



Welcome!

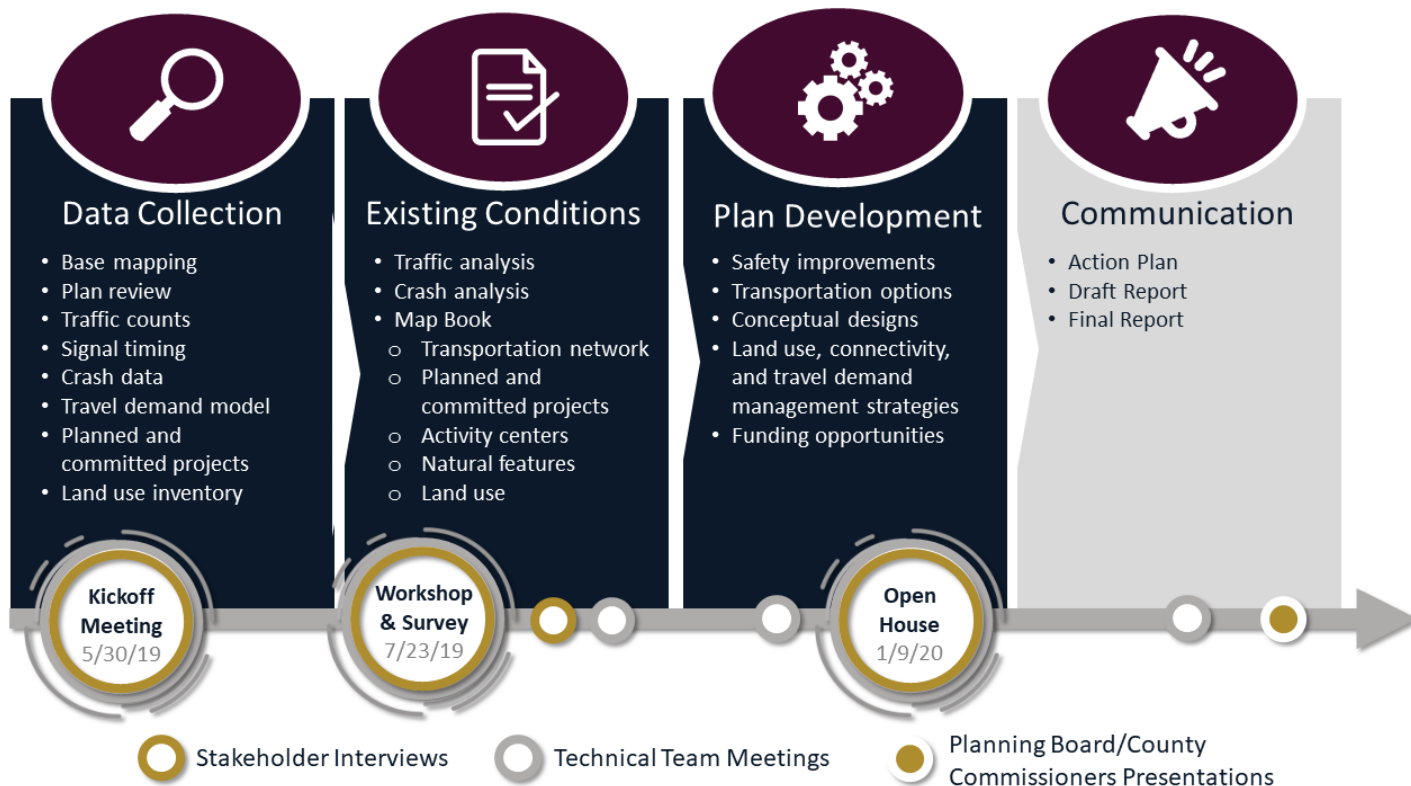
Lincoln County launched the Eastern Lincoln Mobility Study in summer 2019 to better understand transportation needs - today and in the future. Thank you for visiting with us tonight!

Purpose

The Eastern Lincoln Mobility Study is an important step in making the area a better place to live, work, and relax. So far, we have reviewed existing and projected traffic, analyzed crash data, and heard from the public. Your input from the public meetings and online survey is reflected in the initial set of recommendations on view tonight. Thank you for continuing the conversation!

Process

The study process includes four steps, and we're in step 3: Plan Development. Since we last met, the project team took a deeper dive into transportation conditions and considered public input to develop a preliminary set of recommendations. At tonight's open house, you'll learn more about the process, see a summary of community engagement activities, and view short- and long-term recommendations. See below for a graphic representation of our process.



See back for frequently asked questions!





FAQ's

How will this study make a difference?

The study is an important way for Lincoln County to clearly state its transportation needs. These types of studies have helped other communities position themselves for more funding. The study will include a combination of short- and long-term recommendations and an action plan that identifies potential funding sources.

What data are you collecting? How are you analyzing it?

Traffic data was collected for 29 intersections, mostly along NC 16 Business, NC 16 Bypass, NC 73, and North Little Egypt Road/St. James Church Road. A traffic model has been created to analyze the data for existing and future year conditions. Visit the traffic station at tonight's meeting for more information.

How are transportation improvements funded?

From planning and design to right-of-way acquisition and construction, it can take years for larger transportation projects to be funded. An important first step is showing local priorities and community support. The Eastern Lincoln Mobility Study is designed to accomplish that. It's also important that smaller projects be identified so local funds can be set aside or private dollars can be requested during the development process.

Are any transportation projects on the horizon?

Yes! Some big projects are on the horizon, including a new interchange on the NC 16 Bypass and improvements to NC 16 Business and NC 73. The study will take into consideration several projects that have been approved and are in various stages of design and implementation.

How is recent (and upcoming) development being considered?

Eastern Lincoln County continues to be an attractive place for newcomers. The traffic model takes into account recent and upcoming development when forecasting future traffic.

Who is going to fund the transportation improvements?

Potential projects will be prioritized and placed in implementation tiers for funding by the County, state, and developers. That's why it's important that the process include representatives from the County, NCDOT, and the Gaston-Cleveland-Lincoln Metropolitan Planning Organization. We've also involved a variety of local stakeholders.

What are the next steps?

We'll use feedback received at the workshop to finalize the recommendations. Then, we'll create a prioritize list of improvements and identify ways to potentially speed up implementation. Finally, we'll create a report, which will be presented to the County Commissioners for adoption.



Engagement



1,000+

participants



26,000+

individual data points



1,800+

written comments

Overview

The Eastern Lincoln Mobility Study has included extensive community engagement through meetings, workshops, and an online survey. This multi-layered engagement strategy taps into the local knowledge of stakeholders, local officials, and the public. What we heard during these activities is critical to understanding growth and the demands that growth is placing on the study area's critical corridors and important intersections. In addition to the engagement activities, the study is taking a deep dive into existing and projected traffic conditions, identifying and evaluating transportation solutions of all sizes and complexity, and recommending an action plan.

What We Heard

- Many residents are concerned about the amount of growth in the study area and how infrastructure can keep up.
- Traffic and safety were the two most dominant themes. Traffic along NC 16 Business and NC 73 was frequently noted. The most frequently identified safety concerns were the u-turns on the bypass and the intersection of NC 16 Business, N Pilot Knob Rd, and Hagers Ferry Rd.
- People recognize our roads and intersections cannot handle traffic during busiest times of the week.
- More connectivity would be helpful.
- Many comments noted the need to ensure the transportation network has a positive influence on economic development and quality of life.
- People want to use the bypass but limited connectivity and the current u-turn configuration limits the practicality. They also agreed that NC 16 traffic would be improved if more people could use the bypass.
- People indicated they would walk or bike more if it was safer and/or easier.
- Participants desired a mix of smaller and larger projects.

Kickoff Meeting

May 30, 2019

Community Workshop

July 23, 2019

Online Survey

July 23, 2019 to
September 2, 2019

See the summaries in this workshop packet for more information!



Meeting Information

Date: May 30, 2019

Location: East Lincoln Community Center

Time: 7:00 p.m. to 8:30 p.m.

Objectives:

- Introduce the project team and committee members
- Provide background information on the study process
- Learn more about the study area (corridors and intersections)
- Discuss community engagement goals and activities
- Establish expectations for the study
- Begin to identify challenges and opportunities

Number of Participants 50+

Agenda

- Introductions
- Project Overview
 - Project Background
 - Process & Schedule
 - Study Corridors and Intersections
- Community Engagement
 - Community Workshop #1
 - Stakeholder Interviews
- Discussion
 - What are your expectations?
 - What's important to you?
 - Who should join the conversation?
- Next Steps

Meeting Summary

What are your expectations for this study?

The discussion began by asking participants to write three expectations for the Eastern Lincoln Mobility Study. In answering this question, many participants identified specific problem areas and potential solutions that will be considered during the study. The following list summarizes key themes from the 132 comments received.

- To understand current and projected traffic in the area.
- To improve traffic flow and accommodate future growth.
- To balance transportation needs with future growth.
- To improve traffic light timing.
- To create safe roads for everyone.
- To identify short-term improvements that fit in with long-term projects.
- To create a realistic, prioritized list of projects.
- To consider all possible sources of funding and determine who is responsible.
- To increase the number of projects funded and constructed.
- To communicate the transportation needs of eastern Lincoln County, especially to NCDOT.
- To be listened to.



How important are the following topics as we consider tradeoffs and make project decisions?

The Eastern Lincoln Mobility Study will result in a prioritized list of projects to be implemented by local, regional, state, and private partners. As a first step in the prioritization process, participants were asked to weigh in on the considerations shown in the table below. Participants rated each consideration on a scale of 1 to 5, with 5 being very important. The table shows the average rating for each of the 10 considerations as well as a write-in option that was used by four participants.

Average Ratings

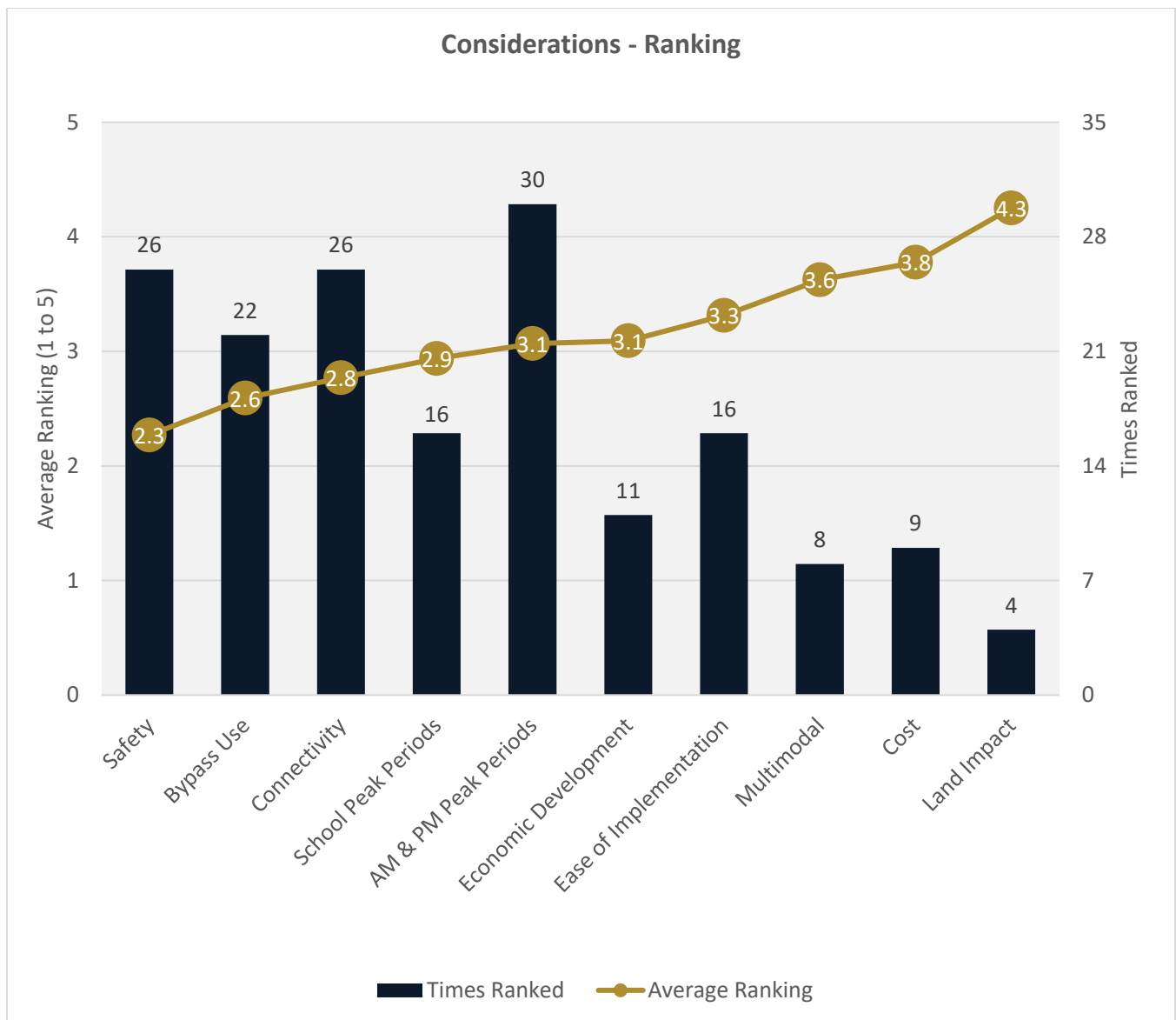
Considerations		Average Rating
AM & PM PEAK PERIODS	How well does the project improve travel times during traditional (AM & PM) peak periods?	4.5
CONNECTIVITY	How well does the project increase overall connectivity and improve route choice?	4.4
SAFETY	How well does the project improve safety?	4.3
BYPASS USE	How well does the project increase use of the NC 16 Bypass?	4.1
EASE OF IMPLEMENTATION	How easily and quickly can the project be implemented?	4.1
SCHOOL PEAK PERIODS	How well does the project improve travel times during school drop off and pick up?	3.9
WRITE-IN	When given the option to write-in a new option, a few participants added protecting greenspace, addressing bottlenecks, and making progress.	3.8
ECONOMIC DEVELOPMENT	How likely will the project enhance economic development potential?	3.4
COST	How inexpensive is the project?	3.1
LAND IMPACT	How well does the project minimize impact to private property?	2.9
MULTIMODAL	How well does the project improve walking and biking conditions?	2.8

Participants placed more weight on addressing the peak travel times in the morning and afternoon, improving connectivity, and addressing safety concerns.



Rankings – Frequency and Intensity

It's natural for people to consider each item to be very important. To better understand what was most important, participants were asked to rank their top five considerations. The graph below shows both the frequency (how often was an item ranked in the top 5) and intensity (what was each item's average ranking). A total of 49 responses were received. Safety, increasing the use of the bypass, and improving connectivity ranked the highest on average. It's interesting to note the gap between frequency and intensity for School Peak Periods. This gap shows that while not everyone thought that addressing traffic backups during school drop off and pick up times was important, those that did ranked it very high.





Who should join the conversation?

As indicated in the responses regarding expectations, participants at the kickoff meeting agreed that more voices need to be heard in the study. Participants were asked to respond to the following questions:

What stakeholders need to be involved?

Participants identified more than 130 individuals and groups that should be involved in the study, many of which were mentioned multiple times. The stakeholders identified include:

Residents and Organizations	Business Owners	Local Staff and Officials	State and Regional Agencies
Residents Property owners Young families Community leaders within neighborhoods East Lincoln Betterment Association Home Owner Associations Parents of students Commuters Rotary Club Churches	Business owners Industry representatives Home Builders Association Developers Denver Area Business Association Lincoln Economic Development Authority Chamber of Commerce Industrial leaders	County staff (planning, public works, finance) County Commissioners Police, Fire, and EMS School administration Board of Education Parent Teacher Associations (PTAs)	NCDOT district representatives NCDOT leadership Gaston-Cleveland-Lincoln MPO State legislators

How can we get the public involved?

Participants also were asked to identify effective ways to bring their friends and neighbors into the conversation about transportation in eastern Lincoln County. The following suggestions were provided:

- Make the process interesting and relevant for residents of all ages
- Have clarity on how the study will benefit the community
- Emphasize word of mouth by encouraging those that participate to invite others
- Canvass the neighborhoods using Facebook, email, and door-to-door
- Spread the word using newspapers (e.g. Denver Weekly), churches, water bills, the library, stores, restaurants, and Board of Commissioner meetings
- Go to the people by having a place where the public can go to get information at any time
- Use multiple ways to get feedback, including meetings and surveys (online and hardcopy)
- Make information readily available—post project information online, advertise meetings well in advance

Meeting Information

Date: July 23, 2019

Location: East Lincoln Community Center

Time: 7:00 p.m. to 8:30 p.m.

Objectives:

- Collect community input on existing conditions
- Educate the public on the challenges and constraints facing potential transportation improvements
- Gather feedback on transportation considerations

Number of Participants 54 (signed in)

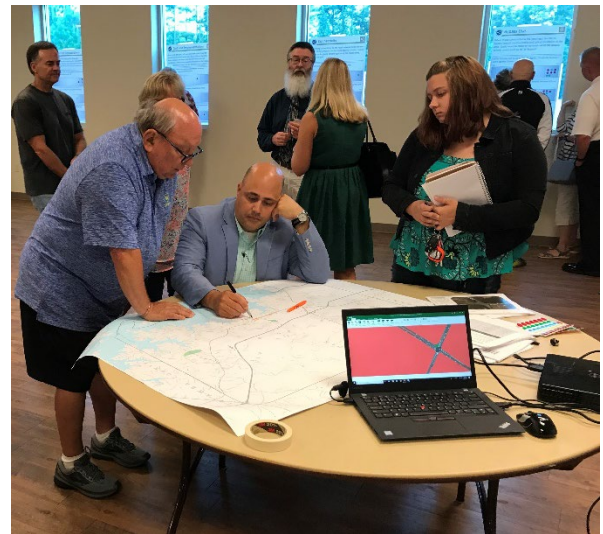
Activity Stations

- Information Wall
- One Word
- Considerations
- Statements
- Mapping
- Traffic Analysis

Meeting Summary

The meeting was an interactive workshop organized in a variety of stations. The workshop included an information wall with background information and several activity stations to collect input. The workshop focused on eight transportation considerations that were revised based on an initial list presented at the May 30, 2019 project kickoff meeting. Participants were asked to rank the considerations, then respond to a series of statements about each topic. A mapping station with a large-scale plot was a centerpiece of the workshop. Participants also were informed of the online survey that launched the day of the workshop.





One Word

As they signed in, participants were given a card and asked to write one word that describes eastern Lincoln County today and one word that describes their ideal vision for eastern Lincoln County in the future. The following responses were received.

Today

overgrown
growing rampant
behind livable
crowded fragmented
quagmire
overcrowded
messy chaotic
struggling
pandemonium commuters

Ideal Vision

mobility ahead
synchronization
tranquil
flowing livable controlled
pleasant
walkable
slower orderly
fixed sustained



Considerations

The Eastern Lincoln Mobility Study will identify potential transportation projects throughout the study area. The projects will be evaluated based on a variety of considerations. At the workshop, participants asked to rank the eight considerations in order of importance. The eight considerations are shown below in order of average ranking.

1



SAFETY

Ranking this category as a priority would put more emphasis on projects that improve safety, especially at those locations that have a history of frequent and/or severe crashes.

2



TRAFFIC

Ranking this category as a priority would put more emphasis on projects that do the most to improve travel times during the busiest times of the week, including the morning and afternoon peak periods.

3



CONNECTIVITY

Ranking this category as a priority would put more emphasis on projects that increase overall connectivity and improve route choice.

4



LAND USE CONSIDERATIONS

Ranking this category as a priority would put more emphasis on projects that balance the context surrounding land uses with transportation needs.

5



BYPASS USE

Ranking this category as a priority would put more emphasis on projects that seek to increase use of the Bypass.

6



ECONOMIC DEVELOPMENT

Ranking this category as a priority would put more emphasis on how likely the project would help sustain economic activity or enhance economic development potential.

7



WALKING & BIKING

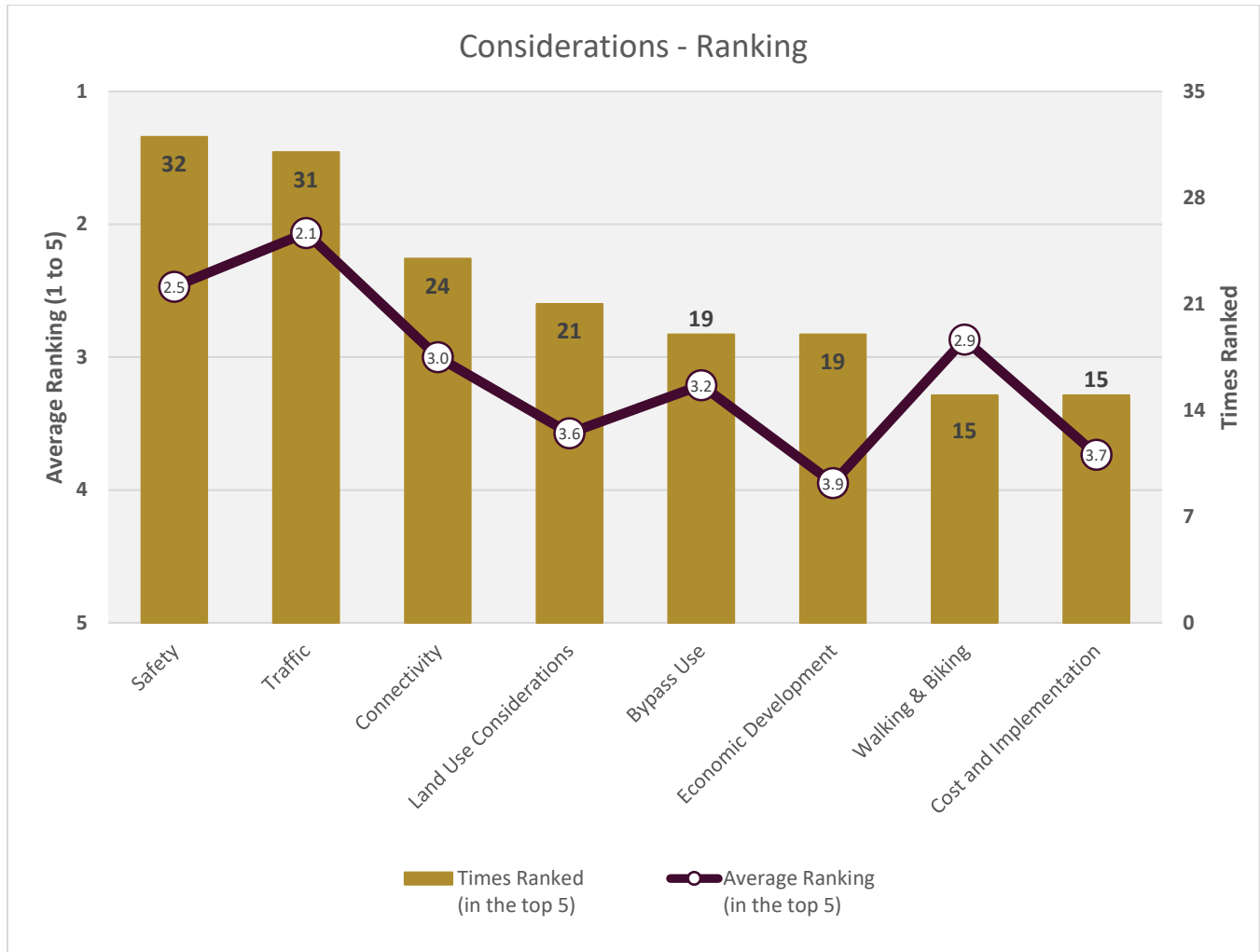
Ranking this category as a priority would put more emphasis on projects make it safer and easier to walk or ride a bicycle, even for short distances.

8



COST AND IMPLEMENTATION

Ranking this category as a priority would put more emphasis on the cost of a project and how easily it can be constructed.



Notes:

- While **SAFETY** and **TRAFFIC** were ranked in the top five a similar number of times, the average ranking for **TRAFFIC** was higher. **SAFETY** and **TRAFFIC** were also ranked first and second on the online survey, though **TRAFFIC** was ranked in the top five more often.
- The four most frequently ranked categories were the same at the workshop and on the online survey.
- The higher average ranking for **BYPASS USE** shows that those that ranked it typically ranked it higher on average. A similar trend was observed through the online survey.
- The gap between the frequency (times ranked) and intensity (average ranking) for **WALKING & BIKING** shows that while not everyone sees it as an important consideration, those that do think it's very important.



Statements

To better understand issues and opportunities related to the Considerations, participants were presented with three statements for each topic and used dots to indicate how much they agreed with each statement. The following tables show the results of this activity. The categories are ordered based on Considerations activity.

Safety

Crashes can occur at any time and at any location. Reducing how often crashes happen and how severe crashes are when they do occur is important during planning and design.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Most of the safety concerns in the area are related to the amount of traffic on the road.	Total	1	1	4	7	13	26
	Percent	3.3%	3.3%	13.3%	23.3%	43.3%	86.7%
Most of the safety concerns in the area are related to the current configuration of roads and intersections.	Total	0	0	0	5	26	31
	Percent	0.0%	0.0%	0.0%	16.7%	86.7%	103.3%
Most of the safety concerns in the area are related to the number of driveways and access points.	Total	1	1	10	5	11	28
	Percent	3.3%	3.3%	33.3%	16.7%	36.7%	93.3%

Traffic

Traffic often serves a daily reminder of growth and changes that have occurred over a period of time. While we can't build enough roads to make traffic issues go away, we can make strategic decisions in which transportation projects we prioritize.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
In general, traffic in the morning is worse than traffic in the afternoon.	Total	0	1	4	8	16	29
	Percent	0.0%	3.3%	13.3%	26.7%	53.3%	96.7%
In general, weekend traffic is worse than weekday traffic.	Total	16	11	2	0	0	29
	Percent	53.3%	36.7%	6.7%	0.0%	0.0%	96.7%
Truck traffic makes my daily commute worse.	Total	9	6	8	2	1	26
	Percent	30.0%	20.0%	26.7%	6.7%	3.3%	86.7%



Connectivity

Improving connectivity of the road network helps relieve some of the pressure on the most heavily traveled routes. It does so by giving people options in the routes they choose to use.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I wish I had more routes to get to places in the area.	Total	3	0	6	5	13	27
	Percent	10.0%	0.0%	20.0%	16.7%	43.3%	90.0%
Connectivity isn't the issue, it's the existing intersections that are the problem.	Total	2	4	9	3	12	30
	Percent	6.7%	13.3%	30.0%	10.0%	40.0%	100.0%
I would avoid NC 16 Business if I had better options.	Total	1	2	4	6	15	28
	Percent	3.3%	6.7%	13.3%	20.0%	50.0%	93.3%

Land Use Considerations

The transportation system greatly influences development patterns by dictating the most convenient routes of travel. Likewise, the context of surrounding development can affect how easy it is to travel through an area.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
The land uses near a potential transportation solution should be considered when deciding what to do.	Total	0	0	0	6	26	32
	Percent	0.0%	0.0%	0.0%	20.0%	86.7%	106.7%
Fewer driveways would be okay if it meant better traffic.	Total	0	1	7	8	9	25
	Percent	0.0%	3.3%	23.3%	26.7%	30.0%	83.3%
The impact to private property should be limited as much as possible when selecting transportation improvements.	Total	3	3	14	3	5	28
	Percent	10.0%	10.0%	46.7%	10.0%	16.7%	93.3%



Bypass Use

When it was constructed a few years ago, the NC 16 Bypass helped improve traffic and safety conditions in the area. Could more be done to increase use of the Bypass to help routes such as NC 16 Bypass?

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
When I choose not to use the NC 16 Bypass, it's usually because I don't like the U-turns.	Total	1	4	0	3	22	30
	Percent	3.3%	13.3%	0.0%	10.0%	73.3%	100.0%
When I choose to use NC 16 Business, it's usually because it's not convenient to get to the Bypass.	Total	1	3	2	3	17	26
	Percent	3.3%	10.0%	6.7%	10.0%	56.7%	86.7%
Traffic on NC 16 Business would be better if it was easier to use the Bypass.	Total	2	0	3	0	19	24
	Percent	6.7%	0.0%	10.0%	0.0%	63.3%	80.0%

Economic Development

The presence of a safe and efficient transportation system is often cited as an important factor when individuals and companies decide to invest in an area. Transportation projects both big and small can make a difference.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
We should focus on projects that help local businesses.	Total	1	4	9	8	5	27
	Percent	3.3%	13.3%	30.0%	26.7%	16.7%	90.0%
Projects should have a positive and direct influence on economic development.	Total	3	1	6	12	7	29
	Percent	10.0%	3.3%	20.0%	40.0%	23.3%	96.7%
Investment in the area is going to occur regardless.	Total	2	3	3	6	16	30
	Percent	6.7%	10.0%	10.0%	20.0%	53.3%	100.0%



Walking & Biking

People walk or bike for a variety of reasons. For some, it's because they enjoy it. For others, it's because they don't have other options. Transportation projects of all sizes can improve conditions for pedestrians and bicyclists.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
I would walk more if it was safer and more enjoyable.	Total	5	2	3	0	25	35
	Percent	16.7%	6.7%	10.0%	0.0%	83.3%	116.7%
I often encounter bicyclists on local roads.	Total	6	8	7	6	6	33
	Percent	20.0%	26.7%	23.3%	20.0%	20.0%	110.0%
I wish it was safer for kids to walk and bike to schools and parks.	Total	1	1	3	6	20	31
	Percent	3.3%	3.3%	10.0%	20.0%	66.7%	103.3%

Cost and Implementation

How much a project will cost and how easily it can be implemented varies based on a lot of different factors. Some projects are lower cost but still help improve conditions, while other projects are expensive but have a more substantial impact on the transportation system.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Affordable projects that could be implemented today are preferred over more expensive projects.	Total	3	6	10	6	1	26
	Percent	10.0%	20.0%	33.3%	20.0%	3.3%	86.7%
Smaller projects—but more of them—should be our focus.	Total	1	10	8	2	5	26
	Percent	3.3%	33.3%	26.7%	6.7%	16.7%	86.7%
An expensive project that makes a big difference should be the focus...even if it takes a while to be constructed.	Total	0	2	3	9	13	27
	Percent	0.0%	6.7%	10.0%	30.0%	43.3%	90.0%



Overview

An online survey launched at the July 23, 2019 community workshop to provide an additional opportunity for the public and stakeholders to offer input transportation issues and preferences in eastern Lincoln County. The survey was developed using the MetroQuest platform, which allowed participants to provide input on desktop and mobile devices by responding to prompts on five interactive screens. The survey closed September 2, 2019.

Survey Instrument | MetroQuest

Survey Period | July 23, 2019 to September 2, 2019

Participants | 882

Data Points | 25,000+

Written Comments | 1,600+

Screen Overview				
Welcome	Considerations	Statements	Mapping	Wrap Up
Screen 1 provides a brief introduction to the Eastern Lincoln Mobility Study.	Screen 2 asked participants to rank eight considerations that will be used to evaluate potential improvements.	Screen 3 asked participants to show how much they agreed or disagreed with three statements for each consideration they ranked on Screen 2.	Screen 4 allowed participants to drop pins on a map to identify locations of concern and opportunity.	Screen 5 asked participants a few final questions.
Desktop Screen Shots				
Mobile Screen Shots				



Participation Level and Participant Profile



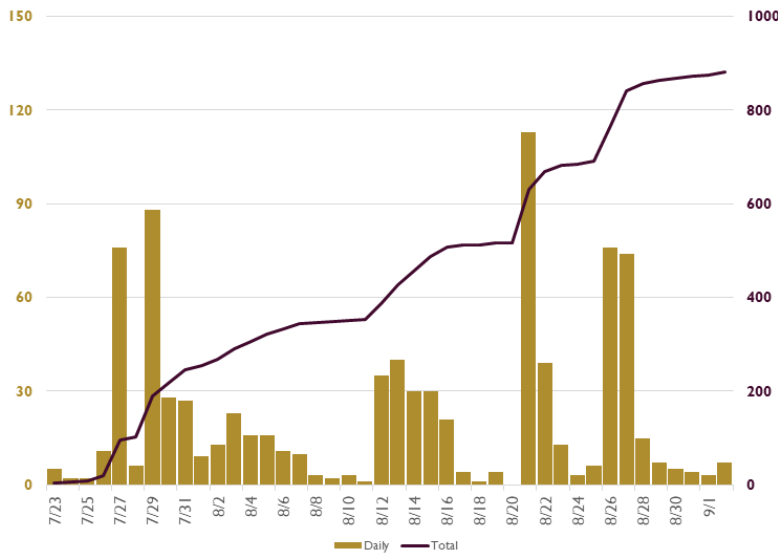
882 participants



25,000+ individual data points



1,600+ written comments

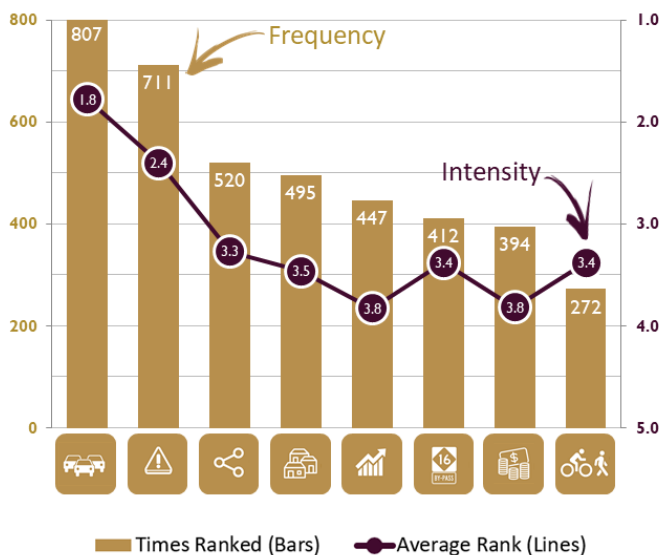


- ❖ Online engagement site designed to educate the public about the project and collect feedback using interactive and visual screens
- ❖ Active: July 23, 2019 to September 2, 2019
- ❖ Project information provided on the "welcome" screen
- ❖ Asked participants to weigh in on priorities and strategies
- ❖ Allowed participants to map areas of concern
- ❖ Asked participants to name one thing they hope results from the study

CONSIDERATIONS | What's important to you?

Considerations

The study will identify potential transportation projects throughout the study area. The projects will be evaluated based on topics the community identifies as important.



1. **TRAFFIC**
2. **SAFETY**
3. **CONNECTIVITY**
4. **LAND USE**
5. **ECONOMIC DEVELOPMENT**
6. **BYPASS USE**
7. **COST AND IMPLEMENTATION**
8. **WALKING & BICYCLING**

- **TRAFFIC and SAFETY:** most frequently ranked and highest average ranking
- **CONNECTIVITY and LAND USE:** ranked a similar number of times but CONNECTIVITY usually ranked slightly higher
- **BYPASS USE:** higher average ranking shows that those that ranked it ranked it higher on average
- **WALKING & BICYCLING:** gap between the intensity and frequency shows that while not everyone sees it as an important consideration, those that do think it's very important



STATEMENTS | Tell us more.



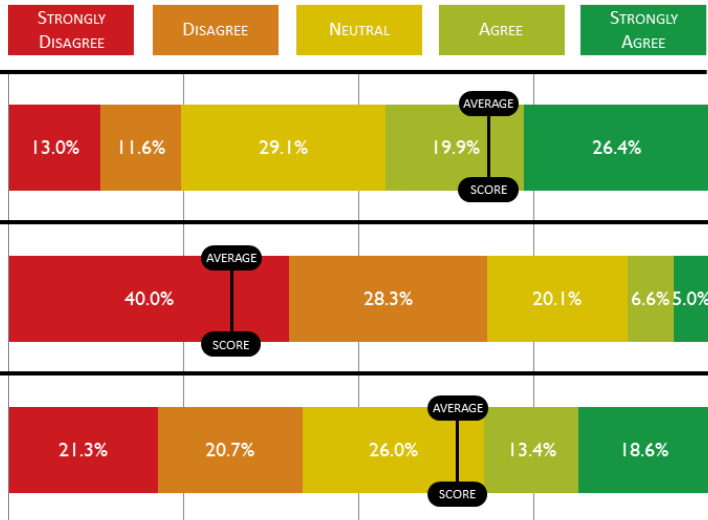
TRAFFIC



STATEMENTS

Traffic often serves a daily reminder of growth and changes that have occurred over a period of time. While we can't build enough roads to make traffic issues go away, we can make strategic decisions in which transportation projects we prioritize.

How much do you agree with each statement?



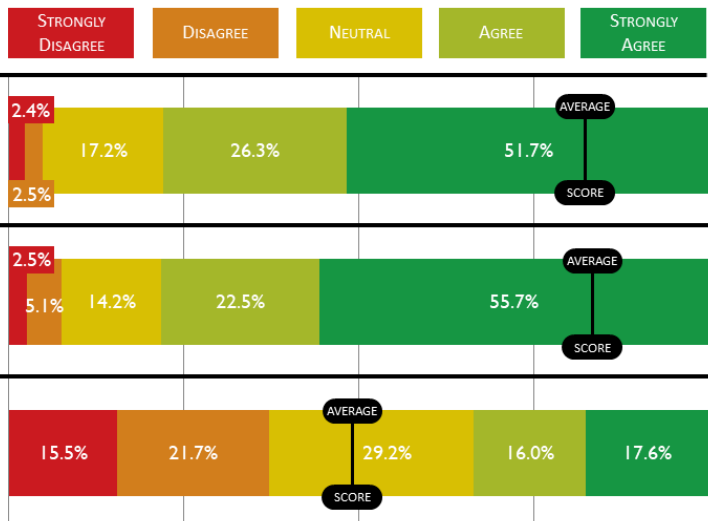
SAFETY



STATEMENTS

Crashes can occur at any time and at any location. Reducing how often crashes happen and how severe crashes are when they do occur is important during planning and design.

How much do you agree with each statement?





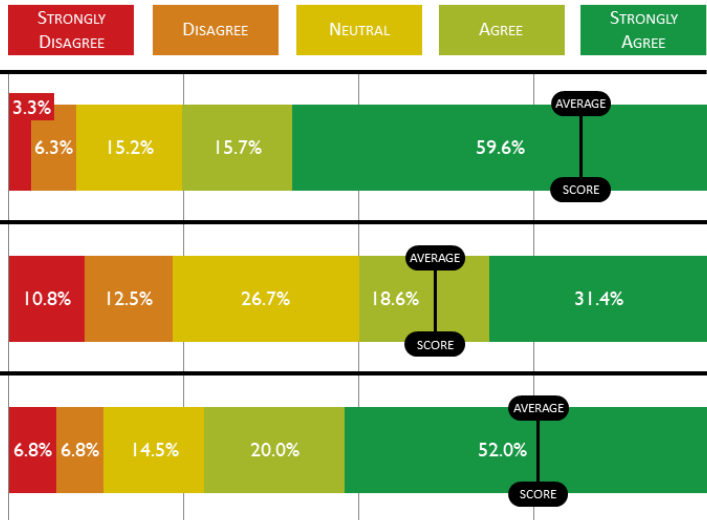
CONNECTIVITY



STATEMENTS

Improving connectivity of the road network helps relieve some of the pressure on the most heavily traveled routes. It does so by giving people options in the routes they choose to use.

How much do you agree with each statement?



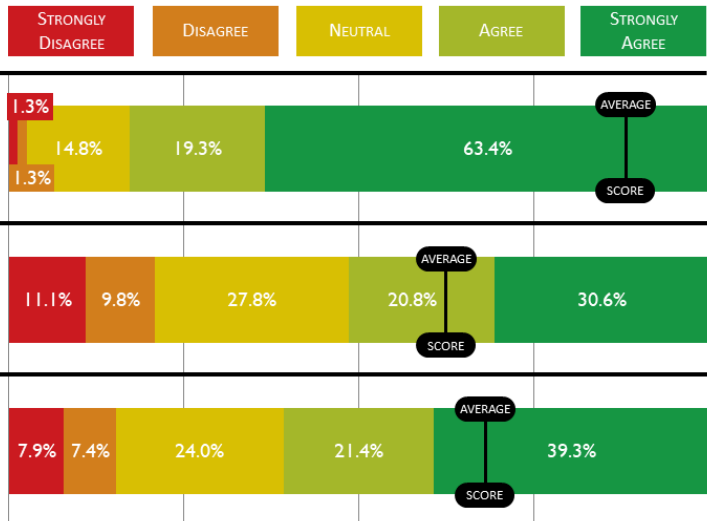
LAND USE



STATEMENTS

The transportation system greatly influences development patterns by dictating the most convenient routes of travel. Likewise, the context of surrounding development can affect how easy it is to travel through an area.

How much do you agree with each statement?





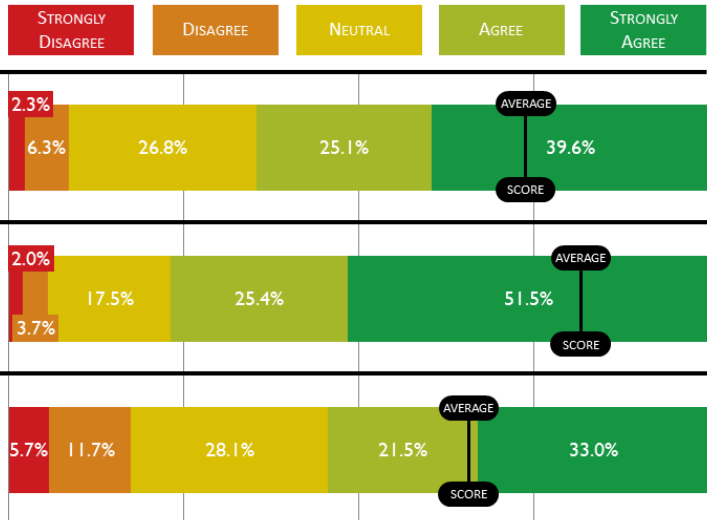
ECONOMIC DEVELOPMENT



STATEMENTS

The presence of a safe and efficient transportation system is often cited as an important factor when individuals and companies decide to invest in an area. Transportation projects both big and small can make a difference.

How much do you agree with each statement?



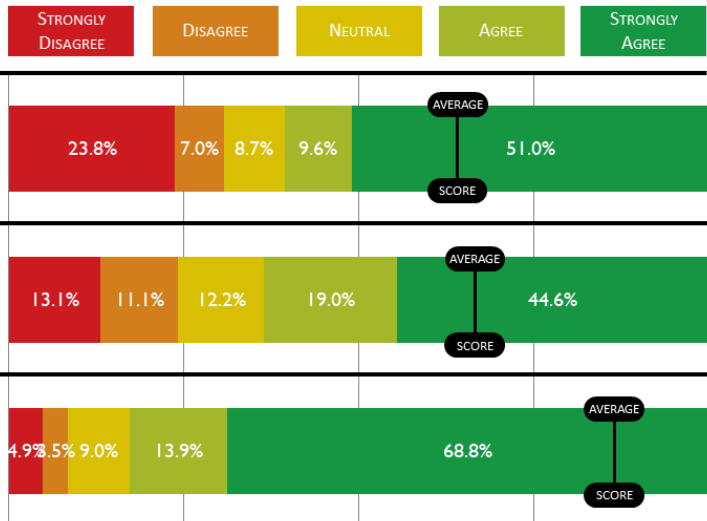
BYPASS USE



STATEMENTS

When it was constructed a few years ago, the NC 16 Bypass helped improve traffic and safety conditions in the area. Could more be done to increase use of the Bypass to help routes such as NC 16 Bypass?

How much do you agree with each statement?





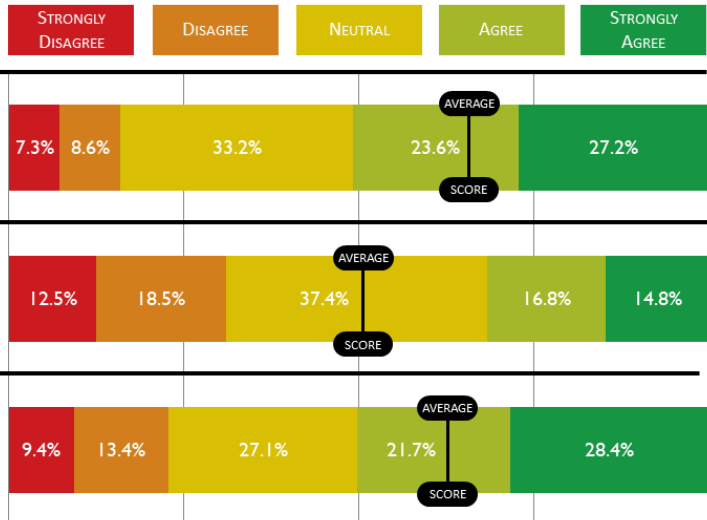
COST AND IMPLEMENTATION



STATEMENTS

How much a project will cost and how easily it can be implemented varies based on a lot of different factors. Some projects are lower cost but still help improve conditions, while other projects are expensive but have a more substantial impact on the transportation system.

How much do you agree with each statement?



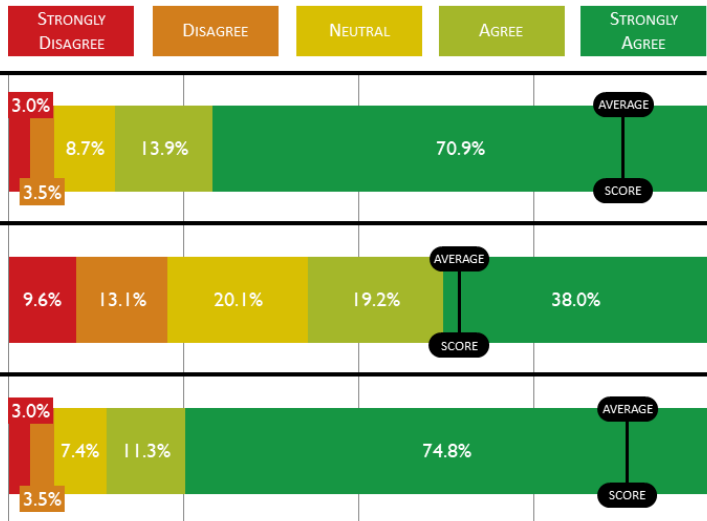
WALKING & BICYCLING



STATEMENTS

People walk or bike for a variety of reasons. For some, it's because they enjoy it. For others, it's because they don't have other options. Transportation projects of all sizes can improve conditions for pedestrians and bicyclists.

How much do you agree with each statement?

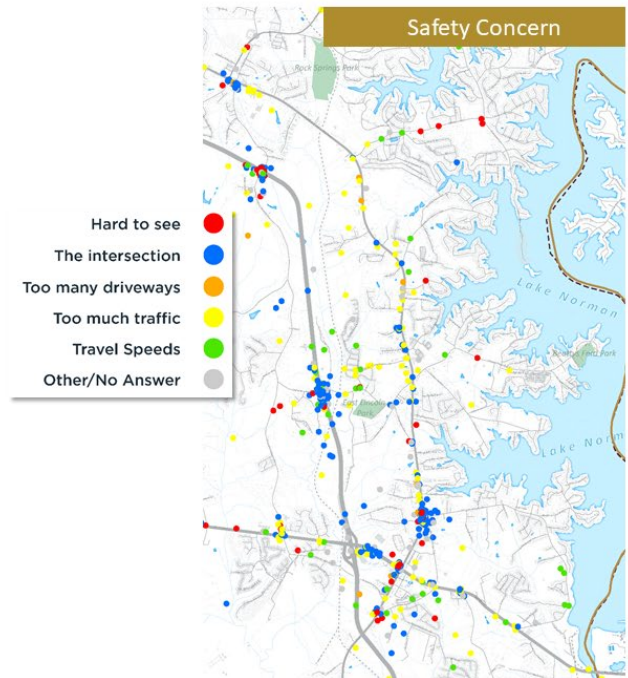
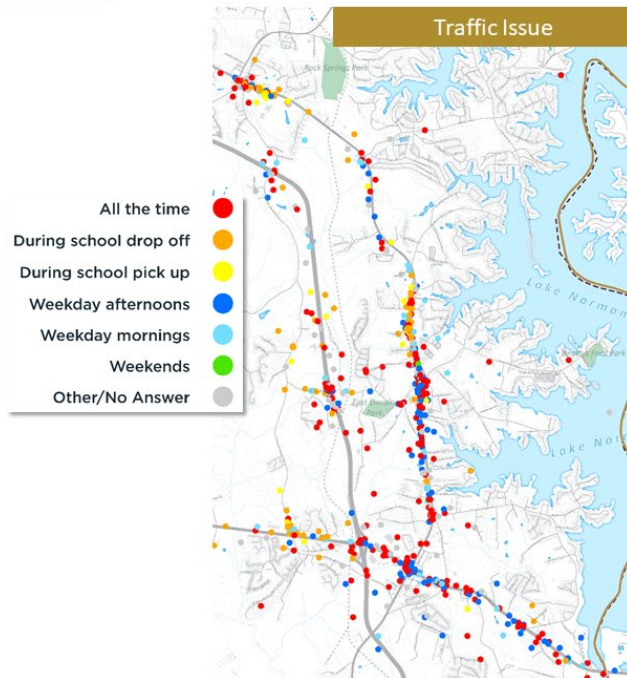




MAPPING | Where are the problems and opportunities?

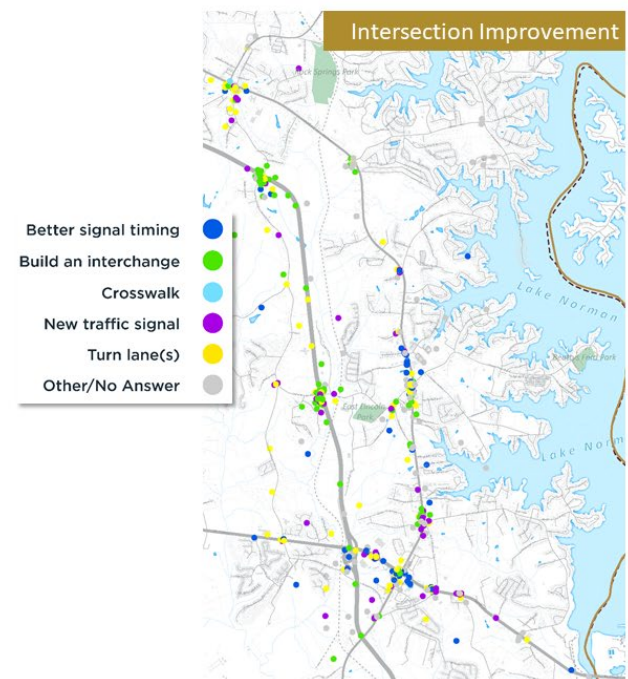
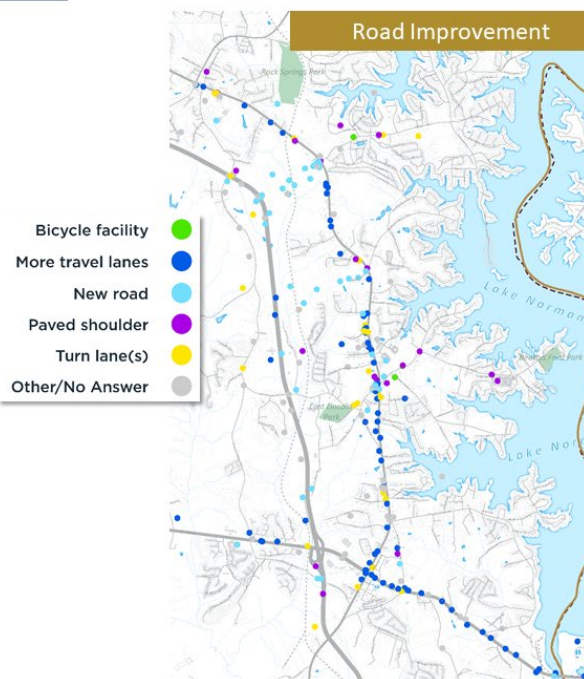
MAPPING

Where are the problems?



MAPPING

Where are the opportunities?





Please take a moment to provide any comments on the Eastern Lincoln Mobility Study. Your feedback continues to be an important part of the process.

[illegible]