

**I-77 Toll Lanes** 

February 4, 2016

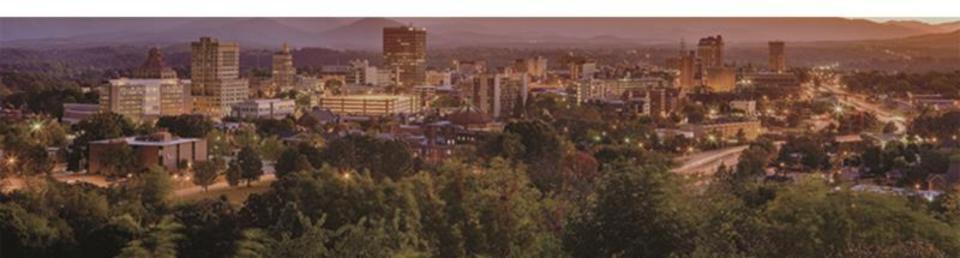




Charlotte Regional Realtor Association | February 4, 2016

I-77 and Regional Roadway Improvements

#### Warren Cooksey and Jean Leier



### **Outline of Presentation**



Introduction to Express Lanes
I-77 Project
Selected other projects
Questions



Introduction to Express Lanes

### also known as...

> High Occupancy Toll (HOT) Lanes
> Tolled Managed Lanes
> Express Toll Lanes
> Optional Toll Lanes



A Simple Definition of Traffic Congestion

### Volume of vehicles

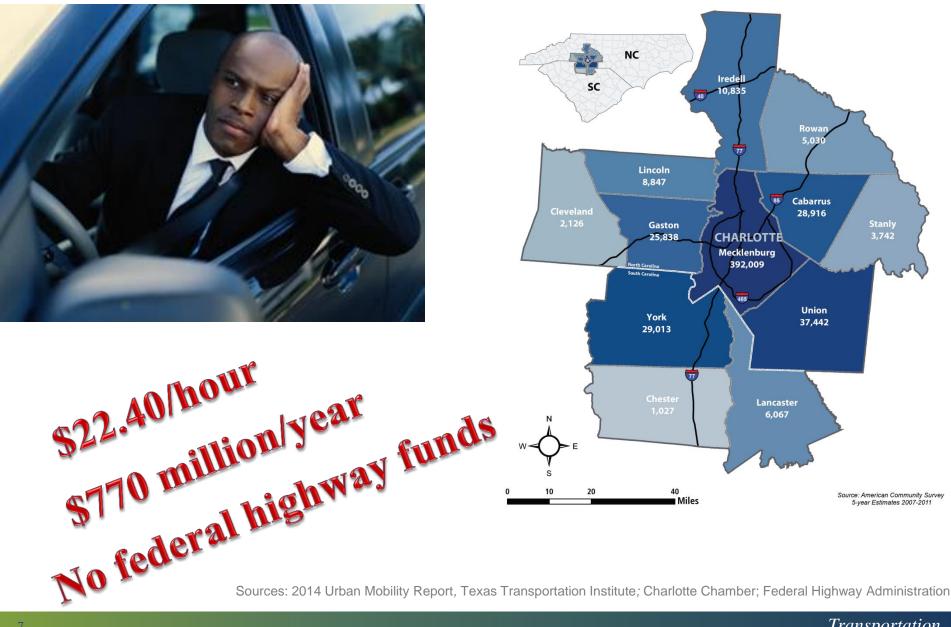


### Capacity of the road

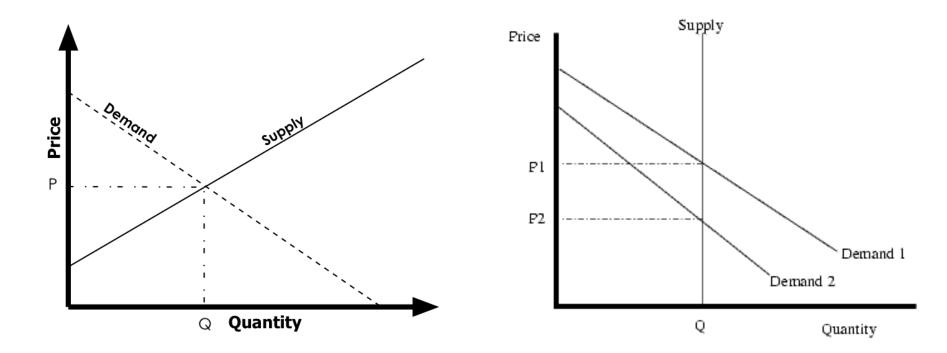
### Congestion on Highways



### Costs of "The Fundamental Law of Road Congestion"



### Economics 101

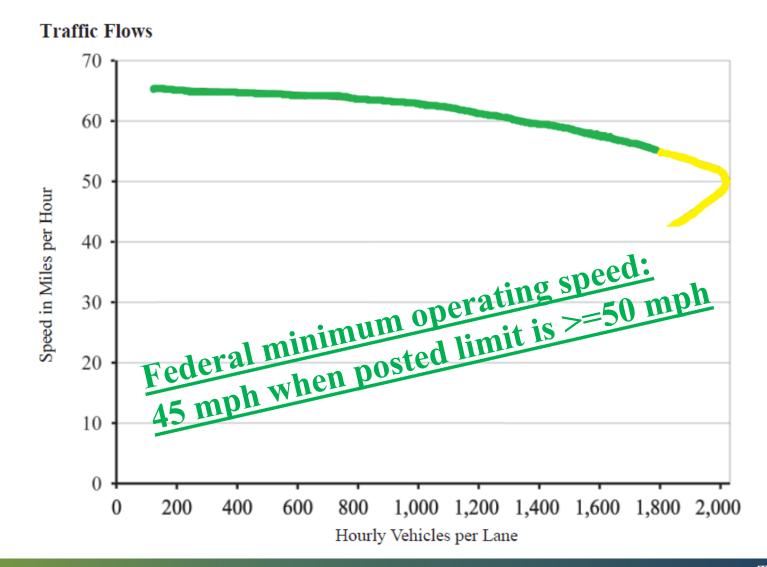


### Managing Demand to Match Supply



**Express Lanes**: separate lanes in a highway corridor in which drivers can choose to pay a variable toll for a more reliable, quicker trip within a corridor.

### Understanding Traffic Flow with Optional Toll Lanes



### Performance of Optional Toll Lanes: SR-91



"The 91 Express Lanes...carry twice as many vehicles per lane as regular lanes during peak periods, and speeds are three to four times faster."

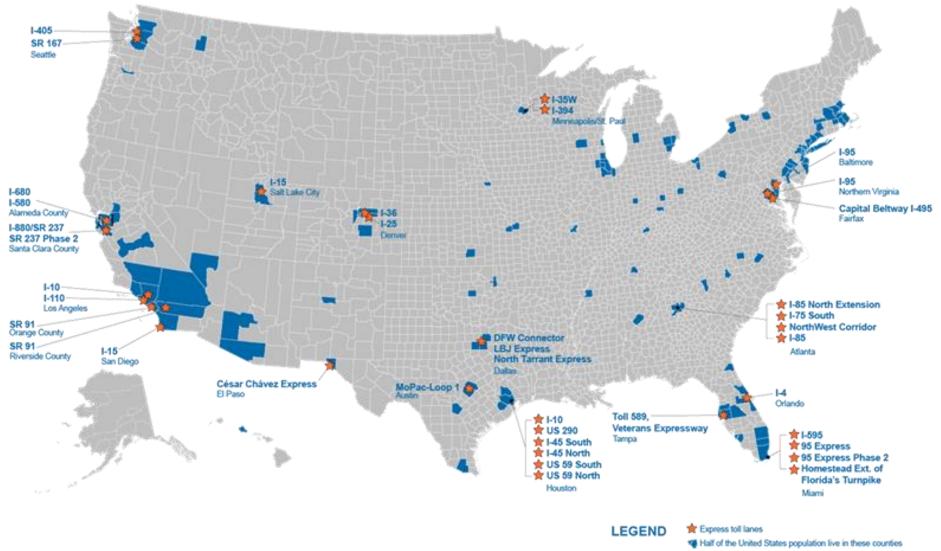
Source: Riverside County Transportation Commission, "Tolled Express Lanes//Frequently Asked Questions"





Express Toll Lanes create a new option for drivers

### **Optional Toll Lanes Nationwide**



Map of United States of America with counties by FreeVectorMaps.com

Source: Washington State DOT

## Local Response to Growth and Congestion

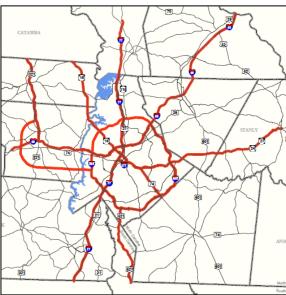
CDOT NCDOT SCDOT MUMPO FHWA CATS

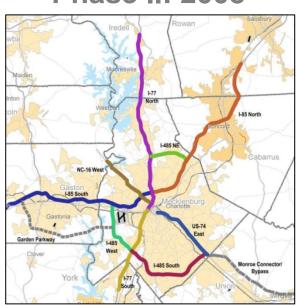


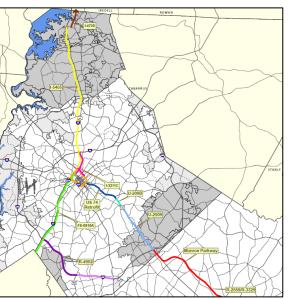
#### Phase I: 2007

Phase II: 2008

### Phase III: 2009









# <u>2010</u>

# Adopted Fast Lanes study



charlotte regional transportation planning organization



# <u>2011</u>

# Approved widening I-77 from Charlotte to Cornelius with optional toll lanes



charlotte regional transportation planning organization



# <u>2013</u>

# Approved widening I-77 from Charlotte to Mooresville with optional toll lanes through a public-private partnership



charlotte regional transportation planning organization

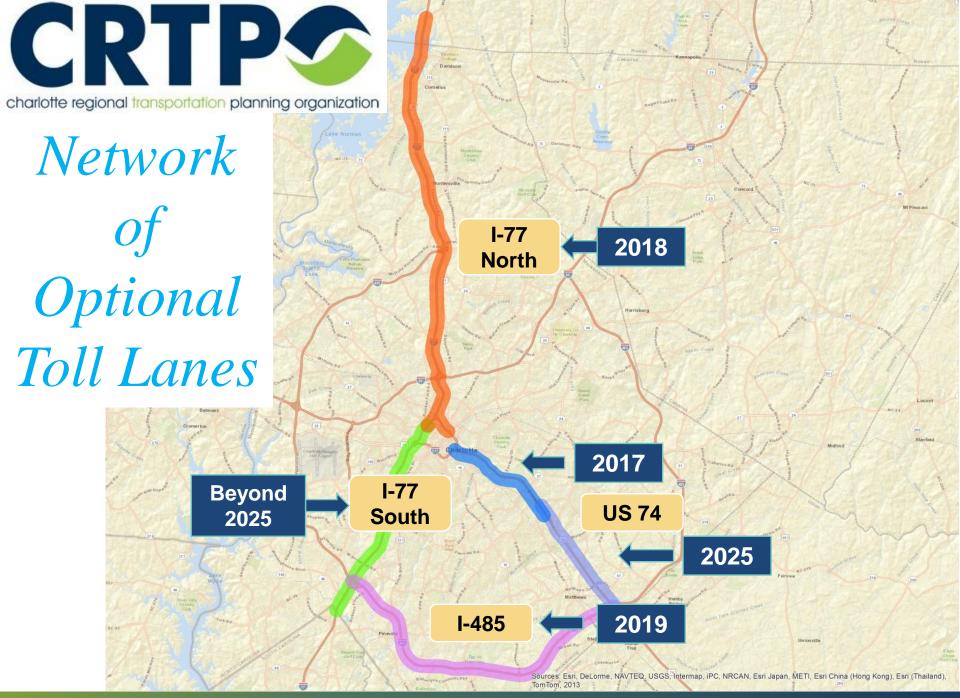


# <u>2016</u>

# Reaffirmed managed lane strategy



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### **One Customer Management Agency**











Open and manage a transponder account

Bill by Mail

Local customer service center

### The I-77 Project



#### Sources of funds

Private equity:\$248 millionToll-backed loan:\$189 millionToll-backed bonds:\$100 millionFederal/state funding:\$ 95 millionInterest & bond premium:\$ 17 million

TOTAL: \$649 million (15% taxpayer funded)





### **Commuting on I-77 North**

# We know traffic can be frustrating.





Especially if you have an important appointment.







### **Project Overview**

- Drivers decide if they use: express lanes, the general purpose lanes or a combination of both
- The current number of toll-free lanes will remain the same as today
- HOV3+ with transponder, emergency vehicles, public transit vehicles and motorcycles use the lanes free of charge
- Reduced congestion in all lanes

### It's Your Choice!





### **Using the I-77 Express Lanes**

https://www.youtube.com/watch?v=zUMMJ08jvkw



### **Benefits For Your Day**

- Flexible appointments & showings
- Livability options & choices

 Economic Development Opportunities



More time in the day for you, your family and friends to do what you want to do!

### **Travel Options**





#### Work and Job Opportunities



#### 4 park and ride lots



### **Job Creation**



- Anticipate working with 50-100 local firms during construction
- Opportunities with I-77 Mobility Partners and Sugar Creek Construction

- Workforce training opportunities available
- Provide outreach, bonding and insurance assistance and mentoring





- I-77 mobility partners
  - Construction began November 2015
  - Work in progress south of Exit 23 to north of Exit 28 in the median
  - Heavy travel times and special events will not be affected
  - Any lane closures will only take place overnight
  - Minimal disruption to motorists
  - Working with first responders
  - Entire 26-mile project scheduled for completion in 2018







#### Responsible for all 26 miles:

 General purpose lanes and express lanes

mobility partners

High level of customer service and care of corridor



- NCDOT retains snow and ice preparations and removal
- Sharing of video and communications with local emergency responders









### www.I77express.com







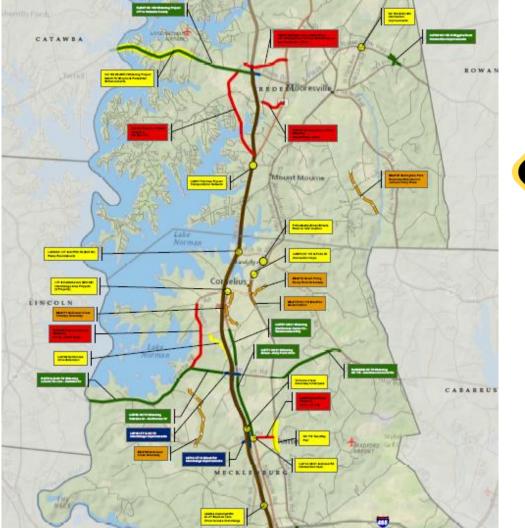




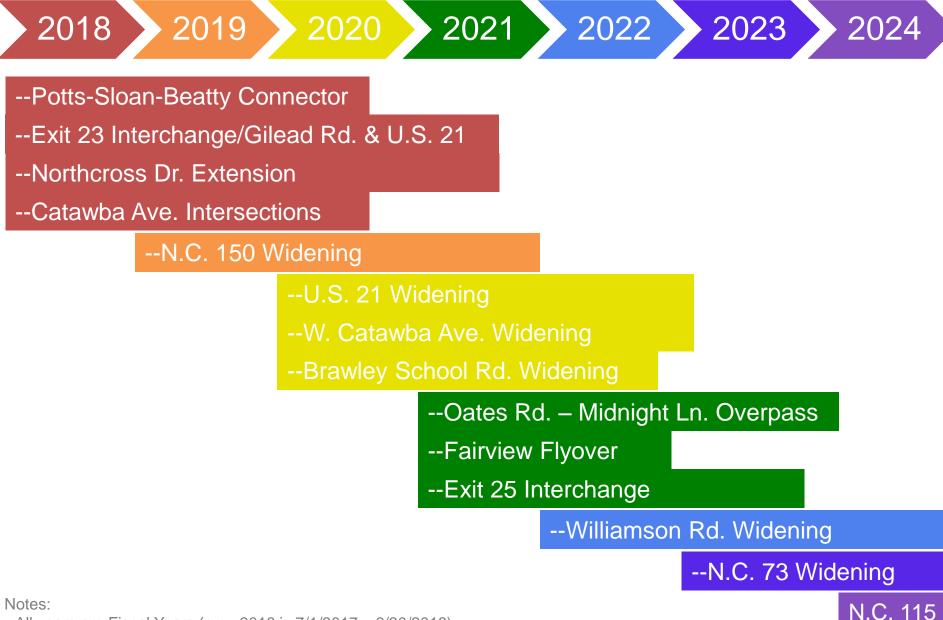




### Selected Other Projects







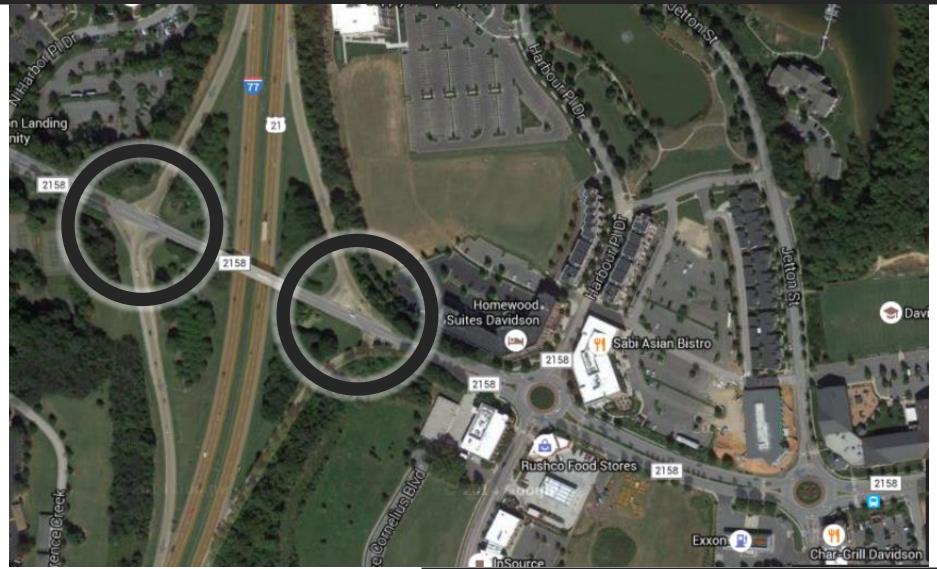
--All years are Fiscal Years (e.g., 2018 is 7/1/2017 – 6/30/2018)

--Construction years are planned as of 2/4/2016

**Transportation** 

Widening

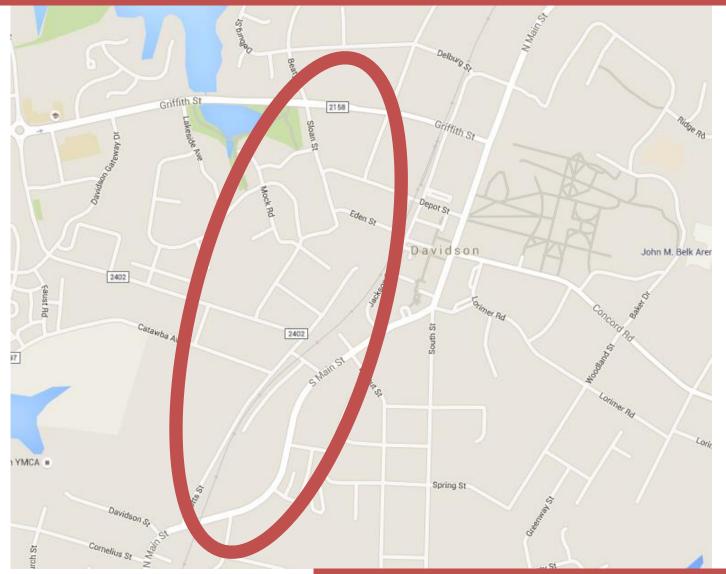
### Exit 30 Roundabouts (2016) – Davidson



I-4750AC (New)

Construct roundabouts on the I-77 ramps
 Improve traffic flow

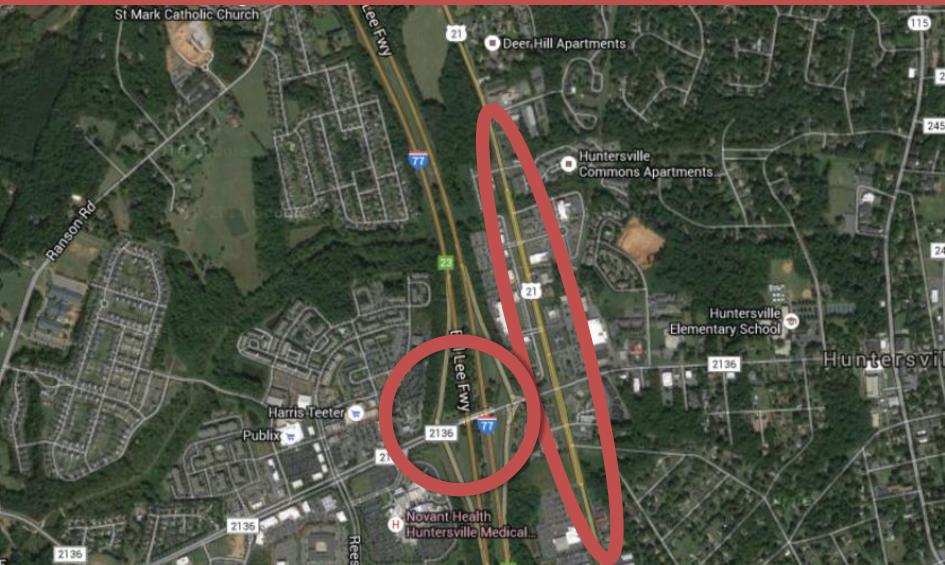
### Potts-Sloan-Beatty Connector (2018) – Davidson



U-5907 (New)

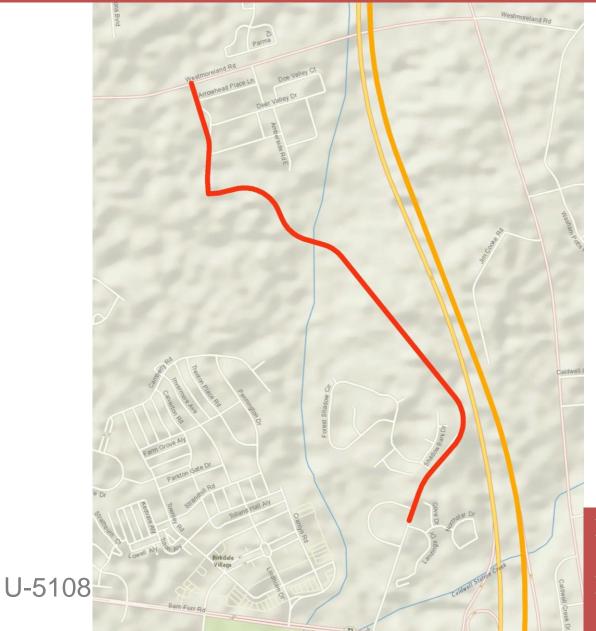
Connect streets west of downtown Davidson
 Improve north-south connectivity

### Exit 23 & U.S. 21/Gilead Rd.(2018) - Huntersville



I-5714 (New) & U-5114 Interchange and intersection improvements
 Intersection to be administered by the Town of Huntersville

#### Northcross Dr. Extension (2018) - Cornelius



Extend Northcross Dr. to Westmoreland Rd.

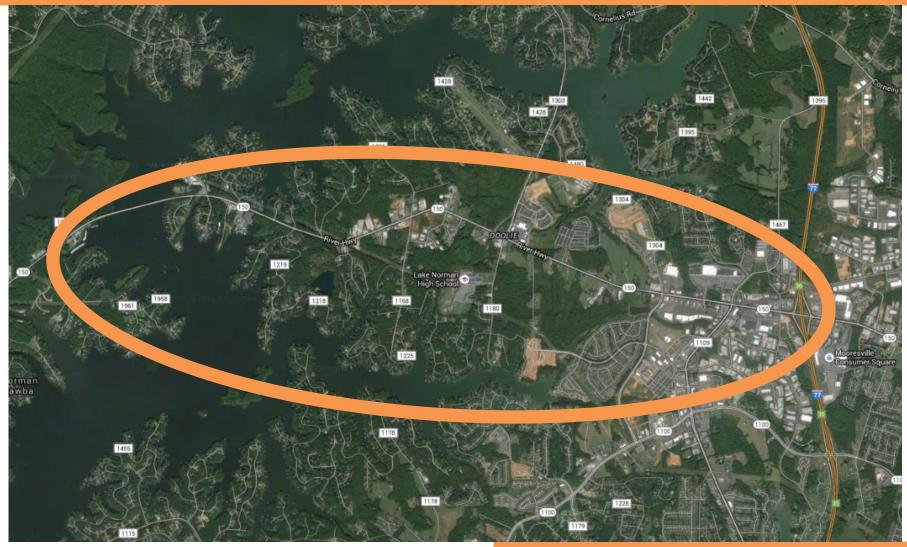
Project to be administered by the Town of Cornelius

# Catawba Ave. Intersections (2018 & 2019) - Cornelius



U-5906 (New) & C-5621 (New) Roundabout at U.S. 21 and Catawba Ave. (2018)
 Improvements at Torrence Chapel Rd. and West Catawba Ave.
 Improve safety and traffic flow

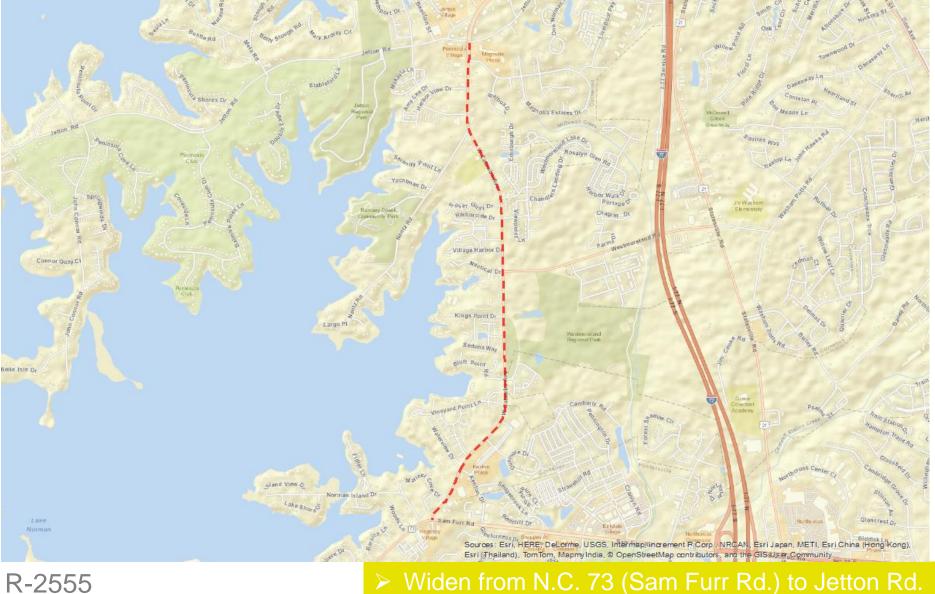
#### N.C. 150 Widening (2019) – Catawba & Iredell Counties



R-2307 (New) & I-5717 (New) Widen from Harvel Rd. to I-77

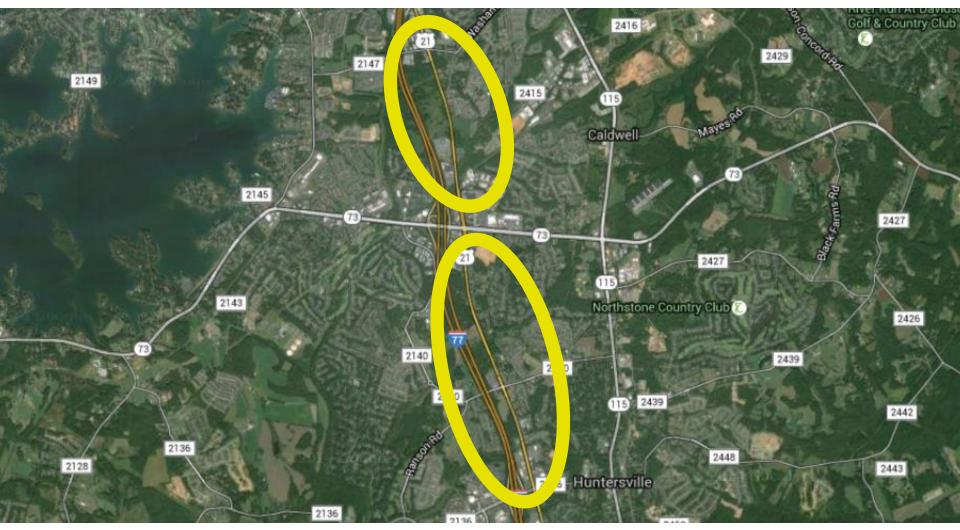
- Improve I-77 Exit 36 interchange
- Add capacity and improve traffic flow

# W. Catawba Ave. Widening (2020) - Cornelius



Widen from N.C. 73 (Sam Furr Rd.) to Jetton Rd.
Add capacity and improve traffic flow

## U.S. 21 Widening (2020) – Cornelius & Huntersville

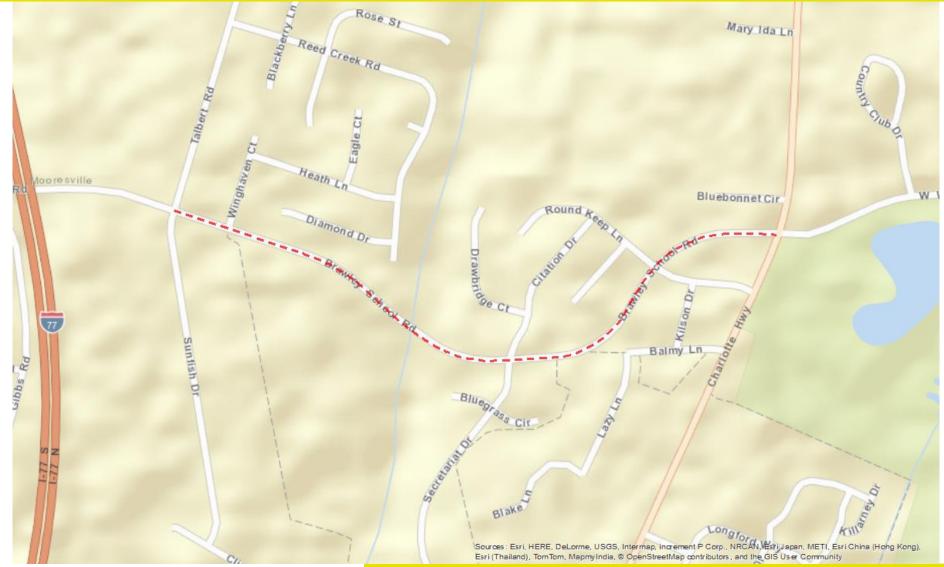


U-5767 (New) & U-5771 (New)

Widen from Northcross Center Pt. to Westmoreland Rd.
Widen from Gilead Rd. to Holly Point Dr.

Increase capacity and enhance local connectivity

### Brawley School Rd. Widening (2020) - Mooresville



Widen from Talbert Rd. to U.S. 21 (Charlotte Hwy.)
 Completes widening of Brawley School Rd.

R-3833 (New)

# Oates Rd./Midnight Ln. Overpass (2021) - Mooresville

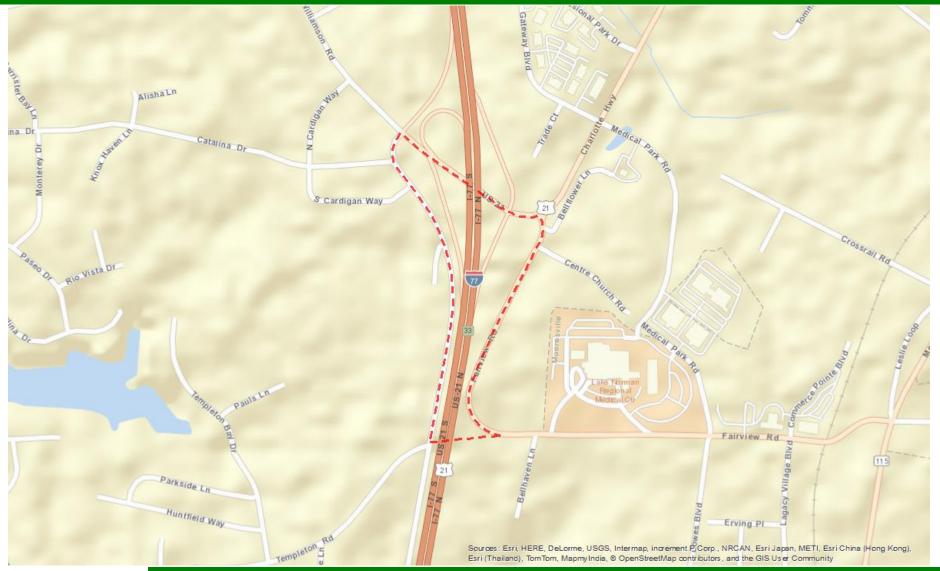


U-5816 (New)

Construct overpass over I-77 from Midnight Ln. to Oates Rd.
 Improve Midnight Ln. and Oates Rd.

Enhance local connectivity

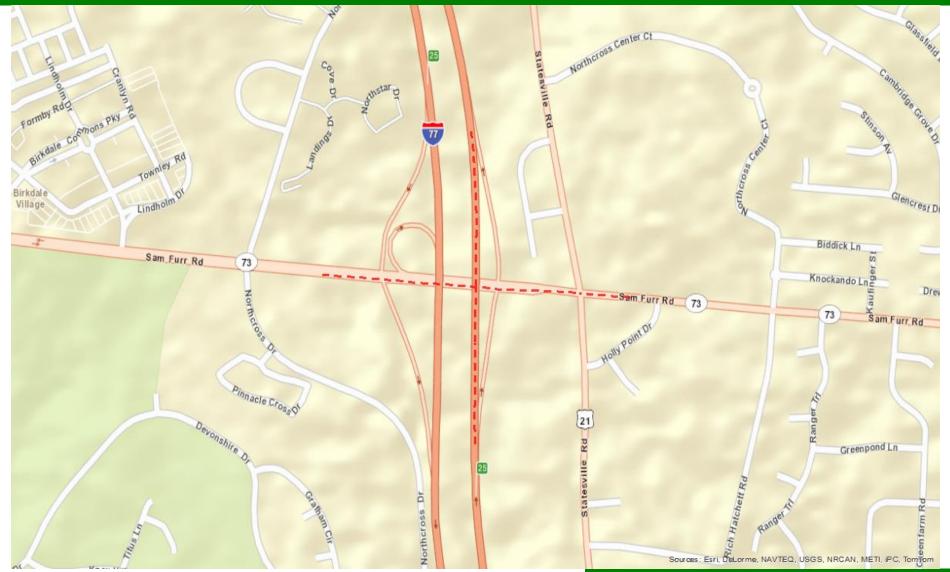
# Fairview Flyover (2021) - Mooresville



U-5817 (New)

Construct overpass connecting Fairview Rd. and Alcove Rd. over I-77
 Construct additional links to surrounding road network

## Exit 25 Interchange (2021) - Huntersville



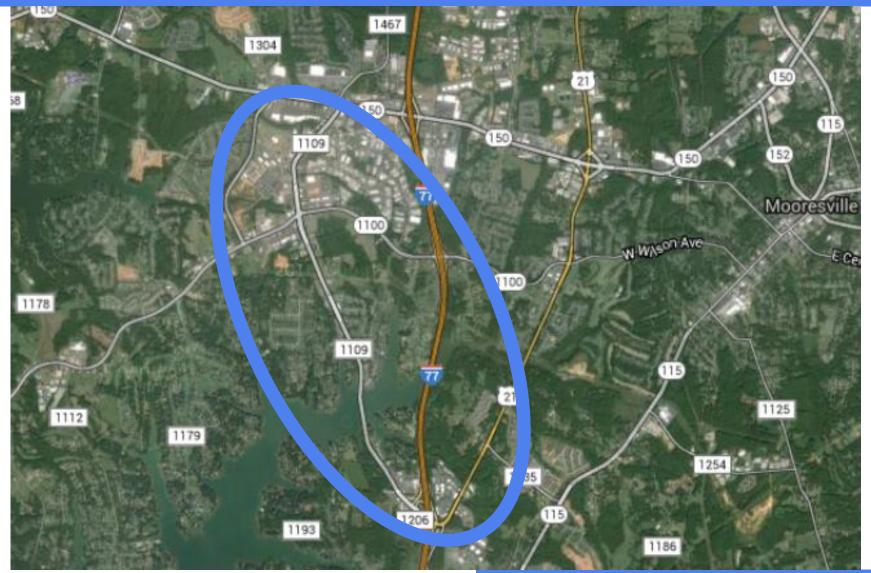
Interchange improvement
Improve safety and traffic flow

**Transportation** 

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I-5715

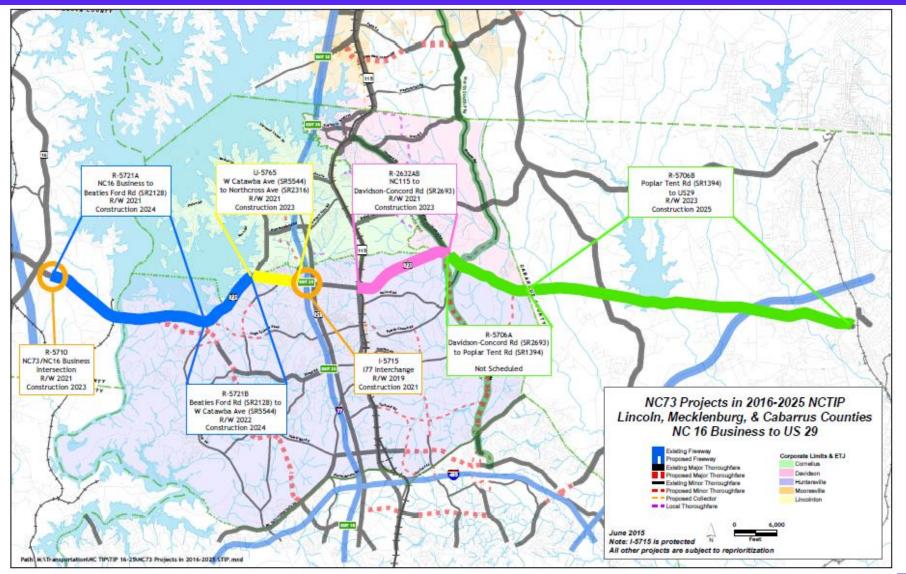
### Williamson Rd. Widening (2022) - Mooresville



R-5100 (New)

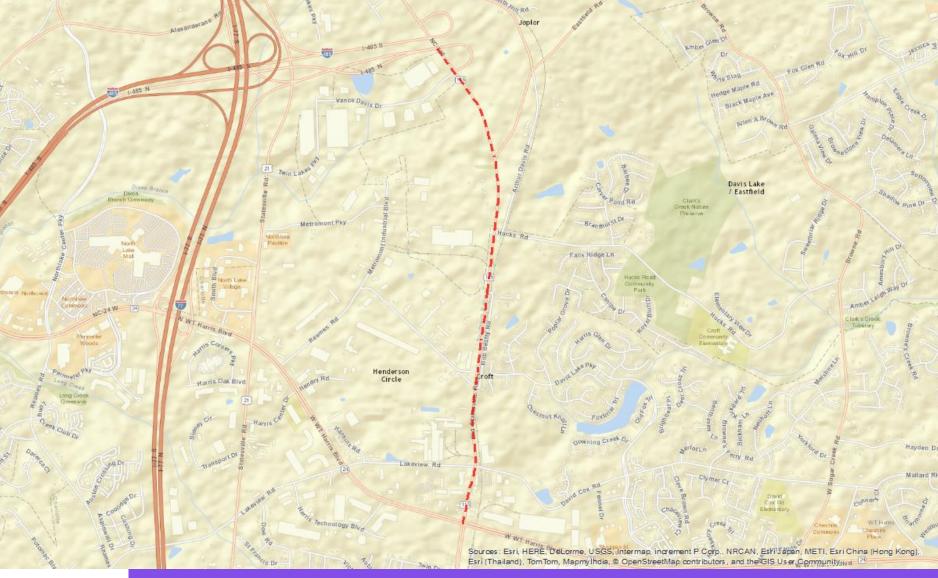
 Widen from I-77 to N.C. 150
 Add capacity and improve traffic flow Transportation

#### N.C. 73 Widening (2023) – Lincoln, Mecklenburg, Cabarrus



 (6 New, → Widen from Business 16 in Lincoln County to U.S. 29 in Cabarrus County
 1 Funded) → Add capacity and improve east-west regional connectivity

#### N.C. 115 Widening (2023) – Charlotte



- U-5772  $\succ$  Widen from Harris Blvd. to I-485
  - Add capacity and improve north-south regional connectivity

**Transportation** 

(New)



# In conclusion...

**I-77 EXPRESS LANES** 



Originated locally to address congestion over the long term

INTERSTATE

- Protects taxpayers from the risk of underperformance
- Is one of more than two dozen projects to improve travel in the Lake Norman area



# **177 EXPRESS LANES**

#### Post-Bid Improvements

CONNECTIVITY

**IMPROVEMENTS** 



