

TRAILNATION PLAYBOOK IN ACTION: MAPPING AND GAP-FILLING STRATEGIES TO ACCELERATE NETWORK DEVELOPMENT

**NOV. 28, 2023 WEBINAR** 

ANACOSTIA RIVER TRAIL PHOTO BY JOE FLOOD



## **TRAIL NATION**PROJECTS

## **TRAIL NATION** PLAYBOOK

## TRAIL NATION COLLABORATIVE

## **Technical Support**

As people across the world continue to work and learn online, platforms like Zoom are experiencing increased usage, which can result in technical difficulties.

Here's how to troubleshoot:

- Log out and back into the webinar
- Listen by phone: +1 301 715 8592 ; meeting ID: 847 1122 3037
- Browse Zoom Customer Support topics & contact Customer Support: <u>https://support.zoom.us</u>

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Capital Trails Coalition Washington, D.C. Region



Baltimore Greenway Trails Network



New England Rail-Trail Network



The Circuit Trails Greater Philadelphia Region



Industrial Heartland Trails Coalition



Route of the Badger Southeastern Wisconsin



Bay Area Trails Collaborative



Caracara Trails Southeastern Texas



The Miami LOOP







**Derek Strout** GIS Specialist Rails-to-Trails Conservancy



#### **Curtis Bridges, AICP**

Database & Active Transportation Planner Charlotte Regional Transportation Planning Organization



Kalli Krumpos Senior Organizing Manager Washington Area Bicyclists Association



Jordan Petrov Associate Planner Mid-Ohio Regional Planning Commission



#### **District of Columbia**

#### Virginia

City of Alexandria Arlington Co. Fairfax Co.

#### Maryland

Prince George's Co. Montgomery Co.









MAPPING AND ANALYTICS

#### **Develop Vision**

#### Gather Data

Network Emerges

**Refine Data** 

Data Informs and Engages





Network Emerges —

Data Informs and Engages

#### Assess geospatial expertise across your coalition

- Existing GIS capacity and capabilities of coalition members
- Short and long-term goals
- Roles and responsibilities, data stewardship

Be prepared to keep the data updated, as hopefully there will be lots of progress!

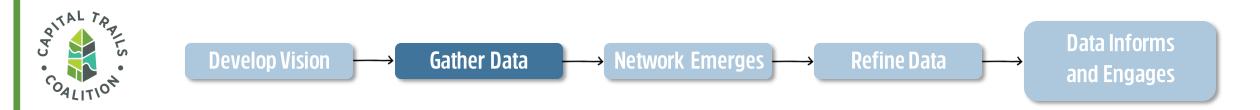
#### Begin (or continue) defining trail and network characteristics

- Width, surface, use types
- Connections to other bike ped facilities
- Connections to parks, schools, job centers, etc.
- Assess potential priority areas through an equity lens



**Refine Data** 





#### Spatial

Trail lines, trail user counts, trail access points, etc. **Non-spatial** 

Planning/budget docs, priority project lists, etc.

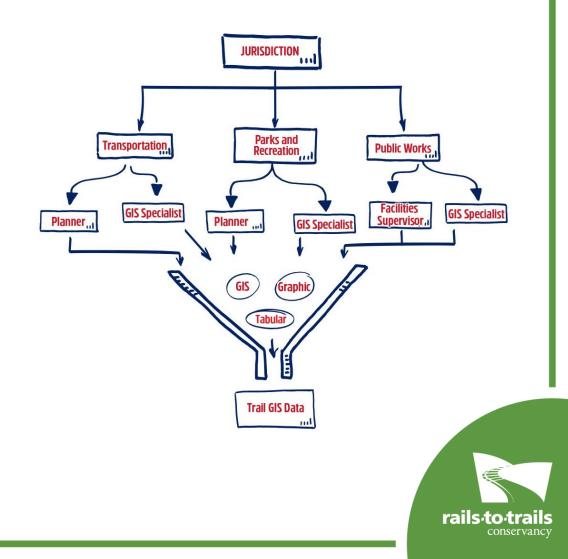
Consider a plan review

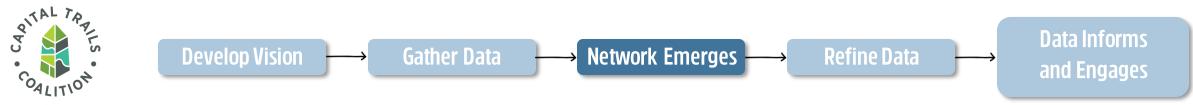
#### Meet with GIS professionals

Note sources and dates in metadata/attribute table

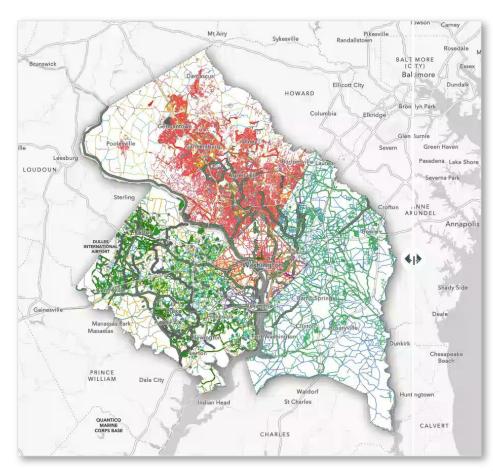
- Can be a valuable process for data partners as well
- Assess and standardize attributes

Trail uses, surface types, naming conventions, etc.

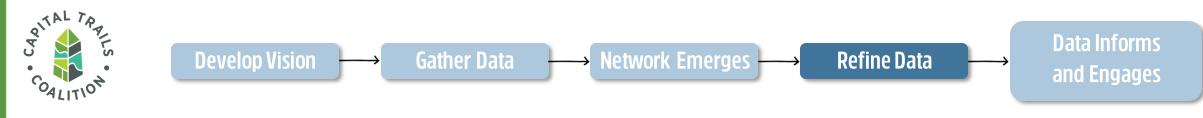




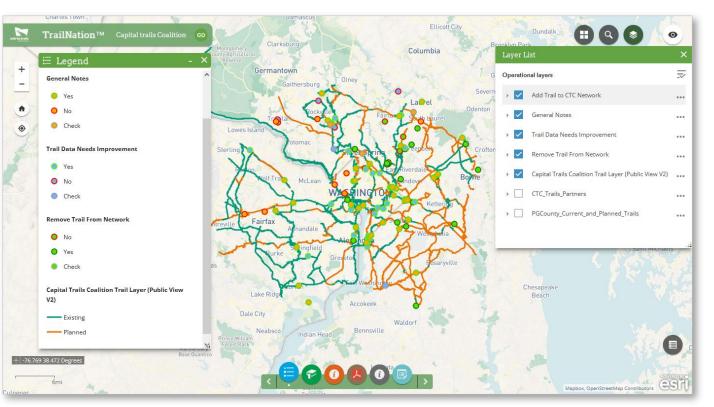
- Known spines and gaps will be evident Important connectors and additional gaps will start to become apparent.
- Original criteria will be tested Consider designation of official routes and unofficial connectors.
- Important to revisit and refine criteria ...without compromising the impact of the overall vision.







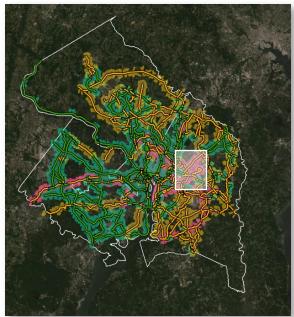
- Improve attributes and geometries
- Assess new data against criteria
- Stay engaged with data partners
- Consider gathering feedback

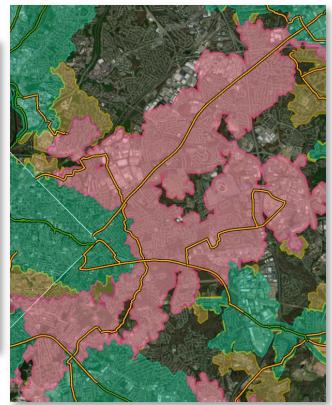




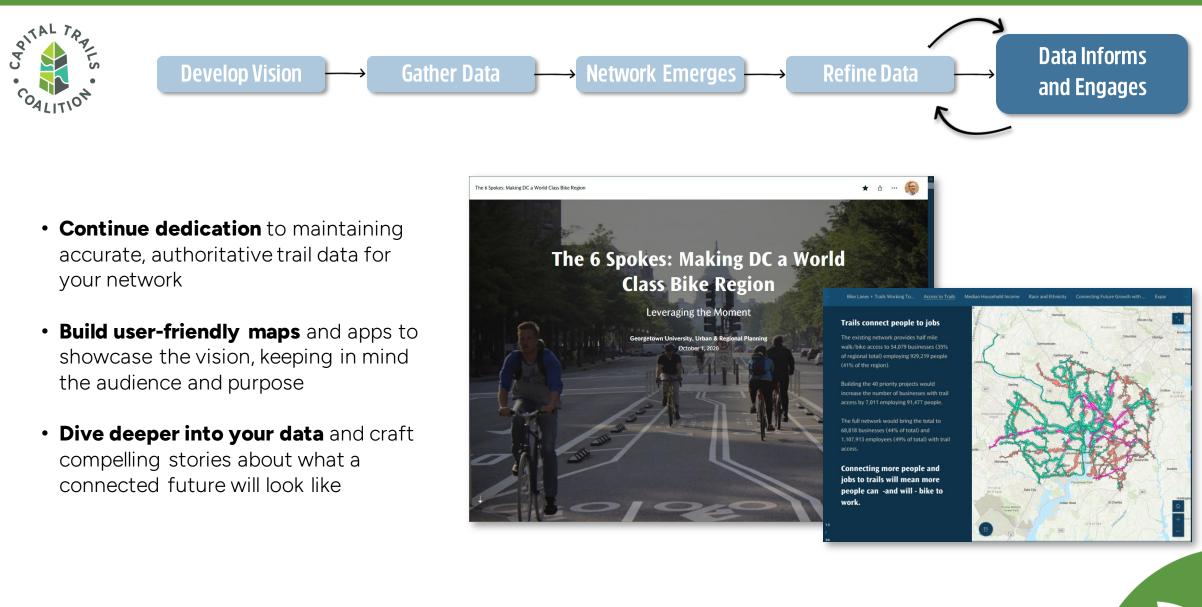


- With all trail data in one place, exploration of the network will now be more efficient
- **Consider enriching your data** with additional info like cost estimates for project segments
- Generate service areas to gain a better understanding of the communities that have or need access to your trail system













#### **Capital Trails Coalition**

Advancing a Regional Network of Multi-Use Trails

## **About the Capital Trails Coalition**



The Capital Trails Coalition seeks to create a world-class network of multiuse trails that are equitably distributed throughout the Washington, D.C. metropolitan region.

The regional trails network will transform public life by providing lowstress access to open space and reliable transportation for people of all ages and abilities.

Status: 51% to goal (551.6mi complete /1,006 mi total)



## **Building a Network Map**

In 2017, the CTC convened a meeting with employees from all 6 core jurisdictions (and the National Park Service).

The goal of each meeting was to build a mapping portal for the coalition and to understand each jurisdiction's definition of planned and proposed trails.

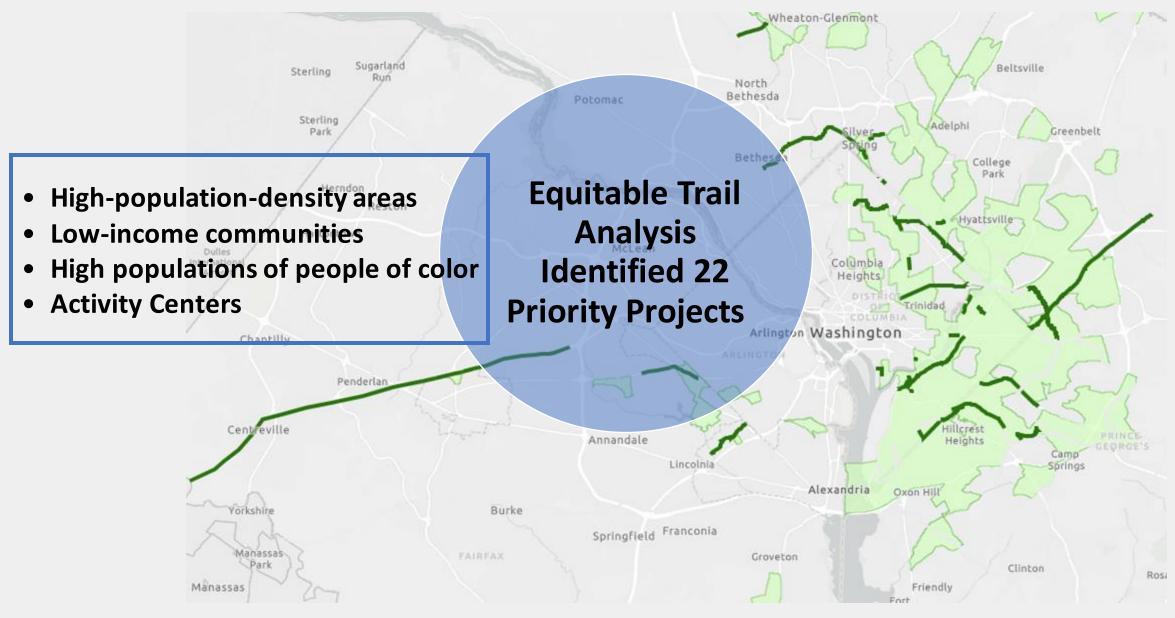


## **Criteria for Network Inclusion**

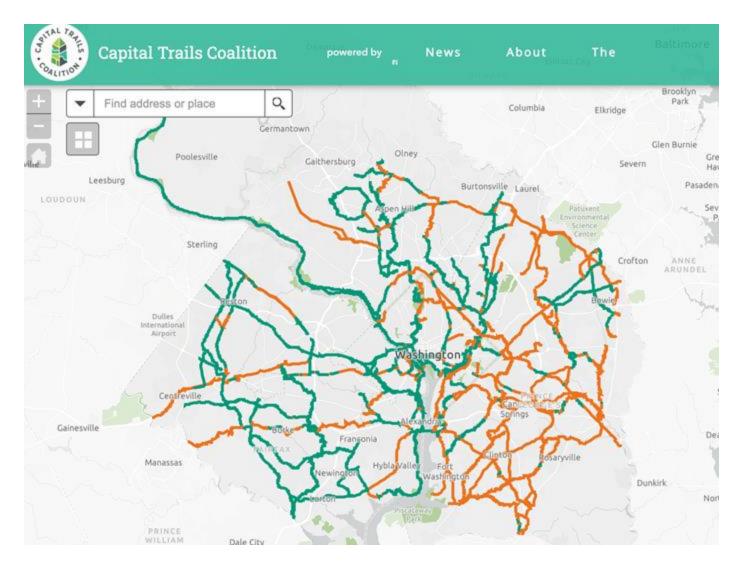


Off-road / On- road	<ul> <li>Off-street, separated from moving traffic</li> <li>Provision for on-street facilities for connection</li> <li>On-street facility trail connectors may not be accessible to all ages and abilities and will be marked as "needs improved" for continuous trail connection.</li> </ul>		
Width	<ul> <li>10-12 feet minimum</li> <li>Designed for probable use</li> <li>Wider if demand warrants</li> <li>Narrower in short segments to accommodate design constraints</li> <li>8 feet minimum acceptable for existing trails (2017), but 10 feet minimum required for new trails</li> </ul>		
Design Standards	New trails (from Planned to Existing, post-2017) designed according to best practices (E.g. AASHTO standards)		
Types of Use	Designed for non-motorized use		
Paved <i>l</i> Unpaved	<ul> <li>Paved</li> <li>Firm, crushed stone where appropriate</li> <li>Boardwalks and bridges are acceptable</li> </ul>		
Relation to the Network	<ul> <li>Is directly connected to the overall system or will be part of the system with the completion of future planned trails</li> <li>This connection also needs to be in the form of a physical multi-use trail</li> <li>"Thematic" connections are not acceptable</li> <li>Each trail should connect to the overall network at at-least one point</li> <li>Even if individual trail segments are short, the completed trail should connect places</li> </ul>		
Transportatio n / Recreation	<ul> <li>Well-suited for serving both transportation and recreation purposes</li> <li>Connecting people to transit, activity centers, and recreation areas</li> </ul>		
Feasibility	<ul> <li>Right of way identified and trail capable of being built within 25 years</li> <li>Planned trails must have associated, locally approved plan</li> </ul>		

## **Centering Equitable Trail Development**



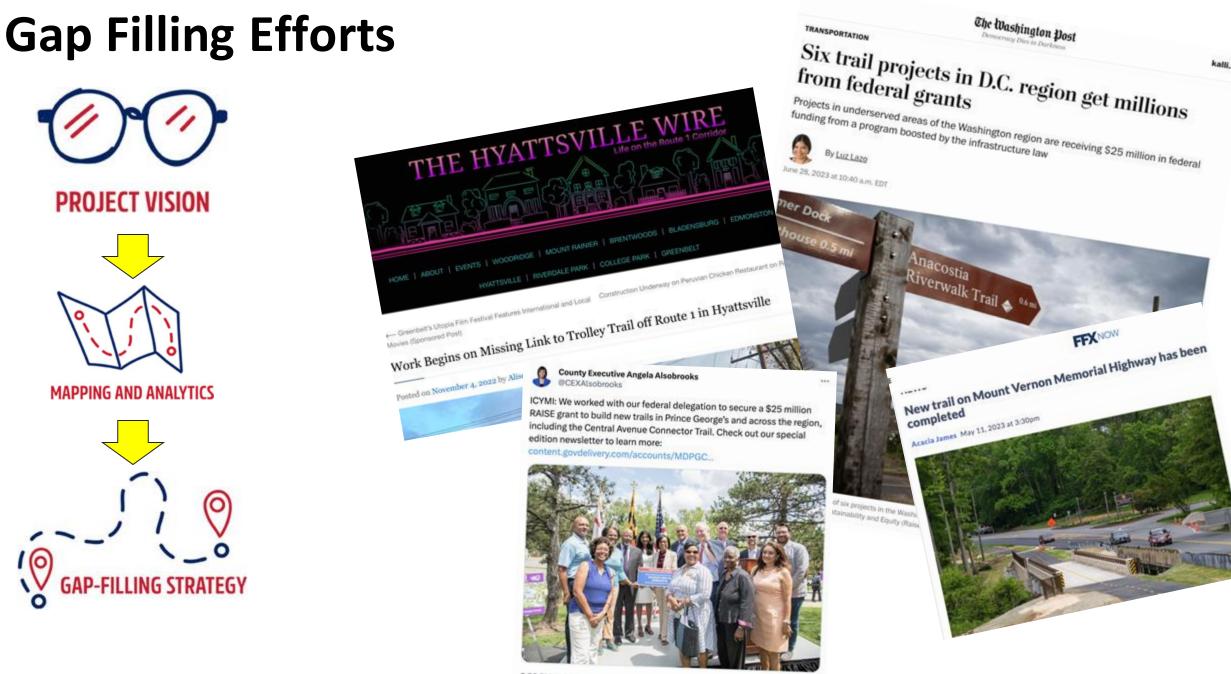
## **Interactive Trail Map**





The interactive map allows stakeholders to learn more about the existing network and visualize the planned segments.

Find it online at capitaltrailscoalition.org/map



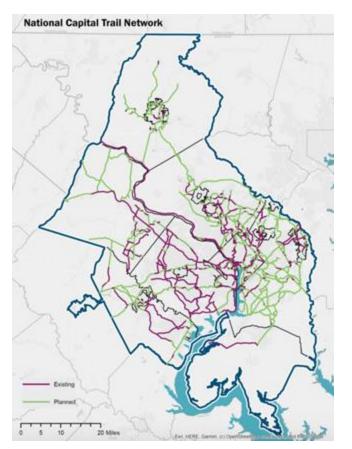
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## **MPO Adopts National Capital Trail Network**

COALITION

- The NCTN network has about 1,400 miles of facilities (645 miles already exist).
- Prioritizes trail projects for funding.
- 136 of 141 Activity Centers and 308 of 351 Equity Emphasis Areas are within ½ mile of the network.
- Once completed, over 4 million people in the Washington region will have access to trails within ½ a mile of their home.





2020

## **Regional Resolutions Supporting Trails**



5 out of 6 jurisdictions passed resolutions indicating their commitment to completing the remaining top 40 priority projects identified by the Capital Trails Coalition and the jurisdiction partners by 2025 and complete the full CTC network by 2030.

Why this strategy? To show regional unity, raise the stature of the trail network, build awareness so that it becomes a priority with dedicated resources, and embolden political will and commitment.

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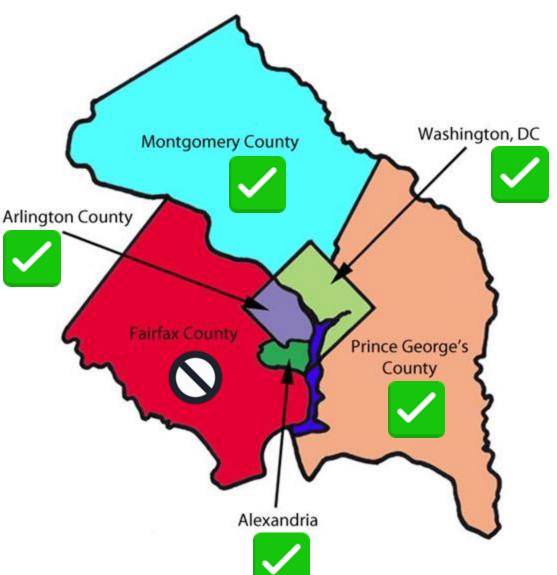
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Jurisdictional Resolution Status:

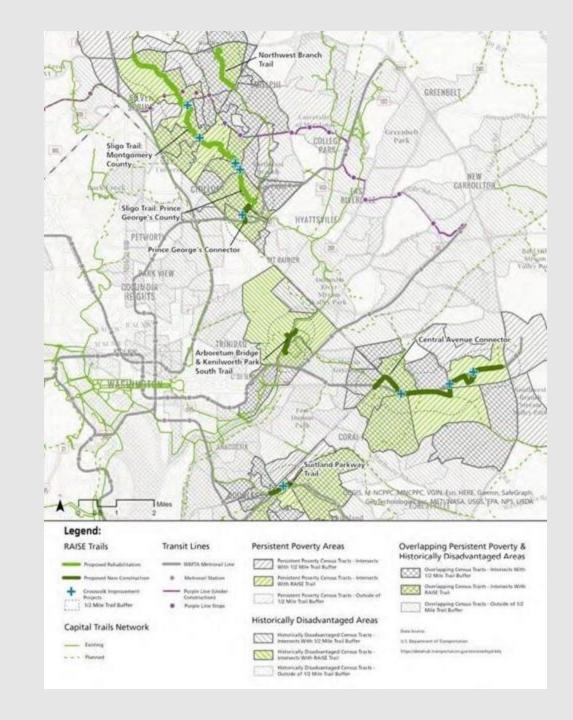
- Montgomery County
- Prince George's County
- Arlington County
- DC
- City of Alexandria
- Fairfax



## Prioritizing Gap Filling in Funding Proposals

### \$25 Million in FY 2023 RAISE Program funds to address an urgent and critical need to rehabilitate existing and

**construct new multi-use paths** to fill key gaps in the regional bicycle and pedestrian trail network.



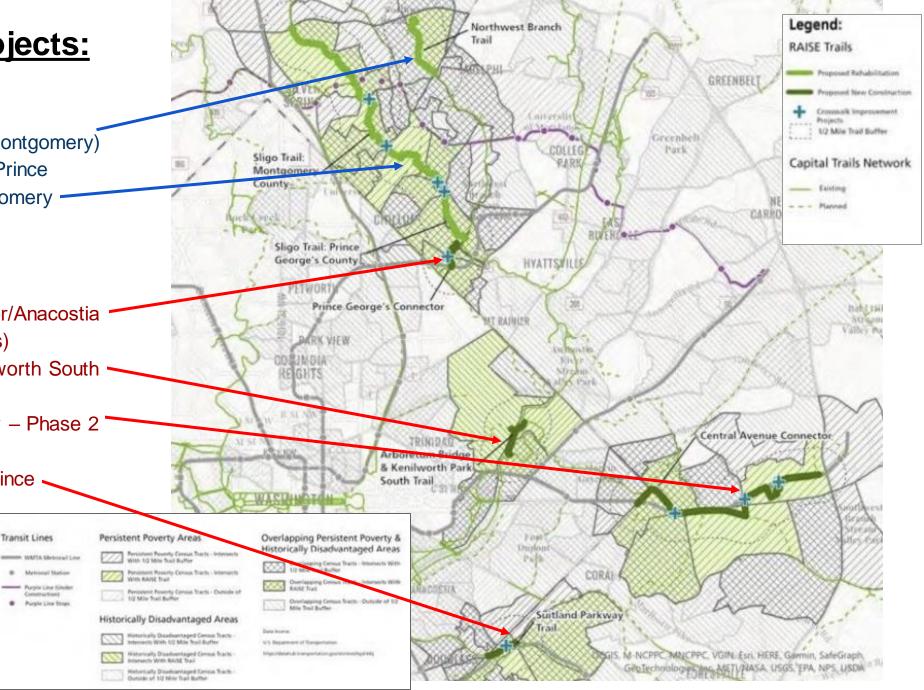
## Maryland & DC Projects:

#### Rehabilitation of:

- Northwest Branch Trail (Montgomery)
- Sligo Creek Trail Rehab (Prince George's County & Montgomery — County)

#### **Construction of:**

- Prince George's Connector/Anacostia -Gateway (Prince George's)
- Arboretum Bridge & Kenilworth South -Park Trail (DC)
- Central Avenue Connector Phase 2 (Prince George's)
- Suitland Parkway Trail (Prince George's)

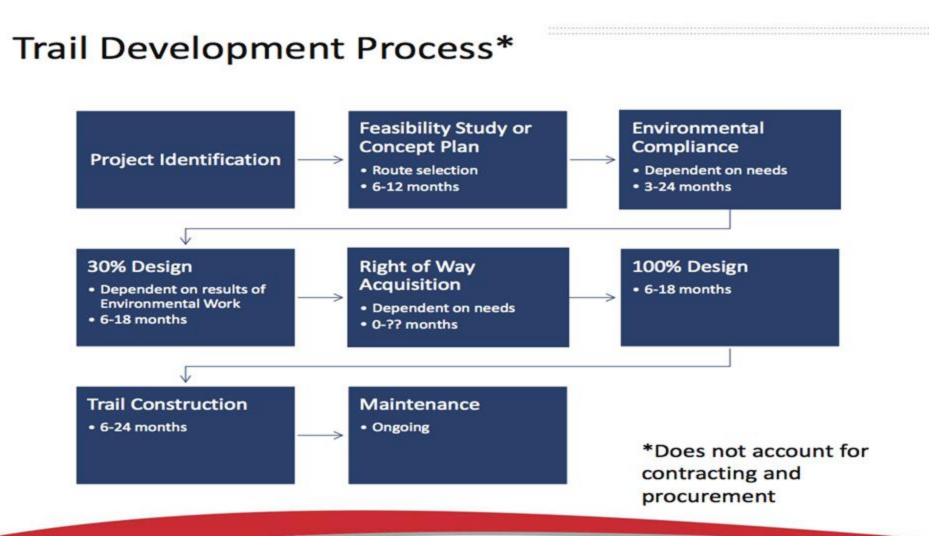


## **Creating Equitable Connections on the Capital Trails Network**



Equity Emphasis	Safety Improvements	Increased Access
<ul> <li>Each project is located completely within Areas of Persistent Poverty and/or Historically Disadvantaged Communities, as defined by the U.S. Department of Transportation.</li> <li>15 miles of trail construction and rehabilitation spread across 40 impoverished census tracts in Prince George's and Montgomery Counties in Maryland and the District of Columbia.</li> </ul>	<ul> <li>Safer connections to nine rail stations, including four new trail connections to Metrorail Green and Blue Line stations, enabling and encouraging more multimodal transportation.</li> <li>Connections across our communities by bridging the Anacostia River and implementing safety improvements at nine major intersections and at-grade trail crossings.</li> </ul>	<ul> <li>The project creates and improves meaningful regional trail connections where 600,000 people live, providing access to national and local parks, jobs, and everyday destinations.</li> <li>The project will enhance both recreational and economic opportunities in the region, provide non-motorized commuting options to the 53,000 workers that are within half a mile of the trails.</li> </ul>

## **Opportunities in the Trail Development Cycle**





## **Thank You!**

Please send any questions or comments to kalli.krumpos@waba.org

# CRTP

charlotte regional transportation planning organization

## TrailNation Playbook in Action

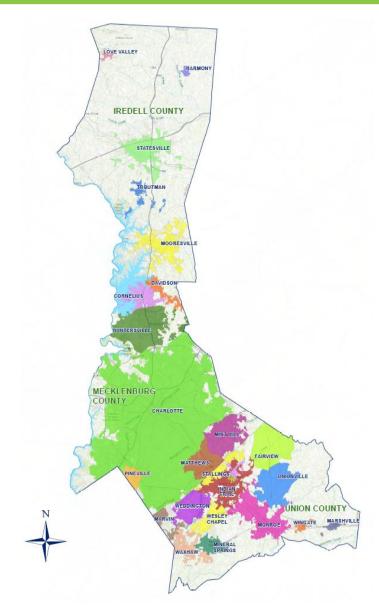
November 28, 2023





### Charlotte Regional Transportation Planning Organization

- $\odot~1.5^{\scriptscriptstyle +}$  Million Population
- 1,560 Sq Miles
- 27 Voting Members
- 24 Municipalities
- o 3 Counties
- 2 NCDOT Divisions

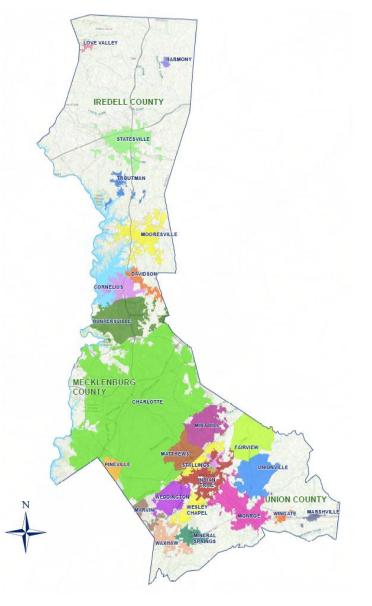






#### **Prioritize & Allocate Funding**

- Submit projects for NC's Strategic
   Transportation Investments (STI) Program and STIP
- Award MPO Discretionary Funding to Projects
- $\circ~$  Coordinating Submittals for IIJA Grants

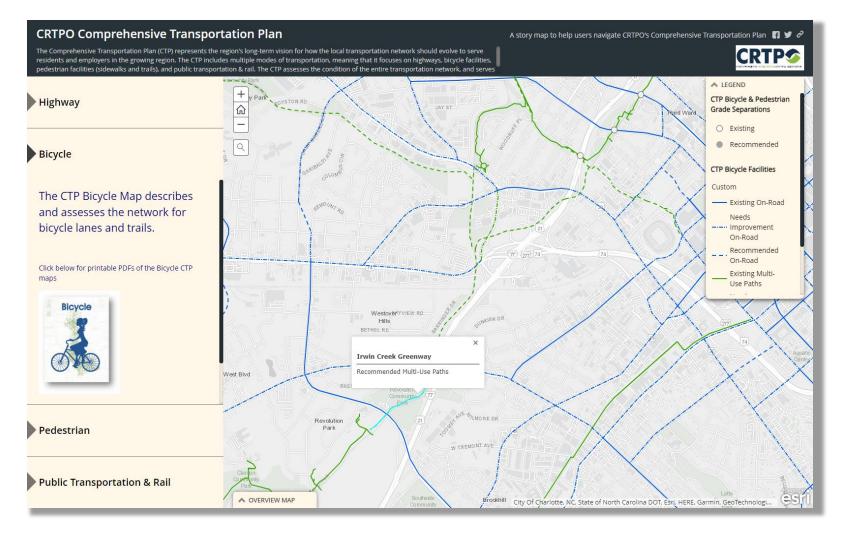




#### **CRTPO's Role**

#### "Filling the Gaps"

- ComprehensiveTransportation Plan (CTP)
- $\circ~$  Active Transportation
  - Pedestrian Facilities
  - Bicycle Facilities
  - Shared Use/ Greenways





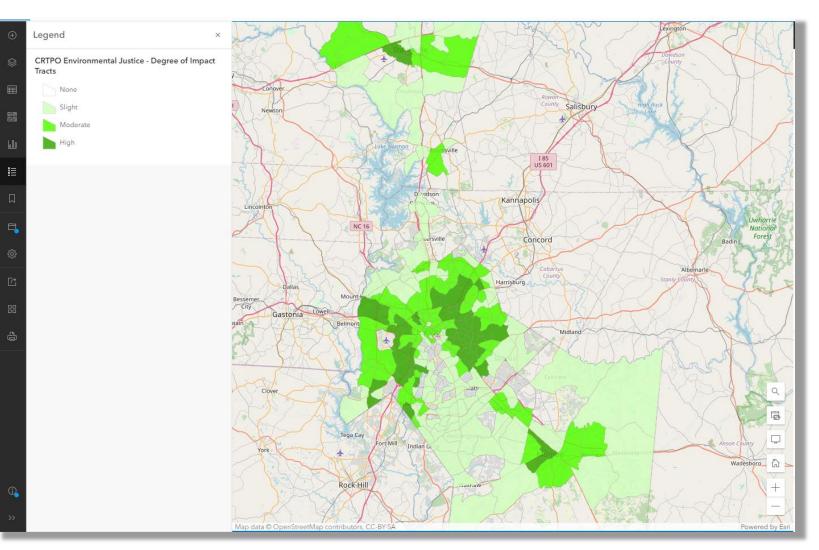
#### **Active Transportation – Discretionary** Funding

Congestion Mitigation & Air Quality (CMAQ), TAP, Carbon Reduction Program (CRP), and Planning (PL) Funds

- Connectivity Ο
- Safety Ο
- Health & Environment/Equity Ο
- Feasibility Ο

		Emission & Pollutant Reduction (Vehicle Mile Reduction)		
		Will this project result in reducing vehicle miles traveled locally? 20 Pts 300+ Daily Veh Miles		
		1. Assume vehicle trips equal 2% of the AADT total from the Vehicle Traffic criteria. 15 Pts 200 - 299 Daily Veh Miles		
		-OR- 10 Pts 100 - 199 Daily Veh Miles		
		Where AADT/ADT is unavailable, estimate the daily usership of the proposed facility. Assume 5 Pts 0 - 99 Daily Veh Miles that each user represents a vehicle trip removed from the road.		
Charlotte Regional Transp		2. Measure roadway miles that bicyclists or pedestrians would otherwise travel, if not for the proposed facility.		
		3. Multiply vehicle trips by roadway miles to determine vehicle miles reduced.		
Organizati		Emissions Reduction Score		
		Social Equity		
Transportation Altorn				
Transportation Altern	& Environment	Please reference CRTPO's EJ Degree of Impact mapping which identifies geographically-based concentrations of racial, car-less, and low income populations.		
Criteria Scorin	iron	El Degree of Impact Mapping		
Citteria Scoriii	Env	Does the project provide access (direct or adjacent contact) for environmental justice (EJ) populations?		
	Et 8			
	Health	High Impact Moderate Impact Low Impact No Impact 10 pts 5 pts 2pts Opts Social Equity - EJ Score		
		Does the project provide access (direct or adjacent contact) for carless households?		
Yes No		Yes No		
5 pts Opts Social Equity - Carless Score		5 pts Opts Social Equity - Carless Score		
		Environmental Quality		
		Does the project include significant benefits which address wildlife safety, water quality, or other improvements?		
		Examples of benefits may include, but are not limited to: pervious surfaces, rain gardens, routing to avoid wildlife habitats. Please list any proposed benefits/improvements.		
		riesse ist any proposed beneficy/improvements.		
January 202		Yes (S Pts) No (0 Pts) Environmental Quality Score		
		ститоппенка циану зооге		
		Health Equity		
		Does this project provide access for people at greater risk of chronic disease? Please reference the most current CRTPO TAP Health Focus Areas Mapping, which uses education and income level as social determinants of populations		
		at greater risk for chronic disease.		
		12% or more residents were living below the 5% - 11.9% of residents were living below Less than 5% of residents were poverty level within the past 12 months AND the poverty level within the past 12 months living below the poverty line		
		10% or more residents have less than a high OR 5%-9.9% of residents have less than a within the past 12 months AND school diploma less than a less tha		
		scnool opioma nign scnool opioma ies than 5 m or residents have less than a high school diploma		
		Yes (5 Pts) Yes (3 Pts) No (0 Pts)		
		Health Equity Score		



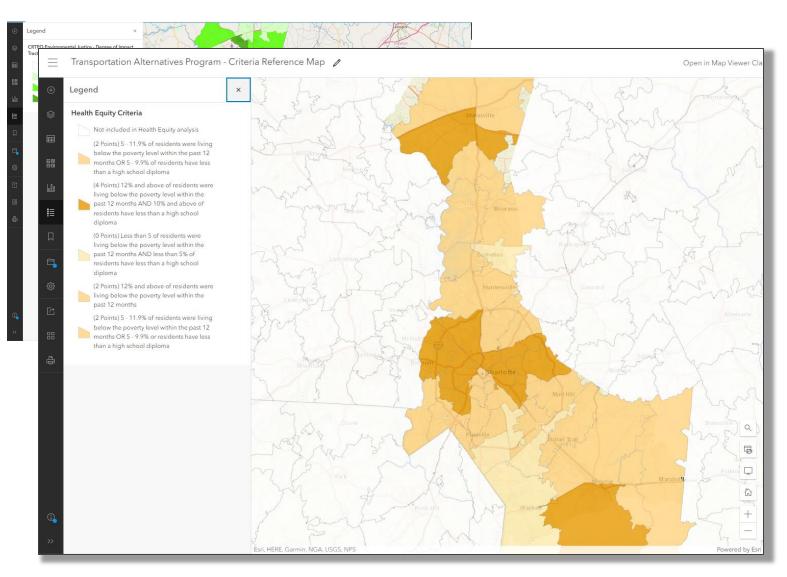


## Social Equity: Environmental Justice Degree of Impact

- O HistoricallyUnderrepresentedCommunities
- $\,\circ\,$  Low Income Households
- Carless Households



### **Prioritizing Equity**



#### **Health Equity Criteria:**

- Mecklenburg County Public Health
- Policy research linking health outcomes with income and education
- Significant thresholds for residents living below
   poverty level (12%) and less than a high school
   diploma (10%)



#### **CRTPO Discretionary Program**

- 20% Target for Active Transportation
- $\circ~$  \$14.9 Million awarded in Fall 2022

Project Category	CRTPO Discretionary Project Status	Number of Applications Received	Number of Projects Recommended	Total Discretionary Recommended Amount (in Millions)	Ratio of Funding by Category
Highway	New Projects	9	9	\$28.6	62%
	Existing Discretionary	2	2	\$7.8	
Non-highway: Bicycle & Pedestrian	New Projects	14	7	\$14.6	25%
	Existing Discretionary	1	1	\$0.3	
Non-highway: Carbon Reduction Projects	New Projects	3	3	\$7.2	12%
Local Planning Projects	New Projects	5	5	\$0.5	1%
TOTAL RECOMMENDED DISCRETIONARY PROJECTS		34	27	\$59.1	100%

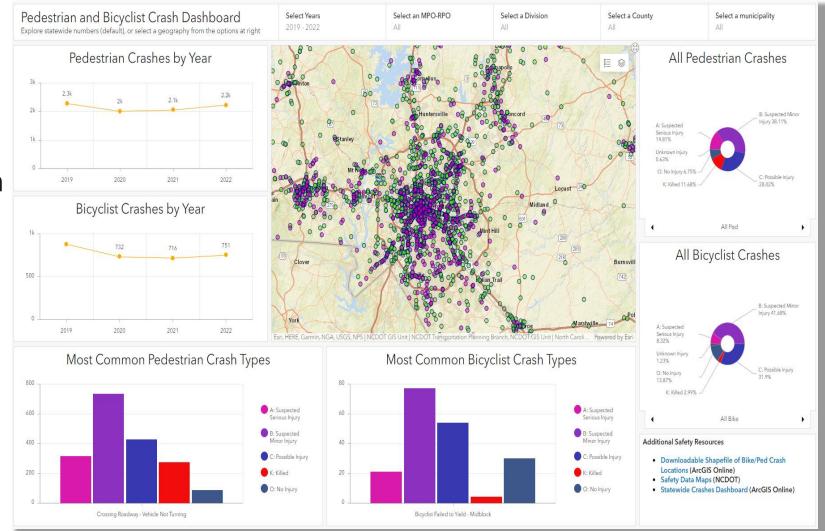


### **Prioritizing Safety**

### NCDOT Vulnerable Road User (VRU) Program

 $\circ$  Safety

 Equity: Overrepresentation in crashes with fatality or serious injury

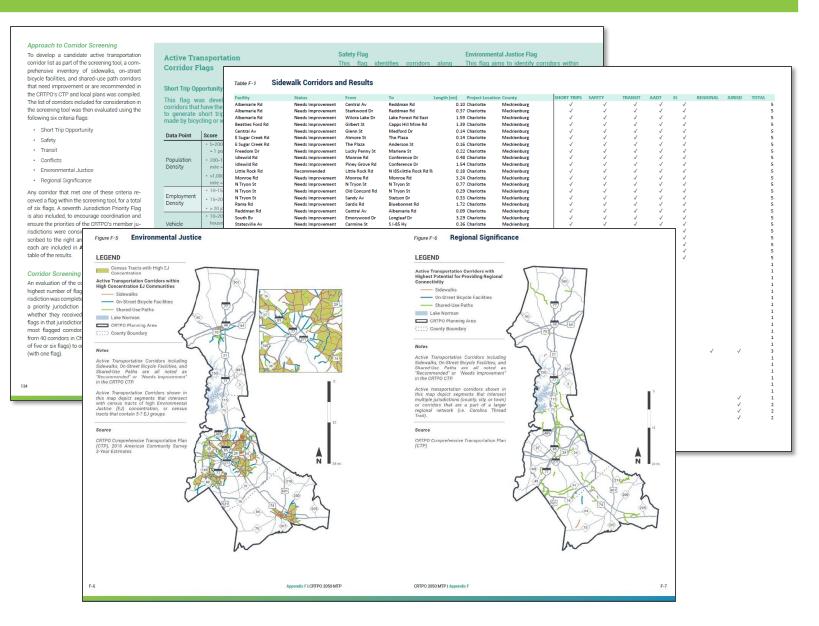




### **Regional Leadership & Coordination**

### **CRTPO Active Transportation Corridors**

- Short Trips
- $\circ$  Safety
- Transit
- o AADT
- Environmental Justice
- Regional Significance
- Jurisdictional Priority

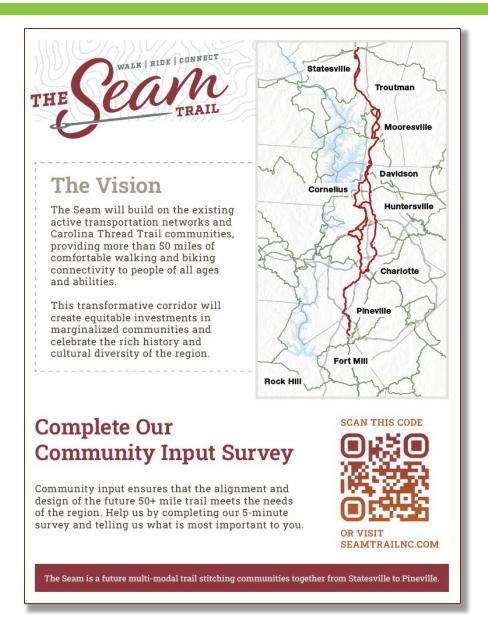




### **Regional Leadership & Coordination**

#### "The Seam"

- o 50+ Mile Greenway
- o 11 Municipal and County Stakeholders
- "Stitch" together
   communities along the
   corridor





# Trail Networks & Gap-Filling

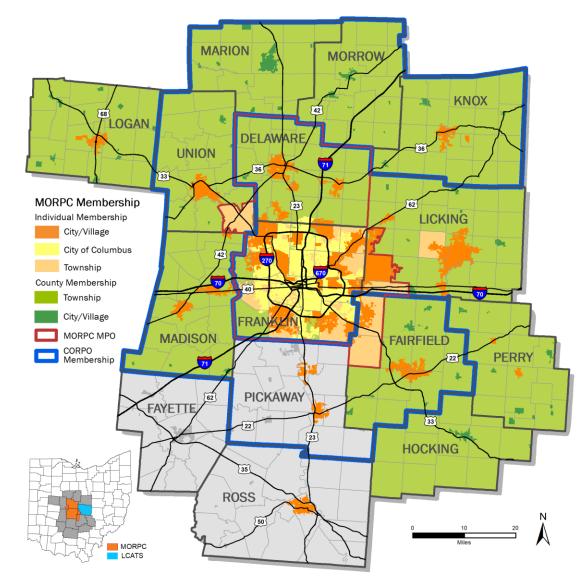
### **Deciding Where to Start**

RTC | November 28<sup>th</sup>, 2023



MID-OHIO REGIONAL MORPC PLANNING COMMISSION

### **About MORPC**

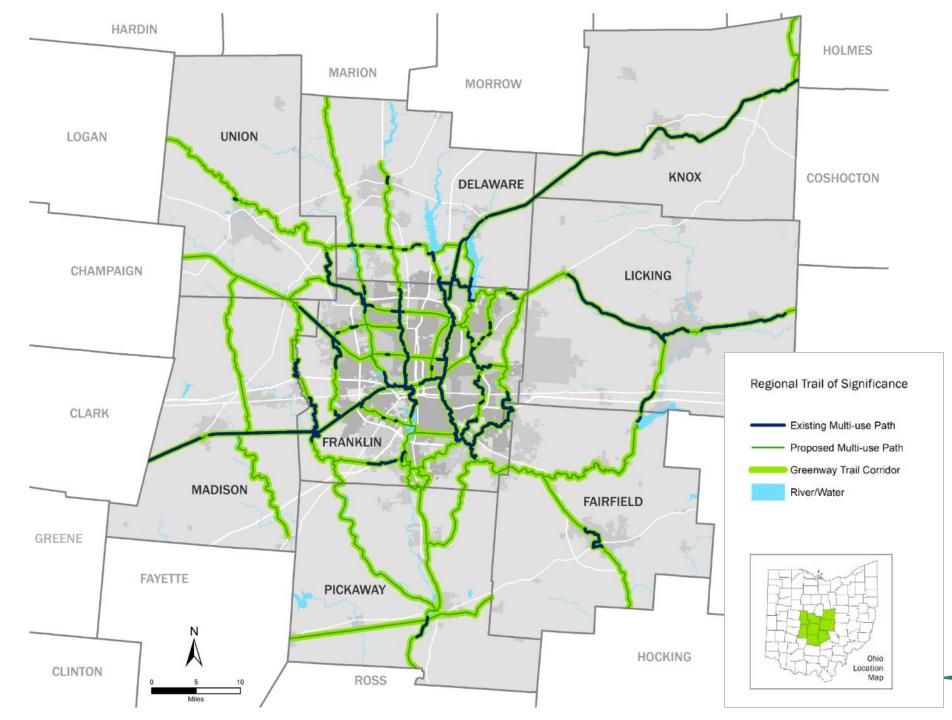


#### WHO WE ARE

MORPC is Central Ohio's regional council for more than 80 communities and regional partners. We bring communities of all sizes and interests together to collaborate on best practices and planning through a variety of programs, services, projects, and initiatives to help drive a sustainable and prosperous future and improve the quality of life for everyone in Central Ohio.

#### WHAT WE DO

- Central Ohio's resource hub and leadership forum
- **Convene local governments** to plan, prioritize, and advance strategic transportation and infrastructure investments.
- Provide data tools, insights, and technical assistance for sustainability programs, growth planning, residential services, and shared solutions.
- Engage and represent Central Ohio's community leaders, residents, and partner organizations on public policy.



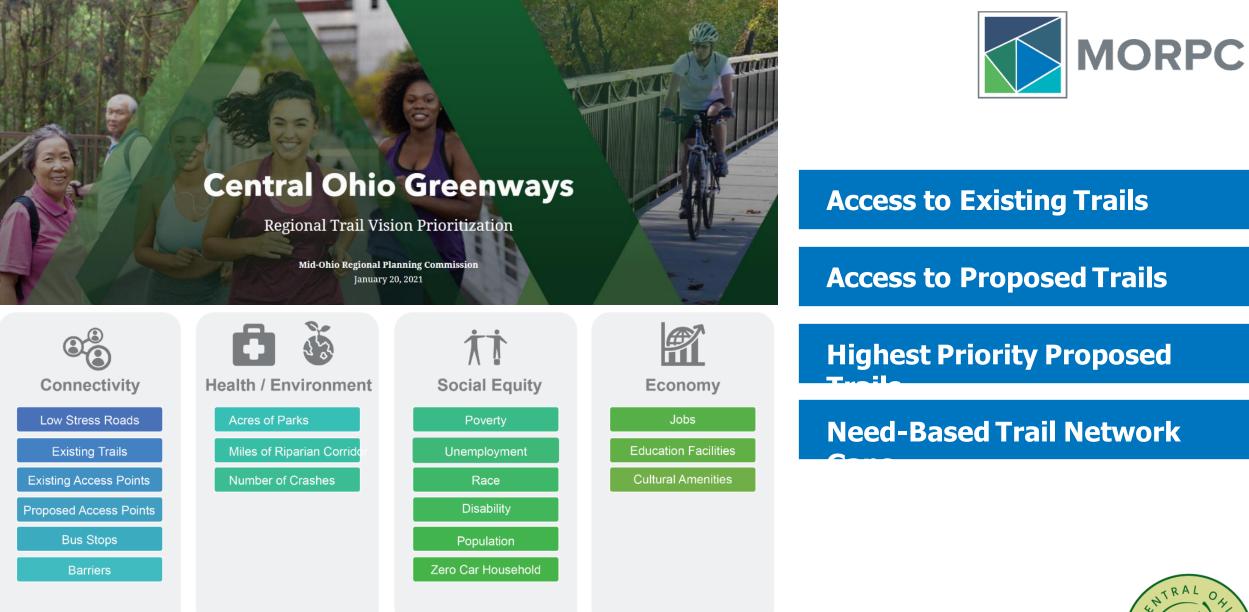


### Regional Trail Vision

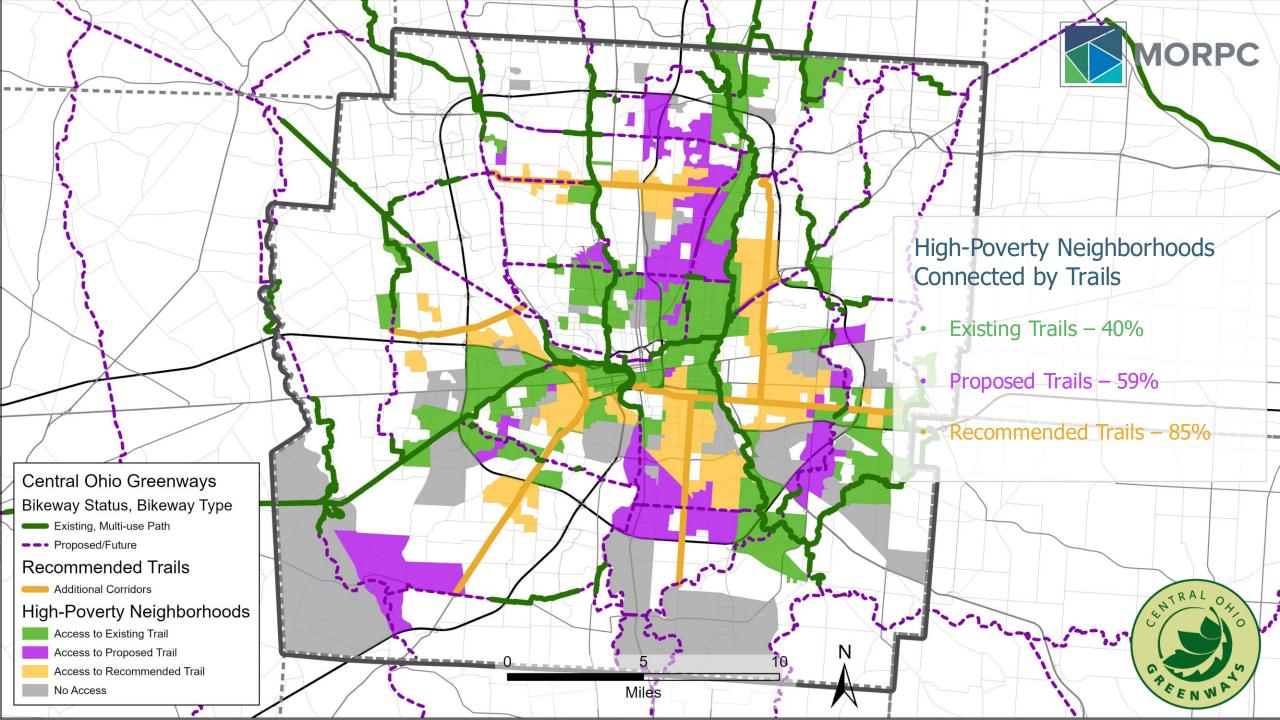
### 500+ Proposed Trail Miles

### 230+ Existing Trail Miles









# Local Case Studies

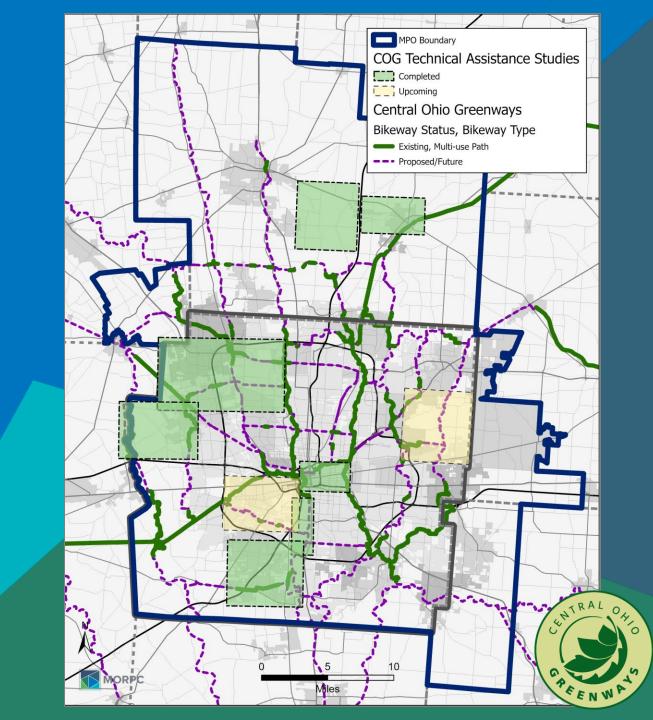


MID-OHIO REGIONAL MORPC PLANNING COMMISSION

### TECHNICAL ASSISTANCE STUDIES

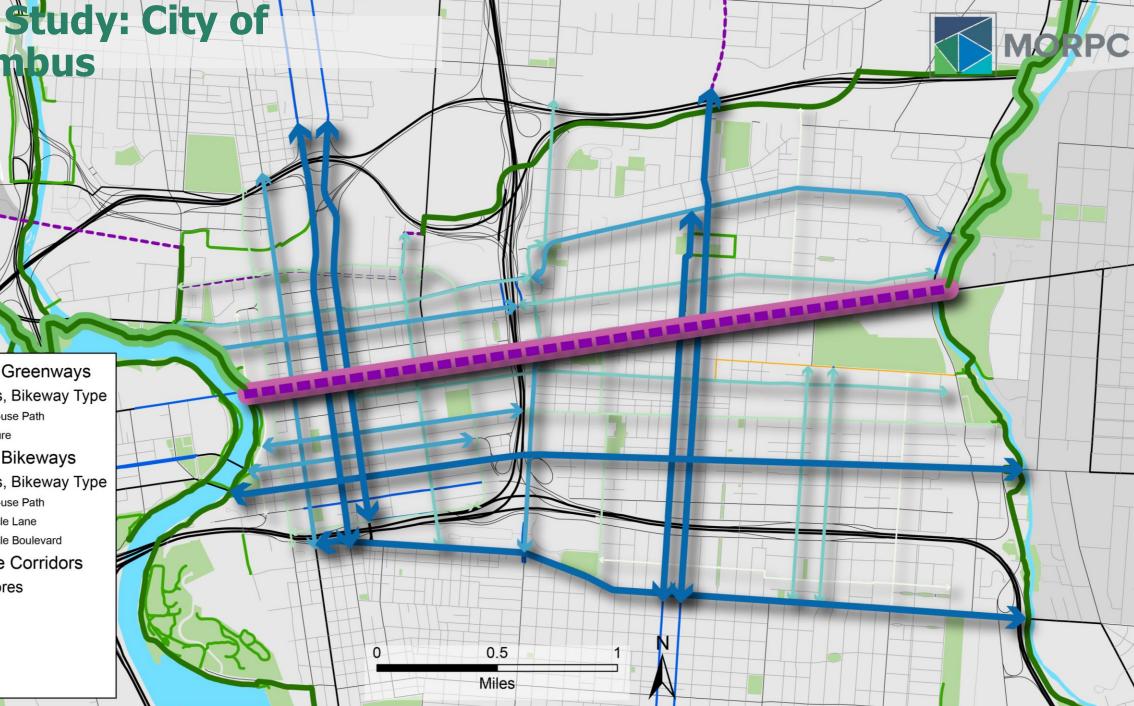
- 6-9-month, staff-time-based studies
- Study components
  - Public, Stakeholder Engagement
  - Opportunities, Existing Conditions, and Alternatives/Access Analyses
  - Implementation Plan roadmap forward
- COG-Related Studies
  - Trail Vision Refinements
  - Trail Access & Connectivity

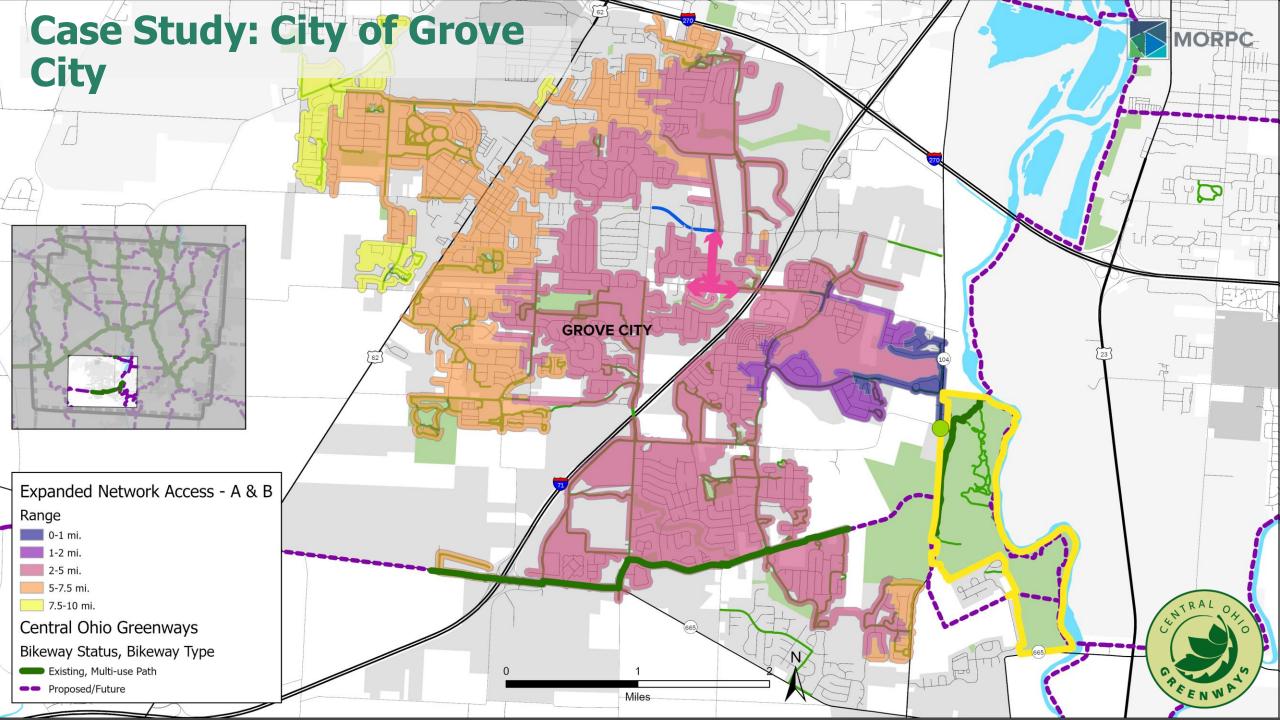




### **Case Study: City of** Columbus

Central Ohio Greenways Bikeway Status, Bikeway Type Existing, Multi-use Path --- Proposed/Future Central Ohio Bikeways Bikeway Status, Bikeway Type Existing, Multi-use Path ----- Existing, Bicycle Lane Existing, Bicycle Boulevard **Potential Bike Corridors Composite Scores** Lowest Lower Middle Higher Highest

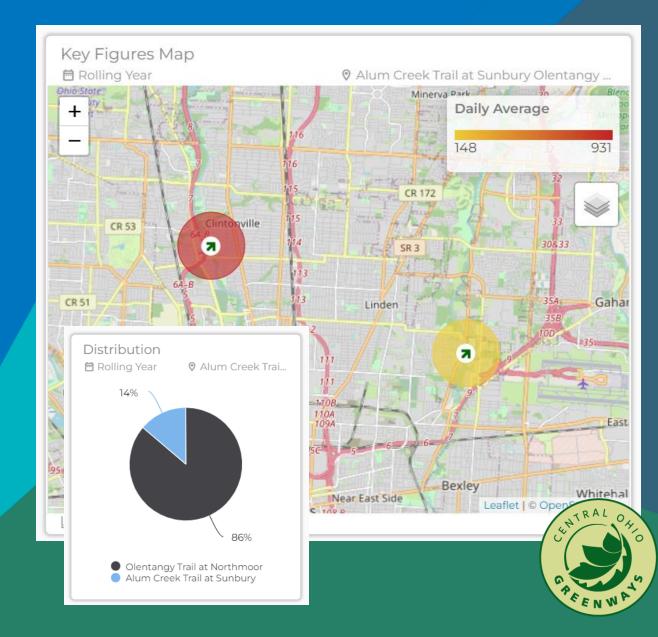




### **Concluding Thoughts & Considerations**

- Sophistication vs. Constraints
  - Buffer analysis
    - Coarse, further from ground-truth
    - Relatively quick, accessible
  - Network analysis
    - Detailed, closer to ground-truth
    - Time- and data-intensive
    - Accessibility
- Data
  - MPOs
  - Big Data
    - Streetlight, StravaMetro
- Non-Motorized Data Collection (NMDC)
  - Where people <u>are</u> walking and/or biking





# **MORPC's NMDC Program**

### **Increase Counting Capacity**

### **Expand the Monitoring Area**

# 2023 Safe Streets & Roads for All Application

- Transformational increase in permanent counters
- Consultant assistance

Additional permanent counters to bootstrap passive data

- Streetlight, Strava Metro
- On- and Along-Street Facilities

**Support local members** 

• Grant applications





# **THANK YOU!**

#### **JORDAN PETROV**

Associate Planner **Mid-Ohio Regional Planning Commission** T: 614-233-4226 jpetrov@morpc.org







# **TRAIL NATION**PROJECTS

# **TRAIL NATION** PLAYBOOK

## TRAIL NATION COLLABORATIVE



Railstotrails.org