

Charlotte City Council  
**Action Review**  
November 28, 2022



**Mobility**  
Moving Our Vision Forward

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**Tonight's Purpose:**

**No Council Action**

**Discussion:**

- As we look toward our 2040 future - we challenged ourselves with a **big vision** and a **bold aspiration**.
- This naturally requires us to **change the way we think** about future infrastructure investment.
- What does that mean for identifying, prioritizing, **and funding transportation projects?**

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## Topics to Inform Your Discussion:

### Why Now

Taking advantage of opportunities and establishing a sense of urgency

### Getting From Policies to Projects

Translating Our Mobility Strategy into actions

### How We Get There

Prioritizing project investment that leads to change and meaningful impact

### Addressing Our Challenge

Considering and evaluating mobility funding options

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Topic:

## Why Now

Taking advantage of opportunities and establishing a sense of urgency

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## Why Now:

Establish clear commitment to our ambitious plans

**5 in 5**  
Plans Years

**2018 to 2022: A New Holistic Vision for Charlotte**

**1** CHARLOTTE FUTURE 2040 COMPREHENSIVE PLAN

**2** CHARLOTTE FUTURE 2040 POLICY MAP

**3** UDO UNIFIED DEVELOPMENT ORDINANCE

**4** SEAP STRATEGIC ENERGY ACTION PLAN

**In just 5 years:**  
Charlotte City Council has adopted the **most transformative plans and policies** in our City's history

**5 Strategic Mobility Plan**  
City's Holistic Vision implemented through a mobility lens

CHARLOTTE STRATEGIC MOBILITY PLAN  
Our Blueprint for Safe and Equitable Mobility  
Approved June 22, 2022  
CITY OF CHARLOTTE

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## Why Now:

Establish clear commitment to our ambitious plans

**Safe | Vision Zero**      **Equitable | 50-50 Mode Share**

## Strategic Mobility Plan

**2040 Aspiration**  
As a community, we will eliminate traffic deaths and serious injuries for all who share Charlotte streets.

**2040 Aspiration**  
As a community, half of our commute trips will be made by means other than a single-occupancy vehicle, through walking, biking, and taking transit.

Ensures and prioritizes the **safety of all** who share Charlotte's streets.

Balances our **mobility choices** and transitions away from car dependency.

Makes **transit a natural part of how we travel.**

Is on the **leading edge** of the ongoing **technological transformation** of urban mobility.

**VISION ZER**  
OUR STREETS | OUR RESPONSIBILITY

Today	Future
Car 76%	Car 50%
Non-SOV	Non-SOV

Grow Mode Share

New Capacity

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# Why Now:

Continue our ongoing work and commitment to advance mobility solutions



# Why Now:

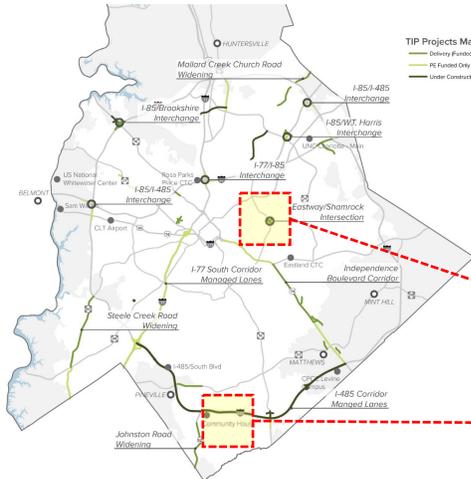
Capitalize on funding partnerships and maximize opportunities for federal Transportation and Transit investment

To be competitive, we need: **A clear mobility strategy with a dedicated local funding source**

**CRTPO Discretionary Funding**

**\$20m**

Annual Average received by Charlotte (with 20% match)



## NCDOT Partnership

Charlotte partners with NCDOT to implement and fund key projects that support both regional and local mobility goals. This strategy is a valuable way to leverage the City's capital investments with state funding to achieve mutual interests.

**State Transportation Improvement Program (STIP) 2020 – 2029**

Interstate, Freeways, Major Arterials

**\$3B**

STIP Funding in Mecklenburg County (2020-2029)

## Capital Investment Plan (CIP)

Funded in partnership with NCDOT and CRTPO:

### Eastway Drive/Shamrock Drive Intersection

Funded in partnership with NCDOT and CRTPO. Intersection redesign to improve safety (HIN) for drivers, pedestrians and bicyclists.

**\$39m**

City: \$23.2 (59%)  
NCDOT: \$8.0 (21%)  
CRTPO: \$7.8 (20%)

### Rea Road Widening

Funded in partnership with NCDOT as part of the I-485 managed lanes project with available Bonus Allocation funding for congestion mitigation projects.

**\$14m**

City: \$7.3 (52%)  
NCDOT: \$6.7 (48%) (Bonus Allocation)

# Why Now:

We cannot do it alone

**Regional**  
Connecting communities regionally with collaboration and problem-solving

**We need to work together**  
To be successful we need to connect across jurisdictional lines

**Local**  
Connecting local mobility goals, plans and investments

**Vision for Regional Transit**

12 counties  
5,000 square miles  
2.6m residents

**Mecklenburg County**

2030 Transit System Plan

**Local Transportation Plans (last 5 years)**

- Meck Playbook (2021)
- \$30m Transportation Bond (2017)  
Davidson Mobility Plan (2019)  
Comprehensive Plan (2020)
- \$24m Transportation Bond (2018)  
Bicycle Master Plan (2017)
- 2040 Community Plan (2020)  
2022 Downtown Plan (in progress)
- Mint Hill Comprehensive Plan (in progress)
- \$21m Transportation Bond (2022)  
Comprehensive Transportation Plan (2020)  
Downtown Mobility and Parking Study (2020)
- Pineville Comprehensive Plan (2022)  
Pineville Mobility Plan (2021)
- Strategic Mobility Plan (2022)  
\$146m Transportation Bond (2022)

# Why Now:

Our 2040 Vision cannot be achieved by doing the same thing...

Mode Share	Current Drive Alone	Goal Drive Alone
Charlotte	76.6%	50%
Austin	74.1%	50%
Denver	69.6%	50%
Seattle	44.4%	25%
Washington, DC	34.2%	25%

Our 50-50 Mode Share goal is both ambitious and practical (other US cities have achieved this)

1.1m existing SOV trips

Single Occupant Vehicle (SOV) Today

Addressing "cumulative trips" at the citywide scale

Infeasible (physically/financially) to build enough vehicle capacity

Would require almost **2x** current road capacity

82% Growth in SOV Trips (+900k) **Current Trend**

**Mode Shift**

- Bike & Walk
- HOV Vehicle
- Work From Home
- Transit (Rail + Bus)

20% Growth in new SOV trips (+200k) **Strategic Mobility Plan Vision**

Our Vibrant Economic Growth **Comes with a Mobility Challenge:** Managing "cumulative" growth

Managed with **targeted capacity** investment

2040

**How can we manage these trips differently?**

The Way We Invest

Walk  
Bike  
Road  
Transit

The Way We Innovate

Emerging Mobility Technology

The Way We Grow

2040 POLICY MAP

UDO

SEAP

Topic:

# Getting From Policies to Projects

Translating Our Mobility Strategy into actions

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## Our goal is to move people...

walk, bike, car, transit, greenway

### Roadway Network

A designed roadway network to provide safe multimodal options to manage areas of high congestion and expand street grid connectivity

### Bicycle Network

An expansive cross-county network for bicycles, scooters and emerging mobility technology

### Pedestrian Walkability

Creating a safe pedestrian environment with convenient access to daily needs and mobility options

### Greenway System

A connected greenway system to connect neighborhoods and services

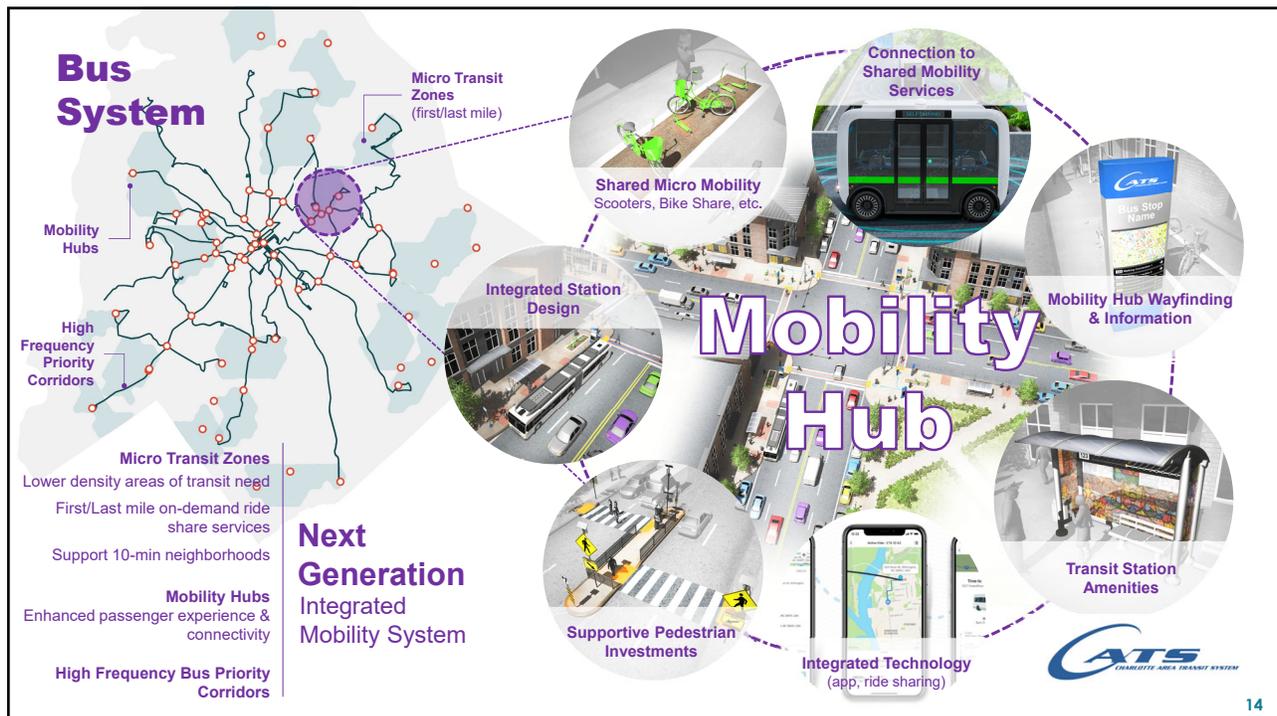
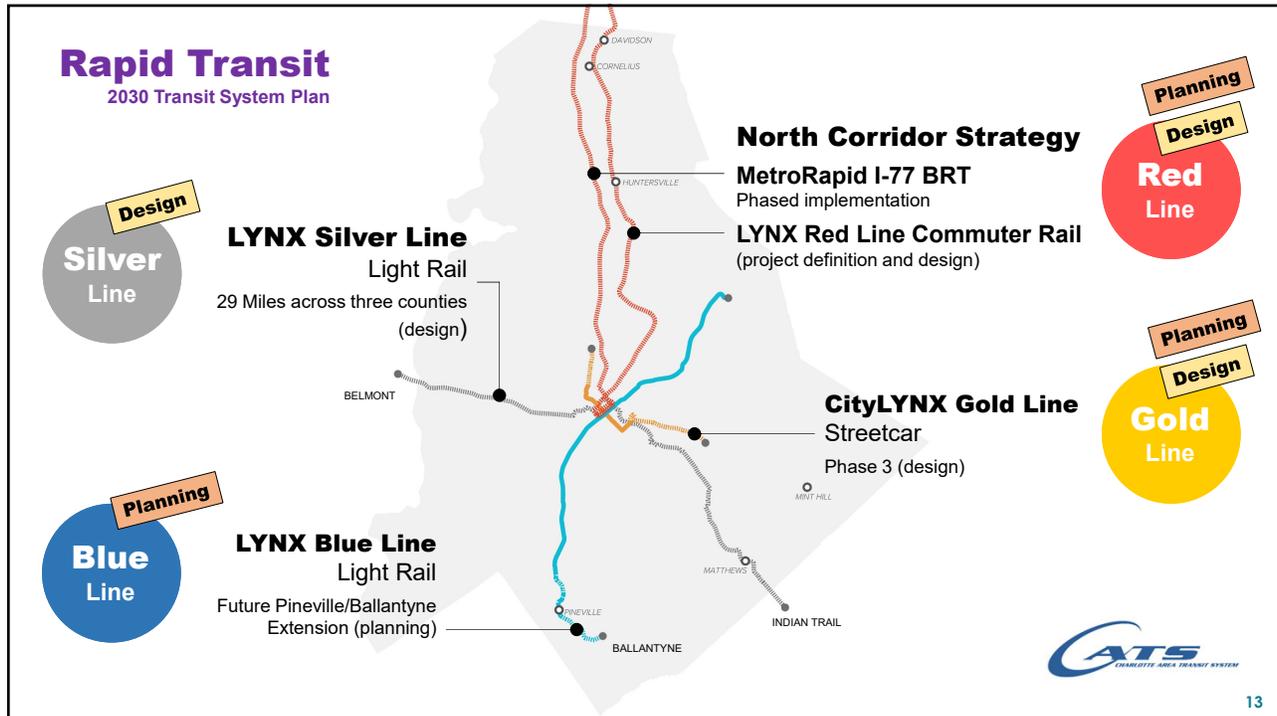
### Bus System

High-frequency bus network highlighted by 15-minute service or better on more than 20 key routes, enhanced reliability and mobility hubs with on-demand services

### Rapid Transit

High-capacity transit corridors and technology including light rail, commuter rail, bus rapid transit and streetcar

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## Transportation Projects: Cost & Feasibility

How much will they cost & how many will we get?

### Project Examples:

**Updated Intersection**  
Freedom/Tuckaseegee  
**\$14.8M**  
Advance Planning

**New Sidewalk**  
**\$4 to \$8M**  
(per mile)

**New Street**  
Bryant Farms Road  
**\$20M**  
No ROW needed  
(0.4 miles)

**Parkwood Ave.**  
\$2.8M (0.8 miles)  
Davidson to The Plaza  
2 new signals  
Concrete buffer

**The Plaza**  
\$800k (0.8 miles)  
Central to Parkwood  
Resurfacing/markings

**Uptown CycleLink**  
\$6.0M (2.1 miles)  
5th Street & 6th Street  
Concrete buffer

### Range of Bicycle Facilities



### What We Know:

Historic cost and recent project experience  
Rules of thumb (for some project types)

### What We Don't Know:

On-going cost escalation and inflation (in a current state of unpredictability)  
Impactful technical details: needed ROW, extent of utility work  
Projects moving forward are simply more complex and varied (the easy projects are done)

## What We Are Doing:

Capital Investment Plan  
**Advance Planning**

Advanced design to better understand project costs and to inform CIP decisions

Strategic Mobility Plan  
**Project Identification & Feasibility**

Accelerating project identification and feasibility to estimate future order-of-magnitude needs

## Pedestrian Walkability

Prioritized investments in pedestrian safety and facilities including sidewalks, pedestrian crossings, street lighting, and signal upgrades



**Sidewalk Gaps**



**Street Lighting**



**Pedestrian Crossings**



**Traffic Calming**

**Vision Zero**  
(High Injury Network)

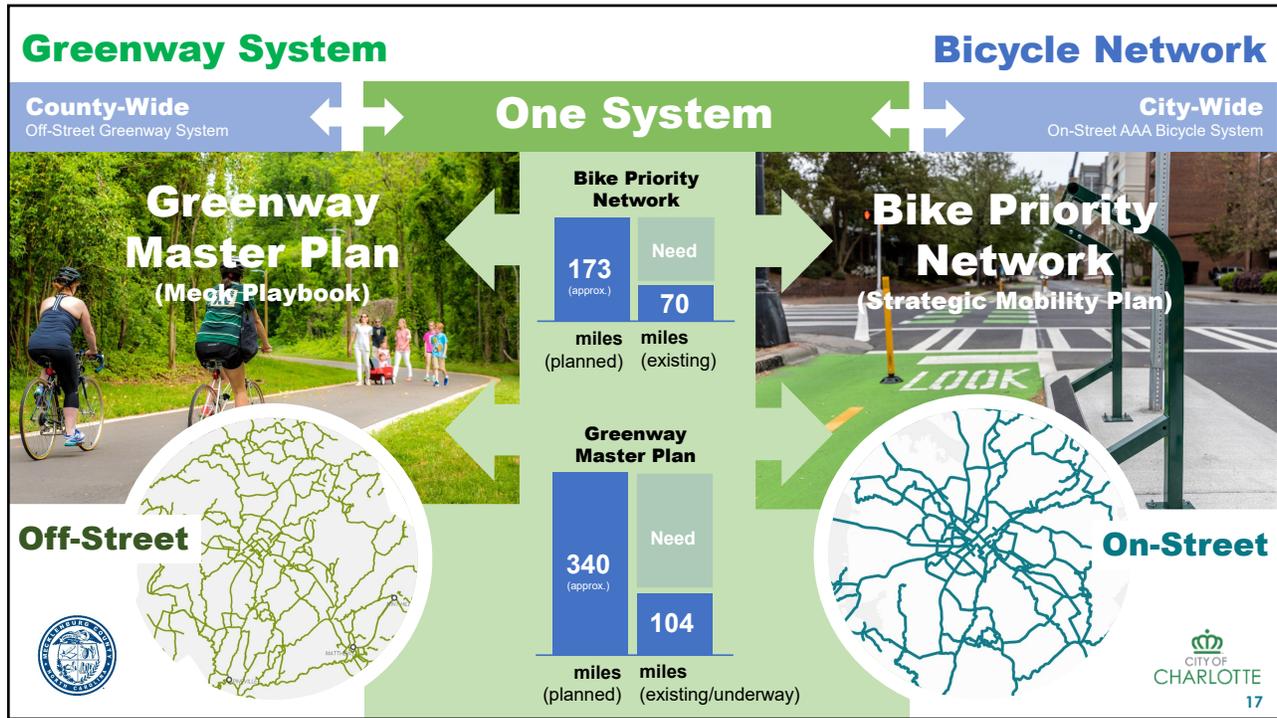
### Vision Zero

Install and upgrade street lighting to improve street segments identified on the High Injury Network  
Construct refuge islands, install new signals and pedestrian hybrid beacons and deploy smart technology  
Install neighborhood traffic calming measures such as speed humps and multiway stops

### Sidewalk Connectivity

Fill sidewalk gaps along arterial streets without sidewalks  
Prioritize first/last mile connectivity near transit connections and mobility hubs  
Prioritize proximity to jobs, high-frequency transit corridors, schools and services

**Sidewalk Gaps**  
(245 miles)



Topic:

# How We Get There

Prioritizing project investment that leads to change and meaningful impact

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**Vision & Goals**  
2040 Plan & Strategic Mobility Plan

Mobility Criteria

**Establish Priority**  
Priority Mobility Needs Analysis

Potential Project Areas  
(overlap of Mobility Criteria)

**Identify Projects**  
Identification & Feasibility

**Strategic Mobility Plan**

**Project Investment Process**

- Identification
- Feasibility
- Prioritization

**Project Prioritization**

**What have we done in the past?**

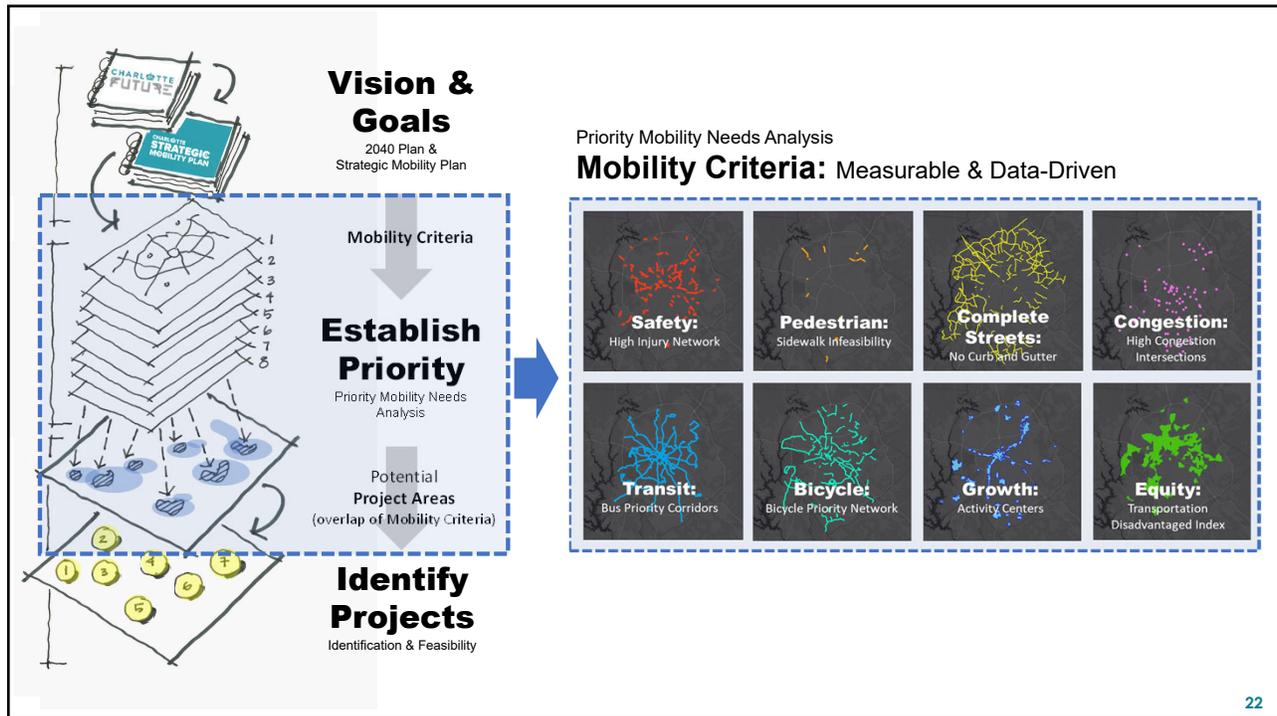
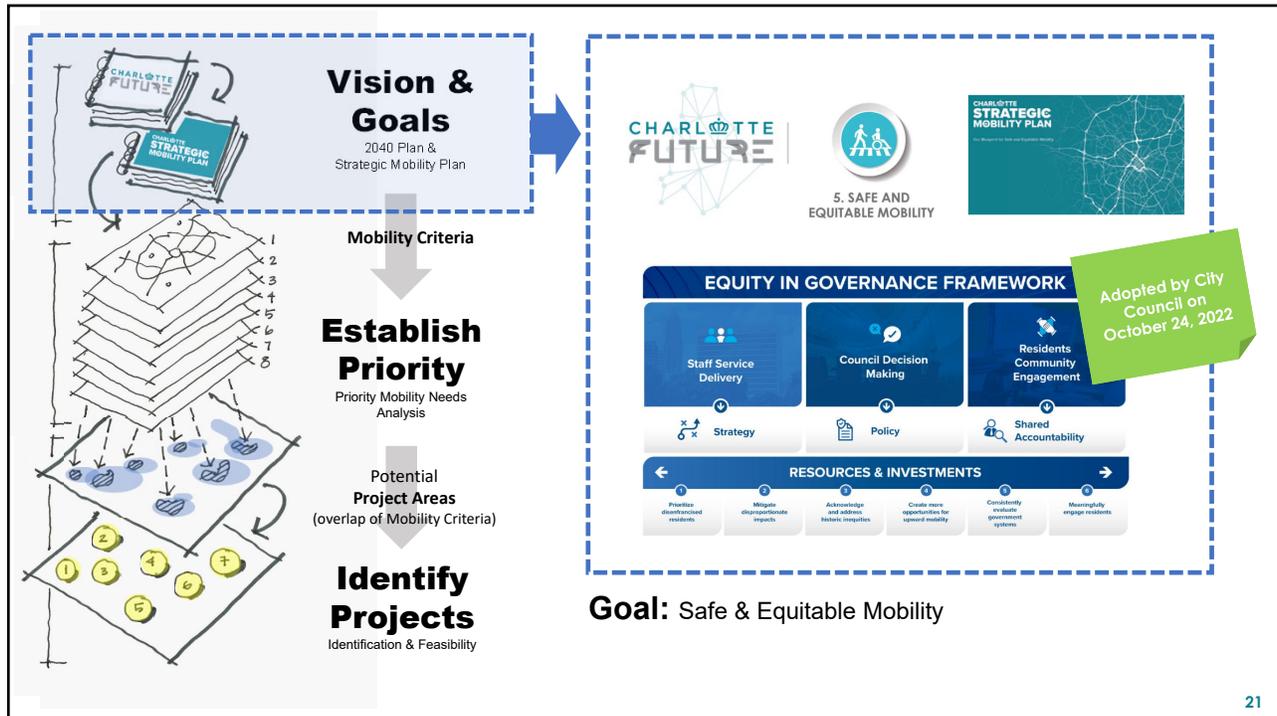
Prioritization on existing goals:

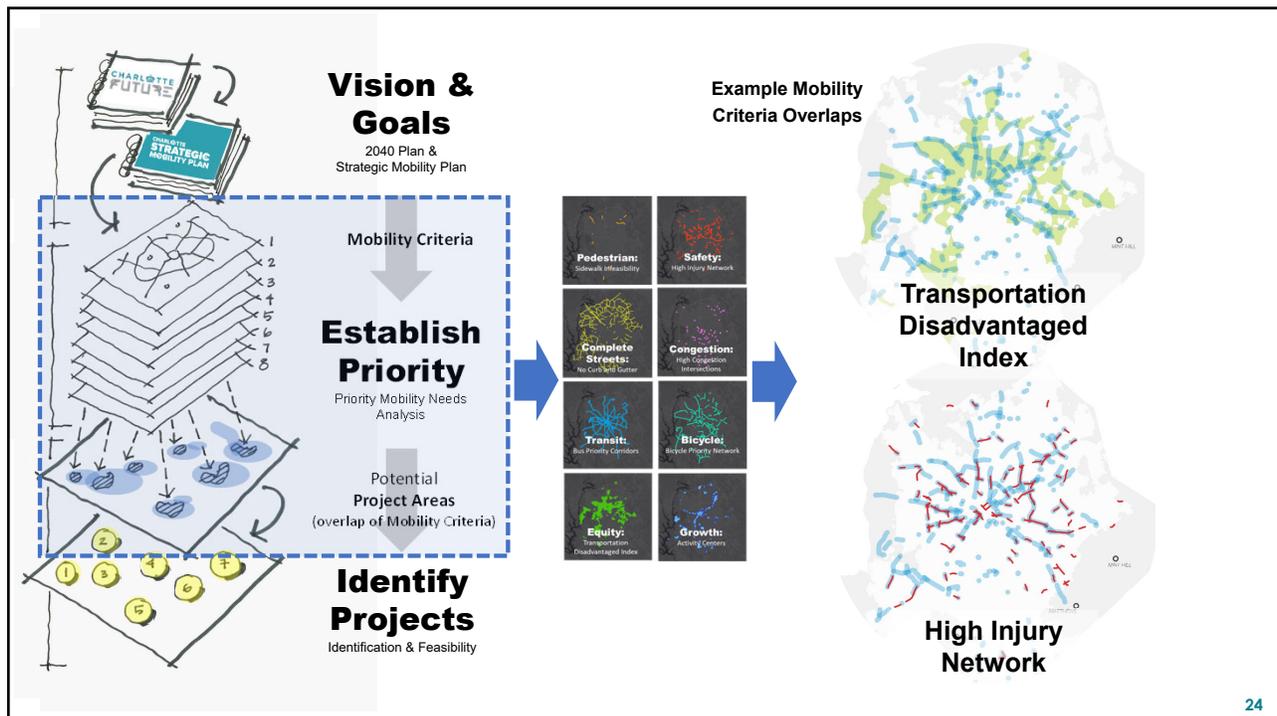
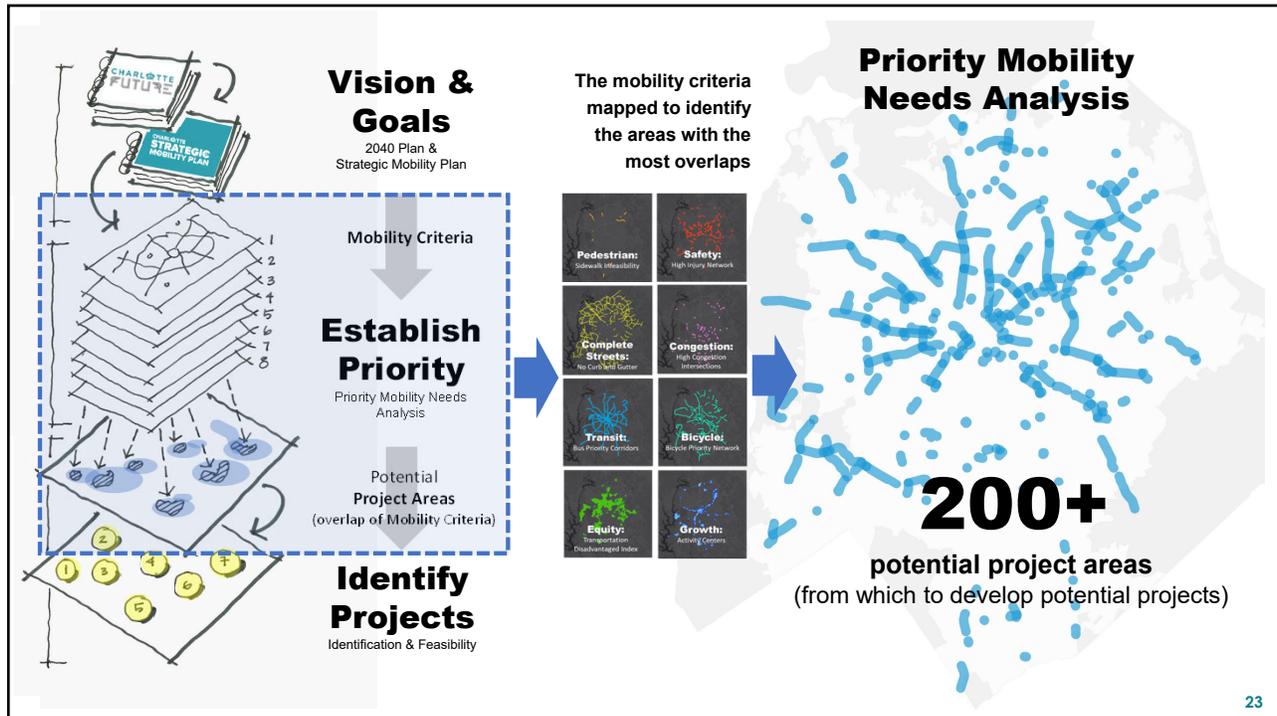
- Safety (Vision Zero)
- Congestion (traffic and growth)
- Connectivity (places and needs)
- Leverage (funding partnerships)

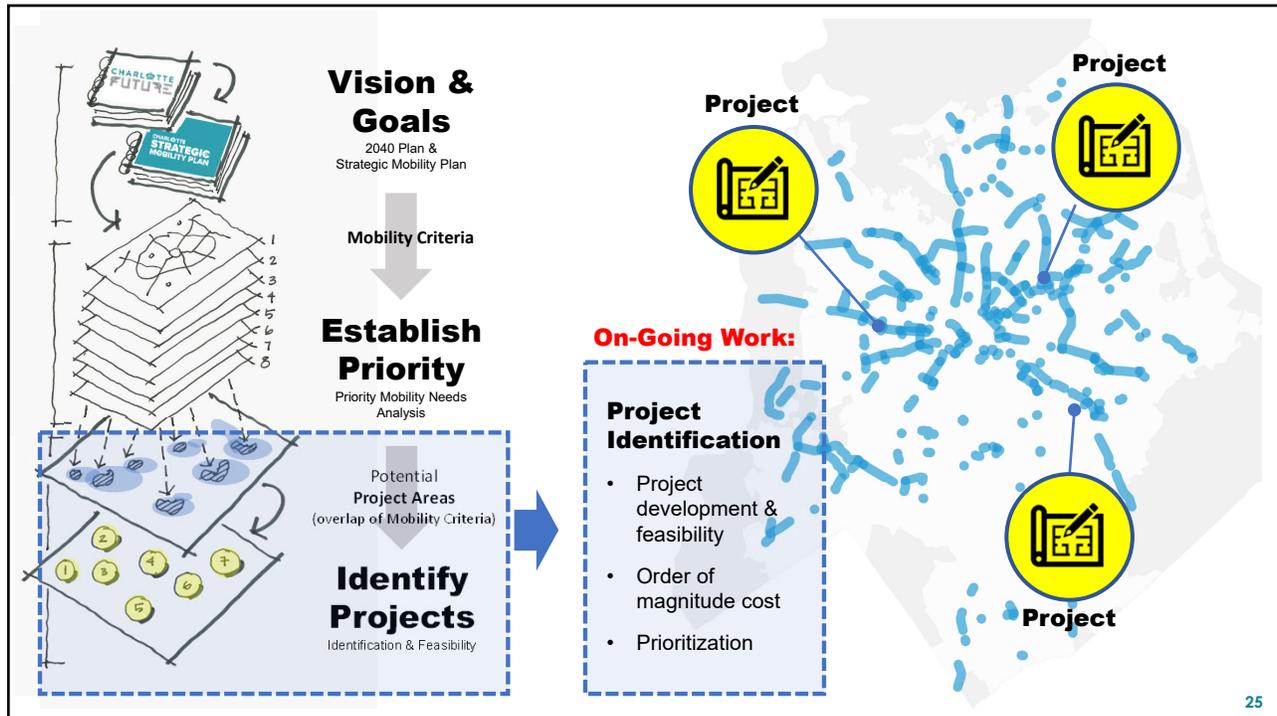
**What's New?**

- New Plans (2040, SMP, SEAP)
- Need to level set and align our work
- Holistic approach designed to fully ensure equity and progress to stated goals
- Additional feasibility to better inform project identification

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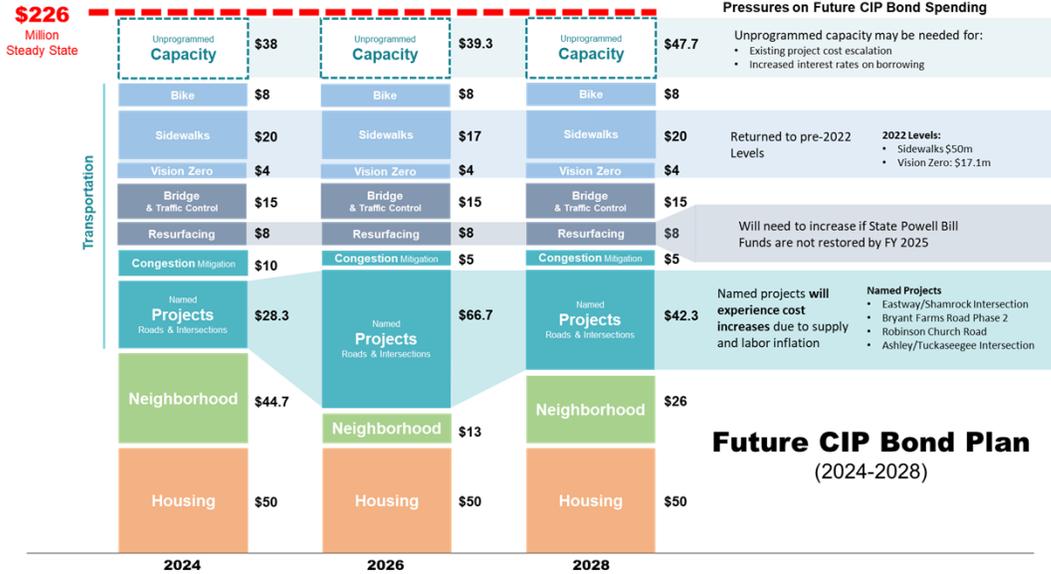
Topic:

# Addressing Our Challenge

Consideration and evaluation of mobility funding options

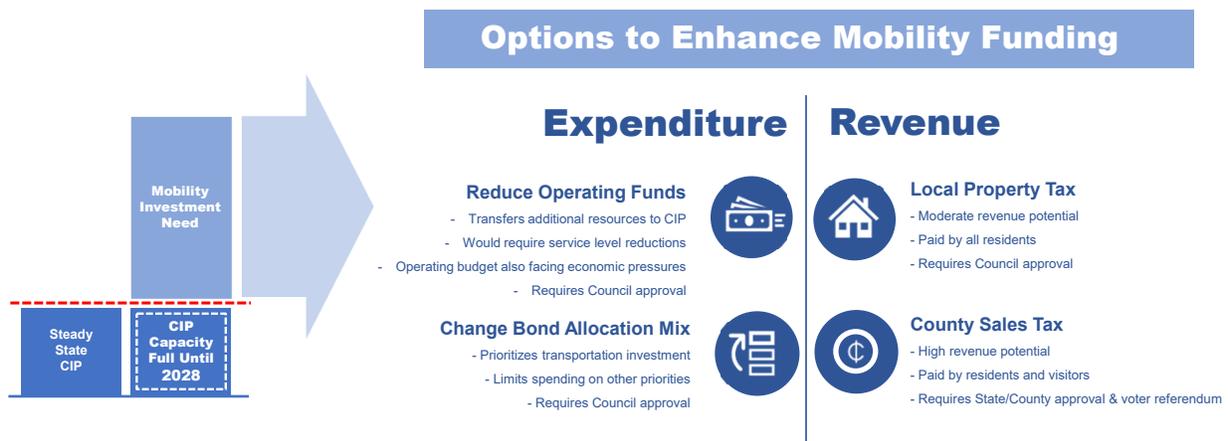
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### Future CIP Bond Plan – Limitations & Pressures



\*This future bond plan was included in the FY 2023 Budget Book for the purpose of CIP planning. Funds have not been approved by City Council.

### Future CIP Bond Plan – Limitations & Pressures



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**Wrap Up:**

This is just the beginning of discussion...

- **Staff to continue working on funding options** (Transit & Transportation)
- **Staff to continue project identification and feasibility work**
- **Reexamine in Budget Workshop** (February 2023)