

ASTRoMaP Atlanta Strategic Truck Route Master Plan



DRAFT ASTRoMaP System



Halcrow

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ASTROMAP DRAFT SYSTEM OVERVIEW

Road Network Overview

The purpose of the ASTRoMaP system is to develop a network of existing roadways, within the region, that provide access across the region for commercial truck traffic. This network will consist, where most appropriate, of those attributes identified and investigated within the Needs Assessment. The network is intended to concurrently respond to current and future land use designation and take under consideration, results of the presence of environmental justice concerns.

After evaluating the original Regional Priority Freight Highway Network (RPFHN), those routes discussed during jurisdictional interviews, private sector meetings including Freight Advisory Task Force presentations, and community outreach sessions across the ARC region, inclusion of required NHS Connector routes, an a final working session with all TCC participants, a proposed network consisting of 1,359.2 miles is offered for review, discussion, and adoption.

An additional consideration was the relative position, of the designated corridors, to the possible position of trucks within the region. Through an informal survey, private sector response noted that where the network was within fifteen "driving" minutes of the trucks location, ten and less being optimal, the expectation would be for the driver to utilize the corridors, where applicable. This last consideration was calculated at 25 miles per hour, to account for delays and possible locations where residential stops are being performed. Fifteen minutes would require a path to an appropriate corridor be no longer than 6.25 miles, 4.2 miles optimally. This allows a maximum of 12.5 miles, driving, between any two corridors of the same axis. Connector placement may augment those areas where this spacing significantly exceeds the distance.

ASTRoMaP Overview

Proceeding with the process as outlined in the Strategic Truck Route Identification Criteria Matrix, with due consideration of the Community Impact Mapping Technical Report, a "grid" network of appropriate corridors was identified, **Figure 1A, 1B, and 1C**. In Figures 1B and 1C, the "Reference State Routes" illustrate connectivity only and are not identified corridors within that direction. A more detailed description is available in **Table 1**. A method of corridor identification is also proposed to allow for more meaningful recognition of signed routes and the ability to designate future expansion of the system. The initial two letters identify the primary direction of the corridor. A preceding "C" designates a connector route. This is followed by a designator noting the corridors relationship to the recognizable primary east-west corridor of I-20 or the north-south corridor consisting of GA-9, from the north to the downtown area, then south along GA-3. Substituting the letters "A, B, C, D" in lieu of the numeric for connector routes further identifies location and differential to corridor identification. Therefore an explanation of the first noted corridor would be:



Enhancement projects will be a	nddressed in the Strategies	and Recommendations Report.

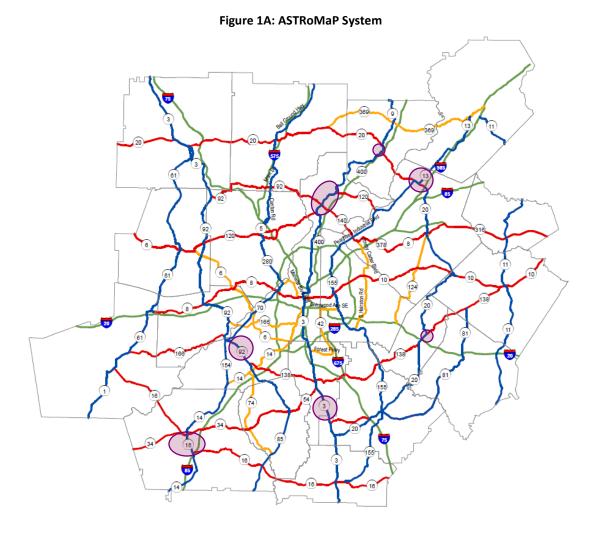








Figure 1B: ASTRoMaP System, East-West Corridors

ASTROMAP DRAFT SYSTEM



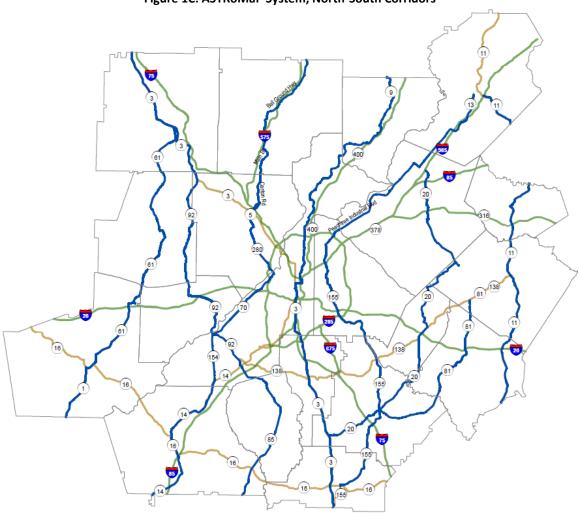


Figure 1C: ASTRoMaP System, North-South Corridors

ASTROMAP DRAFT SYSTEM



Table 1: ASTRoMaP Corridor Description

Table 1: ASTRoMaP Corridor Description				
ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
EW-N4	GA-20	Region western border	Interstate-985	59
EW-N3	GA-3, GA-92, GA-120	GA-3	Peachtree Industrial Boulevard	39.9
EW No	G1 5, G1 72, G1 120	dri 5	Boulevaru	33.7
EW-N2	GA-6, GA-120, GA-140, GA-13, GA-378, GA-8, GA-316	Region western border	Region eastern border	111
EW-N1	GA-8, GA-10 (US-78)	US-61	Region eastern border	89.9
EW-S1	GA-166, GA-92, GA-138	GA-61	GA-11	89.7
EW-S2	GA-34, GA-54, GA-3, GA-81	Region western border	Interstate-20	89.4
EW-S3	GA-16	GA-166	Region eastern border	69.9
				568.5
ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
NS-W3	GA-3, GA-61, GA-1	Region northern border	Region southern border	65.9
NS-W2	GA-3, GA-92, GA-154 GA-14	Region northern border	Region southern border	101.5
	Canton Hwy, Marietta Hwy, Canton Hwy, Main St, Canton Rd,			
NS-W1	GA-5, GA-280, Bolton Rd, GA-70, GA-92, GA-85	Region northern border	Region southern border	97.7
NS-E0	GA-9, GA-3	Region northern border	Region southern border	88.1
NS-E1	GA-13, GA-347, Peachtree Industrial Blvd, GA-141, Clairmount Road, Holiday GA-155	Region northern border	GA-16	89.1
NS-E2	GA-20	Interstate-985	GA-3	67
NS-E3	GA-81	GA-138	GA-155	30.7
NS-E4	GA-11	Interstate-985	Region southern border	75.6
				615.6
ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
CNS-EC	GA-124	Interstate 20	GA-8	20.7
CNS-EB	Jimmy Carter Blvd, Mountain Industrial Blvd, N Hairston Road, Wesley Chapel Road	GA-140/Peachtree Industrial Blvd	GA-155	21.5
CNS-EA	Glenwood Ave SE/GA-260, GA-42, GA-331 (Halsey RR yard access: Glenwood Drive, Boulevard SE,)	GA-3	GA-155	18.4
CNC MA	Bolton Road, Marietta Blvd NW (includes enclosed Marietta	CA 200	CAR	F.C
CNS-WA	Road NW)	GA-280	GA-8	5.6 29.8
CNS-WB	GA-14	GA-92 GA-154	GA-14	
CNS-WC	GA-14		GA-3	22.9
CNS-WD	GA-74	GA-14	GA-85	19.2 138.1
ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
CEW-SA	GA-166	GA-92	GA-3	17.8
CEW-ND	GA-360	GA-20	Interstate 985	35.8
				E2 6

53.6

Total Network Mileage 1356.4

Report Organization

The report provides a review of:

- Chapter 1: ASTRoMaP Draft System Overview
- Chapter 2: Implementation of the Strategic Truck Route Identification Criteria Matrix
- Chapter 3: Corridor Detail Description and Review

IMPLEMENTATION OF STRATEGIC TRUCK ROUTE IDENTIFICATION CRITERIA MATRIX

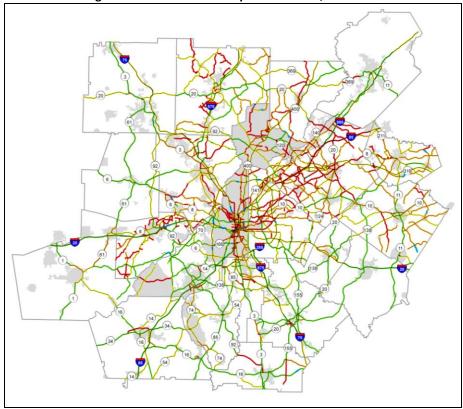
Assignment of Scoring to Roadways

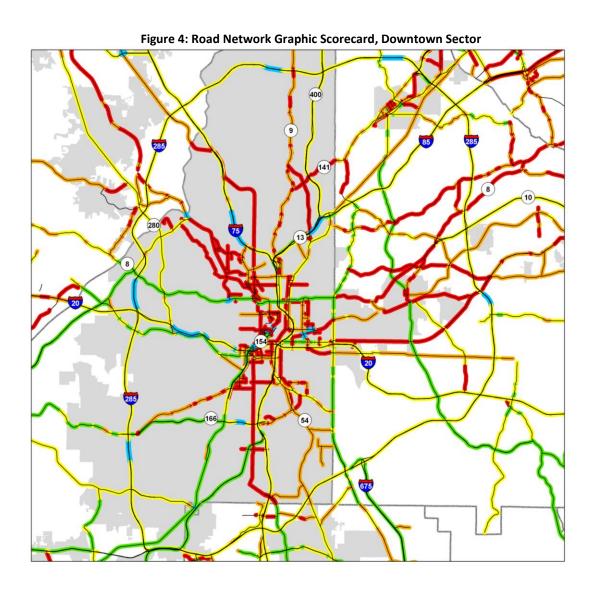
Each roadway contained within the RPFHN and those later identified through the outreach segments of the project, were scored, using the methodology described in the Criteria Matrix Report. Granularity was achieved by applying the scoring at the RC File segment level. This provided scoring for lengths of less than a thousand feet or more than two miles, depending on the final level of detail contained in the file. A composite score was assigned to each segment and is illustrated in a common legend, **Figure 2**. The fifth scoring range (in blue) captures only those segments where the point obstacle of minimum vertical clearance or posted weight restriction is present. The overall road network under consideration and the applicable scoring is offered in **Figures 3 thru 8**.

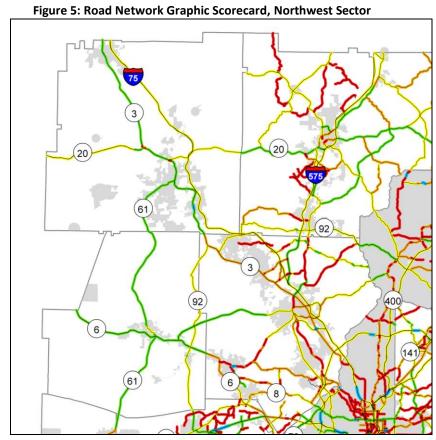
1.00 - 1.24 1.25 - 1.42 1.43 - 1.61 1.62 - 3.00 3.01 - 11.07

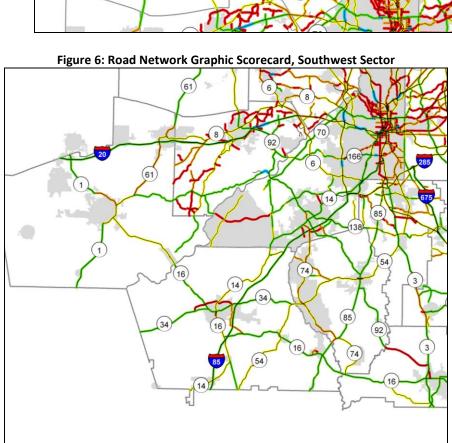
Figure 2: Road Network Graphic Scorecard, Legend











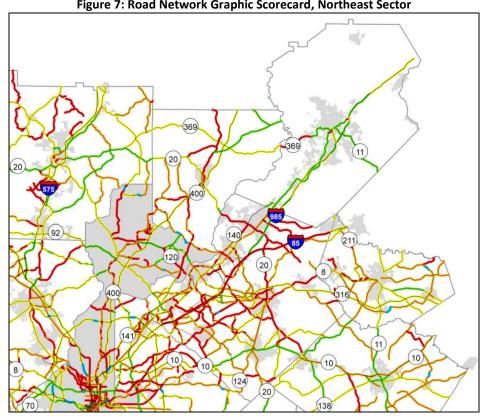
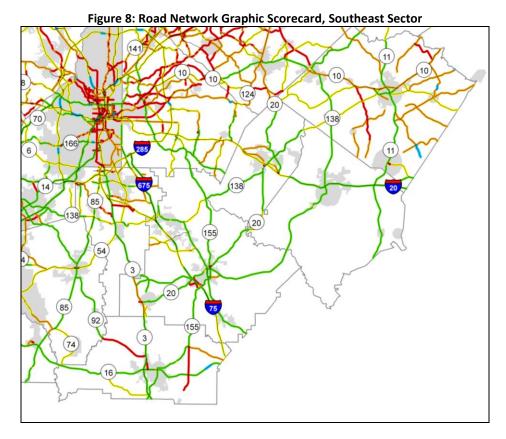


Figure 7: Road Network Graphic Scorecard, Northeast Sector



Methodology

With the "grid" concept providing a framework and the desire to provide corridors which met or exceeded the polled carrier response of "distance to the appropriate corridor", the network was initially evaluated for corridors moving along the east-west axis. Beginning in the northwest portion of the region, a path to the northeast was selected. This "path of least resistance" or roadways scoring in the first two categories, green and yellow, was to remain on the same relative latitude. A second review, where applicable, was performed along this initial corridor for connectivity purposes. These segments were identified in a manner to reduce the presence of the least desirable category, red, and still maintain the direction of travel. This process was applied in the north-south travel direction.

In each direction, the corridor was readily identified, except for corridor NS-E0, which was selected due to the need for a north-south corridor to service the central portion of the region.

The network was compared to designated NHS connectors and absent routes were identified and added as connectors.

Jurisdictional review was then utilized to assess any remaining concerns of corridor or connector placement.

Excluded Roadways

Four versions of the ASTRoMaP system have resulted from the initial evaluation, comparison to National Highway Connector needs, environmental justice concerns, geographical gap review, and evaluation for inclusion of connectors to provide access to key freight generator nodes.

Based on the analysis presented in the Environmental Justice Corridor Evaluation Report, alternative routes were identified where non-critical route segments passed through areas with vulnerable populations. Where possible, those routes were not included on the ASTRoMap System. The proposed ASTRoMaP System version 4.0 resulted in exclusions in two counties; Barrow and Coweta.

In Barrow County, GA-211 extending northwest from Winder and crossing Interstate 85 presented a predominantly agricultural and thus seasonal need for local truck activity. Similarly in Coweta County, GA-54, extending southwest from GA-16 to the southern border of the county, the ability to identify a parallel route with greater freight intensive activity was applicable. GA-211 was replaced with GA-11, providing access north and connectivity with the connector GA-369, in Hall County. Both GA-14 and GA-85 were identified as north-south axis roadways through Coweta County, eliminating the need to include GA-54.

CORRIDOR DETAIL DESCRIPTION AND REVIEW

East-West Corridors

Seven corridors have been identified, comprising 568.5 miles of roadway, **Table 2**. The longest corridor is 111.0 miles, with the shortest at 39.3 miles. There is only one corridor spanning the length of the region, in this direction. Two corridors are composed of a single roadway, with the most segmented consisting of seven individual roadways. Four exist north of I-20 and three south.

Table 2: East West Corridors

ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
EW-N4	GA-20	Region western border	Interstate-985	59.0
EW-N3	GA-3, GA-92, GA-120	GA-3	Peachtree Industrial Blvd.	39.3
EW-N2	GA-6, GA-120, GA-140, GA-13, GA-378, GA-8, GA-316	Region western border	Region eastern border	111.0
EW-N1	GA-8, GA-10 (US-78)	US-61	Region eastern border	89.9
EW-S1	GA-166, GA-92, GA-138	GA-61	GA-11	89.7
EW-S2	GA-34, GA-54, GA-3, GA-81	Region western border	Interstate-20	89.4
EW-S3	GA-16	GA-166	Region eastern border	69.6

EW-N4

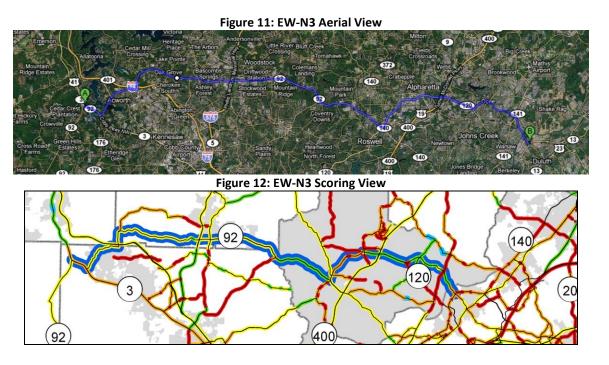
Consisting of a single state route, GA-20, this corridor reaches only the western border of the region, terminating upon intersecting I-985, in the east. The remainder of GA-20 is identified as a continuing ASTRoMaP corridor, but in the north-south direction. An aerial view of the route is illustrated in **Figure 9**, and the scoring illustrated in **Figure 10**.

Figure 9: EW-N4 Aerial View

| Company | Compa

EW-N3

Consisting of segments from three state routes, this corridor is the shortest of the east-west routes. It extends from US 41 in Acworth to Peachtree Industrial Boulevard in Duluth. An aerial view of the route is illustrated in **Figure 11**, and the scoring illustrated in **Figure 12**.



EW-N2

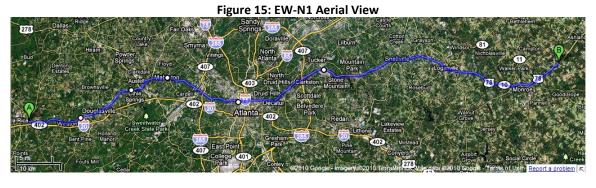
Consisting of segments from seven state routes, the most complex of the ASTRoMaP, this corridor is the only one to extend from both the eastern to the western border of the region. An aerial view of the route is illustrated in **Figure 13**, and the scoring illustrated in **Figure 14**.

Figure 13: EW-N2 Aerial View

| Control | Cont

EW-N1

Consisting of segments from two state routes, this is a single route when identified as US-78. The corridor extends from GA-61, in the west, to the region's eastern border. An aerial view of the route is illustrated in **Figure 15**, and the scoring illustrated in **Figure 16**.





EW-S1

Consisting of segments from three state routes, this corridor does not extend to either border. An aerial view of the route is illustrated in **Figure 17**, and the scoring illustrated in **Figure 18**.

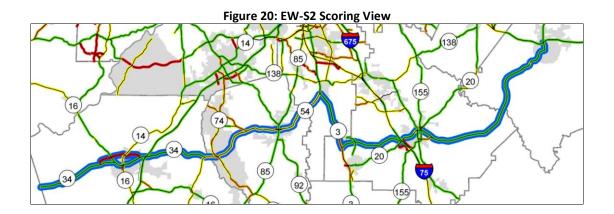




EW-S2

Consisting of segments from seven state routes, the most complex of the ASTRoMaP eastwest corridors, this is the only one to extend from both the eastern to the western border of the region. An aerial view of the route is illustrated in **Figure 19**, and the scoring illustrated in **Figure 20**.

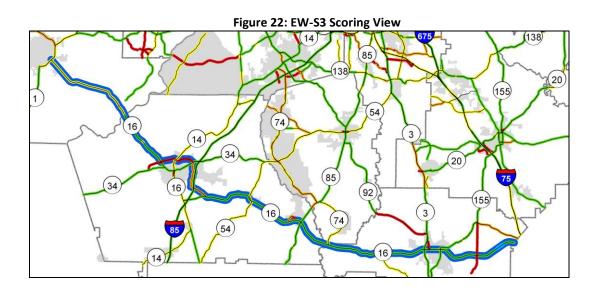




EW-S3

Consisting predominately of a single state route, GA-16, this corridor reaches only the eastern border of the region, terminating upon intersecting Ga-166. An aerial view of the route is illustrated in **Figure 21**, and the scoring illustrated in **Figure 22**.





North-South Corridors

Eight corridors have been identified, comprising 615.6 miles of roadway, **Table 3**. The longest corridor is 101.5 miles, with the shortest at 30.7 miles. There are three corridors spanning the length of the region, in this direction. Three corridors are composed of a single roadway, with the most segmented consisting of five individual roadways with a length of a previously cited state route, now five named roads and highways. Three exist west of the combined GA-9 and GA-3 corridor, which is also a noted corridor on the ASTRoMaP. Four exist east of the corridor.

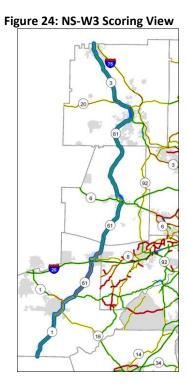
Table 3: North South Corridors

ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
NS-W3	GA-3, GA-61, GA-1	Region northern border	Region southern border	65.9
NS-W2	GA-3, GA-92, GA-154 GA-14	Region northern border	Region southern border	101.5
NS-W1	Canton Hwy, Marietta Hwy, Canton Hwy, Main St, Canton Rd, GA-5, GA- 280, Bolton Rd, GA-70, GA-92, GA-85	Region northern border	Region southern border	97.7
NS-E0	GA-9, GA-3	Region northern border	Region southern border	88.1
NS-E1	GA-13, GA-347, Peachtree Industrial Blvd, GA-141, Clairmount Road, Holiday GA-155	Region northern border	GA-16	89.1
NS-E2	GA-20	Interstate-985	GA-3	67
NS-E3	GA-81	GA-138	GA-155	30.7
NS-E4	GA-11	Interstate-985	Region southern border	75.6

NS-W3

Consisting of four state routes, this corridor terminates at GA-3 while extending to the southern border of the region. An aerial view of the route is illustrated in **Figure 23**, and the scoring illustrated in **Figure 24**.

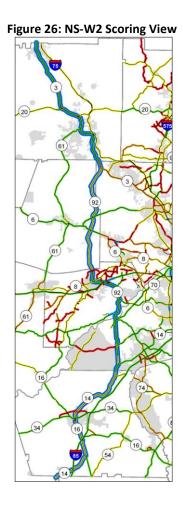




NS-W2

Consisting of four state routes and is the longest in this direction. This corridor extends across the region. An aerial view of the route is illustrated in **Figure 25**, and the scoring illustrated in **Figure 26**.





NS-W1

Consisting of six state routes and two non-state route segments, this corridor is the most complex of the ASTRoMaP, in either direction. The northern segment of the corridor consists of a former state route, GA-5, which was designated and runs concurrent with I-575 at present. An aerial view of the route is illustrated in **Figure 27**, and the scoring illustrated in **Figure 28**.

Figure 27: NS-W1 Aerial View



Figure 28: NS-W1 Scoring View



Consisting of three state routes, this route is the least conforming to the selection process. This corridor was designated due to the need to provide a central corridor, in the north-south direction, as the combination of GA-8 and GA-10 does for the east west direction. This corridor extends across the region. An aerial view of the route is illustrated in **Figure 29**, and the scoring illustrated in **Figure 30**.

Figure 29: NS-E0 Aerial View



Figure 30: NS-E0 Scoring View



Consisting of one state route, this route is the least conforming to the selection process. This corridor was designated due to the need to provide a central corridor, in the north-south direction, as the combination of GA-8 and GA-10 does for the east west direction. This corridor extends across the region. An aerial view of the route is illustrated in **Figure 31**, and the scoring illustrated in **Figure 32**.

Figure 31: NS-E1 Aerial View

Waleska

Ball Cround

Cumming

Cainesville

Gainesville

Maysville

Canton

Cumming

Sugar Hill

Sugar Hill

Suwanee

Alpharetta

Suwanee

Alpharetta

Sandy

Springs

Oraville Lilbum

Springs

Oraville Lilbum

Sontidale

Tucker

Snellville

Monroe

Social Circle

Park

Forest Park

College

Park

Forest Park

College

Park

Forest Park

Covington

Stockbidge

Man

Covington

Maysville

College

Russell

Monroe

Statham

Russell

Monroe

Shady Dale

Man

Covington

Newborn

Man

Riverdale

Jonesboro

Newborn

Man

Riverdale

Jonesboro

McDonough

Chree

Hampton

McDonough

Chree

Shady Dale

Figure 32: NS-E1 Scoring View

28 / 41

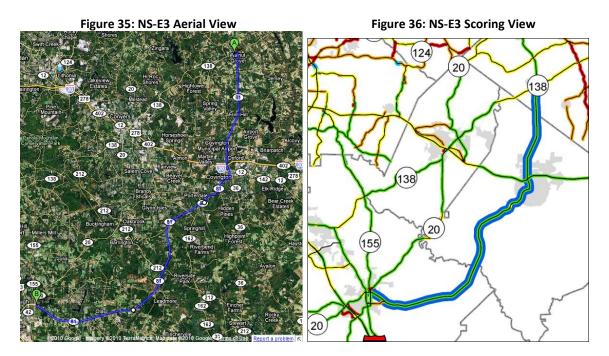
Consisting of one state route, is the continuing segment of GA-20, identified in the east-west corridors, at the point of changing general direction. An aerial view of the route is illustrated in **Figure 33**, and the scoring illustrated in **Figure 34**.

Figure 34: NS-E2 Scoring View

140
85
120
10
10
10
10
10
138
138

29 / 41

Consisting of one state route, is the continuing segment of GA-138, identified in the east-west corridors, at the point of changing general direction. An aerial view of the route is illustrated in **Figure 35**, and the scoring illustrated in **Figure 36**.



Consisting of one state route, is the continuing segment of GA-138, identified in the east-west corridors, at the point of changing general direction. An aerial view of the route is illustrated in **Figure 37**, and the scoring illustrated in **Figure 38**.

Figure 37: NS-E4 Aerial View

Holdsy Hills Barret

Gameson Ganesy Constantine

Point Ganesy Constantine

Point Ganesy Constantine

Point Ganesy Constantine

Oetwood 385

Constantine

Point Ganesy Constantine

Point Ganesy Constantine

Oetwood Monthair

Pender 618

Hill Bufort Sannyage Fragelto

Fistles

Hoschton

Fistles

Forest Monthair

Constantine

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Abdum Construit

Forest Monthair

Forest Mandred Construit

Forest Mandred Construit

Forest Monthair

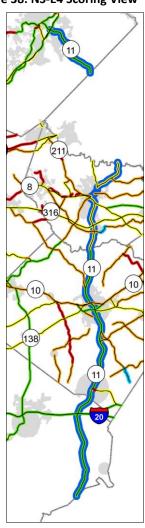
Forest Mandred Construit

Forest Mandred North Monthair

Forest Monthair

F

Figure 38: NS-E4 Scoring View



Connectors

This category identifies those specific roadways that provide access to freight generating clusters or nodes of activity. Such areas are identified on ARC's Unified Growth Policy Map as Center City, Regional Center, Town Center or Freight Areas. These corridors are multijurisdictional on the county level but do not provide cross regional access. In addition, corridors designated as NHS intermodal connectors would be eligible for consideration as ASTRoMaP connectors. There a total of nine routes, **Table 4**. The longest connector is 35.8 miles and the shortest 5.6 miles. Only two do not provide access between two corridors, CNS-EC and CEW-ND both terminate on an interstate at one end.

Table 4: Connectors

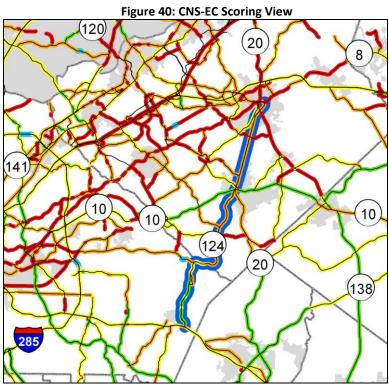
Table 4: Conffectors				
ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
CNS-EC	GA-124	Interstate 20	GA-8	20.7
CNS-EB	Jimmy Carter Blvd, Mountain Industrial Blvd, N Hairston Road, Wesley Chapel Road	GA-140/Peachtree Industrial Blvd	GA-155	21.5
CNS-EA	Glenwood Ave SE/GA-260, GA-42, GA-331 (Halsey RR yard access: Glenwood Drive, Boulevard SE,)	GA-3	GA-155	18.4
CNS-WA	Bolton Road, Marietta Blvd NW (includes enclosed Marietta Road NW)	GA-280	GA-8	5.6
CNS-WB	GA-6	GA-92	GA-14	29.8
CNS-WC	GA-14	GA-154	GA-3	22.9
CNS-WD	GA-74	GA-14	GA-85	19.2
		•		

ID	INCLUDED ROADWAYS	WEST TERMINUS	EAST TERMINUS	LENGTH (mi)
CEW-SA	GA-166	GA-92	GA-3	17.8
CEW-ND	GA-369	GA-20	Interstate 985	35.8

CNS-EC

Consisting of a single state route, GA-124, this is one of two that do not connect two identified ASTROMAP Corridors. The jurisdictions involved are DeKalb and Gwinnett Counties. An aerial view of the route is illustrated in **Figure 39**, and the scoring illustrated in **Figure 40**.





CNS-EB

Connecting two ASTROMAP Corridors, this connector also provides access between two interstates. The jurisdictions involved are DeKalb and Gwinnett Counties. An aerial view of the route is illustrated in **Figure 41**, and the scoring illustrated in **Figure 42**.

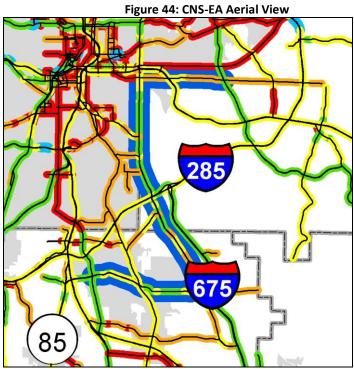
Figure 42: CNS-EB Scoring View

10
10
10
124
20

CNS-EA

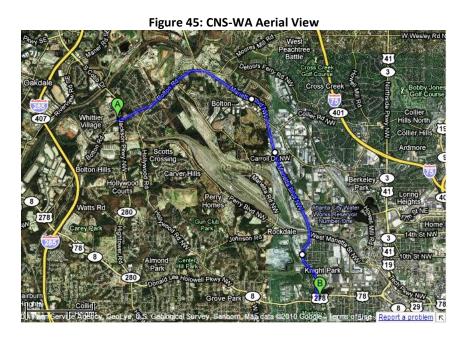
This connector provides access for Halsey RR yard and numerous truck facilities, linking these to two corridors. The jurisdictions involved are DeKalb and Clayton Counties. An aerial view of the route is illustrated in **Figure 43**, and the scoring illustrated in **Figure 44**.

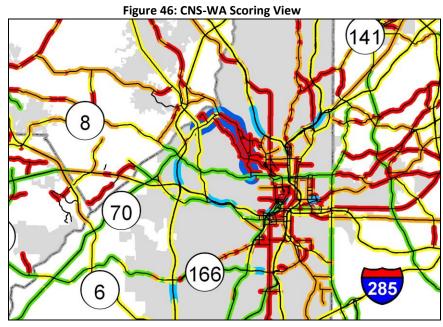




CNS-WA

The jurisdiction involved is Fulton (South) County. An aerial view of the route is illustrated in **Figure 45**, and the scoring illustrated in **Figure 46**.

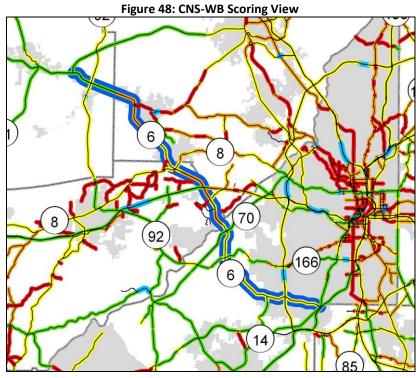




CNS-WB

The jurisdictions involved are Fulton (South), Douglas, Cobb, and Paulding Counties. An aerial view of the route is illustrated in **Figure 47**, and the scoring illustrated in **Figure 48**.





CNS-WC

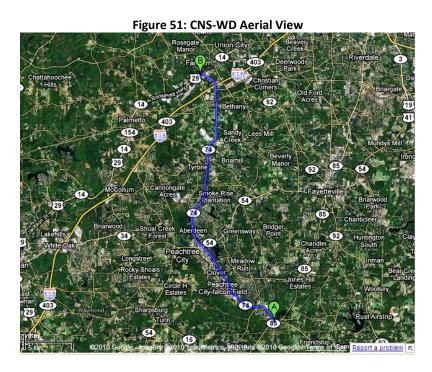
The jurisdiction involved is Fulton (South) County. An aerial view of the route is illustrated in **Figure 49**, and the scoring illustrated in **Figure 50**.

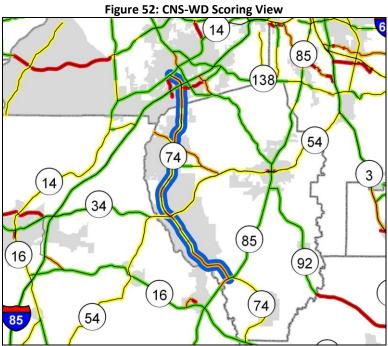




CNS-WD

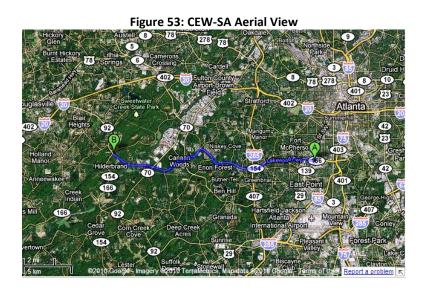
The jurisdiction involved are Fulton (South) and Fayette Counties. An aerial view of the route is illustrated in **Figure 51**, and the scoring illustrated in **Figure 52**.

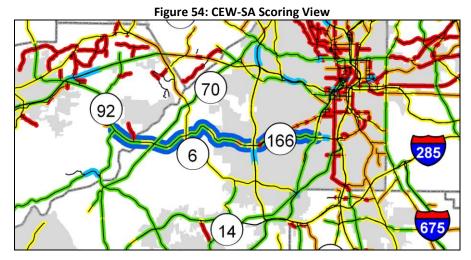




CEW-SA

The jurisdictions involved are Fulton (South) and Douglas Counties. An aerial view of the route is illustrated in **Figure 53**, and the scoring illustrated in **Figure 54**.





CEW-ND

The jurisdictions involved are Cherokee and Forsyth Counties. Hall County is part of this connector though not a participant in the ARC. An aerial view of the route is illustrated in **Figure 55**, and the scoring illustrated in **Figure 56**.

Figure 56: CEW-ND Scoring View

20
400

985