

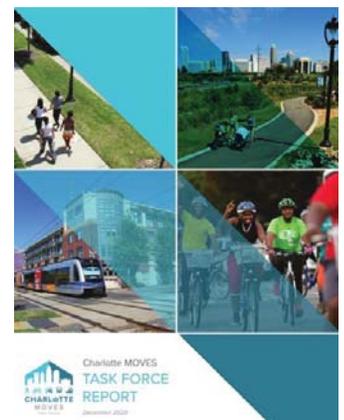
# Transformational Mobility Network Update

JUNE 28, 2021

## Forming Charlotte MOVES Task Force

### ◀Original Charge:

- “The primary goal of this task force is to bring the vision of a robust network of mobility solutions to fruition, determine what that vision would cost, and how to pay for it” – Mayor Vi Lyles



# Charlotte Moves Recommendations and Approach (December 2020)

## ◀ Funding and Construction Recommendations

- Total Program Cost: \$8 to \$12 billion with 50/50 Funding Approach
  - *Local portion: \$4 to \$6 billion*
  - *State and Federal portion: \$4 to \$6 billion*
- Construction: 10+ years
- Financing: 30 years
- Revenue Estimate (no growth assumed):
  - *1 cent = \$6.6 billion over 30 years*

# Charlotte Moves Recommendations (December 2020)

 TIME & DURATION	 PROGRAM SCALE & AMOUNT	 FUNDING SOURCES
<p>Construction: <b>10+ Years</b></p> <p>Financing: <b>30 Years</b></p> <p>Exact duration influenced by an agreed upon financial plan and construction program</p>	<p>Total Program: <b>\$8 to \$12 Billion</b></p> <p>Local Portion: <b>\$4 to \$6 Billion</b></p> <p>Program includes design, construction, operation, maintenance, and financing</p>	<p>Partnerships State &amp; Federal Grants County Source Planned Capital Investment Binary New Source Increased Sales Tax Secondary New Source Dedicated Property Tax Local</p>

# Charlotte Moves Cost Inputs

*Based upon figures below, Charlotte Moves Task Force recommended a range for total program cost of \$8-\$12B*

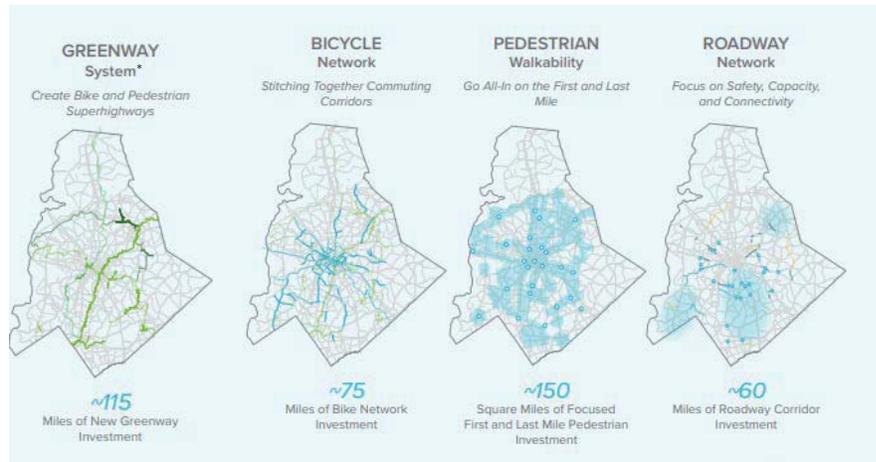


## Transit Program: Charlotte Moves

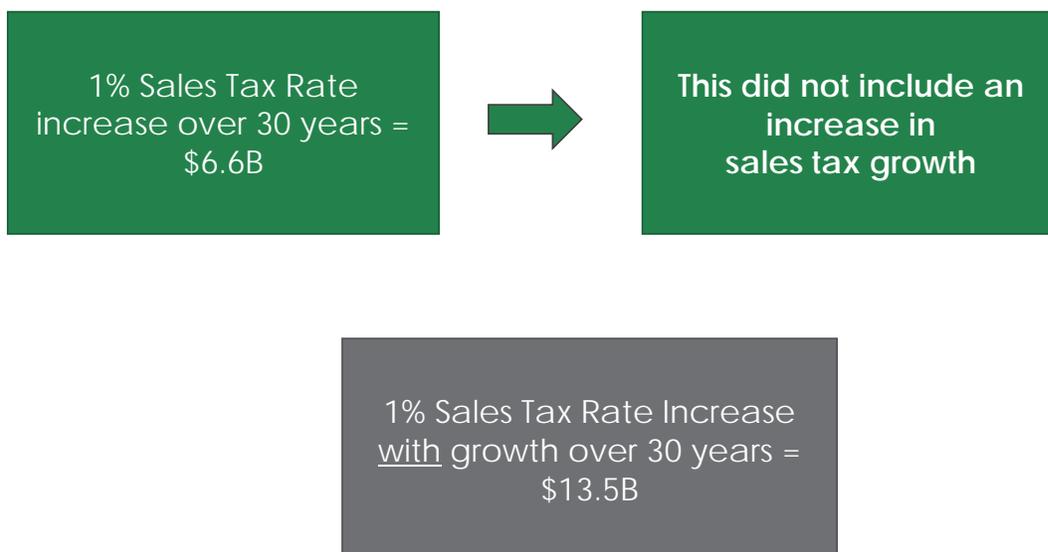
Service	Cost Estimate
Gold Line Phase III	\$587 million
Redline (Uptown to Davidson)	\$503 million
Blue Line Ballantyne Extension	\$1,042 million
Blue Line Core Capacity	\$61 million
Silver Line (Countywide)	\$6,229 million
I-77 Bus Rapid Transit	\$198 million
Envision My Ride	\$57 million
<b>Total</b>	<b>\$8,677 million</b>

# Transportation Program: Charlotte Moves

Program Estimate: \$1.9 billion



# Revenue Estimates: Charlotte Moves



# Progress to Date

## ◀ Assessment

- Assessing Charlotte Moves recommendations (timeline, funding strategy, and financing plan)

## ◀ Funding and Financing

- Selected Davenport Financial Advisors and InfraStrategies to develop funding scenarios
  - *Key Task: Understand if 1 cent sales tax increase can fund the Transformational Mobility Network Plan*

## ◀ Legislative and Advocacy

- Leveraged connections to Natural Resources Defense Council to understand public sentiment
- Partnered with Charlotte Regional Business Alliance (CRBA) who:
  - *Selected Institute for Transportation Research and Education to understand economic impact*
  - *Engaged Nexus Strategies and Strategic Partners Solutions to develop political consensus at the state and regional levels*

# Legislative Strategy/Economic Analysis Coordination



**Janet LaBar**  
President and CEO  
Charlotte Regional Business Alliance

# InfraStrategies Financial Team



**Sharon Greene**  
Managing Principal  
InfraStrategies LLC

*Nationally-recognized expert with over four decades of transit finance advisory experience*  
*Chair of APTA's Innovative Funding, Finance, and Public-Private Partnership Committee*



**Carolyn Flowers**  
Managing Principal  
InfraStrategies LLC

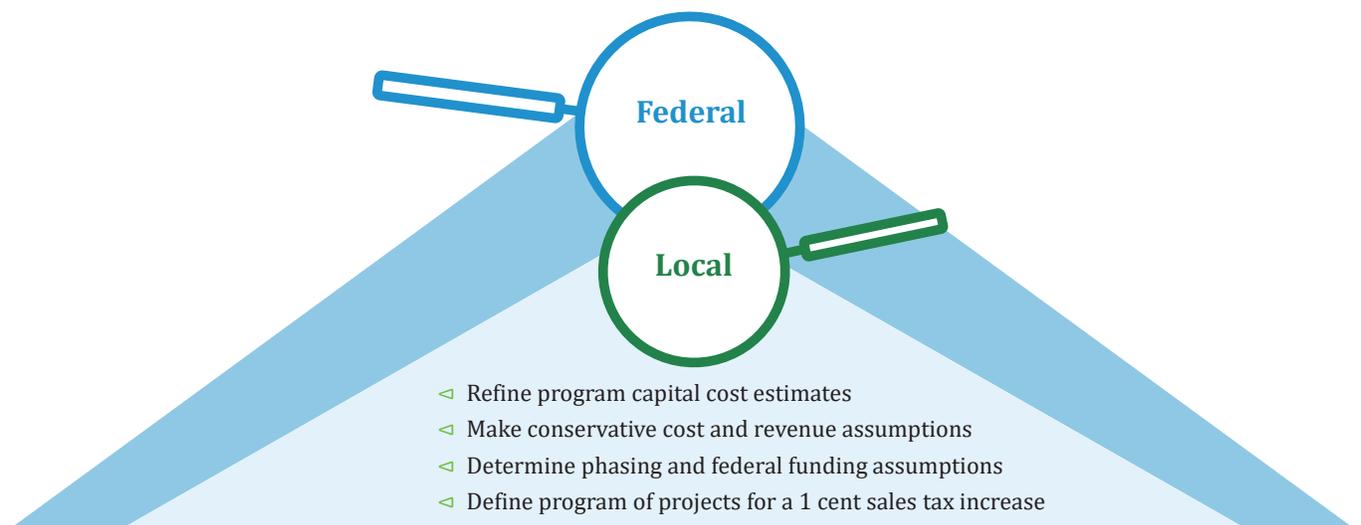
*Former FTA Acting Administrator and Agency CEO*  
*Led development of federal guidance, programs, initiatives, and policy changes at FTA*



**Amanda Vandegrift**  
Principal Consultant  
InfraStrategies LLC

*Senior financial advisor for major transportation providers across the country*  
*Specializes in the development of dynamic financial models and multibillion dollar financial plans*

# Preliminary Transformational Mobility Network (TMN) Financial Plan



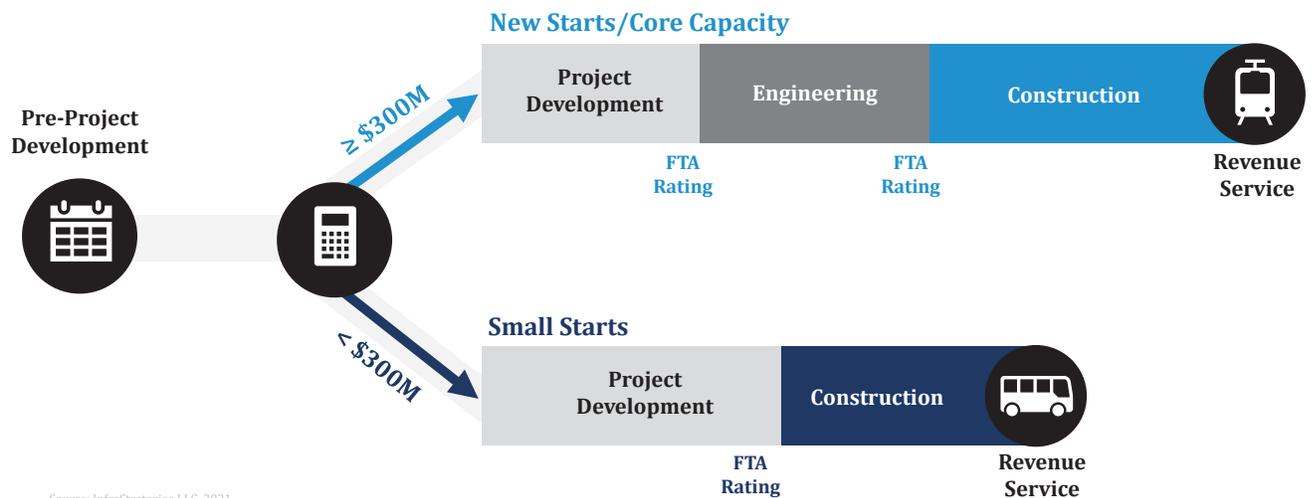
# Why Now?

2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041



- ◁ Potential for more infrastructure funding from new Administration
- ◁ Changes in criteria for discretionary grants with recent new grant notices
  - Focus on equity and climate change
- ◁ Increased interest in advancing infrastructure projects in urban areas

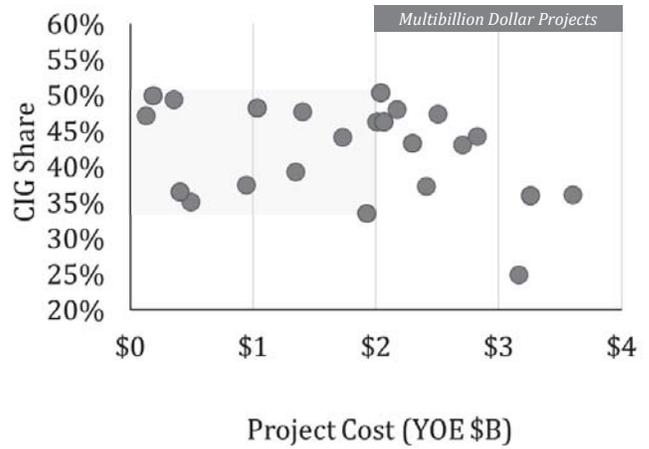
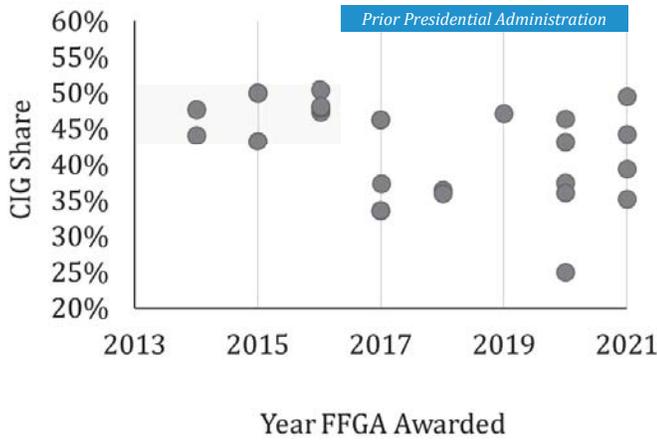
## FTA Capital Investment Grant (CIG) Program Categories and Phases



Source: InfraStrategies LLC, 2021  
Adapted from the Final Interim Policy Guidance, FTA CIG Program, June 2016

# FTA Capital Investment Grant (CIG) Program

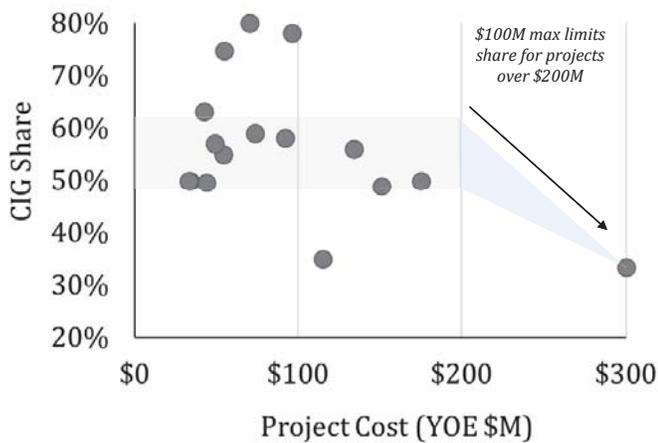
## Recent New Starts Awards (35-50%)



Source: InfraStrategies LLC, 2021  
New Starts and Core Capacity Projects Awarded FFGAs (FY14 - Present)

# FTA Capital Investment Grant (CIG) Program

## Recent Small Starts BRT Awards (50-60%)



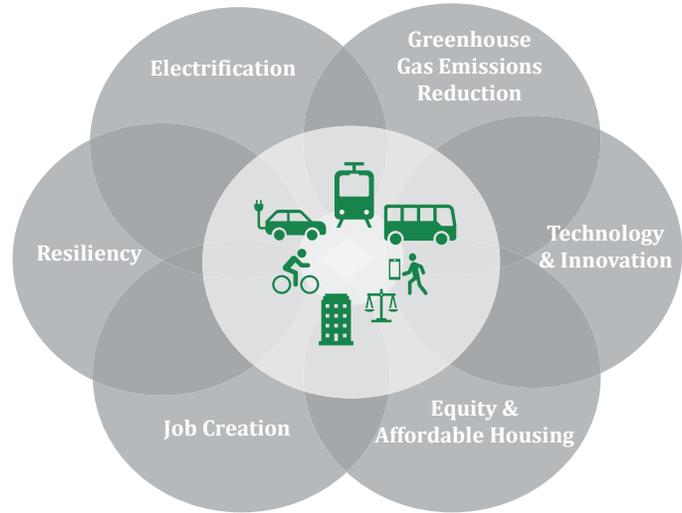
Source: InfraStrategies LLC, 2021  
Adapted from FTA signed and anticipated Capital Investment Grant (CIG) Funding Agreements, 1/20/2017-1/6/2021

Project	Total Cost (\$M)	CIG Funds (\$M)	CIG Share (%)
Albany River Corridor	42.5	26.9	63%
Albuquerque Rapid Transit	133.7	75.0	56%
Everett, WA Swift	73.6	43.2	59%
Grand Rapids Laker Line	70.2	56.2	80%
Indianapolis Red Line	96.3	75.0	78%
Jacksonville East	34.0	16.9	50%
Jacksonville SW	33.0	16.5	50%
Kansas City Prospect Avenue	54.2	29.9	55%
Minneapolis Orange Line	150.7	74.1	49%
Portland Division Street	174.8	87.4	50%
Reno Virginia Street	114.9	40.4	35%
Spokane Central City	92.2	53.4	58%
El Paso Montana Rapid Transit	49.2	28.2	57%
St. Petersburg Central Avenue BRT	43.9	21.8	50%
Miami-Dade South Corridor	300.0	99.9	33%
Milwaukee East West BRT	54.8	40.9	75%

# Leveraging Federal Opportunities

- ◁ USDOT RAISE (formerly BUILD/TIGER) Grants
- ◁ FTA Bus and Bus Facilities Grants
- ◁ FTA Low-No Emissions Grants
- ◁ Integrated Mobility and Innovation (IMI) Grants
- ◁ Accelerating Innovation Mobility (AIM) Grants
- ◁ FTA TOD Planning Grants
- ◁ FHWA CMAQ Funds
- ◁ FHWA STBG Funds
- ◁ TIFIA or RRIF Loans
- ◁ Congressional Directives
- ◁ Future opportunities from American Jobs Plan and/or Surface Transportation Reauthorization

Key Priorities of Congress and the New Administration



# Refining Program Cost Estimates

Progress To Date Since Charlotte MOVES

- ◁ Included future cost escalation assumptions to align with FTA guidance and emerging inflationary impacts anticipated over program timeline
- ◁ Added Bus Priority Corridors to program
- ◁ Refinements to reflect latest cost information from project planning teams:
  - Gold Line Phase 3 cost estimates
  - Red Line cost estimates
  - Silver Line cost estimates
- ◁ Expanded construction horizon to 18 years to accommodate segmentation and phasing assumptions for major capital projects to support:
  - Program cash flow needs
  - Increased federal competitiveness
  - Anticipated federal funding timelines
  - Local construction market capacity
  - Agency program delivery capacity

 TIME & DURATION	 PROGRAM SCALE & AMOUNT	 FUNDING SOURCES
Construction: <b>10+ Years</b>  Financing: <b>30 Years</b>  Exact duration influenced by an agreed upon financial plan and construction program	Total Program: <b>\$8 to \$12 Billion</b>  Local Portion: <b>\$4 to \$6 Billion</b>  Program includes design, construction, operation, maintenance, and financing	Participates: State & Federal Grants Existing Sources: Planned Capital Investment Primary New Source: Increased Sales Tax Secondary New Source: Dedicated Property Tax <small>*if needed</small>

Source: Charlotte MOVES Task Force Report, December 2020

# Refining Funding Assumptions

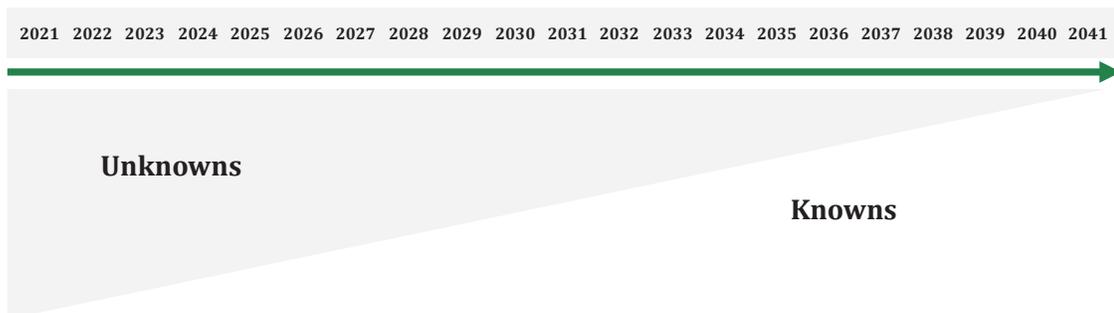
## Progress To Date Since Charlotte MOVES

- ◁ Applied project-specific federal funding assumptions based on recent federal awards and annual allocations for similar projects
- ◁ Applied recent sales tax growth rates to sales tax estimate, including COVID-19 recovery period
- ◁ Assumed share (10%) of additional 1 cent sales tax revenue would be allocated to non-transit projects (countywide):
  - Roadway Network
  - Pedestrian Walkability
  - Bicycle Network
  - Greenway System



Source: Charlotte MOVES Task Force Report, December 2020

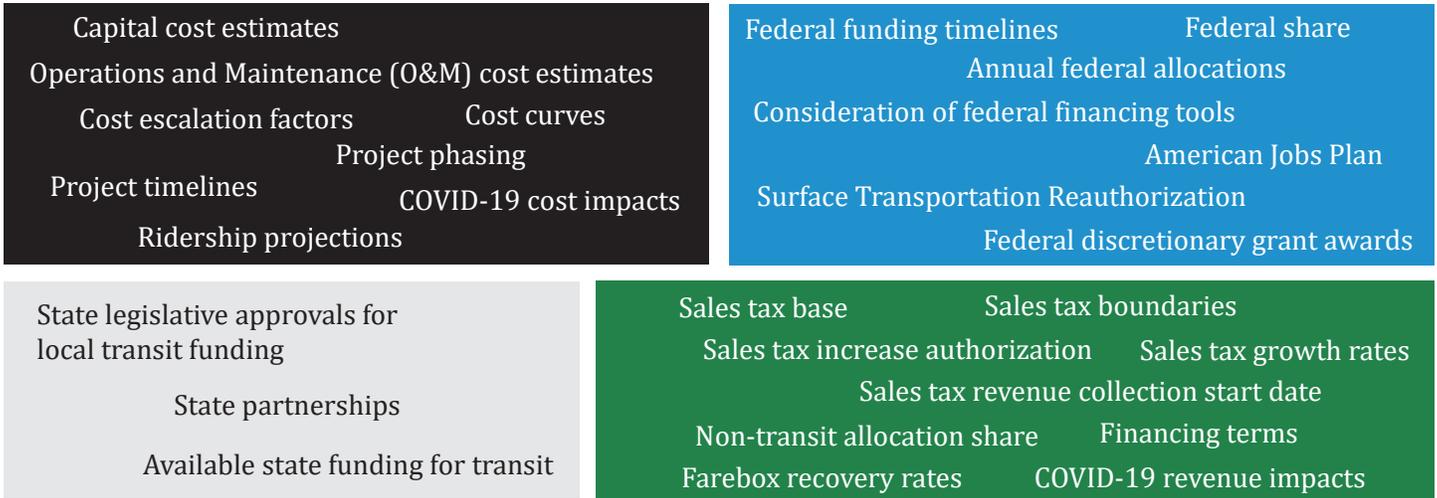
# What We Know Today



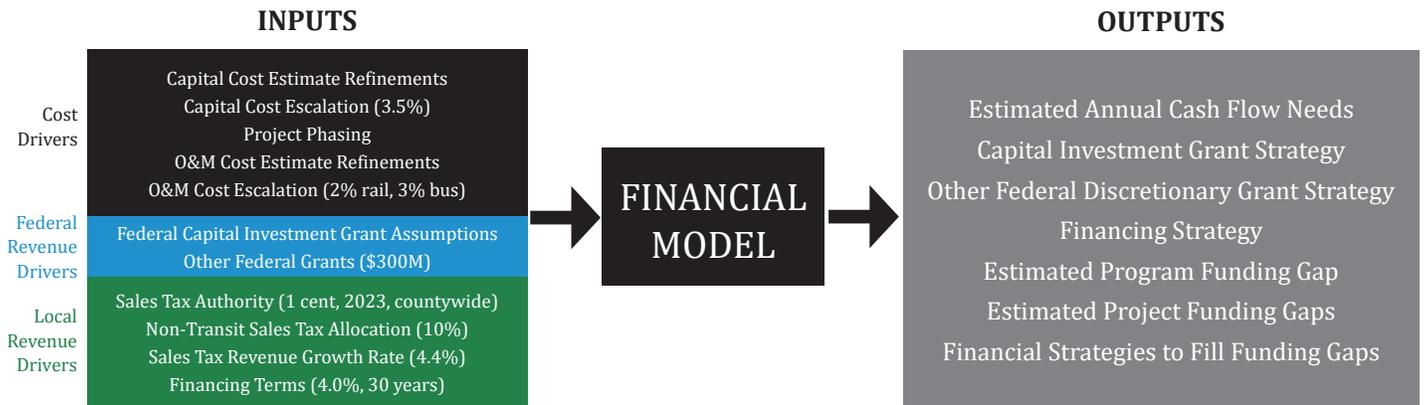
- ◁ Current cost estimates are compiled from project-specific sources and reflect varying levels of conceptual planning and design
  - Planning cost estimates reflect an approximation of the probable costs based on several unknown placeholder assumptions made at the time the estimate was prepared
  - Certainty will increase as projects advance further into planning and design
- ◁ Actual federal funding amount and annual allocations will be determined based on negotiations with FTA as projects advance into the Federal Capital Investment Grant program
- ◁ Sales tax revenue estimates are based on several placeholder assumptions: increase authorization, sales tax base, collection boundaries, growth rates, non-transit allocation shares, and financing terms

# A Snapshot in Time

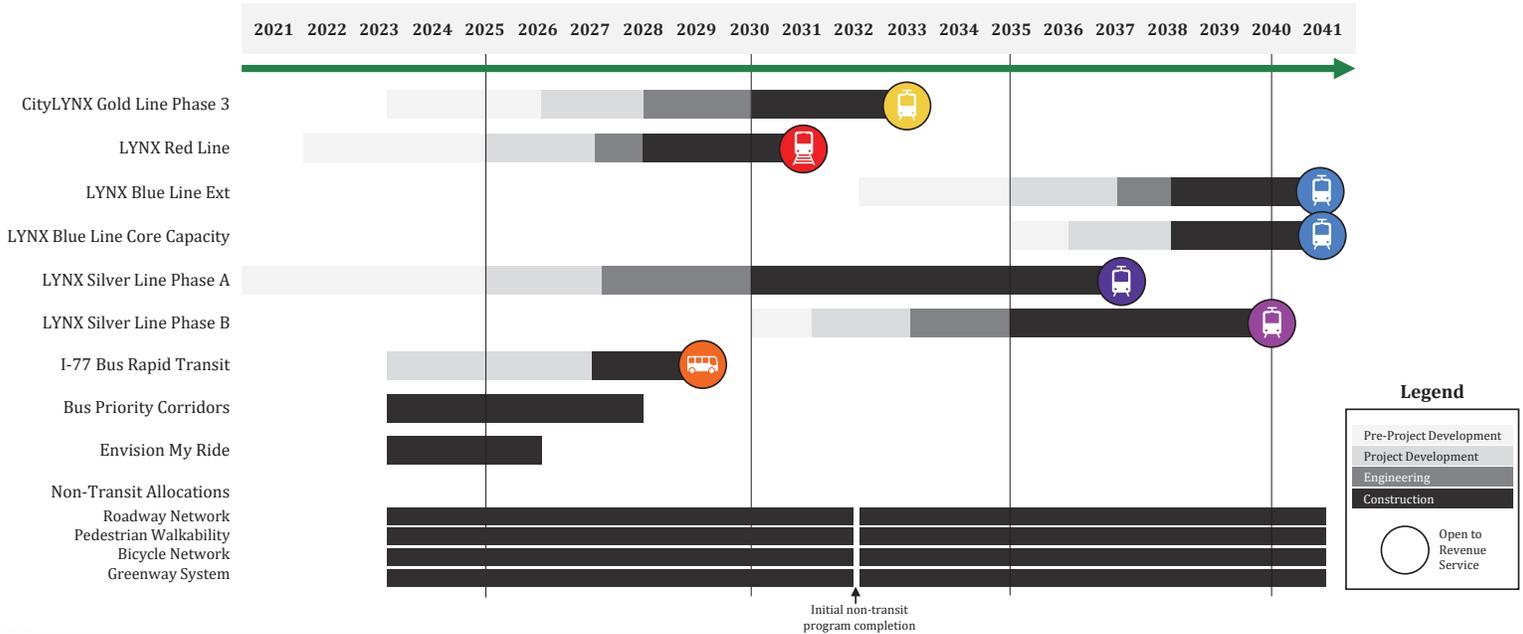
Financial plan, program, and schedule **WILL** change over time as we know more about:



# Preliminary TMN Baseline Financial Model



# Baseline Project Phasing Assumptions



## Additional 1 Cent Sales Tax Revenue

Estimated Annual Allocation Assumptions



### 10% Non-Transit Allocation

- Roadway Network
- Pedestrian Walkability
- Bicycle Network
- Greenway System

### 90% Transit Projects

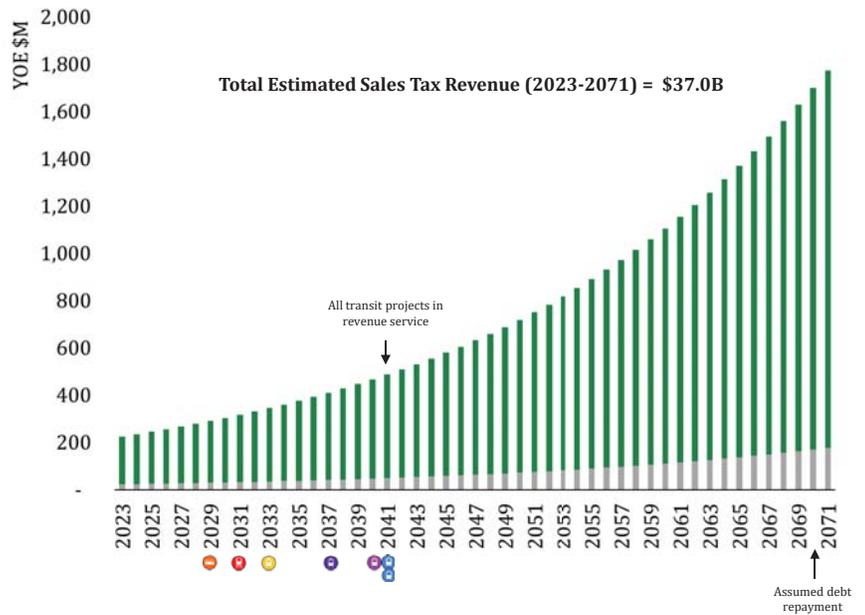
- Operations and Maintenance Costs
- Debt Service Payments
- Capital Costs

# Additional 1 Cent Sales Tax Revenue

## Preliminary Revenue Estimate

### Key Assumptions:

- ◁ 1 cent countywide sales tax increase
- ◁ 3-year COVID-19 recovery period
  - Based on FY2020 actuals
  - FY2021-FY2023 recovery period
  - Lower 1.5% annual growth rate
- ◁ 2023 revenue collections start date
- ◁ 4.4% annual growth rate
- ◁ 10% of annual revenue would be allocated to non-transit projects (countywide)
- ◁ After the annual non-transit allocation and covering estimated new transit operations and maintenance costs, remaining annual revenue would be available for debt service payments and transit capital costs
- ◁ Assumes use of both pay-go and debt financing to allow for accelerated project delivery
  - 4.0% interest rate
  - 30-year repayment period
  - Last debt service payment in 2070



# TMN Transit Capital Cost Estimates

### Key Changes:

- ◁ Included future cost escalation assumptions to align with FTA guidance and emerging inflationary impacts anticipated over program timeline
- ◁ Added Bus Priority Corridors to program
- ◁ Refinements to reflect latest cost information from project planning teams:
  - Gold Line Phase 3 cost estimates
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- ◁ Expanded construction horizon to 18 years to accommodate segmentation and phasing assumptions for major capital projects to support:
  - Program cash flow needs
  - Increased federal competitiveness
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  - Local construction market capacity
  - Agency program delivery capacity

	Initial Transit Cost Estimates (\$M)	Possible Revenue Service	Baseline Capital Cost Estimates (Year of Expenditure \$M)	Possible Revenue Service
LYNX Gold Line Phase 3	\$587.1	2030	\$651.7	2033
LYNX Red Line	\$502.6	2030	\$674.0	2031
LYNX Blue Line Ext	\$1,042.0	2030	\$1,481.9	2041
Blue Line Core Capacity	\$60.8	2025	\$122.4	2041
LYNX Silver Line	\$6,229.5	2030	\$8,119.6	2040
Phase A			\$5,153.0	2037
Phase B			\$2,966.5	2040
I-77 Bus Rapid Transit	\$197.6	2025	\$228.6	2029
Bus Priority Corridors			\$229.9	2028
Envision My Ride	\$57.1	2025	\$92.6	2026
<b>Total Transit Capital Costs</b>	<b>\$8,676.7</b>	<b>2030</b>	<b>\$11,600.7</b>	<b>2041</b>

Note: Capital cost estimates are compiled from project-specific sources and reflect varying levels of conceptual planning and design. Capital cost estimates are escalated annually to the assumed year of expenditure (YOE) cost to account for historic and future increases due to inflation through the project implementation period. Historic cost escalation is based on the Engineering News Record Construction Cost Index (Atlanta) and cost escalation after 2021 is assumed to be 3.5%. Capital cost estimates will change as projects advance further into planning and design.

# Federal Transit Funding Assumptions

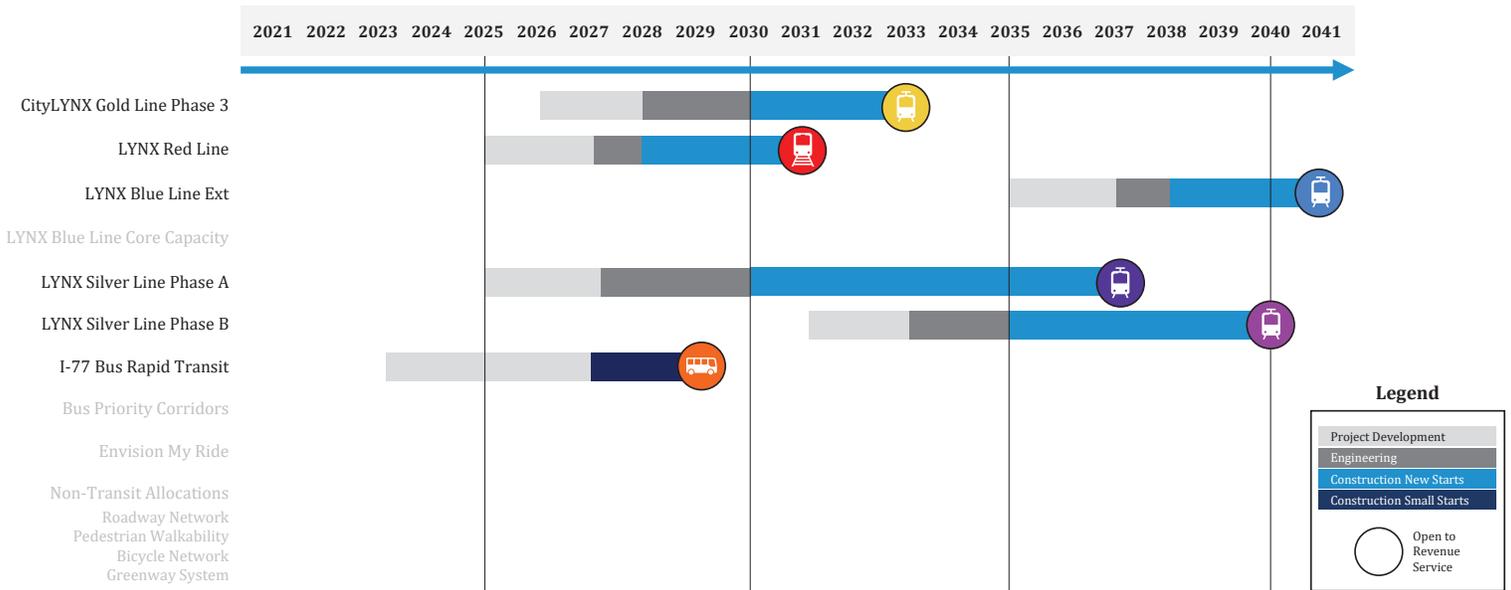
## FTA New Starts

- **35% CIG Share** for all projects > \$3B in YOE dollars
- Projects < \$3B in YOE dollars
  - **40% CIG Share** for LRT, HR, or CR projects
  - **50% CIG Share** for BRT or Bus projects

## FTA Small Starts

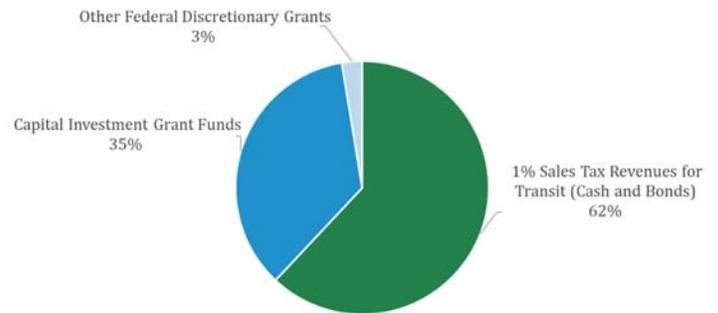
- Small Starts projects receive a max grant of **\$100M** or **50%** of the project costs, whichever is less
- Small Starts projects must keep YOE project costs under **\$300M** threshold to maintain eligibility

# FTA Capital Investment Grant Projects



# Preliminary TMN Transit Capital Program (YOE \$M)

BASELINE	
Sales Tax Revenue <i>1 cent, portion of 90% transit share, pay-go and revenue bond proceeds</i>	\$7,192.5
Federal Capital Investment Grants	\$4,108.2
Other Federal Discretionary Grants	\$300.0
<b>Total Capital Program Costs</b>	<b>\$11,600.7</b>

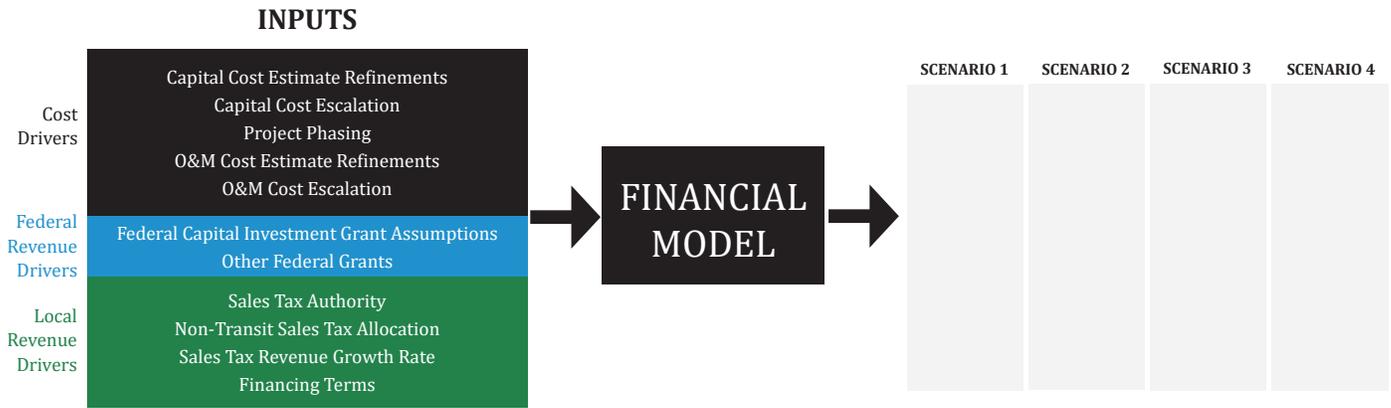


# Preliminary TMN Capital Program

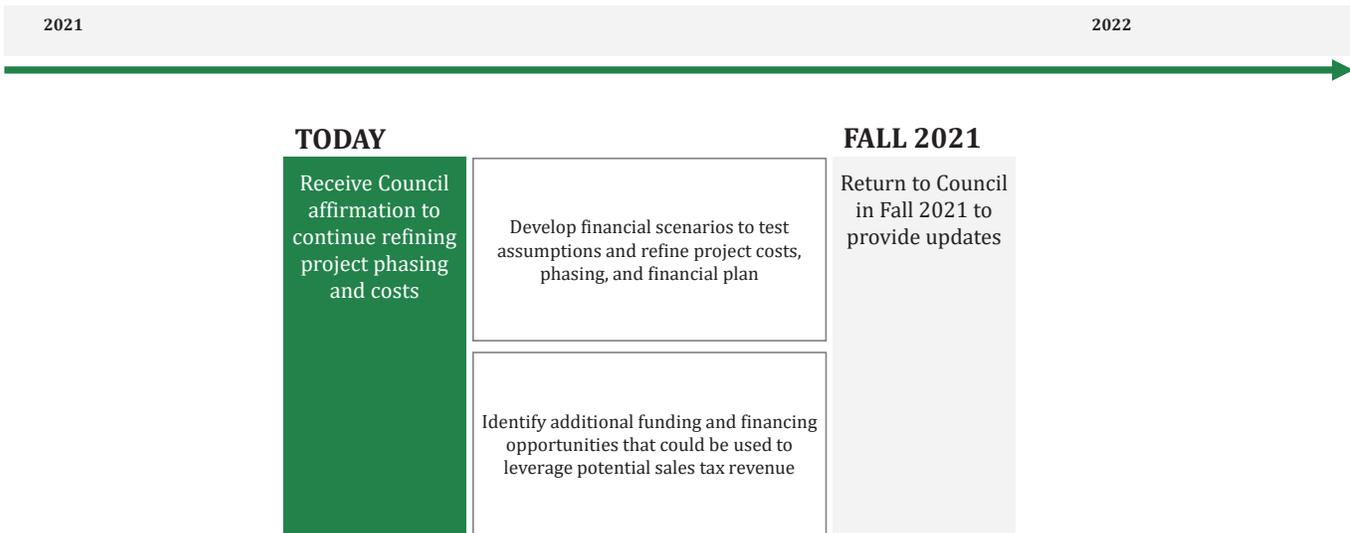
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<b>Total Transit Capital Costs</b>	<b>\$8,676.7</b>	<b>2030</b>	<b>\$11,600.7</b>	<b>2041</b>
<b>Non-Transit Capital Costs</b>	<b>\$1,900.0</b>	2021-2030	<b>\$1,900.0</b>	2023-2032
<b>TOTAL CAPITAL PROGRAM</b>	<b>\$10,576.7</b>	2021-2030	<b>\$13,500.7</b>	2023-2041

Note: Capital cost estimates are compiled from project-specific sources and reflect varying levels of conceptual planning and design. Capital cost estimates are escalated annually to the assumed year of expenditure (YOE) cost to account for historic and future increases due to inflation through the project implementation period. Historic cost escalation is based on the Engineering News Record Construction Cost Index (Atlanta) and cost escalation after 2021 is assumed to be 3.5%. Capital cost estimates will change as projects advance further into planning and design.

# Next Steps



# Next Steps



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