



# Central Louisiana Regional Beltway Commission

## MEETING AGENDA

**Date:** Thursday, June 25, 2020  
**Time:** 11:00 am - 12:00 pm  
**Location:** Zoom Conferencing / Phone

### Zoom Meeting Login Details

<https://us02web.zoom.us/j/81785586237?pwd=NmJUN3RjMHBIa09XOWN0VndxM0lrUT09>

Meeting ID: 817 8558 6237

Password: 803238

Find your local number: <https://us02web.zoom.us/u/kcczXYLRg8>

1. Call to Order
2. Roll Call
3. **Beltway Commission Housekeeping Project for Approval**
  - a. DRAFT Regional Beltway Technical Memorandum P\_F\_T  
Motion to approve adoption of Regional Beltway Technical Memorandum
4. Next Steps
5. Other Business
6. Adjournment

### ADA Notice:

For special meeting accommodations, contact our ADA Coordinator, Kathy Powell, via phone 318-487-5401, ex.15 at least 72 hours in advance of the meeting.



# Beltway

## TECHNICAL MEMORANDUM

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Central Louisiana Regional  
Infrastructure Beltway Commission

**EMBARGOED DRAFT**  
June 2020



# Central Louisiana Regional Beltway TECHNICAL MEMORANDUM

Prepared for:



**NOTE:**

This is a pre-release draft containing sensitive critical infrastructure information and subject to minor editorial changes, prior to being officially released for public inspection. This information is embargoed until further notice due to non-disclosure agreements between the Commission and data providers, so please keep the document confidential until we redact the necessary data sets for the public release.

## Central Louisiana Regional Infrastructure Beltway Commission

Prepared by:  
Rapides Area Planning Commission

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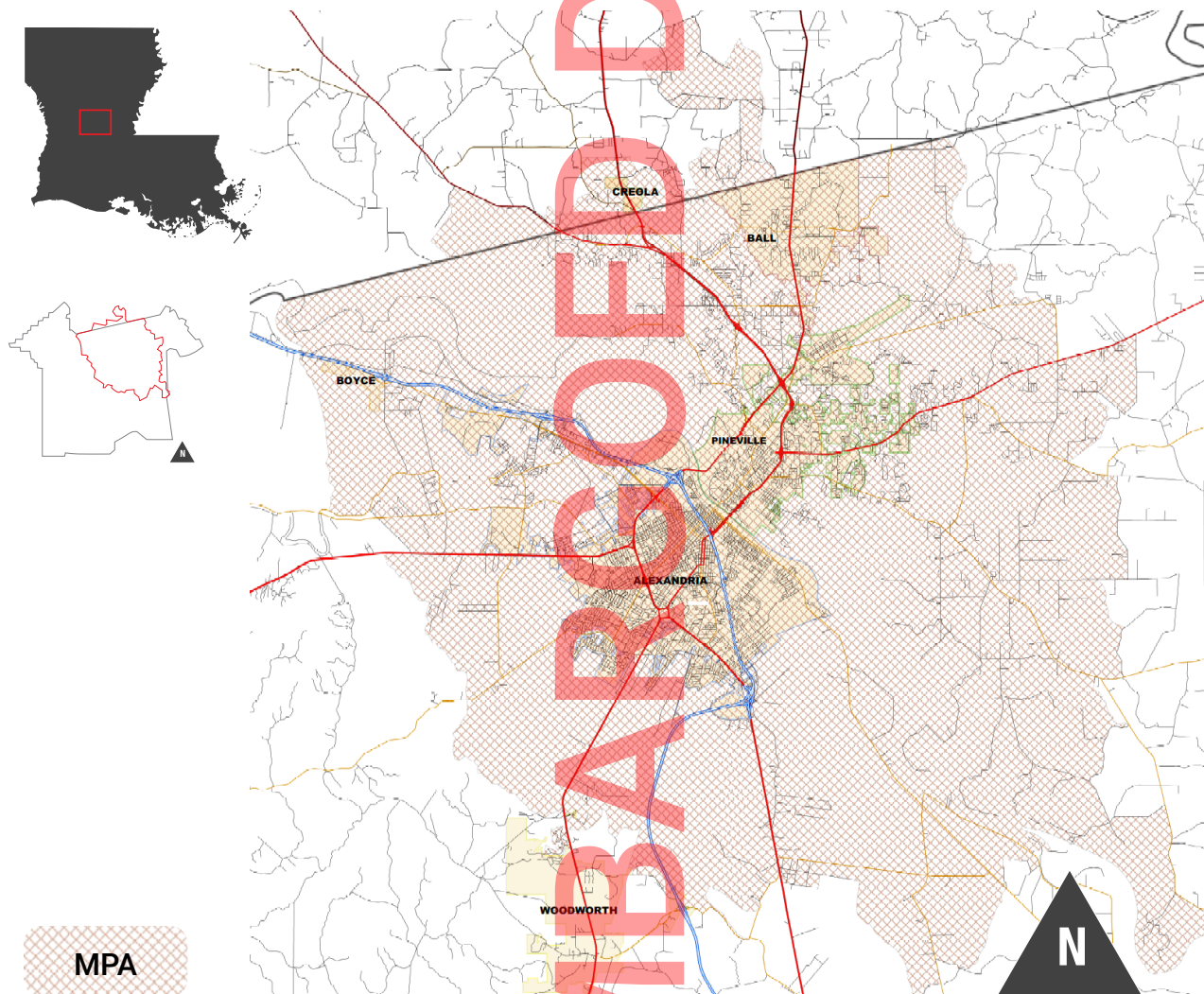
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# INTRODUCTION

The Central Louisiana Regional Infrastructure Beltway Commission (the Commission) was introduced by legislation as House Bill No. 865 by Representative Herbert Dixon (District 26) in 2009 and later became ACT No. 518 when signed by Governor Bobby Jindal. The legislation followed a format similar to Lafayette’s Regional Expressway (est. 2003 ACT No. 893) endeavor; setting out to create a commission with the task of “establishing and constructing a transportation and utility corridor for the growth of residential, commercial, and industrial developments serving the urban and rural areas of Rapides and south Grant parishes.”<sup>1</sup>

Figure 1: Study Area / Metropolitan Planning Area (MPA)



<sup>1</sup> Louisiana State ACT No. 518, 2009

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Initially, the Commission had no funding to develop a general feasibility study to serve as a “marketing tool” to inform funding efforts through state or federal lawmakers. The Commission’s initial concept and beltways presented in the MPO’s Long Range Plans. Although authorized it also had no desire to generate funds through taxes or fees to do so. Recognizing its potential, the Alexandria-Pineville Metropolitan Planning Organization (AP-MPO), with many of the same members as the Commission, allocated \$800,000 to develop the study. In addition to the AP-MPO, RAPC provided the Commission with project staff, as well as an additional \$200,000 in local matching funds to help implement the study.

For years, RAPC staff and technical consultants collected, mapped, and analyzed data to assist the Technical Advisory Committee and the project Steering Committee to develop suitability criteria. This memorandum, which will be the first planning document produced by the Commission, documents the methodology and preliminary analyses conducted to identify potential areas that should be avoided by, as well as suitable lands for, a new transportation corridor.

## COMMISSIONERS

Initially, fourteen (14) commissioners were set within the original 2009 legislation, ACT No. 518. A fifteenth (15) commissioner representing the Central Louisiana Regional Port (port director) was set through a 2016 legislative amendment, ACT No. 287. Members may also appoint a designee to serve in their stead. Officers must include a Chairman and Vice-Chairman, however may also include other officers as deemed necessary. The Rapides Area Planning Commission (RAPC) and its subcommittees serve in an advisory capacity to the Commission. RAPC also serves as the secretary, treasurer and staff for the Commission. All membership and current designees are as follows:

- ▶ Jeff Hall  
*Mayor, City of Alexandria*
- ▶ Clarence Fields  
*Mayor, City of Pineville*
- ▶ David Butler, II  
*Mayor, Town of Woodworth*
- ▶ Alma Moore  
*Mayor, Town of Ball*
- ▶ Gail Wilking  
*Mayor, Town of Boyce*
- ▶ Craig Smith  
*President, Rapides Parish Police Jury*
- ▶ Don Arnold  
*President, Grant Parish Police Jury*
- ▶ Kirby Roy, III  
*President, Avoyelles Parish Police Jury*
- ▶ Troy Russell  
*District Administrator, LADOTD-08*
- ▶ Sandra McQuain  
*Executive Director, England Authority*
- ▶ Blake Cooper  
*Director, Central Louisiana Regional Port*
- ▶ Dr. Paul Coreil  
*Chancellor, Louisiana State University - Alexandria*
- ▶ Dr. Rick Brewer  
*President, Louisiana College*
- ▶ Jules Green  
*President, Alexandria City Council*
- ▶ Deborah Randolph  
*Member Appointed by Cenla Chamber of Commerce*

## POWERS & AUTHORITY

The Beltway Commission is one of the more powerful boards that RAPC coordinates and serves. The commission may construct projects but shall conduct economic feasibility studies prior to any project initiation. Additionally, the commission is granted the following powers, although, these are not all inclusive:

- (1) To adopt rules and regulations necessary to carry out the purposes of the commission, for the governance of its affairs, and for the conduct of its business.
- (2) To adopt, use, and alter at will an official seal.
- (3) To plan, construct, reconstruct, maintain, improve, operate, own, or lease projects within its jurisdiction in the manner determined by the commission and to pay any project costs in connection therewith.
- (4) To sue and be sued in its own name.
- (5) To impose, revise, and adjust tolls, fees, and charges in connection with its projects sufficient to pay all project costs, maintenance, operation, debt service, and reserve or replacement costs, and other necessary or usual charges.
- (6) To regulate speed limits on the tollways consistent with state speed limits.
- (7) To contract with any person, partnership, association, or corporation desiring the use of any part of a project, including the right-of-way adjoining the paved portion, for placing thereon telephone, fiber optic, telegraph, electric light, or power lines, gas stations, garages, and restaurants, or for any other purpose, and to fix the terms, conditions, rents, and rates of charges limited to no more than the commission's direct and actual cost of administering the permitting process.
- (8) To acquire, hold, and dispose of real and personal property in the exercise of its powers and the performance of its duties under this Chapter in accordance with law.
- (9) To acquire public or private lands including rights or easements in the name of the commission by purchase, donation, exchange, foreclosure, lease, or otherwise, including exercising the power of eminent domain in accordance with Part XVIII of Chapter 1 of this Title, as it may deem necessary for carrying out the provisions of this Chapter.
- (10) To hold, sell, assign, lease, or otherwise dispose of any real or personal property or any interest therein; to release or relinquish any right, title, claim, lien, interest, easement, or demand however acquired, including any equity or right of redemption in property foreclosed by it; to take assignments of leases and rentals; to proceed with foreclosure actions; or to take any other actions necessary or incidental to the performance of its corporate purposes.
- (11) To establish control of access, designate the location, and establish, limit, and control points of ingress and egress for each project as may be necessary or desirable in the judgment of the commission to ensure its proper operation and maintenance, and to prohibit entrance to such project from any point or points not so designated, subject to the prior written concurrence of the department when the state highway system is affected.

**Technical Memorandum**

- (12) To relocate parish, municipal, or other public roads affected or severed by commission projects with equal or better facilities at the expense of the commission.
- (13) To enter, or authorize its agents to enter, upon any lands, waters, or premises within the geographic boundaries of the commission for the purpose of making surveys, soundings, drillings, or examinations as it may deem necessary or appropriate for the purposes of this Chapter provided that the commission shall reimburse any actual damages resulting to such lands, waters, or premises as a result of such activities; such entry shall not be deemed a trespass or unlawful.
- (14) To procure insurance in such amount or amounts appropriate to the size of the project, as determined by the commission, insuring the commission against all losses, risk, and liability arising out of the construction, operation, maintenance, and ownership of any project.
- (15) To apply for, receive, and accept grants, loans, advances, and contributions from any source of money, property, labor, or other things of value, to be held, used, and applied for its corporate purposes.
- (16) To open accounts at financial institutions necessary for the conduct of its business and to invest any funds held in reserves or sinking funds, or any funds not required for immediate disbursement in such investments as may be provided in any financing document relating to the use of such funds, or, if not so provided, as the commission may determine, subject to compliance with state laws relative to investments by political subdivisions.
- (17) To borrow money and issue bonds for any commission purpose.
- (18) To enter contracts and agreements and execute all instruments necessary or convenient thereto for accomplishing the purposes of the commission.
- (19) To enter into agreements with a public or private entity to construct, maintain, repair, or operate commission projects.
- (20) To authorize the investment of public and private money to finance commission projects, subject to compliance with state law relative to use of public funds.
- (21) To employ consultants, engineers, attorneys, accountants, construction and financial experts, superintendents, managers, and such other employees and agents necessary for the accomplishment of commission purposes and to fix their compensation.
- (22) To do all acts and perform things necessary or convenient to execute the powers granted to the commission by law.

Furthermore, the beltway commission has authority to acquire land; dispose of property; make regulations regarding public utilities around beltway projects; contract for construction, project development, and law enforcement; and issue bonds.



## LAND USE SUITABILITY

A massive undertaking, this study was commissioned to assist with preferred routing for the proposed Central Louisiana Regional Beltway. This memorandum reviews and summarizes land-use suitability criteria determined by the Central Louisiana Regional Infrastructure Beltway Commission, presents preliminary conclusions, and makes preliminary recommendations regarding such criteria. Conclusions and recommendations are presented here as a starting point for discussion on proposed routing for the proposed Central Louisiana Regional Beltway.

The Beltway Commission, with input from state, regional, and local agencies, preliminarily identified avoidance areas where direct impacts from enhanced or new corridors (routes) should be avoided to the maximum extent possible. Data collection for inputs took years and included locating and mapping all existing infrastructure in the study area (such as, water, sewer, electricity, data/fiber, road, rail, waterways, etc.), as well as geographical and environmental features that would impact suitability (elevations, federally protected lands, floodplains, etc.) and more.

### METHODOLOGY

RAPC used ESRI Arcmap and Arcgis Pro products to assist in ranking areas within the three mapped corridor options. ESRI products allow you to assign rankings to data layers, and generate a composite image from multiple layers to help illustrate the best options when choosing a corridor (route). This process is called suitability mapping and RAPC employed the following steps to do it:

- **Step 1:** *Identification of Layers*
- **Step 2:** *Relative Ranking Layer Assignments*
- **Step 3:** *Land Suitability Mapping (LSM)*
- **Step 4:** *Corridor Analysis*

### **Step 1: Identification of Layers**

Per Commission guidance, a list of relative data was compiled, and various layers were either found, or drawn in from both historical and current digital and hard-copy maps. Commission members and local agencies provided the opportunity to add layers of local concern.

The Beltway Commission, with input from state, regional, and local agencies, as well as LADOTD staff and the public, examined opportunities and constraints in the study area considering conservation, countryside, centers and communities, and corridors, such as roads, rail, pipelines, utilities, etc.

### **Step 2: Relative Ranking Layer Assignments**

Rankings were assigned to layers to assist with the analysis. These assignments allowed customized analysis based on importance, uniqueness, and sensitivity of resources with input from the steering committee.

Individual GIS data layers were assigned a ranking, based on steering committee input, to create a land suitability map. Once GIS layers were selected, rankings were applied to each layer to better assist with identifying unique and critical resources. For instance, we can rank distance from a particular feature within a layer in a numerical format to illustrate either a positive or negative output in relation to a corridor. Each layer was normalized to a 1-10 scale with 1 being the most positive, and 10 being the most negative.

Table 1 shows the final ranking criteria and weightings adopted by the Commission August 29, 2019.

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Table 1: Final Adopted Ranking Criteria

Beltway Ranking Criteria			Points Basis			
GEOLOGY	Elevation	Wetlands	Showstopper (no mitigation)	-100		
		Flood Depth	Variance from Base Flood Elevation (BFE)	Points: < -7.5ft (-100); -7.5 to -5ft(-75); -5 to -2.5ft(-50); -2.5 to 0ft(-25); @BFE (0 points); 0 to .5ft (25); .5 - 2ft(50); >2ft(100)		
		Blue Line Access	(rivers and receiving streams)	Points: 0 - .5 mi (25); .5 - 1mi (15); 1 - 1.5mi(10); 1.5 - 2mi(5); No Access (0)		
	Land	Land Type	Federal Lands		-50	
			Other Land Constraints (Borrow Pits, Lakes, Forest Area)		-50	
			Archaeological		-25	
			Cemeteries		-100	
		Land Ownership	Public		50	
			Private		0	
	Trusts/Commissions			25		
Developable Land Size	> 15 acres		100			
	5 - 15 acres		75			
	< 5 acres		25			
INFRASTRUCTURE	Utilities	Existing Network Access	Sewer	>2 mi Community Sys. (0); closest (max points) 25 intervals every 1/4 mi. Points: 0 - .25 mi (50); .25 - .50mi (35); .50 - 1mi (25); 1 - 2mi (10); >2mi (0)		
			Water	at/near existing water lines max points Points: 0 - .25 mi (25); .25 - .50mi (20); .50 - 1mi (15); 1 - 2mi (10); >2mi (0)		
			Electric	at/near existing electric lines max points (1/2 mi interval) Points: 0 - .50 mi (25); .50 - 1mi (20); 1 - 1.5mi (15); 1.5 - 2mi (10); >2mi (0)		
			Fiber Optic	at/near existing network max points (1/2 mi interval) Points: 0 - .50 mi (25); .50 - 1mi (20); 1 - 1.5mi (15); 1.5 - 2mi (10); >2mi (0)		
			Gas	if available (+10) else (0)		
	Roadway	R.O.W Availability	Cost + acquisition plausibility	Current Development: Fully developed 100% (-25); Half developed 50% (0) ; Green field 0% (25)		
		Traffic Volume Served	Based on LRTP model	Handling Traffic: Most (15); Mid (10) and Least (5)		
		Proximity to	Industrial Corridor (certified sites)	Adjacent Location: Points: 0 - .5mi (15); .5 - 1mi(10); 1 - 2mi(5); >2mi (0)		
			Rail Corridor	Adjacent Location: Points: 0 - .5mi (25); .5 - 1mi(10); 1 - 2mi(5); >2mi (0)		
	Dated: August 29, 2019					

### Step 3: Land Suitability Mapping

The analysis began with the creation of base maps for the project study area and the development of a Land Suitability Map (LSM) that would be the final overlay used to analyze locations that were least suitable for a transportation corridor. The resulting map represented “areas of opportunity” for further analysis and evaluation of potentially feasible corridors that are an optimal fit for the study area.

The ArcGIS Spatial Analyst extension tool was used to create and convert grid layers to prepare them for input into the LSM. Application of adopted ranking criteria and weights were then mapped and presented in layers, by feature. Rankings were plotted in the LSM using a gradient to identify areas ranging from low sensitivity (least number of features) in green to high sensitivity in red. For example, we started with electric transmission lines for Rapides Parish. A) The feature layer for the electric lines is comprised of line data representing electric lines. B) This feature layer was converted into a raster image. The raster image is comprised of individual pixels which, for our purpose, measure .25 miles per pixel. C) Using the euclidean distance tool, we were able to classify each pixel in the image by distance. D) Using the re-classify tool, we can normalized each pixel distance from our original feature.

Figure 2: Feature Layer Development

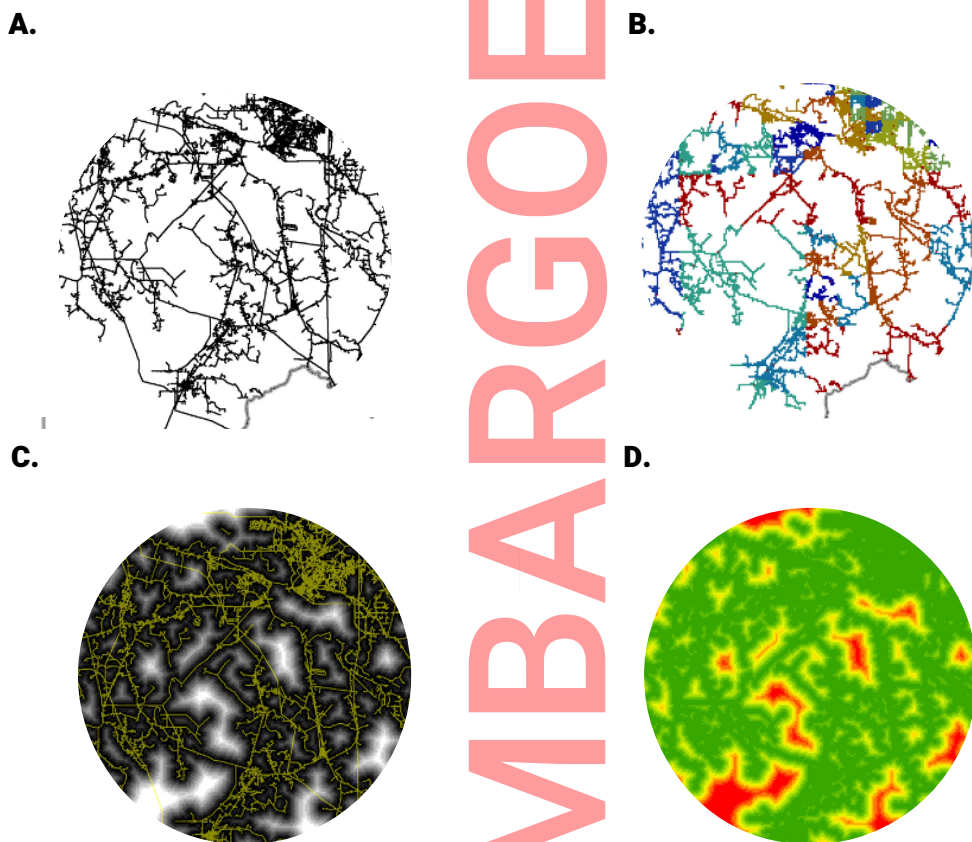
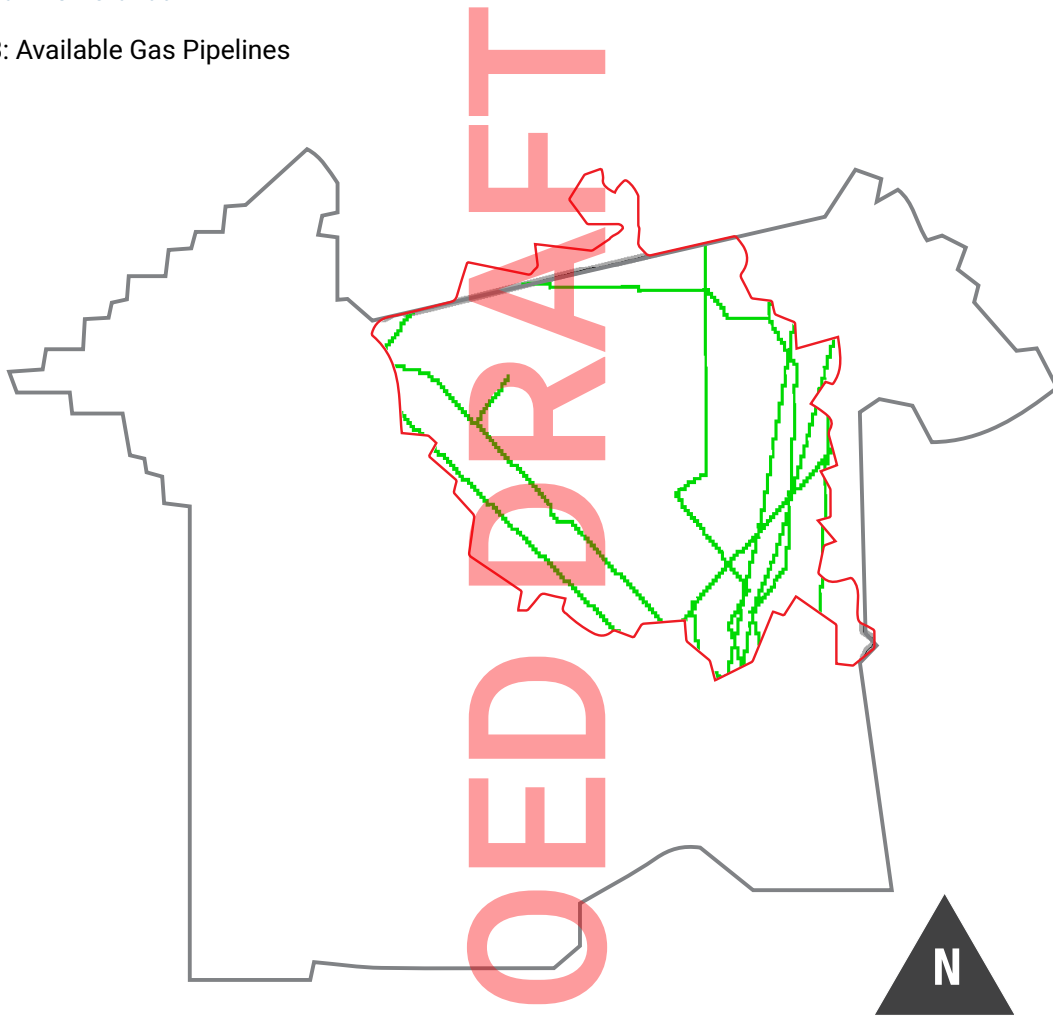


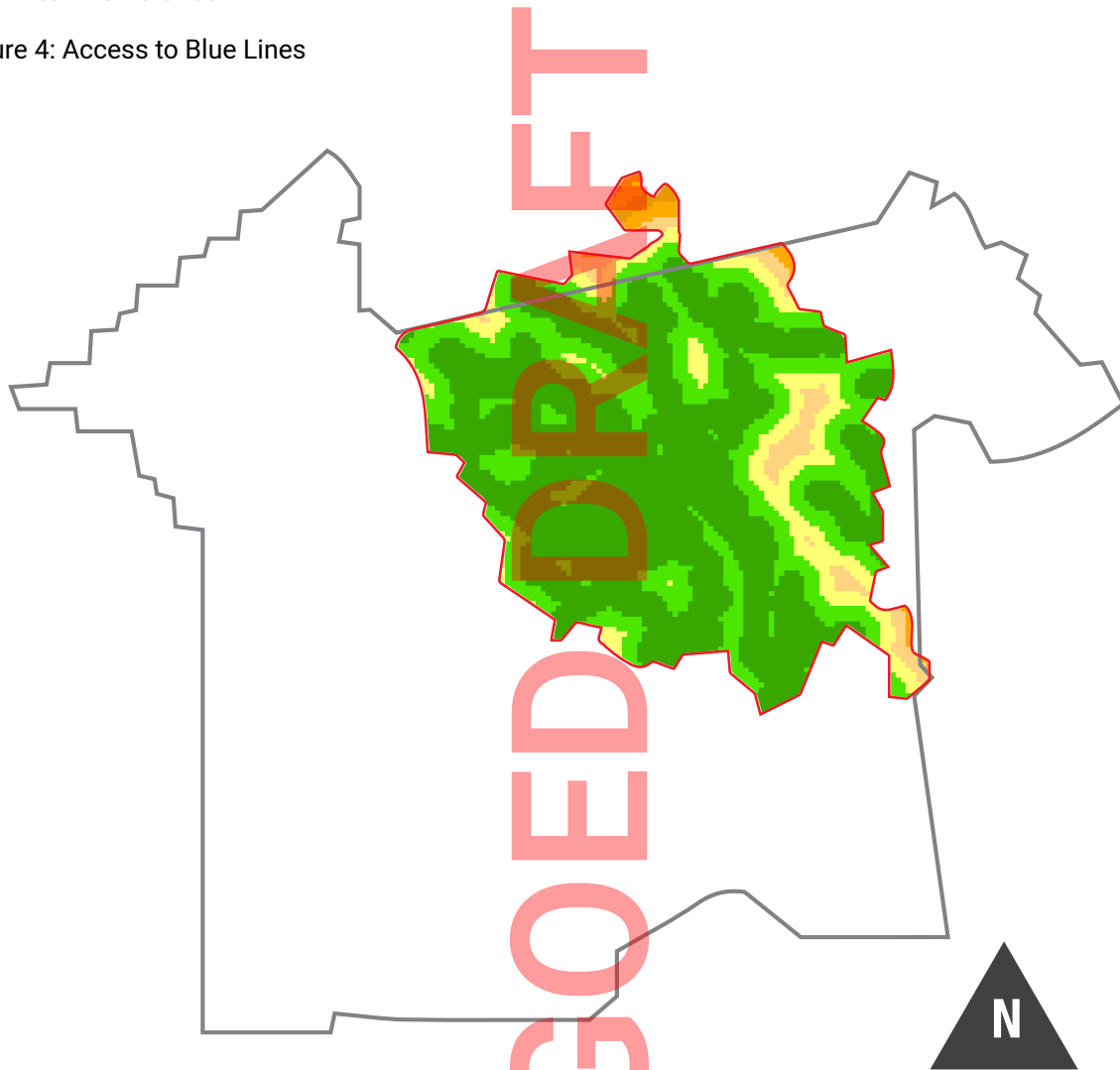
Figure 3: Available Gas Pipelines



**AVAILABLE GAS PIPELINES**

This layer used data from available Louisiana Mid Continent Oil and Gas Association maps to illustrate available gas lines that exist already within the study area (MPA). Pixels were ranked by distance, with those at or near the feature having the highest number of points.

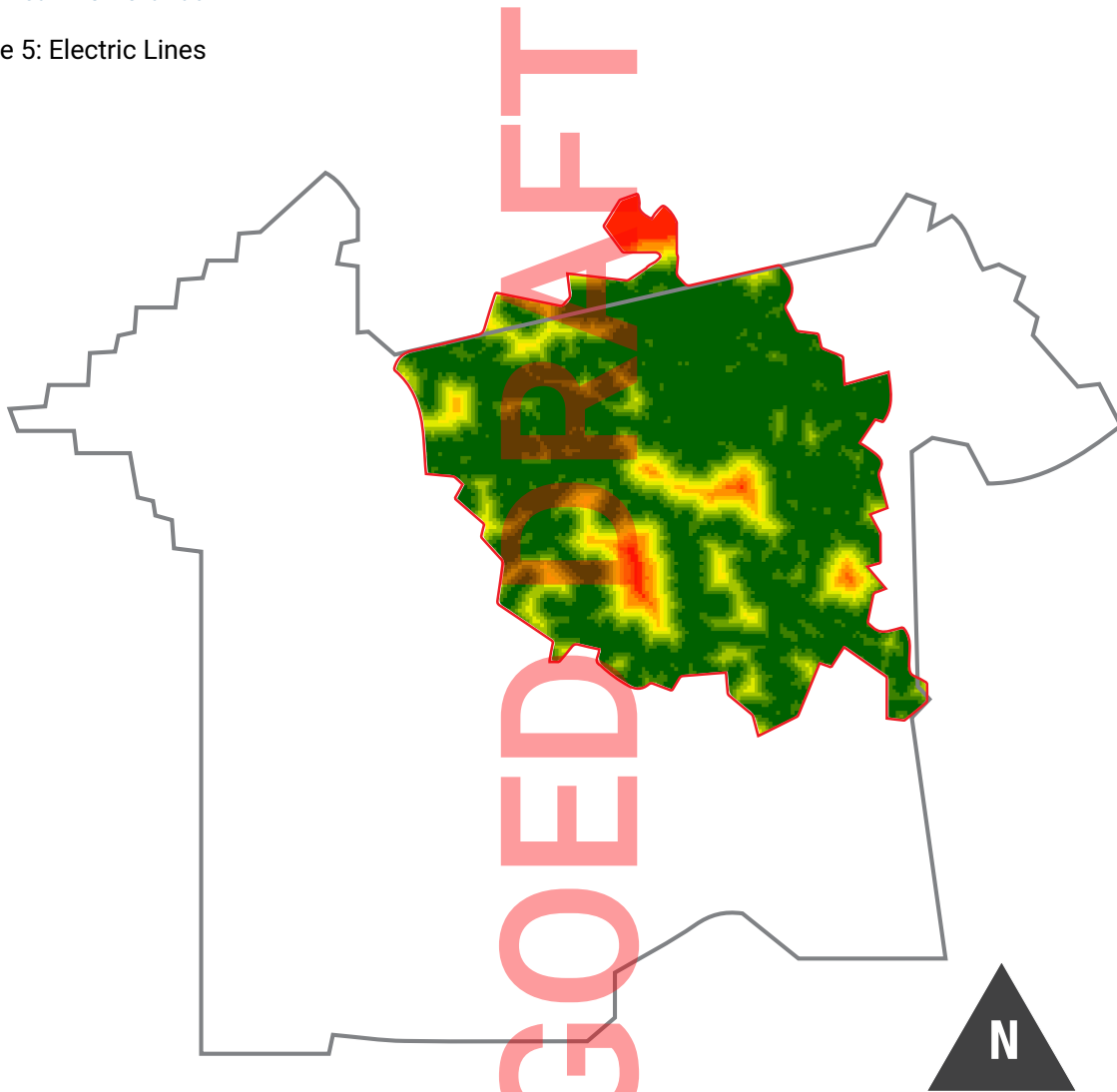
Figure 4: Access to Blue Lines



### ACCESS TO BLUE LINES

This layer used a mix of RAPC data and United States Geological Survey (USGS) Quadrangle Base Maps (QUAD) to illustrate access to linear water features, such as rivers and streams. It provides the linear water features for geographic display and analysis. Pixels were ranked by distance, with those at or near the feature having the highest number of points.

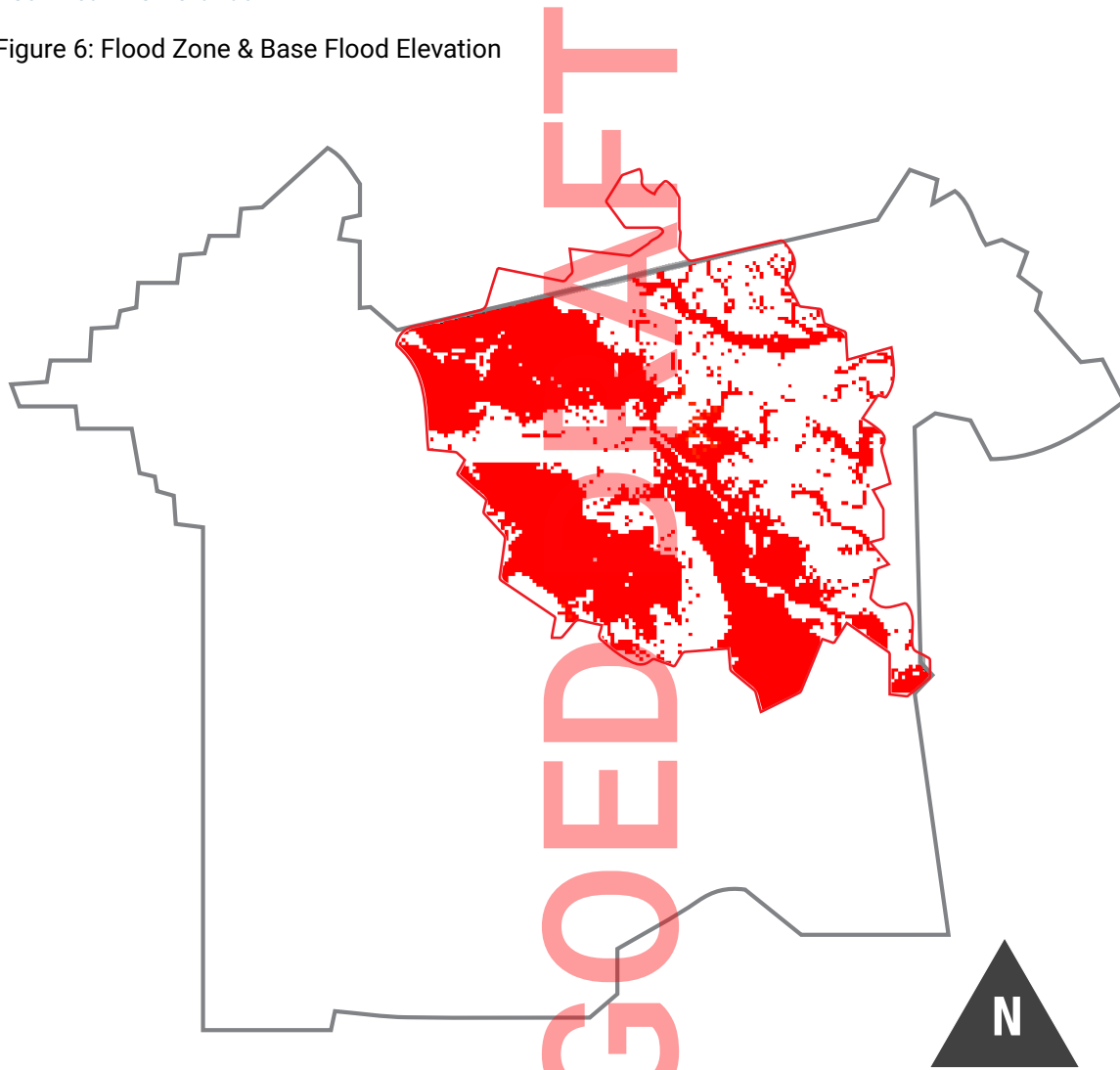
Figure 5: Electric Lines



### **ELECTRIC LINES**

This layer used CLECO data to illustrate all transmission lines inside Rapides Parish. Pixels were ranked by distance, with those at or near the feature having the highest number of points.

Figure 6: Flood Zone & Base Flood Elevation



### FLOOD ZONE & BASE FLOOD ELEVATION

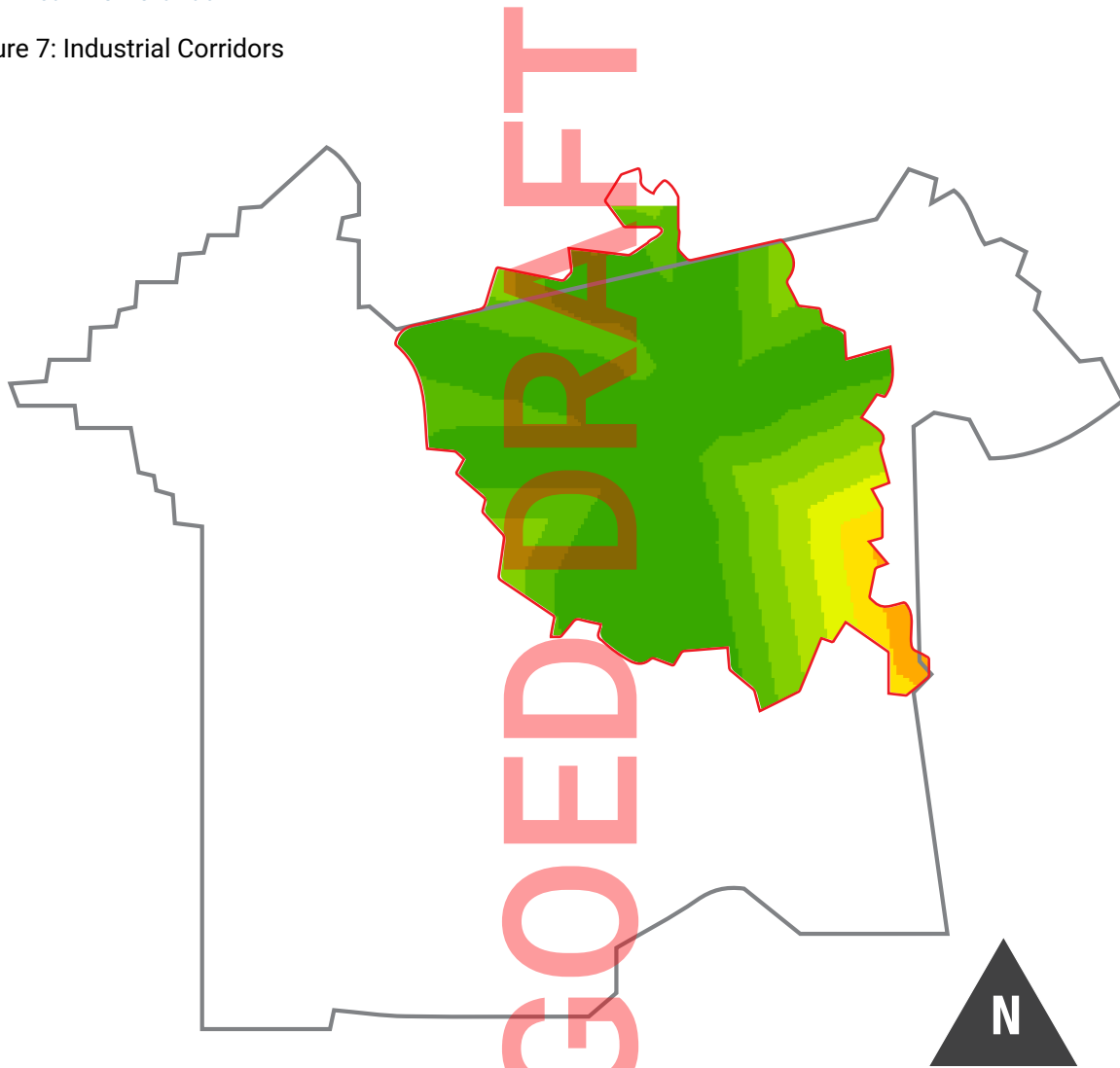
This layer used FEMA flood zone maps to illustrate base flood elevation. Essentially, the computed elevation to which floodwater is anticipated to rise during the base flood. Base Flood Elevations (BFEs) are also shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles.<sup>2</sup> Zone A's area areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies.<sup>3</sup> Pixels located in flood profiles were ranked by points on a 1-10 scale. For example, pixels inside the boundary were ranked 5, pixels outside ranked 10. Pixels located in Zone A's of any kind were assigned a lower score.

<sup>2</sup> [www.FEMA.gov](http://www.FEMA.gov) / DFIRM

<sup>3</sup> [www.FEMA.gov](http://www.FEMA.gov) / ZONE A



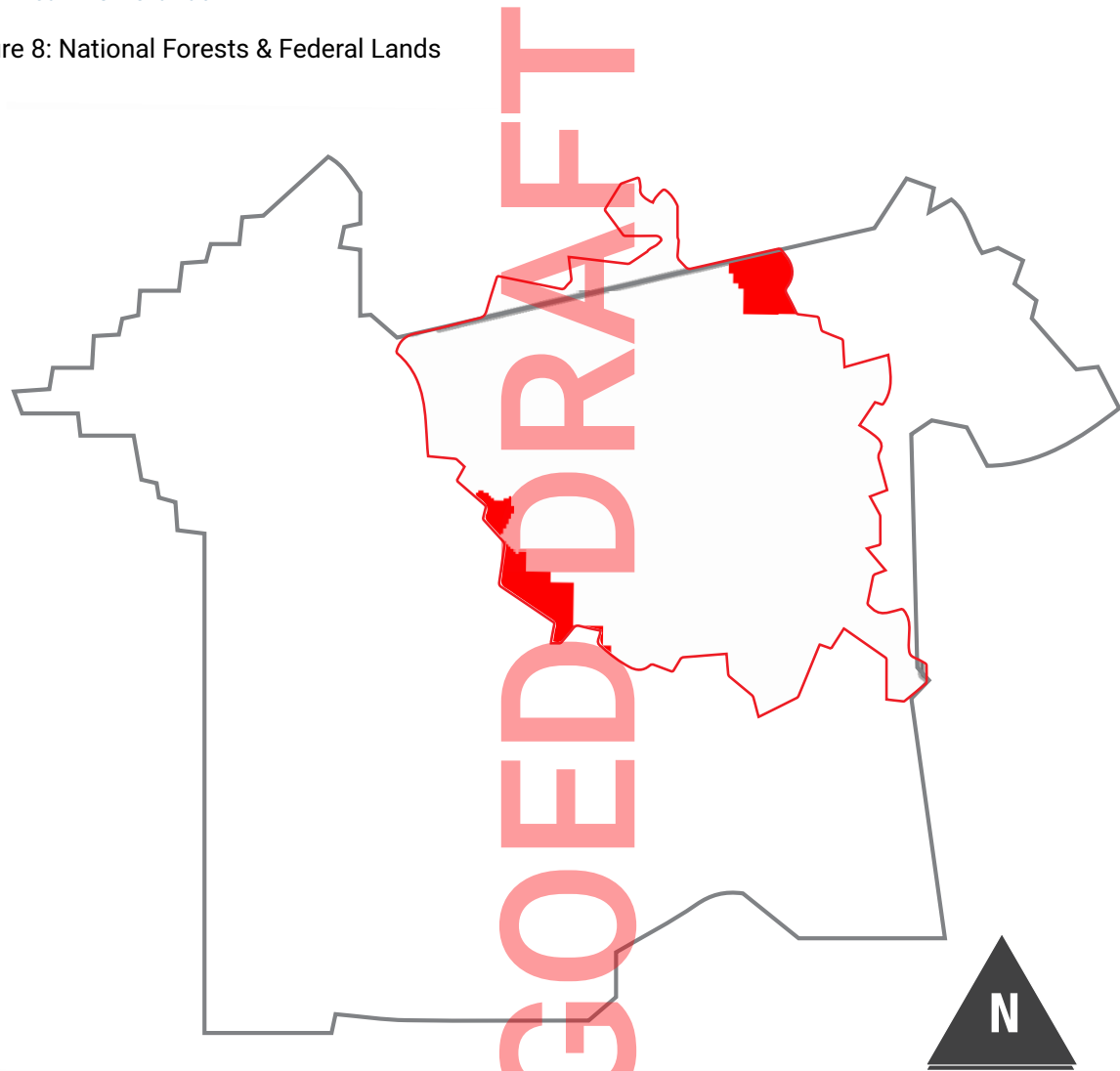
Figure 7: Industrial Corridors



**INDUSTRIAL CORRIDORS**

This layer was created based off RAPC Road Network data. Pixels were ranked by distance, with those at or near the feature having the highest number of points.

Figure 8: National Forests & Federal Lands

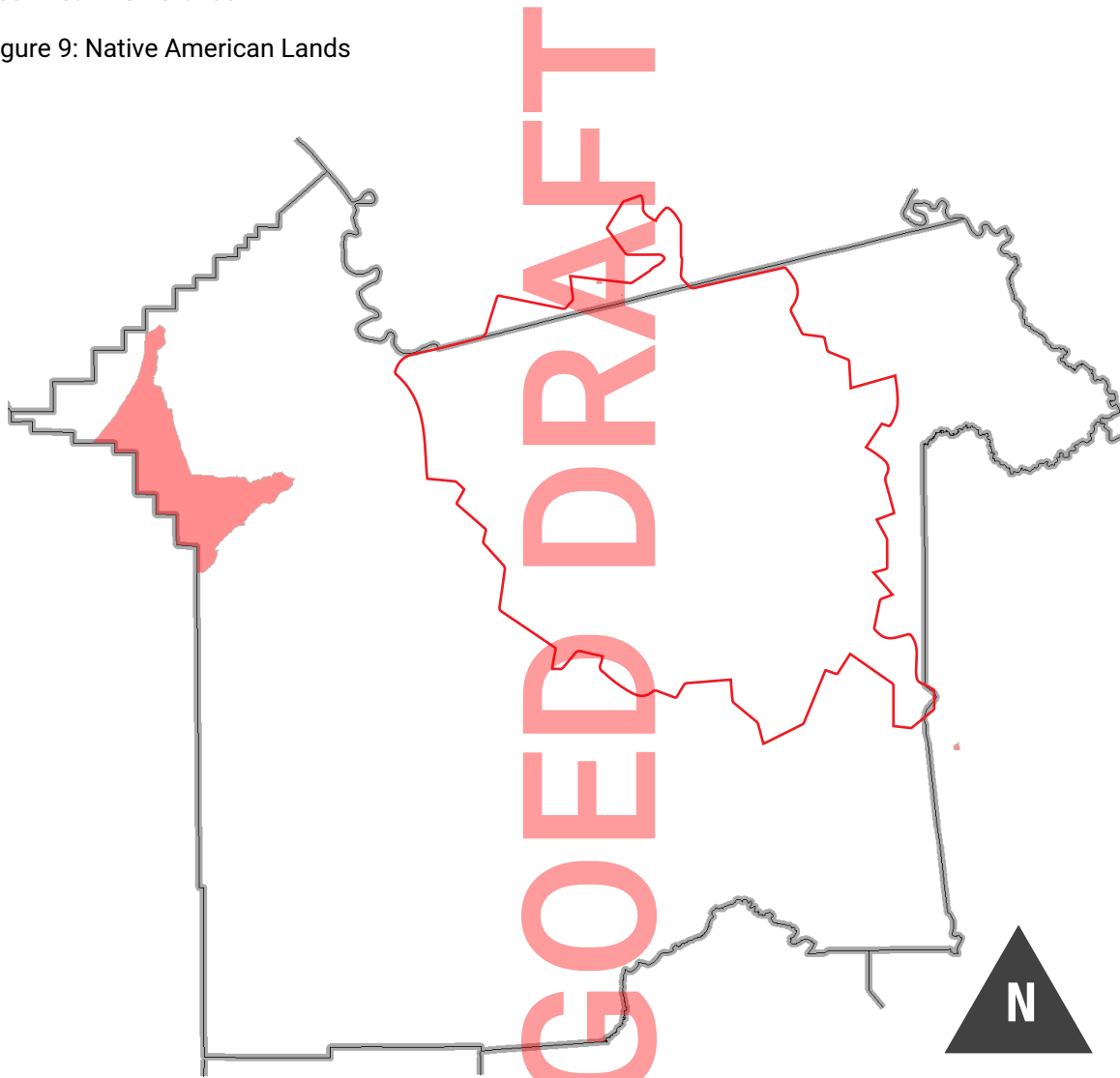


### NATIONAL FORESTS & FEDERAL LANDS

This layer sourced Forestry Service data<sup>4</sup> to identify National Forest and Federal Land features. Pixels located on and off national forests and federal lands were ranked by points on a 1-10 scale. For example, pixels inside the boundary were ranked 5, pixels outside ranked 10.

<sup>4</sup> [www.data.fs.usda.gov](http://www.data.fs.usda.gov)

Figure 9: Native American Lands



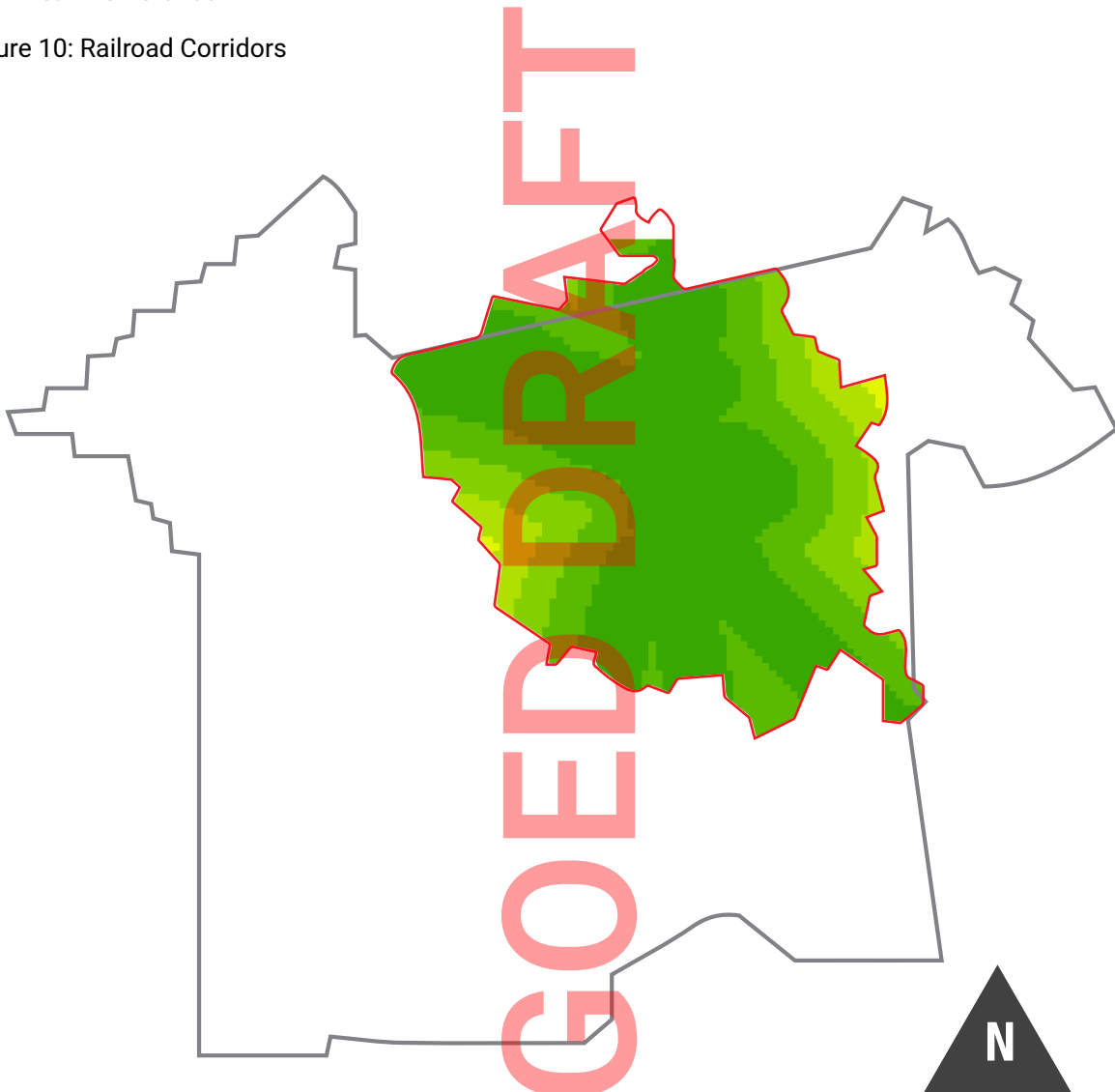
### **NATIVE AMERICAN LANDS**

This layer was created using US Census Bureau<sup>5</sup> and National Atlas data<sup>6</sup>. Pixels located on and off Native American lands were ranked by points on a 1-10 scale. For example, pixels inside the boundary were ranked 5, pixels outside ranked 10.

<sup>5</sup> [www.data.gov](http://www.data.gov)

<sup>6</sup> [www.catalog.data.gov](http://www.catalog.data.gov) / US National Atlas Metadata, 2020

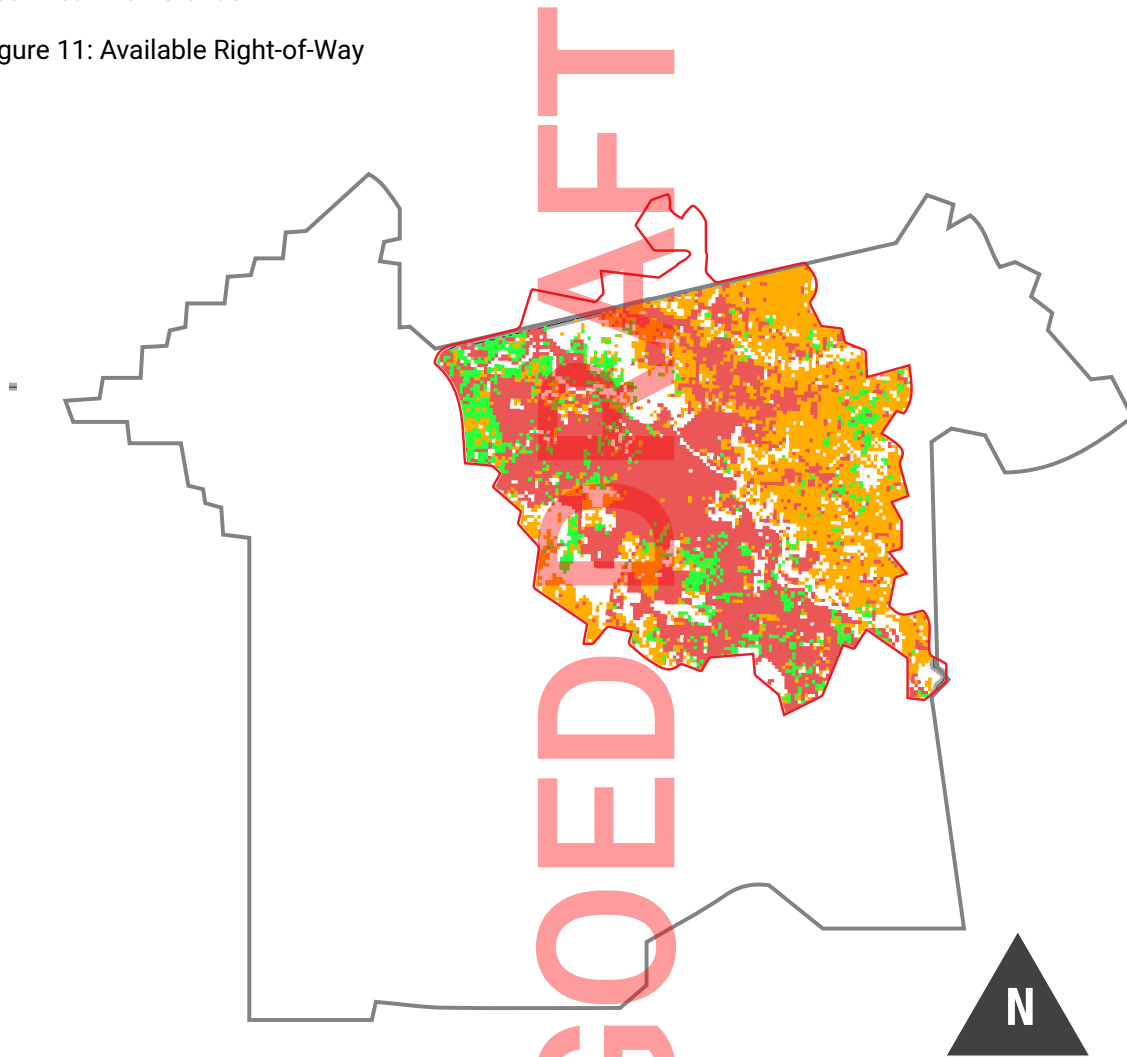
Figure 10: Railroad Corridors



**RAILROAD CORRIDORS**

This layer was created using available RAPC rail network data. Pixels were ranked by distance, with those at or near the feature having the highest number of points.

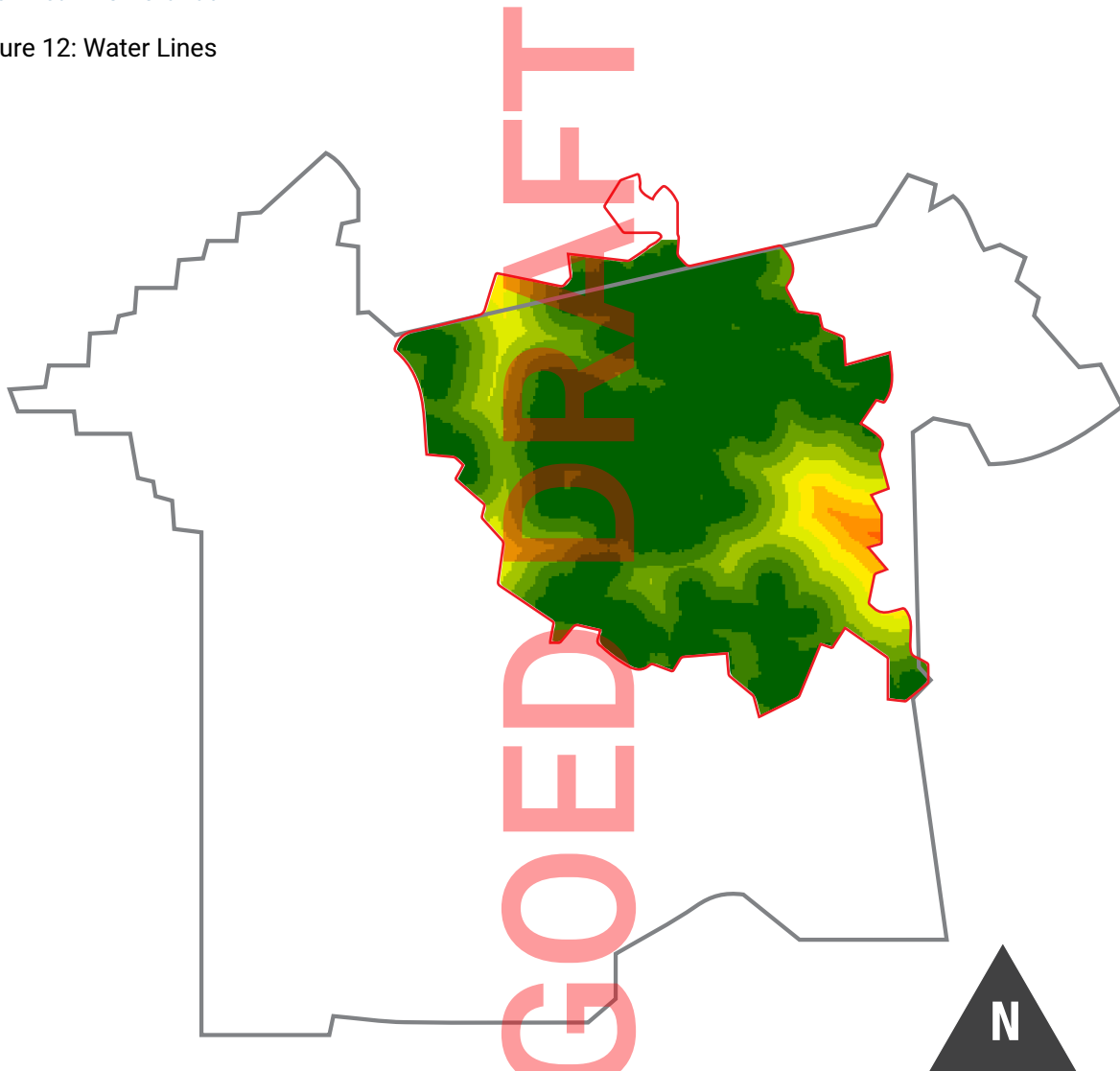
Figure 11: Available Right-of-Way



### AVAILABLE RIGHT OF WAY

This layer was created using LSU-Ag Center land use data and illustrates developed, half developed, and green field areas. Pixels located in urbanized areas (developed) areas were ranked lower, while undeveloped (open fields) land ranked higher.

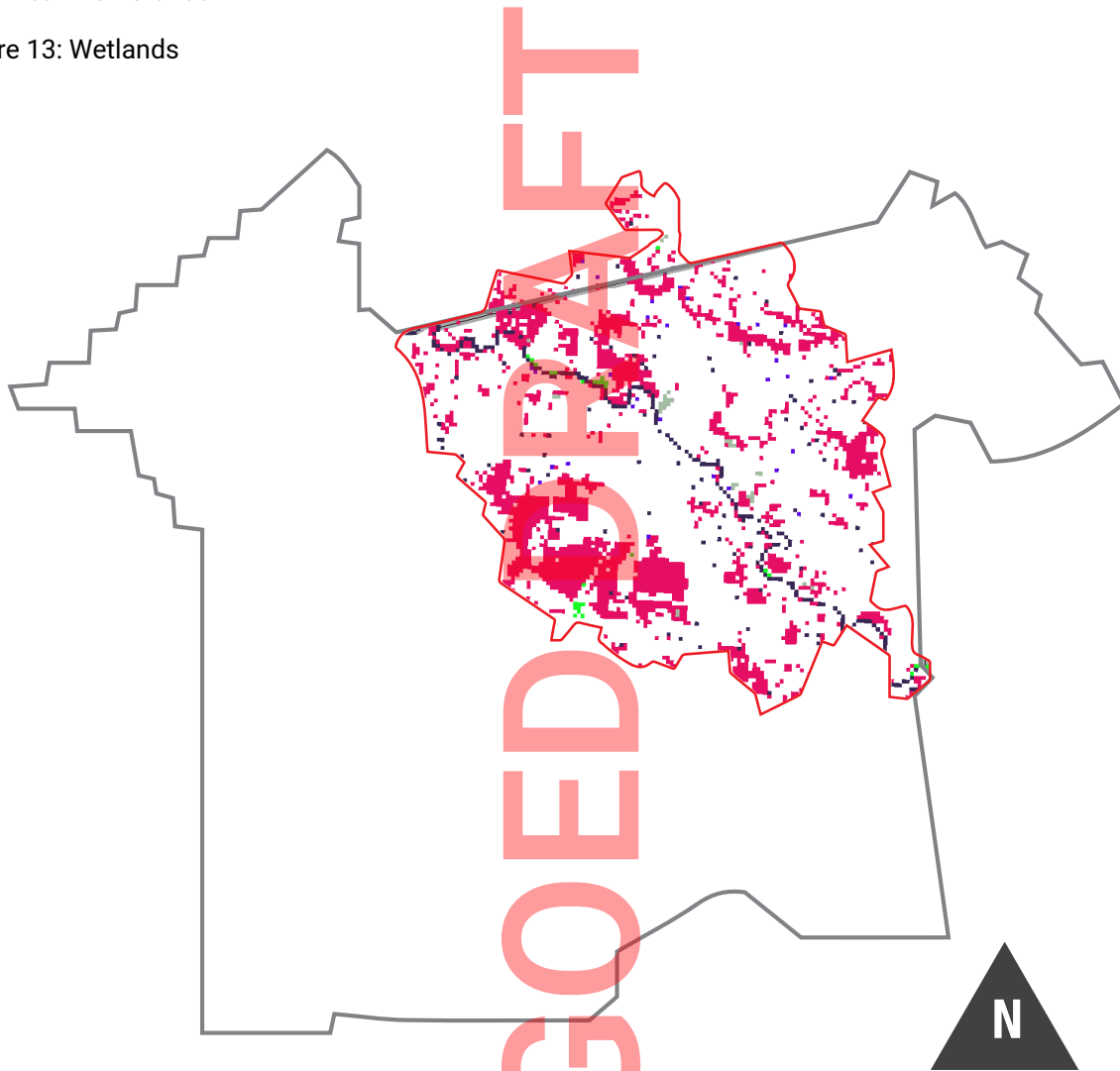
Figure 12: Water Lines



### WATER LINES

This layer combined existing RAPC data with available Parish maps to illustrate areas at or near water lines. Pixels were ranked by distance, with those at or near the feature having the highest number of points.

Figure 13: Wetlands



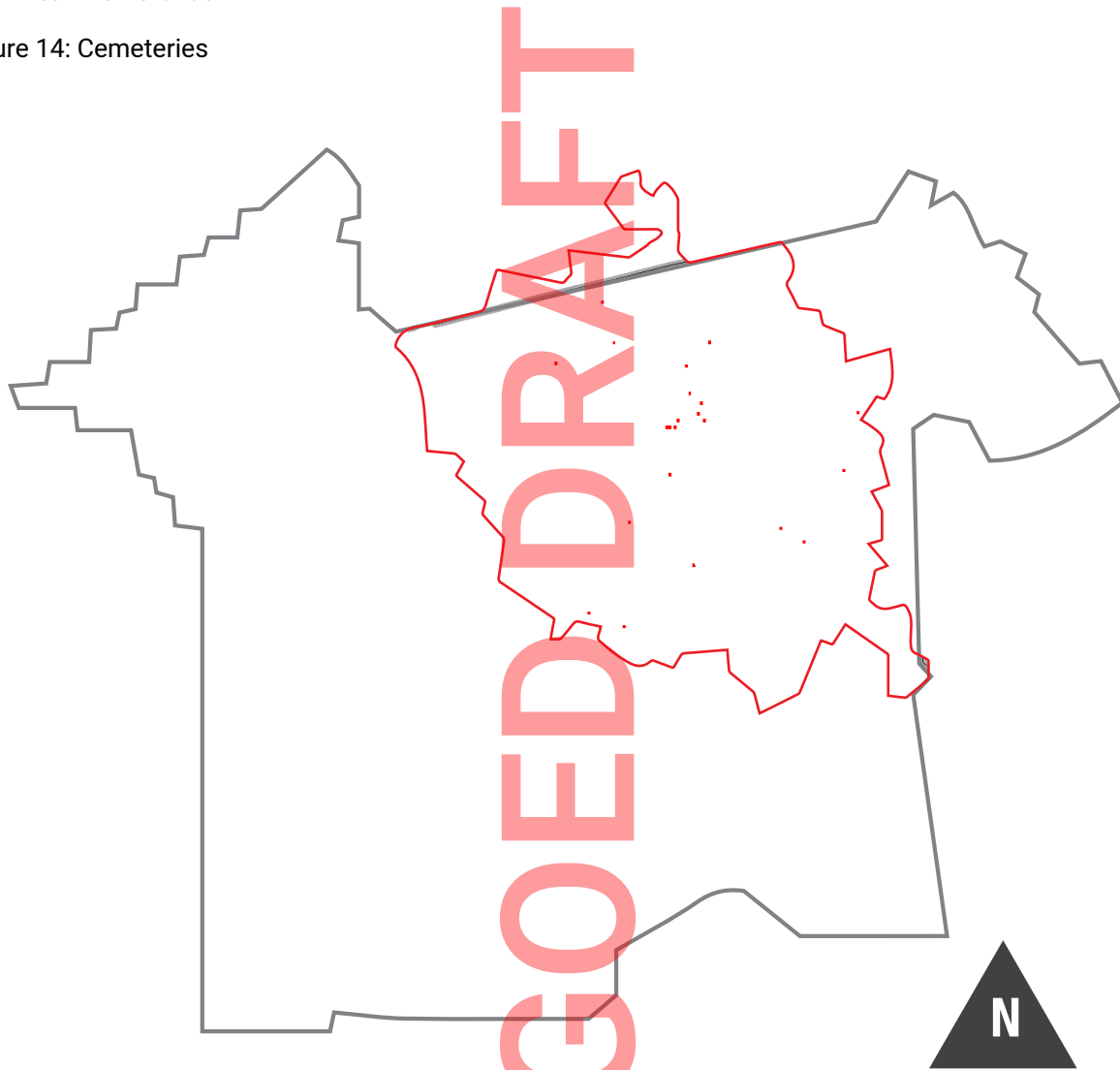
## WETLANDS

Through experience with the study area and knowledge of other similar studies, wetlands permitting, and mitigation projects, this layer was created using FEMA Flood Map<sup>7</sup> data and US Fish and Wildlife Service National Wetlands Inventory to illustrate wetland areas.<sup>8</sup> Pixels located on and off wetlands were ranked by points on a 1-10 scale. For example, pixels inside the boundary were ranked 0, pixels outside ranked 10.

<sup>7</sup> [www.FEMA.gov](http://www.FEMA.gov) / FIRM

<sup>8</sup> [www.fws.gov](http://www.fws.gov) / WETLANDS / MAPPER

Figure 14: Cemeteries

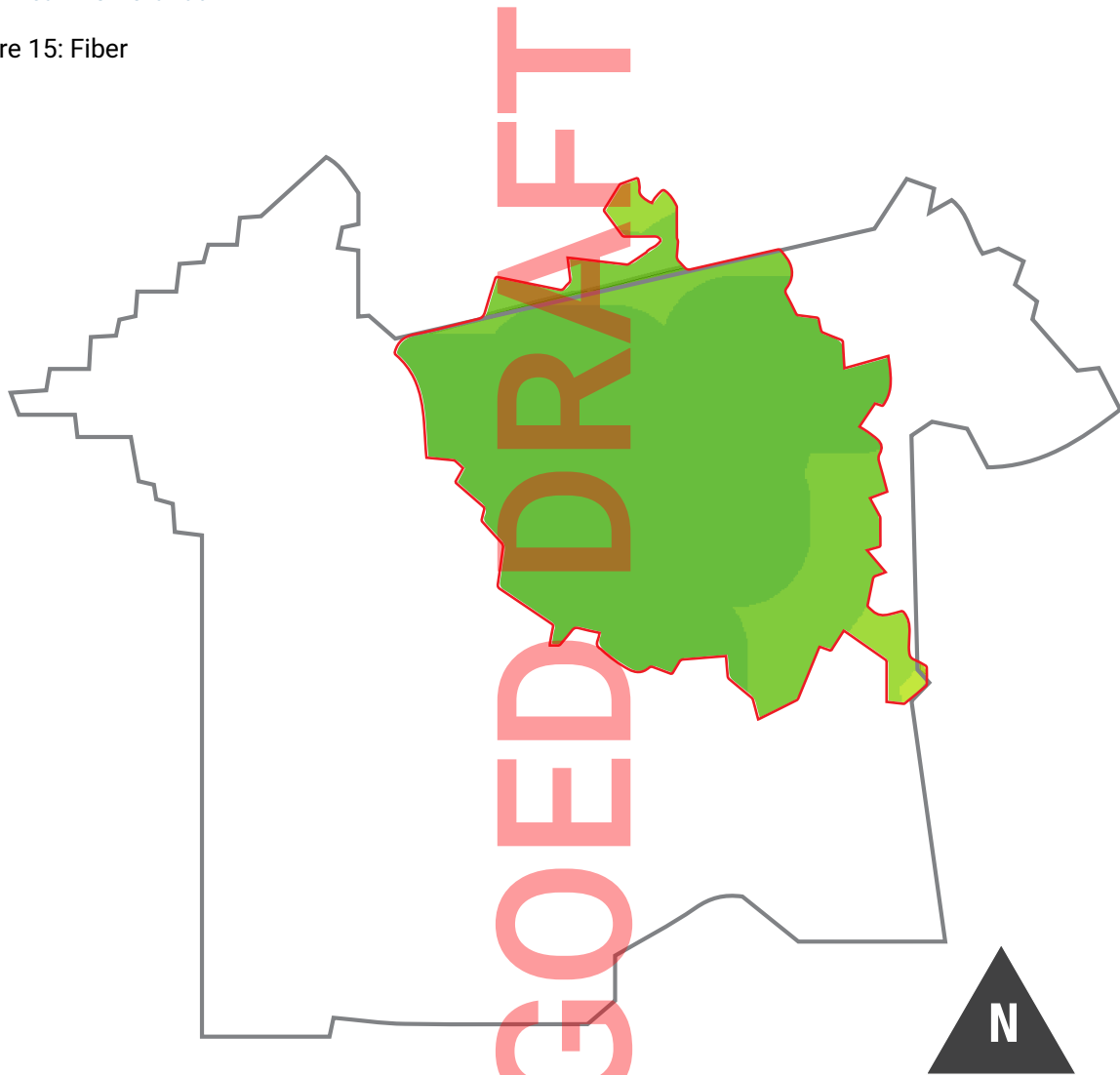


### CEMETARIES

This layer was created using available RAPC land use data to illustrate as close as possible to the actual footprint of each cemetery. Pixels located on and off cemeteries were ranked by points on a 1-10 scale. For example, pixels inside the boundary were ranked 0, pixels outside ranked 10.



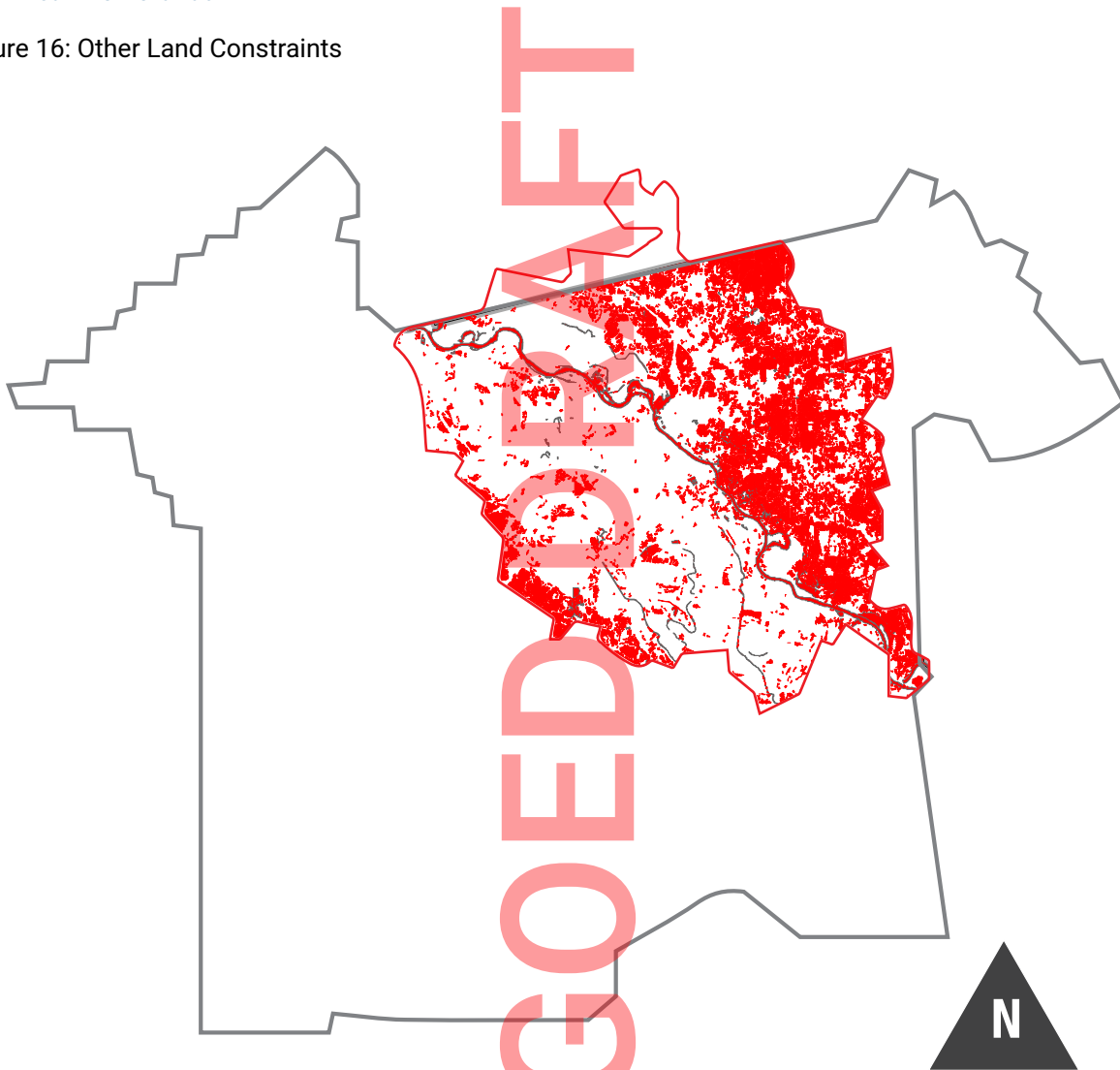
Figure 15: Fiber



**FIBER**

This layer was created combining available AT&T, Verizon, and Kinetix fiber maps. Pixels were ranked by distance, with those at or near to the feature having the highest number of points.

Figure 16: Other Land Constraints



### **OTHER LAND USE CONSTRAINTS**

This layer was based off LSU Ag Center land use data combined with other land constraints that could substantial additional costs, such as borrow hits, forested areas, and lakes. Pixels located on and off these features were ranked by points on a 1-10 scale. For example, pixels inside the boundary were ranked 5, pixels outside ranked 10.

### BELTWAY TRAFFIC ANALYSIS

As part of the AP-MPO Metropolitan Planning process in 2016, RAPC conducted a traffic volume analysis to determine the impact a full beltway scenario would have by 2040 compared to not being built. Travel times are included in Table 2 and were used to model the beltway’s impact on travel times comparing exiting conditions in 2015, a no-build scenario in 2014, and a full loop scenario in 2040.

Table 2: Summary of Travel Time Routes<sup>9</sup>

Locations	Travel Time (Minutes)							
	AM Peak				PM Peak			
	Existing	2040 NB	Souther Loop	Full Loop	Existing	2040 NB	Souther Loop	Full Loop
US 71/167 S to Walmart-Pine	12	13	12-16	11-15	12	12-16	12-16	10-14
Walmart-Pine to US 71/167 S	13	13-17	12-16	11-15	13	14-20	13-19	12-18
US 71/167 S to LA 28 W	19	22-30	17-25	17-25	21	25-39	19-33	19-33
LA 28 W to US 71/167 S	18	21-29	16-24	17-25	20	23-35	18-30	18-30
US 71/167 S to Airport	14	16-20	16-20	16-20	14	16-20	16-20	17-21
Airport to US 71/167 S	14	16-20	16-20	17-21	14	16	17	17
US 71/167 S to Coliseum	14	16-23	15-22	14-21	15	17-28	16-27	16-27
Coliseum to US 71/167 S	11	13-20	12-20	12-20	13	15-24	14-23	14-23
US 71/167 S to City Hall	8	9	9	9	8	9	9	9
City Hall to US 71/167 S	8	9	9	9	8	9	9	9
US 71/167 S to LA College	10	11	11	10	9	10-12	9-11	9-11
LA College to US 71/167 S	10	11	10	9	9	10	10	9
Walmart-Pine to LA 28 W	22	22-34	21-33	19	22	23-35	22-34	21-33
LA 28 W to Walmart-Pine	22	22-32	21-31	20-30	26	26-45	24-43	22-41
Walmart-Pine to Mall	13	13-19	12-18	11-17	15	15-23	15-23	13-21
Mall to Walmart-Pine	13	13-19	13-19	12-18	15	15-21	14-20	12-18
Walmart-Pine to Airport	15	15-21	14-20	13-19	16	16-24	15-23	14-22
Airport to Walmart-Pine	16	16-20	16-20	15-19	17	17-23	16-22	14-20
Walmart-Pine to Coliseum	16	15-25	14-24	12-22	15	15-25	14-24	13-23
Coliseum to Walmart-Pine	16	16-26	16-26	14-24	17	17-27	15-25	13-23
Walmart-Pine to City Hall	12	10-15	9-14	8-13	12	11-16	11-16	10-15
City Hall to Walmart-Pine	12	13-18	13-18	12-17	12	11-15	11-15	10-14
LA 28 W to Mall	18	21-27	19-25	20-26	19	22-32	20-30	20-30
Mall to LA 28 W	18	20-28	19-27	19-27	21	24-36	23-35	23-35
LA 28 W to Airport	8	9-11	9-11	9-11	8	9-10	9-10	9-10
Airport to LA 28 W	8	9-11	9-11	9-11	8	9-11	9-11	9-11
LA 28 W to City Hall	20	22-30	22-30	21-29	21	23-33	22-32	22-32
City Hall to LA 28 W	18	20-28	19-27	19-27	19	21-31	21-31	21-31
LA 28 W to LA College	20	22-30	21-29	20-28	22	23-35	22-34	21-33
LA College to LA 28 W	21	22-30	21-29	20-28	20	22-30	21-29	20-28



<sup>9</sup> AP-MPO | NeelShaffer, 2020

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**Step 4: Land Suitability Map & Corridor Analysis**

The last step was to use the LSM tool as a guide for developing the corridors such that avoided pixels with the greatest involvement with the various data layers. Using the LSM, three potential routes for future study were then mapped by RAPC based on suitable areas indicated by the LSM. The final overlay was most useful in identifying the areas suitable for a transportation corridor.

The resulting map was presented during the August 29, 2019, joint AP-MPO Transportation Policy Committee and Beltway Commission Meeting.

Figure 17: Land Suitability Map Layers

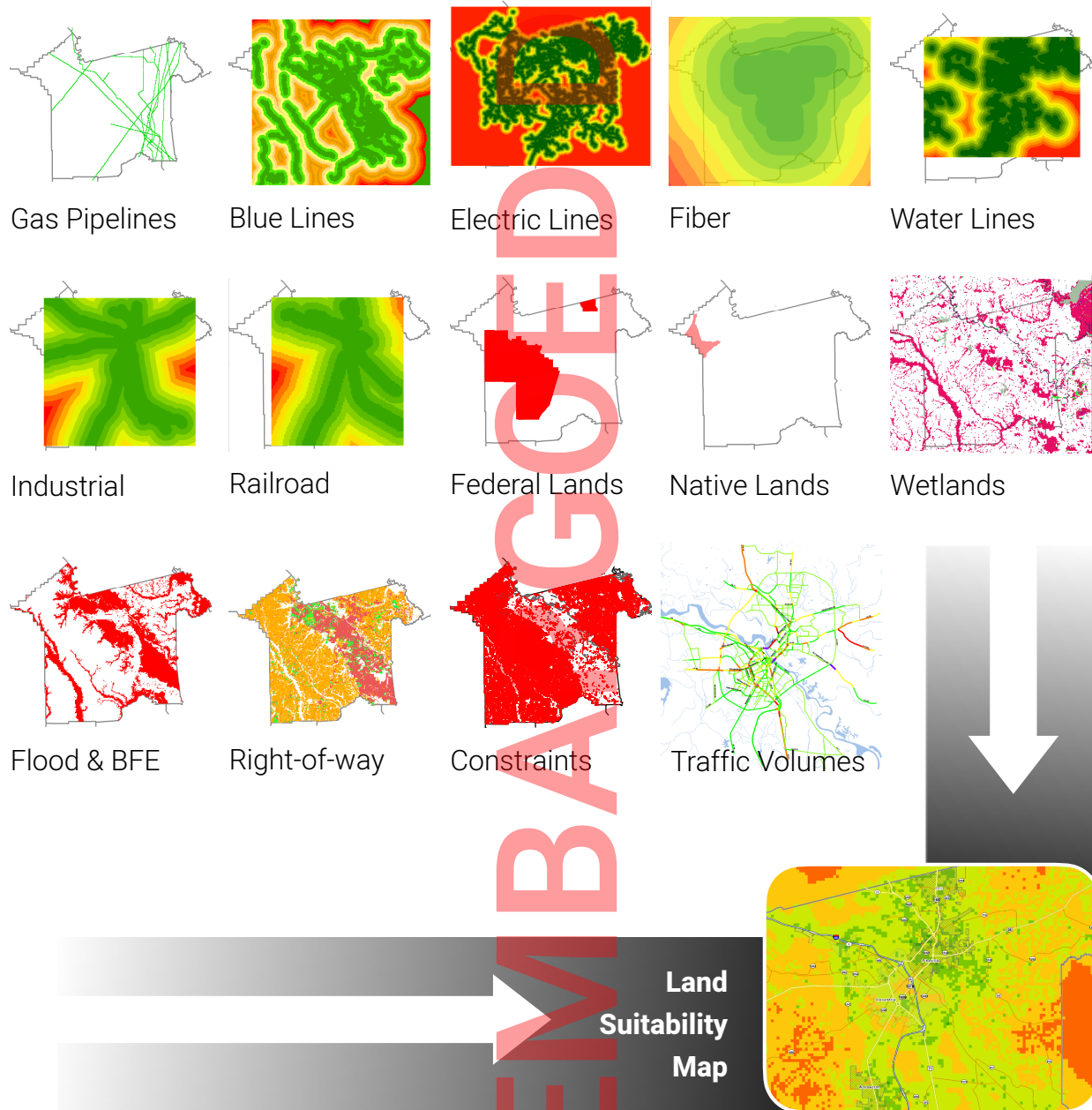
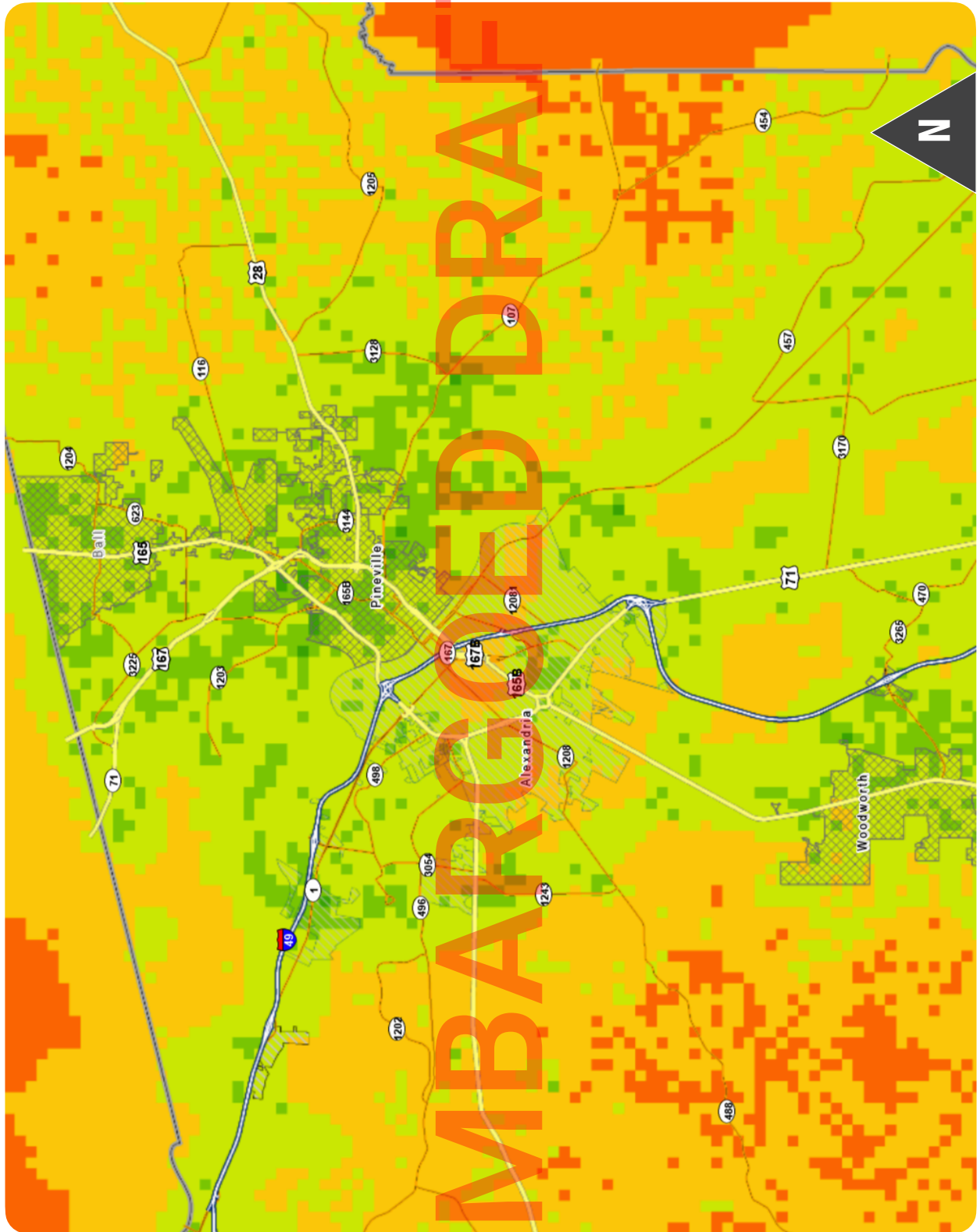


Figure 18: Final Land Suitability Map



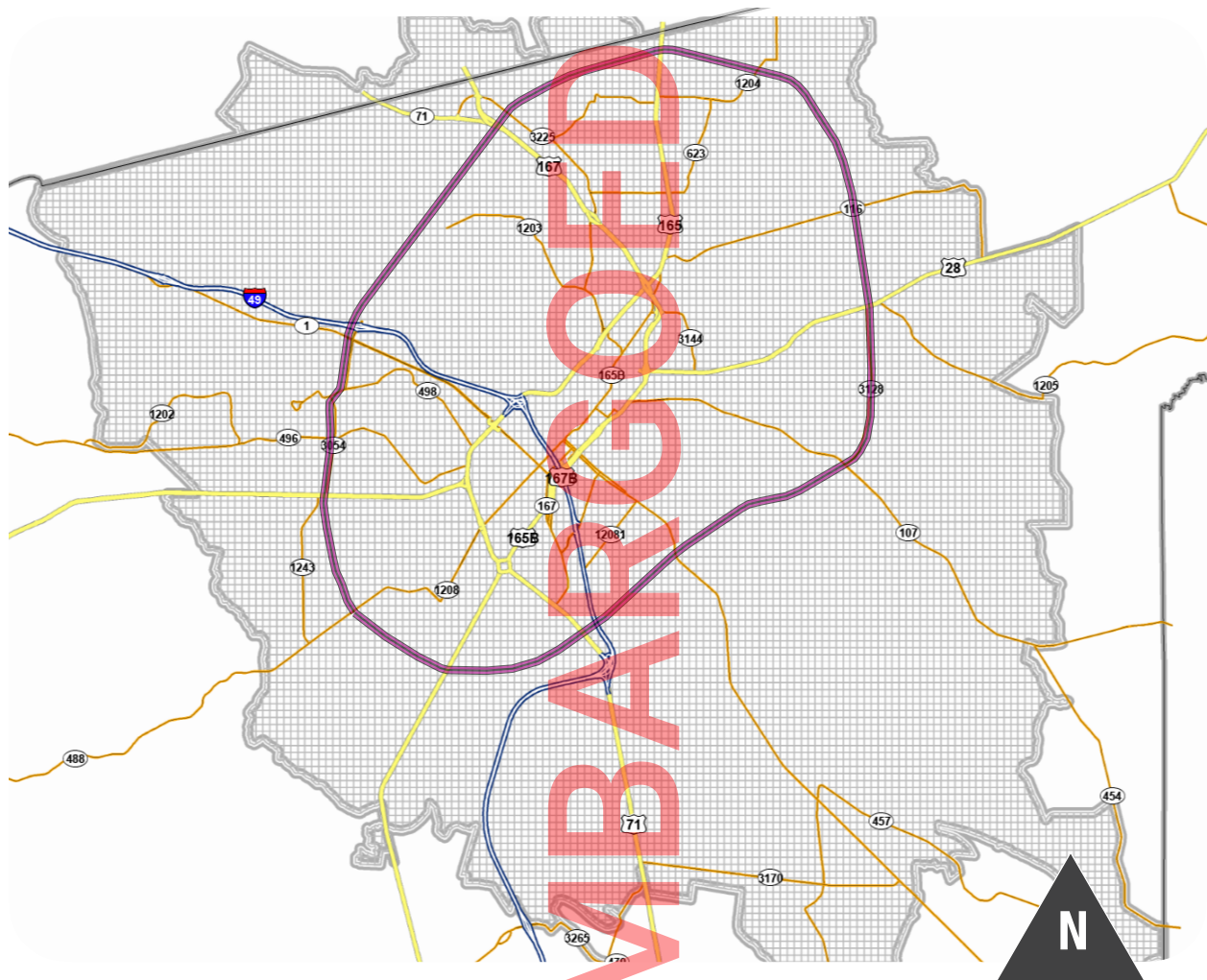
## CORRIDORS

A description of the routes follows. Figures 19 - 21 show the Belts A - C on existing NHS roadways within the MPA. Assuming an additional \$150M to cover loop segments which may be elevated, preliminary costs estimates for the Southern portions for all alternatives ranges between \$950M and \$1.25B.

### Belt A

Belt A is a 46 mile route envisioned by the AP-MPO and NeelShaffer as part of the Metropolitan Transportation Plan 2011 Update. The loop is divided into a 24 mile northern and 22 mile southern portions. It incorporates existing roadways, such as LA Hwy. 3054 (Vandenberg Drive) and LA Hwy. 3128 (Williams Lake Road).

Figure 19: Belt A

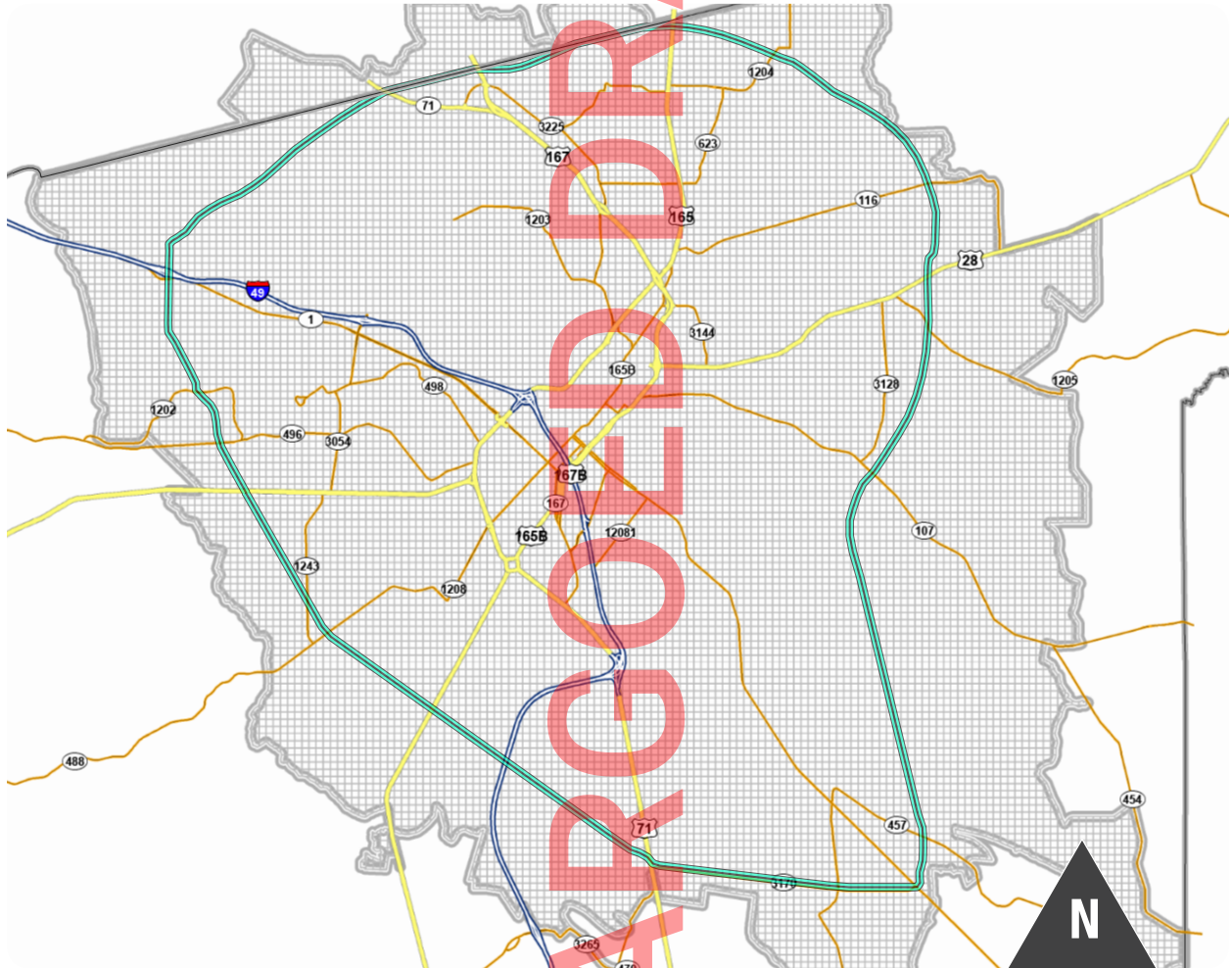


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**Belt B**

Another 55-mile route as envisioned by Randy Gilchrist of Gilchrist Construction that predominantly utilizes parts of existing roadways, such as LA Hwy. 3170, and utility rights-of-way.

Figure 20: Belt B

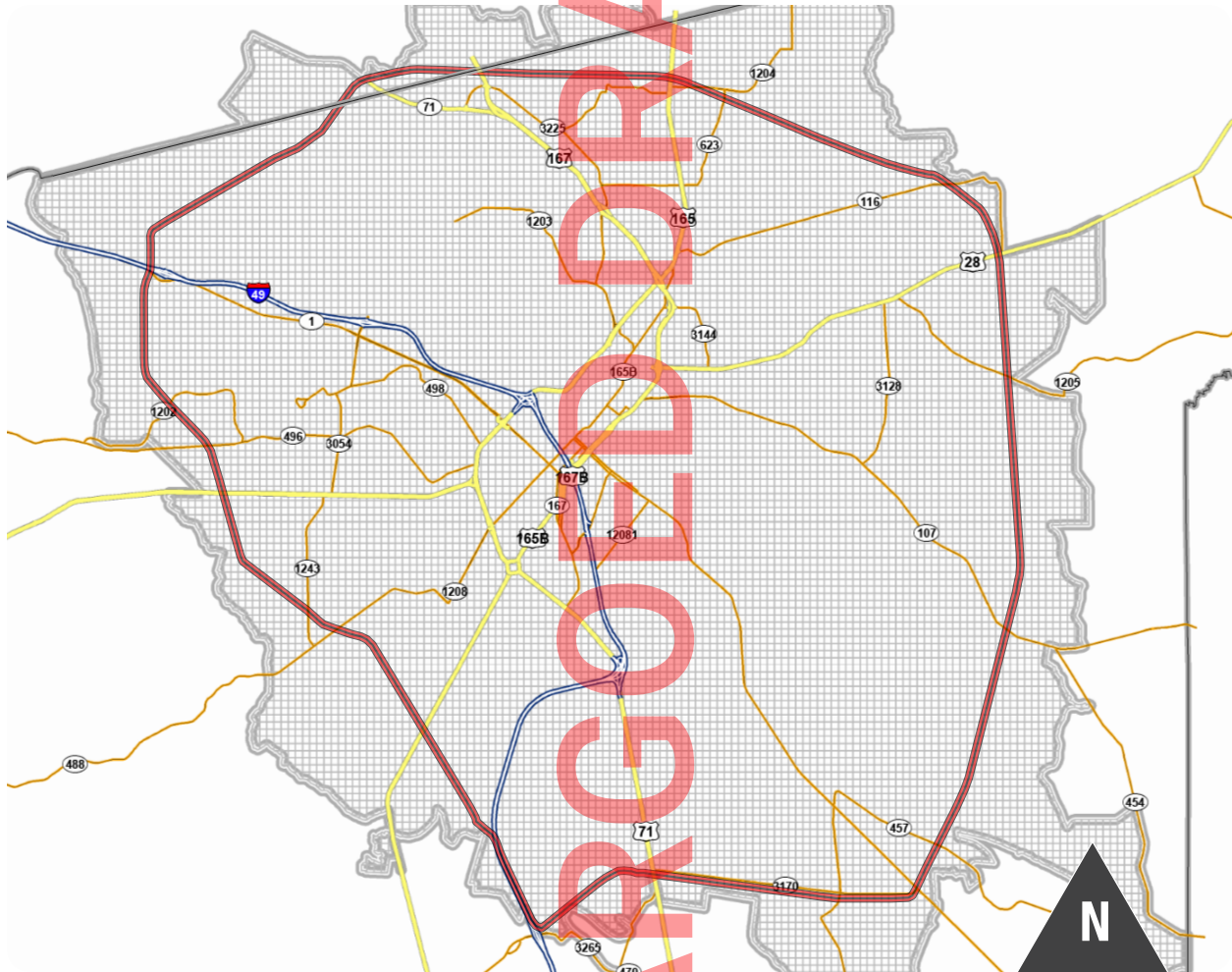


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**Belt C**

The largest, Belt C is a 59 mile route alternative developed by staff and divided into a 30 mile northern and 29 mile southern portions, including LA Hwy. 3170 and I-49.

Figure 21: Belt C





## What's Next?

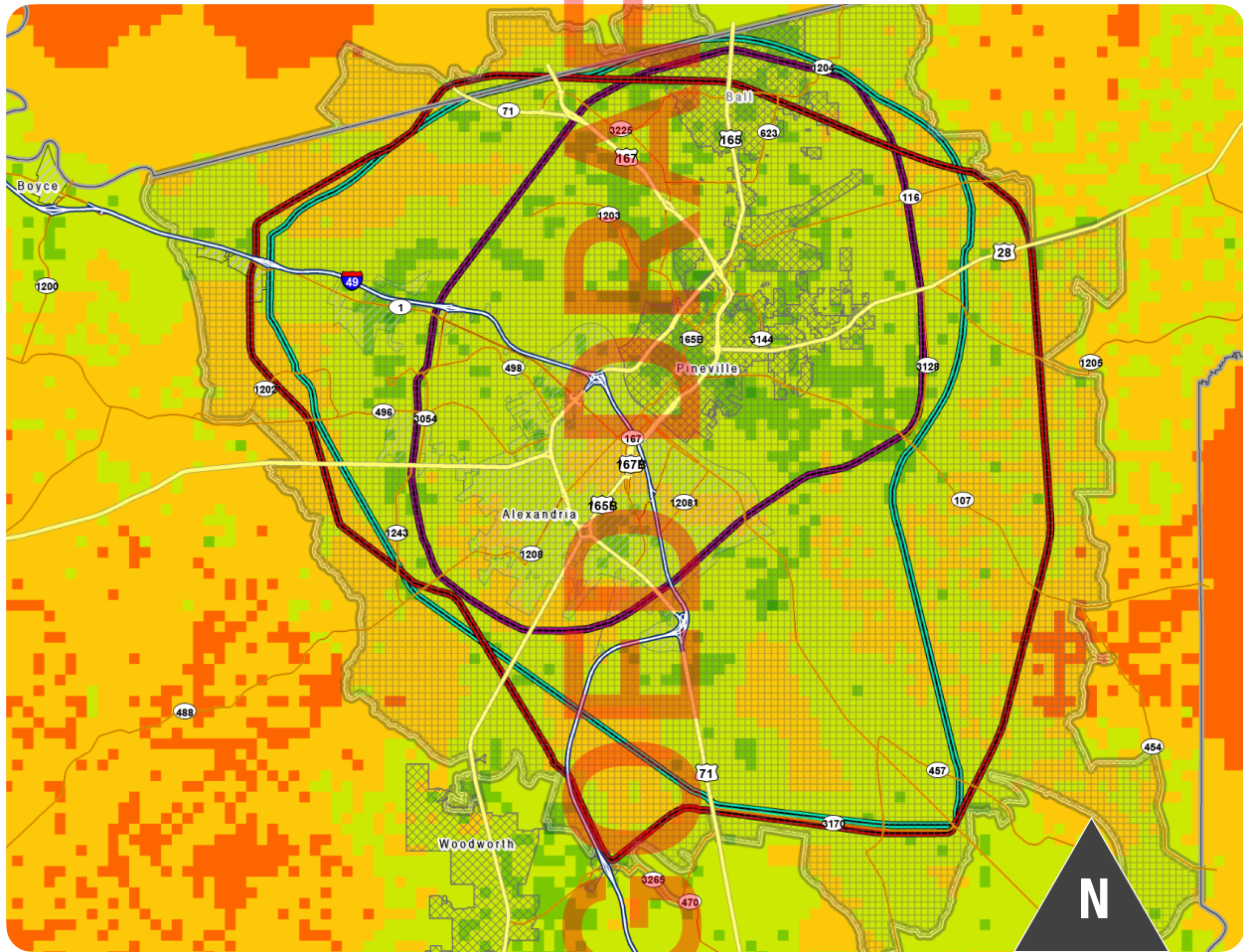


Figure 22: Composite LSM & Corridors

**B**elts A - C were analyzed using the LSM. From this data, they can be reviewed and refined where possible to further avoid or minimize impacts. Upon completion and acceptance of the technical memorandum, choosing the general routing of the beltway will be the next big decision for the commission, then prioritizing segments. This includes obtaining public input, performing a Purpose and Need review, and a social, cultural, natural, and physical environmental impacts analysis.

Staff will then pursue funding for the environmental phase of the first prioritized segment – the environmental review process requires review of alternatives, and this will aid in ultimately deciding the final route configuration for the segment. At this point, the commission may choose to pursue funding for land banking or construction and repeat the process for the next segment. Should any of the proposed routing falls upon existing roadways, the commission may choose to designate existing sections as well.

Figure 22: Final LSM & Corridor Analysis

