



# LYNX Blue Line Extension LPA and NEPA Preferred Alternative

## Reduce Cost and Accelerate Schedule

- Cut capital cost by 20%
- Reduce annual operating and maintenance costs by 6.5%
- Open project in 2016



- Change project terminus to UNC Charlotte
- Operate 2-car trains every 7.5 minutes initially and 3-car trains every 10 minutes in future
- Purchase 18 vehicles
- Use surface lots at Sugar Creek station
- Eliminate park and rides at Tom Hunter and McCullough
- Construct a storage yard only at the NS Intermodal Yard and up-fit the existing South Blvd facility
- Retain North Tryon cross-section

## Change Project Terminus to UNC Charlotte

- Estimated net savings is \$92 million
- Eliminates 1.1 miles of mostly bridge structure crossing wetlands including grade separation over Mallard Creek Church Road
- Most of I-485 ridership redistributes to other stations (JW Clay Blvd and University City Blvd) – revised ridership projections estimate approximately 90% of ridership will be retained.
- Reduces annual operating expenses by about 7 percent
- Retains \$40 million in budget to replace I-485 parking needs

## **Provide additional spaces at University City Blvd (UCB) and JW Clay Blvd stations to replace the 2000 spaces lost by elimination of I-485 deck**

- \$40 million retained in project cost for replacement parking
- Roadwork needed to address traffic from additional parking required at the UCB station
- New parking deck proposed for the JW Clay Blvd station

## **Replace Sugar Creek deck with surface parking**

- Estimated \$9 million savings

## **No parking at Tom Hunter or McCullough stations**

- Tom Hunter has low demand for parking
- McCullough is high cost, constrained site

## Traffic mitigation required at UCB station

- Approximately 800 parking spaces have been transferred from the I-485 station to the UCB station
- CATS can provide improvements to mitigate traffic impacts to minimum required service levels (minor adjustments to lengths of left turn lanes into and out of the park and ride road); or
- An alternative improvement (lengthen right turn lanes to create continuous right/through lanes from I-85 Connector to UCB) would provide better overall traffic flow – requires additional funding
- City staff is exploring options to fund the better treatment; the total cost of this improvement is approximately \$4 million; the City share would be around \$1 million

## Purchase 18 vehicles\*

- Estimated savings is \$38 million
- Initial operation: 7.5 minutes (2-car)
- Ultimate operation: 10 minutes (3-car) needed around 2028
- 10-minute headways yield lower annual operating and maintenance cost over originally planned 2-car trains at 6 minutes

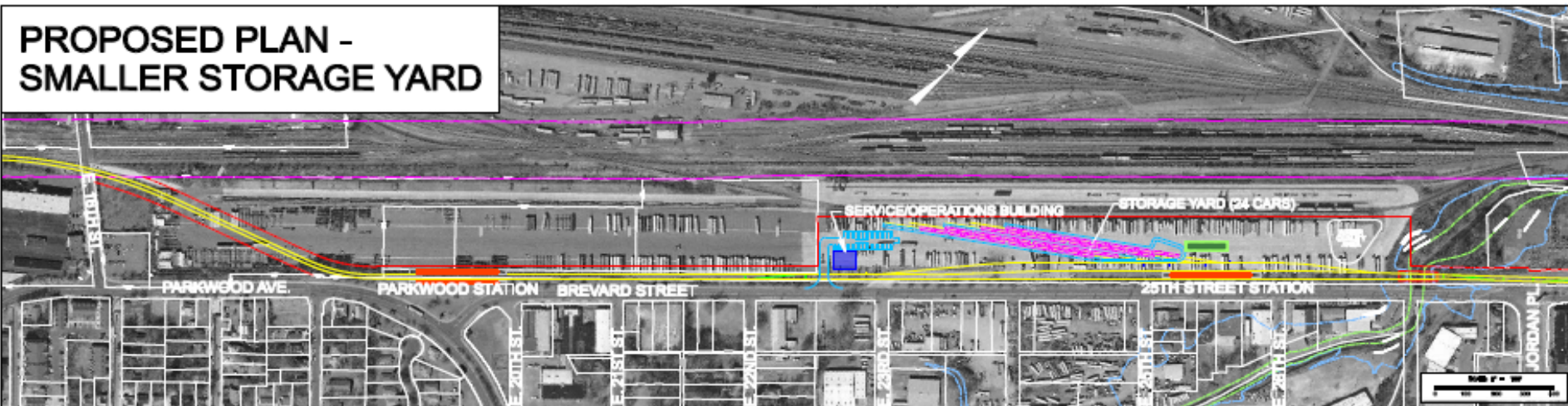
## Reduction of 8 vehicles from current estimate

- Shorter project reduces vehicle requirement by 4
- 3-car trains require 4 fewer vehicles



- Reduce the planned facility at the NS Intermodal site to a small yard with minimal improvements to the facilities at the existing South Boulevard site
- Reduces cost by \$26 million

## PROPOSED PLAN - SMALLER STORAGE YARD





- Retain planned North Tryon Street cross-section and right of way (ROW)
- Fund incremental ROW costs and new street improvements with \$13 million in alternative local funds (NECI) to leverage state and federal funds



**In summary, the estimated net savings, in 2010 dollars, due to scope reductions are as follows:**

End project @ UNC Charlotte	\$ 92 million
Sugar Creek parking modifications	\$ 9 million
Reduce fleet size by 8 vehicles	\$ 38 million
<u>Reduce VMF needs</u>	<u>\$ 26 million</u>
<b>Total Scope and Cost Reductions</b>	<b>\$165 million</b>

## **BLE 30% Design Cost Estimate**

Base Year Estimate (2010\$): \$983 million

YOE Cost Estimate (YOE\$): \$1.12 billion (3.25% escalation)

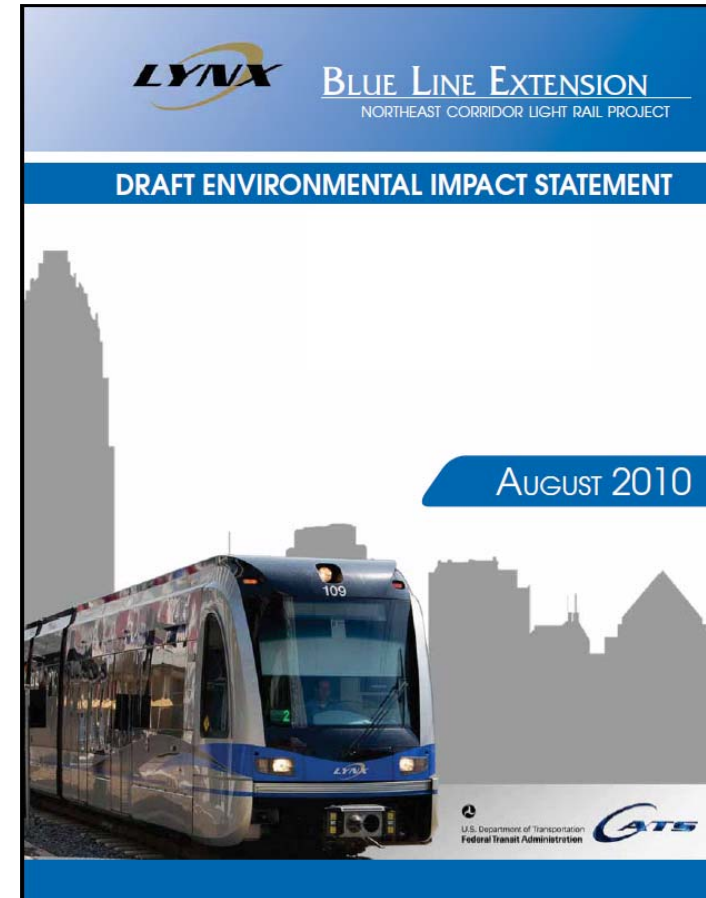
**Revised BLE Cost: \$983-\$165 = \$818 million**

## Revised BLE Approximate Cost Estimate

Base Year Estimate (2010\$):		\$812 million
YOE Cost Estimate (YOE\$):		\$967 million (4.0% escalation)
Federal	50%	\$483 million
State	25%	\$242 million
CATS	24%	\$228 million
City of Charlotte	1%	\$14 million

**JPA recommended CATS share target: \$227 million**

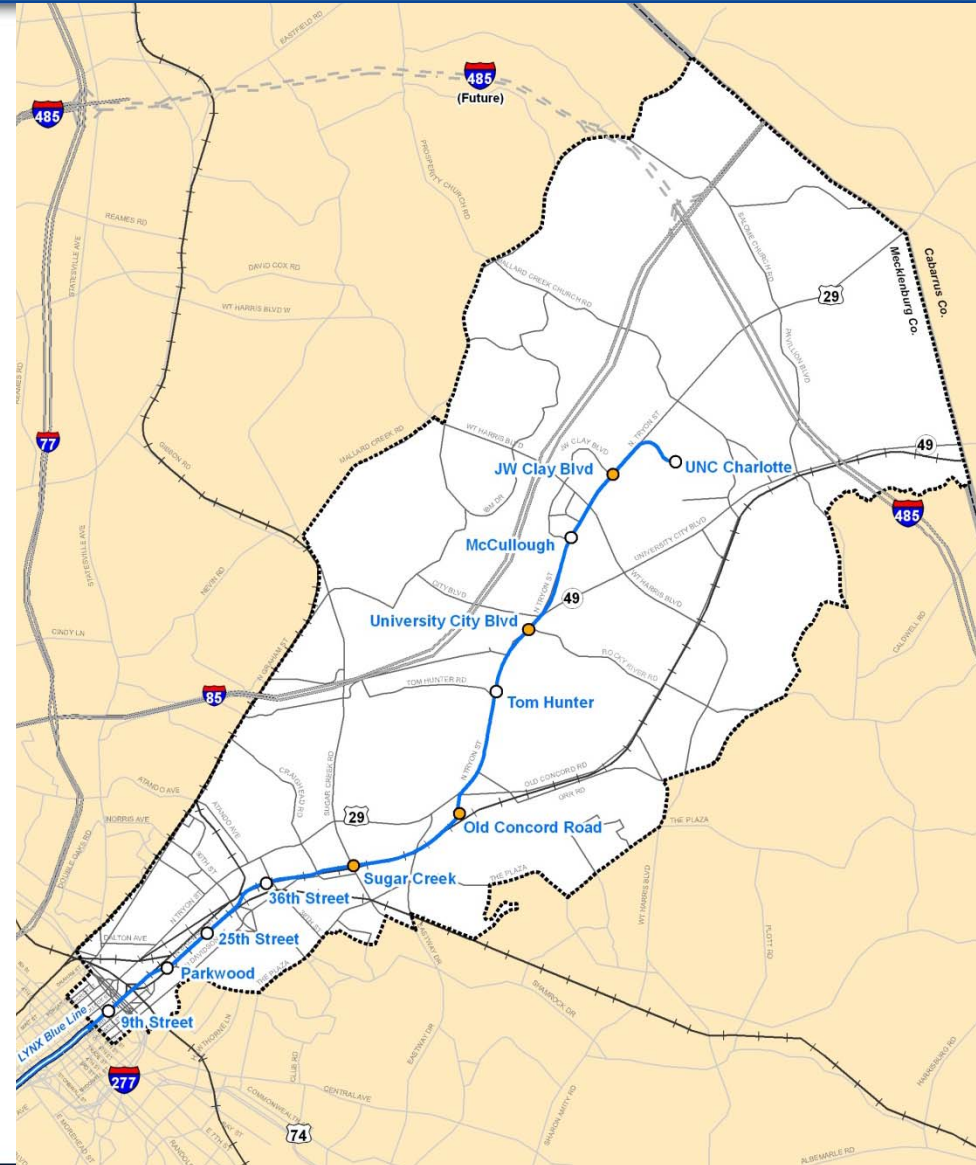
- Comment Period August 27 - October 12, 2010
- Public Comments (18)
  - 12 Written Comments
  - 6 Verbal Comments at Public Hearing
- Agency Comments (9)
  - US Environmental Protection Agency (EPA)
  - NC Dept. of Transportation (NCDOT)
  - State Historic Preservation Office (SHPO)
  - NC Wildlife Resources Commission
  - NC Dept. of Environment and Natural Resources (DENR) Water Quality Division
  - NC DENR Division of Environmental Health
  - Town of Harrisburg
  - Mecklenburg-Union Metropolitan Planning Organization (MUMPO)
  - US Dept. of Interior (US Geological Service, US Fish and Wildlife Service)



- Stakeholder meetings
  - UNC Charlotte, University City Partners, CMC-University
- Recommendations announced at MTC Meeting on December 15, 2010
- Extensive media coverage
- Public meeting
  - Oasis Shriner's Center held January 12, 2011
  - 28 attendees
- Public survey (at meeting and on-line)
  - 298 responses
  - 76% support changes overall

## Adopt Light Rail Alternative to UNC Charlotte as Locally Preferred Alternative (LPA) and NEPA Preferred Alternative

- 7<sup>th</sup> Street to UNC Charlotte  
(9.4 miles)
- 11 stations, including 4 with  
park and rides



- Complete 65% Design and Final EIS
- Prepare /submit New Starts information package including updated financial plan for revised project
- Conduct Risk Assessment
- Prepare Independent Cost Estimate
- Confirm budget of revised project - identify project elements for bid alternates
- Amend STV Preliminary Engineering contract to finish 65% design