	374	947.2
ROUTE ANQ	385	926.5
ROUTE ANS	270	952.5
ROUTE ANU	289	964.8
ROUTE ANW	300	944.2
ROUTE ANY	229	948.8
ROUTE AOA	248	961.2
ROUTE AOC	259	940.6
ROUTE AOE	226	950.8
ROUTE AOG	245	963.2
ROUTE AOI	256	942.5
ROUTE AOK	185	947.2
ROUTE AOM	204	959.5
ROUTE AOO	215	938.9
ROUTE AOQ	223	898.7
ROUTE AOR	280	987.6
ROUTE AOS	333	949.1
ROUTE AOT	390	1038.1
ROUTE AOU	400	935.5

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE AOV	457	1024.5
ROUTE AOW	274	949.6
ROUTE AOX	331	1038.5
ROUTE AOY	490	985.9
ROUTE APA	510	998.3
ROUTE APC	520	977.7
ROUTE APE	450	982.3
ROUTE APG	469	994.7
ROUTE API	479	974.1
ROUTE APK	365	1000.0
ROUTE APM	384	1012.4
ROUTE APO	394	991.8
ROUTE APQ	324	996.4
ROUTE APS	343	1008.7
ROUTE APU	354	988.1
ROUTE APW	320	998.3
ROUTE APY	339	1010.7
ROUTE AQA	350	990.1
ROUTE AQC	279	994.7
ROUTE AQE	299	1007.0
ROUTE AQG	309	986.4
ROUTE AQI	327	992.0
ROUTE AQJ	232	944.5
ROUTE AQK	270	903.0
ROUTE AQL	175	855.5
ROUTE AQM	266	905.9
ROUTE AQN	285	918.3
ROUTE AQO	295	897.7
ROUTE AQP	225	902.3
ROUTE AQQ	244	914.7
ROUTE AQR	254	894.1
ROUTE AQS	221	904.2
ROUTE AQT	240	916.6
ROUTE AQU	251	896.0
ROUTE AQV	180	900.6
ROUTE AQW	200	913.0
ROUTE AQX	210	892.4
ROUTE AQY	258	869.8
ROUTE AQZ	277	882.2
ROUTE ARA	288	861.6
ROUTE ARB	217	866.2
ROUTE ARC	236	878.5
ROUTE ARD	247	857.9
ROUTE ARE	214	868.1
ROUTE ARF	233	880.5
ROUTE ARG	244	859.9
ROUTE ARH	173	864.5
ROUTE ARI	192	876.8
ROUTE ARJ	203	856.2
ROUTE ARK	138	822.1
ROUTE ARL	195	911.0
ROUTE ARM	316	858.9
ROUTE ARN	373	947.9
ROUTE ARO	168	819.4
ROUTE ARP	225	908.4
ROUTE ARQ	293	833.9
ROUTE ARR	313	846.3
ROUTE ARS	323	825.7
ROUTE ART	253	830.3
ROUTE ARU	272	842.7
ROUTE ARV	282	822.1
ROUTE ARW	225	841.0
ROUTE ARX	244	853.3
ROUTE ARY	255	832.7
ROUTE ARZ	184	837.3
ROUTE ASA	204	849.7

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE ASB	214	829.1
ROUTE ASC	321	837.8
ROUTE ASD	340	850.2
ROUTE ASE	351	829.6
ROUTE ASF	253	844.8
ROUTE ASG	272	857.2
ROUTE ASH	283	836.6
ROUTE ASI	367	855.5
ROUTE ASK	348	843.2
ROUTE ASM	434	769.5
ROUTE ASN	412	816.2
ROUTE ASO	423	790.1
ROUTE ASP	401	836.8
ROUTE ASQ	404	777.7
ROUTE ASR	382	824.5
ROUTE ASS	480	763.9
ROUTE AST	458	810.7
ROUTE ASU	470	784.5
ROUTE ASV	448	831.3
ROUTE ASW	451	772.1
ROUTE ASX	428	818.9
ROUTE ASY	634	767.0
ROUTE ASZ	612	813.8
ROUTE ATA	623	787.6
ROUTE ATB	601	834.4
ROUTE ATC	604	775.3
ROUTE ATD	582	822.1
ROUTE ATE	785	768.0
ROUTE ATF	763	814.8
ROUTE ATG	524	1010.2
ROUTE ATH	513	1030.8
ROUTE ATI	494	1018.4
ROUTE ATJ	675	1011.2
ROUTE ATK	537	1024.5
ROUTE ATL	526	1045.1
ROUTE ATM	507	1032.7
ROUTE ATN	687	1025.5
ROUTE ATO	454	916.1
ROUTE ATP	443	936.7
ROUTE ATQ	424	924.4
ROUTE ATR	605	917.1
ROUTE ATS	467	930.4
ROUTE ATT	456	951.0
ROUTE ATU	437	938.7
ROUTE ATV	617	931.4
ROUTE ATW	588	1065.9
ROUTE ATX	577	1086.5
ROUTE ATY	558	1074.2
ROUTE ATZ	739	1066.9
ROUTE AUA	601	1080.2
ROUTE AUB	590	1100.8
ROUTE AUC	571	1088.5
ROUTE AUD	751	1081.2
ROUTE AUE	518	971.9
ROUTE AUF	508	992.5
ROUTE AUG	488	980.1
ROUTE AUH	669	972.8
ROUTE AUI	531	986.2
ROUTE AUJ	520	1006.8
ROUTE AUK	501	994.4
ROUTE AUL	681	987.2
ROUTE AUM	586	1109.3
ROUTE AUN	567	1097.0
ROUTE AUO	604	1092.4
ROUTE AUP	398	1107.9
ROUTE AUQ	594	1118.3

Table 3.1(a)
Additional Route Metrics

ROUTES	Estimated Number of Parcels	Approximate Acres of New Easement
ROUTE AUR	575	1105.9
ROUTE AUS	612	1101.3
ROUTE AUT	406	1116.8
ROUTE AUU	698	1135.5
ROUTE AUV	679	1123.2
ROUTE AUW	716	1118.5
ROUTE AUX	510	1134.1
ROUTE AUY	690	1158.8
ROUTE AUZ	671	1146.4
ROUTE AVA	708	1141.8
ROUTE AVB	502	1157.3
ROUTE AVC	398	1129.2
ROUTE AVD	368	1165.1
ROUTE AVE	397	1318.5
ROUTE AVF	405	1295.3

Table 3.2.3
Top 50 Routes for Maximum Collocation
(All Routes Compatible with Fort Knox)

Total Co-location	Amount Collocation
ROUTE ACO	97.99%
ROUTE ACQ	97.79%
ROUTE A	97.15%
ROUTE E	96.97%
ROUTE C	96.32%
ROUTE G	96.17%
ROUTE AUL	93.39%
ROUTE ACR	91.37%
ROUTE ACP	91.35%
ROUTE AVF	91.13%
ROUTE F	90.36%
ROUTE B	90.31%
ROUTE H	89.54%
ROUTE D	89.46%
ROUTE AUW	88.71%
ROUTE ACU	87.00%
ROUTE ACS	86.83%
ROUTE AUH	86.39%
ROUTE AUJ	86.36%
ROUTE AUK	86.20%
ROUTE M	85.83%
ROUTE I	85.61%
ROUTE AUU	85.55%
ROUTE AUV	85.39%
ROUTE O	84.96%
ROUTE K	84.71%
ROUTE AUI	83.55%
ROUTE AUD	83.50%
ROUTE ACY	82.85%
ROUTE ADC	82.57%
ROUTE ACW	82.53%
ROUTE ADA	82.24%
ROUTE AVC	81.67%
ROUTE U	81.50%
ROUTE AC	81.22%
ROUTE Q	81.12%
ROUTE Y	80.83%
ROUTE W	80.58%
ROUTE ACV	80.55%
ROUTE AE	80.31%
ROUTE ACT	80.17%
ROUTE S	80.16%
ROUTE AA	79.89%
ROUTE AUF	79.48%
ROUTE N	79.19%
ROUTE AUG	79.15%
ROUTE J	78.74%
ROUTE ADS	78.72%
ROUTE P	78.31%
ROUTE ADQ	78.25%

Table 4.1
Metrics for East Routes
(Statistics and Normalized Statistics)

Built	Residences within ROW	Normalized	Proximity to Residences (within 300')	Normalized	Proposed Developments	Normalized	Proximity Commercial Buildings(within 300')	Normalized	Proximity Industrial Buildings(within 300')	Normalized	School, Church, Cemetery, and Park Parcels Crossed	Normalized	NRHP Listed Structures and Districts (3000' from edge of R/W)	Normalized	Natural	Natural Forests (Acres)	Normalized	Stream/River Crossings	Normalized	Wetland Areas (Acres)	Normalized	Floodplain Areas (Acres)	Normalized	Engineering	Length (Miles)	Normalized	Percent of Route Rebuilt with Existing T/L*	Normalized	Inverted	Percent of Route of Co-located with Existing Utilities*	Normalized	Inverted	Percent of Route Co-located with Roads*	Normalized	Inverted	Total Project Costs	Normalized
ROUTE ATJ	85	0.51	493	0.66	0	0.00	126	0.97	149	0.97	4	1.00	0	0.00		468.67	0.30	74	0.42	3.026	0.07	267.67	0.84		41.7	0.23	0	0.00	0.00	0.491	0.13	0.87	0.103	0.30	0.70	73498510	0.62
ROUTE ATN	85	0.51	500	0.67	0	0.00	126	0.97	149	0.97	4	1.00	0	0.00		485.08	0.42	70	0.30	2.881	0.03	224.16	0.54		42.3	0.27	0	0.00	0.00	0.563	0.27	0.73	0.101	0.30	0.70	75554987	0.71
ROUTE ATR	142	0.91	631	0.92	0	0.00	35	0.27	50	0.29	2	0.50	0	0.00		428.34	0.00	73	0.39	3.37	0.17	267.3	0.84		37.8	0.00	0	0.00	0.00	0.562	0.27	0.73	0.012	0.04	0.96	68615186	0.38
ROUTE ATV	142	0.91	638	0.93	0	0.00	35	0.27	50	0.29	2	0.50	0	0.00		444.76	0.12	69	0.27	3.224	0.13	223.78	0.54		38.4	0.04	0	0.00	0.00	0.641	0.42	0.58	0.012	0.04	0.96	70671662	0.48
ROUTE ATZ	98	0.60	531	0.73	0	0.00	130	1.00	154	1.00	4	1.00	0	0.00		476.42	0.36	65	0.15	2.94	0.04	289.89	1.00		44	0.37	0	0.00	0.00	0.77	0.68	0.32	0.097	0.29	0.71	78488555	0.86
ROUTE AUD	98	0.60	538	0.74	0	0.00	130	1.00	154	1.00	4	1.00	0	0.00		492.83	0.48	61	0.03	2.795	0.00	246.37	0.70		44.6	0.41	0	0.00	0.00	0.835	0.80	0.20	0.096	0.28	0.72	80545031	0.95
ROUTE AUH	155	1.00	669	0.99	0	0.00	39	0.30	55	0.33	2	0.50	0	0.00		436.09	0.06	64	0.12	3.283	0.14	289.51	1.00		40.1	0.14	0	0.00	0.00	0.864	0.86	0.14	0.011	0.03	0.97	73605230	0.62
ROUTE AUL	155	1.00	676	1.00	0	0.00	39	0.30	55	0.33	2	0.50	0	0.00		452.51	0.18	60	0.00	3.138	0.10	246	0.69		40.7	0.17	0	0.00	0.00	0.934	1.00	0.00	0.011	0.03	0.97	75661706	0.72
ROUTE AUO	82	0.49	374	0.44	2	0.33	53	0.41	68	0.41	3	0.75	4	0.50		476.69	0.36	77	0.52	3.426	0.19	176.34	0.21		45.1	0.44	0	0.00	0.00	0.656	0.45	0.55	0.228	0.67	0.33	72052370	0.55
ROUTE AUP	34	0.16	144	0.02	3	0.50	9	0.07	25	0.12	1	0.25	8	1.00		540.36	0.83	74	0.42	2.965	0.05	162.7	0.11		45.7	0.48	0	0.00	0.00	0.501	0.15	0.85	0.338	1.00	0.00	65275814	0.22
ROUTE AUS	80	0.48	377	0.45	2	0.33	53	0.41	72	0.44	3	0.75	4	0.50		497.39	0.51	75	0.45	3.323	0.16	169.22	0.16		45.4	0.46	0	0.00	0.00	0.58	0.30	0.70	0.226	0.67	0.33	75209884	0.70
ROUTE AUT	32	0.15	147	0.02	3	0.50	9	0.07	29	0.15	1	0.25	8	1.00		561.06	0.98	72	0.36	2.862	0.02	155.58	0.06		46.1	0.50	0	0.00	0.00	0.427	0.00	1.00	0.335	0.99	0.01	68433328	0.37
ROUTE AUW	130	0.83	514	0.70	3	0.50	54	0.42	68	0.41	3	0.75	3	0.38		443.84	0.11	78	0.55	3.71	0.27	163.4	0.12		46.1	0.50	0	0.00	0.00	0.887	0.91	0.09	0	0.00	1.00	73913556	0.64
ROUTE AUX	82	0.49	284	0.28	4	0.67	10	0.08	25	0.12	1	0.25	7	0.88		507.52	0.59	75	0.45	3.249	0.13	149.76	0.02		46.8	0.54	0	0.00	0.00	0.732	0.60	0.40	0.111	0.33	0.67	67137000	0.31
ROUTE AVA	113	0.71	497	0.67	2	0.33	54	0.42	75	0.46	3	0.75	3	0.38		494.24	0.49	83	0.70	3.606	0.24	160.5	0.10		47.1	0.56	0	0.00	0.00	0.696	0.53	0.47	0.011	0.03	0.97	81498224	1.00
ROUTE AVB	65	0.38	267	0.24	3	0.50	10	0.08	32	0.17	1	0.25	7	0.88		557.92	0.96	80	0.61	3.145	0.10	146.86	0.00		47.7	0.60	0	0.00	0.00	0.547	0.24	0.76	0.119	0.35	0.65	74721667	0.67
ROUTE AVC	36	0.17	199	0.12	6	1.00	0	0.00	11	0.03	0	0.00	1	0.13		515.55	0.65	80	0.61	3.249	0.13	151.8	0.03		46.6	0.53	0	0.00	0.00	0.817	0.77	0.23	0	0.00	1.00	60685362	0.00
ROUTE AVD	11	0.00	165	0.06	4	0.67	0	0.00	18	0.07	0	0.00	1	0.13		563.22	1.00	83	0.70	3.145	0.10	148.9	0.01		48.1	0.62	0	0.00	0.00	0.563	0.27	0.73	0.011	0.03	0.97	69636782	0.43
ROUTE AVE	18	0.05	135	0.00	2	0.33	0	0.00	14	0.05	0	0.00	4	0.50		562.59	1.00	93	1.00	6.065	0.97	159.12	0.09		54.4	1.00	0	0.00	0.00	0.745	0.63	0.37	0.01	0.03	0.97	73856378	0.63
ROUTE AVF	35	0.17	152	0.03	3	0.50	0	0.00	7	0.00	0	0.00	4	0.50		512.19	0.62	88	0.85	6.169	1.00	162.02	0.11		53.4	0.94	0	0.00	0.00	0.911	0.96	0.04	0	0.00	1.00	66271710	0.27

Table 4.1
Metrics for East Routes
(Built Envionment Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
72%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		14%	9.3%		38.0%		40.3%		12.4%		100.0%		14%	65.6%		19.2%		7.8%		7.4%		100.0%		SORT
ROUTE AVD	0.00	0.00	0.06	0.01	0.67	0.04	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.02	0.06	0.05		1.00	0.09	0.70	0.26	0.10	0.04	0.01	0.00	0.40	0.06		0.00	0.00	0.73	0.14	0.97	0.08	0.43	0.03	0.25	0.03	0.13701
ROUTE AVC	0.17	0.08	0.12	0.02	1.00	0.05	0.00	0.00	0.03	0.00	0.00	0.00	0.13	0.02	0.17	0.12		0.65	0.06	0.61	0.23	0.13	0.05	0.03	0.00	0.35	0.05		0.00	0.00	0.23	0.04	1.00	0.08	0.00	0.00	0.12	0.02	0.18572
ROUTE AVE	0.05	0.02	0.00	0.00	0.33	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.50	0.08	0.12	0.08		1.00	0.09	1.00	0.38	0.97	0.39	0.09	0.01	0.87	0.12		0.00	0.00	0.37	0.07	0.97	0.08	0.63	0.05	0.19	0.03	0.23439
ROUTE AVF	0.17	0.07	0.03	0.00	0.50	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.08	0.18	0.13		0.62	0.06	0.85	0.32	1.00	0.40	0.11	0.01	0.80	0.11		0.00	0.00	0.04	0.01	1.00	0.08	0.27	0.02	0.11	0.01	0.25776
ROUTE AUT	0.15	0.06	0.02	0.00	0.50	0.03	0.07	0.00	0.15	0.00	0.25	0.04	1.00	0.16	0.30	0.21		0.98	0.09	0.36	0.14	0.02	0.01	0.06	0.01	0.25	0.03		0.00	0.00	1.00	0.19	0.01	0.00	0.37	0.03	0.22	0.03	0.27788
ROUTE AUP	0.16	0.07	0.02	0.00	0.50	0.03	0.07	0.00	0.12	0.00	0.25	0.04	1.00	0.16	0.30	0.22		0.83	0.08	0.42	0.16	0.05	0.02	0.11	0.01	0.27	0.04		0.00	0.00	0.85	0.16	0.00	0.00	0.22	0.02	0.18	0.03	0.27969
ROUTE AVB	0.38	0.17	0.24	0.03	0.50	0.03	0.08	0.00	0.17	0.00	0.25	0.04	0.88	0.14	0.41	0.29		0.96	0.09	0.61	0.23	0.10	0.04	0.00	0.00	0.36	0.05		0.00	0.00	0.76	0.15	0.65	0.05	0.67	0.05	0.25	0.03	0.37847
ROUTE AUX	0.49	0.22	0.28	0.04	0.67	0.04	0.08	0.00	0.12	0.00	0.25	0.04	0.88	0.14	0.47	0.34		0.59	0.05	0.45	0.17	0.13	0.05	0.02	0.00	0.28	0.04		0.00	0.00	0.40	0.08	0.67	0.05	0.31	0.02	0.15	0.02	0.40078
ROUTE AUS	0.48	0.21	0.45	0.06	0.33	0.02	0.41	0.01	0.44	0.01	0.75	0.12	0.50	0.08	0.51	0.37		0.51	0.05	0.45	0.17	0.16	0.06	0.16	0.02	0.30	0.04		0.00	0.00	0.70	0.13	0.33	0.03	0.70	0.05	0.21	0.03	0.44009
ROUTE AUO	0.49	0.22	0.44	0.06	0.33	0.02	0.41	0.01	0.41	0.01	0.75	0.12	0.50	0.08	0.52	0.37		0.36	0.03	0.52	0.20	0.19	0.08	0.21	0.03	0.33	0.05		0.00	0.00	0.55	0.11	0.33	0.03	0.55	0.04	0.17	0.02	0.44181
ROUTE ATN	0.51	0.23	0.67	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.38		0.42	0.04	0.30	0.12	0.03	0.01	0.54	0.07	0.23	0.03		0.00	0.00	0.73	0.14	0.70	0.05	0.71	0.05	0.25	0.03	0.44968
ROUTE AUD	0.60	0.27	0.74	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.42		0.48	0.04	0.03	0.01	0.00	0.00	0.70	0.09	0.14	0.02		0.00	0.00	0.20	0.04	0.72	0.06	0.95	0.07	0.16	0.02	0.46207
ROUTE ATJ	0.51	0.23	0.66	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.38		0.30	0.03	0.42	0.16	0.07	0.03	0.84	0.10	0.32	0.05		0.00	0.00	0.87	0.17	0.70	0.05	0.62	0.05	0.27	0.04	0.46382
ROUTE ATZ	0.60	0.27	0.73	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.42		0.36	0.03	0.15	0.06	0.04	0.02	1.00	0.12	0.23	0.03		0.00	0.00	0.32	0.06	0.71	0.06	0.86	0.06	0.18	0.03	0.47582
ROUTE ATV	0.91	0.40	0.93	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.45		0.12	0.01	0.27	0.10	0.13	0.05	0.54	0.07	0.23	0.03		0.00	0.00	0.58	0.11	0.96	0.08	0.48	0.04	0.22	0.03	0.51098
ROUTE AUL	1.00	0.44	1.00	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.48		0.18	0.02	0.00	0.00	0.10	0.04	0.69	0.09	0.14	0.02		0.00	0.00	0.00	0.00	0.97	0.08	0.72	0.05	0.13	0.02	0.52208
ROUTE ATR	0.91	0.40	0.92	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.45		0.00	0.00	0.39	0.15	0.17	0.07	0.84	0.10	0.32	0.05		0.00	0.00	0.73	0.14	0.96	0.08	0.38	0.03	0.24	0.03	0.52549
ROUTE AUH	1.00	0.44	0.99	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.48		0.06	0.01	0.12	0.05	0.14	0.06	1.00	0.12	0.23	0.03		0.00	0.00	0.14	0.03	0.97	0.08	0.62	0.05	0.15	0.02	0.53612
ROUTE AVA	0.71	0.31	0.67	0.09	0.33	0.02	0.42	0.01	0.46	0.01	0.75	0.12	0.38	0.06	0.62	0.45		0.49	0.05	0.70	0.26	0.24	0.10	0.10	0.01	0.42	0.06		0.00	0.00	0.47	0.09	0.97	0.08	1.00	0.07	0.24	0.03	0.54086
ROUTE AUW	0.83	0.37	0.70	0.09	0.50	0.03	0.42	0.01	0.41	0.01	0.75	0.12	0.38	0.06	0.69	0.50		0.11	0.01	0.55	0.21	0.27	0.11	0.12	0.01	0.34	0.05		0.00	0.00	0.09	0.02	1.00	0.08	0.64	0.05	0.14	0.02	0.56294

Table 4.1
Metrics for East Routes
(Engineering Considerations Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	**SUM OF WEIGHTED TOTALS**
14%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		**14%**	9.3%		38.0%		40.3%		12.4%		100.0%		**72%**	65.6%		19.2%		7.8%		7.4%		100.0%		**SORT**
ROUTE AVC	0.17	0.08	0.12	0.02	1.00	0.05	0.00	0.00	0.03	0.00	0.00	0.00	0.13	0.02	0.17	0.02		0.65	0.06	0.61	0.23	0.13	0.05	0.03	0.00	0.35	0.05		0.00	0.00	0.23	0.04	1.00	0.08	0.00	0.00	0.12	0.09	0.16031
ROUTE AUL	1.00	0.44	1.00	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.09		0.18	0.02	0.00	0.00	0.10	0.04	0.69	0.09	0.14	0.02		0.00	0.00	0.00	0.00	0.97	0.08	0.72	0.05	0.13	0.09	0.20683
ROUTE AUP	0.16	0.07	0.02	0.00	0.50	0.03	0.07	0.00	0.12	0.00	0.25	0.04	1.00	0.16	0.30	0.04		0.83	0.08	0.42	0.16	0.05	0.02	0.11	0.01	0.27	0.04		0.00	0.00	0.85	0.16	0.00	0.00	0.22	0.02	0.18	0.13	0.21009
ROUTE AVF	0.17	0.07	0.03	0.00	0.50	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.08	0.18	0.03		0.62	0.06	0.85	0.32	1.00	0.40	0.11	0.01	0.80	0.11		0.00	0.00	0.04	0.01	1.00	0.08	0.27	0.02	0.11	0.08	0.21368
ROUTE AUX	0.49	0.22	0.28	0.04	0.67	0.04	0.08	0.00	0.12	0.00	0.25	0.04	0.88	0.14	0.47	0.07		0.59	0.05	0.45	0.17	0.13	0.05	0.02	0.00	0.28	0.04		0.00	0.00	0.40	0.08	0.67	0.05	0.31	0.02	0.15	0.11	0.21521
ROUTE AUD	0.60	0.27	0.74	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.08		0.48	0.04	0.03	0.01	0.00	0.00	0.70	0.09	0.14	0.02		0.00	0.00	0.20	0.04	0.72	0.06	0.95	0.07	0.16	0.12	0.21945
ROUTE AUH	1.00	0.44	0.99	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.09		0.06	0.01	0.12	0.05	0.14	0.06	1.00	0.12	0.23	0.03		0.00	0.00	0.14	0.03	0.97	0.08	0.62	0.05	0.15	0.11	0.23298
ROUTE AUT	0.15	0.06	0.02	0.00	0.50	0.03	0.07	0.00	0.15	0.00	0.25	0.04	1.00	0.16	0.30	0.04		0.98	0.09	0.36	0.14	0.02	0.01	0.06	0.01	0.25	0.03		0.00	0.00	1.00	0.19	0.01	0.00	0.37	0.03	0.22	0.16	0.23422
ROUTE AUO	0.49	0.22	0.44	0.06	0.33	0.02	0.41	0.01	0.41	0.01	0.75	0.12	0.50	0.08	0.52	0.07		0.36	0.03	0.52	0.20	0.19	0.08	0.21	0.03	0.33	0.05		0.00	0.00	0.55	0.11	0.33	0.03	0.55	0.04	0.17	0.12	0.24158
ROUTE AVD	0.00	0.00	0.06	0.01	0.67	0.04	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.02	0.06	0.01		1.00	0.09	0.70	0.26	0.10	0.04	0.01	0.00	0.40	0.06		0.00	0.00	0.73	0.14	0.97	0.08	0.43	0.03	0.25	0.18	0.24378
ROUTE ATZ	0.60	0.27	0.73	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.08		0.36	0.03	0.15	0.06	0.04	0.02	1.00	0.12	0.23	0.03		0.00	0.00	0.32	0.06	0.71	0.06	0.86	0.06	0.18	0.13	0.24409
ROUTE AUW	0.83	0.37	0.70	0.09	0.50	0.03	0.42	0.01	0.41	0.01	0.75	0.12	0.38	0.06	0.69	0.10		0.11	0.01	0.55	0.21	0.27	0.11	0.12	0.01	0.34	0.05		0.00	0.00	0.09	0.02	1.00	0.08	0.64	0.05	0.14	0.10	0.24691
ROUTE AUS	0.48	0.21	0.45	0.06	0.33	0.02	0.41	0.01	0.44	0.01	0.75	0.12	0.50	0.08	0.51	0.07		0.51	0.05	0.45	0.17	0.16	0.06	0.16	0.02	0.30	0.04		0.00	0.00	0.70	0.13	0.33	0.03	0.70	0.05	0.21	0.15	0.26620
ROUTE AVE	0.05	0.02	0.00	0.00	0.33	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.50	0.08	0.12	0.02		1.00	0.09	1.00	0.38	0.97	0.39	0.09	0.01	0.87	0.12		0.00	0.00	0.37	0.07	0.97	0.08	0.63	0.05	0.19	0.14	0.27859
ROUTE ATV	0.91	0.40	0.93	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.09		0.12	0.01	0.27	0.10	0.13	0.05	0.54	0.07	0.23	0.03		0.00	0.00	0.58	0.11	0.96	0.08	0.48	0.04	0.22	0.16	0.27932
ROUTE ATN	0.51	0.23	0.67	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.07		0.42	0.04	0.30	0.12	0.03	0.01	0.54	0.07	0.23	0.03		0.00	0.00	0.73	0.14	0.70	0.05	0.71	0.05	0.25	0.18	0.28531
ROUTE AVB	0.38	0.17	0.24	0.03	0.50	0.03	0.08	0.00	0.17	0.00	0.25	0.04	0.88	0.14	0.41	0.06		0.96	0.09	0.61	0.23	0.10	0.04	0.00	0.00	0.36	0.05		0.00	0.00	0.76	0.15	0.65	0.05	0.67	0.05	0.25	0.18	0.28560
ROUTE ATR	0.91	0.40	0.92	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.09		0.00	0.00	0.39	0.15	0.17	0.07	0.84	0.10	0.32	0.05		0.00	0.00	0.73	0.14	0.96	0.08	0.38	0.03	0.24	0.18	0.30788
ROUTE ATJ	0.51	0.23	0.66	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.07		0.30	0.03	0.42	0.16	0.07	0.03	0.84	0.10	0.32	0.05		0.00	0.00	0.87	0.17	0.70	0.05	0.62	0.05	0.27	0.19	0.31196
ROUTE AVA	0.71	0.31	0.67	0.09	0.33	0.02	0.42	0.01	0.46	0.01	0.75	0.12	0.38	0.06	0.62	0.09		0.49	0.05	0.70	0.26	0.24	0.10	0.10	0.01	0.42	0.06		0.00	0.00	0.47	0.09	0.97	0.08	1.00	0.07	0.24	0.17	0.31845

Table 4.1
Metrics for East Routes
(Natural Envionment Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	**SUM OF WEIGHTED TOTALS**
14%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		**72%**	9.3%		38.0%		40.3%		12.4%		100.0%		**14%**	65.6%		19.2%		7.8%		7.4%		100.0%		**SORT**
ROUTE AUD	0.60	0.27	0.74	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.08		0.48	0.04	0.03	0.01	0.00	0.00	0.70	0.09	0.14	0.10		0.00	0.00	0.20	0.04	0.72	0.06	0.95	0.07	0.16	0.02	0.20688
ROUTE AUL	1.00	0.44	1.00	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.09		0.18	0.02	0.00	0.00	0.10	0.04	0.69	0.09	0.14	0.10		0.00	0.00	0.00	0.00	0.97	0.08	0.72	0.05	0.13	0.02	0.21552
ROUTE AUT	0.15	0.06	0.02	0.00	0.50	0.03	0.07	0.00	0.15	0.00	0.25	0.04	1.00	0.16	0.30	0.04		0.98	0.09	0.36	0.14	0.02	0.01	0.06	0.01	0.25	0.18		0.00	0.00	1.00	0.19	0.01	0.00	0.37	0.03	0.22	0.03	0.24876
ROUTE AUP	0.16	0.07	0.02	0.00	0.50	0.03	0.07	0.00	0.12	0.00	0.25	0.04	1.00	0.16	0.30	0.04		0.83	0.08	0.42	0.16	0.05	0.02	0.11	0.01	0.27	0.20		0.00	0.00	0.85	0.16	0.00	0.00	0.22	0.02	0.18	0.03	0.26356
ROUTE ATZ	0.60	0.27	0.73	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.08		0.36	0.03	0.15	0.06	0.04	0.02	1.00	0.12	0.23	0.17		0.00	0.00	0.32	0.06	0.71	0.06	0.86	0.06	0.18	0.03	0.27371
ROUTE ATN	0.51	0.23	0.67	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.07		0.42	0.04	0.30	0.12	0.03	0.01	0.54	0.07	0.23	0.17		0.00	0.00	0.73	0.14	0.70	0.05	0.71	0.05	0.25	0.03	0.27586
ROUTE AUH	1.00	0.44	0.99	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.09		0.06	0.01	0.12	0.05	0.14	0.06	1.00	0.12	0.23	0.17		0.00	0.00	0.14	0.03	0.97	0.08	0.62	0.05	0.15	0.02	0.28264
ROUTE ATV	0.91	0.40	0.93	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.09		0.12	0.01	0.27	0.10	0.13	0.05	0.54	0.07	0.23	0.17		0.00	0.00	0.58	0.11	0.96	0.08	0.48	0.04	0.22	0.03	0.28578
ROUTE AVC	0.17	0.08	0.12	0.02	1.00	0.05	0.00	0.00	0.03	0.00	0.00	0.00	0.13	0.02	0.17	0.02		0.65	0.06	0.61	0.23	0.13	0.05	0.03	0.00	0.35	0.25		0.00	0.00	0.23	0.04	1.00	0.08	0.00	0.00	0.12	0.02	0.29171
ROUTE AUX	0.49	0.22	0.28	0.04	0.67	0.04	0.08	0.00	0.12	0.00	0.25	0.04	0.88	0.14	0.47	0.07		0.59	0.05	0.45	0.17	0.13	0.05	0.02	0.00	0.28	0.20		0.00	0.00	0.40	0.08	0.67	0.05	0.31	0.02	0.15	0.02	0.29190
ROUTE AUS	0.48	0.21	0.45	0.06	0.33	0.02	0.41	0.01	0.44	0.01	0.75	0.12	0.50	0.08	0.51	0.07		0.51	0.05	0.45	0.17	0.16	0.06	0.16	0.02	0.30	0.22		0.00	0.00	0.70	0.13	0.33	0.03	0.70	0.05	0.21	0.03	0.31917
ROUTE AVD	0.00	0.00	0.06	0.01	0.67	0.04	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.02	0.06	0.01		1.00	0.09	0.70	0.26	0.10	0.04	0.01	0.00	0.40	0.29		0.00	0.00	0.73	0.14	0.97	0.08	0.43	0.03	0.25	0.03	0.33278
ROUTE AUO	0.49	0.22	0.44	0.06	0.33	0.02	0.41	0.01	0.41	0.01	0.75	0.12	0.50	0.08	0.52	0.07		0.36	0.03	0.52	0.20	0.19	0.08	0.21	0.03	0.33	0.24		0.00	0.00	0.55	0.11	0.33	0.03	0.55	0.04	0.17	0.02	0.33387
ROUTE ATJ	0.51	0.23	0.66	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.07		0.30	0.03	0.42	0.16	0.07	0.03	0.84	0.10	0.32	0.23		0.00	0.00	0.87	0.17	0.70	0.05	0.62	0.05	0.27	0.04	0.34307
ROUTE AVB	0.38	0.17	0.24	0.03	0.50	0.03	0.08	0.00	0.17	0.00	0.25	0.04	0.88	0.14	0.41	0.06		0.96	0.09	0.61	0.23	0.10	0.04	0.00	0.00	0.36	0.26		0.00	0.00	0.76	0.15	0.65	0.05	0.67	0.05	0.25	0.03	0.35194
ROUTE ATR	0.91	0.40	0.92	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.09		0.00	0.00	0.39	0.15	0.17	0.07	0.84	0.10	0.32	0.23		0.00	0.00	0.73	0.14	0.96	0.08	0.38	0.03	0.24	0.03	0.35337
ROUTE AUW	0.83	0.37	0.70	0.09	0.50	0.03	0.42	0.01	0.41	0.01	0.75	0.12	0.38	0.06	0.69	0.10		0.11	0.01	0.55	0.21	0.27	0.11	0.12	0.01	0.34	0.25		0.00	0.00	0.09	0.02	1.00	0.08	0.64	0.05	0.14	0.02	0.36225
ROUTE AVA	0.71	0.31	0.67	0.09	0.33	0.02	0.42	0.01	0.46	0.01	0.75	0.12	0.38	0.06	0.62	0.09		0.49	0.05	0.70	0.26	0.24	0.10	0.10	0.01	0.42	0.30		0.00	0.00	0.47	0.09	0.97	0.08	1.00	0.07	0.24	0.03	0.42251
ROUTE AVF	0.17	0.07	0.03	0.00	0.50	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.08	0.18	0.03		0.62	0.06	0.85	0.32	1.00	0.40	0.11	0.01	0.80	0.57		0.00	0.00	0.04	0.01	1.00	0.08	0.27	0.02	0.11	0.01	0.61383
ROUTE AVE	0.05	0.02	0.00	0.00	0.33	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.50	0.08	0.12	0.02		1.00	0.09	1.00	0.38	0.97	0.39	0.09	0.01	0.87	0.63		0.00	0.00	0.37	0.07	0.97	0.08	0.63	0.05	0.19	0.03	0.67281

Table 4.1
Metrics for East Routes
(Simple Average Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
33%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		33%	9.3%		38.0%		40.3%		12.4%		100.0%		33%	65.6%		19.2%		7.8%		7.4%		100.0%		SORT
ROUTE AVC	0.17	0.08	0.12	0.02	1.00	0.05	0.00	0.00	0.03	0.00	0.00	0.00	0.13	0.02	0.17	0.05		0.65	0.06	0.61	0.23	0.13	0.05	0.03	0.00	0.35	0.12		0.00	0.00	0.23	0.04	1.00	0.08	0.00	0.00	0.12	0.04	0.21045
ROUTE AVD	0.00	0.00	0.06	0.01	0.67	0.04	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.02	0.06	0.02		1.00	0.09	0.70	0.26	0.10	0.04	0.01	0.00	0.40	0.13		0.00	0.00	0.73	0.14	0.97	0.08	0.43	0.03	0.25	0.08	0.23548
ROUTE AUP	0.16	0.07	0.02	0.00	0.50	0.03	0.07	0.00	0.12	0.00	0.25	0.04	1.00	0.16	0.30	0.10		0.83	0.08	0.42	0.16	0.05	0.02	0.11	0.01	0.27	0.09		0.00	0.00	0.85	0.16	0.00	0.00	0.22	0.02	0.18	0.06	0.24860
ROUTE AUT	0.15	0.06	0.02	0.00	0.50	0.03	0.07	0.00	0.15	0.00	0.25	0.04	1.00	0.16	0.30	0.10		0.98	0.09	0.36	0.14	0.02	0.01	0.06	0.01	0.25	0.08		0.00	0.00	1.00	0.19	0.01	0.00	0.37	0.03	0.22	0.07	0.25108
ROUTE AUD	0.60	0.27	0.74	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.19		0.48	0.04	0.03	0.01	0.00	0.00	0.70	0.09	0.14	0.05		0.00	0.00	0.20	0.04	0.72	0.06	0.95	0.07	0.16	0.05	0.29317
ROUTE AUX	0.49	0.22	0.28	0.04	0.67	0.04	0.08	0.00	0.12	0.00	0.25	0.04	0.88	0.14	0.47	0.16		0.59	0.05	0.45	0.17	0.13	0.05	0.02	0.00	0.28	0.09		0.00	0.00	0.40	0.08	0.67	0.05	0.31	0.02	0.15	0.05	0.29960
ROUTE AUL	1.00	0.44	1.00	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.22		0.18	0.02	0.00	0.00	0.10	0.04	0.69	0.09	0.14	0.05		0.00	0.00	0.00	0.00	0.97	0.08	0.72	0.05	0.13	0.04	0.31166
ROUTE ATZ	0.60	0.27	0.73	0.10	0.00	0.00	1.00	0.04	1.00	0.02	1.00	0.16	0.00	0.00	0.58	0.19		0.36	0.03	0.15	0.06	0.04	0.02	1.00	0.12	0.23	0.08		0.00	0.00	0.32	0.06	0.71	0.06	0.86	0.06	0.18	0.06	0.32789
ROUTE ATN	0.51	0.23	0.67	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.18		0.42	0.04	0.30	0.12	0.03	0.01	0.54	0.07	0.23	0.08		0.00	0.00	0.73	0.14	0.70	0.05	0.71	0.05	0.25	0.08	0.33358
ROUTE AVB	0.38	0.17	0.24	0.03	0.50	0.03	0.08	0.00	0.17	0.00	0.25	0.04	0.88	0.14	0.41	0.13		0.96	0.09	0.61	0.23	0.10	0.04	0.00	0.00	0.36	0.12		0.00	0.00	0.76	0.15	0.65	0.05	0.67	0.05	0.25	0.08	0.33528
ROUTE AUO	0.49	0.22	0.44	0.06	0.33	0.02	0.41	0.01	0.41	0.01	0.75	0.12	0.50	0.08	0.52	0.17		0.36	0.03	0.52	0.20	0.19	0.08	0.21	0.03	0.33	0.11		0.00	0.00	0.55	0.11	0.33	0.03	0.55	0.04	0.17	0.06	0.33570
ROUTE AUS	0.48	0.21	0.45	0.06	0.33	0.02	0.41	0.01	0.44	0.01	0.75	0.12	0.50	0.08	0.51	0.17		0.51	0.05	0.45	0.17	0.16	0.06	0.16	0.02	0.30	0.10		0.00	0.00	0.70	0.13	0.33	0.03	0.70	0.05	0.21	0.07	0.33840
ROUTE AUH	1.00	0.44	0.99	0.13	0.00	0.00	0.30	0.01	0.33	0.01	0.50	0.08	0.00	0.00	0.67	0.22		0.06	0.01	0.12	0.05	0.14	0.06	1.00	0.12	0.23	0.08		0.00	0.00	0.14	0.03	0.97	0.08	0.62	0.05	0.15	0.05	0.34707
ROUTE ATV	0.91	0.40	0.93	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.21		0.12	0.01	0.27	0.10	0.13	0.05	0.54	0.07	0.23	0.08		0.00	0.00	0.58	0.11	0.96	0.08	0.48	0.04	0.22	0.07	0.35511
ROUTE AVF	0.17	0.07	0.03	0.00	0.50	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.08	0.18	0.06		0.62	0.06	0.85	0.32	1.00	0.40	0.11	0.01	0.80	0.26		0.00	0.00	0.04	0.01	1.00	0.08	0.27	0.02	0.11	0.04	0.35814
ROUTE ATJ	0.51	0.23	0.66	0.09	0.00	0.00	0.97	0.03	0.97	0.02	1.00	0.16	0.00	0.00	0.53	0.17		0.30	0.03	0.42	0.16	0.07	0.03	0.84	0.10	0.32	0.11		0.00	0.00	0.87	0.17	0.70	0.05	0.62	0.05	0.27	0.09	0.36922
ROUTE AUW	0.83	0.37	0.70	0.09	0.50	0.03	0.42	0.01	0.41	0.01	0.75	0.12	0.38	0.06	0.69	0.23		0.11	0.01	0.55	0.21	0.27	0.11	0.12	0.01	0.34	0.11		0.00	0.00	0.09	0.02	1.00	0.08	0.64	0.05	0.14	0.05	0.38679
ROUTE AVE	0.05	0.02	0.00	0.00	0.33	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.50	0.08	0.12	0.04		1.00	0.09	1.00	0.38	0.97	0.39	0.09	0.01	0.87	0.29		0.00	0.00	0.37	0.07	0.97	0.08	0.63	0.05	0.19	0.06	0.39131
ROUTE ATR	0.91	0.40	0.92	0.12	0.00	0.00	0.27	0.01	0.29	0.01	0.50	0.08	0.00	0.00	0.62	0.20		0.00	0.00	0.39	0.15	0.17	0.07	0.84	0.10	0.32	0.11		0.00	0.00	0.73	0.14	0.96	0.08	0.38	0.03	0.24	0.08	0.39162
ROUTE AVA	0.71	0.31	0.67	0.09	0.33	0.02	0.42	0.01	0.46	0.01	0.75	0.12	0.38	0.06	0.62	0.21		0.49	0.05	0.70	0.26	0.24	0.10	0.10	0.01	0.42	0.14		0.00	0.00	0.47	0.09	0.97	0.08	1.00	0.07	0.24	0.08	0.42300

Table 4.2
Metrics for East-Central Routes
(Statistics and Statistics Normalized)

Built	Residences within ROW	Proximity to Residences (within 300')	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)	Natural	Natural Forests (Acres)	Stream/River Crossings	Wetland Areas (Acres)	Floodplain Areas (Acres)	Engineering	Length (Miles)
ROUTE PY	42 0.49	161 0.37	0 0.00	16 0.89	20 0.49	2 0.50	10 0.82	12 1.00	245.22 0.09	40 0.24	14.9 0.36	155.78 0.72		38.6 0.45
ROUTE PZ	44 0.52	198 0.51	0 0.00	16 0.89	20 0.49	2 0.50	10 0.82	12 1.00	254.97 0.16	45 0.38	14.9 0.36	157.96 0.75		39.1 0.51
ROUTE QA	41 0.48	156 0.35	0 0.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	240.94 0.07	39 0.21	12.78 0.10	150.03 0.64		38.4 0.42
ROUTE QB	43 0.51	193 0.49	0 0.00	16 0.89	21 0.51	2 0.50	12 1.00	12 1.00	250.69 0.13	44 0.35	12.78 0.10	152.21 0.67		38.9 0.48
ROUTE QC	50 0.60	212 0.56	0 0.00	15 0.83	19 0.46	2 0.50	12 1.00	12 1.00	241.73 0.05	43 0.32	14.74 0.34	154.34 0.70		38.1 0.44
ROUTE QD	52 0.62	249 0.70	0 0.00	15 0.83	19 0.46	2 0.50	12 1.00	12 1.00	251.48 0.14	43 0.32	14.74 0.34	156.52 0.73		38.5 0.47
ROUTE QE	49 0.58	207 0.54	0 0.00	15 0.83	19 0.46	2 0.50	12 1.00	12 1.00	237.45 0.04	37 0.15	12.62 0.08	148.59 0.62		37.8 0.41
ROUTE QF	53 0.64	244 0.68	0 0.00	15 0.83	19 0.46	2 0.50	12 1.00	12 1.00	246.68 0.11	42 0.29	12.78 0.10	154.3 0.70		38.6 0.45
ROUTE QG	51 0.61	106 0.26	0 0.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	246.68 0.11	42 0.29	15.24 0.40	156.41 0.66		39.1 0.46
ROUTE QH	15 0.14	143 0.35	0 0.00	1 0.06	3 0.03	0 0.00	0 0.00	12 1.00	256.43 0.17	50 0.53	15.24 0.40	157.58 0.74		39.1 0.46
ROUTE QI	12 0.10	101 0.24	0 0.00	1 0.06	3 0.03	0 0.00	0 0.00	10 0.82	242.4 0.08	44 0.35	13.12 0.14	149.66 0.63		38.4 0.44
ROUTE QJ	14 0.13	138 0.28	0 0.00	1 0.06	3 0.03	0 0.00	12 1.00	10 0.82	256.43 0.17	50 0.53	13.12 0.14	151.83 0.66		38.9 0.48
ROUTE QK	60 0.73	263 0.76	0 0.00	16 0.89	25 0.65	3 0.75	10 0.82	12 1.00	241.02 0.07	43 0.32	14.96 0.37	172.35 0.96		36.9 0.23
ROUTE QL	59 0.71	258 0.74	0 0.00	16 0.89	25 0.65	3 0.75	10 0.82	12 1.00	236.75 0.04	42 0.29	12.84 0.11	166.61 0.87		36.7 0.20
ROUTE QM	60 0.73	266 0.77	0 0.00	16 0.89	36 0.92	4 1.00	10 0.82	12 1.00	241.03 0.07	39 0.21	14.93 0.36	158.52 0.76		37.9 0.36
ROUTE QN	59 0.71	261 0.75	0 0.00	16 0.89	37 0.95	4 1.00	10 0.82	12 1.00	236.75 0.04	38 0.18	12.81 0.11	152.77 0.68		37.7 0.33
ROUTE QO	62 0.75	274 0.80	0 0.00	18 1.00	33 0.84	3 0.75	10 0.82	12 1.00	234.99 0.03	39 0.21	14.93 0.36	160.05 0.78		37.1 0.24
ROUTE QP	61 0.74	269 0.78	0 0.00	18 1.00	34 0.86	3 0.75	10 0.82	12 1.00	230.72 0.00	35 0.15	12.81 0.11	154.3 0.70		36.9 0.23
ROUTE QQ	57 0.69	234 0.65	0 0.00	16 0.89	24 0.59	3 0.75	10 0.82	12 1.00	242.83 0.08	44 0.35	14.96 0.37	172.35 0.96		36.8 0.22
ROUTE QR	56 0.68	228 0.63	0 0.00	16 0.89	25 0.62	3 0.75	10 0.82	12 1.00	238.57 0.05	40 0.24	12.84 0.11	166.61 0.87		37.6 0.32
ROUTE QS	57 0.69	237 0.66	0 0.00	16 0.89	35 0.89	4 1.00	10 0.82	12 1.00	242.85 0.08	40 0.24	14.93 0.36	158.52 0.76		37.8 0.34
ROUTE QT	58 0.70	245 0.68	0 0.00	16 0.89	36 0.92	4 1.00	10 0.82	12 1.00	238.57 0.05	40 0.24	14.93 0.36	160.05 0.78		36.9 0.23
ROUTE QU	59 0.71	252 0.70	0 0.00	18 1.00	32 0.81	3 0.75	10 0.82	12 1.00	236.81 0.04	40 0.24	14.93 0.36	156.41 0.66		37.5 0.30
ROUTE QV	58 0.70	245 0.68	0 0.00	18 1.00	32 0.81	3 0.75	10 0.82	12 1.00	236.81 0.04	40 0.24	14.93 0.36	158.52 0.76		37.3 0.28
ROUTE QW	22 0.23	152 0.33	0 0.00	2 0.11	9 0.19	1 0.25	10 0.82	12 1.00	241.69 0.07	49 0.50	13.35 0.17	167.67 0.89		37.3 0.27
ROUTE QX	22 0.23	160 0.35	0 0.00	2 0.11	20 0.49	2 0.50	10 0.82	12 1.00	245.98 0.10	45 0.38	13.31 0.17	153.84 0.69		38.3 0.40
ROUTE QY	22 0.23	155 0.34	0 0.00	2 0.11	16 0.38	1 0.25	10 0.82	12 1.00	241.7 0.07	45 0.38	13.31 0.17	155.37 0.71		37.4 0.29
ROUTE QZ	25 0.27	168 0.40	0 0.00	4 0.22	16 0.38	1 0.25	10 0.82	12 1.00	235.67 0.03	45 0.38	13.31 0.17	155.37 0.71		37.4 0.29
ROUTE RB	24 0.26	163 0.38	0 0.00	4 0.22	17 0.41	1 0.25	10 0.82	12 1.00	247.78 0.11	51 0.66	15.47 0.43	173.42 0.97		37.1 0.25
ROUTE RC	20 0.21	131 0.31	0 0.00	2 0.11	8 0.18	1 0.25	10 0.82	12 1.00	243.51 0.08	50 0.53	13.35 0.17	167.67 0.89		38.4 0.41
ROUTE RD	19 0.19	123 0.22	0 0.00	2 0.11	8 0.18	1 0.25	10 0.82	12 1.00	247.8 0.11	47 0.44	15.43 0.42	159.98 0.77		38.1 0.38
ROUTE RE	22 0.23	139 0.29	0 0.00	2 0.11	19 0.46	2 0.50	10 0.82	12 1.00	243.52 0.08	47 0.44	13.31 0.17	153.84 0.69		37.5 0.30
ROUTE RF	19 0.19	126 0.24	0 0.00	4 0.22	15 0.38	1 0.25	10 0.82	12 1.00	247.78 0.11	47 0.44	15.43 0.42	159.98 0.77		37.3 0.27
ROUTE RG	21 0.22	134 0.27	0 0.00	4 0.22	16 0.38	1 0.25	10 0.82	12 1.00	243.52 0.08	47 0.44	13.31 0.17	153.84 0.69		37.3 0.27
ROUTE RH	21 0.22	134 0.27	0 0.00	4 0.22	16 0.38	1 0.25	10 0.82	12 1.00	237.48 0.04	46 0.41	13.31 0.17	155.37 0.71		37.3 0.26
ROUTE RI	15 0.14	143 0.30	0 0.00	1 0.06	9 0.19	1 0.25	10 0.82	12 1.00	241.76 0.07	47 0.44	15.43 0.42	167.67 0.89		37.2 0.24
ROUTE RJ	14 0.13	143 0.30	0 0.00	1 0.06	9 0.19	1 0.25	9 0.73	12 1.00	271.22 0.26	52 0.69	13.16 0.15	167.67 0.89		37.2 0.24
ROUTE RK	15 0.14	143 0.30	0 0.00	1 0.06	9 0.19	1 0.25	9 0.73	12 1.00	275.23 0.29	49 0.50	15.24 0.40	158.52 0.76		37.4 0.28
ROUTE RL	17 0.17	159 0.36	0 0.00	1 0.06	15 0.38	1 0.25	9 0.73	12 1.00	271.22 0.26	50 0.53	15.24 0.40	161.12 0.80		37.6 0.31
ROUTE RM	16 0.16	154 0.34	0 0.00	1 0.06	14 0.32	1 0.25	9 0.73	12 1.00	273.03 0.28	50 0.53	15.24 0.40	161.12 0.80		37.6 0.31
ROUTE RN	12 0.10	119 0.21	0 0.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	277.33 0.30	54 0.65	15.24 0.40	173.42 0.97		37.3 0.27
ROUTE RO	11 0.09	119 0.21	0 0.00	1 0.06	6 0.11	1 0.25	9 0.73	12 1.00	265.19 0.22	48 0.42	13.16 0.15	167.67 0.89		37.1 0.24
ROUTE RP	11 0.09	117 0.20	0 0.00	1 0.06	6 0.11	1 0.25	9 0.73	12 1.00	269.61 0.24	49 0.50	13.12 0.14	153.84 0.69		37.1 0.24
ROUTE RQ	12 0.10	122 0.22	0 0.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	265.33 0.23	54 0.65	15.65 0.45	173.42 0.97		38.3 0.40
ROUTE RR	14 0.13	130 0.25	0 0.00	3 0.17	14 0.32	1 0.25	9 0.73	12 1.00	271.29 0.26	50 0.53	15.24 0.40	161.12 0.80		37.4 0.28
ROUTE RS	14 0.13	130 0.25	0 0.00	3 0.17	14 0.32	1 0.25	9 0.73	12 1.00	267.01 0.24	49 0.50	13.12 0.14	155.37 0.71		37.2 0.25
ROUTE RT	13 0.12	125 0.23	0 0.00	3 0.17	15 0.35	1 0.25	9 0.73	12 1.00	245.37 0.01	45 0.38	13.12 0.14	155.37 0.71		39.2 0.52
ROUTE RY	41 0.48	157 0.35	1 1.00	16 0.89	20 0.49	2 0.50	10 0.82	12 1.00	245.36 0.10	40 0.24	15.27 0.40	155.78 0.72		39.2 0.52
ROUTE RZ	43 0.51	194 0.49	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	255.11 0.16	45 0.38	15.27 0.40	157.96 0.75		39.4 0.55
ROUTE SA	40 0.47	152 0.33	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	241.08 0.07	39 0.21	13.15 0.15	150.03 0.64		38.9 0.49
ROUTE SB	42 0.49	194 0.49	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	241.86 0.07	38 0.18	15.11 0.38	154.34 0.70		38.6 0.47
ROUTE SC	48 0.56	208 0.45	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	251.61 0.14	43 0.32	15.11 0.38	156.52 0.73		38.2 0.44
ROUTE SD	51 0.61	245 0.69	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	247.78 0.11	47 0.44	12.99 0.13	148.59 0.62		38.4 0.46
ROUTE SE	46 0.55	240 0.67	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	247.78 0.11	47 0.44	15.43 0.42	159.98 0.77		38.6 0.48
ROUTE SF	46 0.55	239 0.67	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	247.53 0.08	47 0.44	15.43 0.42	159.98 0.77		38.6 0.48
ROUTE SG	39 0.46	233 0.65	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	243.65 0.08	46 0.41	13.68 0.21	153.84 0.69		38.7 0.48
ROUTE SH	39 0.46	139 0.29	1 1.00	1 0.06	3 0.03	0 0.00	12 1.00	12 1.00	256.56 0.17	50 0.53	15.61 0.44	157.58 0.74		38.6 0.47
ROUTE SI	14 0.13	97 0.13	1 1.00	1 0.06	3 0.03	0 0.00	12 1.00	12 1.00	242.53 0.08	44 0.35	13.49 0.19	149.66 0.63		38.9 0.49
ROUTE SJ	13 0.12	134 0.27	1 1.00	1 0.06	3 0.03	0 0.00	12 1.00	12 1.00	252.28 0.14	49 0.50	13.49 0.19	151.83 0.66		39.4 0.55
ROUTE SK	59 0.71	259 0.74	1 1.00	16 0.89	25 0.62	3 0.75	10 0.82	12 1.00	241.15 0.07	42 0.29	13.34 0.17	172.35 0.96		37.5 0.30
ROUTE SL	58 0.70	254 0.72	1 1.00	16 0.89	25 0.62	3 0.75	10 0.82	12 1.00	236.87 0.04	42 0.29	13.21 0.15	166.61 0.87		37.2 0.27
ROUTE SM	59 0.71	262 0.75	1 1.00	16 0.89	36 0.92	4 1.00	10 0.82	12 1.00	241.16 0.07	42 0.29	13.21 0.15	166.61 0.87		38.5 0.43
ROUTE SN	58 0.70	257 0.73	1 1.00	16 0.89	37 0.95	4 1.00	10 0.82	12 1.00	236.88 0.04	38 0.18	13.18 0.15	152.77 0.68		38.2 0.41
ROUTE SO	61 0.74	270 0.78	1 1.00	18 1.00	34 0.86	3 0.75	10 0.82	12 1.00	235.13 0.03	39 0.21	15.3 0.41	160.05 0.78		37.6 0.32
ROUTE SP	60 0.73	265 0.76	1 1.00	18 1.00	34 0.86	3 0.75	10 0.82	12 1.00	230.85 0.00	38 0.18	13.18 0.15	154.3 0.70		37.4 0.28
ROUTE SQ	56 0.68	230 0.63	1 1.00	16 0.89	25 0.62	3 0.75	10 0.82	12 1.00	242.97 0.08	43 0.32	15.3 0.41	166.61 0.87		37.1 0.25
ROUTE SR	55 0.66	225 0.61	1 1.00	16 0.89	35 0.89	4 1.00	10 0.82	12 1.00	238.69 0.05	43 0.32	13.21 0.15	166.61 0.87		38.1 0.38
ROUTE SS	56 0.68	233 0.64	1 1.00	16 0.89	36 0.92	4 1.00	10 0.82	12 1.00	242.98 0.08	40 0.24	15.3 0.41	158.52 0.76		38.1 0.38
ROUTE ST	55 0.66	228 0.62	1 1.00	16 0.89	35 0.89	4 1.00	10 0.82	12 1.00	238.7 0.05	39 0.21	13.16 0.15	152.77 0.68		37.8 0.34
ROUTE SU	58 0.70	248 0.67	1 1.00	18 1.00	32 0.81	3 0.75	10 0.82	12 1.00	243.64 0.08	40 0.24	15.3 0.41	154.34 0.70		37.5 0.29
ROUTE SV	58 0.70	241 0.65	1 1.00	18 1.00	32 0.81	3 0.75	10 0.82	12 1.00	246.1 0.10	40 0.24	15.24 0.40	158.52 0.76		38.1 0.38
ROUTE SW	53 0.64	153 0.34	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	265.33 0.23	54 0.65	15.65 0.45	173.42 0.97		37.9 0.27
ROUTE SX	22 0.23	151 0.33	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	247.46 0.11	48 0.47	13.49 0.19	155.37 0.71		38.5 0.43
ROUTE SY	22 0.23	156 0.35	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	247.46 0.11	48 0.47	13.49 0.19	155.37 0.71		38.9 0.49
ROUTE SZ	23 0.25	159 0.36	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	247.53 0.08	47 0.44	13.49 0.19	155.37 0.71		38.9 0.49
ROUTE TA	24 0.26	164 0.38	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	240.08 0.06	41 0.32	15.8 0.47	161.12 0.80		38.2 0.46
ROUTE TB	23 0.25	159 0.36	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	241.83 0.07	45 0.38	13.68 0.21	155.37 0.71		38 0.44
ROUTE TC	19 0.19	124 0.23	1 1.00	4 0.22	17 0.41	1 0.25	10 0.82	12 1.00	247.92 0.11	51 0.66	15.84 0.47	173.42 0.97		37.9 0.27
ROUTE TD	18 0.18	119 0.21	1 1.00	4 0.22	16 0.38	1 0.25	10 0.82	12 1.00	243.64 0.08	50 0.53	13.72 0.21	167.67 0.89		38.3 0.40
ROUTE TE	19 0.19	127 0.24	1 1.00	2 0.11	18 0.43	2 0.50	10 0.82	12 1.00	247.93 0.11	47 0.44	15.8 0.47	159.98 0.77		38.9 0.49
ROUTE TF	18 0.18	122 0.22	1 1.00	2 0.11	19 0.46	2 0.50	10 0.82	12 1.00	243.65 0.08	46 0.41	13.68 0.21	153.84 0.69		38.7 0.48
ROUTE TG	21 0.22	135 0.27	1 1.00	4 0.22	15 0.35	1 0.25	10 0.82	12 1.00	241.89 0.07	47 0.44	15.8 0.47	161.12 0.80		38 0.46
ROUTE TH	20 0.21	130 0.25	1 1.00	4 0.22	16 0.38	1 0.25	10 0.82	12 1.00	237.62 0.04	46 0.41	13.68 0.21	155.37 0.71		39.6 0.52
ROUTE TI	14 0.13	144 0.30	1 1.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	275.63 0.29	53 0.62	15.65 0.45	173.42 0.97		38 0.46
ROUTE TJ	13 0.12	139 0.29	1 1.00	1 0.06	6 0.11	1 0.25	9 0.73	12 1.00	271.35 0.26	52 0.59	13.53 0.19	167.67 0.89		37.8 0.34
ROUTE TK	14 0.13	142 0.30	1 1.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	271.34 0.26	49 0.50	15.61 0.44	158.52 0.76		38.9 0.49
ROUTE TL	13 0.12	142 0.30	1 1.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	271.34 0.26	49 0.50	15.61 0.44	158.52 0.76		38.9 0.49
ROUTE TM	15 0.14	150 0.33	1 1.00	3 0.17	16 0.38	1 0.25	9 0.73	12 1.00	260.75 0.20	45 0.38	15.21 0.39	157.96 0.75		38.2 0.44
ROUTE TN	15 0.14	150 0.33	1 1.00	3 0.17	16 0.38	1 0.25	9 0.73	12 1.00	266.43 0.17	44 0.35	13.08 0.14	152.21 0.67		38.9 0.49
ROUTE TO	11 0.09	110 0.17	1 1.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	273.17 0.28	50 0.53	15.24 0.40	161.12 0.80		38.6 0.47
ROUTE TP	10 0.08	110 0.17	1 1.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	273.17 0.28	50 0.53	15.24 0.40	161.12 0.80		38.6 0.47
ROUTE TQ	11 0.09	118 0.18	1 1.00	1 0.06	7 0.14	1 0.25	9 0.73	12 1.00	277.46 0.30	53 0.62	15.53 0.41	167.67 0.89		38.8 0.48
ROUTE TR	10 0.08	113 0.19	1 1.00	1 0.06	18 0.43	2 0.50	10 0.82	12 1.00	273.18 0.28	49 0.50	13.49 0.19	153.84 0.69		38.6 0.47
ROUTE TS	13 0.12	126 0.24	1 1.00	3 0.17	14 0.32	1 0.25	9 0.73	12 1.00	271.42 0.27	50 0.53	15.61 0.44	161.12 0.80		38.8 0.48
ROUTE TT	12 0.10	121 0.22	1 1.00	3 0.17	15 0.35	1 0.25	9 0.73	12 1.00	267.14 0.24	49 0.50	15.24 0.40	155.37 0.71		37.7 0.27
ROUTE TV	39 0.45	145 0.33	1 1.00	16 0.89	20 0.49	2 0.50	10 0.82	12 1.00	251.1 0.13	45 0.38	15.24 0.40	155.37 0.71		38.5 0.43
ROUTE TZ	41 0.48	187 0.47	1 1.00	16 0.89	20 0.49	2 0.50	12 1.00	12 1.00	260.75 0.20	45 0.38	15.21 0.39	157.96 0.75		39.2 0.52
ROUTE UA	38 0.44	145 0.33	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	246.73 0.10	38 0.18	13.08 0.14	150.03 0.64		38.5 0.43
ROUTE UB	40 0.47	182 0.45	1 1.00	16 0.89	21 0.51	2 0.50	10 0.82	12 1.00	256.47 0.17	44 0.35	13.08 0.14	152.21 0.67		38.9 0.49
ROUTE UC	47 0.56	201 0.52	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	247.51 0.11	38 0.18	15.05 0.38	154.34 0.70		38.1 0.44
ROUTE UD	48 0.58	208 0.54	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	247.53 0.08	37 0.15	12.99 0.13	148.59 0.62		38.4 0.46
ROUTE UE	46 0.55	199 0.50	1 1.00	15 0.83	19 0.46	2 0.50	10 0.82	12 1.00	252.28 0.14	45 0.38	15.61 0.44	155.41 0.71		38.7 0.47
ROUTE UG	10 0.08	95 0.12	1 1.00	1 0.06	2 0.00	0 0.00	12 1.00	12 1.00	252.46 0.14	45 0.38	15.61 0.44	157.58 0.74		38.2 0.44
ROUTE UH	9 0.08	90 0.10	1 1.00	1 0.06	3 0.03	0 0.00	12 1.00	12 1.00	248.18 0.11	44 0.35	13.49 0.19	149.66 0.63		38.5 0.43
ROUTE UI	11 0.09	111 0.21	1 1.00	1 0.06	3 0.03	0 0.00	12 1.00	12 1.00	262.21 0.21	49 0.50	13.43 0.18	153.84 0.69		39 0.49
ROUTE UJ	56 0.68	247 0.70	1 1.00	16 0.89	25 0.62	3 0.75	10 0.82	12 1.00	242.52 0.08	43 0.32	13.15 0.15	166.61 0.87		37.6 0.32
ROUTE UK	57 0.69	252 0.71	1 1.00	16 0.89	25 0.62	3 0.75	10 0.82	12 1.00	246.8 0.10	43 0.32	13.27 0.16	172.35 0.96		37 0.23
ROUTE UL	56 0.68	247 0.70	1 1.00	16 0.89	25 0.62	3 0.75	10 0.82	12 1.00	242.52 0.08	39 0.21	13.15 0.15	166.61 0.87		36.8 0.21
ROUTE UM	57 0.69	255 0.73	1 1.00	16 0.89	36 0.92	4 1.00	10 0.82	12 1.00	246.81 0.10	39 0.21	13.12 0.14	152.77 0.68		38 0.36
ROUTE UN	58 0.70	250 0.71	1 1.00	16 0.89	36 0.92	4 1.00	10 0.82	12 1.00	242.53 0.08	38 0.18	13.12 0.14	152.77 0.68		37.8 0.34
ROUTE UO	59 0.71	263 0.76	1 1.00	18 1.00	33 0.84	3 0.75	10 0.82	12 1.00	240.78 0.07	39 0.21	13.12 0.14	160.05 0.78		37.2 0.24
ROUTE UP	58 0.70	258 0.74	1 1.00	18 1.00	34 0.86	3 0.75	10 0.82	12 1.00	236.5 0.04	38 0.18	13.12 0.14	154.3 0.70		37.4 0.28
ROUTE UQ	54 0.65	223 0.60	1 1.00	16 0.89	24 0.59	3 0.75	10 0.82	12 1.00	248.61 0.12	44 0.35	13.27 0.16	172.35 0.96		36.9 0.22
ROUTE UR	53 0.64	218 0.59	1 1.00	16 0.89	35 0.89	4 1.00	10 0.82	12 1.00	244.34 0.09	40 0.24	13.27 0.16	166.61 0.87		36.6 0.20
ROUTE US	54 0.65	226 0.62	1 1.00	16 0.89	35 0.89	4 1.00	10 0.82	12 1.00	246.63 0.10	40 0.24	15.24 0.40	158.52 0.76		37.9 0.26
ROUTE UT	53 0.64	221 0.60	1 1.00	16 0.89	35 0.89	4 1.00	10 0.82	12 1.00	244.35 0.09	40 0.24	13.12 0.14	152.77 0.68		37.6 0.32
ROUTE UU	56 0.68	229 0.62	1 1.00	16 0.89	36 0.92	4 1.00	10 0.82	12 1.00	246.63 0.10	39 0.21	13.12 0.14	154.3 0.70		36.8 0.21
ROUTE UV	19 0.19	141 0.29	1 1.00	2 0.11	9 0.19	1 0.25	10 0.82	12 1.00	265.33 0.23	48 0.47	13.49 0.19	155.37 0.71		37.9 0.27
ROUTE UW	19 0.19	146 0.32	1 1.00	2 0.11	9 0.19	1 0.25	10 0.82	12 1.00	251.76 0.14	49 0.50	13.66 0.21	153.84 0.69		37.6 0.30
ROUTE UX	20 0.21	140 0.29	1 1.00	2 0.11	9 0.19	1 0.25	10 0.82	12 1.00	247.47 0.11	49 0.50	13.66 0.21	167.67 0.89		37.4 0.28
ROUTE UZ	19 0.19	144 0.30	1 1.00	4 0.22	16 0.38	1 0.25	10 0.82	12 1.00	247.48 0.11	45 0.38	13.62 0.20	161.12 0.80		38.6 0.47
ROUTE VA	21 0.22	157 0.33	1 1.00	4 0.22	16 0.38	1 0.25	10 0.82	12 1.00	241.45 0.07	45 0.38	13.62 0.20	155.37 0.71		37.5 0.27
ROUTE VB	21 0.22	152 0.33	1 1.00	4 0.22	17 0.41	1 0.25	10 0.82	12 1.00	253.57 0.18	51 0.66	15.78 0.46	173.42 0.97		37.4 0.27
ROUTE VC	17 0.17	117 0.20	1 1.00	2 0.11	8 0.18	1 0.25	10 0.82	12 1.00	249.29 0.12	50 0.53	13.66 0.21	167.67 0.89		37.2 0.24
ROUTE VD	16 0.16	112 0.18	1 1.00	2 0.11	8 0.16	1 0.25	10 0.82	12 1.00	253.58 0.18	47 0.44	15.74 0.45	159.98 0.77		38.2 0.43
ROUTE VE	16 0.16	115 0.19	1 1.00	2 0.11	19 0.46	2 0.50	10 0.82	12 1.00	249.3 0.12	46 0.41	13.62 0.20	153.84 0.69		38.2 0.43

Table 4.2
Metrics for East-Central Routes
(Statistics and Statistics Normalized)

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Table 4.2
Metrics for East-Central Routes
(Built Environment Emphasis Matrix)

Built	Residences with ROW	Proximity to Residences (within 300')	Wetland Areas (Acres)	Floodplain Areas (Acres)	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	Percent of Route of Co-located with Existing Utilities*	Percent of Route Rebuilt with Existing T/L*	Engineering	NEHP Listed Structures and Districts (3000' from edge of R/W)	TOTAL	WEIGHTED TOTAL	Natural	Stream/River Crossings	Natural Forests (Acres)	TOTAL	WEIGHTED TOTAL	Total Project Costs	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
7.2%	44.3%	13.1%	12.4%	5.4%	3.6%	1.8%	16.3%	19.2%	65.6%	1.4%		15.5%	100.0%		14%	39.0%	9.3%	100.0%		7.4%	100.0%		
ROUTE ALE	0.08	0.03	0.06	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALF	0.06	0.04	0.01	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AME	0.06	0.03	0.03	0.04	0.02	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ANE	0.04	0.02	0.00	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE QI	0.10	0.05	0.04	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YB	0.04	0.02	0.14	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALX	0.09	0.04	0.13	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALV	0.06	0.03	0.09	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE QC	0.12	0.05	0.16	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQX	0.03	0.01	0.13	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQV	0.00	0.00	0.09	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YA	0.05	0.02	0.16	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE SI	0.09	0.04	0.13	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALU	0.13	0.06	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALS	0.10	0.05	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALF	0.06	0.03	0.09	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQW	0.00	0.00	0.10	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE UI	0.06	0.03	0.10	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQS	0.04	0.02	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQU	0.02	0.01	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMX	0.05	0.02	0.08	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALT	0.10	0.05	0.21	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE SG	0.14	0.07	0.14	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALR	0.19	0.09	0.17	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOO	0.05	0.02	0.09	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOK	0.08	0.03	0.08	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQT	0.04	0.02	0.21	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQR	0.08	0.03	0.12	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMW	0.05	0.02	0.09	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQP	0.10	0.05	0.15	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQK	0.13	0.06	0.29	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMU	0.12	0.05	0.23	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMS	0.09	0.04	0.19	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMF	0.09	0.04	0.17	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALQ	0.17	0.07	0.14	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOM	0.03	0.01	0.06	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALO	0.23	0.10	0.28	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALM	0.09	0.04	0.24	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ANF	0.04	0.02	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOI	0.09	0.04	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOE	0.06	0.03	0.14	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQQ	0.10	0.05	0.14	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMO	0.07	0.03	0.08	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQM	0.14	0.06	0.23	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMT	0.05	0.02	0.15	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQM	0.12	0.05	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE RT	0.05	0.02	0.09	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMR	0.08	0.03	0.15	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMP	0.16	0.07	0.11	0.01	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ALN	0.21	0.09	0.25	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOG	0.06	0.03	0.17	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZJ	0.05	0.02	0.23	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOC	0.16	0.07	0.13	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ANY	0.13	0.06	0.25	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQW	0.32	0.14	0.24	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE RR	0.09	0.04	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMQ	0.16	0.07	0.13	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ANN	0.19	0.09	0.22	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE RL	0.13	0.06	0.31	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE RO	0.13	0.06	0.25	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE QJ	0.22	0.10	0.26	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZK	0.03	0.01	0.20	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMO	0.19	0.09	0.22	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AMM	0.14	0.06	0.30	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AOA	0.10	0.04	0.34	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZI	0.09	0.04	0.34	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZH	0.06	0.03	0.31	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZG	0.06	0.03	0.30	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YX	0.04	0.02	0.21	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE XX	0.06	0.03	0.28	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ANW	0.19	0.09	0.24	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ANS	0.17	0.07	0.19	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE TP	0.08	0.03	0.17	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE VP	0.15	0.07	0.22	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE QH	0.14	0.06	0.30	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YY	0.04	0.02	0.22	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YNU	0.07	0.03	0.21	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE TR	0.06	0.03	0.38	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE XZ	0.32	0.14	0.38	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZF	0.16	0.07	0.27	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YW	0.10	0.05	0.36	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZD	0.06	0.03	0.32	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YU	0.08	0.03	0.32	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE TN	0.14	0.06	0.33	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE RF	0.12	0.05	0.29	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE TO	0.09	0.04	0.19	0.02	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YR	0.14	0.06	0.33	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE RK	0.14	0.06	0.33	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE QW	0.25	0.11	0.35	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE QX	0.16	0.07	0.29	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE VM	0.13	0.06	0.34	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE WI	0.35	0.16	0.34	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE UH	0.10	0.05	0.26	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZB	0.17	0.07	0.35	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YS	0.14	0.06	0.25	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE ZA	0.32	0.14	0.43	0.06	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YQ	0.21	0.09	0.40	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE TB	0.25	0.11	0.36	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE SX	0.22	0.10	0.27	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YG	0.22	0.10	0.37	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE QY	0.25	0.11	0.37	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE YF	0.16	0.07	0.19	0.03	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQC	0.31	0.14	0.33	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11
ROUTE AQG	0.34	0.15	0.33	0.04	0.00	0.05	0.00	0.00	0.00	0.24	0.16	0.09	0.03	0.08	0.03	0.29	0.05	0.08	0.03	0.04	0.05	0.04	0.11

Table 4.2
Metrics for East-Central Routes
(Built Environment Emphasis Matrix)

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Table 4.2
Metrics for East-Central Routes
(Engineering Considerations Emphasis Matrix)

Built	Residences with ROW	Weighted	Wetland Areas (Acres)	Weighted	Floodplain Areas (Acres)	Weighted	Proposed Developments	Weighted	Proximity to Residences (within 300')	Weighted	Proximity Commercial Buildings(within 300')	Weighted	Proximity Industrial Buildings(within 300')	Weighted	School, Church, Cemetery, and Park Parcels Crossed	Weighted	NRHP Listed Structures and Districts (3000' from edge of RW)	Weighted	WEIGHTED TOTAL	Weighted	Natural	Weighted	Natural Forests (Acres)	Weighted	Stream/River Crossings	Weighted	SUM OF WEIGHTED TOTALS	SORT
14%	44.3%		13.1%		12.4%		5.4%		3.9%		3.9%		1.8%		16.3%		15.5%		100.0%		14%		9.3%		7.4%		100.0%	
ROUTE Q	0.10	0.05	0.14	0.06	0.63	0.08	0.00	0.00	0.06	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.19	0.03	38.0%	0.20	0.20	0.01	0.28	0.02	0.26553	0.26553
ROUTE ALE	0.08	0.03	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.07	0.01				0.63	0.06	0.04	0.03	0.26702
ROUTE QC	0.12	0.05	0.16	0.02	0.71	0.09	0.40	0.06	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.95	0.15	0.20	0.03				0.10	0.01	0.38	0.15	0.28603
ROUTE QRE	0.06	0.03	0.04	0.01	0.03	0.00	0.30	0.04	0.07	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.97	0.16	0.09	0.01				0.08	0.01	0.25	0.10	0.23098
ROUTE AQE	0.01	0.00	0.04	0.01	0.02	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.24	0.04	0.06	0.01				0.02	0.00	0.06	0.02	0.23659
ROUTE YB	0.04	0.02	0.14	0.02	0.63	0.08	0.21	0.03	0.06	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.73	0.11	0.21	0.03				0.07	0.01	0.22	0.09	0.29724
ROUTE QE	0.56	0.26	0.54	0.07	0.00	0.00	0.83	0.08	0.17	0.02	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.58	0.08				0.04	0.00	0.15	0.06	0.30182
ROUTE SG	0.10	0.05	0.14	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.50	0.08	0.82	0.13	0.25	0.03				0.10	0.01	0.38	0.15	0.31245
ROUTE QA	0.48	0.21	0.35	0.05	0.00	0.00	0.78	0.09	0.03	0.01	0.00	0.00	0.01	0.00	0.50	0.08	0.82	0.13	0.51	0.07				0.10	0.01	0.21	0.08	0.31453
ROUTE ALA	0.45	0.20	0.25	0.03	0.00	0.00	0.83	0.09	0.03	0.01	0.00	0.00	0.57	0.01	0.50	0.08	0.82	0.13	0.38	0.05				0.62	0.06	0.59	0.22	0.31601
ROUTE QC	0.60	0.26	0.56	0.07	0.00	0.00	0.83	0.09	0.03	0.01	0.00	0.00	0.46	0.01	0.50	0.08	0.82	0.13	0.58	0.08				0.07	0.01	0.18	0.07	0.31958
ROUTE SE	0.57	0.25	0.53	0.07	0.00	0.00	0.89	0.10	0.03	0.01	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.56	0.08				0.10	0.01	0.26	0.10	0.32459
ROUTE PY	0.49	0.22	0.37	0.05	0.00	0.00	0.89	0.10	0.03	0.01	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.55	0.07				0.09	0.01	0.24	0.09	0.32650
ROUTE SA	0.47	0.21	0.25	0.03	0.00	0.00	0.89	0.10	0.03	0.01	0.00	0.00	0.51	0.01	0.50	0.08	0.82	0.13	0.55	0.07				0.07	0.01	0.21	0.08	0.33710
ROUTE AMA	0.44	0.20	0.24	0.03	1.00	0.05	0.83	0.09	0.03	0.01	0.00	0.00	0.57	0.01	0.50	0.08	0.82	0.13	0.55	0.07				0.07	0.01	0.21	0.08	0.33880
ROUTE SC	0.58	0.26	0.45	0.06	1.00	0.05	0.83	0.09	0.03	0.01	0.00	0.00	0.46	0.01	0.50	0.08	0.82	0.13	0.58	0.08				0.07	0.01	0.21	0.08	0.33997
ROUTE QK	0.24	0.11	0.25	0.03	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.55	0.07				0.07	0.01	0.21	0.08	0.34922
ROUTE AQK	0.32	0.14	0.36	0.05	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.57	0.08				0.07	0.01	0.21	0.08	0.35146
ROUTE AK	0.20	0.09	0.25	0.03	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.57	0.08				0.07	0.01	0.21	0.08	0.35731
ROUTE AMC	0.66	0.29	0.51	0.07	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.59	0.01	0.50	0.08	0.82	0.13	0.57	0.08				0.07	0.01	0.21	0.08	0.37820
ROUTE ANE	0.06	0.03	0.10	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.23	0.03				0.11	0.01	0.35	0.13	0.38188
ROUTE UI	0.34	0.15	0.40	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.37	0.05				0.22	0.02	0.74	0.28	0.38487
ROUTE UG	0.08	0.03	0.12	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.23	0.03				0.14	0.01	0.38	0.15	0.40375
ROUTE ANC	0.52	0.23	0.40	0.05	1.00	0.05	0.78	0.09	0.03	0.01	0.00	0.00	0.54	0.01	0.50	0.08	0.82	0.13	0.48	0.07				0.14	0.01	0.38	0.15	0.41726
ROUTE UE	0.55	0.24	0.50	0.07	1.00	0.05	0.83	0.09	0.03	0.01	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.61	0.09				0.08	0.01	0.15	0.06	0.41986
ROUTE ANA	0.44	0.20	0.31	0.04	1.00	0.05	0.83	0.09	0.03	0.01	0.00	0.00	0.51	0.01	0.50	0.08	0.82	0.13	0.54	0.08				0.10	0.01	0.18	0.07	0.42731
ROUTE UA	0.56	0.25	0.52	0.07	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.49	0.01	0.50	0.08	0.82	0.13	0.62	0.09				0.11	0.01	0.18	0.07	0.43101
ROUTE UC	0.56	0.25	0.52	0.07	1.00	0.05	0.83	0.09	0.03	0.01	0.00	0.00	0.46	0.01	0.50	0.08	0.82	0.13	0.62	0.09				0.11	0.01	0.18	0.07	0.44208
ROUTE AOW	0.32	0.14	0.24	0.03	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.08	0.00	0.00	0.00	0.82	0.13	0.26	0.04				0.80	0.07	0.59	0.22	0.44983
ROUTE TT	0.10	0.05	0.22	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.29	0.04				0.24	0.02	0.50	0.19	0.45400
ROUTE AMT	0.68	0.30	0.22	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.29	0.04				0.24	0.02	0.50	0.19	0.45295
ROUTE RQ	0.10	0.05	0.22	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.29	0.04				0.24	0.02	0.50	0.19	0.45774
ROUTE TR	0.18	0.08	0.03	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.29	0.04				0.24	0.02	0.50	0.19	0.45935
ROUTE WE	0.26	0.12	0.38	0.05	0.00	0.00	0.22	0.03	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.38	0.05				0.24	0.02	0.50	0.19	0.46220
ROUTE AMR	0.18	0.08	0.15	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.29	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE QZ	0.23	0.10	0.35	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.37	0.05				0.24	0.02	0.50	0.19	0.46220
ROUTE AMH	0.14	0.06	0.36	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.37	0.05				0.24	0.02	0.50	0.19	0.46220
ROUTE TN	0.14	0.06	0.36	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.37	0.05				0.24	0.02	0.50	0.19	0.46220
ROUTE AMQ	0.16	0.07	0.12	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.26	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RK	0.12	0.05	0.33	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.35	0.05				0.24	0.02	0.50	0.19	0.46220
ROUTE AQW	0.10	0.04	0.10	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ALV	0.06	0.03	0.27	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RG	0.23	0.10	0.29	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TH	0.21	0.09	0.23	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AMW	0.19	0.09	0.23	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AQU	0.06	0.03	0.24	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RE	0.21	0.09	0.25	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TF	0.18	0.08	0.22	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TS	0.12	0.05	0.24	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AQT	0.08	0.03	0.18	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TQ	0.06	0.03	0.21	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ALS	0.10	0.05	0.02	0.00	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ZL	0.36	0.15	0.23	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TB	0.25	0.11	0.36	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RA	0.27	0.12	0.40	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ALL	0.68	0.30	0.01	0.00	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ZK	0.03	0.01	0.20	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AQR	0.13	0.06	0.17	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RP	0.09	0.04	0.19	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE SZ	0.22	0.10	0.33	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE QY	0.25	0.11	0.37	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TM	0.16	0.07	0.37	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ALK	0.65	0.29	0.54	0.07	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AQQ	0.10	0.05	0.14	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ALQ	0.13	0.06	0.17	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ALP	0.09	0.04	0.34	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ZJ	0.71	0.32	0.68	0.09	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ALI	0.71	0.32	0.68	0.09	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ZH	0.03	0.01	0.31	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE QV	0.70	0.31	0.67	0.09	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AMV	0.13	0.06	0.30	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RJ	0.13	0.06	0.30	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ZC	0.17	0.07	0.28	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ZB	0.17	0.07	0.38	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AMP	0.16	0.07	0.11	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE YW	0.10	0.05	0.36	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AMI	0.70	0.31	0.67	0.09	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE YV	0.69	0.30	0.33	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE QU	0.71	0.32	0.69	0.09	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TJ	0.12	0.05	0.32	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RI	0.14	0.06	0.32	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ST	0.66	0.29	0.62	0.08	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.92	0.02	1.00	0.16	0.82	0.13	0.77	0.11				0.07	0.01	0.29	0.11	0.46220
ROUTE QS	0.69	0.30	0.66	0.09	1.00	0.05	0.89	0.10	0.03	0.01	0.00	0.00	0.89	0.02	1.00	0.16	0.82	0.13	0.77	0.11				0.07	0.01	0.29	0.11	0.46220
ROUTE AQV	0.00	0.00	0.09	0.01	1.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AMM	0.19	0.09	0.06	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE YS	0.14	0.06	0.07	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE SP	0.15	0.07	0.03	0.00	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE YO	0.18	0.08	0.03	0.00	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE RC	0.21	0.09	0.06	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE ZJ	0.03	0.01	0.19	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE TI	0.13	0.06	0.30	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE SU	0.73	0.32	0.77	0.10	0.00	0.00	0.89	0.10	0.03	0.01	0.00	0.00	0.89	0.02	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AQP	0.10	0.05	0.22	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE SS	0.00	0.00	0.09	0.01	1.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.00	0.16	0.82	0.13	0.32	0.04				0.24	0.02	0.50	0.19	0.46220
ROUTE AQO	0.05	0.02	0.09	0.01	1.00

Table 4.2
Metrics for East-Central Routes
(Engineering Considerations Emphasis Matrix)

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Table 4.2
Metrics for East-Central Routes
(Natural Environment Emphasis Matrix)

Built		Residences with ROW		Proximity to Residences (within 300')		Wetland Areas (Acres)		Floodplain Areas (Acres)		Proposed Developments		Proximity Commercial Buildings(within 300')		Proximity Industrial Buildings(within 300')		School, Church, Cemetery, and Park Parcels Crossed		NRHP Listed Structures and Districts (3000' from edge of R/W)		TOTAL		WEIGHTED TOTAL		Natural		Natural Forests (Acres)		Total Project Costs		Stream/River Crossings		SUM OF WEIGHTED TOTALS
	14%	44.3%		13.1%		40.3%		12.4%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		3.0%		72%		9.3%		7.4%		38.0%		
	SORT																														
ROUTE YB	0.04	0.02	0.14	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.11	0.21	0.03	0.07		0.02	0.33	0.05	0.22879
ROUTE QE	0.58	0.26	0.54	0.07	0.00	0.00	0.83	0.08	0.03	0.49	0.01	0.50	0.08	0.82	0.13	0.58	0.18	0.59	0.05	0.82	0.13	0.58	0.07	0.04	0.00	0.04	0.27	0.04	0.24124
ROUTE QA	0.48	0.21	0.38	0.05	0.00	0.00	0.83	0.08	0.03	0.51	0.01	0.50	0.08	0.82	0.13	0.91	0.19	0.75	0.06	0.82	0.13	0.51	0.07	0.04	0.00	0.04	0.30	0.04	0.25996
ROUTE SE	0.57	0.25	0.53	0.07	1.00	0.05	0.83	0.03	0.49	0.01	0.50	0.08	0.82	0.13	0.19	0.91	0.18	0.60	0.05	0.75	0.06	0.62	0.09	0.04	0.00	0.04	0.30	0.04	0.26377
ROUTE QJ	0.10	0.05	0.14	0.02	1.00	0.05	0.06	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.42	0.03	0.19	0.03	0.08	0.01	0.04	0.28	0.04	0.26549
ROUTE QAL	0.01	0.01	0.04	0.01	1.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.97	0.08	0.22	0.02	0.06	0.01	0.02	0.00	0.04	0.34	0.05	0.27532
ROUTE QE	0.25	0.11	0.24	0.03	1.00	0.05	0.83	0.03	0.49	0.01	0.50	0.08	0.82	0.13	0.97	0.17	0.75	0.04	0.05	0.55	0.08	0.25	0.04	0.08	0.01	0.04	0.30	0.04	0.27842
ROUTE SA	0.47	0.20	0.41	0.05	1.00	0.05	0.83	0.03	0.49	0.01	0.50	0.08	0.82	0.13	0.97	0.17	0.75	0.04	0.05	0.55	0.08	0.25	0.04	0.08	0.01	0.04	0.30	0.04	0.28798
ROUTE SI	0.09	0.04	0.13	0.02	1.00	0.05	0.06	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.87	0.17	0.90	0.07	0.58	0.04	0.00	0.24	0.03	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE UC	0.56	0.23	0.51	0.07	1.00	0.05	0.83	0.03	0.49	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE UA	0.44	0.20	0.31	0.04	1.00	0.05	0.64	0.08	0.02	0.16	0.02	0.16	0.02	0.24	0.16	0.88	0.17	0.85	0.07	0.82	0.13	0.54	0.08	0.10	0.01	0.04	0.31	0.04	0.28443
ROUTE ALE	0.45	0.20	0.25	0.03	1.00	0.05	0.64	0.08	0.02	0.16	0.02	0.16	0.02	0.24	0.16	0.88	0.17	0.85	0.07	0.82	0.13	0.54	0.08	0.11	0.01	0.04	0.31	0.04	0.28443
ROUTE ALA	0.08	0.03	0.04	0.01	0.00	0.00	0.83	0.03	0.57	0.01	0.50	0.08	0.82	0.13	0.97	0.17	0.75	0.04	0.05	0.55	0.08	0.25	0.04	0.08	0.01	0.04	0.30	0.04	0.28798
ROUTE YA	0.26	0.10	0.16	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE ZF	0.17	0.07	0.35	0.05	1.00	0.05	0.22	0.01	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZC	0.26	0.10	0.35	0.05	1.00	0.05	0.22	0.01	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZB	0.17	0.07	0.27	0.03	1.00	0.05	0.22	0.01	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ANC	0.52	0.23	0.40	0.05	1.00	0.05	0.78	0.03	0.57	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AMA	0.44	0.20	0.24	0.03	1.00	0.05	0.83	0.03	0.57	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZE	0.13	0.06	0.24	0.03	1.00	0.05	0.11	0.00	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZA	0.74	0.32	0.53	0.07	1.00	0.05	0.89	0.03	0.57	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZH	0.06	0.03	0.08	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE ZD	0.18	0.07	0.27	0.03	1.00	0.05	0.22	0.01	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZG	0.21	0.08	0.27	0.04	1.00	0.05	0.22	0.01	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZI	0.05	0.02	0.23	0.03	1.00	0.05	0.17	0.01	0.41	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZJ	0.11	0.05	0.18	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE ZK	0.03	0.01	0.20	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE ANE	0.04	0.02	0.37	0.05	1.00	0.05	0.89	0.03	0.59	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE PY	0.49	0.22	0.37	0.05	1.00	0.05	0.89	0.03	0.49	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AMC	0.66	0.29	0.51	0.07	1.00	0.05	0.89	0.03	0.59	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SP	0.73	0.32	0.76	0.10	1.00	0.05	1.00	0.04	0.86	0.02	0.75	0.12	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE RB	0.26	0.12	0.38	0.05	1.00	0.05	0.22	0.01	0.41	0.01	0.25	0.04	0.73	0.11	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SC	0.58	0.26	0.45	0.06	1.00	0.05	0.83	0.03	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SV	0.69	0.30	0.65	0.09	1.00	0.05	1.00	0.04	0.86	0.02	0.75	0.12	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SN	0.70	0.31	0.73	0.10	1.00	0.05	0.89	0.03	0.95	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE RH	0.22	0.10	0.27	0.03	1.00	0.05	0.22	0.01	0.38	0.01	0.25	0.04	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE QZ	0.23	0.10	0.35	0.05	1.00	0.05	0.22	0.01	0.49	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ST	0.66	0.29	0.62	0.08	1.00	0.05	0.89	0.03	0.92	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE RF	0.19	0.09	0.24	0.03	0.00	0.00	0.11	0.00	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AQO	0.17	0.07	0.28	0.04	1.00	0.05	0.17	0.01	0.51	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE QF	0.61	0.27	0.68	0.09	1.00	0.05	0.83	0.03	0.49	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AQR	0.13	0.06	0.17	0.02	1.00	0.05	0.17	0.01	0.49	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AQN	0.10	0.05	0.14	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE UP	0.70	0.31	0.74	0.10	1.00	0.05	1.00	0.04	0.86	0.02	0.75	0.12	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AQQ	0.10	0.05	0.14	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE UC	0.56	0.25	0.52	0.07	1.00	0.05	0.83	0.03	0.46	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE RW	0.16	0.07	0.34	0.04	1.00	0.05	0.17	0.01	0.38	0.01	0.25	0.04	0.73	0.11	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE UV	0.46	0.20	0.40	0.05	1.00	0.05	0.78	0.03	0.57	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE UW	0.25	0.11	0.29	0.04	1.00	0.05	0.89	0.03	0.92	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE UN	0.68	0.30	0.68	0.09	1.00	0.05	0.89	0.03	0.95	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AUJ	0.72	0.32	0.68	0.09	1.00	0.05	0.89	0.03	0.92	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE RT	0.12	0.05	0.31	0.04	1.00	0.05	0.22	0.01	0.41	0.01	0.25	0.04	0.73	0.11	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE TB	0.13	0.06	0.36	0.05	1.00	0.05	0.89	0.03	0.92	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE UT	0.64	0.28	0.60	0.08	1.00	0.05	0.89	0.03	0.92	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZA	0.17	0.07	0.33	0.05	1.00	0.05	0.89	0.03	0.92	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ALL	0.68	0.30	0.57	0.07	0.00	0.00	0.94	0.03	0.89	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SG	0.10	0.05	0.14	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE TH	0.21	0.09	0.25	0.03	1.00	0.05	0.22	0.01	0.38	0.01	0.25	0.04	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE QR	0.68	0.30	0.63	0.08	1.00	0.05	0.89	0.03	0.62	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE VB	0.22	0.10	0.33	0.04	1.00	0.05	0.22	0.01	0.41	0.01	0.25	0.04	0.73	0.11	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE RR	0.09	0.04	0.20	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE SZ	0.22	0.10	0.33	0.04	1.00	0.05	0.22	0.01	0.38	0.01	0.25	0.04	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ZZ	0.14	0.06	0.38	0.05	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE VH	0.08	0.03	0.22	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE VG	0.18	0.08	0.29	0.04	1.00	0.05	0.89	0.03	0.58	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE VI	0.19	0.09	0.30	0.04	1.00	0.05	0.89	0.03	0.58	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AMI	0.70	0.31	0.67	0.09	1.00	0.05	0.94	0.03	0.92	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE TT	0.12	0.05	0.18	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE TL	0.12	0.05	0.30	0.04	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE TA	0.04	0.02	0.18	0.02	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE ALO	0.03	0.01	0.10	0.01	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE ZJ	0.16	0.07	0.19	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE VF	0.29	0.13	0.19	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE AML	0.57	0.26	0.56	0.07	1.00	0.05	0.83	0.03	0.94	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE AMH	0.68	0.30	0.63	0.08	1.00	0.05	0.83	0.03	1.00	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE TR	0.19	0.09	0.17	0.02	0.00	0.00	0.17	0.01	0.43	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ALR	0.19	0.09	0.17	0.02	0.00	0.00	0.17	0.01	0.43	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ALN	0.21	0.09	0.25	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE AMK	0.64	0.28	0.62	0.08	1.00	0.05	0.83	0.03	0.97	0.02	1.00	0.16	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SB	0.40	0.17	0.46	0.06	1.00	0.05	0.78	0.03	0.89	0.03	0.51	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SL	0.17	0.07	0.14	0.02	0.00	0.00	0.89	0.03	0.51	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE ALQ	0.58	0.26	0.59	0.08	1.00	0.05	0.78	0.03	0.54	0.01	0.50	0.08	0.82	0.13	0.99	0.19	0.69	0.05	0.65	0.05	0.45	0.06	0.08	0.01	0.01	0.04	0.30	0.04	0.28893
ROUTE SJ	0.12	0.05	0.27	0.03	1.00	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.17	0.90	0.07	0.47	0.04	0.28	0.04	0.08	0.01	0.04	0.30	0.04	0.28842
ROUTE QX	0.23	0.10	0.33	0.04	1.00	0.05	0.17	0.01	0.38	0.01	0.25	0.04	0.73	0.11	0.99	0.19	0.69	0.05	0.65

Table 4.2
Metrics for East-Central Routes
(Natural Environment Emphasis Matrix)

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Table 4.2
Metrics for East-Central Routes
(Simple Average Matrix)

Built	Residences with ROW	Proximity to Residences (within 300')	Wetland Areas (Acres)	Floodplain Areas (Acres)	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	Engineering	Percent of Route Rebuilt With Existing T/L*	Percent of Route of Co-located with Existing Utilities*	School, Church, Cemetery, and Park Parcels Crossed	NRHP Listed Structures and Districts (3000' from edge of R/W)	TOTAL	Natural	WEIGHTED TOTAL	Natural Forests (Acres)	Stream/River Crossings	SUM OF WEIGHTED TOTALS
33%	44.3%	13.1%	40.3%	12.4%	5.4%	3.6%	1.8%	33%	65.6%	19.2%	16.3%	15.5%	100.0%	33%	100.0%	9.3%	38.0%	SORT
ROUTE AQL	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.24	0.16	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.11
ROUTE ALE	0.08	0.03	0.04	0.01	0.02	0.00	0.00	0.00	0.06	0.04	0.00	0.00	0.18	0.03	0.07	0.02	0.06	0.09
ROUTE QI	0.10	0.05	0.14	0.02	0.06	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.82	0.13	0.19	0.06	0.08	0.09
ROUTE YB	0.04	0.02	0.14	0.02	0.06	0.08	0.00	0.00	0.13	0.58	0.11	0.00	0.73	0.11	0.21	0.07	0.01	0.11
ROUTE AME	0.06	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.18	0.03	0.04	0.02	0.04	0.02
ROUTE SI	0.09	0.04	0.13	0.02	0.08	0.13	0.00	0.00	0.03	0.02	0.01	0.00	0.87	0.17	0.90	0.07	0.58	0.04
ROUTE QG	0.12	0.05	0.16	0.02	0.10	0.04	0.00	0.00	0.05	0.00	0.00	0.00	0.83	0.16	0.95	0.07	0.49	0.04
ROUTE YA	0.05	0.02	0.16	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.14	0.97	0.08	0.29	0.02
ROUTE AME	0.04	0.02	0.07	0.00	0.02	0.00	0.00	0.00	0.08	0.03	0.00	0.00	0.18	0.03	0.04	0.02	0.10	0.03
ROUTE SG	0.06	0.03	0.10	0.01	0.04	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.13	0.25	0.07	0.47	0.03
ROUTE SE	0.35	0.13	0.48	0.06	0.21	0.08	0.00	0.00	0.24	0.16	0.00	0.00	0.73	0.11	0.90	0.07	0.11	0.01
ROUTE ALA	0.45	0.20	0.25	0.03	0.00	0.00	0.00	0.00	0.06	0.04	0.00	0.00	0.81	0.13	0.90	0.07	0.35	0.03
ROUTE ALC	0.56	0.25	0.44	0.06	0.00	0.00	0.00	0.00	0.08	0.03	0.00	0.00	0.82	0.13	0.90	0.07	0.54	0.04
ROUTE QE	0.58	0.26	0.54	0.07	0.00	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.82	0.13	0.90	0.07	0.54	0.04
ROUTE AMA	0.44	0.20	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE UG	0.08	0.03	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.90	0.07	0.54	0.04
ROUTE AQK	0.30	0.13	0.29	0.04	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE SA	0.47	0.21	0.33	0.04	0.00	0.00	0.00	0.00	0.08	0.03	0.00	0.00	0.82	0.13	0.90	0.07	0.54	0.04
ROUTE SE	0.57	0.25	0.53	0.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.73	0.11	0.90	0.07	0.54	0.04
ROUTE XZ	0.32	0.14	0.38	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.90	0.07	0.54	0.04
ROUTE PY	0.49	0.22	0.37	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.90	0.07	0.54	0.04
ROUTE QC	0.60	0.26	0.56	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.90	0.07	0.54	0.04
ROUTE ALX	0.07	0.03	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ANA	0.42	0.18	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ANC	0.52	0.23	0.40	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALW	0.06	0.03	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALU	0.13	0.06	0.20	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQW	0.00	0.00	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE UA	0.44	0.20	0.31	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RT	0.12	0.05	0.23	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALR	0.19	0.09	0.17	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQU	0.06	0.03	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALT	0.10	0.05	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE UE	0.55	0.24	0.50	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMC	0.66	0.29	0.51	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQR	0.13	0.06	0.17	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RY	0.48	0.21	0.35	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZL	0.05	0.02	0.23	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQT	0.04	0.02	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RN	0.09	0.04	0.20	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQ	0.20	0.09	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RN_Q	0.16	0.07	0.34	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALO	0.23	0.10	0.28	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE SC	0.58	0.26	0.55	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMX	0.08	0.03	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQQ	0.03	0.01	0.20	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZK	0.22	0.10	0.27	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQO	0.17	0.07	0.28	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE XY	0.34	0.15	0.40	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZI	0.09	0.04	0.34	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RL	0.13	0.06	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALN	0.21	0.09	0.25	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALV	0.06	0.03	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMW	0.05	0.02	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZH	0.12	0.05	0.27	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQN	0.14	0.06	0.25	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RF	0.19	0.09	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AOW	0.32	0.14	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZH	0.06	0.03	0.31	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RB	0.18	0.08	0.38	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMR	0.12	0.05	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TT	0.10	0.05	0.19	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQP	0.00	0.00	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQJ	0.04	0.02	0.18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALM	0.21	0.09	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMN	0.19	0.09	0.23	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TL	0.12	0.05	0.30	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZJ	0.03	0.01	0.19	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TY	0.45	0.20	0.26	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RS	0.13	0.06	0.25	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMV	0.05	0.02	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE UC	0.56	0.25	0.52	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TF	0.18	0.08	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RD	0.19	0.09	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALF	0.10	0.05	0.18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMO	0.22	0.10	0.26	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQS	0.04	0.02	0.20	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TN	0.14	0.06	0.33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZB	0.17	0.07	0.35	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TH	0.21	0.09	0.25	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQP	0.10	0.05	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQJ	0.02	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMQ	0.16	0.07	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TP	0.08	0.03	0.17	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RK	0.14	0.06	0.33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AQC	0.16	0.07	0.17	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE VT	0.07	0.03	0.29	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RE	0.21	0.09	0.27	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ZA	0.17	0.07	0.33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AMM	0.08	0.03	0.23	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TJ	0.12	0.05	0.29	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AOA	0.13	0.06	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE YS	0.19	0.09	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE VR	0.09	0.04	0.16	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TD	0.18	0.08	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE YQ	0.04	0.02	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE VW	0.12	0.05	0.30	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE QT	0.25	0.11	0.37	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE WG	0.36	0.16	0.36	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TQ	0.09	0.04	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE RO	0.10	0.05	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TM	0.16	0.07	0.35	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE VH	0.18	0.08	0.27	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE VL	0.09	0.04	0.27	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE SP	0.18	0.08	0.27	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE AOK	0.23	0.10	0.32	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TG	0.22	0.10	0.27	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE VF	0.16	0.07	0.19	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE YX	0.04	0.02	0.21	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE TK	0.13	0.06	0.32	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALG	0.06	0.03	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE VB	0.24	0.10	0.32	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ANF	0.14	0.06	0.32	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ANY	0.13	0.06	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02
ROUTE ALK	0.65	0.29	0.54	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.08	0.02	0.06	0.02

Table 4.2
Metrics for East-Central Routes
(Simple Average Matrix)

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Table 4.3
Metrics for West-Central Routes
(Statistics and Normalized Statistics)

Built	Residences within ROW	*Normalized*	Proximity to Residences (within 300')	*Normalized*	Proposed Developments	*Normalized*	Proximity Commercial Buildings(within 300')	*Normalized*	Proximity Industrial Buildings(within 300')	*Normalized*	School, Church, Cemetery, and Park Parcels Crossed	*Normalized*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Normalized*	**Natural**	Natural Forests (Acres)	*Normalized*	Stream/River Crossings	*Normalized*	Wetland Areas (Acres)	*Normalized*	Floodplain Areas (Acres)	*Normalized*	**Engineering**	Length (Miles)	*Normalized*	Percent of Route Rebuilt with Existing T/L*	*Normalized*	*Inverted*	Percent of Route of Co-located with Existing Utilities*	*Normalized*	*Inverted*	Percent of Route Co-located with Roads*	*Normalized*	*Inverted*	Total Project Costs	*Normalized*
ROUTE KW	3	*0.08*	44	*0.17*	1	*0.00*	1	*0.05*	3	*0.00*	0	*0.00*	9	*0.64*		321.64	*0.33*	28	*0.03*	14.74	*0.33*	153.22	*0.85*		42.2	*0.61*	0.3	*0.99*	*0.01*	0.335	*0.22*	*0.78*	0.014	*0.00*	*1.00*	62443199	*0.89*
ROUTE KX	5	*0.13*	81	*0.38*	1	*0.00*	1	*0.05*	3	*0.00*	0	*0.00*	11	*0.82*		331.39	*0.39*	33	*0.21*	14.74	*0.33*	155.4	*0.89*		42.7	*0.69*	0.23	*0.62*	*0.38*	0.332	*0.17*	*0.83*	0.014	*0.00*	*1.00*	62177675	*0.85*
ROUTE KY	2	*0.05*	39	*0.15*	1	*0.00*	1	*0.05*	4	*0.05*	0	*0.00*	9	*0.64*		317.36	*0.31*	27	*0.00*	12.62	*0.08*	147.47	*0.75*		42	*0.57*	0.31	*1.00*	*0.00*	0.321	*0.04*	*0.96*	0.03	*0.11*	*0.89*	61124054	*0.69*
ROUTE KZ	4	*0.10*	76	*0.35*	1	*0.00*	1	*0.05*	4	*0.05*	0	*0.00*	11	*0.82*		327.11	*0.36*	32	*0.17*	12.62	*0.08*	149.65	*0.79*		42.4	*0.65*	0.23	*0.63*	*0.37*	0.318	*0.00*	*1.00*	0.03	*0.11*	*0.89*	60870262	*0.65*
ROUTE LA	3	*0.08*	43	*0.17*	1	*0.00*	1	*0.05*	3	*0.00*	0	*0.00*	11	*0.82*		348.58	*0.48*	31	*0.14*	16.96	*0.59*	157.34	*0.92*		40.2	*0.25*	0.18	*0.40*	*0.60*	0.352	*0.42*	*0.58*	0.015	*0.01*	*0.99*	58169056	*0.25*
ROUTE LB	5	*0.13*	80	*0.37*	1	*0.00*	1	*0.05*	3	*0.00*	0	*0.00*	13	*1.00*		358.33	*0.54*	36	*0.31*	16.96	*0.59*	159.52	*0.96*		40.6	*0.33*	0.1	*0.02*	*0.98*	0.348	*0.37*	*0.63*	0.015	*0.01*	*0.99*	57896843	*0.21*
ROUTE LC	2	*0.05*	38	*0.14*	1	*0.00*	1	*0.05*	4	*0.05*	0	*0.00*	11	*0.82*		344.3	*0.46*	30	*0.10*	14.84	*0.34*	151.59	*0.82*		39.9	*0.20*	0.18	*0.40*	*0.60*	0.338	*0.24*	*0.76*	0.032	*0.12*	*0.88*	56885428	*0.05*
ROUTE LD	4	*0.10*	75	*0.34*	1	*0.00*	1	*0.05*	4	*0.05*	0	*0.00*	13	*1.00*		354.05	*0.51*	35	*0.28*	14.84	*0.34*	153.77	*0.86*		40.4	*0.29*	0.1	*0.02*	*0.98*	0.334	*0.19*	*0.81*	0.031	*0.12*	*0.88*	56618722	*0.01*
ROUTE NU	38	*0.95*	158	*0.80*	1	*0.00*	21	*1.00*	21	*0.86*	0	*0.00*	10	*0.73*		267.6	*0.02*	39	*0.41*	20.5	*1.00*	159.59	*0.96*		39	*0.04*	0.18	*0.42*	*0.58*	0.362	*0.55*	*0.45*	0.146	*0.88*	*0.12*	63174947	*1.00*
ROUTE NV	40	*1.00*	195	*1.00*	1	*0.00*	21	*1.00*	21	*0.86*	0	*0.00*	12	*0.91*		277.35	*0.08*	44	*0.59*	20.5	*1.00*	161.77	*1.00*		39.5	*0.13*	0.1	*0.03*	*0.97*	0.358	*0.49*	*0.51*	0.144	*0.87*	*0.13*	62726091	*0.93*
ROUTE NW	37	*0.93*	153	*0.77*	1	*0.00*	21	*1.00*	22	*0.90*	0	*0.00*	10	*0.73*		263.33	*0.00*	38	*0.38*	18.37	*0.75*	153.84	*0.86*		38.8	*0.00*	0.18	*0.43*	*0.57*	0.347	*0.36*	*0.64*	0.164	*1.00*	*0.00*	61782792	*0.79*
ROUTE NX	39	*0.98*	190	*0.97*	1	*0.00*	21	*1.00*	22	*0.90*	0	*0.00*	12	*0.91*		273.07	*0.06*	43	*0.55*	18.37	*0.75*	156.02	*0.90*		39.3	*0.08*	0.1	*0.03*	*0.97*	0.343	*0.31*	*0.69*	0.162	*0.99*	*0.01*	61357262	*0.73*
ROUTE AJU	0	*0.00*	12	*0.00*	1	*0.00*	0	*0.00*	6	*0.14*	0	*0.00*	4	*0.18*		429.82	*0.94*	43	*0.55*	14.15	*0.26*	108.73	*0.07*		41.9	*0.55*	0.17	*0.36*	*0.64*	0.388	*0.87*	*0.13*	0.014	*0.01*	*0.99*	56742836	*0.03*
ROUTE AJV	2	*0.05*	49	*0.20*	1	*0.00*	0	*0.00*	6	*0.14*	0	*0.00*	6	*0.36*		439.57	*1.00*	48	*0.72*	14.15	*0.26*	110.91	*0.11*		42.3	*0.64*	0.09	*0.00*	*1.00*	0.384	*0.81*	*0.19*	0.014	*0.00*	*1.00*	56533166	*0.00*
ROUTE AJW	0	*0.00*	13	*0.01*	1	*0.00*	0	*0.00*	6	*0.14*	0	*0.00*	2	*0.00*		402.88	*0.79*	40	*0.45*	11.93	*0.00*	104.61	*0.00*		43.9	*0.92*	0.29	*0.94*	*0.06*	0.37	*0.65*	*0.35*	0.014	*0.00*	*1.00*	60973719	*0.67*
ROUTE AJX	2	*0.05*	50	*0.21*	1	*0.00*	0	*0.00*	6	*0.14*	0	*0.00*	4	*0.18*		412.63	*0.85*	45	*0.62*	11.93	*0.00*	106.79	*0.04*		44.4	*1.00*	0.22	*0.58*	*0.42*	0.366	*0.60*	*0.40*	0.014	*0.00*	*1.00*	60786966	*0.64*
ROUTE AJY	35	*0.88*	127	*0.63*	1	*0.00*	20	*0.95*	24	*1.00*	0	*0.00*	3	*0.09*		348.85	*0.49*	51	*0.83*	17.69	*0.67*	110.98	*0.11*		40.7	*0.35*	0.18	*0.39*	*0.61*	0.399	*1.00*	*0.00*	0.14	*0.84*	*0.16*	61884071	*0.81*
ROUTE AJZ	37	*0.93*	164	*0.83*	1	*0.00*	20	*0.95*	24	*1.00*	0	*0.00*	5	*0.27*		358.6	*0.54*	56	*1.00*	17.69	*0.67*	113.16	*0.15*		41.2	*0.43*	0.1	*0.01*	*0.99*	0.394	*0.94*	*0.06*	0.138	*0.83*	*0.17*	61484297	*0.75*

Table 4.3
Metrics for West-Central Routes
(Built Environment Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	**SUM OF WEIGHTED TOTALS**
72%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		**14%**	9.3%		38.0%		40.3%		12.4%		100.0%		**14%**	65.6%		19.2%		7.8%		7.4%		100.0%		**SORT**
ROUTE AJW	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.79	0.07	0.45	0.17	0.00	0.00	0.00	0.00	0.24	0.03		0.06	0.04	0.35	0.07	1.00	0.08	0.67	0.05	0.24	0.03	0.06963
ROUTE AJU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.03	0.02		0.94	0.09	0.55	0.21	0.26	0.10	0.07	0.01	0.41	0.06		0.64	0.42	0.13	0.03	0.99	0.08	0.03	0.00	0.52	0.07	0.15287
ROUTE KY	0.05	0.02	0.15	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.64	0.10	0.14	0.10		0.31	0.03	0.00	0.00	0.08	0.03	0.75	0.09	0.15	0.02		0.00	0.00	0.96	0.18	0.89	0.07	0.69	0.05	0.30	0.04	0.16684
ROUTE AJX	0.05	0.02	0.21	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.08	0.06		0.85	0.08	0.62	0.24	0.00	0.00	0.04	0.00	0.32	0.04		0.42	0.27	0.40	0.08	1.00	0.08	0.64	0.05	0.48	0.07	0.16895
ROUTE KW	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.64	0.10	0.16	0.11		0.33	0.03	0.03	0.01	0.33	0.13	0.85	0.11	0.28	0.04		0.01	0.01	0.78	0.15	1.00	0.08	0.89	0.07	0.30	0.04	0.19397
ROUTE LC	0.05	0.02	0.14	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.17	0.12		0.46	0.04	0.10	0.04	0.34	0.14	0.82	0.10	0.32	0.04		0.60	0.39	0.76	0.15	0.88	0.07	0.05	0.00	0.61	0.09	0.25279
ROUTE AJV	0.05	0.02	0.20	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.36	0.06	0.11	0.08		1.00	0.09	0.72	0.28	0.26	0.10	0.11	0.01	0.49	0.07		1.00	0.66	0.19	0.04	1.00	0.08	0.00	0.00	0.77	0.11	0.25325
ROUTE KZ	0.10	0.04	0.35	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.22	0.16		0.36	0.03	0.17	0.07	0.08	0.03	0.79	0.10	0.23	0.03		0.37	0.24	1.00	0.19	0.89	0.07	0.65	0.05	0.55	0.08	0.26749
ROUTE LA	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.18	0.13		0.48	0.04	0.14	0.05	0.59	0.24	0.92	0.11	0.45	0.06		0.60	0.40	0.58	0.11	0.99	0.08	0.25	0.02	0.60	0.08	0.27945
ROUTE KX	0.13	0.06	0.38	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.23	0.17		0.39	0.04	0.21	0.08	0.33	0.13	0.89	0.11	0.36	0.05		0.38	0.25	0.83	0.16	1.00	0.08	0.85	0.06	0.55	0.08	0.29445
ROUTE LD	0.10	0.04	0.34	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	1.00	0.16	0.25	0.18		0.51	0.05	0.28	0.10	0.34	0.14	0.86	0.11	0.40	0.06		0.98	0.64	0.81	0.15	0.88	0.07	0.01	0.00	0.87	0.12	0.35461
ROUTE LB	0.13	0.06	0.37	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.26	0.19		0.54	0.05	0.31	0.12	0.59	0.24	0.96	0.12	0.52	0.07		0.98	0.64	0.63	0.12	0.99	0.08	0.21	0.02	0.86	0.12	0.38108
ROUTE AJY	0.88	0.39	0.63	0.08	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.09	0.01	0.54	0.39		0.49	0.05	0.83	0.31	0.67	0.27	0.11	0.01	0.64	0.09		0.61	0.40	0.00	0.00	0.16	0.01	0.81	0.06	0.47	0.07	0.54285
ROUTE NW	0.93	0.41	0.77	0.10	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.73	0.11	0.68	0.49		0.00	0.00	0.38	0.14	0.75	0.30	0.86	0.11	0.55	0.08		0.57	0.38	0.64	0.12	0.00	0.00	0.79	0.06	0.56	0.08	0.64201
ROUTE AJZ	0.93	0.41	0.83	0.11	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.27	0.04	0.61	0.44		0.54	0.05	1.00	0.38	0.67	0.27	0.15	0.02	0.72	0.10		0.99	0.65	0.06	0.01	0.17	0.01	0.75	0.06	0.73	0.10	0.64405
ROUTE NU	0.95	0.42	0.80	0.10	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.73	0.11	0.69	0.50		0.02	0.00	0.41	0.16	1.00	0.40	0.96	0.12	0.68	0.10		0.58	0.38	0.45	0.09	0.12	0.01	1.00	0.07	0.55	0.08	0.66883
ROUTE NX	0.98	0.43	0.97	0.13	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.91	0.14	0.75	0.54		0.06	0.01	0.55	0.21	0.75	0.30	0.90	0.11	0.63	0.09		0.97	0.63	0.69	0.13	0.01	0.00	0.73	0.05	0.82	0.11	0.74480
ROUTE NV	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.91	0.14	0.77	0.55		0.08	0.01	0.59	0.22	1.00	0.40	1.00	0.12	0.76	0.11		0.97	0.64	0.51	0.10	0.13	0.01	0.93	0.07	0.81	0.11	0.77140

Table 4.3
Metrics for West-Central Routes
(Engineering Considerations Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	**SUM OF WEIGHTED TOTALS**
14%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		**14%**	9.3%		38.0%		40.3%		12.4%		100.0%		**72%**	65.6%		19.2%		7.8%		7.4%		100.0%		**SORT**
ROUTE AJW	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.79	0.07	0.45	0.17	0.00	0.00	0.00	0.00	0.24	0.03		0.06	0.04	0.35	0.07	1.00	0.08	0.67	0.05	0.24	0.17	0.20485
ROUTE KY	0.05	0.02	0.15	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.64	0.10	0.14	0.02		0.31	0.03	0.00	0.00	0.08	0.03	0.75	0.09	0.15	0.02		0.00	0.00	0.96	0.18	0.89	0.07	0.69	0.05	0.30	0.22	0.26048
ROUTE KW	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.64	0.10	0.16	0.02		0.33	0.03	0.03	0.01	0.33	0.13	0.85	0.11	0.28	0.04		0.01	0.01	0.78	0.15	1.00	0.08	0.89	0.07	0.30	0.22	0.27680
ROUTE AJX	0.05	0.02	0.21	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.08	0.01		0.85	0.08	0.62	0.24	0.00	0.00	0.04	0.00	0.32	0.04		0.42	0.27	0.40	0.08	1.00	0.08	0.64	0.05	0.48	0.34	0.39826
ROUTE AJU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.03	0.00		0.94	0.09	0.55	0.21	0.26	0.10	0.07	0.01	0.41	0.06		0.64	0.42	0.13	0.03	0.99	0.08	0.03	0.00	0.52	0.38	0.43828
ROUTE KZ	0.10	0.04	0.35	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.22	0.03		0.36	0.03	0.17	0.07	0.08	0.03	0.79	0.10	0.23	0.03		0.37	0.24	1.00	0.19	0.89	0.07	0.65	0.05	0.55	0.40	0.46073
ROUTE KX	0.13	0.06	0.38	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.23	0.03		0.39	0.04	0.21	0.08	0.33	0.13	0.89	0.11	0.36	0.05		0.38	0.25	0.83	0.16	1.00	0.08	0.85	0.06	0.55	0.39	0.47613
ROUTE AJY	0.88	0.39	0.63	0.08	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.09	0.01	0.54	0.08		0.49	0.05	0.83	0.31	0.67	0.27	0.11	0.01	0.64	0.09		0.61	0.40	0.00	0.00	0.16	0.01	0.81	0.06	0.47	0.34	0.50724
ROUTE LC	0.05	0.02	0.14	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.17	0.02		0.46	0.04	0.10	0.04	0.34	0.14	0.82	0.10	0.32	0.04		0.60	0.39	0.76	0.15	0.88	0.07	0.05	0.00	0.61	0.44	0.50785
ROUTE LA	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.18	0.03		0.48	0.04	0.14	0.05	0.59	0.24	0.92	0.11	0.45	0.06		0.60	0.40	0.58	0.11	0.99	0.08	0.25	0.02	0.60	0.43	0.52172
ROUTE NW	0.93	0.41	0.77	0.10	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.73	0.11	0.68	0.09		0.00	0.00	0.38	0.14	0.75	0.30	0.86	0.11	0.55	0.08		0.57	0.38	0.64	0.12	0.00	0.00	0.79	0.06	0.56	0.40	0.57288
ROUTE NU	0.95	0.42	0.80	0.10	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.73	0.11	0.69	0.10		0.02	0.00	0.41	0.16	1.00	0.40	0.96	0.12	0.68	0.10		0.58	0.38	0.45	0.09	0.12	0.01	1.00	0.07	0.55	0.40	0.58761
ROUTE AJV	0.05	0.02	0.20	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.36	0.06	0.11	0.02		1.00	0.09	0.72	0.28	0.26	0.10	0.11	0.01	0.49	0.07		1.00	0.66	0.19	0.04	1.00	0.08	0.00	0.00	0.77	0.55	0.63708
ROUTE AJZ	0.93	0.41	0.83	0.11	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.27	0.04	0.61	0.09		0.54	0.05	1.00	0.38	0.67	0.27	0.15	0.02	0.72	0.10		0.99	0.65	0.06	0.01	0.17	0.01	0.75	0.06	0.73	0.52	0.71029
ROUTE LD	0.10	0.04	0.34	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	1.00	0.16	0.25	0.03		0.51	0.05	0.28	0.10	0.34	0.14	0.86	0.11	0.40	0.06		0.98	0.64	0.81	0.15	0.88	0.07	0.01	0.00	0.87	0.62	0.71403
ROUTE LB	0.13	0.06	0.37	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.26	0.04		0.54	0.05	0.31	0.12	0.59	0.24	0.96	0.12	0.52	0.07		0.98	0.64	0.63	0.12	0.99	0.08	0.21	0.02	0.86	0.62	0.72699
ROUTE NX	0.98	0.43	0.97	0.13	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.91	0.14	0.75	0.11		0.06	0.01	0.55	0.21	0.75	0.30	0.90	0.11	0.63	0.09		0.97	0.63	0.69	0.13	0.01	0.00	0.73	0.05	0.82	0.59	0.78410
ROUTE NV	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.91	0.14	0.77	0.11		0.08	0.01	0.59	0.22	1.00	0.40	1.00	0.12	0.76	0.11		0.97	0.64	0.51	0.10	0.13	0.01	0.93	0.07	0.81	0.58	0.79771

Table 4.3
Metrics for West-Central Routes
(Natural Environment Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	**SUM OF WEIGHTED TOTALS**
14%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		**72%**	9.3%		38.0%		40.3%		12.4%		100.0%		**14%**	65.6%		19.2%		7.8%		7.4%		100.0%		**SORT**
ROUTE KY	0.05	0.02	0.15	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.64	0.10	0.14	0.02		0.31	0.03	0.00	0.00	0.08	0.03	0.75	0.09	0.15	0.11		0.00	0.00	0.96	0.18	0.89	0.07	0.69	0.05	0.30	0.04	0.17326
ROUTE AJW	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.79	0.07	0.45	0.17	0.00	0.00	0.00	0.00	0.24	0.18		0.06	0.04	0.35	0.07	1.00	0.08	0.67	0.05	0.24	0.03	0.20923
ROUTE KW	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.64	0.10	0.16	0.02		0.33	0.03	0.03	0.01	0.33	0.13	0.85	0.11	0.28	0.20		0.01	0.01	0.78	0.15	1.00	0.08	0.89	0.07	0.30	0.04	0.26643
ROUTE KZ	0.10	0.04	0.35	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.22	0.03		0.36	0.03	0.17	0.07	0.08	0.03	0.79	0.10	0.23	0.16		0.37	0.24	1.00	0.19	0.89	0.07	0.65	0.05	0.55	0.08	0.27308
ROUTE AJX	0.05	0.02	0.21	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.08	0.01		0.85	0.08	0.62	0.24	0.00	0.00	0.04	0.00	0.32	0.23		0.42	0.27	0.40	0.08	1.00	0.08	0.64	0.05	0.48	0.07	0.30772
ROUTE LC	0.05	0.02	0.14	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.17	0.02		0.46	0.04	0.10	0.04	0.34	0.14	0.82	0.10	0.32	0.23		0.60	0.39	0.76	0.15	0.88	0.07	0.05	0.00	0.61	0.09	0.34012
ROUTE KX	0.13	0.06	0.38	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.23	0.03		0.39	0.04	0.21	0.08	0.33	0.13	0.89	0.11	0.36	0.26		0.38	0.25	0.83	0.16	1.00	0.08	0.85	0.06	0.55	0.08	0.36608
ROUTE AJU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.03	0.00		0.94	0.09	0.55	0.21	0.26	0.10	0.07	0.01	0.41	0.30		0.64	0.42	0.13	0.03	0.99	0.08	0.03	0.00	0.52	0.07	0.37338
ROUTE LA	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.18	0.03		0.48	0.04	0.14	0.05	0.59	0.24	0.92	0.11	0.45	0.32		0.60	0.40	0.58	0.11	0.99	0.08	0.25	0.02	0.60	0.08	0.43282
ROUTE LD	0.10	0.04	0.34	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	1.00	0.16	0.25	0.03		0.51	0.05	0.28	0.10	0.34	0.14	0.86	0.11	0.40	0.29		0.98	0.64	0.81	0.15	0.88	0.07	0.01	0.00	0.87	0.12	0.44110
ROUTE AJV	0.05	0.02	0.20	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.36	0.06	0.11	0.02		1.00	0.09	0.72	0.28	0.26	0.10	0.11	0.01	0.49	0.35		1.00	0.66	0.19	0.04	1.00	0.08	0.00	0.00	0.77	0.11	0.47292
ROUTE LB	0.13	0.06	0.37	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.26	0.04		0.54	0.05	0.31	0.12	0.59	0.24	0.96	0.12	0.52	0.38		0.98	0.64	0.63	0.12	0.99	0.08	0.21	0.02	0.86	0.12	0.53362
ROUTE NW	0.93	0.41	0.77	0.10	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.73	0.11	0.68	0.09		0.00	0.00	0.38	0.14	0.75	0.30	0.86	0.11	0.55	0.40		0.57	0.38	0.64	0.12	0.00	0.00	0.79	0.06	0.56	0.08	0.57148
ROUTE AJY	0.88	0.39	0.63	0.08	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.09	0.01	0.54	0.08		0.49	0.05	0.83	0.31	0.67	0.27	0.11	0.01	0.64	0.46		0.61	0.40	0.00	0.00	0.16	0.01	0.81	0.06	0.47	0.07	0.60550
ROUTE NU	0.95	0.42	0.80	0.10	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.73	0.11	0.69	0.10		0.02	0.00	0.41	0.16	1.00	0.40	0.96	0.12	0.68	0.49		0.58	0.38	0.45	0.09	0.12	0.01	1.00	0.07	0.55	0.08	0.66434
ROUTE NX	0.98	0.43	0.97	0.13	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.91	0.14	0.75	0.11		0.06	0.01	0.55	0.21	0.75	0.30	0.90	0.11	0.63	0.45		0.97	0.63	0.69	0.13	0.01	0.00	0.73	0.05	0.82	0.11	0.67343
ROUTE AJZ	0.93	0.41	0.83	0.11	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.27	0.04	0.61	0.09		0.54	0.05	1.00	0.38	0.67	0.27	0.15	0.02	0.72	0.52		0.99	0.65	0.06	0.01	0.17	0.01	0.75	0.06	0.73	0.10	0.70587
ROUTE NV	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.91	0.14	0.77	0.11		0.08	0.01	0.59	0.22	1.00	0.40	1.00	0.12	0.76	0.55		0.97	0.64	0.51	0.10	0.13	0.01	0.93	0.07	0.81	0.11	0.76608

Table 4.3
Metrics for West-Central Routes
(Simple Average Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	**SUM OF WEIGHTED TOTALS**
33%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		**33%**	9.3%		38.0%		40.3%		12.4%		100.0%		**33%**	65.6%		19.2%		7.8%		7.4%		100.0%		**SORT**
ROUTE AJW	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.79	0.07	0.45	0.17	0.00	0.00	0.00	0.00	0.24	0.08		0.06	0.04	0.35	0.07	1.00	0.08	0.67	0.05	0.24	0.08	0.15962
ROUTE KY	0.05	0.02	0.15	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.64	0.10	0.14	0.05		0.31	0.03	0.00	0.00	0.08	0.03	0.75	0.09	0.15	0.05		0.00	0.00	0.96	0.18	0.89	0.07	0.69	0.05	0.30	0.10	0.19819
ROUTE KW	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.64	0.10	0.16	0.05		0.33	0.03	0.03	0.01	0.33	0.13	0.85	0.11	0.28	0.09		0.01	0.01	0.78	0.15	1.00	0.08	0.89	0.07	0.30	0.10	0.24328
ROUTE AJX	0.05	0.02	0.21	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.08	0.03		0.85	0.08	0.62	0.24	0.00	0.00	0.04	0.00	0.32	0.11		0.42	0.27	0.40	0.08	1.00	0.08	0.64	0.05	0.48	0.16	0.28873
ROUTE AJU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.18	0.03	0.03	0.01		0.94	0.09	0.55	0.21	0.26	0.10	0.07	0.01	0.41	0.14		0.64	0.42	0.13	0.03	0.99	0.08	0.03	0.00	0.52	0.17	0.31829
ROUTE KZ	0.10	0.04	0.35	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.22	0.07		0.36	0.03	0.17	0.07	0.08	0.03	0.79	0.10	0.23	0.08		0.37	0.24	1.00	0.19	0.89	0.07	0.65	0.05	0.55	0.18	0.33043
ROUTE LC	0.05	0.02	0.14	0.02	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.82	0.13	0.17	0.06		0.46	0.04	0.10	0.04	0.34	0.14	0.82	0.10	0.32	0.11		0.60	0.39	0.76	0.15	0.88	0.07	0.05	0.00	0.61	0.20	0.36325
ROUTE KX	0.13	0.06	0.38	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.23	0.08		0.39	0.04	0.21	0.08	0.33	0.13	0.89	0.11	0.36	0.12		0.38	0.25	0.83	0.16	1.00	0.08	0.85	0.06	0.55	0.18	0.37510
ROUTE LA	0.08	0.03	0.17	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.82	0.13	0.18	0.06		0.48	0.04	0.14	0.05	0.59	0.24	0.92	0.11	0.45	0.15		0.60	0.40	0.58	0.11	0.99	0.08	0.25	0.02	0.60	0.20	0.40722
ROUTE AJV	0.05	0.02	0.20	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.36	0.06	0.11	0.04		1.00	0.09	0.72	0.28	0.26	0.10	0.11	0.01	0.49	0.16		1.00	0.66	0.19	0.04	1.00	0.08	0.00	0.00	0.77	0.25	0.44987
ROUTE LD	0.10	0.04	0.34	0.05	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	1.00	0.16	0.25	0.08		0.51	0.05	0.28	0.10	0.34	0.14	0.86	0.11	0.40	0.13		0.98	0.64	0.81	0.15	0.88	0.07	0.01	0.00	0.87	0.29	0.49821
ROUTE LB	0.13	0.06	0.37	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.26	0.09		0.54	0.05	0.31	0.12	0.59	0.24	0.96	0.12	0.52	0.17		0.98	0.64	0.63	0.12	0.99	0.08	0.21	0.02	0.86	0.28	0.54176
ROUTE AJY	0.88	0.39	0.63	0.08	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.09	0.01	0.54	0.18		0.49	0.05	0.83	0.31	0.67	0.27	0.11	0.01	0.64	0.21		0.61	0.40	0.00	0.00	0.16	0.01	0.81	0.06	0.47	0.16	0.54635
ROUTE NW	0.93	0.41	0.77	0.10	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.73	0.11	0.68	0.22		0.00	0.00	0.38	0.14	0.75	0.30	0.86	0.11	0.55	0.18		0.57	0.38	0.64	0.12	0.00	0.00	0.79	0.06	0.56	0.18	0.58950
ROUTE NU	0.95	0.42	0.80	0.10	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.73	0.11	0.69	0.23		0.02	0.00	0.41	0.16	1.00	0.40	0.96	0.12	0.68	0.22		0.58	0.38	0.45	0.09	0.12	0.01	1.00	0.07	0.55	0.18	0.63386
ROUTE AJZ	0.93	0.41	0.83	0.11	0.00	0.00	0.95	0.03	1.00	0.02	0.00	0.00	0.27	0.04	0.61	0.20		0.54	0.05	1.00	0.38	0.67	0.27	0.15	0.02	0.72	0.24		0.99	0.65	0.06	0.01	0.17	0.01	0.75	0.06	0.73	0.24	0.67987
ROUTE NX	0.98	0.43	0.97	0.13	0.00	0.00	1.00	0.04	0.90	0.02	0.00	0.00	0.91	0.14	0.75	0.25		0.06	0.01	0.55	0.21	0.75	0.30	0.90	0.11	0.63	0.21		0.97	0.63	0.69	0.13	0.01	0.00	0.73	0.05	0.82	0.27	0.72677
ROUTE NV	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.86	0.02	0.00	0.00	0.91	0.14	0.77	0.25		0.08	0.01	0.59	0.22	1.00	0.40	1.00	0.12	0.76	0.25		0.97	0.64	0.51	0.10	0.13	0.01	0.93	0.07	0.81	0.27	0.77062

Table 4.4
Metrics for BREC Routes
(Statistics and Statistics Normalized)

Built	Residences within ROW	*Normalized*	Proximity to Residences (within 300')	*Normalized*	Proposed Developments	*Normalized*	Proximity Commercial Buildings(within 300')	*Normalized*	Proximity Industrial Buildings(within 300')	*Normalized*	School, Church, Cemetery, and Park Parcels Crossed	*Normalized*	NRHP Listed Structures and Districts (3000' from edge of RW)	*Normalized*	**Natural**	Natural Forests (Acres)	*Normalized*	Stream/River Crossings	*Normalized*	Wetland Areas (Acres)	*Normalized*	Floodplain Areas (Acres)	*Normalized*	**Engineering**	Length (Miles)	*Normalized*	Percent of Route Rebuilt with Existing T/L*	*Normalized*	*Inverted*	Percent of Route Co-located with Existing Utilities*	*Normalized*	*Inverted*	Percent of Route Co-located with Roads*	*Normalized*	*Inverted*	Total Project Costs	*Normalized*
ROUTE A	19	*0.90*	104	*0.70*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		376.33	*0.28*	24	*0.04*	19.41	*1.00*	153.43	*0.96*		52.97	*0.45*	0.384	*0.78*	*0.22*	0.587	*0.93*	*0.07*	0	*0.00*	*1.00*	74462383.6	*0.76*
ROUTE B	21	*1.00*	141	*1.00*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		386.08	*0.32*	29	*0.21*	19.41	*1.00*	155.6	*1.00*		53.44	*0.52*	0.321	*0.41*	*0.59*	0.582	*0.92*	*0.08*	0	*0.00*	*1.00*	74070052.5	*0.69*
ROUTE C	18	*0.86*	99	*0.66*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		372.05	*0.26*	23	*0.00*	17.29	*0.72*	147.68	*0.85*		52.74	*0.42*	0.386	*0.79*	*0.21*	0.577	*0.90*	*0.10*	0.013	*0.29*	*0.71*	73239546.1	*0.56*
ROUTE D	20	*0.95*	136	*0.96*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		381.8	*0.30*	28	*0.18*	17.29	*0.72*	149.86	*0.89*		53.21	*0.49*	0.322	*0.41*	*0.59*	0.572	*0.89*	*0.11*	0.012	*0.29*	*0.71*	72846365.3	*0.50*
ROUTE E	5	*0.24*	54	*0.30*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		364.26	*0.22*	28	*0.18*	14.95	*0.40*	151.75	*0.93*		54.82	*0.71*	0.42	*0.99*	*0.01*	0.55	*0.82*	*0.18*	0.011	*0.26*	*0.74*	76022034.1	*1.00*
ROUTE F	7	*0.33*	91	*0.60*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		374.01	*0.27*	33	*0.36*	14.95	*0.40*	153.93	*0.97*		55.29	*0.77*	0.358	*0.63*	*0.37*	0.545	*0.80*	*0.20*	0.011	*0.25*	*0.75*	75745801.8	*0.96*
ROUTE G	4	*0.19*	49	*0.26*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		359.98	*0.21*	27	*0.14*	12.83	*0.12*	146	*0.82*		54.59	*0.67*	0.421	*1.00*	*0.00*	0.54	*0.78*	*0.22*	0.023	*0.54*	*0.46*	74724437.6	*0.80*
ROUTE H	6	*0.29*	86	*0.56*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		369.73	*0.25*	32	*0.32*	12.83	*0.12*	148.18	*0.86*		55.06	*0.74*	0.36	*0.63*	*0.37*	0.536	*0.77*	*0.23*	0.023	*0.54*	*0.46*	74455972.8	*0.75*
ROUTE I	19	*0.90*	102	*0.69*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		453.9	*0.61*	30	*0.25*	19.41	*1.00*	153.43	*0.96*		51.98	*0.32*	0.325	*0.43*	*0.57*	0.531	*0.76*	*0.24*	0	*0.00*	*1.00*	73006217.1	*0.53*
ROUTE J	21	*1.00*	139	*0.98*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		463.65	*0.65*	35	*0.43*	19.41	*1.00*	155.6	*1.00*		52.45	*0.38*	0.261	*0.05*	*0.95*	0.527	*0.74*	*0.26*	0	*0.00*	*1.00*	72613238.5	*0.47*
ROUTE K	18	*0.86*	97	*0.65*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		449.62	*0.59*	29	*0.21*	17.29	*0.72*	147.68	*0.85*		51.75	*0.29*	0.326	*0.44*	*0.56*	0.521	*0.72*	*0.28*	0.013	*0.30*	*0.70*	71791707.3	*0.34*
ROUTE L	20	*0.95*	134	*0.94*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		459.37	*0.63*	34	*0.39*	17.29	*0.72*	149.86	*0.89*		52.22	*0.35*	0.262	*0.06*	*0.94*	0.516	*0.71*	*0.29*	0.013	*0.30*	*0.70*	71397061.4	*0.28*
ROUTE M	5	*0.24*	52	*0.28*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		441.83	*0.56*	34	*0.39*	14.95	*0.40*	151.75	*0.93*		53.83	*0.57*	0.363	*0.65*	*0.35*	0.496	*0.64*	*0.36*	0.011	*0.26*	*0.74*	74550209.3	*0.77*
ROUTE N	7	*0.33*	89	*0.58*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		451.58	*0.60*	39	*0.57*	14.95	*0.40*	153.93	*0.97*		54.3	*0.64*	0.301	*0.28*	*0.72*	0.491	*0.63*	*0.37*	0.011	*0.26*	*0.74*	74265046.4	*0.72*
ROUTE O	4	*0.19*	47	*0.24*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		437.55	*0.54*	33	*0.36*	12.83	*0.12*	146	*0.82*		53.6	*0.54*	0.364	*0.66*	*0.34*	0.485	*0.61*	*0.39*	0.024	*0.55*	*0.45*	73270481.6	*0.57*
ROUTE P	6	*0.29*	84	*0.54*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		447.3	*0.58*	38	*0.54*	12.83	*0.12*	148.18	*0.86*		54.07	*0.60*	0.302	*0.29*	*0.71*	0.481	*0.59*	*0.41*	0.023	*0.55*	*0.45*	72990250.4	*0.52*
ROUTE Y	17	*0.81*	98	*0.65*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		389.53	*0.33*	26	*0.11*	19.2	*0.97*	153.43	*0.96*		50.5	*0.12*	0.334	*0.48*	*0.52*	0.474	*0.57*	*0.43*	0	*0.00*	*1.00*	71372798.5	*0.27*
ROUTE Z	19	*0.90*	135	*0.95*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		399.28	*0.37*	31	*0.29*	19.2	*0.97*	155.6	*1.00*		50.97	*0.18*	0.268	*0.09*	*0.91*	0.47	*0.56*	*0.44*	0	*0.00*	*1.00*	70981183.1	*0.21*
ROUTE AA	16	*0.76*	93	*0.61*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		385.25	*0.31*	25	*0.07*	17.08	*0.69*	147.68	*0.85*		50.27	*0.09*	0.336	*0.49*	*0.51*	0.463	*0.54*	*0.46*	0.013	*0.31*	*0.69*	70154670.2	*0.08*
ROUTE AB	18	*0.86*	130	*0.91*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		395	*0.36*	30	*0.25*	17.08	*0.69*	149.86	*0.89*		50.74	*0.15*	0.27	*0.10*	*0.90*	0.459	*0.52*	*0.48*	0.013	*0.30*	*0.70*	69761699.5	*0.02*
ROUTE AC	3	*0.14*	48	*0.25*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		377.46	*0.28*	30	*0.25*	14.74	*0.38*	151.75	*0.93*		52.35	*0.37*	0.373	*0.71*	*0.29*	0.439	*0.46*	*0.54*	0.011	*0.27*	*0.73*	72912642.7	*0.51*
ROUTE AD	5	*0.24*	85	*0.55*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		387.21	*0.32*	35	*0.43*	14.74	*0.38*	153.93	*0.97*		52.82	*0.43*	0.309	*0.33*	*0.67*	0.435	*0.45*	*0.55*	0.011	*0.27*	*0.73*	72635623	*0.47*
ROUTE AE	2	*0.10*	43	*0.21*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		373.18	*0.26*	29	*0.21*	12.62	*0.09*	146	*0.82*		52.12	*0.34*	0.375	*0.72*	*0.28*	0.429	*0.43*	*0.57*	0.024	*0.57*	*0.43*	71624400.8	*0.31*
ROUTE AF	4	*0.19*	80	*0.51*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		382.93	*0.30*	34	*0.39*	12.62	*0.09*	148.18	*0.86*		52.59	*0.40*	0.31	*0.34*	*0.66*	0.425	*0.41*	*0.59*	0.024	*0.56*	*0.44*	71353614.3	*0.27*
ROUTE BE	19	*0.90*	103	*0.69*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		389.94	*0.33*	24	*0.04*	19.2	*0.97*	153.43	*0.96*		50.58	*0.13*	0.334	*0.48*	*0.52*	0.433	*0.44*	*0.56*	0	*0.00*	*1.00*	72136382.4	*0.39*
ROUTE BF	21	*1.00*	140	*0.99*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		399.69	*0.38*	29	*0.21*	19.2	*0.97*	155.6	*1.00*		51.05	*0.19*	0.268	*0.09*	*0.91*	0.429	*0.43*	*0.57*	0	*0.00*	*1.00*	71743580	*0.33*
ROUTE BG	18	*0.86*	98	*0.65*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		385.66	*0.32*	23	*0.00*	17.08	*0.69*	147.68	*0.85*		50.35	*0.10*	0.335	*0.49*	*0.51*	0.422	*0.41*	*0.59*	0.013	*0.31*	*0.69*	70917067.7	*0.20*
ROUTE BH	20	*0.95*	135	*0.95*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		395.41	*0.36*	28	*0.18*	17.08	*0.69*	149.86	*0.89*		50.82	*0.16*	0.269	*0.10*	*0.90*	0.418	*0.39*	*0.61*	0.013	*0.30*	*0.70*	70523058.2	*0.14*
ROUTE BI	5	*0.24*	53	*0.29*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		377.87	*0.28*	28	*0.18*	14.74	*0.38*	151.75	*0.93*		52.43	*0.38*	0.372	*0.71*	*0.29*	0.4	*0.33*	*0.67*	0.011	*0.27*	*0.73*	73692015.2	*0.63*
ROUTE BJ	7	*0.33*	90	*0.59*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		387.62	*0.32*	33	*0.36*	14.74	*0.38*	153.93	*0.97*		52.9	*0.45*	0.309	*0.33*	*0.67*	0.397	*0.32*	*0.68*	0.011	*0.27*	*0.73*	73411072.4	*0.59*
ROUTE BK	4	*0.19*	48	*0.25*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		373.59	*0.26*	27	*0.14*	12.62	*0.09*	146	*0.82*		52.2	*0.35*	0.374	*0.72*	*0.28*	0.389	*0.30*	*0.70*	0.024	*0.56*	*0.44*	72402290.8	*0.43*
ROUTE BL	6	*0.29*	85	*0.55*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		383.34	*0.31*	32	*0.32*	12.62	*0.09*	148.18	*0.86*		52.67	*0.41*	0.31	*0.34*	*0.66*	0.386	*0.29*	*0.71*	0.024	*0.56*	*0.44*	72127814.8	*0.39*
ROUTE HQ	6	*0.29*	49	*0.26*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	8	*0.78*		316.37	*0.02*	27	*0.14*	14.74	*0.38*	151.75	*0.93*		49.85	*0.03*	0.392	*0.82*	*0.18*	0.311	*0.05*	*0.95*	0.029	*0.69*	*0.31*	71291033.9	*0.26*
ROUTE HR	8	*0.38*	86	*0.56*	0	*0.00*	1	*1.00*	1	*0.00*	0	*0.00*	10	*1.00*		326.12	*0.06*	32	*0.32*	14.74	*0.38*	153.93	*0.97*		50.32	*0.09*	0.324	*0.42*	*0.58*	0.308	*0.04*	*0.96*	0.029	*0.68*	*0.32*	71021327.9	*0.22*
ROUTE HS	5	*0.24*	44	*0.22*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	8	*0.78*		312.09	*0.00*	26	*0.11*	12.62	*0.09*	146	*0.82*		49.62	*0.00*	0.393	*0.83*	*0.17*	0.299	*0.01*	*0.99*	0.043	*1.00*	*0.00*	69981205.7	*0.05*
ROUTE HT	7	*0.33*	81	*0.52*	0	*0.00*	1	*1.00*	2	*0.33*	0	*0.00*	10	*1.00*		321.84	*0.04*	31	*0.29*	12.62	*0.09*	148.18	*0.86*		50.09	*0.06*	0.326	*0.43*	*0.57*	0.296	*0.00*	*1.00*	0.042	*0.99*	*0.01*	69721446.6	*0.01*
ROUTE ACO	16	*0.76*	73	*0.45*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		457.57	*0.62*	36	*0.46*	16.61	*0.62*	104.82	*0.03*		54.67	*0.69*	0.372	*0.71*	*0.29*	0.607	*1.00*	*0.00*	0	*0.00*	*1.00*	73253137.2	*0.57*
ROUTE ACP	18	*0.86*	110	*0.75*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		467.32	*0.67*	41	*0.64*	16.61	*0.62*	106.99	*0.07*		55.14	*0.75*	0.311	*0.35*	*0.65*	0.602	*0.98*	*0.02*	0	*0.00*	*1.00*	72891192	*0.51*
ROUTE ACQ	2	*0.10*	23	*0.05*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		445.5	*0.57*	40	*0.61*	12.15	*0.03*	103.14	*0.00*		56.52	*0.94*	0.407	*0.91*	*0.09*	0.571	*0.88*	*0.12*	0.011	*0.25*	*0.75*	74588719.3	*0.78*
ROUTE ACR	4	*0.19*	60	*0.35*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		455.25	*0.61*	45	*0.79*	12.15	*0.03*	105.32	*0.04*		56.99	*1.00*	0.347	*0.56*	*0.44*	0.566	*0.87*	*0.13*	0.011	*0.25*	*0.75*	74378955.5	*0.74*
ROUTE ACS	16	*0.76*	71	*0.44*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		535.14	*0.96*	42	*0.68*	16.61	*0.62*	104.82	*0.03*		53.68	*0.55*	0.314	*0.37*	*0.63*	0.554	*0.83*	*0.17*	0	*0.00*	*1.00*	71801493.2	*0.34*
ROUTE ACT	18	*0.86*	108	*0.73*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		544.89	*1.00*	47	*0.86*	16.61	*0.62*	106.99	*0.07*		54.15	*0.61*	0.253	*0.00*	*1.00*	0.549	*0.81*	*0.19*	0	*0.00*	*1.00*	71436236.1	*0.28*
ROUTE ACU	2	*0.10*	21	*0.03*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		523.07	*0.91*	46	*0.82*	12.15	*0.03*	103.14	*0.00*		55.53	*0.80*	0.352	*0.59*	*0.41*	0.518	*0.71*	*0.29*	0.011	*0.25*	*0.75*	73144888	*0.55*
ROUTE ACV	4	*0.19*	58	*0.33*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		532.82	*0.95*	51	*1.00*	12.15	*0.03*	105.32	*0.04*		56	*0.87*	0.291	*0.23*	*0.77*	0.514	*0.70*	*0.30*	0.011	*0.25*	*0.75*	72917006.8	*0.51*
ROUTE ADA	14	*0.67*	67	*0.40*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		470.77	*0.68*	38	*0.54*	16.39	*0.60*	104.82	*0.03*		52.2	*0.35*	0.323	*0.42*	*0.58*	0.499	*0.65*	*0.35*	0	*0.00*	*1.00*	70163326.6	*0.08*
ROUTE ADB	16	*0.76*	104	*0.70*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		480.52	*0.72*	43	*0.71*	16.39	*0.60*	106.99	*0.07*		52.67	*0.41*	0.26	*0.04*	*0.96*	0.495	*0.64*	*0.36*	0	*0.00*	*1.00*	69801184.8	*0.03*
ROUTE ADC	0	*0.00*	17	*0.00*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		458.7	*0.63*	42	*0.68*	11.93	*0.00*	103.14	*0.00*		54.05	*0.60*	0.361	*0.64*	*0.36*	0.465	*0.54*	*0.46*	0.011	*0.26*	*0.74*	71488947.7	*0.29*
ROUTE ADD	2	*0.10*	54	*0.30*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		468.45	*0.67*	47	*0.86*	11.93	*0.00*	105.32	*0.04*		54.52	*0.66*	0.299	*0.28*	*0.72*	0.461	*0.53*	*0.47*	0.011	*0.26*	*0.74*	71274659.8	*0.26*
ROUTE ADQ	16	*0.76*	72	*0.44*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		471.18	*0.68*	36	*0.46*	16.39	*0.60*	104.82	*0.03*		52.28	*0.36*	0.323	*0.42*	*0.58*	0.46	*0.53*	*0.47*	0	*0.00*	*1.00*	70929786.8	*0.20*
ROUTE ADR	18	*0.86*	109	*0.74*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		480.93	*0.73*	41	*0.64*	16.39	*0.60*	106.99	*0.07*		52.75	*0.42*	0.259	*0.04*	*0.96*	0.456	*0.51*	*0.49*	0	*0.00*	*1.00*	70566082.5	*0.15*
ROUTE ADS	2	*0.10*	22	*0.04*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		459.11	*0.63*	40	*0.61*	11.93	*0.00*	103.14	*0.00*		54.13	*0.61*	0.361	*0.64*	*0.36*	0.427	*0.42*	*0.58*	0.011	*0.26*	*0.74*	72272345.3	*0.41*
ROUTE ADT	4	*0.19*	59	*0.34*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		468.86	*0.67*	45	*0.79*	11.93	*0.00*	105.32	*0.04*		54.6	*0.68*	0.299	*0.27*	*0.73*	0.423	*0.41*	*0.59*	0.011	*0.26*	*0.74*	72053469.7	*0.38*
ROUTE AGW	3	*0.14*	18	*0.01*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	1	*0.00*		397.61	*0.37*	39	*0.57*	11.93	*0.00*	103.14	*0.00*		51.55	*0.26*	0.379	*0.75*	*0.25*	0.341	*0.15*	*0.85*	0.028	*0.66*	*0.34*	69836907.5	*0.03*
ROUTE AGX	5	*0.24*	55	*0.31*	0	*0.00*	0	*0.00*	4	*1.00*	0	*0.00*	3	*0.22*		407.36	*0.41*	44	*0.75*	11.93	*0.00*	105.32	*0.04*		52.02	*0.33*	0.314	*0.36*	*0.64*	0.338	*0.14*	*0.86*	0.028	*0.66*	*0.34*	69640629.7	*0.00*

Table 4.4
Metrics for BREC Routes
(Built Environment Emphasis Matrix)

Built	Residences with ROW	Weighted	Proximity to Residences (within 300')	Weighted	Proposed Developments	Weighted	Proximity Commercial Buildings(within 300')	Weighted	Proximity Industrial Buildings(within 300')	Weighted	School, Church, Cemetery, and Park Parcels Crossed	Weighted	NRHP Listed Structures and Districts (3000' from edge of R/W)	Weighted	TOTAL	WEIGHTED TOTAL	Natural	Natural Forests (Acres)	Weighted	Stream/River Crossings	Weighted	Wetland Areas (Acres)	Weighted	Floodplain Areas (Acres)	Weighted	TOTAL	WEIGHTED TOTAL	Engineering	Percent of Route Rebuilt with Existing T/L*	Weighted	Percent of Route of Co-located with Existing Utilities*	Weighted	Percent of Route Co-located with Roads*	Weighted	Total Project Costs	Weighted	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
72%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		14%	9.3%		38.0%		40.3%		12.4%		100.0%		14%	65.6%		19.2%		7.8%		7.4%		100.0%		SORT
ROUTE ADC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.02	0.01		0.63	0.06	0.68	0.26	0.00	0.00	0.00	0.00	0.32	0.04		0.36	0.23	0.46	0.09	0.74	0.06	0.29	0.02	0.40	0.06	0.11344
ROUTE ACQ	0.10	0.04	0.05	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.05		0.57	0.05	0.61	0.23	0.03	0.01	0.00	0.00	0.30	0.04		0.09	0.06	0.12	0.02	0.75	0.06	0.78	0.06	0.19	0.03	0.11650
ROUTE AGW	0.14	0.06	0.01	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.08	0.06		0.37	0.03	0.57	0.22	0.00	0.00	0.00	0.00	0.25	0.04		0.25	0.17	0.85	0.16	0.34	0.03	0.03	0.00	0.36	0.05	0.14466
ROUTE ADS	0.10	0.04	0.04	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.05		0.63	0.06	0.61	0.23	0.00	0.00	0.00	0.00	0.29	0.04		0.36	0.24	0.58	0.11	0.74	0.06	0.41	0.03	0.44	0.06	0.14869
ROUTE ACU	0.10	0.04	0.03	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.06	0.05		0.91	0.08	0.82	0.31	0.03	0.01	0.00	0.00	0.41	0.06		0.41	0.27	0.29	0.05	0.75	0.06	0.55	0.04	0.43	0.06	0.16302
ROUTE ADD	0.10	0.04	0.30	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.13	0.10		0.67	0.06	0.86	0.33	0.00	0.00	0.04	0.01	0.39	0.06		0.72	0.47	0.47	0.09	0.74	0.06	0.26	0.02	0.64	0.09	0.24120
ROUTE ACR	0.19	0.08	0.35	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.13		0.61	0.06	0.79	0.30	0.03	0.01	0.04	0.01	0.37	0.05		0.44	0.29	0.13	0.03	0.75	0.06	0.74	0.05	0.43	0.06	0.24307
ROUTE AE	0.10	0.04	0.21	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.23	0.17		0.26	0.02	0.21	0.08	0.09	0.04	0.82	0.10	0.24	0.03		0.28	0.18	0.57	0.11	0.43	0.03	0.31	0.02	0.35	0.05	0.25024
ROUTE G	0.19	0.08	0.26	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.20		0.21	0.02	0.14	0.05	0.12	0.05	0.82	0.10	0.22	0.03		0.00	0.00	0.22	0.04	0.46	0.04	0.80	0.06	0.14	0.02	0.25244
ROUTE AGX	0.24	0.11	0.31	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.20	0.14		0.41	0.04	0.75	0.29	0.00	0.00	0.04	0.01	0.33	0.05		0.64	0.42	0.86	0.17	0.34	0.03	0.00	0.00	0.61	0.09	0.27411
ROUTE ADT	0.19	0.08	0.34	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.13		0.67	0.06	0.79	0.30	0.00	0.00	0.04	0.01	0.37	0.05		0.73	0.48	0.59	0.11	0.74	0.06	0.38	0.03	0.68	0.09	0.27636
ROUTE HS	0.24	0.11	0.22	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.30	0.21		0.00	0.00	0.11	0.04	0.09	0.04	0.82	0.10	0.18	0.03		0.17	0.11	0.99	0.19	0.00	0.00	0.05	0.00	0.30	0.04	0.28097
ROUTE BK	0.19	0.08	0.25	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.20		0.26	0.02	0.14	0.05	0.09	0.04	0.82	0.10	0.22	0.03		0.28	0.18	0.70	0.13	0.44	0.03	0.43	0.03	0.38	0.05	0.28563
ROUTE ACV	0.19	0.08	0.33	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.13		0.95	0.09	1.00	0.38	0.03	0.01	0.04	0.01	0.48	0.07		0.77	0.51	0.30	0.06	0.75	0.06	0.51	0.04	0.66	0.09	0.28985
ROUTE AC	0.14	0.06	0.25	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.25	0.18		0.28	0.03	0.25	0.10	0.38	0.15	0.93	0.11	0.39	0.05		0.29	0.19	0.54	0.10	0.73	0.06	0.51	0.04	0.39	0.05	0.29026
ROUTE E	0.24	0.11	0.30	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.22		0.22	0.02	0.18	0.07	0.40	0.16	0.93	0.11	0.37	0.05		0.01	0.01	0.18	0.04	0.74	0.06	1.00	0.07	0.17	0.02	0.29248
ROUTE O	0.19	0.08	0.24	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.20		0.54	0.05	0.36	0.14	0.12	0.05	0.82	0.10	0.34	0.05		0.34	0.22	0.39	0.08	0.45	0.04	0.57	0.04	0.37	0.05	0.30004
ROUTE HQ	0.29	0.13	0.26	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.32	0.23		0.02	0.00	0.14	0.05	0.38	0.15	0.93	0.11	0.32	0.05		0.18	0.12	0.95	0.18	0.31	0.02	0.26	0.02	0.34	0.05	0.32121
ROUTE BI	0.24	0.11	0.29	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.22		0.28	0.03	0.18	0.07	0.38	0.15	0.93	0.11	0.36	0.05		0.29	0.19	0.67	0.13	0.73	0.06	0.63	0.05	0.42	0.06	0.32563
ROUTE M	0.24	0.11	0.28	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.22		0.56	0.05	0.39	0.15	0.40	0.16	0.93	0.11	0.48	0.07		0.35	0.23	0.36	0.07	0.74	0.06	0.77	0.06	0.41	0.06	0.33996
ROUTE AF	0.19	0.08	0.51	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.35	0.25		0.30	0.03	0.39	0.15	0.09	0.04	0.86	0.11	0.32	0.04		0.66	0.43	0.59	0.11	0.44	0.03	0.27	0.02	0.60	0.08	0.37922
ROUTE H	0.29	0.13	0.56	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.29		0.25	0.02	0.32	0.12	0.12	0.05	0.86	0.11	0.30	0.04		0.37	0.24	0.23	0.04	0.46	0.04	0.75	0.06	0.38	0.05	0.38014
ROUTE ADA	0.67	0.30	0.40	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.37	0.26		0.68	0.06	0.54	0.20	0.60	0.24	0.03	0.00	0.51	0.07		0.58	0.38	0.35	0.07	1.00	0.08	0.08	0.01	0.53	0.07	0.40966
ROUTE ACO	0.76	0.34	0.45	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.30		0.62	0.06	0.46	0.18	0.62	0.25	0.03	0.00	0.49	0.07		0.29	0.19	0.00	0.00	1.00	0.08	0.57	0.04	0.31	0.04	0.41063
ROUTE HT	0.33	0.15	0.52	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.41	0.30		0.04	0.00	0.29	0.11	0.09	0.04	0.86	0.11	0.26	0.04		0.57	0.37	1.00	0.19	0.01	0.00	0.01	0.00	0.57	0.08	0.41177
ROUTE BL	0.29	0.13	0.55	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.28		0.31	0.03	0.32	0.12	0.09	0.04	0.86	0.11	0.29	0.04		0.66	0.43	0.71	0.14	0.44	0.03	0.39	0.03	0.63	0.09	0.41452
ROUTE AD	0.24	0.11	0.55	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.37	0.27		0.32	0.03	0.43	0.16	0.38	0.15	0.97	0.12	0.46	0.06		0.67	0.44	0.55	0.11	0.73	0.06	0.47	0.03	0.63	0.09	0.41905
ROUTE F	0.33	0.15	0.60	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.30		0.27	0.02	0.36	0.14	0.40	0.16	0.97	0.12	0.44	0.06		0.37	0.25	0.20	0.04	0.75	0.06	0.96	0.07	0.41	0.06	0.42000
ROUTE P	0.29	0.13	0.54	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.39	0.28		0.58	0.05	0.54	0.20	0.12	0.05	0.86	0.11	0.41	0.06		0.71	0.46	0.41	0.08	0.45	0.04	0.52	0.04	0.62	0.09	0.42803
ROUTE ADQ	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.30		0.68	0.06	0.46	0.18	0.60	0.24	0.03	0.00	0.48	0.07		0.58	0.38	0.47	0.09	1.00	0.08	0.20	0.01	0.57	0.08	0.44498
ROUTE HR	0.38	0.17	0.56	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.43	0.31		0.06	0.01	0.32	0.12	0.38	0.15	0.97	0.12	0.40	0.06		0.58	0.38	0.96	0.18	0.32	0.03	0.22	0.02	0.60	0.08	0.45179
ROUTE BJ	0.33	0.15	0.59	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.30		0.32	0.03	0.36	0.14	0.38	0.15	0.97	0.12	0.44	0.06		0.67	0.44	0.68	0.13	0.73	0.06	0.59	0.04	0.67	0.09	0.45433
ROUTE ACS	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.30		0.96	0.09	0.68	0.26	0.62	0.25	0.03	0.00	0.60	0.08		0.63	0.42	0.17	0.03	1.00	0.08	0.34	0.03	0.55	0.08	0.45867
ROUTE N	0.33	0.15	0.58	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.41	0.30		0.60	0.06	0.57	0.22	0.40	0.16	0.97	0.12	0.56	0.08		0.72	0.47	0.37	0.07	0.74	0.06	0.72	0.05	0.65	0.09	0.46777
ROUTE ACP	0.86	0.38	0.75	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.38		0.67	0.06	0.64	0.24	0.62	0.25	0.07	0.01	0.57	0.08		0.65	0.43	0.02	0.00	1.00	0.08	0.51	0.04	0.55	0.08	0.53790
ROUTE ADB	0.76	0.34	0.70	0.09	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.48	0.35		0.72	0.07	0.71	0.27	0.60	0.24	0.07	0.01	0.59	0.08		0.96	0.63	0.36	0.07	1.00	0.08	0.03	0.00	0.78	0.11	0.53819
ROUTE C	0.86	0.38	0.66	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.45		0.26	0.02	0.00	0.00	0.72	0.29	0.85	0.11	0.42	0.06		0.21	0.14	0.10	0.02	0.71	0.06	0.56	0.04	0.25	0.04	0.54671
ROUTE AA	0.76	0.34	0.61	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.58	0.42		0.31	0.03	0.07	0.03	0.69	0.28	0.85	0.11	0.44	0.06		0.51	0.33	0.46	0.09	0.69	0.05	0.08	0.01	0.48	0.07	0.54673
ROUTE ADR	0.86	0.38	0.74	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.38		0.73	0.07	0.64	0.24	0.60	0.24	0.07	0.01	0.56	0.08		0.96	0.63	0.49	0.09	1.00	0.08	0.15	0.01	0.81	0.11	0.57342
ROUTE BG	0.86	0.38	0.65	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.45		0.32	0.03	0.00	0.00	0.69	0.28	0.85	0.11	0.41	0.06		0.51	0.33	0.59	0.11	0.69	0.05	0.20	0.01	0.52	0.07	0.58220
ROUTE ACT	0.86	0.38	0.73	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.38		1.00	0.09	0.86	0.33	0.62	0.25	0.07	0.01	0.68	0.10		1.00	0.66	0.19	0.04	1.00	0.08	0.28	0.02	0.79	0.11	0.58624
ROUTE A	0.90	0.40	0.70	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.47		0.28	0.03	0.04	0.01	1.00	0.40	0.96	0.12	0.56	0.08		0.22	0.14	0.07	0.01	1.00	0.08	0.76	0.06	0.29	0.04	0.58665
ROUTE Y	0.81	0.36	0.65	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.60	0.43		0.33	0.03	0.11	0.04	0.97	0.39	0.96	0.12	0.58	0.08		0.52	0.34	0.43	0.08	1.00	0.08	0.27	0.02	0.52	0.07	0.58667
ROUTE K	0.86	0.38	0.65	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.45		0.59	0.05	0.21	0.08	0.72	0.29	0.85	0.11	0.53	0.07		0.56	0.37	0.28	0.05	0.70	0.05	0.34	0.02	0.50	0.07	0.59595
ROUTE BE	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.47		0.33	0.03	0.04	0.01	0.97	0.39	0.96	0.12	0.56	0.08		0.52	0.34	0.56	0.11	1.00	0.08	0.39	0.03	0.55	0.08	0.62211
ROUTE I	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.47		0.61	0.06	0.25	0.10	1.00	0.40	0.96	0.12	0.67	0.09		0.57	0.38	0.24	0.05	1.00	0.08	0.53	0.04	0.54	0.08	0.63578
ROUTE D	0.95	0.42	0.96	0.13	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.54		0.30	0.03	0.18	0.07	0.72	0.29	0.89	0.11	0.49	0.07		0.59	0.38	0.11	0.02	0.71	0.06	0.50	0.04	0.50	0.07	0.67522
ROUTE AB	0.86	0.38	0.91	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.70	0.50		0.36	0.03	0.25	0.10	0.69	0.28	0.89	0.11	0.52	0.07		0.90	0.59	0.48	0.09	0.70	0.05	0.02	0.00	0.74	0.10	0.67661
ROUTE BH	0.95	0.42	0.95	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.54		0.36	0.03	0.18	0.07	0.69	0.28	0.89	0.11	0.49	0.07		0.90	0.59	0.61	0.12	0.70	0.05	0.14	0.01	0.77	0.11	0.71198
ROUTE B	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.77	0.55		0.32	0.03	0.21	0.08	1.00	0.40	1.00	0.12	0.64	0.09		0.59	0.39	0.08	0.02	1.00	0.08	0.69	0.05	0.53	0.07	0.71499
ROUTE Z	0.90	0.40	0.95	0.12	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.72	0.52		0.37	0.03	0.29	0.11	0.97	0.39	1.00	0.12	0.66	0.09		0.91	0.59	0.44	0.08	1.00	0.08	0.21	0.02	0.77	0.11	0.71635
ROUTE L	0.95	0.42	0.94	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.53		0.63	0.06	0.39	0.15	0.72	0.29	0.89	0.11	0.61	0.09		0.94	0.62	0.29	0.06	0.70	0.05	0.28	0.02	0.75	0.11	0.72479
ROUTE BF	1.00	0.44	0.99	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.55		0.38	0.03	0.21	0.08	0.97	0.39	1.00	0.12	0.63	0.09		0.91	0.60	0.57	0.11	1.00	0.08	0.33	0.02	0.81	0.11	0.75170
ROUTE J	1.00	0.44	0.98	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.55		0.65	0.06	0.43	0.16	1.00	0.40	1.00	0.12	0.75	0.11		0.95	0.62	0.26	0.05	1.00	0.08	0.47	0.03	0.79	0.11	0.76444

Table 4.4
Metrics for BREC Routes
(Engineering Considerations Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Natural**	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	**Engineering**	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	**SUM OF WEIGHTED TOTALS**
14%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		**14%**	9.3%		38.0%		40.3%		12.4%		100.0%		**72%**	65.6%		19.2%		7.8%		7.4%		100.0%		**SORT**
ROUTE G	0.19	0.08	0.26	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.04		0.21	0.02	0.14	0.05	0.12	0.05	0.82	0.10	0.22	0.03		0.00	0.00	0.22	0.04	0.46	0.04	0.80	0.06	0.14	0.10	0.16859
ROUTE ACQ	0.10	0.04	0.05	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.01		0.57	0.05	0.61	0.23	0.03	0.01	0.00	0.00	0.30	0.04		0.09	0.06	0.12	0.02	0.75	0.06	0.78	0.06	0.19	0.14	0.19070
ROUTE E	0.24	0.11	0.30	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.04		0.22	0.02	0.18	0.07	0.40	0.16	0.93	0.11	0.37	0.05		0.01	0.01	0.18	0.04	0.74	0.06	1.00	0.07	0.17	0.13	0.21888
ROUTE HS	0.24	0.11	0.22	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.30	0.04		0.00	0.00	0.11	0.04	0.09	0.04	0.82	0.10	0.18	0.03		0.17	0.11	0.99	0.19	0.00	0.00	0.05	0.00	0.30	0.22	0.28462
ROUTE AGW	0.14	0.06	0.01	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.08	0.01		0.37	0.03	0.57	0.22	0.00	0.00	0.00	0.00	0.25	0.04		0.25	0.17	0.85	0.16	0.34	0.03	0.03	0.00	0.36	0.26	0.30484
ROUTE AE	0.10	0.04	0.21	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.23	0.03		0.26	0.02	0.21	0.08	0.09	0.04	0.82	0.10	0.24	0.03		0.28	0.18	0.57	0.11	0.43	0.03	0.31	0.02	0.35	0.25	0.31806
ROUTE C	0.86	0.38	0.66	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.09		0.26	0.02	0.00	0.00	0.72	0.29	0.85	0.11	0.42	0.06		0.21	0.14	0.10	0.02	0.71	0.06	0.56	0.04	0.25	0.18	0.32854
ROUTE ADC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00		0.63	0.06	0.68	0.26	0.00	0.00	0.00	0.00	0.32	0.04		0.36	0.23	0.46	0.09	0.74	0.06	0.29	0.02	0.40	0.29	0.33574
ROUTE HQ	0.29	0.13	0.26	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.32	0.04		0.02	0.00	0.14	0.05	0.38	0.15	0.93	0.11	0.32	0.05		0.18	0.12	0.95	0.18	0.31	0.02	0.26	0.02	0.34	0.25	0.33592
ROUTE BK	0.19	0.08	0.25	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.04		0.26	0.02	0.14	0.05	0.09	0.04	0.82	0.10	0.22	0.03		0.28	0.18	0.70	0.13	0.44	0.03	0.43	0.03	0.38	0.28	0.34655
ROUTE ACO	0.76	0.34	0.45	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.06		0.62	0.06	0.46	0.18	0.62	0.25	0.03	0.00	0.49	0.07		0.29	0.19	0.00	0.00	1.00	0.08	0.57	0.04	0.31	0.22	0.34996
ROUTE O	0.19	0.08	0.24	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.04		0.54	0.05	0.36	0.14	0.12	0.05	0.82	0.10	0.34	0.05		0.34	0.22	0.39	0.08	0.45	0.04	0.57	0.04	0.37	0.27	0.35572
ROUTE ADS	0.10	0.04	0.04	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.01		0.63	0.06	0.61	0.23	0.00	0.00	0.00	0.00	0.29	0.04		0.36	0.24	0.58	0.11	0.74	0.06	0.41	0.03	0.44	0.31	0.36354
ROUTE AC	0.14	0.06	0.25	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.25	0.04		0.28	0.03	0.25	0.10	0.38	0.15	0.93	0.11	0.39	0.05		0.29	0.19	0.54	0.10	0.73	0.06	0.51	0.04	0.39	0.28	0.36826
ROUTE H	0.29	0.13	0.56	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.06		0.25	0.02	0.32	0.12	0.12	0.05	0.86	0.11	0.30	0.04		0.37	0.24	0.23	0.04	0.46	0.04	0.75	0.06	0.38	0.27	0.36842
ROUTE ACU	0.10	0.04	0.03	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.06	0.01		0.91	0.08	0.82	0.31	0.03	0.01	0.00	0.00	0.41	0.06		0.41	0.27	0.29	0.05	0.75	0.06	0.55	0.04	0.43	0.31	0.37229
ROUTE A	0.90	0.40	0.70	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.09		0.28	0.03	0.04	0.01	1.00	0.40	0.96	0.12	0.56	0.08		0.22	0.14	0.07	0.01	1.00	0.08	0.76	0.06	0.29	0.21	0.37837
ROUTE ACR	0.19	0.08	0.35	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.03		0.61	0.06	0.79	0.30	0.03	0.01	0.04	0.01	0.37	0.05		0.44	0.29	0.13	0.03	0.75	0.06	0.74	0.05	0.43	0.31	0.38473
ROUTE BI	0.24	0.11	0.29	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.04		0.28	0.03	0.18	0.07	0.38	0.15	0.93	0.11	0.36	0.05		0.29	0.19	0.67	0.13	0.73	0.06	0.63	0.05	0.42	0.30	0.39666
ROUTE M	0.24	0.11	0.28	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.04		0.56	0.05	0.39	0.15	0.40	0.16	0.93	0.11	0.48	0.07		0.35	0.23	0.36	0.07	0.74	0.06	0.77	0.06	0.41	0.30	0.40538
ROUTE F	0.33	0.15	0.60	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.06		0.27	0.02	0.36	0.14	0.40	0.16	0.97	0.12	0.44	0.06		0.37	0.25	0.20	0.04	0.75	0.06	0.96	0.07	0.41	0.30	0.41777
ROUTE AA	0.76	0.34	0.61	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.58	0.08		0.31	0.03	0.07	0.03	0.69	0.28	0.85	0.11	0.44	0.06		0.51	0.33	0.46	0.09	0.69	0.05	0.08	0.01	0.48	0.35	0.48947
ROUTE HT	0.33	0.15	0.52	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.41	0.06		0.04	0.00	0.29	0.11	0.09	0.04	0.86	0.11	0.26	0.04		0.57	0.37	1.00	0.19	0.01	0.00	0.01	0.00	0.57	0.41	0.50039
ROUTE ADA	0.67	0.30	0.40	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.37	0.05		0.68	0.06	0.54	0.20	0.60	0.24	0.03	0.00	0.51	0.07		0.58	0.38	0.35	0.07	1.00	0.08	0.08	0.01	0.53	0.38	0.50574
ROUTE AGX	0.24	0.11	0.31	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.20	0.03		0.41	0.04	0.75	0.29	0.00	0.00	0.04	0.01	0.33	0.05		0.64	0.42	0.86	0.17	0.34	0.03	0.00	0.00	0.61	0.44	0.51369
ROUTE BG	0.86	0.38	0.65	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.09		0.32	0.03	0.00	0.00	0.69	0.28	0.85	0.11	0.41	0.06		0.51	0.33	0.59	0.11	0.69	0.05	0.20	0.01	0.52	0.37	0.51836
ROUTE K	0.86	0.38	0.65	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.09		0.59	0.05	0.21	0.08	0.72	0.29	0.85	0.11	0.53	0.07		0.56	0.37	0.28	0.05	0.70	0.05	0.34	0.02	0.50	0.36	0.52414
ROUTE AF	0.19	0.08	0.51	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.35	0.05		0.30	0.03	0.39	0.15	0.09	0.04	0.86	0.11	0.32	0.04		0.66	0.43	0.59	0.11	0.44	0.03	0.27	0.02	0.60	0.43	0.52449
ROUTE D	0.95	0.42	0.96	0.13	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.10		0.30	0.03	0.18	0.07	0.72	0.29	0.89	0.11	0.49	0.07		0.59	0.38	0.11	0.02	0.71	0.06	0.50	0.04	0.50	0.36	0.53256
ROUTE ADQ	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.06		0.68	0.06	0.46	0.18	0.60	0.24	0.03	0.00	0.48	0.07		0.58	0.38	0.47	0.09	1.00	0.08	0.20	0.01	0.57	0.41	0.53389
ROUTE ADD	0.10	0.04	0.30	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.13	0.02		0.67	0.06	0.86	0.33	0.00	0.00	0.04	0.01	0.39	0.06		0.72	0.47	0.47	0.09	0.74	0.06	0.26	0.02	0.64	0.46	0.53588
ROUTE Y	0.81	0.36	0.65	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.60	0.08		0.33	0.03	0.11	0.04	0.97	0.39	0.96	0.12	0.58	0.08		0.52	0.34	0.43	0.08	1.00	0.08	0.27	0.02	0.52	0.37	0.53920
ROUTE ACS	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.06		0.96	0.09	0.68	0.26	0.62	0.25	0.03	0.00	0.60	0.08		0.63	0.42	0.17	0.03	1.00	0.08	0.34	0.03	0.55	0.40	0.53937
ROUTE ACP	0.86	0.38	0.75	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.07		0.67	0.06	0.64	0.24	0.62	0.25	0.07	0.01	0.57	0.08		0.65	0.43	0.02	0.00	1.00	0.08	0.51	0.04	0.55	0.39	0.54758
ROUTE HR	0.38	0.17	0.56	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.43	0.06		0.06	0.01	0.32	0.12	0.38	0.15	0.97	0.12	0.40	0.06		0.58	0.38	0.96	0.18	0.32	0.03	0.22	0.02	0.60	0.43	0.55058
ROUTE BL	0.29	0.13	0.55	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.06		0.31	0.03	0.32	0.12	0.09	0.04	0.86	0.11	0.29	0.04		0.66	0.43	0.71	0.14	0.44	0.03	0.39	0.03	0.63	0.46	0.55250
ROUTE P	0.29	0.13	0.54	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.39	0.06		0.58	0.05	0.54	0.20	0.12	0.05	0.86	0.11	0.41	0.06		0.71	0.46	0.41	0.08	0.45	0.04	0.52	0.04	0.62	0.44	0.55706
ROUTE ADT	0.19	0.08	0.34	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.03		0.67	0.06	0.79	0.30	0.00	0.00	0.04	0.01	0.37	0.05		0.73	0.48	0.59	0.11	0.74	0.06	0.38	0.03	0.68	0.49	0.56322
ROUTE ACV	0.19	0.08	0.33	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.03		0.95	0.09	1.00	0.38	0.03	0.01	0.04	0.01	0.48	0.07		0.77	0.51	0.30	0.06	0.75	0.06	0.51	0.04	0.66	0.47	0.56766
ROUTE BE	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.09		0.33	0.03	0.04	0.01	0.97	0.39	0.96	0.12	0.56	0.08		0.52	0.34	0.56	0.11	1.00	0.08	0.39	0.03	0.55	0.40	0.56799
ROUTE I	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.09		0.61	0.06	0.25	0.10	1.00	0.40	0.96	0.12	0.67	0.09		0.57	0.38	0.24	0.05	1.00	0.08	0.53	0.04	0.54	0.39	0.57336
ROUTE AD	0.24	0.11	0.55	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.37	0.05		0.32	0.03	0.43	0.16	0.38	0.15	0.97	0.12	0.46	0.06		0.67	0.44	0.55	0.11	0.73	0.06	0.47	0.03	0.63	0.46	0.57371
ROUTE B	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.77	0.11		0.32	0.03	0.21	0.08	1.00	0.40	1.00	0.12	0.64	0.09		0.59	0.39	0.08	0.02	1.00	0.08	0.69	0.05	0.53	0.39	0.58147
ROUTE BJ	0.33	0.15	0.59	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.06		0.32	0.03	0.36	0.14	0.38	0.15	0.97	0.12	0.44	0.06		0.67	0.44	0.68	0.13	0.73	0.06	0.59	0.04	0.67	0.48	0.60162
ROUTE N	0.33	0.15	0.58	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.41	0.06		0.60	0.06	0.57	0.22	0.40	0.16	0.97	0.12	0.56	0.08		0.72	0.47	0.37	0.07	0.74	0.06	0.72	0.05	0.65	0.47	0.60579
ROUTE AB	0.86	0.38	0.91	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.70	0.10		0.36	0.03	0.25	0.10	0.69	0.28	0.89	0.11	0.52	0.07		0.90	0.59	0.48	0.09	0.70	0.05	0.02	0.00	0.74	0.53	0.70051
ROUTE ADB	0.76	0.34	0.70	0.09	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.48	0.07		0.72	0.07	0.71	0.27	0.60	0.24	0.07	0.01	0.59	0.08		0.96	0.63	0.36	0.07	1.00	0.08	0.03	0.00	0.78	0.56	0.70985
ROUTE BH	0.95	0.42	0.95	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.10		0.36	0.03	0.18	0.07	0.69	0.28	0.89	0.11	0.49	0.07		0.90	0.59	0.61	0.12	0.70	0.05	0.14	0.01	0.77	0.56	0.72891
ROUTE L	0.95	0.42	0.94	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.10		0.63	0.06	0.39	0.15	0.72	0.29	0.89	0.11	0.61	0.09		0.94	0.62	0.29	0.06	0.70	0.05	0.28	0.02	0.75	0.54	0.72984
ROUTE ADR	0.86	0.38	0.74	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.07		0.73	0.07	0.64	0.24	0.60	0.24	0.07	0.01	0.56	0.08		0.96	0.63	0.49	0.09	1.00	0.08	0.15	0.01	0.81	0.58	0.73754
ROUTE ACT	0.86	0.38	0.73	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.07		1.00	0.09	0.86	0.33	0.62	0.25	0.07	0.01	0.68	0.10		1.00	0.66	0.19	0.04	1.00	0.08	0.28	0.02	0.79	0.57	0.73852
ROUTE Z	0.90	0.40	0.95	0.12	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.72	0.10		0.37	0.03	0.29	0.11	0.97	0.39	1.00	0.12	0.66	0.09		0.91	0.59	0.44	0.08	1.00	0.08	0.21	0.02	0.77	0.56	0.74925
ROUTE BF	1.00	0.44	0.99	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.11		0.38	0.03	0.21	0.08	0.97	0.39	1.00	0.12	0.63	0.09		0.91	0.60	0.57	0.11	1.00	0.08	0.33	0.02	0.81	0.58	0.77756
ROUTE J	1.00	0.44	0.98	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.11		0.65	0.06	0.43	0.16	1.00	0.40	1.00	0.12	0.75	0.11		0.95	0.62	0.26	0.05	1.00	0.08	0.47	0.03	0.79	0.57	0.77813

Table 4.4
Metrics for BREC Routes
(Natural Environment Emphasis Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	Natural	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	Engineering	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
14%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		72%	9.3%		38.0%		40.3%		12.4%		100.0%		14%	65.6%		19.2%		7.8%		7.4%		100.0%		SORT
ROUTE HS	0.24	0.11	0.22	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.30	0.04		0.00	0.00	0.11	0.04	0.09	0.04	0.82	0.10	0.18	0.13		0.17	0.11	0.99	0.19	0.00	0.00	0.05	0.00	0.30	0.04	0.21275
ROUTE G	0.19	0.08	0.26	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.04		0.21	0.02	0.14	0.05	0.12	0.05	0.82	0.10	0.22	0.16		0.00	0.00	0.22	0.04	0.46	0.04	0.80	0.06	0.14	0.02	0.21904
ROUTE AGW	0.14	0.06	0.01	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.08	0.01		0.37	0.03	0.57	0.22	0.00	0.00	0.00	0.00	0.25	0.18		0.25	0.17	0.85	0.16	0.34	0.03	0.03	0.00	0.36	0.05	0.24266
ROUTE BK	0.19	0.08	0.25	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.04		0.26	0.02	0.14	0.05	0.09	0.04	0.82	0.10	0.22	0.16		0.28	0.18	0.70	0.13	0.44	0.03	0.43	0.03	0.38	0.05	0.24931
ROUTE ACQ	0.10	0.04	0.05	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.01		0.57	0.05	0.61	0.23	0.03	0.01	0.00	0.00	0.30	0.21		0.09	0.06	0.12	0.02	0.75	0.06	0.78	0.06	0.19	0.03	0.24932
ROUTE AE	0.10	0.04	0.21	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.23	0.03		0.26	0.02	0.21	0.08	0.09	0.04	0.82	0.10	0.24	0.18		0.28	0.18	0.57	0.11	0.43	0.03	0.31	0.02	0.35	0.05	0.25711
ROUTE ADS	0.10	0.04	0.04	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.01		0.63	0.06	0.61	0.23	0.00	0.00	0.00	0.00	0.29	0.21		0.36	0.24	0.58	0.11	0.74	0.06	0.41	0.03	0.44	0.06	0.27859
ROUTE ADC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00		0.63	0.06	0.68	0.26	0.00	0.00	0.00	0.00	0.32	0.23		0.36	0.23	0.46	0.09	0.74	0.06	0.29	0.02	0.40	0.06	0.28653
ROUTE HT	0.33	0.15	0.52	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.41	0.06		0.04	0.00	0.29	0.11	0.09	0.04	0.86	0.11	0.26	0.18		0.57	0.37	1.00	0.19	0.01	0.00	0.01	0.00	0.57	0.08	0.32103
ROUTE HQ	0.29	0.13	0.26	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.32	0.04		0.02	0.00	0.14	0.05	0.38	0.15	0.93	0.11	0.32	0.23		0.18	0.12	0.95	0.18	0.31	0.02	0.26	0.02	0.34	0.05	0.32419
ROUTE H	0.29	0.13	0.56	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.06		0.25	0.02	0.32	0.12	0.12	0.05	0.86	0.11	0.30	0.22		0.37	0.24	0.23	0.04	0.46	0.04	0.75	0.06	0.38	0.05	0.32422
ROUTE E	0.24	0.11	0.30	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.04		0.22	0.02	0.18	0.07	0.40	0.16	0.93	0.11	0.37	0.26		0.01	0.01	0.18	0.04	0.74	0.06	1.00	0.07	0.17	0.02	0.33028
ROUTE O	0.19	0.08	0.24	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.04		0.54	0.05	0.36	0.14	0.12	0.05	0.82	0.10	0.34	0.24		0.34	0.22	0.39	0.08	0.45	0.04	0.57	0.04	0.37	0.05	0.33307
ROUTE AGX	0.24	0.11	0.31	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.20	0.03		0.41	0.04	0.75	0.29	0.00	0.00	0.04	0.01	0.33	0.24		0.64	0.42	0.86	0.17	0.34	0.03	0.00	0.00	0.61	0.09	0.34959
ROUTE ACR	0.19	0.08	0.35	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.03		0.61	0.06	0.79	0.30	0.03	0.01	0.04	0.01	0.37	0.27		0.44	0.29	0.13	0.03	0.75	0.06	0.74	0.05	0.43	0.06	0.35337
ROUTE BL	0.29	0.13	0.55	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.06		0.31	0.03	0.32	0.12	0.09	0.04	0.86	0.11	0.29	0.21		0.66	0.43	0.71	0.14	0.44	0.03	0.39	0.03	0.63	0.09	0.35568
ROUTE BI	0.24	0.11	0.29	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.04		0.28	0.03	0.18	0.07	0.38	0.15	0.93	0.11	0.36	0.26		0.29	0.19	0.67	0.13	0.73	0.06	0.63	0.05	0.42	0.06	0.36052
ROUTE ACU	0.10	0.04	0.03	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.06	0.01		0.91	0.08	0.82	0.31	0.03	0.01	0.00	0.00	0.41	0.29		0.41	0.27	0.29	0.05	0.75	0.06	0.55	0.04	0.43	0.06	0.36227
ROUTE AF	0.19	0.08	0.51	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.35	0.05		0.30	0.03	0.39	0.15	0.09	0.04	0.86	0.11	0.32	0.23		0.66	0.43	0.59	0.11	0.44	0.03	0.27	0.02	0.60	0.08	0.36357
ROUTE AC	0.14	0.06	0.25	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.25	0.04		0.28	0.03	0.25	0.10	0.38	0.15	0.93	0.11	0.39	0.28		0.29	0.19	0.54	0.10	0.73	0.06	0.51	0.04	0.39	0.05	0.36834
ROUTE ADT	0.19	0.08	0.34	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.03		0.67	0.06	0.79	0.30	0.00	0.00	0.04	0.01	0.37	0.26		0.73	0.48	0.59	0.11	0.74	0.06	0.38	0.03	0.68	0.09	0.38374
ROUTE ADD	0.10	0.04	0.30	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.13	0.02		0.67	0.06	0.86	0.33	0.00	0.00	0.04	0.01	0.39	0.28		0.72	0.47	0.47	0.09	0.74	0.06	0.26	0.02	0.64	0.09	0.39176
ROUTE C	0.86	0.38	0.66	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.09		0.26	0.02	0.00	0.00	0.72	0.29	0.85	0.11	0.42	0.30		0.21	0.14	0.10	0.02	0.71	0.06	0.56	0.04	0.25	0.04	0.42435
ROUTE HR	0.38	0.17	0.56	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.43	0.06		0.06	0.01	0.32	0.12	0.38	0.15	0.97	0.12	0.40	0.29		0.58	0.38	0.96	0.18	0.32	0.03	0.22	0.02	0.60	0.08	0.43225
ROUTE F	0.33	0.15	0.60	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.06		0.27	0.02	0.36	0.14	0.40	0.16	0.97	0.12	0.44	0.32		0.37	0.25	0.20	0.04	0.75	0.06	0.96	0.07	0.41	0.06	0.43528
ROUTE P	0.29	0.13	0.54	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.39	0.06		0.58	0.05	0.54	0.20	0.12	0.05	0.86	0.11	0.41	0.30		0.71	0.46	0.41	0.08	0.45	0.04	0.52	0.04	0.62	0.09	0.43854
ROUTE M	0.24	0.11	0.28	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.04		0.56	0.05	0.39	0.15	0.40	0.16	0.93	0.11	0.48	0.34		0.35	0.23	0.36	0.07	0.74	0.06	0.77	0.06	0.41	0.06	0.44419
ROUTE ACO	0.76	0.34	0.45	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.06		0.62	0.06	0.46	0.18	0.62	0.25	0.03	0.00	0.49	0.35		0.29	0.19	0.00	0.00	1.00	0.08	0.57	0.04	0.31	0.04	0.45450
ROUTE BG	0.86	0.38	0.65	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.09		0.32	0.03	0.00	0.00	0.69	0.28	0.85	0.11	0.41	0.30		0.51	0.33	0.59	0.11	0.69	0.05	0.20	0.01	0.52	0.07	0.45693
ROUTE AA	0.76	0.34	0.61	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.58	0.08		0.31	0.03	0.07	0.03	0.69	0.28	0.85	0.11	0.44	0.32		0.51	0.33	0.46	0.09	0.69	0.05	0.08	0.01	0.48	0.07	0.46465
ROUTE ACV	0.19	0.08	0.33	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.03		0.95	0.09	1.00	0.38	0.03	0.01	0.04	0.01	0.48	0.35		0.77	0.51	0.30	0.06	0.75	0.06	0.51	0.04	0.66	0.09	0.46658
ROUTE BJ	0.33	0.15	0.59	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.06		0.32	0.03	0.36	0.14	0.38	0.15	0.97	0.12	0.44	0.31		0.67	0.44	0.68	0.13	0.73	0.06	0.59	0.04	0.67	0.09	0.46670
ROUTE AD	0.24	0.11	0.55	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.37	0.05		0.32	0.03	0.43	0.16	0.38	0.15	0.97	0.12	0.46	0.33		0.67	0.44	0.55	0.11	0.73	0.06	0.47	0.03	0.63	0.09	0.47461
ROUTE ADQ	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.06		0.68	0.06	0.46	0.18	0.60	0.24	0.03	0.00	0.48	0.35		0.58	0.38	0.47	0.09	1.00	0.08	0.20	0.01	0.57	0.08	0.48593
ROUTE ADA	0.67	0.30	0.40	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.37	0.05		0.68	0.06	0.54	0.20	0.60	0.24	0.03	0.00	0.51	0.37		0.58	0.38	0.35	0.07	1.00	0.08	0.08	0.01	0.53	0.07	0.49379
ROUTE D	0.95	0.42	0.96	0.13	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.10		0.30	0.03	0.18	0.07	0.72	0.29	0.89	0.11	0.49	0.36		0.59	0.38	0.11	0.02	0.71	0.06	0.50	0.04	0.50	0.07	0.53035
ROUTE A	0.90	0.40	0.70	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.09		0.28	0.03	0.04	0.01	1.00	0.40	0.96	0.12	0.56	0.40		0.22	0.14	0.07	0.01	1.00	0.08	0.76	0.06	0.29	0.04	0.53551
ROUTE K	0.86	0.38	0.65	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.09		0.59	0.05	0.21	0.08	0.72	0.29	0.85	0.11	0.53	0.38		0.56	0.37	0.28	0.05	0.70	0.05	0.34	0.02	0.50	0.07	0.54003
ROUTE N	0.33	0.15	0.58	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.41	0.06		0.60	0.06	0.57	0.22	0.40	0.16	0.97	0.12	0.56	0.40		0.72	0.47	0.37	0.07	0.74	0.06	0.72	0.05	0.65	0.09	0.54948
ROUTE ACP	0.86	0.38	0.75	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.07		0.67	0.06	0.64	0.24	0.62	0.25	0.07	0.01	0.57	0.41		0.65	0.43	0.02	0.00	1.00	0.08	0.51	0.04	0.55	0.08	0.55924
ROUTE BH	0.95	0.42	0.95	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.10		0.36	0.03	0.18	0.07	0.69	0.28	0.89	0.11	0.49	0.35		0.90	0.59	0.61	0.12	0.70	0.05	0.14	0.01	0.77	0.11	0.56420
ROUTE BE	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.09		0.33	0.03	0.04	0.01	0.97	0.39	0.96	0.12	0.56	0.40		0.52	0.34	0.56	0.11	1.00	0.08	0.39	0.03	0.55	0.08	0.56805
ROUTE ACS	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.06		0.96	0.09	0.68	0.26	0.62	0.25	0.03	0.00	0.60	0.43		0.63	0.42	0.17	0.03	1.00	0.08	0.34	0.03	0.55	0.08	0.56897
ROUTE AB	0.86	0.38	0.91	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.70	0.10		0.36	0.03	0.25	0.10	0.69	0.28	0.89	0.11	0.52	0.37		0.90	0.59	0.48	0.09	0.70	0.05	0.02	0.00	0.74	0.10	0.57201
ROUTE Y	0.81	0.36	0.65	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.60	0.08		0.33	0.03	0.11	0.04	0.97	0.39	0.96	0.12	0.58	0.42		0.52	0.34	0.43	0.08	1.00	0.08	0.27	0.02	0.52	0.07	0.57579
ROUTE ADR	0.86	0.38	0.74	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.07		0.73	0.07	0.64	0.24	0.60	0.24	0.07	0.01	0.56	0.40		0.96	0.63	0.49	0.09	1.00	0.08	0.15	0.01	0.81	0.11	0.59185
ROUTE ADB	0.76	0.34	0.70	0.09	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.48	0.07		0.72	0.07	0.71	0.27	0.60	0.24	0.07	0.01	0.59	0.42		0.96	0.63	0.36	0.07	1.00	0.08	0.03	0.00	0.78	0.11	0.59980
ROUTE B	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.77	0.11		0.32	0.03	0.21	0.08	1.00	0.40	1.00	0.12	0.64	0.46		0.59	0.39	0.08	0.02	1.00	0.08	0.69	0.05	0.53	0.07	0.64132
ROUTE L	0.95	0.42	0.94	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.10		0.63	0.06	0.39	0.15	0.72	0.29	0.89	0.11	0.61	0.44		0.94	0.62	0.29	0.06	0.70	0.05	0.28	0.02	0.75	0.11	0.64635
ROUTE I	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.09		0.61	0.06	0.25	0.10	1.00	0.40	0.96	0.12	0.67	0.48		0.57	0.38	0.24	0.05	1.00	0.08	0.53	0.04	0.54	0.08	0.65106
ROUTE ACT	0.86	0.38	0.73	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.07		1.00	0.09	0.86	0.33	0.62	0.25	0.07	0.01	0.68	0.49		1.00	0.66	0.19	0.04	1.00	0.08	0.28	0.02	0.79	0.11	0.67401
ROUTE BF	1.00	0.44	0.99	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.11		0.38	0.03	0.21	0.08	0.97	0.39	1.00	0.12	0.63	0.45		0.91	0.60	0.57	0.11	1.00	0.08	0.33	0.02	0.81	0.11	0.67512
ROUTE Z	0.90	0.40	0.95	0.12	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.72	0.10		0.37	0.03	0.29	0.11	0.97	0.39	1.00	0.12	0.66	0.47		0.91	0.59	0.44	0.08	1.00	0.08	0.21	0.02	0.77	0.11	0.68295
ROUTE J	1.00	0.44	0.98	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.11		0.65	0.06	0.43	0.16	1.00	0.40	1.00	0.12	0.75	0.54		0.95	0.62	0.26	0.05	1.00	0.08	0.47	0.03	0.79	0.11	0.75720

Table 4.4
Metrics for BREC Routes
(Simple Average Matrix)

Built	Residences with ROW	*Weighted*	Proximity to Residences (within 300')	*Weighted*	Proposed Developments	*Weighted*	Proximity Commercial Buildings(within 300')	*Weighted*	Proximity Industrial Buildings(within 300')	*Weighted*	School, Church, Cemetery, and Park Parcels Crossed	*Weighted*	NRHP Listed Structures and Districts (3000' from edge of R/W)	*Weighted*	TOTAL	WEIGHTED TOTAL	Natural	Natural Forests (Acres)	*Weighted*	Stream/River Crossings	*Weighted*	Wetland Areas (Acres)	*Weighted*	Floodplain Areas (Acres)	*Weighted*	TOTAL	WEIGHTED TOTAL	Engineering	Percent of Route Rebuilt with Existing T/L*	*Weighted*	Percent of Route of Co-located with Existing Utilities*	*Weighted*	Percent of Route Co-located with Roads*	*Weighted*	Total Project Costs	*Weighted*	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
33%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		33%	9.3%		38.0%		40.3%		12.4%		100.0%		33%	65.6%		19.2%		7.8%		7.4%		100.0%		SORT
ROUTE ACQ	0.10	0.04	0.05	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.02		0.57	0.05	0.61	0.23	0.03	0.01	0.00	0.00	0.30	0.10		0.09	0.06	0.12	0.02	0.75	0.06	0.78	0.06	0.19	0.06	0.18365
ROUTE G	0.19	0.08	0.26	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.09		0.21	0.02	0.14	0.05	0.12	0.05	0.82	0.10	0.22	0.07		0.00	0.00	0.22	0.04	0.46	0.04	0.80	0.06	0.14	0.04	0.21122
ROUTE AGW	0.14	0.06	0.01	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.08	0.03		0.37	0.03	0.57	0.22	0.00	0.00	0.00	0.00	0.25	0.08		0.25	0.17	0.85	0.16	0.34	0.03	0.03	0.00	0.36	0.12	0.22841
ROUTE ADC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.02	0.01		0.63	0.06	0.68	0.26	0.00	0.00	0.00	0.00	0.32	0.10		0.36	0.23	0.46	0.09	0.74	0.06	0.29	0.02	0.40	0.13	0.24278
ROUTE HS	0.24	0.11	0.22	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.30	0.10		0.00	0.00	0.11	0.04	0.09	0.04	0.82	0.10	0.18	0.06		0.17	0.11	0.99	0.19	0.00	0.00	0.05	0.00	0.30	0.10	0.25685
ROUTE ADS	0.10	0.04	0.04	0.01	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.07	0.02		0.63	0.06	0.61	0.23	0.00	0.00	0.00	0.00	0.29	0.10		0.36	0.24	0.58	0.11	0.74	0.06	0.41	0.03	0.44	0.14	0.26097
ROUTE AE	0.10	0.04	0.21	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.23	0.08		0.26	0.02	0.21	0.08	0.09	0.04	0.82	0.10	0.24	0.08		0.28	0.18	0.57	0.11	0.43	0.03	0.31	0.02	0.35	0.12	0.27238
ROUTE E	0.24	0.11	0.30	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.10		0.22	0.02	0.18	0.07	0.40	0.16	0.93	0.11	0.37	0.12		0.01	0.01	0.18	0.04	0.74	0.06	1.00	0.07	0.17	0.06	0.27774
ROUTE BK	0.19	0.08	0.25	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.09		0.26	0.02	0.14	0.05	0.09	0.04	0.82	0.10	0.22	0.07		0.28	0.18	0.70	0.13	0.44	0.03	0.43	0.03	0.38	0.13	0.29089
ROUTE ACU	0.10	0.04	0.03	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.06	0.02		0.91	0.08	0.82	0.31	0.03	0.01	0.00	0.00	0.41	0.13		0.41	0.27	0.29	0.05	0.75	0.06	0.55	0.04	0.43	0.14	0.29620
ROUTE ACR	0.19	0.08	0.35	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.06		0.61	0.06	0.79	0.30	0.03	0.01	0.04	0.01	0.37	0.12		0.44	0.29	0.13	0.03	0.75	0.06	0.74	0.05	0.43	0.14	0.32379
ROUTE HQ	0.29	0.13	0.26	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.32	0.10		0.02	0.00	0.14	0.05	0.38	0.15	0.93	0.11	0.32	0.11		0.18	0.12	0.95	0.18	0.31	0.02	0.26	0.02	0.34	0.11	0.32384
ROUTE O	0.19	0.08	0.24	0.03	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.28	0.09		0.54	0.05	0.36	0.14	0.12	0.05	0.82	0.10	0.34	0.11		0.34	0.22	0.39	0.08	0.45	0.04	0.57	0.04	0.37	0.12	0.32631
ROUTE AC	0.14	0.06	0.25	0.03	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.25	0.08		0.28	0.03	0.25	0.10	0.38	0.15	0.93	0.11	0.39	0.13		0.29	0.19	0.54	0.10	0.73	0.06	0.51	0.04	0.39	0.13	0.33887
ROUTE H	0.29	0.13	0.56	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.13		0.25	0.02	0.32	0.12	0.12	0.05	0.86	0.11	0.30	0.10		0.37	0.24	0.23	0.04	0.46	0.04	0.75	0.06	0.38	0.12	0.35401
ROUTE BI	0.24	0.11	0.29	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.10		0.28	0.03	0.18	0.07	0.38	0.15	0.93	0.11	0.36	0.12		0.29	0.19	0.67	0.13	0.73	0.06	0.63	0.05	0.42	0.14	0.35733
ROUTE AGX	0.24	0.11	0.31	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.20	0.07		0.41	0.04	0.75	0.29	0.00	0.00	0.04	0.01	0.33	0.11		0.64	0.42	0.86	0.17	0.34	0.03	0.00	0.00	0.61	0.20	0.37534
ROUTE ADD	0.10	0.04	0.30	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.13	0.04		0.67	0.06	0.86	0.33	0.00	0.00	0.04	0.01	0.39	0.13		0.72	0.47	0.47	0.09	0.74	0.06	0.26	0.02	0.64	0.21	0.38572
ROUTE M	0.24	0.11	0.28	0.04	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.30	0.10		0.56	0.05	0.39	0.15	0.40	0.16	0.93	0.11	0.48	0.16		0.35	0.23	0.36	0.07	0.74	0.06	0.77	0.06	0.41	0.14	0.39254
ROUTE ACO	0.76	0.34	0.45	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.14		0.62	0.06	0.46	0.18	0.62	0.25	0.03	0.00	0.49	0.16		0.29	0.19	0.00	0.00	1.00	0.08	0.57	0.04	0.31	0.10	0.40098
ROUTE ADT	0.19	0.08	0.34	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.06		0.67	0.06	0.79	0.30	0.00	0.00	0.04	0.01	0.37	0.12		0.73	0.48	0.59	0.11	0.74	0.06	0.38	0.03	0.68	0.22	0.40370
ROUTE HT	0.33	0.15	0.52	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.41	0.14		0.04	0.00	0.29	0.11	0.09	0.04	0.86	0.11	0.26	0.08		0.57	0.37	1.00	0.19	0.01	0.00	0.01	0.00	0.57	0.19	0.40695
ROUTE AF	0.19	0.08	0.51	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.35	0.11		0.30	0.03	0.39	0.15	0.09	0.04	0.86	0.11	0.32	0.11		0.66	0.43	0.59	0.11	0.44	0.03	0.27	0.02	0.60	0.20	0.41820
ROUTE F	0.33	0.15	0.60	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.14		0.27	0.02	0.36	0.14	0.40	0.16	0.97	0.12	0.44	0.15		0.37	0.25	0.20	0.04	0.75	0.06	0.96	0.07	0.41	0.14	0.42011
ROUTE C	0.86	0.38	0.66	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.21		0.26	0.02	0.00	0.00	0.72	0.29	0.85	0.11	0.42	0.14		0.21	0.14	0.10	0.02	0.71	0.06	0.56	0.04	0.25	0.08	0.42887
ROUTE BL	0.29	0.13	0.55	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.40	0.13		0.31	0.03	0.32	0.12	0.09	0.04	0.86	0.11	0.29	0.10		0.66	0.43	0.71	0.14	0.44	0.03	0.39	0.03	0.63	0.21	0.43649
ROUTE ACV	0.19	0.08	0.33	0.04	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.18	0.06		0.95	0.09	1.00	0.38	0.03	0.01	0.04	0.01	0.48	0.16		0.77	0.51	0.30	0.06	0.75	0.06	0.51	0.04	0.66	0.22	0.43695
ROUTE ADA	0.67	0.30	0.40	0.05	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.37	0.12		0.68	0.06	0.54	0.20	0.60	0.24	0.03	0.00	0.51	0.17		0.58	0.38	0.35	0.07	1.00	0.08	0.08	0.01	0.53	0.18	0.46503
ROUTE P	0.29	0.13	0.54	0.07	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.39	0.13		0.58	0.05	0.54	0.20	0.12	0.05	0.86	0.11	0.41	0.14		0.71	0.46	0.41	0.08	0.45	0.04	0.52	0.04	0.62	0.20	0.46980
ROUTE HR	0.38	0.17	0.56	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.43	0.14		0.06	0.01	0.32	0.12	0.38	0.15	0.97	0.12	0.40	0.13		0.58	0.38	0.96	0.18	0.32	0.03	0.22	0.02	0.60	0.20	0.47343
ROUTE ADQ	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.14		0.68	0.06	0.46	0.18	0.60	0.24	0.03	0.00	0.48	0.16		0.58	0.38	0.47	0.09	1.00	0.08	0.20	0.01	0.57	0.19	0.48338
ROUTE AD	0.24	0.11	0.55	0.07	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.37	0.12		0.32	0.03	0.43	0.16	0.38	0.15	0.97	0.12	0.46	0.15		0.67	0.44	0.55	0.11	0.73	0.06	0.47	0.03	0.63	0.21	0.48423
ROUTE A	0.90	0.40	0.70	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.21		0.28	0.03	0.04	0.01	1.00	0.40	0.96	0.12	0.56	0.19		0.22	0.14	0.07	0.01	1.00	0.08	0.76	0.06	0.29	0.10	0.49517
ROUTE AA	0.76	0.34	0.61	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.58	0.19		0.31	0.03	0.07	0.03	0.69	0.28	0.85	0.11	0.44	0.14		0.51	0.33	0.46	0.09	0.69	0.05	0.08	0.01	0.48	0.16	0.49528
ROUTE BJ	0.33	0.15	0.59	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.42	0.14		0.32	0.03	0.36	0.14	0.38	0.15	0.97	0.12	0.44	0.14		0.67	0.44	0.68	0.13	0.73	0.06	0.59	0.04	0.67	0.22	0.50247
ROUTE BG	0.86	0.38	0.65	0.09	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.21		0.32	0.03	0.00	0.00	0.69	0.28	0.85	0.11	0.41	0.14		0.51	0.33	0.59	0.11	0.69	0.05	0.20	0.01	0.52	0.17	0.51397
ROUTE ACS	0.76	0.34	0.44	0.06	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00	0.41	0.14		0.96	0.09	0.68	0.26	0.62	0.25	0.03	0.00	0.60	0.20		0.63	0.42	0.17	0.03	1.00	0.08	0.34	0.03	0.55	0.18	0.51711
ROUTE N	0.33	0.15	0.58	0.08	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.41	0.14		0.60	0.06	0.57	0.22	0.40	0.16	0.97	0.12	0.56	0.18		0.72	0.47	0.37	0.07	0.74	0.06	0.72	0.05	0.65	0.22	0.53560
ROUTE ACP	0.86	0.38	0.75	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.18		0.67	0.06	0.64	0.24	0.62	0.25	0.07	0.01	0.57	0.19		0.65	0.43	0.02	0.00	1.00	0.08	0.51	0.04	0.55	0.18	0.54276
ROUTE K	0.86	0.38	0.65	0.08	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	0.78	0.12	0.63	0.21		0.59	0.05	0.21	0.08	0.72	0.29	0.85	0.11	0.53	0.18		0.56	0.37	0.28	0.05	0.70	0.05	0.34	0.02	0.50	0.17	0.54784
ROUTE Y	0.81	0.36	0.65	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.60	0.20		0.33	0.03	0.11	0.04	0.97	0.39	0.96	0.12	0.58	0.19		0.52	0.34	0.43	0.08	1.00	0.08	0.27	0.02	0.52	0.17	0.56155
ROUTE D	0.95	0.42	0.96	0.13	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.25		0.30	0.03	0.18	0.07	0.72	0.29	0.89	0.11	0.49	0.16		0.59	0.38	0.11	0.02	0.71	0.06	0.50	0.04	0.50	0.16	0.57358
ROUTE BE	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.21		0.33	0.03	0.04	0.01	0.97	0.39	0.96	0.12	0.56	0.18		0.52	0.34	0.56	0.11	1.00	0.08	0.39	0.03	0.55	0.18	0.58019
ROUTE ADB	0.76	0.34	0.70	0.09	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.48	0.16		0.72	0.07	0.71	0.27	0.60	0.24	0.07	0.01	0.59	0.19		0.96	0.63	0.36	0.07	1.00	0.08	0.03	0.00	0.78	0.26	0.60979
ROUTE I	0.90	0.40	0.69	0.09	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	0.78	0.12	0.65	0.21		0.61	0.06	0.25	0.10	1.00	0.40	0.96	0.12	0.67	0.22		0.57	0.38	0.24	0.05	1.00	0.08	0.53	0.04	0.54	0.18	0.61387
ROUTE ADR	0.86	0.38	0.74	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.17		0.73	0.07	0.64	0.24	0.60	0.24	0.07	0.01	0.56	0.19		0.96	0.63	0.49	0.09	1.00	0.08	0.15	0.01	0.81	0.27	0.62793
ROUTE B	1.00	0.44	1.00	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.77	0.25		0.32	0.03	0.21	0.08	1.00	0.40	1.00	0.12	0.64	0.21		0.59	0.39	0.08	0.02	1.00	0.08	0.69	0.05	0.53	0.18	0.63947
ROUTE AB	0.86	0.38	0.91	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.70	0.23		0.36	0.03	0.25	0.10	0.69	0.28	0.89	0.11	0.52	0.17		0.90	0.59	0.48	0.09	0.70	0.05	0.02	0.00	0.74	0.24	0.64321
ROUTE ACT	0.86	0.38	0.73	0.10	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.22	0.03	0.53	0.17		1.00	0.09	0.86	0.33	0.62	0.25	0.07	0.01	0.68	0.22		1.00	0.66	0.19	0.04	1.00	0.08	0.28	0.02	0.79	0.26	0.65960
ROUTE BH	0.95	0.42	0.95	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.25		0.36	0.03	0.18	0.07	0.69	0.28	0.89	0.11	0.49	0.16		0.90	0.59	0.61	0.12	0.70	0.05	0.14	0.01	0.77	0.26	0.66168
ROUTE L	0.95	0.42	0.94	0.12	0.00	0.00	1.00	0.04	0.33	0.01	0.00	0.00	1.00	0.16	0.74	0.25		0.63	0.06	0.39	0.15	0.72	0.29	0.89	0.11	0.61	0.20		0.94	0.62	0.29	0.06	0.70	0.05	0.28	0.02	0.75	0.25	0.69332
ROUTE Z	0.90	0.40	0.95	0.12	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.72	0.24		0.37	0.03	0.29	0.11	0.97	0.39	1.00	0.12	0.66	0.22		0.91	0.59	0.44	0.08	1.00	0.08	0.21	0.02	0.77	0.26	0.70902
ROUTE BF	1.00	0.44	0.99	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.25		0.38	0.03	0.21	0.08	0.97	0.39	1.00	0.12	0.63	0.21		0.91	0.60	0.57	0.11	1.00	0.08	0.33	0.02	0.81	0.27	0.72745
ROUTE J	1.00	0.44	0.98	0.13	0.00	0.00	1.00	0.04	0.00	0.00	0.00	0.00	1.00	0.16	0.76	0.25		0.65	0.06	0.43	0.16	1.00	0.40	1.00	0.12	0.75	0.25		0.95	0.62	0.26	0.05	1.00	0.08	0.47	0.03	0.79	0.26	0.75893

Table 4.5
Metrics for Cross Over Routes
(Statistics and Statistics Normalized)

Built	Residences within ROW	*Normalized*	Proximity to Residences (within 300')	*Normalized*	Proposed Developments	*Normalized*	Proximity Commercial Buildings(within 300')	*Normalized*	Proximity Industrial Buildings(within 300')	*Normalized*	School, Church, Cemetery, and Park Parcels Crossed	*Normalized*	NWP Listed Structures and Districts (300' from edge of RW)	*Normalized*	Natural	Natural Forests (Acres)	*Normalized*	Stream/River Crossings	*Normalized*	Wetland Areas (Acres)	*Normalized*	Floodplain Areas (Acres)	*Normalized*	Engineering	Length (Miles)	*Normalized*	Percent of Route Rebuilt with Existing ITC	*Normalized*	*Inverted*	Percent of Route Co-located with Existing Utilities*	*Normalized*	*Inverted*	Percent of Route Co-located with Roads*	*Normalized*	*Inverted*	Total Project Costs	*Normalized*
ROUTE Q	22	*0.15*	112	*0.18*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	8	*0.62*		462.13	*0.71*	34	*0.11*	19.41	*0.77*	155.82	*0.28*		50	*0.76*	0.2	*0.72*	*0.28*	0.607	*0.53*	*0.47*	0.058	*0.12*	*0.88*	70462276	*0.49*
ROUTE R	24	*0.16*	149	*0.25*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		471.89	*0.74*	39	*0.13*	19.41	*0.77*	150	*0.27*		50.5	*0.78*	0.14	*0.49*	*0.51*	0.602	*0.52*	*0.48*	0.057	*0.12*	*0.88*	70066405	*0.47*
ROUTE S	21	*0.14*	107	*0.17*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		457.85	*0.69*	33	*0.10*	17.29	*0.67*	150.07	*0.26*		49.8	*0.74*	0.2	*0.73*	*0.27*	0.597	*0.51*	*0.49*	0.071	*0.15*	*0.85*	69259045	*0.44*
ROUTE T	23	*0.15*	144	*0.24*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		467.6	*0.73*	38	*0.18*	17.29	*0.67*	152.25	*0.26*		50.3	*0.77*	0.14	*0.49*	*0.51*	0.591	*0.50*	*0.50*	0.07	*0.15*	*0.85*	68860680	*0.42*
ROUTE U	8	*0.05*	62	*0.09*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	8	*0.62*		450.06	*0.67*	38	*0.18*	14.95	*0.57*	154.14	*0.27*		51.9	*0.87*	0.25	*0.88*	*0.12*	0.568	*0.46*	*0.54*	0.067	*0.14*	*0.86*	71988994	*0.55*
ROUTE V	10	*0.07*	99	*0.16*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		459.81	*0.70*	43	*0.24*	14.95	*0.57*	156.32	*0.28*		52.4	*0.90*	0.18	*0.65*	*0.35*	0.562	*0.43*	*0.57*	0.066	*0.14*	*0.86*	71695829	*0.54*
ROUTE W	7	*0.05*	57	*0.08*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		445.78	*0.68*	37	*0.16*	12.83	*0.47*	148.39	*0.24*		51.7	*0.85*	0.25	*0.88*	*0.12*	0.557	*0.44*	*0.56*	0.08	*0.17*	*0.83*	70743152	*0.50*
ROUTE X	9	*0.06*	94	*0.15*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		455.53	*0.69*	42	*0.24*	12.83	*0.47*	150.57	*0.25*		52.1	*0.88*	0.19	*0.68*	*0.34*	0.552	*0.43*	*0.57*	0.079	*0.17*	*0.83*	70441805	*0.49*
ROUTE AG	20	*0.13*	103	*0.17*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		397.75	*0.50*	30	*0.07*	15.2	*0.76*	155.82	*0.28*		48.6	*0.67*	0.21	*0.74*	*0.26*	0.55	*0.43*	*0.57*	0.059	*0.13*	*0.87*	68826243	*0.42*
ROUTE AH	22	*0.15*	145	*0.25*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		407.5	*0.53*	35	*0.13*	19.2	*0.76*	158	*0.29*		49	*0.69*	0.14	*0.51*	*0.49*	0.545	*0.42*	*0.58*	0.059	*0.13*	*0.87*	68431704	*0.41*
ROUTE AI	19	*0.13*	103	*0.17*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		393.48	*0.49*	29	*0.03*	17.08	*0.66*	150.07	*0.24*		48.3	*0.65*	0.21	*0.75*	*0.25*	0.539	*0.41*	*0.59*	0.073	*0.16*	*0.84*	67620414	*0.37*
ROUTE AJ	21	*0.14*	140	*0.24*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		403.22	*0.52*	34	*0.11*	17.08	*0.66*	152.25	*0.26*		48.8	*0.68*	0.14	*0.51*	*0.49*	0.534	*0.40*	*0.60*	0.073	*0.16*	*0.84*	67223523	*0.38*
ROUTE AK	6	*0.04*	58	*0.08*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	8	*0.62*		385.68	*0.40*	34	*0.11*	14.74	*0.56*	154.14	*0.27*		50.4	*0.79*	0.25	*0.90*	*0.10*	0.511	*0.36*	*0.64*	0.069	*0.15*	*0.85*	70585896	*0.49*
ROUTE AL	8	*0.05*	95	*0.15*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		395.43	*0.49*	39	*0.19*	14.74	*0.56*	156.32	*0.28*		50.9	*0.81*	0.19	*0.67*	*0.33*	0.506	*0.38*	*0.65*	0.068	*0.15*	*0.85*	70061842	*0.47*
ROUTE AM	5	*0.03*	53	*0.07*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		381.4	*0.45*	33	*0.10*	12.62	*0.46*	148.39	*0.24*		50.2	*0.76*	0.26	*0.91*	*0.09*	0.5	*0.34*	*0.66*	0.083	*0.18*	*0.82*	69096945	*0.43*
ROUTE AN	9	*0.05*	90	*0.14*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		391.15	*0.48*	38	*0.18*	12.62	*0.46*	150.57	*0.25*		50.7	*0.79*	0.19	*0.67*	*0.33*	0.496	*0.33*	*0.67*	0.082	*0.17*	*0.83*	68802684	*0.42*
ROUTE AO	17	*0.11*	103	*0.17*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	12	*0.92*		398.59	*0.51*	39	*0.19*	15.2	*0.76*	154.9	*0.27*		47.4	*0.63*	0.22	*0.76*	*0.24*	0.505	*0.35*	*0.65*	0.016	*0.03*	*0.97*	67872750	*0.38*
ROUTE AP	19	*0.13*	140	*0.24*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		408.34	*0.54*	36	*0.15*	19.2	*0.76*	157.08	*0.28*		47.9	*0.62*	0.15	*0.52*	*0.48*	0.5	*0.34*	*0.66*	0.016	*0.03*	*0.97*	67275291	*0.36*
ROUTE AQ	16	*0.11*	98	*0.16*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		394.31	*0.49*	30	*0.05*	17.08	*0.66*	149.15	*0.24*		47.2	*0.58*	0.22	*0.77*	*0.23*	0.494	*0.33*	*0.67*	0.03	*0.06*	*0.94*	66460150	*0.33*
ROUTE AR	18	*0.12*	135	*0.23*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		404.06	*0.52*	35	*0.13*	17.08	*0.66*	151.33	*0.25*		47.6	*0.61*	0.15	*0.52*	*0.48*	0.489	*0.32*	*0.68*	0.03	*0.06*	*0.94*	66063198	*0.31*
ROUTE AS	2	*0.01*	53	*0.07*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		386.51	*0.45*	33	*0.10*	14.74	*0.56*	153.22	*0.26*		49.3	*0.71*	0.26	*0.92*	*0.08*	0.467	*0.28*	*0.72*	0.067	*0.14*	*0.86*	69221248	*0.49*
ROUTE AT	5	*0.03*	90	*0.14*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		396.27	*0.50*	40	*0.21*	14.74	*0.56*	155.4	*0.27*		49.7	*0.74*	0.19	*0.69*	*0.33*	0.463	*0.27*	*0.73*	0.027	*0.06*	*0.94*	68925469	*0.43*
ROUTE AU	2	*0.01*	48	*0.06*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		382.24	*0.45*	34	*0.11*	12.62	*0.46*	147.47	*0.23*		49	*0.69*	0.26	*0.93*	*0.07*	0.456	*0.26*	*0.74*	0.041	*0.09*	*0.91*	67951796	*0.39*
ROUTE AV	4	*0.03*	89	*0.14*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		391.99	*0.48*	39	*0.19*	12.62	*0.46*	149.65	*0.24*		49.5	*0.72*	0.19	*0.69*	*0.31*	0.451	*0.25*	*0.75*	0.041	*0.09*	*0.91*	67659520	*0.38*
ROUTE AW	17	*0.11*	102	*0.16*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		425.54	*0.59*	34	*0.11*	21.42	*0.86*	159.02	*0.29*		45.4	*0.47*	0.1	*0.35*	*0.65*	0.527	*0.39*	*0.61*	0.017	*0.04*	*0.96*	63476875	*0.21*
ROUTE AX	19	*0.13*	139	*0.23*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	12	*0.92*		435.29	*0.62*	39	*0.19*	21.42	*0.86*	161.2	*0.30*		45.9	*0.50*	0.03	*0.10*	*0.90*	0.522	*0.38*	*0.62*	0.016	*0.03*	*0.97*	63081910	*0.19*
ROUTE AY	16	*0.11*	97	*0.16*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		421.26	*0.58*	33	*0.10*	19.3	*0.76*	153.27	*0.26*		45.2	*0.46*	0.1	*0.35*	*0.65*	0.516	*0.37*	*0.63*	0.031	*0.07*	*0.93*	62278084	*0.18*
ROUTE AZ	18	*0.12*	134	*0.22*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	12	*0.92*		431.01	*0.61*	38	*0.18*	19.3	*0.76*	155.45	*0.27*		45.6	*0.49*	0.03	*0.10*	*0.90*	0.51	*0.36*	*0.64*	0.031	*0.07*	*0.93*	61880277	*0.14*
ROUTE BA	3	*0.02*	52	*0.07*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		413.47	*0.55*	38	*0.18*	16.96	*0.66*	157.34	*0.28*		47.2	*0.59*	0.15	*0.54*	*0.46*	0.487	*0.31*	*0.69*	0.029	*0.06*	*0.94*	64987873	*0.27*
ROUTE BB	5	*0.03*	99	*0.14*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	12	*0.92*		423.22	*0.58*	43	*0.26*	16.96	*0.66*	159.52	*0.30*		47.7	*0.61*	0.08	*0.29*	*0.71*	0.482	*0.30*	*0.70*	0.028	*0.06*	*0.94*	64685678	*0.26*
ROUTE BC	2	*0.01*	47	*0.06*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		409.19	*0.54*	37	*0.16*	14.84	*0.56*	151.59	*0.25*		47	*0.57*	0.15	*0.54*	*0.46*	0.475	*0.29*	*0.71*	0.043	*0.09*	*0.91*	63739389	*0.22*
ROUTE BD	4	*0.03*	84	*0.13*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	12	*0.92*		418.94	*0.57*	39	*0.19*	14.84	*0.56*	153.77	*0.26*		47.5	*0.60*	0.08	*0.29*	*0.71*	0.471	*0.29*	*0.71*	0.042	*0.09*	*0.91*	63438165	*0.21*
ROUTE BM	22	*0.15*	113	*0.19*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	8	*0.62*		398.16	*0.50*	28	*0.02*	19.2	*0.76*	155.82	*0.28*		48.6	*0.67*	0.21	*0.74*	*0.26*	0.508	*0.33*	*0.65*	0.059	*0.13*	*0.87*	69588585	*0.46*
ROUTE BN	24	*0.16*	150	*0.25*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		407.91	*0.53*	33	*0.10*	19.2	*0.76*	158	*0.29*		49.1	*0.70*	0.14	*0.51*	*0.49*	0.503	*0.34*	*0.66*	0.059	*0.13*	*0.87*	69193138	*0.44*
ROUTE BO	21	*0.14*	108	*0.18*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		393.88	*0.49*	27	*0.00*	17.08	*0.66*	150.07	*0.24*		48.4	*0.66*	0.21	*0.75*	*0.25*	0.496	*0.33*	*0.67*	0.073	*0.16*	*0.84*	68381712	*0.40*
ROUTE BP	23	*0.15*	140	*0.24*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		403.63	*0.52*	32	*0.08*	17.08	*0.66*	152.25	*0.26*		48.9	*0.69*	0.14	*0.51*	*0.49*	0.492	*0.32*	*0.68*	0.072	*0.16*	*0.84*	68026488	*0.39*
ROUTE BQ	8	*0.05*	63	*0.09*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	8	*0.62*		386.09	*0.46*	32	*0.08*	14.74	*0.56*	154.14	*0.27*		50.5	*0.78*	0.25	*0.90*	*0.10*	0.47	*0.28*	*0.72*	0.069	*0.15*	*0.85*	71133830	*0.52*
ROUTE BR	10	*0.07*	100	*0.16*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		395.84	*0.50*	37	*0.16*	14.74	*0.56*	156.32	*0.28*		51	*0.81*	0.19	*0.67*	*0.33*	0.466	*0.28*	*0.72*	0.068	*0.15*	*0.85*	70834267	*0.50*
ROUTE BS	7	*0.05*	88	*0.13*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		381.81	*0.45*	31	*0.06*	12.62	*0.46*	148.39	*0.24*		50.3	*0.77*	0.26	*0.91*	*0.09*	0.459	*0.26*	*0.74*	0.082	*0.18*	*0.82*	69870924	*0.48*
ROUTE BT	9	*0.06*	95	*0.15*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		391.56	*0.48*	36	*0.15*	12.62	*0.46*	150.57	*0.25*		50.7	*0.80*	0.19	*0.67*	*0.33*	0.455	*0.26*	*0.74*	0.082	*0.17*	*0.83*	69574023	*0.45*
ROUTE BU	19	*0.13*	108	*0.18*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	8	*0.62*		399	*0.51*	29	*0.03*	19.2	*0.76*	154.9	*0.27*		47.5	*0.60*	0.21	*0.76*	*0.24*	0.462	*0.27*	*0.73*	0.016	*0.03*	*0.97*	68432837	*0.41*
ROUTE BV	21	*0.14*	145	*0.25*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		408.75	*0.54*	34	*0.11*	19.2	*0.76*	157.08	*0.28*		48	*0.63*	0.15	*0.52*	*0.48*	0.457	*0.26*	*0.74*	0.016	*0.03*	*0.97*	68036916	*0.39*
ROUTE BW	18	*0.12*	103	*0.17*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		394.72	*0.49*	27	*0.00*	17.08	*0.66*	149.15	*0.24*		47.3	*0.59*	0.22	*0.77*	*0.23*	0.45	*0.25*	*0.75*	0.03	*0.06*	*0.94*	67221672	*0.36*
ROUTE BX	20	*0.13*	140	*0.24*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		404.47	*0.52*	33	*0.10*	17.08	*0.66*	151.33	*0.25*		47.7	*0.61*	0.15	*0.52*	*0.48*	0.446	*0.24*	*0.76*	0.03	*0.06*	*0.94*	66823878	*0.34*
ROUTE BY	5	*0.03*	58	*0.08*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	8	*0.62*		386.93	*0.47*	33	*0.10*	14.74	*0.56*	153.22	*0.26*		49.3	*0.71*	0.26	*0.92*	*0.08*	0.425	*0.20*	*0.80*	0.027	*0.06*	*0.94*	69997279	*0.47*
ROUTE BZ	7	*0.05*	95	*0.15*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		396.68	*0.50*	38	*0.18*	14.74	*0.56*	155.4	*0.27*		49.8	*0.74*	0.19	*0.69*	*0.31*	0.421	*0.19*	*0.81*	0.027	*0.06*	*0.94*	69698487	*0.46*
ROUTE CA	4	*0.03*	57	*0.08*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	8	*0.62*		382.69	*0.45*	32	*0.08*	12.62	*0.46*	147.47	*0.23*		49.1	*0.70*	0.26	*0.93*	*0.07*	0.414	*0.18*	*0.82*	0.041	*0.09*	*0.91*	68726522	*0.42*
ROUTE CB	6	*0.04*	90	*0.14*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		392.4	*0.48*	37	*0.16*	12.62	*0.46*	149.65	*0.24*		49.6	*0.73*	0.19	*0.69*	*0.31*	0.41	*0.17*	*0.83*	0.041	*0.09*	*0.91*	68431420	*0.41*
ROUTE CC	19	*0.13*	107	*0.17*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		425.95	*0.59*	32	*0.08*	21.42	*0.86*	159.02	*0.29*		45.5	*0.48*	0.1	*0.35*	*0.65*	0.482	*0.30*	*0.70*	0.016	*0.04*	*0.96*	64238709	*0.24*
ROUTE CD	21	*0.14*	144	*0.24*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	12	*0.92*		435.7	*0.62*	37	*0.16*	21.42	*0.86*	161.2	*0.30*		45.9	*0.51*	0.03	*0.10*	*0.90*	0.477	*0.30*	*0.70*	0.016	*0.03*	*0.97*	63942939	*0.22*
ROUTE CE	18	*0.12*	102	*0.16*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		421.67	*0.58*	31	*0.06*	19.3	*0.76*	153.27	*0.26*		45.2	*0.46*	0.1	*0.35*	*0.65*	0.47	*0.28*	*0.72*	0.031	*0.07*	*0.93*	63038941	*0.19*
ROUTE CF	20	*0.13*	139	*0.23*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	12	*0.92*		431.42	*0.61*	36	*0.15*	19.3	*0.76*	155.45	*0.27*		45.7	*0.49*	0.03	*0.10*	*0.90*	0.465	*0.27*	*0.73*	0.031	*0.07*	*0.93*	62640432	*0.17*
ROUTE CG	5	*0.03*	57	*0.08*	0	*0.00*	1	*0.01*	1	*0.00*	1	*0.25*	10	*0.77*		413.88	*0.55*	38	*0.18*	16.96	*0.66*	157.34	*0.28*		47.3	*0.59*	0.15	*0.54*	*0.46*	0.443	*0.23*	*0.77*	0.029	*0.06*	*0.94*	65761493	*0.30*
ROUTE CH	7	*0.05*	94	*0.15*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	12	*0.92*		423.63	*0.58*	41	*0.23*	16.96	*0.66*	159.52	*0.30*		47.8	*0.62*	0.08	*0.29*	*0.71*	0.439	*0.23*	*0.77*	0.028	*0.06*	*0.94*	65456882	*0.29*
ROUTE CI	4	*0.03*	52	*0.07*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	10	*0.77*		409.6	*0.54*	35	*0.13*	14.84	*0.56*	151.59	*0.25*		47.1	*0.58*	0.15	*0.54*	*0.46*	0.432	*0.21*	*0.79*	0.043	*0.09*	*0.91*	64511840	*0.26*
ROUTE CJ	6	*0.04*	89	*0.14*	0	*0.00*	1	*0.01*	2	*0.01*	1	*0.25*	12	*0.92*		419.35	*0.57*	40	*0.21*	14.84	*0.56*	153.77	*0.26*		47.6	*0.60*	0.08	*0.29*	*0.71*	0.427	*0.20*	*0.80*	0.042	*0.09*	*0.91*	64208347	*0.24*
ROUTE CK	24	*0.16*	172	*0.30*	0	*0.00*	1	*0.01*	6	*0.04*	1	*0.25*	10	*0.77*		375.55	*0.43*	56	*0.47*	20.82	*0.83*	175.27	*0.38*		45.4	*0.47*	0	*0.00*	*1.00*	0.709	*0.72*	*0.28*	0.048	*0.10*	*0.90*	65471364	*0.29*
ROUTE CL	23	*0.15*	167	*0.29*	0	*0.00*	1	*0.01*	6	*0.04*	1	*0.25*	10	*0.77*		371.27	*0.42*	55	*0.45*	18.7	*0.73*	169.52	*0.35*		45.1	*0.46*	0	*0.00*	*1.00*	0.698	*0.70*	*0.30*	0.063	*0.13*	*0.87*	64265251	*0.24*
ROUTE CM	10	*0.07*	122	*0.20*	0	*0.00*	1	*0.01*	6	*0.04*	1	*0.25*	10	*0.77*		363.48	*0.39*	60	*0.53*	16.36	*0.63*	173.6	*0.37*		47.2	*0.59*	0.06	*0.20*	*0.80*	0.662	*0.63*	*0.37*	0.059	*0.13*	*0.87*	67132917	*0.35*
ROUTE CN	11	*0.07*	117	*0.19*	0	*0.00*	1	*0.01*	7	*0.05*	1	*0.25*	10	*0.77*		359.2	*0.38*	59	*0.52*	14.24	*0.53*	167.85	*0.34*		47	*0.57*	0.06	*0.20*	*0.80*	0.651	*0.61*	*0.39*	0.073	*0.16*	*0.84*	65880646	*0.30*
ROUTE CO	24	*0.16*	175	*0.30*	0	*0.00*	1	*0.01*	7	*0.05*	2	*0.50*	10	*0.77*		375.57	*0.43*	52	*0.40*	20.79	*0.83*	161.43	*0.31*		46.4	*0.52*	0.01	*0.04*	*0.96*	0.704	*0.71*	*0.29*	0.053	*0.11*	*0.89*	68329965	*0.40*
ROUTE CP	23	*0.15*	170	*0.29*	0	*0.00*	1	*0.01*	7	*0.05*	2	*0.50*	10	*0.77*		371.29	*0.42*	51	*0.39*	18.67	*0.73*	155.68	*0.27*		46.1	*0.52*	0.01	*0.04*	*0.96*	0.693	*0.69*	*0.31*	0.067	*0.14*	*0.86*	67120809	*0.35*
ROUTE CQ	10	*0.07*	125	*0.21*	0	*0.00*	1	*0.01*	17	*0.12*	2	*0.50*	10	*0.77*		363.5	*0.39*	54	*0.47*	16.33	*0.63*	159.76	*0.30*		48.2	*0.64*	0.06	*0.23*	*0.77*	0.657	*0.63*	*0.37*	0.063	*0.14*	*0.86*	70029666	*0.47*
ROUTE CR	9	*0.06*	120	*0.20*	0	*0.00*	1	*0.01*	18	*0.13*	2	*0.50*	10	*0.77*		359.22	*0.38*	55	*0.45*	14.21	*0.53*	154.01	*0.27*		48	*0.63*	0.07	*0.23*	*0.77*	0.647	*0.61*	*0.39*	0.077	*0.17*	*0.83*	68774130	*0.42*
ROUTE CS	25	*0.17*	163	*0.28*	0	*0.00*	3	*0.03*	14	*0.10*	2	*0.50*	10	*0.77*		369.53	*0.41*	52	*0.40*	20.79	*0.83*	162.97	*0.31*		45.5	*0.48*	0.01	*0.04*	*0.96*	0.675	*0.66*	*0.34*	0.092	*0.20*	*0.80*	67142862	*0.39*
ROUTE CT	25	*0.17*	178	*0.31*	0	*0.00*	3	*0.03*	15	*0.11*	2	*0.50*	10	*0.77*		365.25	*0.40*	51	*0.39*	18.67	*0.73*	157.22	*0.28*		45.3	*0.47*	0.01	*0.04*	*0.96*	0.664	*0.64*	*0.36*	0.107	*0.23*	*0.77*	65928535	*0.31*
ROUTE CU	12	*0.08*	133	*0.22*	0	*0.00*	3	*0.03*	14	*0.10*	2	*0.50*	10	*0.77*		357.46	*0.37*	56	*0.47*	16.33	*0.63*	161.29	*0.30*		47.4	*0.59*	0.07	*0.23*	*0.77*	0.629	*0.57*	*0.43*	0.101	*0.22*	*0.78*	68883487	*0.43*
ROUTE CV	11	*0.07*	128	*0.21*	0	*0.00*	3	*0.03*	15	*0.11*	2	*0.50*	10	*0.77*		353.18	*0.36*	55	*0.45*	14.21	*0.53*	155.54	*0.27*		47.1	*0.58*	0.07	*0.23*	*0.77*	0.618	*0.55*	*0.45*	0.115	*0.25*	*0.75*	67620377	*0.37*
ROUTE CW	23	*0.15*	167	*0.29*	0	*0.00*	3	*0.03*	15	*0.11*	2	*0.50*	10	*0.77*		377.37	*0.44*	57	*0.49*	20.82	*0.83*	175.27	*0.38*		45.2	*0.48*	0	*0.00*	*1.00*	0.736	*0.77*	*0.23*	0	*0.00*	*1.00*	64265251	*0.24*
ROUTE CX	20	*0.13*	138	*0.23*	0	*0.00*	1	*0.01*	6	*0.04*	1	*0.25*	10	*0.77*		373.09	*0.42*	56	*0.47*	18.7	*0.73*	169.52	*0.35*		45	*0.45*	0	*0.00*	*1.00*	0.725	*0.75*	*0.25*	0.015	*0.03*	*0.97*	63249046	*0.20*
ROUTE CY	7	*0.05*	93	*0.15*	0	*0.00*	1	*0.01*	5	*0.03*	1	*0.25*	10	*0.77*		365.3	*0.40*	61	*0.55*	16.36	*0.63*	173.6	*0.37*		47.1	*0.58*	0.06	*0.20*	*0.80*	0.687	*0.68*	*0.32*	0.013	*0.02*	*0.97*	66013091	*0.31*
ROUTE CZ	6	*0.04*	114	*0.19*	0	*0.00*	1	*0.01*	5	*0.03*	1	*0.25*	10	*0.77*		361.02	*0.38*	60	*0.53*	14.24	*0.53*	167.85	*0.34*		46.8	*0.56*	0.06	*0.20*	*0.80*	0.676	*0.66*	*0.34*	0.027	*0.06*	*0.94*	64772126	*0.26*
ROUTE DA	21	*0.14*	146	*0.25*	0	*0.00*	1	*0.01*	11	*0.08*	2	*0.50*	10	*0.77*		377.39	*0.44*	53	*0.42*	20.79	*0.83*	161.43	*0.31*		46.2	*0.50*	0.01	*0.04*	*0.96*	0.729	*0.74*	*0.26*	0.006	*0.01*	*0.99*	67305635	*0.36*
ROUTE DB	20	*0.13*	141	*0.24*	0	*0.00*	1	*0.01*	17	*0.12*	2	*0.50*	10	*0.77*		373.1	*0.42*	52	*0.40*	18.67	*0.73*	155.68	*0.27*		46	*0.51*	0.01	*0.04*	*0.96*	0.719	*0.74*	*0.26*	0.02	*0.04*	*0.96*	66105398	*0.31*
ROUTE DC	7	*0.05*	96	*0.15*	0	*0.00*	1	*0.01*	16	*0.12*	2	*0.50*	10	*0.77*		365.31	*0.40*	57	*0.49*	16.33	*0.63*	159.76	*0.30*		48.1	*0.64*	0.06	*0.23*	*0.77*	0.682	*0.67*	*0.33*	0.018	*0.04*	*0.96*	68912439	*0.43*
ROUTE DD	6	*0.04*	91	*0.14*	0	*0.00*	1	*0.01*	16	*0.12*	2	*0.50*	10	*0.77*	

Table 4.5
Metrics for Cross Over Routes
(Statistics and Statistics Nomralized)

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Table 4.5
Metrics for Cross Over Routes
(Statistics and Statistics Normalized)

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Table 4.5
Metrics for Cross Over Routes
(Statistics and Statistics Nomralized)

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Table 4.5
Metrics for Cross Over Routes
(Built Environment Emphasis Matrix)

	Built	Residences with ROW	Residences	Proximity to Residences (within 300')	Wetland	Floodplain Areas (Acres)	Wetland Areas (Acres)	Stream/River Crossings	Proposed Developments	Proximity Commercial Buildings(within 300')	Proximity Industrial Buildings(within 300')	School, Church, Cemetery, and Park Parcels Crossed	Percent of Route Co-located with Existing Utilities*	Percent of Route Rebuilt with Existing T/L*	Engineering	WEIGHTED TOTAL	Percent of Route Co-located with Roads*	Natural	HRHP Listed Structures and Districts (3000' from edge of RW)	Wetland	Total Project Costs	Wetland	Natural Forests (Acres)	Wetland	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
	72%	44.36%	13.1%	5.54%	12.44%	40.33%	36.0%	3.6%	1.8%	16.3%	19.2%	65.6%	14%			14%		15.5%		7.4%		9.3%		100.0%		
ROUTE AIK		0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.07	0.25	0.00	0.02	0.04	0.10
ROUTE AGU		0.00	0.00	0.01	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.90	0.06	0.00	0.02	0.00	0.00	0.00	0.00	0.14	0.03	0.00	0.03	0.04	0.10
ROUTE ADK		0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.07	0.68	0.13	0.94	0.07	0.00	0.00	0.00	0.38	0.03	0.00	0.04	0.32	0.12
ROUTE AHA		0.02	0.01	0.02	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.18	0.90	0.07	0.00	0.00	0.00	0.32	0.02	0.00	0.04	0.31	0.10
ROUTE ADG		0.02	0.01	0.02	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.11	0.86	0.07	0.00	0.00	0.00	0.43	0.03	0.00	0.04	0.30	0.08
ROUTE AEA		0.01	0.01	0.02	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.14	0.94	0.07	0.00	0.00	0.00	0.41	0.03	0.00	0.04	0.32	0.11
ROUTE AGY		0.03	0.01	0.03	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.16	0.81	0.06	0.00	0.00	0.00	0.36	0.03	0.00	0.04	0.30	0.08
ROUTE ACV		0.03	0.01	0.03	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.17	0.86	0.07	0.00	0.00	0.00	0.46	0.03	0.00	0.04	0.32	0.10
ROUTE ADW		0.03	0.01	0.03	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.17	0.86	0.07	0.00	0.00	0.00	0.46	0.03	0.00	0.04	0.32	0.10
ROUTE AIL		0.02	0.01	0.02	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.17	0.93	0.07	0.00	0.00	0.00	0.24	0.02	0.00	0.04	0.32	0.10
ROUTE AGV		0.01	0.01	0.02	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.19	0.90	0.07	0.00	0.00	0.00	0.25	0.02	0.00	0.04	0.32	0.10
ROUTE KU		0.02	0.01	0.05	0.01	0.00	0.20	0.23	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.02	0.05	0.02	0.02
ROUTE AIJ		0.01	0.00	0.02	0.00	0.00	0.17	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AGQ		0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AGS		0.01	0.00	0.01	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE KS		0.01	0.01	0.06	0.01	0.00	0.20	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADL		0.01	0.01	0.08	0.01	0.00	0.20	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AKY		0.05	0.02	0.07	0.01	0.00	0.20	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AHB		0.01	0.00	0.01	0.00	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADO		0.00	0.00	0.00	0.00	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADI		0.00	0.00	0.00	0.00	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADH		0.03	0.01	0.09	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AEB		0.03	0.01	0.09	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE IA		0.03	0.01	0.07	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AGZ		0.02	0.01	0.03	0.00	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AHC		0.02	0.01	0.03	0.00	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AM		0.03	0.01	0.07	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADE		0.01	0.01	0.02	0.00	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADX		0.02	0.01	0.10	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADY		0.11	0.05	0.12	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HW		0.05	0.02	0.07	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ALY		0.04	0.02	0.06	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AMY		0.03	0.01	0.04	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AS		0.02	0.01	0.07	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE BS		0.05	0.02	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADU		0.13	0.06	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ACZ		0.05	0.02	0.10	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HY		0.04	0.02	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AKK		0.04	0.02	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE BY		0.08	0.03	0.16	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ACW		0.13	0.06	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HU		0.06	0.03	0.06	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE BQ		0.02	0.01	0.09	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE U		0.03	0.01	0.12	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE KV		0.03	0.01	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HP		0.03	0.01	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AUJ		0.02	0.01	0.07	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AGR		0.01	0.01	0.01	0.00	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE KQ		0.02	0.01	0.05	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HK		0.11	0.05	0.15	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HG		0.09	0.04	0.10	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AGO		0.09	0.04	0.10	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE KT		0.04	0.02	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE KN		0.03	0.01	0.06	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE KO		0.11	0.05	0.16	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HI		0.11	0.05	0.16	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HE		0.02	0.01	0.07	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AHH		0.03	0.01	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADP		0.03	0.01	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AVH		0.03	0.01	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AEN		0.03	0.01	0.09	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AV		0.03	0.01	0.09	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AKJ		0.05	0.02	0.10	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADJ		0.11	0.05	0.18	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AKZ		0.06	0.03	0.11	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AER		0.04	0.02	0.11	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE PW		0.06	0.03	0.11	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ATT		0.03	0.01	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AIV		0.04	0.02	0.11	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE IB		0.05	0.02	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AQ		0.11	0.05	0.16	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AN		0.05	0.02	0.14	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AHD		0.03	0.01	0.08	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADF		0.06	0.03	0.19	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AEF		0.04	0.02	0.14	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE CB		0.04	0.02	0.14	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADM		0.09	0.04	0.11	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADZ		0.12	0.05	0.19	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE IE		0.07	0.03	0.14	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AIW		0.13	0.06	0.17	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AT		0.03	0.01	0.14	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE BW		0.07	0.03	0.17	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE GI		0.03	0.01	0.07	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE BT		0.06	0.03	0.15	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AHE		0.06	0.03	0.14	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ADV		0.07	0.03	0.16	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AEH		0.07	0.03	0.16	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AHG		0.07	0.03	0.16	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AEC		0.11	0.05	0.12	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AEL		0.06	0.03	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AIQ		0.05	0.02	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE ALZ		0.04	0.02	0.13	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AIS		0.06	0.03	0.15	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE HZ		0.05	0.02	0.14	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE RW		0.05	0.02	0.11	0.01	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTE AMZ		0.11	0.05	0.17	0.02	0.00	0.20	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 4.5
Metrics for Cross Over Routes
(Built Environment Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Built Environment Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Built Environment Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Engineering Considerations Emphasis Matrix)

Built	Residences with ROW	Weighted	Proximity to Residences (within 300')	Weighted	Wetland Areas (Acres)	Weighted	Floodplain Areas (Acres)	Weighted	Proposed Developments	Weighted	Proximity Commercial Buildings(within 300')	Weighted	Proximity Industrial Buildings(within 300')	Weighted	School, Church, Cemetery, and Park Parcels Crossed	Weighted	NRHP Listed Structures and Districts (300' from edge of RW)	Weighted	Percent of Route Co-located with Existing Utilities*	Weighted	Percent of Route Co-located with Roads*	Weighted	Total Project Costs	Weighted	Natural Forests (Acres)	Weighted	Streams/River Crossings	Weighted	SUM OF WEIGHTED TOTALS
14%	44.3%		13.1%		12.4%		12.4%		5.4%		3.6%		1.8%		16.3%		15.5%		19.2%		7.8%		7.4%		14%		38.0%		
ROUTE KU	0.02	0.01	0.05	0.01	0.20	0.03	0.23	0.03	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.98	0.19	0.90	0.07	0.25	0.02	0.24	0.02	0.05	0.02	0.25488
ROUTE KUK	0.01	0.00	0.10	0.02	0.47	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.96	0.18	0.93	0.07	0.25	0.02	0.26	0.02	0.26	0.02	0.25986
ROUTE KS	0.03	0.01	0.06	0.01	0.24	0.03	0.23	0.03	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.94	0.18	0.93	0.07	0.30	0.02	0.25	0.02	0.26	0.02	0.26605
ROUTE KW	0.03	0.01	0.07	0.01	0.26	0.04	0.24	0.03	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.96	0.18	0.93	0.07	0.30	0.02	0.25	0.02	0.26	0.02	0.26823
ROUTE AM	0.05	0.02	0.07	0.01	0.28	0.04	0.24	0.03	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.90	0.17	0.78	0.06	0.37	0.03	0.29	0.02	0.28	0.02	0.26888
ROUTE AGU	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.34	0.03	0.00	0.00	0.00	0.00	0.27065
ROUTE AU	0.01	0.00	0.06	0.01	0.46	0.06	0.23	0.03	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.14	0.01	0.39	0.03	0.32	0.02	0.26	0.02	0.27250
ROUTE AUK	0.02	0.01	0.02	0.00	0.43	0.06	0.23	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.13	0.03	0.08	0.01	0.43	0.03	0.30	0.02	0.72	0.07	0.27334
ROUTE AUS	0.03	0.01	0.02	0.00	0.43	0.06	0.23	0.03	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.08	0.02	0.06	0.00	0.36	0.03	0.30	0.02	0.53	0.05	0.27563
ROUTE AUW	0.00	0.00	0.01	0.00	0.43	0.06	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.13	0.03	0.94	0.07	0.38	0.03	0.30	0.02	0.73	0.07	0.27692
ROUTE AW	0.05	0.02	0.08	0.01	0.46	0.06	0.24	0.03	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.11	0.03	0.86	0.06	0.50	0.04	0.29	0.02	0.66	0.06	0.27755
ROUTE AWK	0.04	0.02	0.08	0.01	0.56	0.08	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.03	0.85	0.07	0.48	0.04	0.29	0.02	0.46	0.04	0.27928
ROUTE AX	0.04	0.02	0.06	0.01	0.56	0.08	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.82	0.06	0.46	0.03	0.30	0.02	0.45	0.04	0.27996
ROUTE AXK	0.04	0.02	0.06	0.01	0.56	0.08	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.82	0.06	0.46	0.03	0.30	0.02	0.45	0.04	0.28026
ROUTE AY	0.03	0.01	0.06	0.01	0.56	0.08	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.82	0.06	0.46	0.03	0.30	0.02	0.45	0.04	0.28172
ROUTE AZ	0.03	0.01	0.05	0.01	0.56	0.08	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.82	0.06	0.46	0.03	0.30	0.02	0.45	0.04	0.28239
ROUTE BS	0.05	0.02	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.42	0.03	0.29	0.02	0.47	0.04	0.28369
ROUTE ACY	0.03	0.01	0.03	0.00	0.26	0.04	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.94	0.07	0.44	0.03	0.29	0.02	0.47	0.04	0.28418
ROUTE AS	0.04	0.02	0.07	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.46	0.03	0.30	0.02	0.47	0.04	0.28858
ROUTE AT	0.05	0.02	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AUV	0.03	0.01	0.02	0.00	0.43	0.06	0.23	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	0.06	0.00	0.36	0.03	0.30	0.02	0.46	0.04	0.28172
ROUTE AV	0.04	0.02	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.28239
ROUTE AWU	0.03	0.01	0.03	0.00	0.43	0.06	0.23	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	0.06	0.00	0.36	0.03	0.30	0.02	0.46	0.04	0.28369
ROUTE AWX	0.04	0.02	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.28418
ROUTE AZ	0.03	0.01	0.05	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.28858
ROUTE BBY	0.03	0.01	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BY	0.03	0.01	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AI	0.13	0.06	0.17	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE HK	0.11	0.05	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADE	0.11	0.05	0.14	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AGS	0.09	0.04	0.10	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AQ	0.11	0.05	0.16	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADI	0.09	0.04	0.11	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE S	0.14	0.06	0.17	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AGW	0.13	0.06	0.17	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AG	0.11	0.05	0.14	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BO	0.14	0.06	0.18	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADU	0.13	0.06	0.17	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AO	0.11	0.05	0.17	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BW	0.12	0.05	0.17	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE Q	0.15	0.06	0.18	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADZ	0.11	0.05	0.12	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BM	0.15	0.06	0.19	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BU	0.13	0.06	0.18	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE KV	0.03	0.01	0.12	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AIL	0.02	0.01	0.09	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AN	0.05	0.02	0.14	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADH	0.03	0.01	0.09	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AGV	0.01	0.00	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE HP	0.03	0.01	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AP	0.01	0.00	0.03	0.00	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADL	0.01	0.00	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE X	0.06	0.03	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AGZ	0.02	0.01	0.10	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE HX	0.07	0.03	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ACZ	0.02	0.01	0.10	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE KT	0.04	0.02	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AL	0.05	0.02	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADX	0.05	0.02	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BT	0.06	0.03	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AHB	0.03	0.01	0.09	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE IB	0.05	0.02	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE HN	0.03	0.01	0.14	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AT	0.03	0.01	0.14	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE W	0.07	0.03	0.16	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AHB	0.07	0.03	0.16	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BD	0.07	0.03	0.16	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADU	0.01	0.00	0.03	0.00	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AO	0.01	0.00	0.03	0.00	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AGV	0.01	0.00	0.03	0.00	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE HP	0.03	0.01	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AP	0.01	0.00	0.03	0.00	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADL	0.01	0.00	0.08	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE X	0.06	0.03	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AGZ	0.02	0.01	0.10	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE HX	0.07	0.03	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ACZ	0.02	0.01	0.10	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE KT	0.04	0.02	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AL	0.05	0.02	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE ADX	0.05	0.02	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE BT	0.06	0.03	0.15	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE AHB	0.03	0.01	0.09	0.01	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE IB	0.05	0.02	0.13	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.91	0.07	0.47	0.03	0.30	0.02	0.47	0.04	0.29460
ROUTE HN	0.03	0.01	0.14	0.02	0.56	0.08	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

Table 4.5
Metrics for Cross Over Routes
(Engineering Considerations Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Engineering Considerations Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Engineering Considerations Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Natural Environment Emphasis Matrix)

Built	Residences with ROW	Weighted	Proximity to Residences (within 300')	Weighted	Proposed Developments	Weighted	Proximity Commercial Buildings(within 300')	Weighted	Proximity Industrial Buildings(within 300')	Weighted	School, Church, Cemetery, and Park Parcels Crossed	Weighted	NRHP Listed Structures and Districts (3000' from edge of R/W)	Weighted	TOTAL	WEIGHTED TOTAL	Natural	Natural Forests (Acres)	Weighted	Stream/River Crossings	Weighted	Wetland Areas (Acres)	Weighted	Floodplain Areas (Acres)	Weighted	TOTAL	WEIGHTED TOTAL	Engineering	Percent of Route Rebuilt with Existing T/L*	Weighted	Percent of Route of Co-located with Existing Utilities*	Weighted	Percent of Route Co-located with Roads*	Weighted	Total Project Costs	Weighted	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
14%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		72%	9.3%		38.0%		40.3%		12.4%		100.0%		14%	65.6%		19.2%		7.8%		7.4%		100.0%		SORT
ROUTE HW	0.05	0.02	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.17	0.02		0.25	0.02	0.05	0.02	0.46	0.19	0.24	0.03	0.26	0.19		0.05	0.03	0.90	0.17	0.78	0.06	0.37	0.03	0.29	0.04	0.24947
ROUTE KU	0.02	0.01	0.05	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.69	0.11	0.12	0.02		0.24	0.02	0.05	0.02	0.50	0.20	0.23	0.03	0.27	0.20		0.00	0.00	0.98	0.19	0.90	0.07	0.25	0.02	0.28	0.04	0.25157
ROUTE IA	0.03	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.16	0.02		0.26	0.02	0.06	0.02	0.46	0.19	0.23	0.03	0.26	0.19		0.02	0.01	0.99	0.19	0.87	0.07	0.32	0.02	0.30	0.04	0.25304
ROUTE BS	0.05	0.02	0.08	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.17	0.02		0.45	0.04	0.06	0.02	0.46	0.19	0.24	0.03	0.28	0.20		0.09	0.06	0.74	0.14	0.82	0.06	0.46	0.03	0.30	0.04	0.26841
ROUTE HO	0.01	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.69	0.11	0.12	0.02		0.44	0.04	0.06	0.02	0.50	0.20	0.23	0.03	0.30	0.21		0.05	0.04	0.80	0.15	0.94	0.07	0.35	0.03	0.29	0.04	0.27057
ROUTE CA	0.03	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.16	0.02		0.45	0.04	0.08	0.03	0.46	0.19	0.23	0.03	0.29	0.21		0.07	0.05	0.82	0.16	0.91	0.07	0.42	0.03	0.31	0.04	0.27192
ROUTE AM	0.03	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.16	0.02		0.45	0.04	0.10	0.04	0.46	0.19	0.24	0.03	0.29	0.21		0.09	0.06	0.66	0.13	0.82	0.06	0.43	0.03	0.28	0.04	0.27368
ROUTE AU	0.01	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.15	0.02		0.45	0.04	0.11	0.04	0.46	0.19	0.23	0.03	0.30	0.22		0.07	0.05	0.74	0.14	0.91	0.07	0.39	0.03	0.29	0.04	0.27714
ROUTE AGY	0.04	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.01		0.53	0.05	0.26	0.10	0.43	0.17	0.00	0.00	0.32	0.23		0.08	0.05	0.83	0.16	0.81	0.06	0.36	0.03	0.30	0.04	0.28403
ROUTE AIK	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.15	0.02	0.03	0.00		0.52	0.05	0.26	0.10	0.47	0.19	0.00	0.00	0.34	0.24		0.04	0.03	0.90	0.17	0.93	0.07	0.25	0.02	0.29	0.04	0.28622
ROUTE HU	0.06	0.03	0.08	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.17	0.02		0.27	0.02	0.06	0.02	0.56	0.22	0.27	0.03	0.31	0.22		0.05	0.03	0.88	0.17	0.81	0.06	0.42	0.03	0.30	0.04	0.28641
ROUTE AHA	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.06	0.01		0.53	0.05	0.27	0.10	0.43	0.17	0.00	0.00	0.33	0.24		0.06	0.04	0.91	0.18	0.90	0.07	0.32	0.02	0.31	0.04	0.28759
ROUTE KS	0.03	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.69	0.11	0.13	0.02		0.26	0.02	0.06	0.02	0.60	0.24	0.26	0.03	0.32	0.23		0.01	0.00	0.96	0.18	0.93	0.07	0.30	0.02	0.28	0.04	0.28852
ROUTE HY	0.04	0.02	0.07	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.16	0.02		0.27	0.03	0.08	0.03	0.56	0.22	0.26	0.03	0.31	0.22		0.03	0.02	0.97	0.19	0.90	0.07	0.37	0.03	0.30	0.04	0.28998
ROUTE HX	0.07	0.03	0.14	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.21	0.03		0.29	0.03	0.13	0.05	0.46	0.19	0.25	0.03	0.29	0.21		0.29	0.19	0.91	0.17	0.78	0.06	0.36	0.03	0.45	0.06	0.30268
ROUTE ADW	0.03	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.01		0.73	0.07	0.27	0.10	0.43	0.17	0.00	0.00	0.35	0.25		0.13	0.08	0.67	0.13	0.86	0.07	0.46	0.03	0.31	0.04	0.30286
ROUTE AGU	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.15	0.02	0.03	0.00		0.72	0.07	0.27	0.10	0.47	0.19	0.00	0.00	0.36	0.26		0.09	0.06	0.73	0.14	0.97	0.08	0.34	0.03	0.30	0.04	0.30510
ROUTE BQ	0.05	0.02	0.09	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.17	0.02		0.46	0.04	0.08	0.03	0.56	0.22	0.27	0.03	0.33	0.24		0.10	0.06	0.72	0.14	0.85	0.07	0.52	0.04	0.31	0.04	0.30533
ROUTE KV	0.03	0.01	0.12	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.85	0.13	0.16	0.02		0.28	0.03	0.13	0.05	0.50	0.20	0.24	0.03	0.31	0.22		0.26	0.17	0.99	0.19	0.90	0.07	0.24	0.02	0.45	0.06	0.30585
ROUTE AEA	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.06	0.01		0.73	0.07	0.29	0.11	0.43	0.17	0.00	0.00	0.35	0.25		0.11	0.07	0.75	0.14	0.94	0.07	0.41	0.03	0.32	0.04	0.30636
ROUTE IB	0.05	0.02	0.13	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.20	0.03		0.29	0.03	0.15	0.06	0.46	0.19	0.24	0.03	0.30	0.21		0.27	0.18	1.00	0.19	0.87	0.07	0.31	0.02	0.46	0.06	0.30680
ROUTE HM	0.02	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.69	0.11	0.13	0.02		0.45	0.04	0.08	0.03	0.60	0.24	0.26	0.03	0.35	0.25		0.06	0.04	0.78	0.15	0.97	0.08	0.40	0.03	0.29	0.04	0.30750
ROUTE ADG	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.01		0.72	0.07	0.31	0.12	0.43	0.17	0.00	0.00	0.36	0.26		0.13	0.08	0.60	0.11	0.86	0.07	0.43	0.03	0.30	0.04	0.30821
ROUTE BY	0.03	0.01	0.08	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.16	0.02		0.47	0.04	0.10	0.04	0.56	0.22	0.26	0.03	0.34	0.24		0.08	0.05	0.80	0.15	0.94	0.07	0.47	0.03	0.31	0.04	0.30884
ROUTE W	0.05	0.02	0.08	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.17	0.02		0.66	0.06	0.16	0.06	0.47	0.19	0.24	0.03	0.34	0.25		0.12	0.08	0.56	0.11	0.83	0.06	0.50	0.04	0.29	0.04	0.30921
ROUTE AK	0.04	0.02	0.08	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.16	0.02		0.46	0.04	0.11	0.04	0.56	0.22	0.27	0.03	0.34	0.25		0.10	0.06	0.64	0.12	0.85	0.07	0.48	0.04	0.29	0.04	0.31061
ROUTE ADK	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.06	0.01		0.73	0.07	0.32	0.12	0.43	0.17	0.00	0.00	0.36	0.26		0.11	0.07	0.68	0.13	0.94	0.07	0.38	0.03	0.30	0.04	0.31167
ROUTE AS	0.02	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.15	0.02		0.47	0.04	0.13	0.05	0.56	0.22	0.26	0.03	0.35	0.25		0.08	0.05	0.72	0.14	0.94	0.07	0.44	0.03	0.29	0.04	0.31407
ROUTE BT	0.06	0.03	0.15	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.21	0.03		0.48	0.04	0.15	0.06	0.46	0.19	0.25	0.03	0.32	0.23		0.33	0.21	0.74	0.14	0.83	0.06	0.45	0.03	0.45	0.06	0.32046
ROUTE HP	0.03	0.01	0.13	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.85	0.13	0.16	0.02		0.47	0.04	0.15	0.06	0.50	0.20	0.24	0.03	0.33	0.24		0.30	0.19	0.81	0.16	0.94	0.07	0.34	0.02	0.45	0.06	0.32358
ROUTE CB	0.04	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.20	0.03		0.48	0.05	0.16	0.06	0.46	0.19	0.24	0.03	0.32	0.23		0.31	0.20	0.83	0.16	0.91	0.07	0.41	0.03	0.46	0.06	0.32446
ROUTE AN	0.05	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.20	0.03		0.48	0.04	0.18	0.07	0.46	0.19	0.25	0.03	0.33	0.24		0.33	0.21	0.67	0.13	0.83	0.06	0.42	0.03	0.44	0.06	0.32578
ROUTE AV	0.03	0.01	0.13	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.19	0.03		0.48	0.04	0.19	0.07	0.46	0.19	0.24	0.03	0.33	0.24		0.31	0.20	0.75	0.14	0.91	0.07	0.38	0.03	0.45	0.06	0.32974
ROUTE BO	0.14	0.06	0.18	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.22	0.03		0.49	0.05	0.00	0.00	0.66	0.27	0.24	0.03	0.34	0.25		0.25	0.17	0.67	0.13	0.84	0.07	0.40	0.03	0.39	0.05	0.33198
ROUTE HK	0.11	0.05	0.15	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.69	0.11	0.17	0.02		0.48	0.04	0.00	0.00	0.70	0.28	0.24	0.03	0.36	0.26		0.22	0.14	0.74	0.14	0.97	0.08	0.29	0.02	0.38	0.05	0.33473
ROUTE BW	0.12	0.05	0.17	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.21	0.03		0.49	0.05	0.02	0.01	0.66	0.27	0.24	0.03	0.35	0.25		0.23	0.15	0.75	0.14	0.94	0.07	0.36	0.03	0.40	0.06	0.33586
ROUTE AGZ	0.05	0.02	0.10	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.11	0.02		0.56	0.05	0.34	0.13	0.43	0.17	0.02	0.00	0.36	0.26		0.32	0.21	0.83	0.16	0.81	0.06	0.35	0.03	0.46	0.06	0.33637
ROUTE AI	0.13	0.06	0.17	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.21	0.03		0.49	0.05	0.03	0.01	0.66	0.27	0.24	0.03	0.35	0.26		0.25	0.17	0.59	0.11	0.84	0.07	0.37	0.03	0.37	0.05	0.33720
ROUTE HV	0.07	0.03	0.15	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.21	0.03		0.30	0.03	0.15	0.06	0.56	0.22	0.28	0.03	0.34	0.25		0.29	0.19	0.89	0.17	0.81	0.06	0.41	0.03	0.46	0.06	0.33951
ROUTE AIL	0.02	0.01	0.07	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.31	0.05	0.07	0.01		0.55	0.05	0.34	0.13	0.47	0.19	0.01	0.00	0.37	0.27		0.29	0.19	0.91	0.17	0.93	0.07	0.24	0.02	0.45	0.06	0.33956
ROUTE AHB	0.03	0.01	0.09	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.10	0.01		0.56	0.05	0.35	0.13	0.43	0.17	0.01	0.00	0.36	0.26		0.30	0.20	0.92	0.18	0.90	0.07	0.31	0.02	0.47	0.07	0.34044
ROUTE KQ	0.02	0.01	0.05	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.85	0.13	0.15	0.02		0.33	0.03	0.10	0.04	0.60	0.24	0.25	0.03	0.34	0.25		0.42	0.27	0.95	0.18	0.90	0.07	0.08	0.01	0.53	0.07	0.34060
ROUTE AQ	0.11	0.05	0.16	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.20	0.03		0.49	0.05	0.05	0.02	0.66	0.27	0.24	0.03	0.36	0.26		0.23	0.15	0.67	0.13	0.94	0.07	0.33	0.02	0.38	0.05	0.34102
ROUTE IE	0.03	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.18	0.03		0.34	0.03	0.11	0.04	0.56	0.23	0.25	0.03	0.33	0.24		0.43	0.28	0.97	0.19	0.86	0.07	0.15	0.01	0.55	0.08	0.34132
ROUTE KT	0.04	0.02	0.13	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.85	0.13	0.17	0.02		0.29	0.03	0.15	0.06	0.60	0.24	0.27	0.03	0.36	0.26		0.26	0.17	0.96	0.19	0.93	0.07	0.29	0.02	0.45	0.06	0.34268
ROUTE HZ	0.05	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.20	0.03		0.30	0.03	0.16	0.06	0.56	0.22	0.27	0.03	0.35	0.25		0.28	0.18	0.98	0.19	0.90	0.07	0.36	0.03	0.47	0.07	0.34362
ROUTE ACY	0.03	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.01		0.93	0.09	0.37	0.14	0.44	0.18	0.00	0.00	0.41	0.29		0.15	0.10	0.50	0.10	0.86	0.07	0.50	0.04	0.30	0.04	0.34371
ROUTE U	0.05	0.02	0.09	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.17	0.02		0.67	0.06	0.18	0.07	0.57	0.23	0.27	0.03	0.39	0.28		0.12	0.08	0.54	0.10	0.86	0.07	0.55	0.04	0.29	0.04	0.34614
ROUTE ADX	0.05	0.02	0.10	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.11	0.02		0.76	0.07	0.35	0.13	0.43	0.17	0.02	0.00	0.38	0.27		0.35	0.23	0.68	0.13	0.86	0.07	0.45	0.03	0.46	0.06	0.35412
ROUTE AGV	0.01	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.31	0.05	0.06	0.01		0.75	0.07	0.35	0.13	0.47	0.19	0.01	0.00	0.40	0.28		0.32	0.21	0.74	0.14	0.97	0.08	0.33	0.02	0.46	0.06	0.35726
ROUTE BR	0.07	0.03	0.16	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.21	0.03		0.50	0.05	0.16	0.06	0.56	0.22	0.28	0.03	0.37	0.26		0.33	0.22	0.72	0.14	0.85	0.07	0.50	0.04	0.46	0.06	0.35728
ROUTE HG	0.01	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.85	0.13	0.14	0.02		0.53	0.05	0.11	0.04	0.60	0.24	0.25	0.03	0.37	0.26		0.45	0.30	0.77	0.15	0.94	0.07	0.18	0.01	0.53	0.07	0.35753
ROUTE AEB	0.03	0.01	0.09	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.10	0.01		0.76	0.07	0.37	0.14	0.43	0.17	0.01	0.00	0.39	0.28		0.34	0.22	0.76	0.15	0.94	0.07	0.40	0.03	0.47	0.07	0.35808
ROUTE CI	0.03	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.18	0.03		0.54	0.05	0.13	0.05	0.56	0.23	0.25	0.03	0.36	0.26		0.46	0.30	0.79	0.15	0.91	0.07	0.25	0.02	0.54	0.08	0.35821
ROUTE ADH	0.03	0.01	0.09	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.10	0.01		0.76	0.07	0.39	0.15	0.43	0.17	0.02	0.00	0.39	0.28		0.35	0.23	0.61	0.12	0.86	0.07	0.42	0.03	0.44	0.06	0.35952
ROUTE HN	0.03	0.01	0.14	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.85	0.13	0.16	0.02		0.49	0.05	0.16	0.06	0.60	0.24	0.27	0.03	0.38	0.27		0.30	0.20	0.79	0.15	0.97	0.08	0.39	0.03	0.45	0.06	0.36040
ROUTE X	0.06	0.03	0.15	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.21	0.03		0.69	0.06	0.24	0.09	0.47	0.19	0.25	0.03	0.38	0.27		0.34	0.23	0.57	0.11	0.83	0.06	0.49	0.04	0.44	0.06	0.36070
ROUTE BZ	0.05	0.02	0.15	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.20	0.03		0.50	0.05	0.18	0.07	0.56	0.22	0.27	0.03	0.37	0.27		0.31	0.21	0.81	0.15	0.94	0.07	0.46	0.03	0.47	0.07	0.36128
ROUTE AL	0.05	0.02	0.15	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.20	0.03		0.49	0.05	0.19	0.07	0.56	0.22	0.28	0.03	0.38	0.27		0.33	0.22	0.65	0.12	0.85	0.07	0.47	0.03	0.44	0.06	0.36261
ROUTE BC	0.01	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.17	0.02		0.54	0.05	0.16	0.06	0.56	0.23	0.25	0.03	0.37	0.27		0.46	0.30	0.71	0.14	0.91	0.07	0.22	0.02	0.53	0.07	0.36340
ROUTE ADL	0.01	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.09	0.01		0.76	0.07	0.40	0.15	0.43	0.17	0.01	0.00	0.40	0.29		0.34	0.22	0.68	0.13	0.94	0.07	0.37	0.03	0.45	0.06	0.36344
ROUTE ADU	0.13	0.06	0.13	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.13	0.02		0.76	0.07	0.21	0.08	0.63	0.25	0.01	0.00	0.41	0.29		0.28	0.18	0.60	0.12	0.88	0.07	0.41	0.03	0.40	0.06	0.36605
ROUTE AT	0.03	0.01	0.14	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.19	0.03		0.50	0.05	0.21	0.08	0.56	0.22	0.27	0.03	0.38	0.28		0.31	0.20	0.73	0.14	0.94	0.07	0.43	0.03	0.45	0.06	0.36657
ROUTE PW	0.06	0.03	0.11	0.01	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.77	0.12	0.16	0.02		0.04	0.00	0.15	0.06	0.69	0.28	0.26	0.03	0.37	0.27		0.49	0.32	0.90	0.17	0.93	0.07	0.01	0.00	0.57	0.08	0.36823
ROUTE OE	0.51	0.23	0.51	0.07	0.33	0.02	0.34	0.01	0.29	0.01	0.50	0.08	0.77	0.12	0.53	0.07		0.02	0.00	0.19	0.07	0.49	0.20	0.24	0.03	0.30	0.22		0.47	0.31	0.95	0.18	0.39	0.03	0.45	0.03	0.55	0.08	0.36876
ROUTE BM	0.15	0.06	0.19	0.02	0.00	0.00

Table 4.5
Metrics for Cross Over Routes
(Natural Environment Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Natural Environment Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Natural Environment Emphasis Matrix)

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Table 4.5
Metrics for Cross Over Routes
(Simple Average Matrix)

Built	Residences with ROW	Weighted	Proximity to Residences (within 300')	Weighted	Proposed Developments	Weighted	Proximity Commercial Buildings(within 300')	Weighted	Proximity Industrial Buildings(within 300')	Weighted	School, Church, Cemetery, and Park Parcels Crossed	Weighted	NRHP Listed Structures and Districts (3000' from edge of R/W)	Weighted	TOTAL	WEIGHTED TOTAL	Natural	Natural Forests (Acres)	Weighted	Stream/River Crossings	Weighted	Wetland Areas (Acres)	Weighted	Floodplain Areas (Acres)	Weighted	TOTAL	WEIGHTED TOTAL	Engineering	Percent of Route Rebuilt with Existing T/L*	Weighted	Percent of Route of Co-located with Existing Utilities*	Weighted	Percent of Route Co-located with Roads*	Weighted	Total Project Costs	Weighted	TOTAL	WEIGHTED TOTAL	SUM OF WEIGHTED TOTALS
33%	44.3%		13.1%		5.4%		3.6%		1.8%		16.3%		15.5%		100.0%		33%	9.3%		38.0%		40.3%		12.4%		100.0%		33%	65.6%		19.2%		7.8%		7.4%		100.0%		SORT
ROUTE AIK	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.15	0.02	0.03	0.01		0.52	0.05	0.26	0.10	0.47	0.19	0.00	0.00	0.34	0.11		0.04	0.03	0.90	0.17	0.93	0.07	0.25	0.02	0.29	0.10	0.21565
ROUTE KU	0.02	0.01	0.05	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.69	0.11	0.12	0.04		0.24	0.02	0.05	0.02	0.50	0.20	0.23	0.03	0.27	0.09		0.00	0.00	0.98	0.19	0.90	0.07	0.25	0.02	0.28	0.09	0.22176
ROUTE AGU	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.15	0.02	0.03	0.01		0.72	0.07	0.27	0.10	0.47	0.19	0.00	0.00	0.36	0.12		0.09	0.06	0.73	0.14	0.97	0.08	0.34	0.03	0.30	0.10	0.22672
ROUTE AGY	0.04	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.02		0.53	0.05	0.26	0.10	0.43	0.17	0.00	0.00	0.32	0.11		0.08	0.05	0.83	0.16	0.81	0.06	0.36	0.03	0.30	0.10	0.23037
ROUTE AHA	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.06	0.02		0.53	0.05	0.27	0.10	0.43	0.17	0.00	0.00	0.33	0.11		0.06	0.04	0.91	0.18	0.90	0.07	0.32	0.02	0.31	0.10	0.23088
ROUTE HO	0.01	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.69	0.11	0.12	0.04		0.44	0.04	0.06	0.02	0.50	0.20	0.23	0.03	0.30	0.10		0.05	0.04	0.80	0.15	0.94	0.07	0.35	0.03	0.29	0.10	0.23310
ROUTE HW	0.05	0.02	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.17	0.06		0.25	0.02	0.05	0.02	0.46	0.19	0.24	0.03	0.26	0.08		0.05	0.03	0.90	0.17	0.78	0.06	0.37	0.03	0.29	0.10	0.23671
ROUTE IA	0.03	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.16	0.05		0.26	0.02	0.06	0.02	0.46	0.19	0.23	0.03	0.26	0.09		0.02	0.01	0.99	0.19	0.87	0.07	0.32	0.02	0.30	0.10	0.23724
ROUTE ADG	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.02		0.72	0.07	0.31	0.12	0.43	0.17	0.00	0.00	0.36	0.12		0.13	0.08	0.60	0.11	0.86	0.07	0.43	0.03	0.30	0.10	0.23734
ROUTE ADK	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.06	0.02		0.73	0.07	0.32	0.12	0.43	0.17	0.00	0.00	0.36	0.12		0.11	0.07	0.68	0.13	0.94	0.07	0.38	0.03	0.30	0.10	0.23761
ROUTE KS	0.03	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.69	0.11	0.13	0.04		0.26	0.02	0.06	0.02	0.60	0.24	0.26	0.03	0.32	0.11		0.01	0.00	0.96	0.18	0.93	0.07	0.30	0.02	0.28	0.09	0.24112
ROUTE ADW	0.03	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.02		0.73	0.07	0.27	0.10	0.43	0.17	0.00	0.00	0.35	0.11		0.13	0.08	0.67	0.13	0.86	0.07	0.46	0.03	0.31	0.10	0.24132
ROUTE AEA	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.06	0.02		0.73	0.07	0.29	0.11	0.43	0.17	0.00	0.00	0.35	0.12		0.11	0.07	0.75	0.14	0.94	0.07	0.41	0.03	0.32	0.11	0.24170
ROUTE AM	0.03	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.16	0.05		0.45	0.04	0.10	0.04	0.46	0.19	0.24	0.03	0.29	0.10		0.09	0.06	0.66	0.13	0.82	0.06	0.43	0.03	0.28	0.09	0.24374
ROUTE AU	0.01	0.01	0.06	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.15	0.05		0.45	0.04	0.11	0.04	0.46	0.19	0.23	0.03	0.30	0.10		0.07	0.05	0.74	0.14	0.91	0.07	0.39	0.03	0.29	0.10	0.24402
ROUTE BS	0.05	0.02	0.08	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.17	0.06		0.45	0.04	0.06	0.02	0.46	0.19	0.24	0.03	0.28	0.09		0.09	0.06	0.74	0.14	0.82	0.06	0.46	0.03	0.30	0.10	0.24791
ROUTE CA	0.03	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.16	0.05		0.45	0.04	0.08	0.03	0.46	0.19	0.23	0.03	0.29	0.09		0.07	0.05	0.82	0.16	0.91	0.07	0.42	0.03	0.31	0.10	0.24831
ROUTE HM	0.02	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.69	0.11	0.13	0.04		0.45	0.04	0.08	0.03	0.60	0.24	0.26	0.03	0.35	0.11		0.06	0.04	0.78	0.15	0.97	0.08	0.40	0.03	0.29	0.10	0.25242
ROUTE ACY	0.03	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.07	0.02		0.93	0.09	0.37	0.14	0.44	0.18	0.00	0.00	0.41	0.13		0.15	0.10	0.50	0.10	0.86	0.07	0.50	0.04	0.30	0.10	0.25600
ROUTE HU	0.06	0.03	0.08	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.17	0.06		0.27	0.02	0.06	0.02	0.56	0.22	0.27	0.03	0.31	0.10		0.05	0.03	0.88	0.17	0.81	0.06	0.42	0.03	0.30	0.10	0.25604
ROUTE HY	0.04	0.02	0.07	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.16	0.05		0.27	0.03	0.08	0.03	0.56	0.22	0.26	0.03	0.31	0.10		0.03	0.02	0.97	0.19	0.90	0.07	0.37	0.03	0.30	0.10	0.25657
ROUTE W	0.05	0.02	0.08	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.17	0.06		0.66	0.06	0.16	0.06	0.47	0.19	0.24	0.03	0.34	0.11		0.12	0.08	0.56	0.11	0.83	0.06	0.50	0.04	0.29	0.09	0.26248
ROUTE AK	0.04	0.02	0.08	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.16	0.05		0.46	0.04	0.11	0.04	0.56	0.22	0.27	0.03	0.34	0.11		0.10	0.06	0.64	0.12	0.85	0.07	0.48	0.04	0.29	0.10	0.26305
ROUTE AS	0.02	0.01	0.07	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.15	0.05		0.47	0.04	0.13	0.05	0.56	0.22	0.26	0.03	0.35	0.12		0.08	0.05	0.72	0.14	0.94	0.07	0.44	0.03	0.29	0.10	0.26333
ROUTE BQ	0.05	0.02	0.09	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.17	0.06		0.46	0.04	0.08	0.03	0.56	0.22	0.27	0.03	0.33	0.11		0.10	0.06	0.72	0.14	0.85	0.07	0.52	0.04	0.31	0.10	0.26720
ROUTE BY	0.03	0.01	0.08	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.16	0.05		0.47	0.04	0.10	0.04	0.56	0.22	0.26	0.03	0.34	0.11		0.08	0.05	0.80	0.15	0.94	0.07	0.47	0.03	0.31	0.10	0.26760
ROUTE U	0.05	0.02	0.09	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.17	0.06		0.67	0.06	0.18	0.07	0.57	0.23	0.27	0.03	0.39	0.13		0.12	0.08	0.54	0.10	0.86	0.07	0.55	0.04	0.29	0.10	0.28177
ROUTE AIL	0.02	0.01	0.07	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.31	0.05	0.07	0.02		0.55	0.05	0.34	0.13	0.47	0.19	0.01	0.00	0.37	0.12		0.29	0.19	0.91	0.17	0.93	0.07	0.24	0.02	0.45	0.15	0.29351
ROUTE AGS	0.09	0.04	0.10	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.15	0.02	0.08	0.03		0.75	0.07	0.21	0.08	0.67	0.27	0.01	0.00	0.42	0.14		0.25	0.16	0.66	0.13	1.00	0.08	0.29	0.02	0.39	0.13	0.29389
ROUTE HK	0.11	0.05	0.15	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.69	0.11	0.17	0.06		0.48	0.04	0.00	0.00	0.70	0.28	0.24	0.03	0.36	0.12		0.22	0.14	0.74	0.14	0.97	0.08	0.29	0.02	0.38	0.13	0.30127
ROUTE AGV	0.01	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.31	0.05	0.06	0.02		0.75	0.07	0.35	0.13	0.47	0.19	0.01	0.00	0.40	0.13		0.32	0.21	0.74	0.14	0.97	0.08	0.33	0.02	0.46	0.15	0.30181
ROUTE KV	0.03	0.01	0.12	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.85	0.13	0.16	0.05		0.28	0.03	0.13	0.05	0.50	0.20	0.24	0.03	0.31	0.10		0.26	0.17	0.99	0.19	0.90	0.07	0.24	0.02	0.45	0.15	0.30187
ROUTE ADE	0.11	0.05	0.12	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.12	0.04		0.76	0.07	0.24	0.09	0.63	0.25	0.01	0.00	0.42	0.14		0.28	0.18	0.53	0.10	0.88	0.07	0.37	0.03	0.38	0.13	0.30308
ROUTE ADI	0.09	0.04	0.11	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.11	0.04		0.77	0.07	0.26	0.10	0.63	0.25	0.01	0.00	0.42	0.14		0.26	0.17	0.61	0.12	0.97	0.08	0.33	0.02	0.39	0.13	0.30414
ROUTE AGZ	0.05	0.02	0.10	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.11	0.04		0.56	0.05	0.34	0.13	0.43	0.17	0.02	0.00	0.36	0.12		0.32	0.21	0.83	0.16	0.81	0.06	0.35	0.03	0.46	0.15	0.30589
ROUTE ADU	0.13	0.06	0.13	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.13	0.04		0.76	0.07	0.21	0.08	0.63	0.25	0.01	0.00	0.41	0.13		0.28	0.18	0.60	0.12	0.88	0.07	0.41	0.03	0.40	0.13	0.30719
ROUTE AHB	0.03	0.01	0.09	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.10	0.03		0.56	0.05	0.35	0.13	0.43	0.17	0.01	0.00	0.36	0.12		0.30	0.20	0.92	0.18	0.90	0.07	0.31	0.02	0.47	0.15	0.30760
ROUTE ADY	0.11	0.05	0.12	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.12	0.04		0.77	0.07	0.23	0.09	0.63	0.25	0.01	0.00	0.41	0.14		0.26	0.17	0.68	0.13	0.97	0.08	0.36	0.03	0.41	0.13	0.30836
ROUTE HP	0.03	0.01	0.13	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.85	0.13	0.16	0.05		0.47	0.04	0.15	0.06	0.50	0.20	0.24	0.03	0.33	0.11		0.30	0.19	0.81	0.16	0.94	0.07	0.34	0.02	0.45	0.15	0.31021
ROUTE AI	0.13	0.06	0.17	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.21	0.07		0.49	0.05	0.03	0.01	0.66	0.27	0.24	0.03	0.35	0.12		0.25	0.17	0.59	0.11	0.84	0.07	0.37	0.03	0.37	0.12	0.31039
ROUTE ADH	0.03	0.01	0.09	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.10	0.03		0.76	0.07	0.39	0.15	0.43	0.17	0.02	0.00	0.39	0.13		0.35	0.23	0.61	0.12	0.86	0.07	0.42	0.03	0.44	0.15	0.31044
ROUTE AQ	0.11	0.05	0.16	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.20	0.07		0.49	0.05	0.05	0.02	0.66	0.27	0.24	0.03	0.36	0.12		0.23	0.15	0.67	0.13	0.94	0.07	0.33	0.02	0.38	0.13	0.31151
ROUTE ADL	0.01	0.01	0.08	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.09	0.03		0.76	0.07	0.40	0.15	0.43	0.17	0.01	0.00	0.40	0.13		0.34	0.22	0.68	0.13	0.94	0.07	0.37	0.03	0.45	0.15	0.31179
ROUTE HX	0.07	0.03	0.14	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.29	0.03	0.13	0.05	0.46	0.19	0.25	0.03	0.29	0.10		0.29	0.19	0.91	0.17	0.78	0.06	0.36	0.03	0.45	0.15	0.31429
ROUTE ADX	0.05	0.02	0.10	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.11	0.04		0.76	0.07	0.35	0.13	0.43	0.17	0.02	0.00	0.38	0.13		0.35	0.23	0.68	0.13	0.86	0.07	0.45	0.03	0.46	0.15	0.31430
ROUTE BO	0.14	0.06	0.18	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.22	0.07		0.49	0.05	0.00	0.00	0.66	0.27	0.24	0.03	0.34	0.11		0.25	0.17	0.67	0.13	0.84	0.07	0.40	0.03	0.39	0.13	0.31469
ROUTE AEB	0.03	0.01	0.09	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.10	0.03		0.76	0.07	0.37	0.14	0.43	0.17	0.01	0.00	0.39	0.13		0.34	0.22	0.76	0.15	0.94	0.07	0.40	0.03	0.47	0.15	0.31576
ROUTE BW	0.12	0.05	0.17	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.21	0.07		0.49	0.05	0.02	0.01	0.66	0.27	0.24	0.03	0.35	0.11		0.23	0.15	0.75	0.14	0.94	0.07	0.36	0.03	0.40	0.13	0.31594
ROUTE IB	0.05	0.02	0.13	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.20	0.07		0.29	0.03	0.15	0.06	0.46	0.19	0.24	0.03	0.30	0.10		0.27	0.18	1.00	0.19	0.87	0.07	0.31	0.02	0.46	0.15	0.31611
ROUTE AN	0.05	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.20	0.07		0.48	0.04	0.18	0.07	0.46	0.19	0.25	0.03	0.33	0.11		0.33	0.21	0.67	0.13	0.83	0.06	0.42	0.03	0.44	0.14	0.31870
ROUTE AV	0.03	0.01	0.13	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.19	0.06		0.48	0.04	0.19	0.07	0.46	0.19	0.24	0.03	0.33	0.11		0.31	0.20	0.75	0.14	0.91	0.07	0.38	0.03	0.45	0.15	0.32015
ROUTE HI	0.11	0.05	0.16	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.69	0.11	0.18	0.06		0.49	0.05	0.02	0.01	0.80	0.32	0.27	0.03	0.41	0.13		0.22	0.15	0.71	0.14	1.00	0.08	0.34	0.03	0.39	0.13	0.32038
ROUTE ACW	0.13	0.06	0.13	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.08	0.01	0.13	0.04		0.97	0.09	0.31	0.12	0.64	0.26	0.01	0.00	0.47	0.15		0.30	0.20	0.43	0.08	0.88	0.07	0.44	0.03	0.38	0.13	0.32086
ROUTE KT	0.04	0.02	0.13	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.85	0.13	0.17	0.05		0.29	0.03	0.15	0.06	0.60	0.24	0.27	0.03	0.36	0.12		0.26	0.17	0.96	0.19	0.93	0.07	0.29	0.02	0.45	0.15	0.32094
ROUTE BT	0.06	0.03	0.15	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.48	0.04	0.15	0.06	0.46	0.19	0.25	0.03	0.32	0.10		0.33	0.21	0.74	0.14	0.83	0.06	0.45	0.03	0.45	0.15	0.32274
ROUTE CB	0.04	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.77	0.12	0.20	0.06		0.48	0.05	0.16	0.06	0.46	0.19	0.24	0.03	0.32	0.11		0.31	0.20	0.83	0.16	0.91	0.07	0.41	0.03	0.46	0.15	0.32430
ROUTE AII	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.31	0.05	0.05	0.02		0.60	0.06	0.31	0.12	0.57	0.23	0.02	0.00	0.41	0.13		0.44	0.29	0.87	0.17	0.93	0.07	0.08	0.01	0.54	0.18	0.32725
ROUTE ACZ	0.05	0.02	0.10	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.25	0.04	0.23	0.04	0.11	0.04		0.96	0.09	0.45	0.17	0.44	0.18	0.02	0.00	0.44	0.15		0.37	0.24	0.51	0.10	0.86	0.07	0.49	0.04	0.44	0.15	0.32776
ROUTE S	0.14	0.06	0.17	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.62	0.10	0.22	0.07		0.69	0.06	0.10	0.04	0.67	0.27	0.24	0.03	0.40	0.13		0.27	0.18	0.49	0.09	0.85	0.07	0.44	0.03	0.37	0.12	0.32818
ROUTE HN	0.03	0.01	0.14	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.85	0.13	0.16	0.05		0.49	0.05	0.16	0.06	0.60	0.24	0.27	0.03	0.38	0.13		0.30	0.20	0.79	0.15	0.97	0.08	0.39	0.03	0.45	0.15	0.32927
ROUTE AG	0.13	0.06	0.18	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.22	0.07		0.50	0.05	0.05	0.02	0.76	0.30	0.28	0.03	0.40	0.13		0.26	0.17	0.57	0.11	0.87	0.07	0.42	0.03	0.38	0.12	0.32951
ROUTE AO	0.11	0.05	0.17	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.21	0.07		0.50	0.05	0.06	0.02	0.76	0.30	0.27	0.03	0.41	0.14		0.24	0.16	0.65	0.13	0.97	0.08	0.38	0.03	0.38	0.13	0.33063
ROUTE HV	0.07	0.03	0.15	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.30	0.03	0.15	0.06	0.56	0.22	0.28	0.03	0.34	0.11		0.29	0.19	0.89	0.17	0.81	0.06	0.41	0.03	0.46	0.15	0.33335
ROUTE BM	0.15	0.06	0.19	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.62	0.10	0.23	0.07		0.50	0.05	0.02	0.01	0.76	0.30	0.28	0.03	0.39	0.13		0.26	0.17	0.65	0.12	0.87	0.07	0.45	0.03	0.39	0.13	0.33379
ROUTE AGQ	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.31	0.05	0.05	0.02		0.80	0.07	0.32	0.12	0.57	0.23	0.02	0.00	0.43	0.14		0.47	0.31	0.70	0.13	0.97	0.08	0.17	0.01	0.53	0.18	0.33381
ROUTE BU	0.13	0.06	0.18	0.02	0.00	0.00

Table 4.5
Metrics for Cross Over Routes
(Simple Average Matrix)

ROUTE AHM	0.12	0.05	0.17	0.02	0.00	0.00	0.03	0.00	0.13	0.00	0.25	0.04	0.31	0.05	0.17	0.06		0.34	0.03	0.60	0.23	0.51	0.21	0.04	0.01	0.47	0.15		0.76	0.50	0.62	0.12	0.63	0.05	0.32	0.02	0.69	0.23	0.43860
ROUTE AKZ	0.06	0.03	0.13	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.38	0.06	0.10	0.03		0.34	0.03	0.44	0.17	0.66	0.27	0.05	0.01	0.47	0.15		0.80	0.53	0.82	0.16	0.97	0.08	0.00	0.00	0.76	0.25	0.43927
ROUTE LF	0.06	0.03	0.18	0.02	0.33	0.02	0.01	0.00	0.06	0.00	0.25	0.04	0.77	0.12	0.23	0.08		0.18	0.02	0.45	0.17	0.49	0.20	0.34	0.04	0.43	0.14		0.77	0.51	0.51	0.10	0.82	0.06	0.07	0.01	0.67	0.22	0.43968
ROUTE VW	0.19	0.08	0.21	0.03	0.33	0.02	0.01	0.00	0.02	0.00	0.00	0.00	0.77	0.12	0.25	0.08		0.12	0.01	0.06	0.02	0.90	0.36	0.27	0.03	0.43	0.14		0.60	0.39	0.88	0.17	0.91	0.07	0.24	0.02	0.65	0.21	0.43977
ROUTE LO	0.06	0.03	0.16	0.02	0.33	0.02	0.03	0.00	0.11	0.00	0.25	0.04	0.77	0.12	0.23	0.08		0.18	0.02	0.42	0.16	0.59	0.24	0.30	0.04	0.45	0.15		0.73	0.48	0.51	0.10	0.87	0.07	0.14	0.01	0.65	0.22	0.43999
ROUTE HF	0.03	0.01	0.13	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.19	0.06		0.57	0.05	0.21	0.08	0.70	0.28	0.30	0.04	0.45	0.15		0.70	0.46	0.76	0.15	0.97	0.08	0.22	0.02	0.70	0.23	0.44055
ROUTE DH	0.05	0.02	0.16	0.02	0.00	0.00	0.03	0.00	0.10	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.37	0.03	0.47	0.18	0.53	0.21	0.27	0.03	0.46	0.15		0.76	0.50	0.40	0.08	0.85	0.07	0.33	0.02	0.67	0.22	0.44105
ROUTE IL	0.08	0.04	0.21	0.03	0.00	0.00	0.03	0.00	0.11	0.00	0.25	0.04	0.77	0.12	0.23	0.07		0.16	0.02	0.44	0.17	0.53	0.21	0.27	0.03	0.43	0.14		0.75	0.49	0.61	0.12	0.70	0.05	0.28	0.02	0.68	0.23	0.44170
ROUTE AEP	0.03	0.01	0.10	0.01	0.00	0.00	0.00	0.00	0.14	0.00	0.50	0.08	0.23	0.04	0.14	0.05		0.66	0.06	0.68	0.26	0.50	0.20	0.04	0.00	0.53	0.17		0.78	0.51	0.30	0.06	0.96	0.08	0.37	0.03	0.67	0.22	0.44174
ROUTE LZ	0.09	0.04	0.15	0.02	0.33	0.02	0.02	0.00	0.14	0.00	0.50	0.08	0.85	0.13	0.29	0.10		0.09	0.01	0.35	0.13	0.50	0.20	0.27	0.03	0.38	0.12		0.73	0.48	0.56	0.11	0.80	0.06	0.18	0.01	0.67	0.22	0.44174
ROUTE AHF	0.05	0.02	0.14	0.02	0.00	0.00	0.00	0.00	0.14	0.00	0.50	0.08	0.23	0.04	0.16	0.05		0.46	0.04	0.65	0.25	0.50	0.20	0.04	0.00	0.49	0.16		0.77	0.50	0.48	0.09	0.82	0.06	0.32	0.02	0.68	0.23	0.44199
ROUTE AEN	0.03	0.01	0.09	0.01	0.00	0.00	0.00	0.00	0.05	0.00	0.25	0.04	0.23	0.04	0.10	0.03		0.66	0.06	0.74	0.28	0.50	0.20	0.11	0.01	0.56	0.18		0.81	0.53	0.29	0.05	0.97	0.08	0.26	0.02	0.68	0.22	0.44229
ROUTE AEX	0.11	0.05	0.18	0.02	0.00	0.00	0.03	0.00	0.13	0.00	0.25	0.04	0.31	0.05	0.17	0.05		0.54	0.05	0.61	0.23	0.51	0.21	0.04	0.01	0.49	0.16		0.77	0.51	0.47	0.09	0.69	0.05	0.41	0.03	0.68	0.23	0.44276
ROUTE AHE	0.05	0.02	0.14	0.02	0.00	0.00	0.00	0.00	0.06	0.00	0.25	0.04	0.23	0.04	0.12	0.04		0.46	0.04	0.71	0.27	0.50	0.20	0.11	0.01	0.53	0.17		0.80	0.52	0.48	0.09	0.83	0.06	0.20	0.02	0.70	0.23	0.44299
ROUTE AW	0.11	0.05	0.16	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.23	0.08		0.59	0.05	0.11	0.04	0.86	0.34	0.29	0.04	0.48	0.16		0.65	0.43	0.61	0.12	0.96	0.08	0.21	0.02	0.63	0.21	0.44359
ROUTE LX	0.09	0.04	0.14	0.02	0.33	0.02	0.02	0.00	0.06	0.00	0.25	0.04	0.85	0.13	0.25	0.08		0.09	0.01	0.42	0.16	0.50	0.20	0.34	0.04	0.41	0.14		0.77	0.51	0.56	0.11	0.81	0.06	0.06	0.00	0.68	0.22	0.44362
ROUTE LI	0.08	0.04	0.21	0.03	0.33	0.02	0.03	0.00	0.11	0.00	0.25	0.04	0.77	0.12	0.24	0.08		0.18	0.02	0.40	0.15	0.59	0.24	0.30	0.04	0.44	0.15		0.73	0.48	0.56	0.11	0.75	0.06	0.19	0.01	0.66	0.22	0.44479
ROUTE JD	0.11	0.05	0.17	0.02	0.00	0.00	0.04	0.00	0.11	0.00	0.25	0.04	0.85	0.13	0.25	0.08		0.07	0.01	0.40	0.15	0.54	0.22	0.27	0.03	0.41	0.14		0.75	0.49	0.65	0.12	0.69	0.05	0.27	0.02	0.69	0.23	0.44543
ROUTE AHO	0.09	0.04	0.10	0.01	0.00	0.00	0.01	0.00	0.14	0.00	0.50	0.08	0.31	0.05	0.18	0.06		0.37	0.03	0.61	0.23	0.51	0.21	0.04	0.00	0.48	0.16		0.77	0.50	0.52	0.10	0.81	0.06	0.32	0.02	0.69	0.23	0.44558
ROUTE CV	0.07	0.03	0.21	0.03	0.00	0.00	0.03	0.00	0.11	0.00	0.25	0.04	0.77	0.12	0.22	0.07		0.36	0.03	0.45	0.17	0.53	0.21	0.27	0.03	0.45	0.15		0.77	0.50	0.45	0.09	0.75	0.06	0.37	0.03	0.67	0.22	0.44574
ROUTE AKA	0.44	0.20	0.36	0.05	0.33	0.02	0.34	0.01	0.31	0.01	0.50	0.08	0.23	0.04	0.40	0.13		0.31	0.03	0.44	0.17	0.47	0.19	0.01	0.00	0.38	0.13		0.50	0.33	0.86	0.17	0.55	0.04	0.46	0.03	0.57	0.19	0.44612
ROUTE AEJ	0.05	0.02	0.15	0.02	0.00	0.00	0.00	0.00	0.14	0.00	0.50	0.08	0.23	0.04	0.16	0.05		0.65	0.06	0.66	0.25	0.50	0.20	0.04	0.00	0.52	0.17		0.78	0.51	0.34	0.06	0.87	0.07	0.42	0.03	0.67	0.22	0.44643
ROUTE LT	0.11	0.05	0.20	0.03	0.33	0.02	0.02	0.00	0.15	0.00	0.50	0.08	0.85	0.13	0.31	0.10		0.09	0.01	0.34	0.13	0.50	0.20	0.27	0.03	0.37	0.12		0.74	0.48	0.61	0.12	0.69	0.05	0.22	0.02	0.67	0.22	0.44651
ROUTE AHN	0.09	0.04	0.10	0.01	0.00	0.00	0.01	0.00	0.06	0.00	0.25	0.04	0.31	0.05	0.14	0.05		0.37	0.03	0.68	0.26	0.51	0.21	0.11	0.01	0.51	0.17		0.80	0.52	0.52	0.10	0.82	0.06	0.20	0.01	0.70	0.23	0.44664
ROUTE AEH	0.05	0.02	0.14	0.02	0.00	0.00	0.00	0.00	0.06	0.00	0.25	0.04	0.23	0.04	0.12	0.04		0.65	0.06	0.73	0.28	0.50	0.20	0.11	0.01	0.55	0.18		0.81	0.53	0.33	0.06	0.88	0.07	0.30	0.02	0.68	0.23	0.44697
ROUTE AKC	0.50	0.22	0.46	0.06	0.33	0.02	0.33	0.01	0.30	0.01	0.50	0.08	0.23	0.04	0.43	0.14		0.30	0.03	0.40	0.15	0.46	0.18	0.01	0.00	0.37	0.12		0.49	0.32	0.85	0.16	0.45	0.04	0.47	0.03	0.56	0.18	0.44749
ROUTE CC	0.13	0.06	0.17	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.77	0.12	0.24	0.08		0.59	0.06	0.08	0.03	0.86	0.34	0.29	0.04	0.47	0.15		0.65	0.43	0.70	0.13	0.96	0.08	0.24	0.02	0.65	0.22	0.44807
ROUTE LR	0.11	0.05	0.20	0.03	0.33	0.02	0.02	0.00	0.07	0.00	0.25	0.04	0.85	0.13	0.27	0.09		0.09	0.01	0.40	0.15	0.50	0.20	0.34	0.04	0.41	0.13		0.77	0.51	0.61	0.12	0.69	0.05	0.11	0.01	0.69	0.23	0.44837
ROUTE AKX	0.26	0.11	0.31	0.04	0.33	0.02	0.21	0.01	0.26	0.00	0.25	0.04	0.15	0.02	0.25	0.08		0.39	0.04	0.60	0.23	0.48	0.19	0.04	0.01	0.46	0.15		0.73	0.48	0.59	0.11	0.54	0.04	0.21	0.02	0.65	0.21	0.44858
ROUTE MA	0.11	0.05	0.17	0.02	0.33	0.02	0.04	0.00	0.11	0.00	0.25	0.04	0.85	0.13	0.27	0.09		0.09	0.01	0.37	0.14	0.60	0.24	0.30	0.04	0.43	0.14		0.73	0.48	0.60	0.12	0.74	0.06	0.18	0.01	0.67	0.22	0.44869
ROUTE IP	0.05	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.12	0.00	0.50	0.08	0.77	0.12	0.24	0.08		0.19	0.02	0.45	0.17	0.53	0.21	0.27	0.03	0.44	0.14		0.76	0.50	0.50	0.10	0.89	0.07	0.28	0.02	0.68	0.22	0.44873
ROUTE BB	0.03	0.01	0.14	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.92	0.14	0.22	0.07		0.58	0.05	0.26	0.10	0.66	0.26	0.30	0.04	0.45	0.15		0.71	0.46	0.70	0.13	0.94	0.07	0.26	0.02	0.69	0.23	0.44880
ROUTE EF	0.11	0.05	0.18	0.02	0.00	0.00	0.04	0.00	0.11	0.00	0.25	0.04	0.85	0.13	0.25	0.08		0.27	0.03	0.42	0.16	0.54	0.22	0.27	0.03	0.44	0.14		0.76	0.50	0.49	0.09	0.74	0.06	0.37	0.03	0.68	0.22	0.44933
ROUTE ID	0.05	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.92	0.14	0.23	0.07		0.39	0.04	0.21	0.08	0.66	0.26	0.30	0.04	0.42	0.14		0.69	0.45	0.95	0.18	0.90	0.07	0.19	0.01	0.72	0.24	0.44963
ROUTE AFB	0.08	0.04	0.11	0.01	0.00	0.00	0.01	0.00	0.14	0.00	0.50	0.08	0.31	0.05	0.18	0.06		0.56	0.05	0.63	0.24	0.51	0.21	0.04	0.00	0.50	0.17		0.78	0.51	0.38	0.07	0.86	0.07	0.41	0.03	0.68	0.22	0.44990
ROUTE ALZ	0.05	0.02	0.13	0.02	0.33	0.02	0.00	0.00	0.03	0.00	0.00	0.00	0.38	0.06	0.12	0.04		0.34	0.03	0.44	0.17	0.68	0.27	0.05	0.01	0.48	0.16		0.80	0.53	0.82	0.16	0.97	0.08	0.13	0.01	0.77	0.25	0.45000
ROUTE IN	0.05	0.02	0.13	0.02	0.00	0.00	0.01	0.00	0.04	0.00	0.25	0.04	0.77	0.12	0.20	0.07		0.19	0.02	0.52	0.20	0.53	0.22	0.34	0.04	0.47	0.16		0.79	0.52	0.50	0.10	0.90	0.07	0.16	0.01	0.69	0.23	0.45007
ROUTE IX	0.13	0.06	0.22	0.03	0.00	0.00	0.04	0.00	0.11	0.00	0.25	0.04	0.85	0.13	0.26	0.09		0.07	0.01	0.39	0.15	0.54	0.22	0.27	0.03	0.41	0.13		0.75	0.49	0.69	0.13	0.58	0.05	0.32	0.02	0.70	0.23	0.45013
ROUTE AHL	0.11	0.05	0.16	0.02	0.00	0.00	0.01	0.00	0.15	0.00	0.50	0.08	0.31	0.05	0.20	0.07		0.36	0.03	0.60	0.23	0.51	0.21	0.04	0.00	0.47	0.16		0.77	0.50	0.57	0.11	0.71	0.06	0.36	0.03	0.69	0.23	0.45029
ROUTE AEZ	0.08	0.04	0.11	0.01	0.00	0.00	0.01	0.00	0.06	0.00	0.25	0.04	0.31	0.05	0.14	0.05		0.56	0.05	0.69	0.26	0.51	0.21	0.11	0.01	0.54	0.18		0.81	0.53	0.37	0.07	0.87	0.07	0.30	0.02	0.69	0.23	0.45049
ROUTE AHK	0.11	0.05	0.15	0.02	0.00	0.00	0.01	0.00	0.07	0.00	0.25	0.04	0.31	0.05	0.16	0.05		0.36	0.03	0.66	0.25	0.51	0.21	0.11	0.01	0.50	0.17		0.80	0.52	0.56	0.11	0.72	0.06	0.24	0.02	0.71	0.23	0.45134
ROUTE LM	0.05	0.02	0.14	0.02	0.33	0.02	0.01	0.00	0.13	0.00	0.50	0.08	0.77	0.12	0.26	0.09		0.20	0.02	0.42	0.16	0.59	0.24	0.30	0.04	0.45	0.15		0.74	0.48	0.45	0.09	0.96	0.07	0.19	0.01	0.66	0.22	0.45179
ROUTE PX	0.07	0.03	0.18	0.02	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.92	0.14	0.20	0.07		0.07	0.01	0.23	0.09	0.69	0.28	0.28	0.03	0.41	0.13		0.79	0.52	0.91	0.18	0.93	0.07	0.00	0.00	0.77	0.25	0.45254
ROUTE DD	0.04	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.12	0.00	0.50	0.08	0.77	0.12	0.24	0.08		0.38	0.04	0.47	0.18	0.53	0.21	0.27	0.03	0.46	0.15		0.77	0.50	0.35	0.07	0.93	0.07	0.38	0.03	0.67	0.22	0.45291
ROUTE CH	0.05	0.02	0.15	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.25	0.04	0.92	0.14	0.22	0.07		0.58	0.05	0.23	0.09	0.66	0.26	0.30	0.04	0.44	0.15		0.71	0.46	0.77	0.15	0.94	0.07	0.29	0.02	0.71	0.23	0.45300
ROUTE IJ	0.07	0.03	0.19	0.03	0.00	0.00	0.01	0.00	0.13	0.00	0.50	0.08	0.77	0.12	0.26	0.09		0.18	0.02	0.44	0.17	0.53	0.21	0.27	0.03	0.43	0.14		0.76	0.50	0.55	0.11	0.78	0.06	0.32	0.02	0.69	0.23	0.45342
ROUTE AKU	0.28	0.12	0.36	0.05	0.33	0.02	0.21	0.01	0.27	0.00	0.25	0.04	0.15	0.02	0.27	0.09		0.38	0.04	0.58	0.22	0.48	0.19	0.04	0.01	0.46	0.15		0.73	0.48	0.64	0.12	0.43	0.03	0.26	0.02	0.65	0.22	0.45345
ROUTE LU	0.13	0.06	0.23	0.03	0.33	0.02	0.04	0.00	0.12	0.00	0.25	0.04	0.85	0.13	0.28	0.09		0.08	0.01	0.35	0.13	0.60	0.24	0.30	0.04	0.42	0.14		0.73	0.48	0.65	0.13	0.63	0.05	0.23	0.02	0.67	0.22	0.45348
ROUTE LK	0.05	0.02	0.14	0.02	0.33	0.02	0.01	0.00	0.05	0.00	0.25	0.04	0.77	0.12	0.22	0.07		0.20	0.02	0.48	0.18	0.59	0.24	0.37	0.05	0.49	0.16		0.77	0.51	0.44	0.08	0.97	0.08	0.07	0.01	0.67	0.22	0.45355
ROUTE CZ	0.04	0.02	0.14	0.02	0.00	0.00	0.01	0.00	0.04	0.00	0.25	0.04	0.77	0.12	0.20	0.06		0.38	0.04	0.53	0.20	0.53	0.22	0.34	0.04	0.50	0.16		0.80	0.52	0.34	0.07	0.94	0.07	0.26	0.02	0.68	0.23	0.45375
ROUTE DT	0.13	0.06	0.23	0.03	0.00	0.00	0.04	0.00	0.11	0.00	0.25	0.04	0.85	0.13	0.26	0.09		0.26	0.02	0.40	0.15	0.54	0.22	0.27	0.03	0.43	0.14		0.77	0.50	0.53	0.10	0.64	0.05	0.41	0.03	0.68	0.23	0.45400
ROUTE AEV	0.10	0.04	0.17	0.02	0.00	0.00	0.01	0.00	0.15	0.00	0.50	0.08	0.31	0.05	0.20	0.07		0.56	0.05	0.61	0.23	0.51	0.21	0.04	0.00	0.49	0.16		0.78	0.51	0.42	0.08	0.77	0.06	0.46	0.03	0.68	0.23	0.45458
ROUTE IH	0.07	0.03	0.19	0.02	0.00	0.00	0.01	0.00	0.05	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.18	0.02	0.50	0.19	0.53	0.22	0.34	0.04	0.46	0.15		0.79	0.52	0.54	0.10	0.79	0.06	0.21	0.02	0.70	0.23	0.45475
ROUTE AET	0.10	0.04	0.16	0.02	0.00	0.00	0.01	0.00	0.07	0.00	0.25	0.04	0.31	0.05	0.16	0.05		0.56	0.05	0.68	0.26	0.51	0.21	0.11	0.01	0.53	0.17		0.81	0.53	0.41	0.08	0.77	0.06	0.34	0.03	0.70	0.23	0.45517
ROUTE OA	0.46	0.20	0.41	0.05	0.33	0.02	0.35	0.01	0.29	0.01	0.50	0.08	0.77	0.12	0.49	0.16		0.03	0.00	0.23	0.09	0.50	0.20	0.24	0.03	0.32	0.11		0.48	0.31	0.95	0.18	0.50	0.04	0.45	0.03	0.57	0.19	0.45546
ROUTE IQ	0.07	0.03	0.16	0.02	0.00	0.00	0.03	0.00	0.09	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.18	0.02	0.47	0.18	0.63	0.25	0.30	0.04	0.49	0.16		0.75	0.49	0.54	0.10	0.83	0.07	0.28	0.02	0.68	0.23	0.45566
ROUTE OE	0.51	0.23	0.51	0.07	0.33	0.02	0.34	0.01	0.29	0.01	0.50	0.08	0.77	0.12	0.53	0.17		0.02	0.00	0.19	0.07	0.49	0.20	0.24	0.03	0.30	0.10		0.47	0.31	0.95	0.18	0.39	0.03	0.45	0.03	0.55	0.18	0.45649
ROUTE LG	0.07	0.03	0.20	0.03	0.33	0.02	0.01	0.00	0.14	0.00	0.50	0.08	0.77	0.12	0.28	0.09		0.20	0.02	0.40	0.15	0.59	0.24	0.30	0.04	0.44	0.15		0.74	0.48	0.50	0.10	0.84	0.07	0.24	0.02	0.66	0.22	0.45657
ROUTE JB	0.10	0.04	0.15	0.02	0.00	0.00	0.02	0.00	0.13	0.00	0.50	0.08	0.85	0.13	0.28	0.09		0.09	0.01	0.40	0.15	0.54	0.22	0.27	0.03	0.41	0.14		0.76	0.50	0.59	0.11	0.77	0.06	0.32	0.02	0.69	0.23	0.45711
ROUTE AKR	0.31	0.14	0.32	0.04	0.33	0.02	0.22	0.01	0.27	0.00	0.25	0.04	0.23	0.04	0.29	0.09		0.30	0.03	0.55	0.21	0.49	0.20	0.04	0.01	0.44	0.14		0.73	0.48	0.69	0.13	0.41	0.03	0.26	0.02	0.66	0.22	0.45739
ROUTE CR	0.06	0.03	0.20	0.03	0.00	0.00	0.01	0.00	0.13	0.00	0.50	0.08	0.77	0.12	0.26	0.08		0.38	0.04	0.45	0.17	0.53	0.21	0.27	0.03	0.45	0.15		0.77	0.50	0.39	0.08	0.83	0.07	0.42	0.03	0.68	0.22	0.45759
ROUTE LE	0.07	0.03	0.19	0.03	0.33	0.02	0.01	0.00	0.05	0.00	0.25	0.04	0.77	0.12	0.23	0.08		0.20	0.02	0.47	0.18	0.59	0.24	0.37	0.05	0.48	0.16		0.77	0.51	0.49	0.09	0.86	0.07	0.12	0.01	0.68	0.22	0.45832
ROUTE CN	0.06	0.03	0.19	0.03	0.00	0.00	0.01	0.00	0.05	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.38	0.04	0.52	0.20	0.53	0.22	0.34	0.04	0.49	0.16		0.80	0.53	0.39	0.07	0.84	0.07	0.30	0.02	0.69	0.23	0.45842
ROUTE VU	0.19	0.09	0.22	0.03	0.33	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.77	0.12	0.25	0.08		0.13	0.01	0.08	0.03	1.00	0.40	0.30	0.04	0.48	0.16		0.60	0.39	0.86	0.16	0.95	0.07	0.29	0.02	0.65	0.22	0.45842
ROUTE IZ	0.10	0.04	0.15	0.02	0.00	0.00	0.02	0.00	0.05	0.00	0.25	0.04	0.85	0.13	0.24	0.08		0.09	0.01	0.47	0.18	0.54	0.22	0.34	0.04	0.45	0.15		0.79	0.52	0.59	0.11	0.78	0.06	0.20	0.01	0.71	0.23	0.45850
ROUTE PT	0.27	0.12	0.35	0.05	0.33	0.02	0.22	0.01	0.25	0.00	0.25	0.04	0.69	0.11	0.35	0.11		0.12	0.01	0.39	0.15	0.51	0.21	0.27	0.03	0.40	0.13		0.71	0.47	0.67	0.13	0.48	0.04	0.21	0.02	0.65	0.21	0.45954
ROUTE DG	0.06	0.03	0.17	0.02	0.00	0.00	0.03	0.00	0.09	0.00	0.25	0.04	0.77	0.12	0.21	0.07		0.38	0.04	0.48	0.18	0.63	0.25	0.30	0.04	0.51	0.17		0.77	0.50

Table 4.5
Metrics for Cross Over Routes
(Simple Average Matrix)

ROUTE AIG	0.30	0.13	0.26	0.03	0.00	0.00	0.15	0.01	0.28	0.01	1.00	0.16	0.23	0.04	0.38	0.12		0.35	0.03	0.53	0.20	0.48	0.19	0.02	0.00	0.43	0.14		0.76	0.50	0.67	0.13	0.51	0.04	0.45	0.03	0.70	0.23	0.49839
ROUTE AFV	0.31	0.14	0.31	0.04	0.00	0.00	0.17	0.01	0.26	0.00	0.75	0.12	0.31	0.05	0.36	0.12		0.54	0.05	0.53	0.20	0.49	0.20	0.04	0.01	0.46	0.15		0.77	0.51	0.53	0.10	0.56	0.04	0.56	0.04	0.69	0.23	0.49852
ROUTE PE	0.32	0.14	0.37	0.05	0.33	0.02	0.21	0.01	0.27	0.00	0.50	0.08	0.77	0.12	0.42	0.14		0.05	0.01	0.35	0.13	0.62	0.25	0.30	0.04	0.42	0.14		0.72	0.47	0.68	0.13	0.49	0.04	0.35	0.03	0.67	0.22	0.49899
ROUTE ND	0.32	0.14	0.36	0.05	0.33	0.02	0.16	0.01	0.29	0.01	1.00	0.16	0.77	0.12	0.50	0.17		0.07	0.01	0.26	0.10	0.47	0.19	0.25	0.03	0.33	0.11		0.73	0.48	0.79	0.15	0.34	0.03	0.36	0.03	0.68	0.23	0.49935
ROUTE AFJ	0.36	0.16	0.38	0.05	0.00	0.00	0.16	0.01	0.26	0.00	0.75	0.12	0.31	0.05	0.39	0.13		0.52	0.05	0.50	0.19	0.49	0.20	0.04	0.00	0.44	0.15		0.77	0.51	0.51	0.10	0.51	0.04	0.55	0.04	0.69	0.23	0.49948
ROUTE MV	0.29	0.13	0.27	0.04	0.33	0.02	0.16	0.01	0.20	0.00	0.75	0.12	0.85	0.13	0.44	0.15		0.10	0.01	0.34	0.13	0.49	0.20	0.34	0.04	0.38	0.12		0.77	0.50	0.64	0.12	0.65	0.05	0.20	0.02	0.69	0.23	0.49951
ROUTE AIF	0.30	0.13	0.25	0.03	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.23	0.04	0.33	0.11		0.35	0.03	0.60	0.23	0.49	0.20	0.10	0.01	0.47	0.15		0.79	0.52	0.67	0.13	0.51	0.04	0.34	0.02	0.72	0.24	0.49958
ROUTE MJ	0.34	0.15	0.34	0.04	0.33	0.02	0.15	0.01	0.19	0.00	0.75	0.12	0.85	0.13	0.47	0.16		0.08	0.01	0.31	0.12	0.48	0.19	0.33	0.04	0.36	0.12		0.77	0.50	0.61	0.12	0.60	0.05	0.20	0.01	0.68	0.22	0.49996
ROUTE PC	0.32	0.14	0.36	0.05	0.33	0.02	0.21	0.01	0.19	0.00	0.25	0.04	0.77	0.12	0.38	0.12		0.05	0.01	0.42	0.16	0.62	0.25	0.37	0.05	0.46	0.15		0.76	0.50	0.68	0.13	0.50	0.04	0.23	0.02	0.68	0.23	0.50121
ROUTE KB	0.31	0.14	0.29	0.04	0.00	0.00	0.18	0.01	0.24	0.00	0.75	0.12	0.85	0.13	0.44	0.15		0.08	0.01	0.32	0.12	0.53	0.21	0.27	0.03	0.38	0.12		0.75	0.49	0.72	0.14	0.54	0.04	0.41	0.03	0.70	0.23	0.50122
ROUTE AUJ	0.54	0.24	0.61	0.08	0.00	0.00	0.11	0.00	0.26	0.00	0.50	0.08	0.00	0.00	0.41	0.14		0.68	0.06	0.56	0.21	0.02	0.01	0.69	0.09	0.37	0.12		0.96	0.63	0.02	0.00	0.87	0.07	0.52	0.04	0.74	0.24	0.50126
ROUTE NB	0.32	0.14	0.35	0.05	0.33	0.02	0.16	0.01	0.20	0.00	0.75	0.12	0.77	0.12	0.46	0.15		0.07	0.01	0.32	0.12	0.48	0.19	0.33	0.04	0.36	0.12		0.77	0.50	0.79	0.15	0.34	0.03	0.24	0.02	0.70	0.23	0.50138
ROUTE AIA	0.28	0.13	0.23	0.03	0.00	0.00	0.15	0.01	0.28	0.01	1.00	0.16	0.31	0.05	0.38	0.12		0.37	0.03	0.53	0.20	0.49	0.20	0.04	0.00	0.44	0.15		0.76	0.50	0.59	0.11	0.68	0.05	0.46	0.03	0.70	0.23	0.50141
ROUTE NK	0.32	0.14	0.33	0.04	0.33	0.02	0.18	0.01	0.25	0.00	0.75	0.12	0.77	0.12	0.46	0.15		0.07	0.01	0.29	0.11	0.57	0.23	0.29	0.04	0.38	0.13		0.73	0.48	0.78	0.15	0.39	0.03	0.32	0.02	0.68	0.22	0.50162
ROUTE JP	0.36	0.16	0.37	0.05	0.00	0.00	0.17	0.01	0.23	0.00	0.75	0.12	0.85	0.13	0.47	0.16		0.06	0.01	0.29	0.11	0.52	0.21	0.27	0.03	0.36	0.12		0.75	0.49	0.70	0.13	0.49	0.04	0.40	0.03	0.69	0.23	0.50191
ROUTE GZ	0.32	0.14	0.33	0.04	0.00	0.00	0.18	0.01	0.24	0.00	0.75	0.12	0.77	0.12	0.44	0.14		0.25	0.02	0.34	0.13	0.51	0.21	0.26	0.03	0.39	0.13		0.76	0.50	0.64	0.12	0.44	0.03	0.50	0.04	0.69	0.23	0.50195
ROUTE AHU	0.33	0.15	0.30	0.04	0.00	0.00	0.14	0.01	0.27	0.00	1.00	0.16	0.31	0.05	0.41	0.13		0.35	0.03	0.50	0.19	0.49	0.20	0.03	0.00	0.42	0.14		0.76	0.50	0.57	0.11	0.63	0.05	0.45	0.03	0.69	0.23	0.50231
ROUTE MR	0.31	0.14	0.33	0.04	0.33	0.02	0.16	0.01	0.29	0.01	1.00	0.16	0.85	0.13	0.50	0.17		0.09	0.01	0.26	0.10	0.49	0.20	0.27	0.03	0.34	0.11		0.73	0.48	0.69	0.13	0.53	0.04	0.37	0.03	0.68	0.23	0.50234
ROUTE AEQ	0.13	0.06	0.20	0.03	0.00	0.00	0.02	0.00	0.11	0.00	0.25	0.04	0.23	0.04	0.16	0.05		0.68	0.06	0.61	0.23	0.70	0.28	0.05	0.01	0.59	0.19		0.96	0.63	0.26	0.05	0.91	0.07	0.27	0.02	0.77	0.25	0.50237
ROUTE AHZ	0.28	0.13	0.22	0.03	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.31	0.05	0.33	0.11		0.37	0.03	0.60	0.23	0.50	0.20	0.11	0.01	0.47	0.16		0.80	0.52	0.59	0.11	0.68	0.05	0.34	0.03	0.71	0.24	0.50251
ROUTE ATW	0.18	0.08	0.35	0.05	0.00	0.00	1.00	0.04	0.98	0.02	0.75	0.12	0.00	0.00	0.30	0.10		0.74	0.07	0.65	0.25	0.01	0.00	0.93	0.12	0.43	0.14		0.96	0.63	0.35	0.07	0.61	0.05	0.58	0.04	0.79	0.26	0.50251
ROUTE AGL	0.29	0.13	0.27	0.03	0.00	0.00	0.15	0.01	0.28	0.01	1.00	0.16	0.23	0.04	0.37	0.12		0.54	0.05	0.55	0.21	0.48	0.19	0.02	0.00	0.46	0.15		0.77	0.51	0.52	0.10	0.57	0.04	0.55	0.04	0.69	0.23	0.50252
ROUTE MF	0.36	0.16	0.40	0.05	0.33	0.02	0.15	0.01	0.28	0.01	1.00	0.16	0.85	0.13	0.53	0.18		0.07	0.01	0.23	0.09	0.48	0.19	0.26	0.03	0.32	0.10		0.73	0.48	0.67	0.13	0.48	0.04	0.36	0.03	0.67	0.22	0.50281
ROUTE KH	0.34	0.15	0.38	0.05	0.00	0.00	0.18	0.01	0.25	0.00	0.75	0.12	0.77	0.12	0.45	0.15		0.05	0.00	0.31	0.12	0.51	0.21	0.26	0.03	0.36	0.12		0.75	0.49	0.86	0.16	0.26	0.02	0.45	0.03	0.71	0.23	0.50294
ROUTE AID	0.32	0.14	0.31	0.04	0.00	0.00	0.15	0.01	0.29	0.01	1.00	0.16	0.23	0.04	0.39	0.13		0.34	0.03	0.52	0.20	0.48	0.19	0.02	0.00	0.43	0.14		0.76	0.50	0.72	0.14	0.41	0.03	0.50	0.04	0.71	0.23	0.50310
ROUTE AGJ	0.29	0.13	0.26	0.03	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.23	0.04	0.33	0.11		0.54	0.05	0.61	0.23	0.49	0.20	0.10	0.01	0.49	0.16		0.81	0.53	0.51	0.10	0.58	0.04	0.43	0.03	0.70	0.23	0.50324
ROUTE AHT	0.33	0.15	0.30	0.04	0.00	0.00	0.14	0.01	0.19	0.00	0.75	0.12	0.31	0.05	0.36	0.12		0.35	0.03	0.56	0.21	0.49	0.20	0.10	0.01	0.46	0.15		0.80	0.52	0.56	0.11	0.64	0.05	0.33	0.02	0.70	0.23	0.50341
ROUTE ATK	0.09	0.04	0.29	0.04	0.00	0.00	0.96	0.03	0.94	0.02	0.75	0.12	0.00	0.00	0.25	0.08		0.77	0.07	0.73	0.28	0.00	0.00	0.58	0.07	0.42	0.14		0.96	0.63	0.73	0.14	0.60	0.05	0.46	0.03	0.85	0.28	0.50343
ROUTE AUK	0.54	0.24	0.60	0.08	0.00	0.00	0.11	0.00	0.17	0.00	0.25	0.04	0.00	0.00	0.37	0.12		0.68	0.06	0.63	0.24	0.02	0.01	0.76	0.09	0.40	0.13		1.00	0.66	0.00	0.00	0.88	0.07	0.40	0.03	0.75	0.25	0.50354
ROUTE OY	0.34	0.15	0.42	0.05	0.33	0.02	0.21	0.01	0.28	0.01	0.50	0.08	0.77	0.12	0.44	0.14		0.05	0.00	0.34	0.13	0.62	0.25	0.30	0.04	0.42	0.14		0.72	0.47	0.73	0.14	0.38	0.03	0.40	0.03	0.67	0.22	0.50382
ROUTE AZ	0.12	0.05	0.22	0.03	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.92	0.14	0.27	0.09		0.61	0.06	0.18	0.07	0.76	0.31	0.27	0.03	0.46	0.15		0.90	0.59	0.64	0.12	0.93	0.07	0.14	0.01	0.80	0.26	0.50413
ROUTE MP	0.31	0.14	0.32	0.04	0.33	0.02	0.16	0.01	0.20	0.00	0.75	0.12	0.85	0.13	0.46	0.15		0.09	0.01	0.32	0.12	0.49	0.20	0.34	0.04	0.37	0.12		0.77	0.51	0.69	0.13	0.54	0.04	0.25	0.02	0.70	0.23	0.50427
ROUTE AIC	0.32	0.14	0.31	0.04	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.23	0.04	0.35	0.11		0.34	0.03	0.58	0.22	0.49	0.20	0.10	0.01	0.46	0.15		0.80	0.52	0.72	0.14	0.41	0.03	0.38	0.03	0.72	0.24	0.50428
ROUTE MY	0.31	0.14	0.30	0.04	0.33	0.02	0.18	0.01	0.25	0.00	0.75	0.12	0.85	0.13	0.46	0.15		0.09	0.01	0.29	0.11	0.58	0.23	0.31	0.04	0.39	0.13		0.73	0.48	0.68	0.13	0.58	0.05	0.33	0.02	0.68	0.22	0.50460
ROUTE MD	0.36	0.16	0.40	0.05	0.33	0.02	0.15	0.01	0.20	0.00	0.75	0.12	0.85	0.13	0.49	0.16		0.07	0.01	0.29	0.11	0.48	0.19	0.33	0.04	0.35	0.12		0.77	0.50	0.66	0.13	0.48	0.04	0.24	0.02	0.69	0.23	0.50473
ROUTE GB	0.30	0.13	0.30	0.04	0.00	0.00	0.18	0.01	0.24	0.00	0.75	0.12	0.85	0.13	0.44	0.14		0.27	0.03	0.34	0.13	0.53	0.21	0.27	0.03	0.40	0.13		0.76	0.50	0.55	0.11	0.61	0.05	0.51	0.04	0.69	0.23	0.50503
ROUTE MM	0.36	0.16	0.37	0.05	0.33	0.02	0.17	0.01	0.24	0.00	0.75	0.12	0.85	0.13	0.49	0.16		0.07	0.01	0.26	0.10	0.57	0.23	0.30	0.04	0.37	0.12		0.73	0.48	0.66	0.13	0.53	0.04	0.32	0.02	0.67	0.22	0.50503
ROUTE AFZ	0.28	0.12	0.24	0.03	0.00	0.00	0.15	0.01	0.28	0.01	1.00	0.16	0.31	0.05	0.38	0.12		0.57	0.05	0.55	0.21	0.49	0.20	0.04	0.00	0.46	0.15		0.78	0.51	0.44	0.08	0.73	0.06	0.56	0.04	0.69	0.23	0.50563
ROUTE FD	0.35	0.16	0.37	0.05	0.00	0.00	0.17	0.01	0.23	0.00	0.75	0.12	0.85	0.13	0.47	0.15		0.25	0.02	0.31	0.12	0.52	0.21	0.27	0.03	0.38	0.13		0.76	0.50	0.53	0.10	0.56	0.04	0.50	0.04	0.68	0.23	0.50582
ROUTE JV	0.33	0.15	0.35	0.05	0.00	0.00	0.18	0.01	0.25	0.00	0.75	0.12	0.85	0.13	0.46	0.15		0.07	0.01	0.31	0.12	0.53	0.21	0.27	0.03	0.37	0.12		0.75	0.49	0.77	0.15	0.44	0.03	0.46	0.03	0.71	0.23	0.50591
ROUTE OW	0.34	0.15	0.41	0.05	0.33	0.02	0.21	0.01	0.20	0.00	0.25	0.04	0.77	0.12	0.39	0.13		0.05	0.00	0.40	0.15	0.62	0.25	0.37	0.05	0.45	0.15		0.76	0.50	0.73	0.14	0.38	0.03	0.28	0.02	0.69	0.23	0.50603
ROUTE AHX	0.30	0.13	0.28	0.04	0.00	0.00	0.15	0.01	0.29	0.01	1.00	0.16	0.31	0.05	0.39	0.13		0.36	0.03	0.52	0.20	0.49	0.20	0.04	0.00	0.43	0.14		0.77	0.50	0.63	0.12	0.58	0.05	0.51	0.04	0.71	0.23	0.50611
ROUTE AFX	0.28	0.12	0.23	0.03	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.31	0.05	0.33	0.11		0.57	0.05	0.61	0.23	0.50	0.20	0.11	0.01	0.50	0.16		0.81	0.53	0.43	0.08	0.74	0.06	0.44	0.03	0.70	0.23	0.50627
ROUTE NE	0.34	0.15	0.38	0.05	0.33	0.02	0.18	0.01	0.26	0.00	0.75	0.12	0.77	0.12	0.47	0.16		0.06	0.01	0.27	0.10	0.57	0.23	0.29	0.04	0.38	0.12		0.73	0.48	0.83	0.16	0.28	0.02	0.37	0.03	0.69	0.23	0.50642
ROUTE OH	0.28	0.13	0.39	0.05	0.33	0.02	0.20	0.01	0.15	0.00	0.00	0.00	0.92	0.14	0.35	0.11		0.08	0.01	0.40	0.15	0.61	0.24	0.28	0.04	0.44	0.15		0.77	0.50	0.87	0.17	0.65	0.05	0.35	0.03	0.75	0.25	0.50658
ROUTE JJ	0.38	0.17	0.42	0.06	0.00	0.00	0.17	0.01	0.24	0.00	0.75	0.12	0.85	0.13	0.49	0.16		0.05	0.00	0.27	0.10	0.52	0.21	0.27	0.03	0.35	0.12		0.75	0.49	0.75	0.14	0.39	0.03	0.45	0.03	0.70	0.23	0.50662
ROUTE AFN	0.32	0.14	0.31	0.04	0.00	0.00	0.14	0.01	0.27	0.00	1.00	0.16	0.31	0.05	0.41	0.13		0.55	0.05	0.52	0.20	0.49	0.20	0.03	0.00	0.45	0.15		0.78	0.51	0.42	0.08	0.69	0.05	0.55	0.04	0.68	0.23	0.50662
ROUTE GN	0.34	0.15	0.38	0.05	0.00	0.00	0.18	0.01	0.25	0.00	0.75	0.12	0.77	0.12	0.45	0.15		0.24	0.02	0.32	0.12	0.51	0.21	0.26	0.03	0.38	0.13		0.76	0.50	0.68	0.13	0.34	0.03	0.55	0.04	0.70	0.23	0.50663
ROUTE AEK	0.15	0.07	0.26	0.03	0.00	0.00	0.02	0.00	0.12	0.00	0.25	0.04	0.23	0.04	0.18	0.06		0.67	0.06	0.60	0.23	0.70	0.28	0.05	0.01	0.58	0.19		0.96	0.63	0.30	0.06	0.81	0.06	0.31	0.02	0.78	0.26	0.50687
ROUTE AHR	0.35	0.16	0.36	0.05	0.00	0.00	0.14	0.01	0.28	0.01	1.00	0.16	0.31	0.05	0.42	0.14		0.35	0.03	0.48	0.18	0.49	0.20	0.03	0.00	0.42	0.14		0.76	0.50	0.61	0.12	0.53	0.04	0.50	0.04	0.70	0.23	0.50702
ROUTE AHW	0.30	0.13	0.28	0.04	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.31	0.05	0.35	0.12		0.36	0.03	0.58	0.22	0.50	0.20	0.11	0.01	0.47	0.15		0.80	0.52	0.63	0.12	0.58	0.05	0.39	0.03	0.72	0.24	0.50720
ROUTE AGF	0.31	0.14	0.32	0.04	0.00	0.00	0.15	0.01	0.29	0.01	1.00	0.16	0.23	0.04	0.39	0.13		0.54	0.05	0.53	0.20	0.48	0.19	0.02	0.00	0.45	0.15		0.78	0.51	0.56	0.11	0.48	0.04	0.60	0.04	0.70	0.23	0.50721
ROUTE AFL	0.32	0.14	0.31	0.04	0.00	0.00	0.14	0.01	0.19	0.00	0.75	0.12	0.31	0.05	0.36	0.12		0.55	0.05	0.58	0.22	0.49	0.20	0.10	0.01	0.48	0.16		0.81	0.53	0.41	0.08	0.69	0.05	0.43	0.03	0.69	0.23	0.50726
ROUTE AGD	0.31	0.14	0.31	0.04	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.23	0.04	0.35	0.11		0.54	0.05	0.60	0.23	0.49	0.20	0.10	0.01	0.48	0.16		0.81	0.53	0.56	0.11	0.48	0.04	0.48	0.04	0.71	0.23	0.50792
ROUTE AHQ	0.35	0.16	0.35	0.05	0.00	0.00	0.14	0.01	0.20	0.00	0.75	0.12	0.31	0.05	0.38	0.13		0.35	0.03	0.55	0.21	0.49	0.20	0.10	0.01	0.45	0.15		0.80	0.52	0.61	0.12	0.54	0.04	0.38	0.03	0.71	0.23	0.50812
ROUTE CF	0.13	0.06	0.23	0.03	0.00	0.00	0.01	0.00	0.01	0.00	0.25	0.04	0.92	0.14	0.27	0.09		0.61	0.06	0.15	0.06	0.76	0.31	0.27	0.03	0.45	0.15		0.90	0.59	0.73	0.14	0.93	0.07	0.17	0.01	0.81	0.27	0.50849
ROUTE MS	0.33	0.15	0.35	0.05	0.33	0.02	0.18	0.01	0.26	0.00	0.75	0.12	0.85	0.13	0.48	0.16		0.08	0.01	0.27	0.10	0.58	0.23	0.31	0.04	0.38	0.13		0.73	0.48	0.73	0.14	0.47	0.04	0.38	0.03	0.68	0.23	0.50939
ROUTE FP	0.32	0.14	0.35	0.05	0.00	0.00	0.18	0.01	0.25	0.00	0.75	0.12	0.85	0.13	0.45	0.15		0.27	0.02	0.32	0.12	0.53	0.21	0.27	0.03	0.39	0.13		0.76	0.50	0.60	0.11	0.51	0.04	0.55	0.04	0.70	0.23	0.50970
ROUTE MG	0.38	0.17	0.43	0.06	0.33	0.02	0.17	0.01	0.25	0.00	0.75	0.12	0.85	0.13	0.51	0.17		0.07	0.01	0.24	0.09	0.57	0.23	0.30	0.04	0.37	0.12		0.73	0.48	0.71	0.14	0.42	0.03	0.37	0.03	0.67	0.22	0.50984
ROUTE KL	0.31	0.14	0.31	0.04	0.00	0.00	0.16	0.01	0.26	0.00	1.00	0.16	0.77	0.12	0.47	0.16		0.07	0.01	0.32	0.12	0.51	0.21	0.25	0.03	0.37	0.12		0.75	0.49	0.75	0.14	0.46	0.04	0.45	0.03	0.71	0.23	0.50987
ROUTE AFT	0.30	0.13	0.29	0.04	0.00	0.00	0.15	0.01	0.29	0.01	1.00	0.16	0.31	0.05	0.39	0.13		0.56	0.05	0.53	0.20	0.49	0.20	0.04	0.00	0.46	0.15		0.78	0.51	0.48	0.09	0.64	0.05	0.60	0.04	0.70	0.23	0.51031
ROUTE ER	0.37	0.16	0.43	0.06	0.00	0.00	0.17	0.01	0.24	0.00	0.75	0.12	0.85	0.13	0.48	0.16		0.25	0.02	0.29	0.11	0.52	0.21	0.27	0.03	0.38	0.12		0.76	0.50	0.58	0.11	0.46	0.04	0.54	0.04	0.69	0.23	0.51051
ROUTE AFC	0.19	0.08	0.22	0.03	0.00	0.00	0.03	0.00	0.12	0.00	0.25	0.04	0.31	0.05	0.20	0.07		0.58	0.05	0.56	0.21	0.71	0.29	0.05	0.01	0.56	0.19		0.96	0.63	0.34	0.07	0.80	0.06	0.30	0.02	0.78	0.26	0.51052
ROUTE AFR	0.30	0.13	0.28	0.04	0.00	0.00	0.15	0.01	0.20	0.00	0.75	0.12	0.31	0.05	0.35	0.11		0.56	0.05	0.60	0.23	0.50	0.20	0.11	0.01	0.49	0.16		0.81	0.53	0.48	0.09	0.64	0.05	0.48	0.04	0.71	0.23	0.51094
ROUTE AFH	0.34	0.15	0.37	0.05	0.00	0.00	0.14	0.01	0.28	0.01	1.00	0.16	0.31	0.05	0.42	0.14		0.54	0.05	0.50	0.19	0.49	0.20	0.03	0.00	0.44	0.15		0.78	0.51	0.46	0.09	0.60	0.05	0.59	0.04	0.69	0.23	0.51132
ROUTE KJ	0.31	0.14	0.30	0.04	0.00	0.00	0.16	0.01	0.18	0.00	0.75	0.12	0.77	0.12	0.43	0.14		0.07	0.01	0.39	0.15	0.52	0.21	0.33	0.04	0.40	0.13		0.79	0.52	0.75	0.14	0.46	0.04	0.33	0.02	0.72	0.24	0.51141
ROUTE AFF	0.34	0.15	0.36	0.05	0.00	0.00	0.14	0.01	0.20	0.00	0.75	0.12	0.31	0.05	0.38	0.12		0.54	0.05	0.56	0.21	0.49	0.20	0.10	0.01	0.47	0.16

Table 4.5
Metrics for Cross Over Routes
(Simple Average Matrix)

| | | |

10.0 Appendix: Correspondence from Ft. Knox

11.0 Appendix: Metadata

Built Environment

Residences within ROW

Centroids of houses were identified and heads up digitized using ArcGIS from 2004 aerial photography created by USDA-FSA Aerial Photography Field Office. Houses that fell inside of the approximate ROW needed were counted for each segment.

Proximity to Residences (within 300 feet)

Centroids of houses were identified and heads up digitized using ArcGIS from 2004 aerial photography created by USDA-FSA Aerial Photography Field Office. Houses that fell within 300 feet of the edge of right-of-way were counted for each segment.

Proposed Developments

Boundaries for Proposed Developments were identified and heads up digitized using ArcGIS from 2004 aerial photography created by USDA-FSA Aerial Photography Field Office and parcel data acquired from the county PVA offices. Areas that were identified as being under construction from the photography; or areas that had parcels subdivided from the PVA data, where construction hadn't yet occurred, where included. Proposed Developments were counted for each segment where the approximate easement crossed.

Proximity to Commercial Buildings within 300 feet

Centroids of Commercial Buildings were identified and heads up digitized using ArcGIS from 2004 aerial photography created by USDA-FSA Aerial Photography Field Office. Commercial Buildings that fell within 300 feet of the edge of right-of-way were counted for each segment.

Proximity to Industrial Buildings within 300 feet

Centroids of Industrial Buildings were identified and heads up digitized using ArcGIS from 2004 aerial photography created by USDA-FSA Aerial Photography Field Office. Industrial Buildings that fell within 300 feet of the edge of right-of-way were counted for each alternative segment.

Schools, Churches, Cemeteries, and Parks Crossed

Schools, Churches, Cemeteries, and Parks were identified using map layers from ESRI's Data and Maps Media Kit, as well as photo interpretation from the 2004

USDA-FSA Aerial Photography Field Office Photography and PVA data from individual counties. Schools, Churches, Cemeteries, and Parks were counted for each alternative segment that's approximate easement crossed.

NRHP Listed Structures and Districts (3000 feet from edge of R/W)

NRHP Listed Structures and Districts map layers were downloaded from the National Park Service National Register Information System. Resources that fell within 3000' of the approx. easement were counted for each alterative segment.

Natural Environment

Natural Forests

Forested Areas were identified and heads up digitized using ArcGIS from 2004 aerial photography created by USDA-FSA Aerial Photography Field Office. Acres of natural forested areas were calculated for each alternative segment within the approximate easement area.

Stream and River Crossings

Streams and Rivers map layers were downloaded from the University of Kentucky, Kentucky Geological Survey, Maps and GIS webpage (NHD 24k Streams of Kentucky). Streams and Rivers were counted for each alternative segment.

Wetland Areas

Wetland map layers were downloaded from the Kentucky Natural Resources & Environmental Protection Cabinet (Kentucky's Wetlands). Ponds, Lakes, and Rivers were removed from the layer to leave only wetlands. Acres of wetlands areas were calculated for each alternative segment within the approximate easement area.

Floodplain

Floodplain map layers were downloaded from the Kentucky Division of Geographic Information Systems (FEMA Q3 Data). Acres of floodplain were calculated for each alternative segment within the approximate easement area.

Engineering Considerations

Percent of Routes Rebuilt with Existing T/L

Existing Transmission Lines were acquired from the Kentucky Public Service Commission ("eline" shape file). Also, more detailed alignments were obtained

from LG&E/KU. Sections of the alternative segments that were identified as rebuild opportunities by LG&E/KU were classified as rebuild sections. Lengths were calculated for these sections.

Percent of Routes Parallel with Existing Utilities

Existing Transmission Lines were acquired from the Kentucky Public Service Commission (eline). Existing gas pipelines were identified from USGS 7.5 min Quadrangles and from the Pennwell MapSearch transmission pipeline map layer. The location of the gas pipelines were verified with the aerial photography created by USDA-FSA Aerial Photography Field Office. Sections of the alternative segments that paralleled these existing utilities were classified as utility parallel sections. Lengths were calculated for these sections.

Percent of Routes Parallel with Roads

Roads were acquired from the Kentucky Division of Geographic Information Systems (transportation). Sections of the alternative segments that paralleled roads were classified as road parallel sections. Lengths were calculated for these sections.

Total Project Costs

Total project cost was calculated for each route based on unit price information from LG&E/KU. These costs were based on information calculated such as length, length of rebuild sections, length of single pole sections, length across Fort Knox, easement amount on Fort Knox, number and degree of angles, number of parcels, and acreage to be cleared. Also property values were estimated based on the Fair Market Value from the PVA's.

12.0 Appendix: Resume of Principal Investigator

CLAYTON M DOHERTY

LINEAR PROJECTS, INC.
608 Herb River Drive
Savannah, GA 31406

912.354.7565
Cell: 912.224.5988
e-mail: linearprojects@bellsouth.net

Experience

Environmental & Regulatory Coordinator, electric transmission line and substation projects (1986-2001; 2005 – present). Manage land planning and environmental and regulatory compliance activities on over one hundred thirty significant electric utility projects ($300,000 - $56,000,000). Conduct land use analysis; identify regulatory requirements; siting and routing studies; obtain local, state, and federal approvals. Prepare environmental reports and environmental assessments. Public scoping meetings, public officials briefings, agency coordination, expert witness testimony.

Senior Planner, City of Key West: zoning and land use, variance analysis, and development plan review. Prepare staff reports to planning board and city commission. Update City of Key West 2004 Statistical Abstract. State and federal emergency management training and exercises. Migrate planning department GIS software from ArcView 3.3 to ArcGIS 8.2.

Expertise

Prepare alternatives analyses and site/route selection documentation. Identify federal, state, and local government regulatory requirements. Initiate and manage contracts for environmental, cultural resource, and special needs surveys. Present land use and environmental considerations in project team meetings, public meetings, elected officials briefings, and government agency consultations. Develop and implement strategies for resolving complex regulatory compliance issues. Prepare environmental reports, environmental assessments and regulatory permit applications.

Technical editing of complex environmental and planning documents.

Analyze zoning and land use issues. Research and apply land development regulations. Determine project consistency with local government comprehensive plans.

Policy Groups

Secretary-Treasurer and Board Member, *The National Wetlands Coalition.*
Board Member, *National Endangered Species Act Reform Coalition.*
Policy Committee and Section 404 Task Force, *Utility Water Act Group.*
Corporate Liaison, *National Rural Electric Environmental Association.*

Employment

Linear Projects, Inc. Savannah, GA 31406. 2005 - present.
City of Key West Planning Department. Key West, FL 33040. 2003 - 2004.
Georgia Transmission Corporation. Tucker, GA 30084. 1986 - 2001.
Park-Land Planners, Ltd. Atlanta, GA. 1985 - 1986.
Takeda Landscape Design. Seattle, WA. 1984 - 1985.

Education

Master of Landscape Architecture, 1983. School of Environmental Design, University of Georgia. Thesis passed with distinction. Graduate electives in Land Planning and Historic Preservation.

Bachelor of Arts, English, with General Honors, 1971. College of Arts and Sciences, University of Georgia.

Benedictine Military School. Savannah, GA. 1967.

Training

Federal Wetland Regulation. Wetland Training Institute [1990].

National Environmental Policy Act. Hunton & Williams [1990].

Wetland Functions and Values. Wetland Training Institute [1992].

Advanced Wetland Delineation. Wetland Training Institute [1993].

Medusa (Unix-based CAD) Rev. 13. [1994].

Total Quality Management. Qualtec Institute for Competitive Advantage [1994].

The Role of Environmental Audits and Site Assessments in Property Transfers. Georgia Tech [1994].

Introduction to Federal Projects and Historic Preservation Law. GSA Interagency Training [1995].

Advanced Seminar on Preparing Agreement Documents (NHPA Section 106). GSA Interagency Training [1997].

Introduction to ArcView GIS. ESRI [1999].

Community Emergency Response Team (CERT) - Train the Trainer. Florida Dept. of Community Affairs [2003].

Governor's Hurricane Conference. Florida Dept. of Community Affairs and Florida Emergency Preparedness Association [2003].

National Interagency Incident Management System (NIIMS) Incident Command System (ICS). U.S. Coast Guard [2003].

Introduction to ArcGIS. Photo Science, Inc. / ESRI [2004].

PC Training. Excel; Word; Access; PowerPoint; Desktop Publishing.

Corporate Culture Training. Team Building; Conflict Management; Giving and Receiving Feedback; Negotiating; Writing Goals and Objectives; Essentials of Project Management; Tools and Concepts for Continuous Improvement.

Community

Rotary International. Community Service Committee Member and Fundraising Event Treasurer, Savannah Sunrise Rotary, 2004-present. Sunrise Rotary Club of the Conch Republic (Key West), 2003 - 2004.

Martin des Porres Society. Volunteer, 2004 - present.

Habitat for Humanity. Board Member and Chair, Site Selection Committee, Habitat for Humanity of Key West and the Lower Florida Keys [2002-2004].

Case No. 2005-00467
Case No. 2005-00472

Exhibit CMD-1 (Table)
Filed – December 22, 2006

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	CASE NO. 2005-00467

DIRECT TESTIMONY OF JOHN WOLFRAM E.ON U.S. SERVICES INC.

Filed: December 22, 2005

Q. Please state your name, position and business address.

A. My name is John Wolfram. I hold the position of Manager, Regulatory Affairs, for E.ON U.S. Services, Inc. on behalf of Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (LG&E and KU are referred to collectively as the "Companies"). My business address is 220 West Main Street, P.O. Box 32020, Louisville, Kentucky 40202. A statement of my qualifications is attached as Appendix A.

Q. Have you previously testified before the Commission?

A. Yes. I filed testimony on January 23, 2002, in the case entitled *In the Matter of Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Acquisition of Two Combustion Turbines*, Case No. 2002-00029. I also filed testimony on October 18, 2002, in the case entitled *In the Matter of: Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Acquisition of Four Combustion Turbines and a Site Compatibility Certificate for the Facility*, Case No. 2002-00381. In addition, I have presented the Companies' statement at two local public hearings conducted by the Commission pursuant to KRS 278.020(8). The first local public hearing was held on July 5, 2005, in Case No. 2005-00154, *In the Matter of: Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Franklin, Woodford and Anderson Counties.* The second local public hearing was held on July 12, 2005, in Case No. 2005-00142, *In the Matter of: Joint*

Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties.

Q. What is the purpose of your testimony?

A. My testimony will (i) discuss the Companies' understanding of the Commission's conclusion that the Companies have established a need for transmission facilities from the LG&E Mill Creek Generating Station (the "Mill Creek Station") to KU's Hardin County Substation as set forth in the order of September 8, 2005, in Case No. 2005-00142; (ii) provide an overview of the steps taken by the Companies to comply with the directions of the Commission in respect of the route selection process for electric transmission facilities; (iii) describe the rate impact of differing cost sensitivities relating to the transmission facilities and (iv) discuss the need for the ability to make unsubstantial modifications to the route after that route has been approved.

Q. Has the Commission previously addressed the need for the transmission facilities that are the subject of this proceeding?

A. Yes. The transmission facilities proposed to be constructed in this proceeding is the same transmission line following much of the same route for which the Companies sought a Certificate of Public Convenience and Necessity ("CCN") in Case No. 2005-00142. This line is one of the lines needed to accommodate the addition of a 750 MW nominal net super-critical pulverized coal-fired base load generating unit at the Companies' Trimble County Station ("TC2"). In the order

of September 8, 2005, in Case No. 2005-00142, the Commission set forth the following analysis at pages 5-6:

> LG&E/KU's witnesses testified that, if the Trimble plant addition is built, the line will be required. The Company further stated that the main goal of the transmission project is to ensure the reliability of the network at the least cost to the public. The transmission planning studies by LG&E/KU and the Midwest Independent Transmission System Operator, Inc. ("MISO") considered this and the other two proposed lines [footnote omitted] as a package designed to accommodate bringing TC2 on-line. The transmission planning studies considered the entire transmission system of both KU and LG&E as a whole in searching for the best way to protect the system once TC2 came on-line. Liberty [Consulting Group] reviewed the transmission planning processes and preliminary transmission studies of LG&E/KU and the additional work of MISO transmission planning engineers. MISO performed all power flow and short circuit studies and all transient and long-term studies. LG&E/KU performed an internal short circuit analysis to verify the short circuit results obtained by MISO. Liberty agreed with the Company that the line, in addition to the other two proposed lines, will be required to carry the power from TC2 and that it should be built on the proposed schedule. [footnote omitted] Based on the testimony and other record evidence, the Commission finds that the need for the proposed line has been established and will be required upon commencement of operations at TC2.

The Commission made the following statement in the Conclusions portion of the September 8, 2005, order at page 10:

> Therefore, the Commission finds that the additional transmission facilities are required to integrate the proposed TC2 generating plant into the transmission grid. We further find that LG&E/KU has established a need for such a project.

As Michael G. Toll states in his testimony in this proceeding, the Companies have studied the need for the transmission project, as has MISO. The Commission has studied the need for the transmission project, as has its consultant in Case No. 2005-00142, Liberty Consulting Group. They have all concluded that there is a need for the transmission facilities.

Q. Have there been any changes in circumstances since the Commission's finding on September 8, 2005?

A. No. There have been no changes in the circumstances surrounding the need for the project since the date of the Commission's order in Case No. 2005-00142, except that the Commission has granted the Companies' application for a CCN to construct TC2 and granted a Site Compatibility Certificate for the expansion of the Trimble County plant. The Commission granted the Companies a CCN for the construction of TC2 on November 1, 2005, in Case No. 2004-00507, *In the Matter of: Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for the Expansion of the Trimble County Generating Station*. A Site Compatibility Certificate for TC2 was granted by the Commission in Case No. 2004-00507 on November 9, 2005. The TC2 CCN removes the basis for any claim that the need for transmission facilities from the Mill Creek Station to the Hardin County Substation is speculative and highlights the fact that the transmission facilities at issue here are needed to support the Companies' growing native load. The Companies, therefore, believe

that the need for the transmission facilities should be found to have been established.

Q. KRS 278.020(8) permits the Commission to hire an independent firm to assist it in reaching its decision in transmission line CCN cases. Do you believe that the Commission should retain such an independent firm in this proceeding?

A. As I indicated above, the Commission retained the Liberty Consulting Group in Case No. 2005-00142 to assist it in reaching its decision on the need for the proposed facilities in that proceeding. If the Commission is considering the retention of an independent firm to assist it in deciding whether there is a need for the facilities, then I do not believe that the Commission should hire a firm for that purpose as Liberty and the Commission have both already determined that there is a need for the subject facilities.

Q. Have the Companies followed the Commission's directions regarding the analysis of potential routes for these transmission facilities?

A. Yes. In the Conclusions portion of the order of September 8, 2005, in Case No. 2005-00142, at page 10, the Commission stated,

> Nevertheless, the Commission lacks sufficient information to determine if the proposed line would result in wasteful duplication of facilities. Specifically, the Commission finds that LG&E/KU failed to adequately consider the use of existing rights-of-way, transmission lines, and corridors. As such, the Commission cannot determine if approval of it would violate the standards set out in the *Kentucky Utilities* case.

The Companies have studied the September 8, 2005, order in detail, as well as the orders in all of the transmission line CCN cases decided by the Commission since

the effective date of the amendments to KRS 278.020 in 2004. In addition, the Companies requested and participated in an informal conference with the Commission Staff and the intervenors in Case Nos. 2005-00142 and 2005-00154 on October 4, 2005. The Companies have studied the Informal Conference Memorandum dated October 5, 2005, that was disseminated following the informal conference.

Taking into account all the guidance and direction mentioned above, the Companies undertook the route selection process for this proceeding. The process was led by the Companies' Transmission Line Services personnel, who worked with Photo Science, Inc. and the Companies' Regulatory Affairs personnel. As Mr. Johnson describes in his testimony, they followed the five-step process outlined at the October 4, 2005, informal conference as follows:

> First, the utility should establish the need. Once that is met, the utility should identify all lines that could work electrically, making sure to include corridors that utilize existing facilities, such as substations, lines, and rights-of-way. Third, the utility should identify the "least cost" alternative. Fourth, the utility should consider the rate impact, both overall and per customer, of alternative lines that are not the "least cost." Then the utility should turn to an analysis of the types of considerations listed on slide 5.

"Slide 5" was attached to the Informal Conference Memorandum and contains the evaluation and analysis portion of the Electric Power Research Institute ("EPRI") Standardized Model of Siting Overhead Transmission Lines. It includes objective route selection criteria that were utilized by the Companies in Case Nos. 2005-

00142 and 2005-00154 and the Companies believe that they are appropriate criteria to use in the selection of routes for overhead transmission lines.

Q. How did the Companies utilize the EPRI methodology?

A. The Companies followed the direction of the Commission Staff at the informal conference. As Mr. Johnson states in his testimony in this proceeding, the Companies did not utilize the EPRI "macro-corridor" generation methodology. Instead, the Companies identified the area of inquiry consistent with the Commission Staff's direction. The evaluation and analysis portion of the EPRI model was utilized as recommended by the Commission as the fifth step of the process. In addition, the Companies applied their expert judgment to the analysis. While the step of expert judgment was not explicitly discussed at the informal conference, expert judgment has traditionally been a critical element of route selection for electric transmission lines and is also an important element of the EPRI model.

Q. What was the result of the analysis?

A. The Companies identified two reasonable routes from the Mill Creek Station to the Hardin County substation. The preferred route, Mill Creek to Hardin County Route No. 1, is shown on Application Exhibit 2 in this proceeding. The other route, Mill Creek to Hardin County Route No. 2, is the alternative route for which the Commission should issue a CCN if it does not issue a CCN for Route No. 1. Route No. 2 is the subject of Case No. 2005-00472, filed concurrently herewith.

Q. What is the rate impact if the Commission approves the Mill Creek to Hardin County Route No. 1?

A. Our preferred route, the Mill Creek to Hardin County Route No. 1 designated Route AJU on Exhibit MSJ-1, is approximately $4.2 million less expensive than our alternative route, the Mill Creek to Hardin County Route No. 2 designated Route AJW on Exhibit MSJ-1, and which is the subject of Case No. 2005-00472. The impact to consider, then, is the rate impact of the incremental $4.2 million.

It is impossible to state with certainty the rate impact of this difference without knowing all of the relevant information normally utilized for ratemaking purposes. A full cost of service study and complete rate design within a rate case are also required to accurately estimate the effect on any particular class of customers.

However, it is possible to estimate the overall impact on the Companies' total revenue requirement. Given that the Companies' cost of capital is approximately 7.5%, every $1 million of capital expenditure translates into approximately a $125,000 increase to the Companies' annual revenue requirement (grossed up for taxes). Thus the $4.2 million incremental construction cost would increase the overall revenue requirement of the Companies by approximately $525,000. The Companies have approximately 887,000 end use Kentucky customers. If applied equally across all customers, this would equate to an annual increase of $ 0.60 per customer. This does not reflect the way the ratemaking really works, but it does properly indicate that the rate impact per customer per month for this comparison is de minimis.

Q. Do the Companies believe that cost should be ignored if the difference in rate impact between route alternatives is negligible?

A. No. Total cost is a very important factor in utility resource planning, even when the rate impact of cost differences is negligible. Utilities in Kentucky have engaged in least cost planning for system expansion (generation and transmission) for many years. The Integrated Resource Planning process in Kentucky encourages consideration of least-cost alternatives for meeting projected needs without explicit consideration of rate impact. From a policy standpoint, "least cost planning" provides well-understood criteria for making decisions. Of course the Companies acknowledge that total project cost should not be the sole factor in transmission route selection; numerous factors warrant thorough consideration, as Mr. Johnson explains in his testimony. Given the Commission's emphasis of collocation for consideration and de-emphasis of cost in that context, the route selection process has become more challenging for utilities. As the Companies understand it, however, utilities have not been directed to ignore cost differences altogether when the rate impact is de minimis. The utility must decide how much of a cost difference – and thus how much of a rate impact – is the appropriate amount for effecting the route selection. For this reason, it is important to review collocation possibilities thoroughly, while continuing to emphasize total project cost for competing routes and also consider other factors, even when the incremental impact on customer rates is negligible.

Q. In his testimony, Mr. Johnson requests the Commission to permit the Companies to make unsubstantial modifications to the approved route without the need for further orders from the Commission. Please explain in more detail the Companies' request in this respect.

A. The Companies made this same request in Case Nos. 2005-00142 and 2005-00154. It has been our experience that in the construction of transmission facilities the need arises to make slight adjustments to transmission line routes because of the existence of constraints that were not known when the route was finalized, requests by landowners or to address measures to avoid, minimize or mitigate for potential impacts that may be identified as a result of the environmental review and consultation processes required for the Fort Knox segment of the line under the National Environmental Policy Act of 1969, Section 106 of the National Historic Preservation Act or other such laws, if and as applicable. We would like to make such minor modifications without the need for further approval by the Commission in order to promote administrative efficiency. The Companies are aware of the manner in which the Commission addressed this issue in East Kentucky Power Cooperative's Case No. 2005-00207. There the Commission permitted East Kentucky Power to move the approved centerline 500 feet in either direction as long as the move does not shift the line or its right-of-way onto the property of a different landowner and the property owner who is subject to the move agrees in writing to the requested move. The Companies are concerned that a slight move occasioned by a physical constraint, such as a geological problem, may be necessary but a landowner may refuse consent. In those instances, we believe that the matter should be taken up with a motion in this proceeding rather than with a new application. Therefore, the Companies support the Commission's approach to movement of the line set forth in the order

of October 31, 2005, in Case No. 2005-00207, subject to the different procedure to deal with refusal of landowner consent.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, John Wolfram, being duly sworn, deposes and says he is Manager, Regulatory Affairs, for E.ON U.S. Services, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

John Wolfram

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22nd day of December, 2005.

Notary Public (SEAL)

My Commission Expires:

TAMMY J. ELZY
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
My Commission Expires Nov. 9, 2006

Appendix A

John Wolfram

Manager, Regulatory Affairs
E.ON U.S. Services, Inc.
220 West Main Street
P.O. Box 32010
Louisville, Kentucky 40202

Education

University of Notre Dame, B.S. in Electrical Engineering - 1990
Drexel University, M.S. in Electrical Engineering - 1997
Leadership Louisville 2005-2006

Previous Positions

LG&E Energy LLC, Louisville, Kentucky
2001 – 2004 Manager, Regulatory Policy & Strategy
1998 – 2001 Lead Planning Engineer, Generation Planning
1997 – 1998 Trader, Energy Marketing

PJM Interconnection, Norristown Pennsylvania
1994 – 1997 Senior Engineer, Operations Planning
1990 – 1993 Engineer, Operations Planning

Cincinnati Gas & Electric Company
1993 – 1994 Project Consultant, Energy Management System

Other Associations

Greater Louisville Regional Board for Commonwealth Fund for KET
Edison Electric Institute, Economic Regulation & Competition Committee
Institute of Electrical & Electronics Engineers and IEEE Power Engineering Society

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	CASE NO. 2005-00467

DIRECT TESTIMONY OF KATHLEEN A. SLAY E.ON U.S. SERVICES INC.

Filed: December 22, 2005

Q. Please state your name, position, and business address.

A. My name is Kathleen A. Slay. I am the Director of Operating Services for E.ON U.S. Services Inc., providing service to Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively "the Companies"). My business address is 820 West Broadway, Louisville, Kentucky 40232. A complete statement of my professional experience and education is attached to this testimony as Appendix A.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring the following exhibits:

Exhibit KAS-1	Landowners to whom communications letters were sent
Exhibit KAS-2	Sample letter to landowners with existing right of way
Exhibit KAS-3	Sample letter to landowners requiring new right of way
Exhibit KAS-4	Comment form for landowners with existing right of way
Exhibit KAS-5	Comment form for landowners with new right of way

Q. What is the purpose of your testimony?

A. My testimony addresses the public communications efforts the Companies have undertaken to advise affected landowners of the transmission project which is the subject of this proceeding and to obtain input from those landowners about property-specific concerns regarding the project.

Q. Please provide a broad overview of the public communications process which the Companies have utilized in connection with this proceeding.

A. The Companies began the communications process by reviewing the comments received by landowners as part of the local public hearing held in Case No. 2005-00142, which case involved a transmission project similar to, and affecting the same landowners as, the

project proposed in this proceeding. Then, the Companies engaged in a detailed pre-filing process of individual contact with landowners in order to learn their concerns about the proposed transmission line and to obtain information about any property-specific features that the property owners believe should be known to us in connection with our planning for this line.

Q. How did the Companies go about the process of making individual contact with the landowners?

A. Beginning in mid-November, the Companies mailed letters, including a map of the route, to landowners affected by the proposed route for the transmission facilities at issue in this case. Those letters were mailed to the address of record for each landowner per the local property valuation administrator's files. A list of all property owners to whom letters were sent is attached as Exhibit KAS-1. The letters were tailored to fit the two types of landowners affected by this project: those landowners whose property has existing right of way which will be utilized for the project, and those from whom the Companies will require new right of way for the project. Samples of both letters are attached as Exhibits KAS-2 and KAS-3, respectively.

Q. Were the letters just referred to used to comply with the regulatory notice requirement set forth in 807 KAR 5:120, Section 2 (3)?

A. No. The letters shown in Exhibits KAS-2 and KAS-3 were utilized as a pre-filing communications effort by the Companies to inform affected landowners about the proposed project and to seek information from those landowners about their property-specific concerns, as explained in more detail below. The Companies subsequently sent

further letters to affected property owners pursuant to 807 KAR 5:120, Section 2 (3), as referenced in their Application at paragraph 12.

Q. Please describe in more detail the communications process for the first type of landowner, those whose property has existing right of way that will be used.

A. As can be seen from the sample letter attached as Exhibit KAS-2, the Companies advised these landowners of the proposed project, and then asked that they complete and return a form advising the Companies of any specific concerns they had about the project and informing us of any unique features of their property. A sample of this comment form is attached as Exhibit KAS-4. All returned forms were reviewed with our transmission department for consideration of any changes within the existing utility corridor and assisting with formulation of responses to landowner comments. In addition, any phone or e-mail comments received by landowners were reviewed with our transmission department for their consideration as the pre-filing route design was finalized. As the transmission department considered those comments, the Companies then sent written responses to the landowners who had provided the comments. That process is ongoing as we continue to receive and consider comments.

Q. Please further describe the communications process for the landowners whose property will require new right of way.

A. As with landowners with existing right of way, the landowners from whom the Companies will require new right of way were sent letters describing the proposed project. However, as can be seen from Exhibit KAS-3, the letters to this set of landowners also requested a personal meeting to discuss each landowner's concerns about the proposed transmission line and to learn more about any unique features of the

landowner's property before plans for the line were finalized. A team of representatives from the Companies, acting under my direction, then followed up on that letter by attempting to reach each landowner by phone and set up a personal meeting. In most instances, we were able to make contact with the landowner by phone. With those landowners, we either discussed the project in more detail on the phone, mailed a form to be completed and returned to the Companies, or sent out one or more representatives to meet in person with the landowner, depending upon the landowners' preference and availability. A copy of the referenced comment form is attached as Exhibit KAS-5. That same form was also used in the personal meetings that were held with certain landowners. In some cases we were unable to reach the landowner in person despite our initial letter and repeated phone calls. In those instances, a representative of the Companies left a comment form at the property, along with a self-addressed stamped envelope and a business card, in a weather-protected bag. Again, all comments received from landowners were reviewed with the Companies' transmission department, which then took those comments into consideration and assisted in formulating responses to the landowner comments. As the transmission department considered the landowner comments, the Companies sent written responses to the landowners who had provided the comments. That process is also ongoing as we continue to receive and consider comments.

Q. Why did the Companies choose the above-described method for communicating with landowners in this proceeding?

A. In choosing the method used in this case, the Companies were mindful of the Commission's directive to all jurisdictional utilities, in its Order of October 31, 2005 in

Case No. 2005-00207, that they should attempt to identify and address specific landowner concerns "at least initially, before the application [for a CCN] is filed" in order to minimize the need for any post-CCN adjustments to the line's design and placement. And, as explained in the testimony of Mark S. Johnson filed herein, the Companies also had a need to seek the Commission's approval for this project with as much owner input as possible on a timeline that would allow the needed facilities to be in place on schedule. The Companies chose to contact each landowner individually because we believed this method would accomplish our goal of seeking input about specific landowner concerns to see whether anything could be done to resolve the issue more thoroughly and more efficiently than other methods of communication, such as holding an open house. However, it is important to recognize that this specific method of communication, which involved a number of personal visits with landowners, was very time-intensive and unprecedented in comparison to the communications efforts on other public use projects in the Commonwealth. In addition, we discovered that the number of individuals who were interested in a personal meeting with representatives of the Companies was no greater than the number of attendees at the open house or local public hearing held in Case No. 2005-00142. The Companies will assess their communications process on an ongoing basis and may well utilize different methods of communications, where practicable, in future proceedings, including those where time is less of the essence.

Q. You mentioned an open house being one method of communication with landowners. Will an open house be held for the project that is the subject of this proceeding?

A. No, for two reasons. First, an open house was held for a similar proposed transmission line in Case No. 2005-00142, and many of the landowners affected by this project attended that meeting. Second, and most importantly, the communications process the Companies utilized this time was such that it provided an opportunity for each landowner to obtain at least the same level of information as did the open-house format. For those reasons, the Companies determined that an open house was not needed in this instance.

Q. Why was the communications process different depending upon whether or not new right of way was required on the landowner's property?

A. As noted earlier, one of the key goals of the communications process was to comply with the Commission's directive to seek landowner comments as early in the process as feasible to try and minimize the need for any post-CCN adjustments to the line's design and placement. The Companies recognize the importance of public communication in this regard, because there may be some information about certain properties that does not appear in any of the maps or records available to the Companies, and the Companies want to understand landowner concerns about their specific properties. Those portions of the proposed line designed to utilize existing right of way are less susceptible to change because the line would be located in an existing utility corridor. For that reason, the Companies sought written comments from landowners for that portion of the line. The Companies sought personal meetings with landowners on that portion of the line designed to be located in new right of way because those segments of the line lend themselves to the possibility of more significant design or placement changes to accommodate landowner requests, and the Companies wanted to try and address those issues as early in the process as possible.

Q. Please further describe the Companies' efforts to respond to landowner comments.

A. As noted above, landowner comments were shared with the Companies' transmission department, which then made the decision on whether any of those comments impacted the line's design or placement. Most of the comments received were either general (such as not wanting the line on their property in any circumstances) in nature, or sought information (such as regarding right of way clearing, easement acquisition or property valuation). As discussed above, the Companies wrote a response addressing the specific comments as best we could. Those response letters also included contact information if the landowner still had questions or concerns. In a limited number of instances, however, specific questions were raised by landowners that either directly requested a change in line location on the landowner's property, or which discussed a specific feature of the landowner's property which warranted further inquiry. In both of those instances, the Companies' transmission department investigated the matter further, as discussed in the testimony of Mark S. Johnson in this proceeding. It is important to note, though, that the Companies view the landowner communications process as one that will continue through the time that the proposed line is actually constructed.

Q. Do you have a recommendation for the Commission?

A. Yes. It is my recommendation that the Commission grant the Companies the relief requested in this proceeding and that, in doing so, the Commission recognize the Companies' positive efforts to communicate with affected landowners and to respond to their concerns about this project.

Q. Does this conclude your testimony?

A. Yes it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, Kathleen A. Slay, being duly sworn, deposes and says she is Director of Operating Services for E.ON U.S. Services Inc., and that she has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of her information, knowledge and belief.

Kathleen A. Slay

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22nd day of December 2005.

Notary Public (SEAL)

My Commission Expires:

TAMMY J. ELZY
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
My Commission Expires Nov. 9, 2006

APPENDIX A

Kathleen A. Slay

Director of Operating Services
E.ON Services Services Inc.
820 W. Broadway
Louisville, Kentucky 40202

Education:

University of Rhode Island BA
Graduate Studies at Providence College and University of Louisville

Previous Positions with LG&E Energy Corp.:

Manager, Real Estate & Right of Way
Account Executive, Economic Development

Prior Employment

Assistant Director, Louisville Jefferson County Office for Economic Development
35 years in the land use and development profession

Professional Memberships:

International Right of Way Association- Past Member
Kentucky Industrial Development Association- Past Member

Route 1 New

Last Name 1	Name 2	Name 3	Address One	Address Two	City	State	Zip
Addington	Alice		7743 St John Rd		Elizabethtown	KY	42701
Addington	Phillip G	Doris	880 Harris Sch Rd		Rineyville	KY	40162
Beard	Ronald C	Tamberly	10032 St John Rd		Cecilia	KY	42724
Bewley	Lizzie Mae		5131 Salt River Rd		Rineyville	KY	40162
Blevens	Avery W	Marion	936 Cow Branch Rd		West Point	KY	40177
Bodine	Robert W		695 Bratcher Ln		Vine Grove	KY	40175
Brewer	Gary W	Lesia A	1065 Katherine Station Rd		West Point	KY	40177
Bush	Michael E	Terry L	8706 St John Rd		Cecilia	KY	42724
Clarkson Farm, Inc.	C/O Robert Griffith		400 West Market St, Suite 1800		Louisville	KY	40202
Cowherd	W D		81 Spring Dr		Elizabethtown	KY	42724
Coyle	Elwood		1171 Blueball Ch Rd		Elizabethtown	KY	42701
Coyle **(2 Parcels)**	Samuel E		1481 Blueball Ch Rd		Elizabethtown	KY	42701
Cunningham	Dennis	Cathy	2530 N Highway 11 SE		Elizabeth	IN	47117
Davis	Dennis	Laura	1747 Blueball Ch Rd		Elizabethtown	KY	42701
Detweiler	Nevin		1164 C Mansfield Rd		Horse Cave	KY	42749
Distler	Anthony	Julie	11006 West Highway 44		West Point	KY	40177
DLC, Inc. (Cunningham's own this parcel)			2530 N Highway 11 SE		Elizabeth	IN	47117
Dodson	Floyd		1788 Bethlehem Academy Rd		Cecilia	KY	42724
Edelen	Larry	Margarita	2806 Big Spring Rd		Vine Grove	KY	40175
Estes	Bobby N	Mary S	538 Yates Chapel Rd		Cecilia	KY	42724
Farmwald	Jonas		231 Harper Cemetery Rd		Munfordville	KY	42765
French	Marion		933 Blueball Ch Rd		Elizabethtown	KY	42701
Gathof	James K		4133 Flintlock Dr	Apt F 45	Louisville	KY	40216
Gibson	Sabe	Leatrice H	974 Cow Branch Rd		West Point	KY	40177
Gossett, et.al	William		550 St Andrews Dr		Vine Grove	KY	40175
Graas	George H	Willie	7363 N Long Grove Rd		Elizabethtown	KY	42701
Grant	William		453 Cow Branch Rd		West Point	KY	40177
Hager	George A		700 Flaherty Rd		Ekron	KY	40117
Harrison	Roy		2352 New Salem Ch Rd		Vine Grove	KY	40175
Hicks	George W		345 Sand Ridge Ln		Vine Grove	KY	40175
Hobbs	Linda		1575 Bee Knob Hill Rd		Ekron	KY	40117

Hobbs	Kelly, Kevin and Susan		1664 St Martin Rd		Vine Grove	KY	40175
Hobbs	Joe L		1664 St Martin Rd		Vine Grove	KY	40175
Holloway & Son Construction	Gene Holloway		13115 Aiken Rd		Louisville	KY	40223
Holston, et.al	Glenn		8803 Grand Ridge Ct		Louisville	KY	40214
Hoskins	Leonard F	Winnie C	800 Nichols Hill Rd		West Point	KY	40177
Huffer **(2 Parcels)**	Curtis B	Carol	8998 Rineyville Big Springs Rd		Rineyville	KY	40162
Jent	James L	Mary K	9796 Rineyville Big Springs Rd		Rineyville	KY	40162
Jent	Richard B	Tammy	2045 S Blackbranch Rd		Cecilia	KY	42724
Jones	Charles D	James Lamar Jones	1475 Flaherty Rd		Ekron	KY	40117
Kephart	William R	Mary Ann	10840 Rineyville Big Springs Rd		Rineyville	KY	40162
Kosmos Cement Co.	C/O Darrell Wiley		Post Office Box 1500		Houston	TX	77251-1500
Kueber	Frances K		415 Redmon Rd		Vine Grove	KY	40175
Losey	Pat		4573 Salt River Rd		Rineyville	KY	40162
Lovelace	Todd	Lori	1723 Blueball Ch Rd		Elizabethtown	KY	42701
Marshall Realty Co.			Post Office Box 7066		Louisville	KY	40207
Mathews	Joe T	Frances S	10777 West Highway 44		West Point	KY	40177
McGehee	Gene M	Connie	525 North Dixie Boulevard		Radcliff	KY	40160
Monroe	Violet W		1708 Bethlehem Academy Rd		Cecilia	KY	42724
Pace	Randell E	Peggy	648 Cow Branch Rd		West Point	KY	40177
Padgett	Judy		420 Padgett Rd		Elizabethtown	KY	42701
Pearl, Jr.	Quinn F		2223 Blueball Ch Rd		Elizabethtown	KY	42701
Perry	Gina		7310 Grand Isle Way		Prospect	KY	40059
PGL Builders			129 Ables Mountain Ln		West Point	KY	40177
Puckett	James H		Post Office Box 966		Elizabethtown	KY	42702
Reinhardt	William D	Lyn Hobbs	9405 Hi-View Ln		Louisville	KY	40272
Renfro	Thomas L	Doris J	1733 Weavers Run Rd		West Point	KY	40177
Rosenberger	August L	Carol A	11851 Rineyville Big Springs Rd		Rineyville	KY	40162
Seagraves **(2 Parcels)**	Ronald	Rita	10035 St John Rd		Cecilia	KY	42724
Sheeran	Paul Eugene II		1945 Shot Hunt Rd		Vine Grove	KY	40175
Sipes	Jerry D		1299 Bee Knob Hill Rd		Ekron	KY	40117
Snyder	Edwin W	Betty J	12356 Rineyville Big Springs Rd		Rineyville	KY	40162
Straney Farms, LLC **(2 Parcels)**	C/O Kenny Straney	Annette	2021 St Martin Rd		Vine Grove	KY	40175
Sumner	Winfred Lee	Nancy L	13305 Dixie Highway		Louisville	KY	40272
Thomas	Charles D	Jack	7569 N Long Grove Rd		Elizabethtown	KY	42701

Thomas	Raymond E	Donna	6770 St John Rd		Elizabethtown	KY	42724
Thompson	Charles E	Geraldine	394 Bethlehem Academy Rd		Cecilia	KY	42724
Thompson	James K	Sandra	2162 Bethlehem Academy Rd		Cecilia	KY	42724
Tunis	Bradley Malcolm	Cathy Jean	1835 Weavers Run Rd		West Point	KY	40177
Walker	Wayne C		796 Cow Branch Rd		West Point	KY	40177
Warner	Norman E	Sue	1000 Cow Branch Rd		West Point	KY	40177
William Edelen Estate	Joseph L Edelen		2806 Big Spring Rd		Vine Grove	KY	40175
Wimp	Kenneth W	Joann	106 Wimp Ln		Cecilia	KY	42724
Wood	William R	Kimberly R	1436 Brizendine Rd		Rineyville	KY	40162
Woodring	Anthony M		275 Blueball Ch Rd		Elizabethtown	KY	42701

Route 1 Existing

Aldridge	Howard	Lovonda	156 Sycamore St		Cecilia	KY	42724
Armstrong, Jr.	Carl Lee		95 Warren Ct		Vine Grove	KY	40175
Ashby	Wayne R	Marisa D. Creech	8011 Northern Spy Dr		Louisville	KY	40228
Barragan	Pamela		35 Woodside Dr		Vine Grove	KY	40175
Boak	Ingrid		6240 Russell Cave Rd		Lexington	KY	40511
Board	Gordon		1180 Hillgrove Rd		Guston	KY	40142
Bowman	Timothy E		Post Office Box 47		Muldraugh	KY	40155
Broughton, Jr.	Kenneth W		680 Lee Rd		Vine Grove	KY	40175
Brown	Tyrone	Jennifer L	270 Kinkead Rd		Vine Grove	KY	40175
Burnett	Francis R		210 Thompson Ln S		Vine Grove	KY	40175
Bush	Charles W	Imogene	733 Bacon Crk Rd		Elizabethtown	KY	42701
Bush	W R		634 Bacon Crk Rd		Elizabethtown	KY	42701
City Of Elizabethtown			Post Office Box 550		Elizabethtown	KY	42701
Clair	Michael		149 Shot Hunt Rd		Vine Grove	KY	40175
D B K Properties, LLC	C/O David Kueber		700 Shady Ln		Louisville	KY	40223
Dawes	Mark A		149 Thompson Ln S		Vine Grove	KY	40175
Delaven	Michael		140 Wooddale Ct		Vine Grove	KY	40175
Denton	Dea	Leslie R	215 Shot Hunt Rd		Vine Grove	KY	40175
Dill	Kenneth L		12221 Sholic Rd		Apple Valley	CA	92308
Doll	James A	Brigid	7249 Heatherly Square		Louisville	KY	40202
Douglas	David		155 Warren Ct		Vine Grove	KY	40175
Edwards	Edith M		Post Office Box 112		Cecilia	KY	42724

Elizabethtown/Hardin Co.			111 W Dixie Ave		Elizabethtown	KY	42701
Elizabethtown/Hardin Co.			200 W Dixie Ave		Elizabethtown	KY	42701
Flory	Todd E		405 Warren Ct		Vine Grove	KY	40175
Fuller	Wilma Louise		90 Thompson Ln S		Vine Grove	KY	40175
Fuller	Douglas		95 Finch Ct		Vine Grove	KY	40175
Fuller	Jason D		63 Center		Radcliff	KY	40160
Gardner	Brett		165 Fort Ave		Vine Grove	KY	40175
Hardin County Building Commissions			Post Office Box 568		Elizabethtown	KY	42701
Hatfield	Thelma Mae		3705 Highway 60		Vine Grove	KY	40175
Hayden, Jr., et.al	Jacob B		2138 Hayden Sch Rd		Cecilia	KY	42724
Higgs	Shelby E		130 Rays Rd S		Vine Grove	KY	40175
Higgs	Shelby D		121 Rays Rd S		Vine Grove	KY	40175
Hobbs	David W	Miranda J	364 Kinkead Rd		Vine Grove	KY	40175
Humble	John B	Bernice	4318 Leitchfield Rd		Cecilia	KY	42701
Jameson	Johnny		230 Boak Mountain Rd		Vine Grove	KY	40175
Jennings	Kenneth D		440 Warren Ct		Vine Grove	KY	40175
Karnes	Brenda J		234 Skyview Ct		West Point	KY	40177
Kiefer	Robert N		139 Finch Ct		Vine Grove	KY	40175
Kirk	Joyce		210 Whispering Ct		Vine Grove	KY	40175
Lowe	Billy W	Sandra	70 Warren Ct		Vine Grove	KY	40175
Lusk Properties, LLC			2099 Hobbs-Reesor Rd		Vine Grove	KY	40175
Martin	Nathan D		235 Kinkead Rd		Vine Grove	KY	40175
Mason	Michael L		110 Redbird Ct		Vine Grove	KY	40175
McGehee	Chris		Post Office Box 309		Brandenburg	KY	40108
McGehee	Gene M	Connie	525 N Dixie Blvd		Radcliff	KY	40160
McKinney, Jr	Thomas N		Post Office Box 806		Radcliff	KY	40159
Miller	Elta Castile		2450 Hayden Sch Rd		Cecilia	KY	42724
Morris	Richard	Sherry	460 Warren Ct		Vine Grove	KY	40175
Mowry, Sr.	Harry		70 Woodside Dr		Vine Grove	KY	40175
Nott, Jr.	Jeffrey A		150 Woodside Dr		Vine Grove	KY	40175
Pogue	Henry		254 Kinkead Rd		Vine Grove	KY	40175
Pugh	Bonnie Sue		455 Warren Ct		Vine Grove	KY	40175
Richardson	Barton L		56 Wooddale Ct		Vine Grove	KY	40175
Richardson	Frances		3347 Leitchfield Rd		Cecilia	KY	42724

Scalf	Tyrus M	Diana	140 Kinkead Rd		Vine Grove	KY	40175
Sepulveda	Ray	Martha	4395 Highway 60		Vine Grove	KY	40175
Sexton	William P		460 Redbird Ct		Vine Grove	KY	40175
Shultz	Oscar G		95 Fort Ave		Vine Grove	KY	40175
Sipes	Thomas B		145 Woodside Dr		Vine Grove	KY	40175
Sollner, Jr.	Richard F		61 Warren Ct		Vine Grove	KY	40175
Stanley	Frank	Doris	185 Rays Rd S		Vine Grove	KY	40175
Thompson	John R		982 Penny Royal		Brandenburg	KY	40108
Vachon	Donald S		425 Redmon Rd		Vine Grove	KY	40175
Wade	CM Estate C/O Alice Wade		229 Bob Wade Rd		Elizabethtown	KY	42701
Walker	Adrienne		5385 Highway 60		Vine Grove	KY	40175
Ware	Arthur		355 Shot Hunt Rd		Vine Grove	KY	40175
Warren	Robert A		125 Wooddale Ct		Vine Grove	KY	40175
Watkins	Paul		160 Redbird Ct		Vine Grove	KY	40175
Whelan	Joseph A	Susan M	357 Kinkead Rd		Vine Grove	KY	40175
Whelan, Jr.	John L		240 Rays Rd		Vine Grove	KY	40175
Wimp	Joyce		309 Wimp Ln		Cecilia	KY	42724
Wimp	Mayme		308 Wimp Ln		Cecilia	KY	42724
Winchester	Janice F.		140 Kinkead Rd		Vine Grove	KY	40175

Route 2 New

Adkins	Thomas	Cornelia	CMR 449 Box 1074, APOAE 09031				
Campbell, Jr	Raymond	Anna	291 Gray Ln		Cecilia	KY	42724
Dohn	Fred	Nannie	481 Meredith Rd		Rineyville	KY	40162
Gossett	William, et.al		550 St Andrews Dr		Vine Grove	KY	40175
Harper, et.al	Roy		614 Gray Ln		Cecilia	KY	42724
House	Charley	Karen	Post Office Box 243		Rineyville	KY	40162-0243
House	James E	Georgia	Post Office Box 86		Rineyville	KY	40162-0086
Jenkins	Hildred	Marlene A	7936 Hardinsburg Rd		Cecilia	KY	42734
Morris	Lillian		410 Sun Valley Terrace		Hazard	KY	41701
Morris	Loetta Glenn		612 Cherrywood Dr		Elizabethtown	KY	42701
Pile	Hansell G	Frances	12045 St John Rd		Cecilia	KY	42724
Sampson	Harold J	Lana	493 Gray Ln		Cecilia	KY	42724
Saylor	Robert T	Yvonne	1196 Howevalley Rd		Cecilia	KY	42724

Swan	Robert M		1617 2nd St		Southport	FL	32409

Route 2 Existing

Angeline	Richard	Janis M.	5518 N Long Grove Rd		Cecilia	KY	42724
Atherton	Lanny	Rebecca	1155 Tabb Rd		Cecilia	KY	42724
Basham	Ronnie C		295 Basham Ln		Cecilia	KY	42724
Bush	Joseph P		647 James Duvall Ln		Cecilia	KY	42724
Cherry Tree Coon Club, Inc.			Post Office Box 64		Cecilia	KY	42724
Coogle	Marvin		6829 Hardinsburg Rd		Cecilia	KY	42724
Cowherd	Paul E	Bonnie	5628 N Long Grove Rd		Cecilia	KY	42724
Dixon	Steven	Teresa	5549 N Long Grove Rd		Cecilia	KY	42724
Edwards	Carl H.	Wanda J.	6370 Hardinsburg Rd		Cecilia	KY	42724
Goodman	Lyle Wayne		190 Wright Lane		Cecilia	KY	42724
Goodman	Richard M	Anita	6756 Hardinsburg Rd		Cecilia	KY	42724
Gosselin	Steven M	Angela C.	324 Willyard Ln		Cecilia	KY	42724
Harris	J. T.		3130 Sora		Louisville	KY	40213
Henson	Kenneth	Sandra	6324 Hardinsburg Rd		Cecilia	KY	42724
Highbaugh	George A	Virginia	4515 N Long Grove Rd		Cecilia	KY	42724
Hodges	Wesley W		5786 N Long Grove Rd		Cecilia	KY	42724
Johnson	John L.		742 James Duvall Ln		Cecilia	KY	42724
Lewis	Patricia		6532 Hardinsburg Rd		Cecilia	KY	42724
Lohden, Jr.	Patrick E	Charlotte	1612 Hardinsburg Rd		Cecilia	KY	42724
Maulden	Dickie	Elaine	580 James Duvall Rd		Cecilia	KY	42724
McDevitt	Deborah L		6434 Hardinsburg Rd		Cecilia	KY	42724
Miller	Thomas L	Janet R.	127 Eastview Rd		Cecilia	KY	42724
Perkins	Carl D	Sandra D.	6988 Hardinsburg Rd		Cecilia	KY	42724
Peterson	Charles D	Mary A.	325 Berrytown Rd		Rineyville	KY	40162
Ready	Naomi		1291 Bethlehem Academy Rd		Cecilia	KY	42724
Reesor	Phillip		575 James Duvall Ln		Cecilia	KY	42724
Richardson	Michael L	Michelle L.	804 Jefferson Pl		Elizabethtown	KY	42701
Roby	Rickey	Shelley	5487 N Long Grove Rd		Cecilia	KY	42724
Taul Revocable Trust	Philip		3142 Hardinsburg Rd		Cecilia	KY	42724
Thomas, et.al	Raymond E		6770 St John Rd		Elizabethtown	KY	42701
Thompson	Charles D	Geraldine	394 Bethlehem Academy Rd		Cecilia	KY	42724

Van Horne	Joan S		1070 Tabb Rd		Cecilia	KY	42724
Van Horne	Jo Ann		936 Tabb Rd		Cecilia	KY	42724
Wickersham	Bradley H	Theresa	7090 Hardinsburg Rd		Cecilia	KY	42724

November 18, 2005

[property owner (per PVA)]
[owner's address (per PVA)]

RE: Request for Your Comments Regarding Planned Electric Transmission Line

Dear [Mr./Ms. _____]:

As explained in correspondence sent to you earlier this year, Kentucky Utilities Company ("KU") plans on constructing a 345 kV electric transmission line from the Mill Creek generating station in Jefferson County to our Hardin County substation. This line was the subject of a public meeting held by KU and hearings held by the Kentucky Public Service Commission earlier this year. As presently planned, this would include an upgrade of an existing transmission line crossing your property in an existing easement. We want to learn about any concerns you have regarding the planned line and any unique features of your property. KU will then take your comments into consideration before finalizing its plans for this line. Please assist us by completing the enclosed form and returning it in the enclosed self-addressed stamped envelope. We ask that you return the form by December 9, 2005.

If you have any questions regarding the enclosed form or would like to discuss your concerns by telephone, please call Jeff Kuriger at 502-627-4522.

We recognize that your time is valuable. We would greatly appreciate you taking the time to complete and return the enclosed form. This is also the opportunity for you to advise KU of any concerns before line plans are finalized and regulatory approval for the planned line is sought. After this stage in the process it will be more difficult to make any changes to the planned line. Thank you in advance for your time.

Sincerely,

Mark S. Johnson
Director - Transmission

November 18, 2005

[property owner (per PVA)]
[owner's address (per PVA)]

RE: Request for Meeting Regarding Planned Electric Transmission Line

Dear [Mr./Ms. _____]:

Kentucky Utilities Company ("KU") plans to construct a 345 kV electric transmission line from the Mill Creek generating station in Jefferson County to our Hardin County substation. This line was the subject of a public meeting held by KU and hearings held by the Kentucky Public Service Commission earlier this year. As presently planned, part of the line would cross your property. As representatives of KU, we want to discuss any concerns you may have regarding the planned line and learn more about any unique features of your property. KU will then take your comments into consideration before finalizing its plans for this line. In that regard, we would like to arrange an in person meeting between you and a KU representative where such information could be shared.

In the next few days a KU representative will telephone you to schedule a meeting at a time convenient for you. Hopefully, we can schedule a meeting time that falls within the next few weeks. We will gladly schedule the meeting at your home, office or other location convenient for you.

We recognize that your time is valuable. We would greatly appreciate you taking the time to speak with our representative. Please bear in mind that the requested meeting also provides the opportunity for you to advise KU of any concerns before line plans are finalized and regulatory approval is sought. After this stage in the process it will be more difficult to make any changes to the planned line.

Thank you in advance for meeting with us in order to discuss your concerns. We look forward to the opportunity to meet with you. Should you have any questions at this time please telephone Jeff Kuriger at 502-627-4522.

Sincerely,

Mark S. Johnson
Director - Transmission

FORM 2

DATE _____

KENTUCKY UTILITIES COMPANY

Real Estate & Right of Way Department

PROPERTY
OWNER NAME _____
(PRINT)

PROPERTY OWNER COMMENTS

ADDRESS _____

Kentucky Utilities would appreciate the opportunity to obtain your input concerning the proposed transmission line project from Mill Creek power plant to Hardin County substation.

Part I

Items that concern me about this project are:

Part II

Any specific features of your property we should know about? ☐ Yes ☐ No (If yes, please describe below)

FORM 1

AGENT INITIALS _____

TIME _____

DATE _____

KENTUCKY UTILITIES COMPANY

Real Estate & Right of Way Department

PROPERTY
OWNER NAME _____
(PRINT)

PROPERTY OWNER INTERVIEW

ADDRESS _____

Part I

KENTUCKY UTILITIES WOULD APPRECIATE THE OPPORTUNITY TO OBTAIN YOUR INPUT CONCERNING THE PROPOSED TRANSMISSION LINE PROJECT FROM MILL CREEK POWER PLANT TO HARDIN COUNTY SUBSTATION.

Did a representative do the following: (Please select all that apply)

☐ Call you ☐ Visit your home ☐ Leave behind project information ☐ Other

Did the representative show you a map showing the route across your property? ☐ Yes ☐ No

Did the representative explain the route approval process? ☐ Yes ☐ No

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Part II

ms that concern me about this project are:

Part III

Any specific features of your property we should know about? ☐ Yes ☐ No (If yes, please describe below)

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION FACILITIES IN JEFFERSON, BULLITT, MEADE AND HARDIN COUNTIES, KENTUCKY	)	CASE NO. 2005-00467

DIRECT TESTIMONY OF MICHAEL G. TOLL E.ON U.S. SERVICES INC.

Filed: December22, 2005

Q. Please state your name, position, and business address.

A. My name is Michael G. Toll. I am the Manager of Transmission Planning and Substations for E.ON U.S. Services Inc., providing service to Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU"). My business address is 220 West Main Street, Louisville, Kentucky 40202..

Q. Have you previously testified before this Commission?

A. Yes. I testified before this Commission in Case No. 2005-000142, *In the Matter of: Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky* and in Case No. 2005-00154, *In the Matter of: Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Franklin, Woodford and Anderson Counties, Kentucky.*

Q. What is the purpose of your testimony?

A. My testimony addresses the need for additional 345 kV transmission facilities between LG&E's Mill Creek Generating Station in Jefferson County and KU's Hardin County Substation in Hardin County (the "Mill Creek to Hardin County Line"). My testimony does not address the specific routing of the facilities between those two points.

Q. Why are the Companies proposing to construct the Mill Creek to Hardin County Line?

A. The Companies are proposing to construct this line because it is needed for them to be able to deliver reliable service to their growing native loads. In Case No. 2004-00507, the Commission granted the Companies a certificate of public convenience and necessity

("CCN") to construct a 750 MW nominal net super-critical pulverized coal-fired base load generating unit at the Trimble County Generating Station ("TC2"). TC2 will be utilized to provide base load capacity to the Companies' native customers beginning in 2010. The Mill Creek to Hardin County Line is necessary to accommodate the addition of TC2 to the Companies' generation fleet and to allow the Companies to continue providing reliable, low-cost power to their native customers.

Q. How was the need for the Mill Creek to Hardin County Line determined?

A. The need for the line was determined through detailed studies performed by the Midwest Independent Transmission System Operator, Inc. ("MISO") at the Companies' request and with the Companies' input. Specifically, MISO performed a Transmission Service System Impact Study ("System Impact Study") to identify constraints on the transmission system that might limit the delivery of power from TC2, and to make recommendations to address system limitations. A copy of the System Impact Study was attached as Exhibit MSJ-1 in Case No. 2005-00142, and is incorporated herein by reference. MISO also performed a Generation Interconnection Evaluation Study ("Interconnection Study") to determine the impact of a TC2 interconnection on power system stability, short circuit interruption requirements and potential contingency cascading problems. A copy of the Interconnection Study was attached as Exhibit MSJ-2 in Case No. 2005-00142, and is incorporated herein by reference. In addition, MISO conducted a Facility Study Report for the options identified in the System Impact Study. A copy of that Report is attached as Exhibit MSJ-3 in Case No. 2005-00142, and is incorporated herein by reference. The Companies reviewed the MISO studies and concurred with the findings set forth therein. Indeed, the MISO studies were consistent with an earlier, high-level study the Companies

performed to evaluate potential system needs to support the integration of TC2. That internal study was attached in response to PSC Data Request 10(1) in Case No. 2005-00142, and is incorporated herein by reference.

Q. What were the results of the MISO studies?

A. The studies determined that additional transmission facilities would be needed to alleviate thermal issues and provide for continued system stability with the addition of TC2, and identified four different options to provide for those additional facilities. Each of those four options included the construction of several transmission lines in different areas of the Commonwealth. The Companies chose to pursue Option 4, which includes the construction of the Mill Creek to Hardin County Line.

Q. Did the MISO studies need to be updated in any way for this filing?

A. No. The studies evaluated the impact of the addition of TC2 on the existing transmission system, and identified a number of additional facilities that would be needed, including the Mill Creek to Hardin County Line, and there have been no changes to the transmission system since those studies which would change the need for the Mill Creek to Hardin County Line. Accordingly, there was no need to update or otherwise revisit the studies in any way.

Q. Do you have a recommendation for the Commission?

A. Yes. It is my recommendation that the Commission affirm its previous finding in Case No. 2005-00142 that there is a need for the Mill Creek to Hardin County Line, and approve the relief requested in this proceeding.

Q. Does this conclude your testimony?

A. Yes it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF FAYETTE)

The undersigned, Michael G. Toll, being duly sworn, deposes and says he is Manager of Transmission Planning and Substations for E.ON U.S. Services Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Michael G. Toll

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of December, 2005.

(SEAL)
Notary Public

My Commission Expires:

5-30-06

OS - 2

(10/84)

KENTUCKY PUBLIC SERVICE COMMISSION

MAIN CASE FILE NOTES

Case No. 2005-00467 Maps received 12/22/05 are located in file room in map area

SH