



Liberty County Mobility Study



Thomas B. Gray, AICP
Mike Feeney, P.E.
Stakeholder Meeting #1 – May 25, 2021

Agenda



Presentation

1. Introductions
2. Project Overview
3. Open Discussion – Stakeholder Participation
4. Vision and Goals
5. Identified Issues and Needs
6. Prompted Discussion – Stakeholder Participation
7. Next Steps



Introductions

Project Team



Project Manager – Thomas Gray, AICP

Project Management
Communications
Modeling



Client
Project Review

Project Manager – Michael Feeney

Project Management
Issues & Needs



Analysis
Final Report

Policy Assessment
Implementation/Funding



Analysis
Implementation

Multimodal
Considerations



Data Collection

Steering Committee



Liberty County Engineer's Office

David Douglas

County Engineer

City of Cleveland

Robert Pennington

City Manager

City of Dayton

Kimberly Judge

Assistant City Manager / Director of
Development Services

**Dayton Community Development
Corporation**

Ann Marie Miller

Executive Director

City of Liberty

Tom Warner

City Manager

Chris Jarmon

Assistant City Manager

TxDOT

Noel Salac

Liberty County Engineer

Lisa Collins

Beaumont District

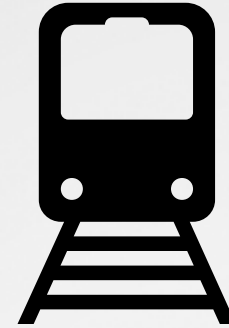
Jeffrey English

Houston District

Stakeholders



Business



Transportation



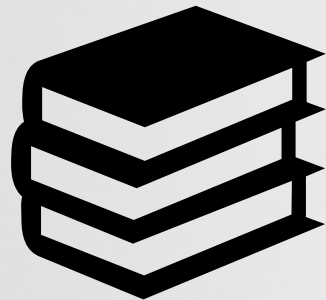
Government



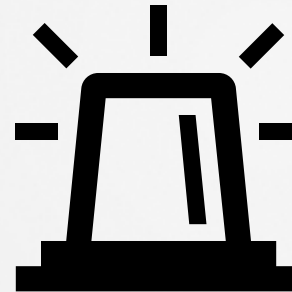
Healthcare



Real Estate/
Developers



Schools



Emergency



Law Enforcement

Stakeholders



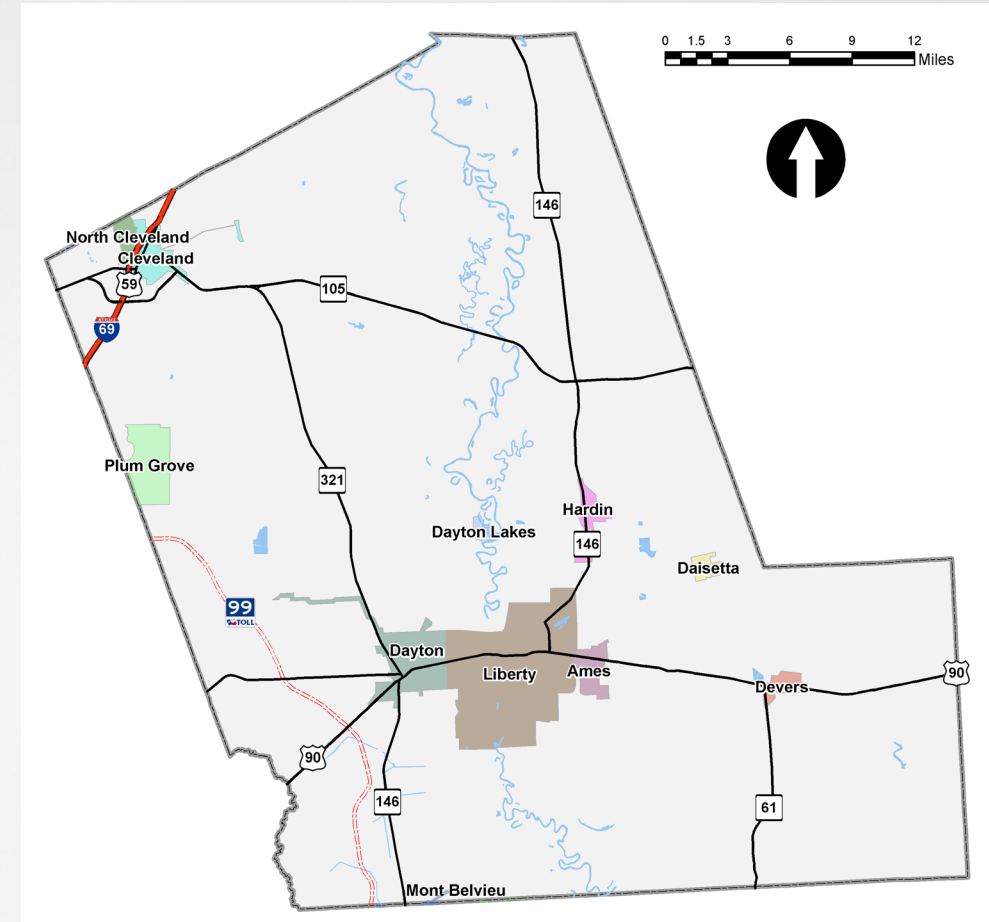
Union Pacific Railroad & BNSF Railroad	Transportation
Brazos Transit District	Transportation
Liberty County Sheriff's Department	Law Enforcement
Local Police (Cleveland, Dayton, Liberty)	Law Enforcement
Texas Department of Parks and Wildlife	Law Enforcement/Environment
Cleveland Fire	Emergency
ISD (Cleveland, Tarkington, Dayton, Liberty, Hardin)	School Districts
Mayor of Plum Grove	Government
Port of Houston	Government
Chambers of Commerce (Greater Cleveland & Liberty-Dayton Area)	Business
State Farm Insurance & Liberty Pest Control	Local Business
Liberty-Dayton Regional Medical Center	Healthcare
Colony Ridge & Pelco Builders	Developers
Poole Realty Group	Real Estate
Cornerstone Church – Cleveland and Liberty	Faith



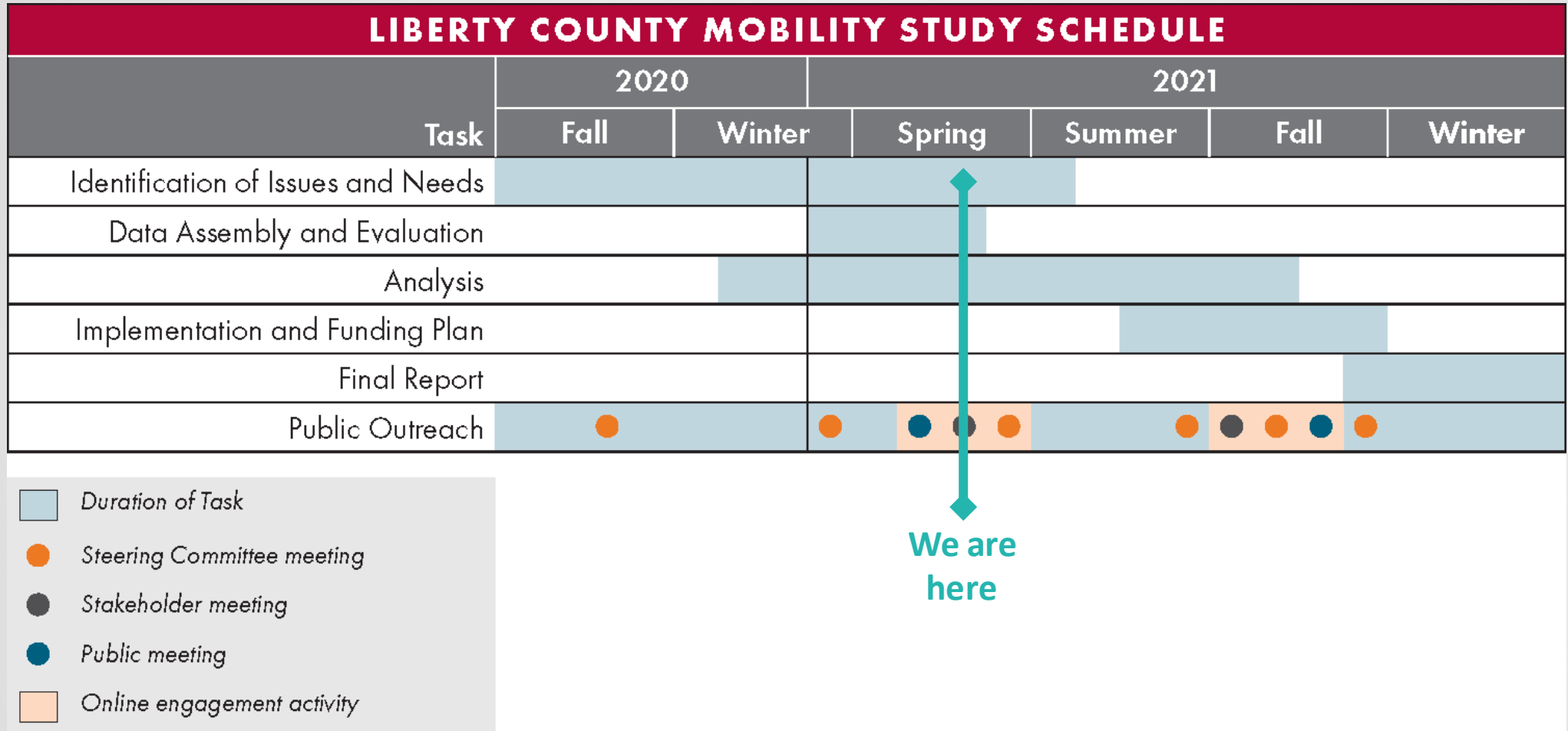
Project Overview

Purpose and Study Area

- Analyze the existing transportation network
- Consider existing and future land use and growth scenarios
- Recommend ways to improve transportation mobility for residents, businesses and visitors now and in the future

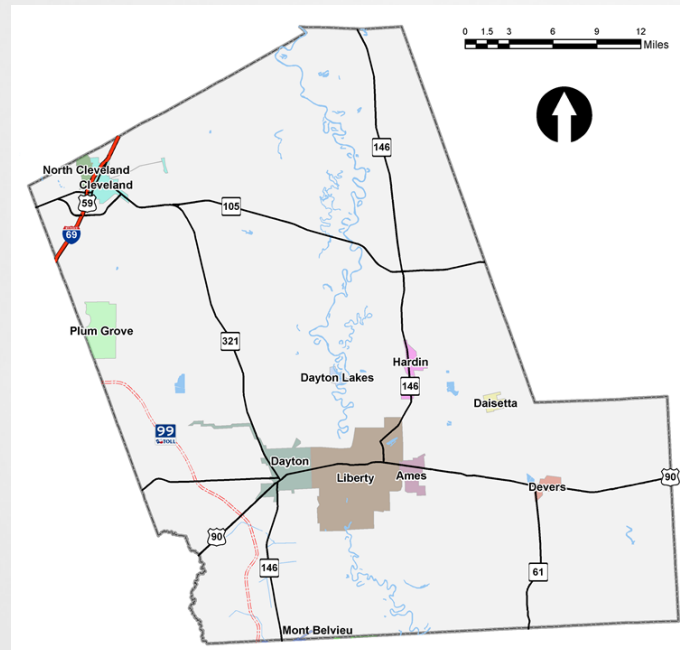


Schedule



Open Discussion

- What does success look like in this project?
- What are your priorities?
- What are the biggest challenges and opportunities for transportation in the County?





Vision & Goals

Vision



The vision of the Liberty County Mobility Study is to address County needs through multimodal transportation, development, and economic policy, while meeting H-GAC's goals of mobility, safety, and enabling economic opportunity.



Goals and Metrics



Goals (Metrics)

1. Provide **MOBILITY** solutions and travel options for daily travelers
(connectivity, gaps, multimodal)
2. Increase **FREIGHT** traffic efficiency
(truck travel time, delay, routes and stops, railroad crossings)
3. Increase **EFFICIENCY** at high -congestion corridors and intersections
(volume/capacity, LOS, travel time)
4. Improve **SAFETY** at high -crash segments and intersections
(crash rates, number of conflict points)
5. Enhance **ECONOMIC** opportunity in focus areas
(cross section, access management, economic impact)

H-GAC Goals

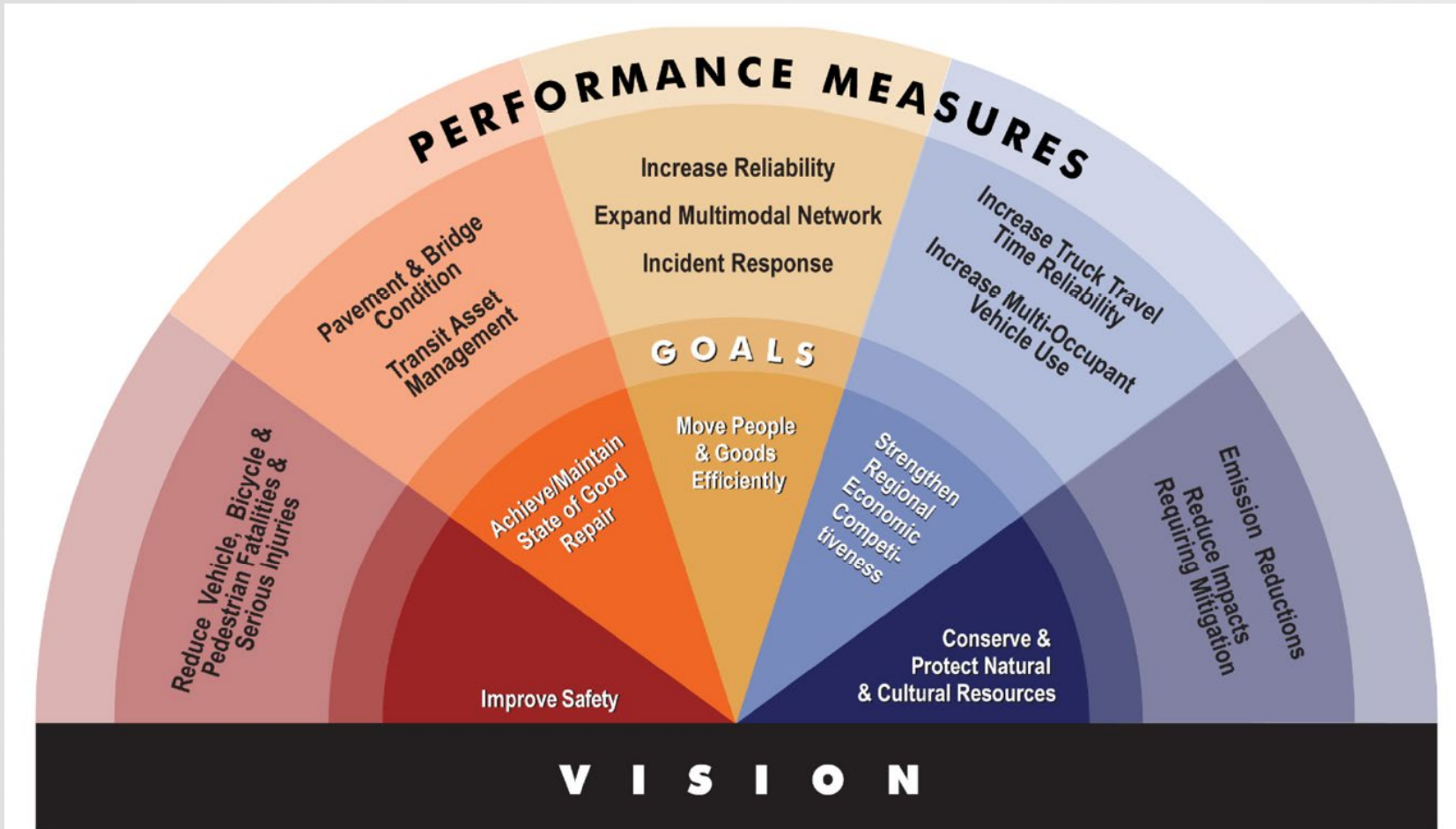
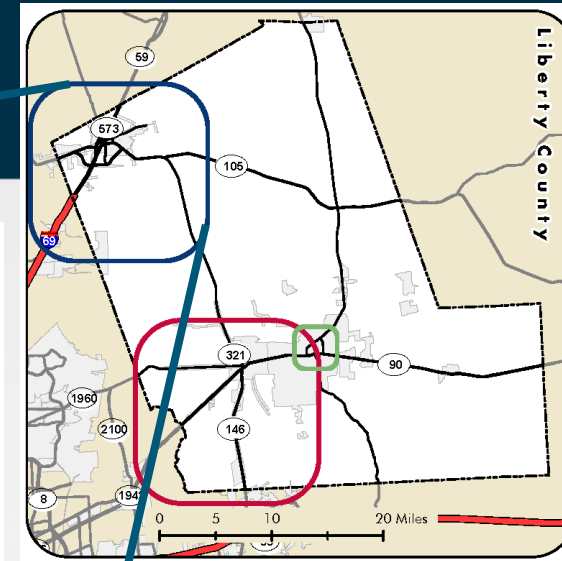
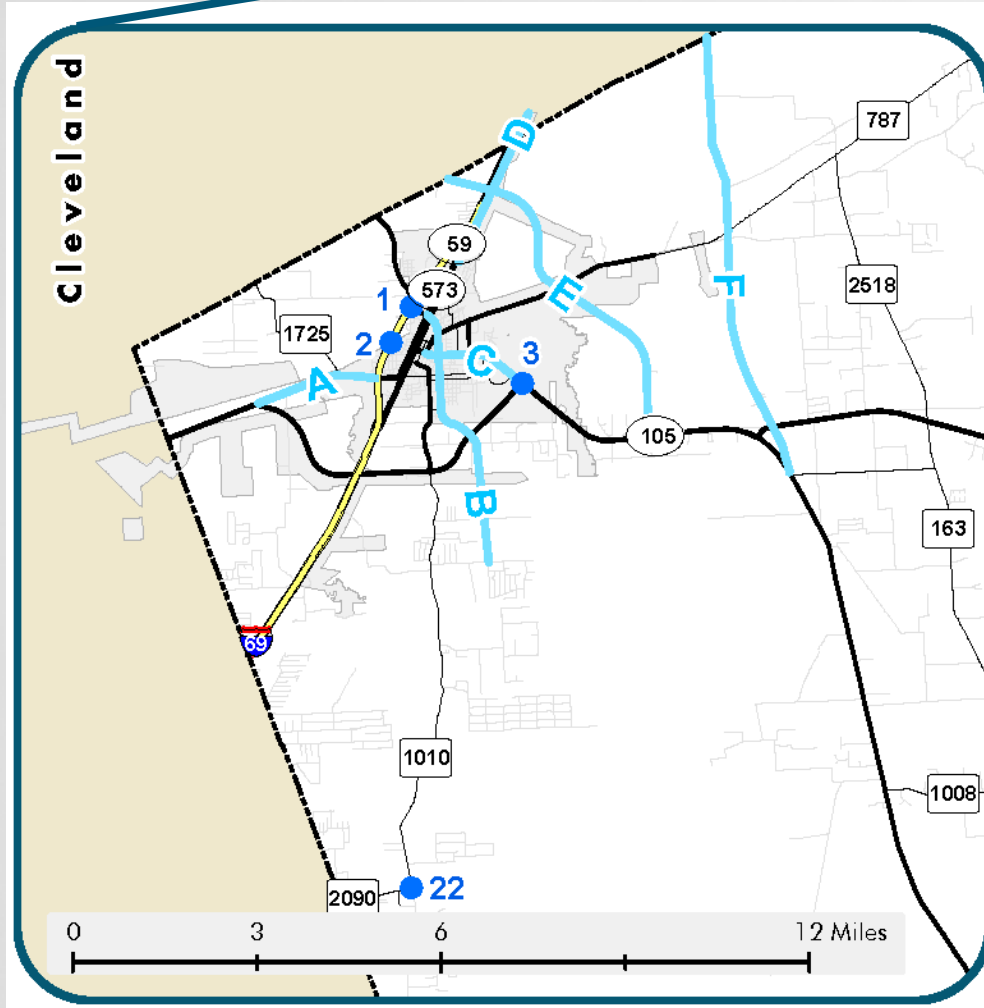


Figure 2-1: 2045 RTP Vision, Goals, and Performance Measures



Identified Issues & Needs

Cleveland



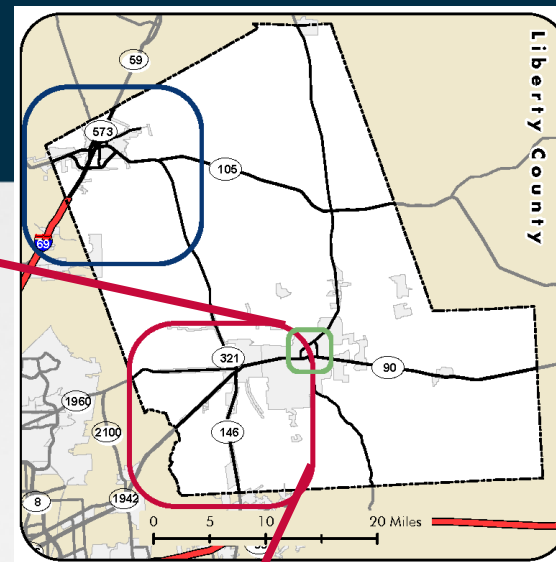
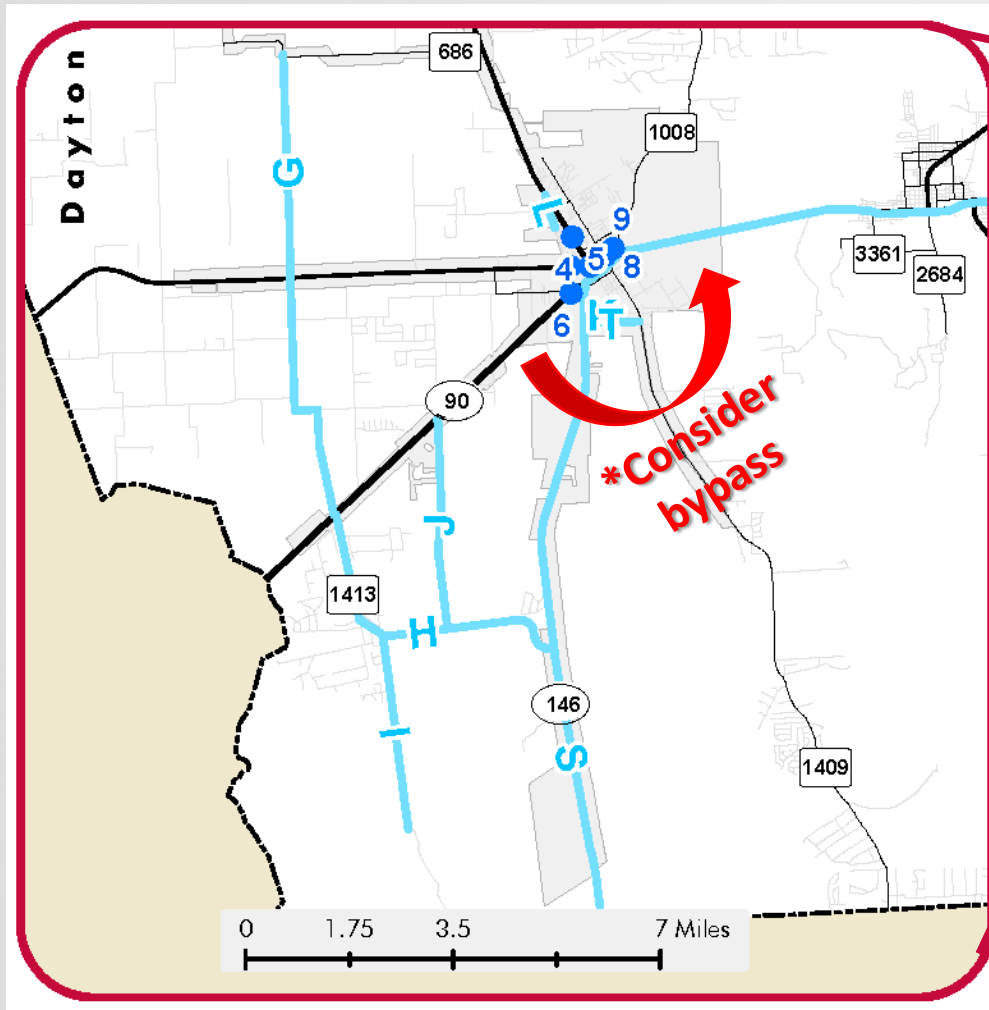
Liberty County Roadways

- Interstate
- Freeway/Expressway
- Principal Arterial
- Minor Arterial
- Major Collector
- Local
- Study Corridors
- Study Intersections
- Liberty County
- Cities

ID	Name
A	SH 105 - SH 105 to US 59
B	FM 2025 - US 59 to Miller Wilson Rd
C	Houston Ave - FM 787 to SH 105
D	N Travis Ave - Travis Ave to N County Limits
E	CR 2243 - N County Limits to SH 105
F	CR 2204/2239 - N County Limits to SH 321

ID	Intersection
1	FM 2025 at US 59
2	US 59 and UPRR
3	SH 105 and Hwy 321 East
22	FM 1010 and FM 2090

Dayton



Liberty County Roadways

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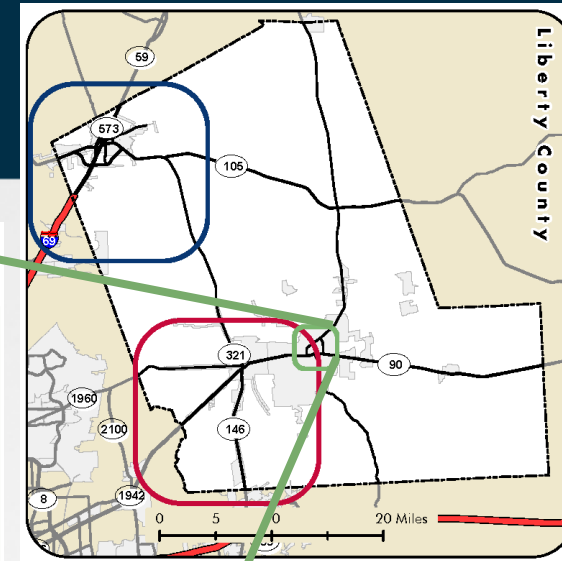
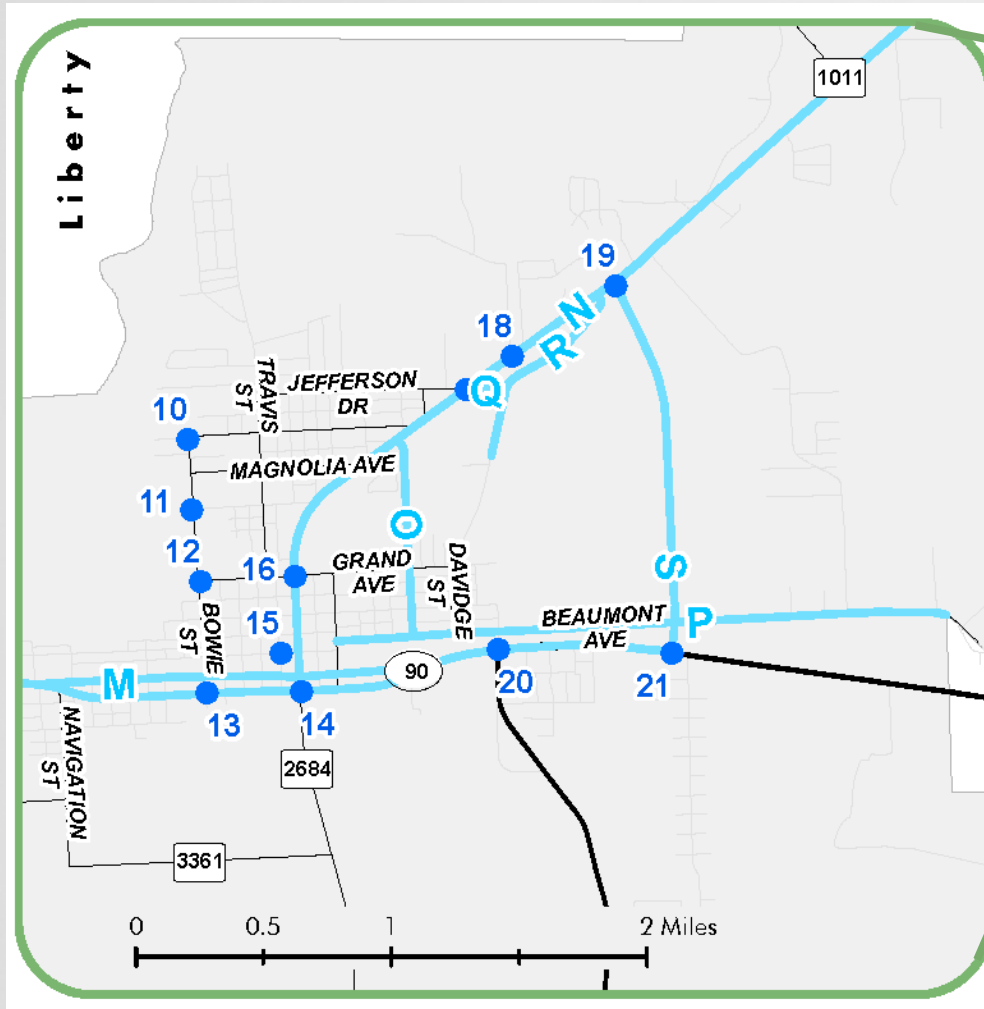
ID Name

G	CR 604/615 - FM 686 to US 90
H	FM 1413 - US 90 to SH 146
I	CR 486 - FM 1413 to 17,419' S
J	CR 491 - US 90 to FM 1413
K	Lovers Ln - SH 146 to Lovers Ln
L	Waco St - Tram Rd to Waco St
S	SH 146 - N County Limits to S County Limits
T	Brown Rd - SH 146 to FM 1409

ID Intersection

4	FM 321 and Linney Street
5	FM 1960 and Waco Street
6	Waco Street and US 90
7	FM 1960 and SH 321
8	Winfree Street and Clayton Street
9	Low Street at Clayton Street

Liberty



Liberty County Roadways

- Interstate
- Freeway/Expressway
- Principal Arterial
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- Cities

ID Name

M	MLK Jr Dr - US 90 to US 90
N	Main St - SH 146 to US 90
O	Texas St - Main St to Beaumont Ave
P	Beaumont Ave - San Jacinto St to E City Limits
Q	Jefferson Dr - Main St to Lakeland Dr
R	Lakeland Dr - Woodspring Rd to Main St
S	SH 146 - N County Limits to S County Limits

ID Intersection

10	Bowie and Edgewood
11	Bowie Street and Monta Street
12	Bowie Street and Grand Avenue
13	US 90 and Bowie Street
14	US 90 and Main Street
15	Sam Houston Street and Trinity Street
16	Main Street and Grand Avenue
17	Jefferson Drive at Main Street
18	N Main Street and Cook Road
19	SH 146 and Main Street
20	US 90 and Independence
21	US 90 and SH 146



Toolbox



ROADWAY (R)	<p>MEDIAN (M)</p> <p>M1-CONSTRUCT RAISED MEDIAN (R/RO ACCESS)</p>	<p>M2-CONSTRUCT S-MEDIAN (LI ACCESS)</p>	<p>M3-CONSTRUCT REVERSE S-MEDIAN (LO ACCESS)</p>		
INTERSECTION (I)	<p>MEDIAN (M)</p> <p>M4-CONSTRUCT TURBO-T (L/LO ACCESS)</p>	<p>M5-CONSTRUCT MEDIAN OPENING (FULL ACCESS)</p>	<p>M6-TWLTL TO REMAIN (FULL ACCESS)</p>		
SIGNAL (S)	<p>DRIVEWAY (D)</p> <p>D1-CLOSE DRIVEWAY</p>	<p>D2-PROVIDE SHARED ACCESS (CONSOLIDATE DRIVEWAYS)</p>	<p>D3-PROVIDE SIDEWALK</p>	<p>D4-DRIVEWAY MODIFICATION (RO ONLY ACCESS)</p>	



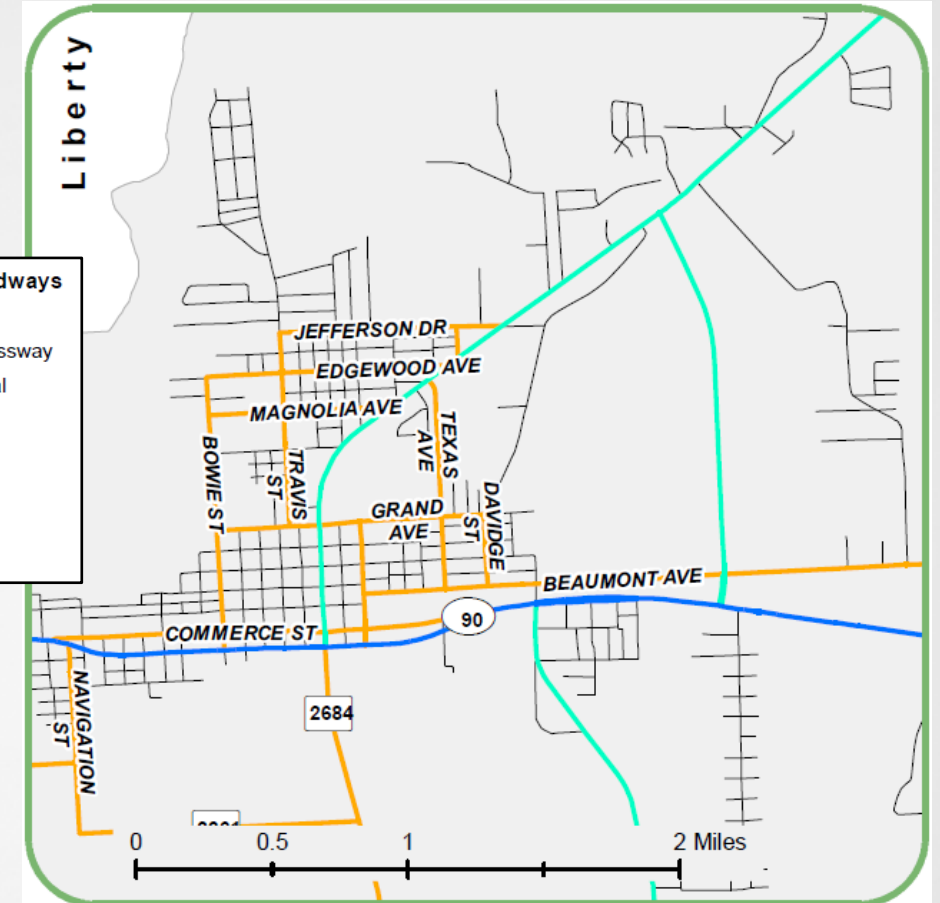
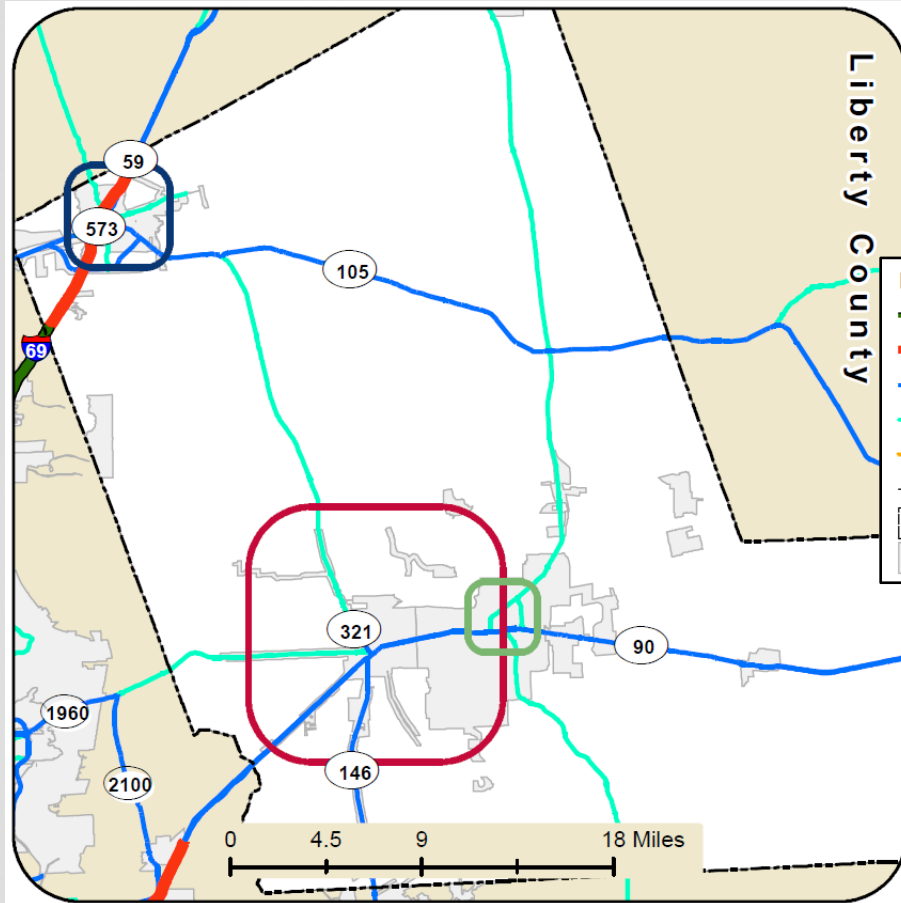
Discussion



<https://engage.h-gac.com/liberty-county-mobility-study>

Roadway Network – Liberty County

Source: TxDOT Roadway Inventory



What roadways / intersections in the study area have **mobility** issues?
Where are there opportunities for **new roadway** connections?

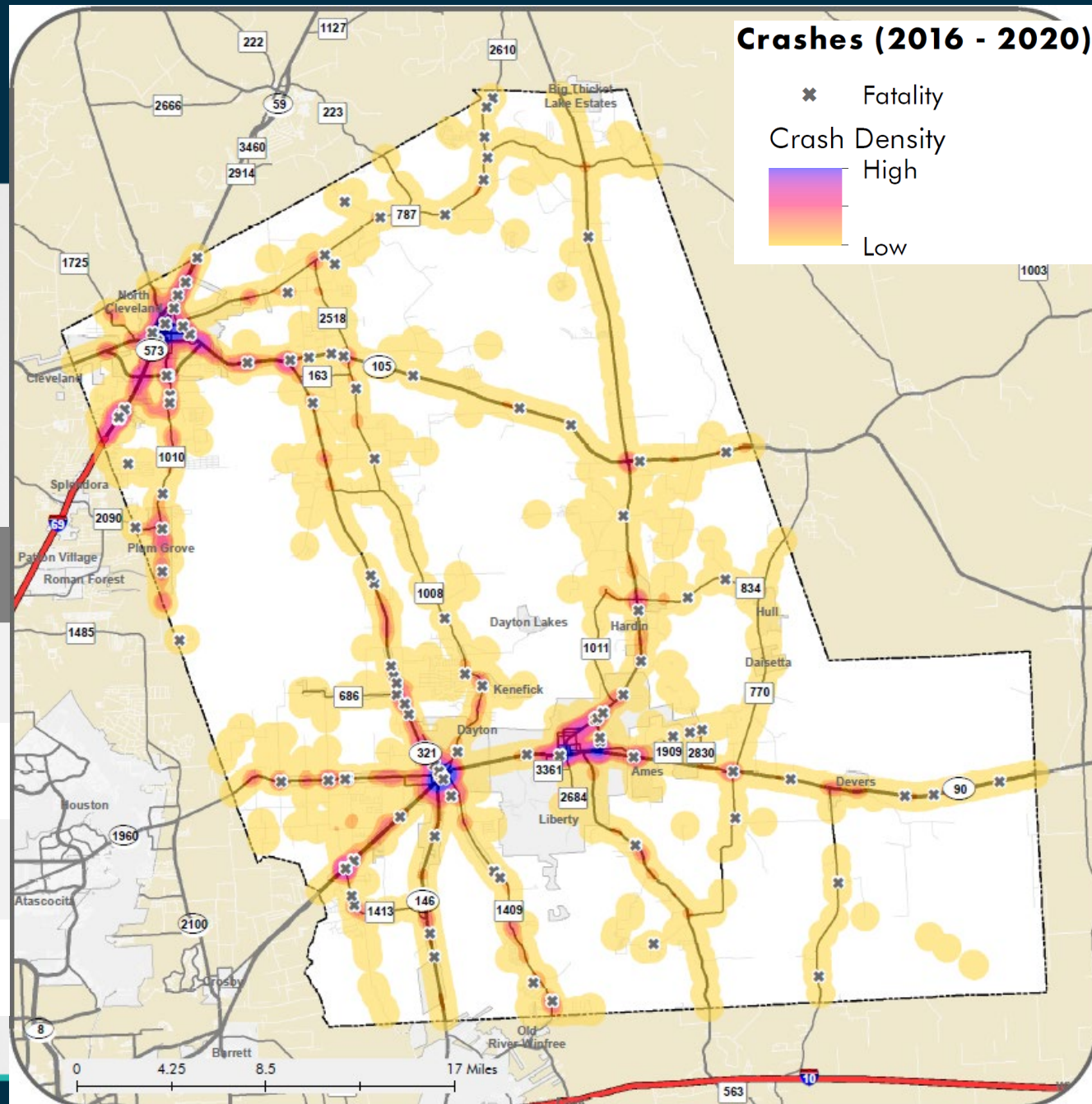
Crash Data



What roadways / intersections in the study area have **safety** issues?

	Cleveland	Dayton	Liberty	Liberty County
<i>Total Crashes</i>	1,449	1,747	896	7,046
<i>Total Fatalities</i>	11	23	9	116
<i>City Fatalities / City Total Crashes</i>	0.8%	1.3%	1.0%	1.6%
<i>City Fatalities / County Fatalities</i>	9.5%	19.8%	7.8%	100.0%

Source: TxDOT CRIS Data, 2016 - 2020

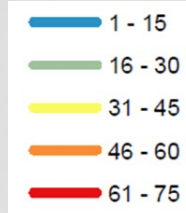


Bicycle Activity

Source: TxDOT Strava data



Average Daily Bicycle Trips



City of Cleveland



What is the **demand** for bike and pedestrian facilities?

What areas have the most **bike or pedestrian activity**?

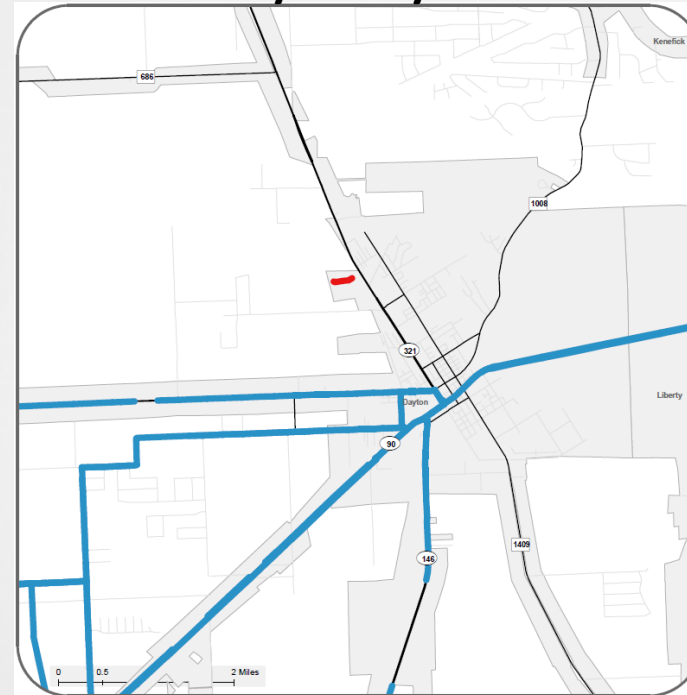
What is the **main issue** preventing more bike and pedestrian activity?

Where should existing bike or pedestrian facilities be **improved**?

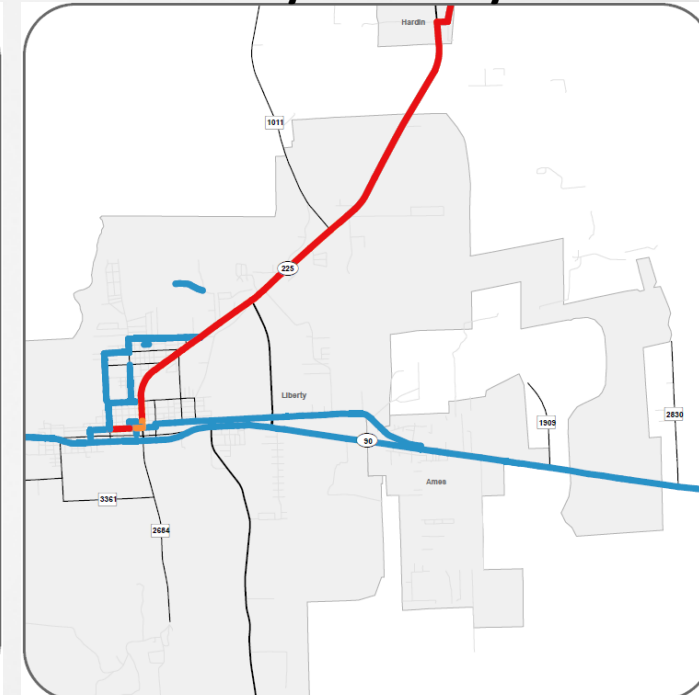
Where are there opportunities for **new bike or pedestrian** facilities?

What is your vision for people walking and riding bikes?

City of Dayton



City of Liberty



Pedestrian Activity



Source: TxDOT Strava data

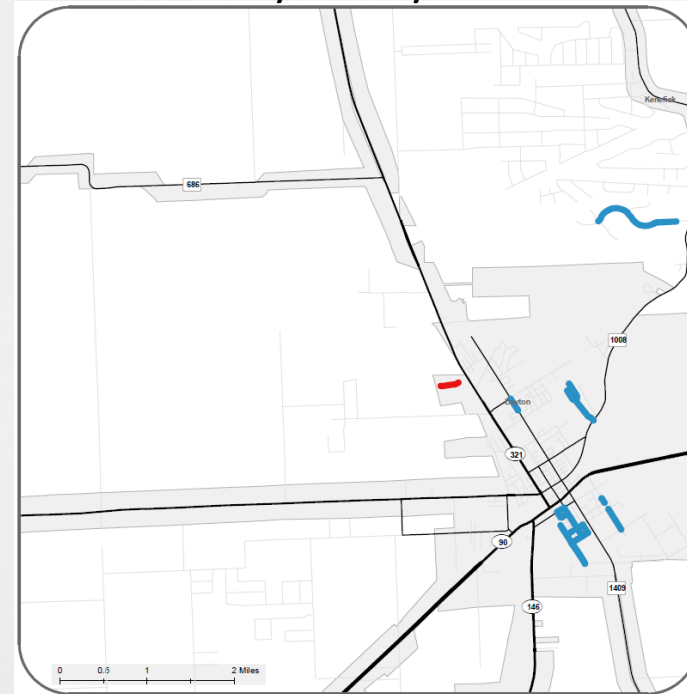
Average Daily Pedestrian Trips



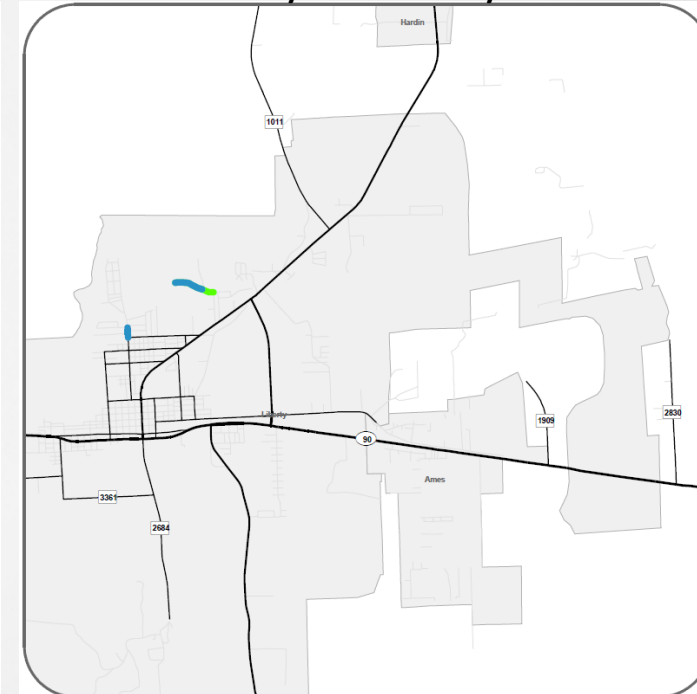
City of Cleveland



City of Dayton



City of Liberty



Transit

- Cleveland Fixed Route
- Dayton Circulator
- Liberty & Ames Circulator

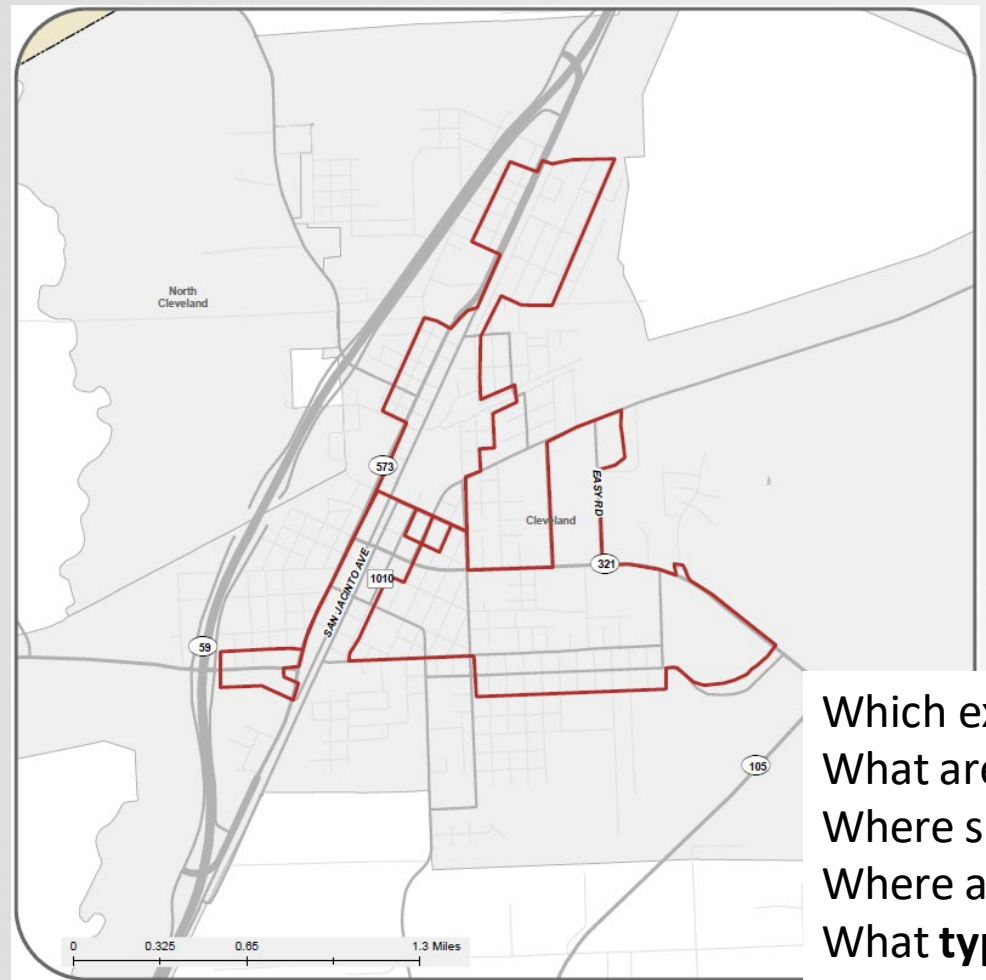
Source: H-GAC Open Data, TxDOT Roadway Inventory



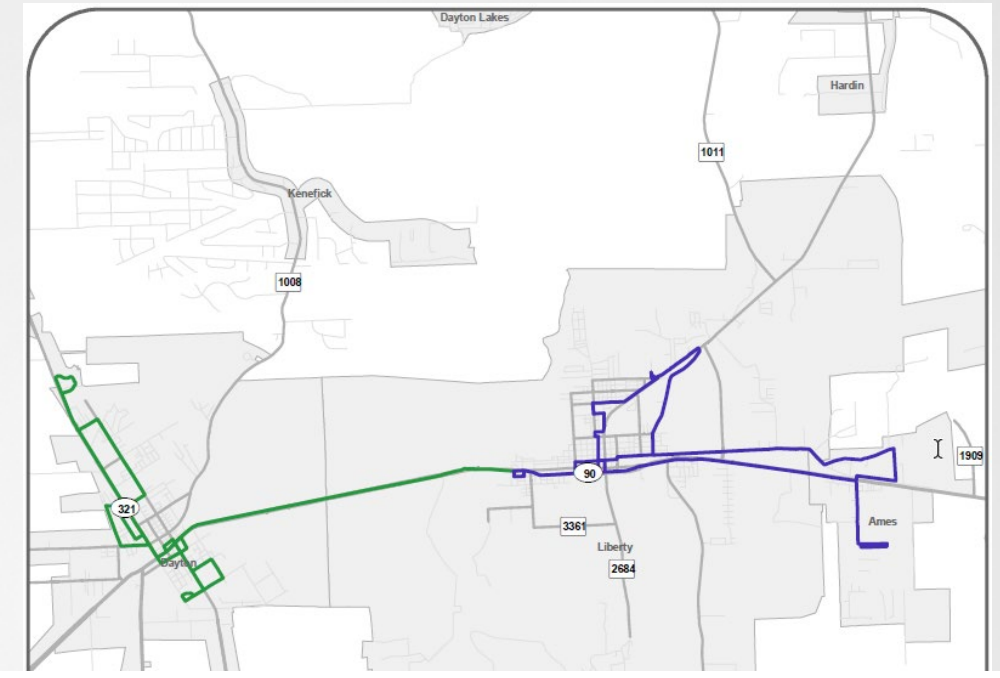
BRAZOS TRANSIT DISTRICT



City of Cleveland



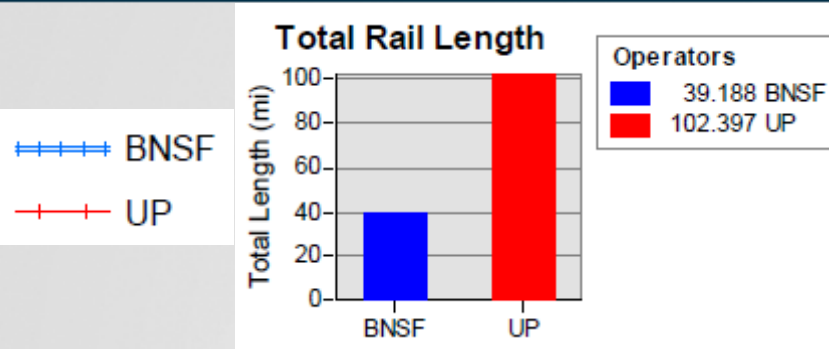
Cities of Dayton and Liberty



Which existing transit facilities have the **most ridership**?
What areas (or traffic generators) are most **transit dependent**?
Where should existing transit facilities be **improved**?
Where are there opportunities for **new transit** facilities?
What **type of transit** service should be provided?

Freight

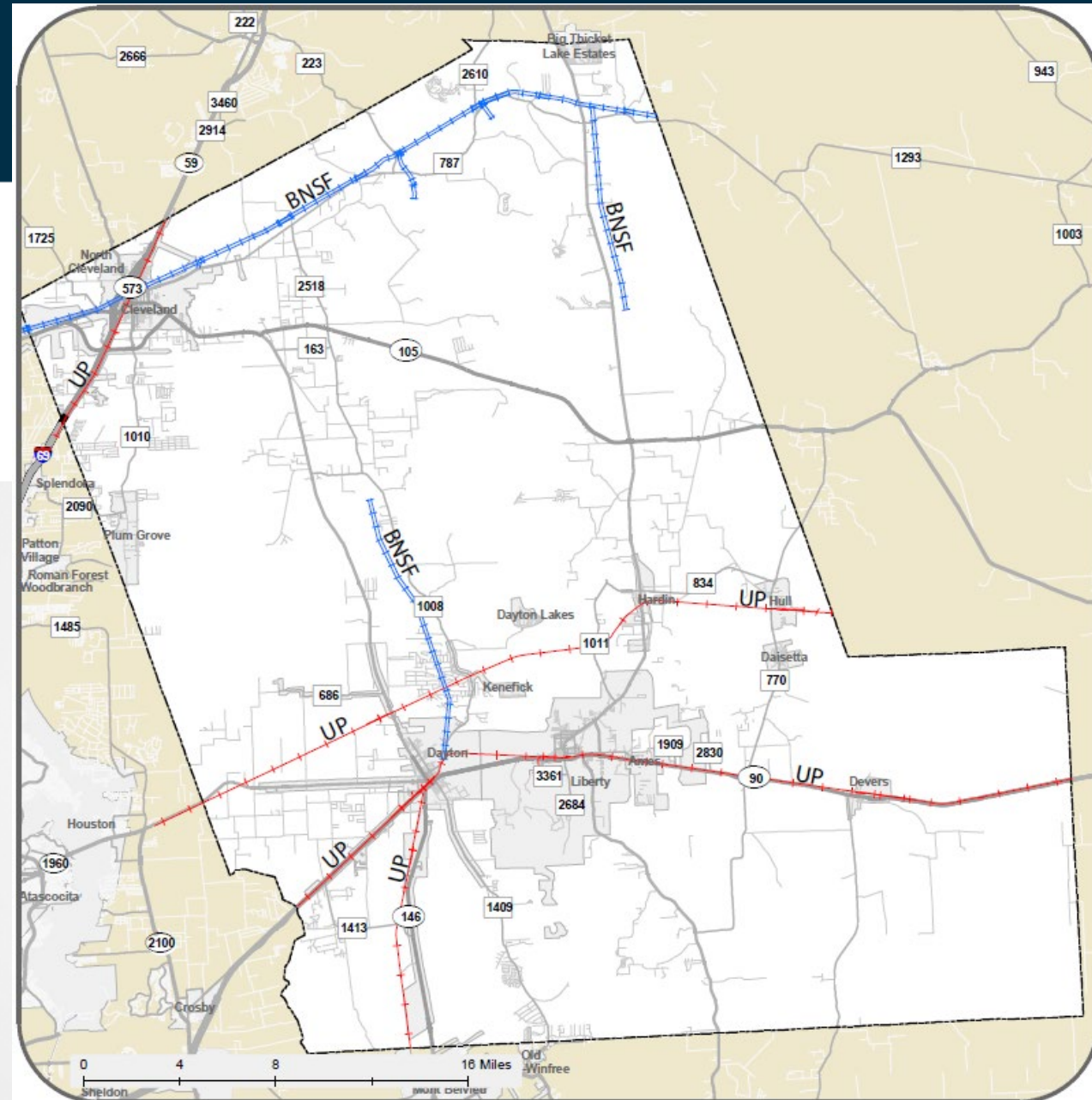
Source: H-GAC Open Data



Where does rail / truck traffic impair **mobility / safety**?

Which roadways (or generators) have the highest **truck volume**?

Which roadways should encourage / discourage **truck use**?



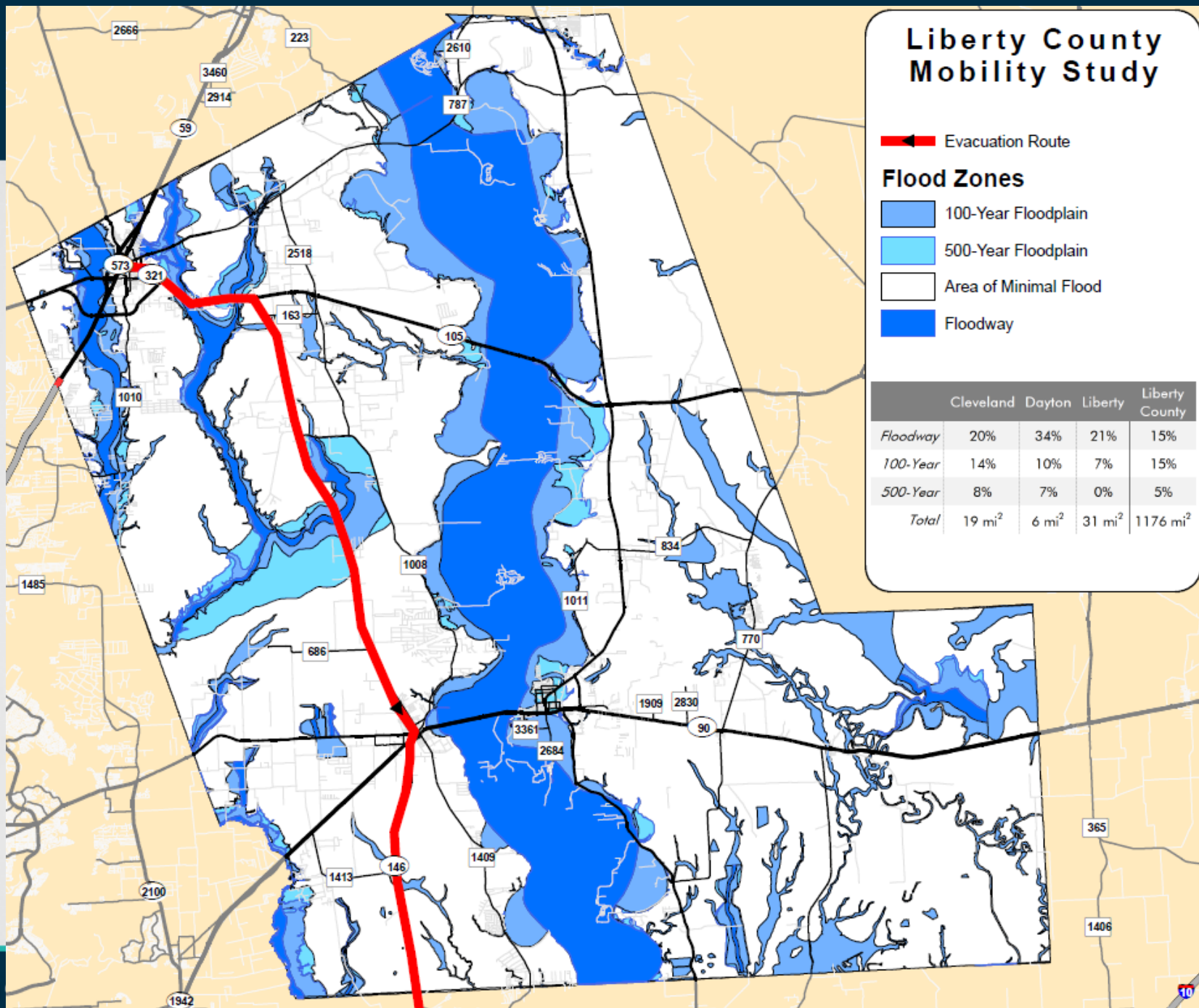
Flood and Evacuation



Source: 2015 FEMA Flood Data, H-GAC Open Data

What areas experience flooding?

What roadways should be improved to operate as evacuation routes?



Environment

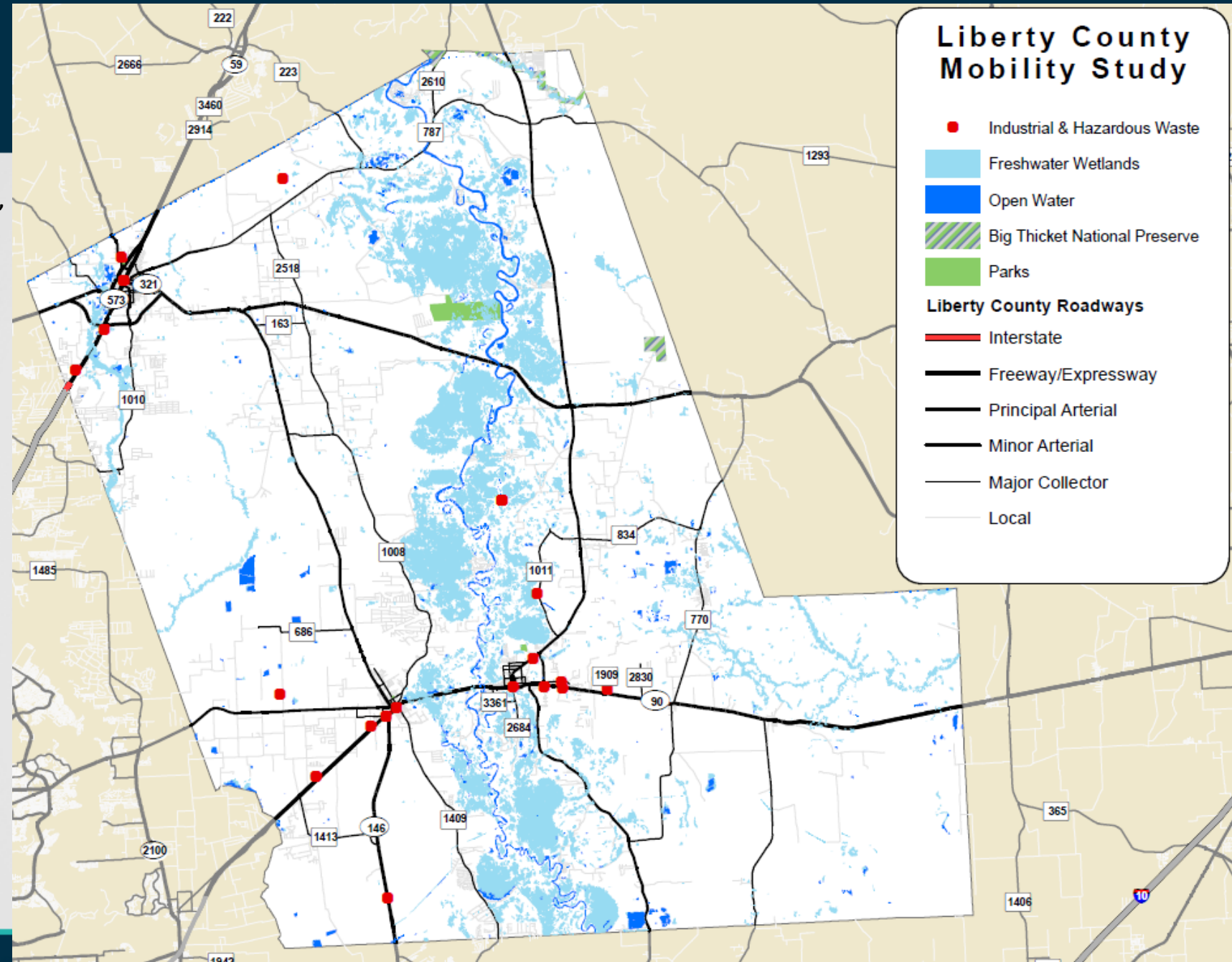


Source: TCEQ Open Data,
National Park Service,
H-GAC Open Data

Which existing
parks are **most
popular?**

Where are there
opportunities for
more **park space?**

What other
environmental
features are
highest priority?



Proposed Development

Cleveland ISD School Sites

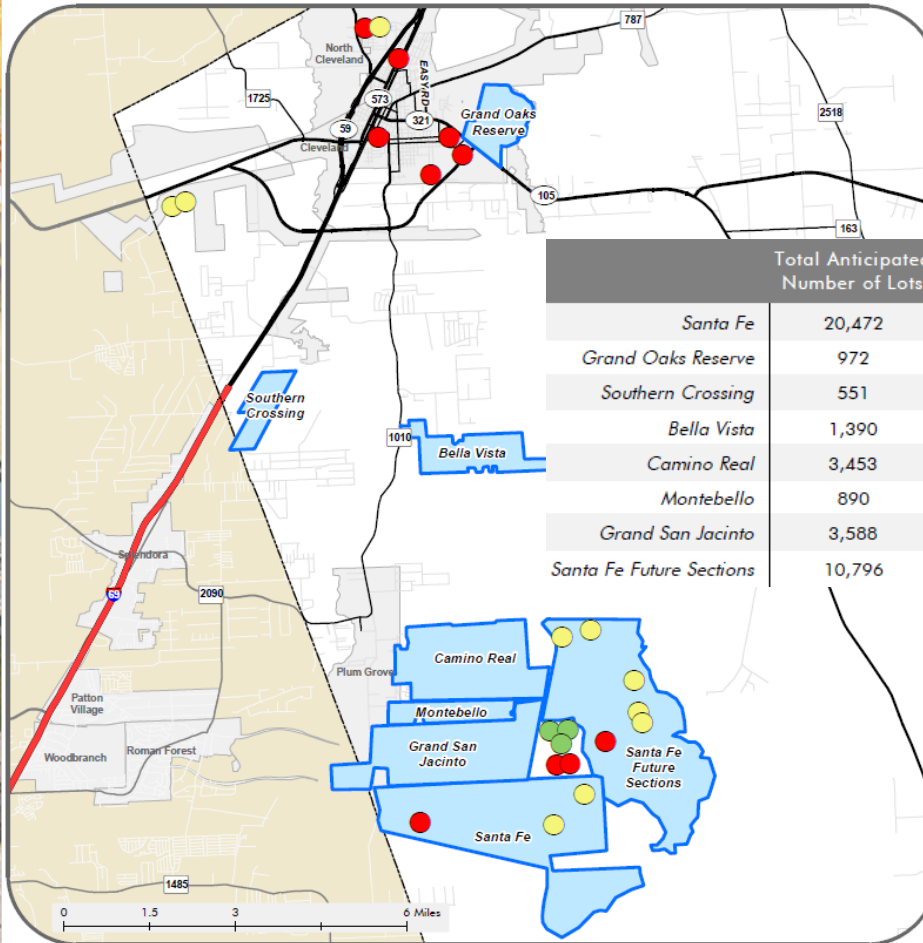
- Existing
- Proposed
- Potential

Development Activity

Source: Cleveland ISD, City of Dayton



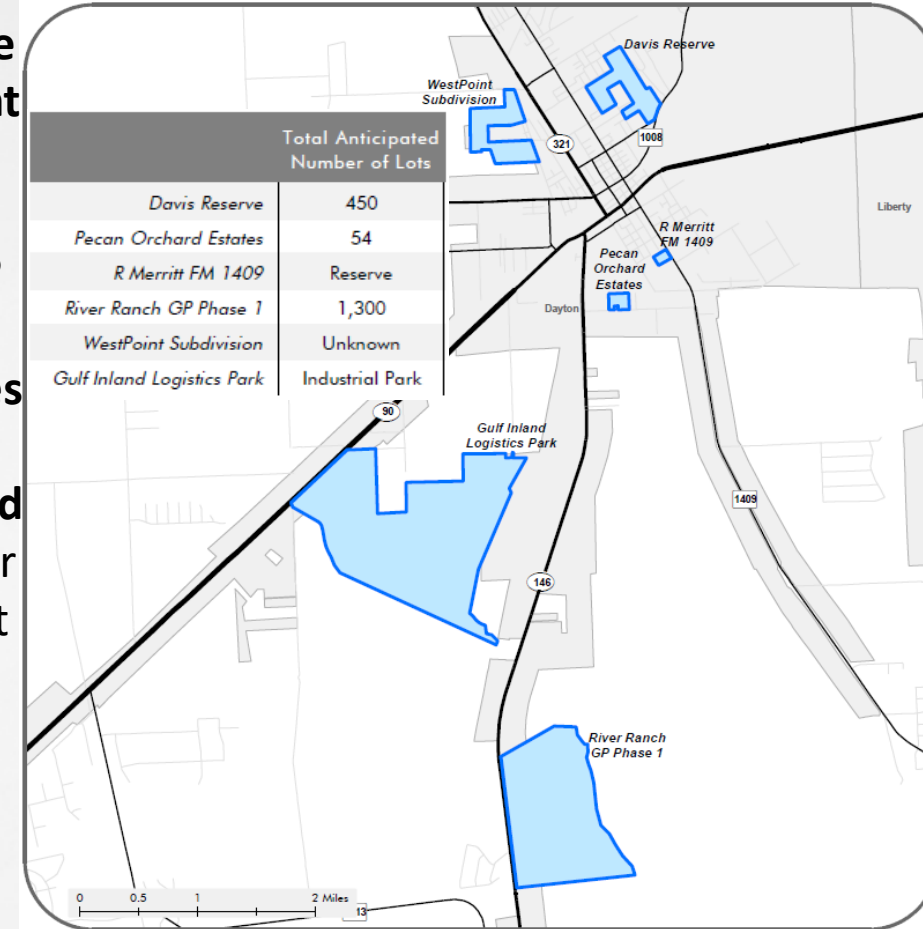
City of Cleveland



Is there **more development** underway that is not shown here?

What **policies** should be implemented / changed for development practices?

Dayton Area





Next Steps

Next Steps



- Review public input received
- Analyze issues and make recommendations
- Continued collaboration with Cleveland, Dayton, Liberty and County representatives
- Public Meeting #2 – Fall 2021
- Stakeholder Meeting(s) #2 – Fall 2021
- Create implementation and funding plan
- Final report

Thank You! Further Discussion

For More Information: [engage.H - GAC.com](https://engage.H-GAC.com)

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- Allie Isbell, AICP - [Allie.Isbell@h - gac.com](mailto:Allie.Isbell@h-gac.com)

