



# Green and Equitable Infrastructure: Potential Projects and Funding Considerations

# Overview

- Current CIP does not approach full funding of capital projects identified and called for in a variety of adopted plans or policy documents.
- Council requested a summary of projects meeting certain criteria as well as estimated costs for completing these projects.
- Most projects are part of adopted plans or are conceived to advance existing Council priorities, but this represents a very preliminary look.

# Considerations and Caveats

- Cost estimates are extremely preliminary.
- A racial equity analysis would be a critical step in vetting which projects should be prioritized.
- Most projects have not been introduced to the community. Equitable engagement strategies will require significant time and resources and may significantly alter plans to move forward.
- Projects are not shovel-ready. Significant time will be needed to develop these projects.
- Capacity does not currently exist to deliver projects in this presentation, and significant GF resources may be needed to increase project delivery capacity.

# Project Categories

- New Sidewalks
- Sidewalk Gaps
- Sidewalk Repairs
- Pedestrian Safety and Accessibility  
Intersection improvements
- Bicycle Facilities
- Pedestrian Access to Transit
- Trail Construction and Repairs
- Dirt Street Paving

# Project Categories (continued)

- Renewable Energy
- Energy Resilience
- Electrification of Transportation Infrastructure
- Energy Efficiency
- Greening of Community Spaces
- Circular Economy

# Category: New Sidewalks

Total potential costs to fund all projects: \$58.3M

*Description: This category consists primarily of new sidewalks called for in the 2017 Bike + Walk Plan on priority corridors such as Miami Blvd., NC 54, Pettigrew and Hardee streets.*

# Category: Sidewalk Gaps

Total potential costs to fund all projects: \$4.1M

*Description: Includes projects to fill gaps in the sidewalk network identified in the Bike + Walk Plan and related plans in various locations throughout the city*

# Category: Sidewalk Repairs

Total potential costs to fund all projects: \$16M

*Description: Projects would augment existing CIP funds to complete sidewalk repairs and address known maintenance issues through the city.*



# Category: Pedestrian Safety and Accessibility Intersection Improvements

Total potential costs to fund all projects: \$2.6M

*Description: Pedestrian safety and accessibility improvements from the 2017 Bike + Walk Plan such as crosswalks, ADA ramps, pedestrian signals, flashing beacons, etc.*

# Category: Bicycle Facilities

Total potential costs to fund all projects: \$7.7M

*Description: This category consists primarily of projects from the 2017 Bike + Walk Plan, to add bicycle lanes on busy roadways (\$6.6m), while also including Neighborhood Bike Route facilities on low-volume roadways (\$0.5m) and adding protected bike lanes when resurfacing streets (\$.6M)*

# Category: Pedestrian Access to Transit

Total potential costs to fund all projects: \$10M

*Description: This category includes improvements at and around bus stop locations based on community engagement for the Durham County Transit Plan to provide sidewalk connections, ADA ramps, crosswalks and other improvements (City contribution would augment funding identified in the Durham County Transit Plan currently under development to enable more projects to advance more quickly)*

# Category: Trail Construction and Repairs

Total potential costs to fund all projects: \$61.1M

*Description: This category includes repair and maintenance of existing trails, as well as construction of new trails in the city's current adopted trails master plan.*

# Category: Dirt Street Paving

Total potential costs to fund all projects: \$5.6M

*Description: This category would augment existing CIP funds to complete ribbon paving of all unpaved roads throughout the city.*

# Category: Renewable Energy Generation

Total potential costs to fund all projects: \$13.5M

*Description: This category would fund the generation of carbon-neutral energy collected from renewable sources. Projects would be installed on city-facilities or funded through partnerships.*

# Category: Energy Resilience

Total potential costs to fund all projects: \$5M

*Description: This category would fund sustainability projects designed to enhance the reliability and resilience of key city infrastructure, using micro-grids, energy storage and solar capacity.*

# Category: Electrification of Transportation

Total potential costs to fund all projects: \$7.2M

*Description: This category of projects would fund the purchase and installation of charging infrastructure for city fleet vehicles, as well as publicly-available charging options in key locations.*



# Category: Energy Efficiency

Total potential costs to fund all projects: \$18.5M

*Description: This category of projects would fund weatherization, retro commissioning, as well as retrofits of the city's 2.4+ million square feet of real estate portfolio.*

# Category: Waste Reduction and Circular Economy

Total potential costs to fund all projects: \$13.8M

*Description: This category of projects would fund projects that promote and support recycling and composting, by investing in new or upgraded facilities at the transfer station.*

# Category: Enhanced and Equitable Green Spaces

Total potential costs to fund all projects: \$2.8M

*Description: This category of projects would serve communities by continuing to grow the tree canopy, build demonstration projects in public spaces and ensure those spaces include sustainable infrastructure like green roofs and solar gardens. Unfunded amenities at the South Ellerbe Stormwater facility could be funded through this category.*

# Projects Considered but Not Included

- Park Renovations or New Amenities
- New Recreation Centers
- Street Repaving
- Street Reconstruction

# Summary of Projects

Name	Cost	Name	Cost
New Sidewalks	\$58.3M	Dirt Street Paving	\$5.6M
Sidewalk Gaps	\$4.1M	Renewable Energy Generation	\$13.5M
Sidewalk Repairs	\$16M	Energy Resilience	\$5M
Pedestrian Safety & Accessibility	\$2.6M	Electrification of Transportation	\$7.2
Bicycle Facilities	\$7.7M	Energy Efficiency	\$18.5M
Pedestrian Access to Transit	\$10M	Waste Reduction & Circular Economy	\$12M
Trails	\$61.1	Enhanced & Equitable Green Spaces	\$2.8M

**TOTAL: \$224.4 Million**

# Capital Capacity Creation

- Current CIP model maximizes capacity within current 11 cent tax rate allocation
- Additional tax revenue needed to create capacity
  - Issue bond for one time influx of capital \$ - use tax to pay debt service
  - Allocate tax to existing 10-year CIP funding model

# Bond Issuance Considerations

- 1 cent on tax rate = debt service on approx \$50M (Fixed rate, single debt issuance, current interest rates, 20 years)
- Requires referendum
- Increases overall debt outstanding for capital (rating consideration)
- Provides immediate access to capital funds

# Bond Issuance Considerations (cont)

- Debt must be issued within 7 years of vote
- Influx of capital dollars requires staffing for mgmt of increased project load
- Once issued capital capacity returns to prior levels



# Key Dates for Referendum

- 5/3 - First Council Action
- 5/17 - Second Council Action
- 6/7 - Council Public Hearing
- 9/24 - Publish 1st Notice of Referendum
- 10/1 - Publish 2nd Notice of Referendum
- 11/2 - Referendum
- Bonds likely issued no sooner than fiscal 23
- Can hold election ANY November

# CIP Tax Allocation Considerations

- Increase the fixed tax rate to pay debt service and cash funded capital
- Assumes interest only draw programs followed by fixed rate take out financing
- Assumes 10% cash funded capital
- Results in increase in both cash funded and debt funded capital over time – no immediate influx of capital capacity
- Capacity increase is interest rate sensitive

# CIP Tax Allocation Considerations

(continued)

- 1 cent on tax rate approximates \$10 million in annual capital capacity – \$100 million over 10 year CIP - roughly 2x single bond issuance
  - This is very rough estimate, depends on how/when projects are funded across 10 year plan
- Provides for planned increases in capital within existing project delivery resources
- Results in permanent capacity increase
- No 7 year borrowing limitation
- No vote required



# Questions and Discussion