WALK·BIKE·HIKE
SOMERSET COUNTY

CONNECTING VIBRANT COMMUNITIES

PUBLIC MEETING # 2 – April 11, 2019

Tonight's Meeting

- Purpose of Study
- Community Engagement and Technical Assessment Summary
- *Draft* Framework Strategy
  - Building the Potential County-Wide Network
  - Focus Area Concept Plans
  - Pattern Book – Design Guidance
- Next Steps and Milestones
- Public Review of Draft Framework Strategy

Purpose of Study

- Develop a low-stress, all ages network
  - Supports Walk, Bike, Hike, activities
  - Connects people with places and destinations
  - Improves mobility, safety, access
  - Compliant with guidance and standards
  - Integrated with County Preservation Plan
- Supports Capital Improvement Programs
  - Somerset County
  - Municipalities
  - State of New Jersey
  - Employers, private land owners, developers

Community Engagement - Summary

- Study Advisory Committee – 3 meetings
- Focus Groups – 3 meetings
- Community "Pop-up" events – 10 events
- ESL Class Group Discussions – 2 events
- Senior Mobility Groups – 2 events
- Somerset County Youth Leadership – 1 event
- Public Meeting # 1 - November 29, 2018
- Public Meeting # 2 - tonight

Crowdsourcing, Social Media, Etc.

- Online survey – close to 1,000 responses
- WikiMapping – more than 617 comments
- E-mail comments & suggestions
- Press releases, E-mail blasts, Facebook, etc.
  - Each has led to a spike in responses & comments
- Project website – live since July
  - http://bit.ly/WalkBikeHikeSC

Community Engagement - Findings

- Widespread support and interest in walk, bike, hike improvements
- Traffic stress a common concern & deterrent
- Many prefer dedicated facilities
- Leverage partnerships for implementation, integrate with county and municipal partners
- Emphasis on both mobility and destinations
- Goal is a “low stress – all ages” network

Technical Assessment - Summary

- Previous studies and recommendations
- Crash locations + hot spots
- Cycling demand model
- Level of Traffic Stress (LTS) + Island Effect
- Base mapping to build the network
  - Existing trails + potential on-road network
  - Generators/attractors/amenities/opportunities
  - Problem areas and corridors, barriers, desire lines
  - Opportunities for new and improved facilities

Technical Assessment – Findings

- 400+ recommendations from previous studies
- Significant barriers exist in on-road network
  - Most crashes on state and county roadways
  - Speeds, volumes, lack of facilities and network limit on-road options
  - Natural barriers and terrain also severe constraints
  - Off-road system essential to viable network
- Better connect Somerset County's communities

What is a Framework Strategy?

- County-wide network of potential WalkBikeHike improvements
- Meet basic design criteria and standards
- Require municipal and agency review
- Engineering assessment of feasibility, potential impacts and constraints
- Build consensus to advance to funding and construction
- First step in a long term process

Design Options and Criteria

- Trails
  - Natural surface, stone, or gravel
- Shared-Use Path (Sidepath)
  - Physically separated from motor vehicle traffic
  - Typically two-way, minimum 8-10 feet wide
  - Most consistent with “low stress, all ages”
- Bicycle Lanes
  - Limited separation from traffic
  - Adjacent to travel lane, 5 foot minimum width, 35 mph
  - 40 mph with a buffer or separator
- Shared Lane – “Sharrow”
  - On-road bicycle facility, where too narrow for bike lanes
  - 25 mph maximum

Building the County-wide Network

- Existing Network
  - Currently built: trails, shared use, and on-road
  - Not yet built: funded, design, or under construction
  - Some existing facilities are non-compliant
- *Draft* Proposed County-wide Network
  - Potential new trails, shared use path, and on-road

Build the Potential County-wide Network

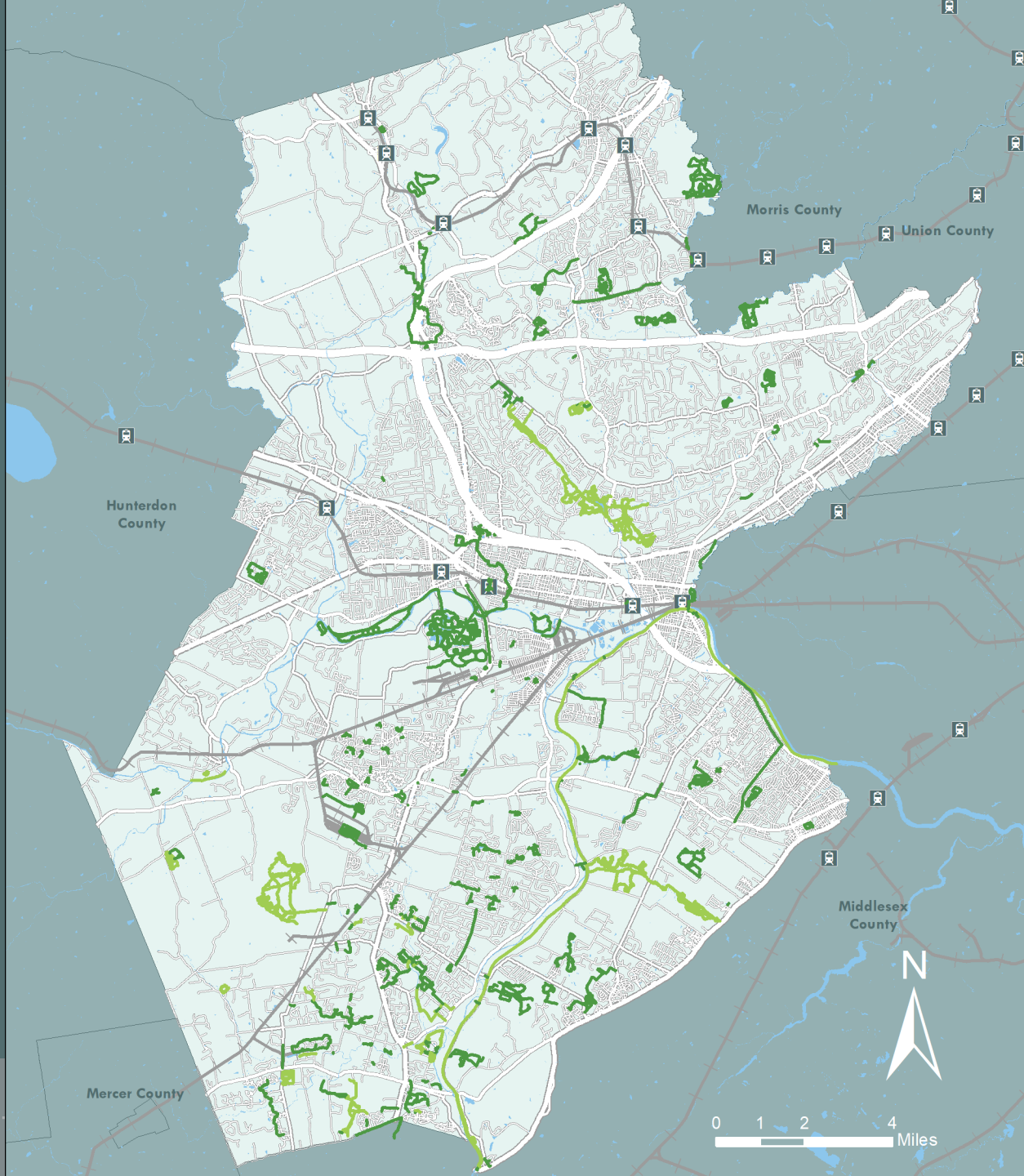
- Existing Facilities
  - Currently built or funded
- *Draft Potential Facilities*
  - Meet basic design criteria
  - Require municipal and agency review to assess feasibility, constraints, and cost
  - Build consensus to advance to funding and construction
- Focus Area Concept Plans

Build the Potential County-wide Network

- Existing Facilities
  - Trails and Paths
  - On-road Bike Network
- *Draft Potential Facilities*
  - Trails and Paths
  - On-road Bike Network
- Draft Focus Area Concept Plans

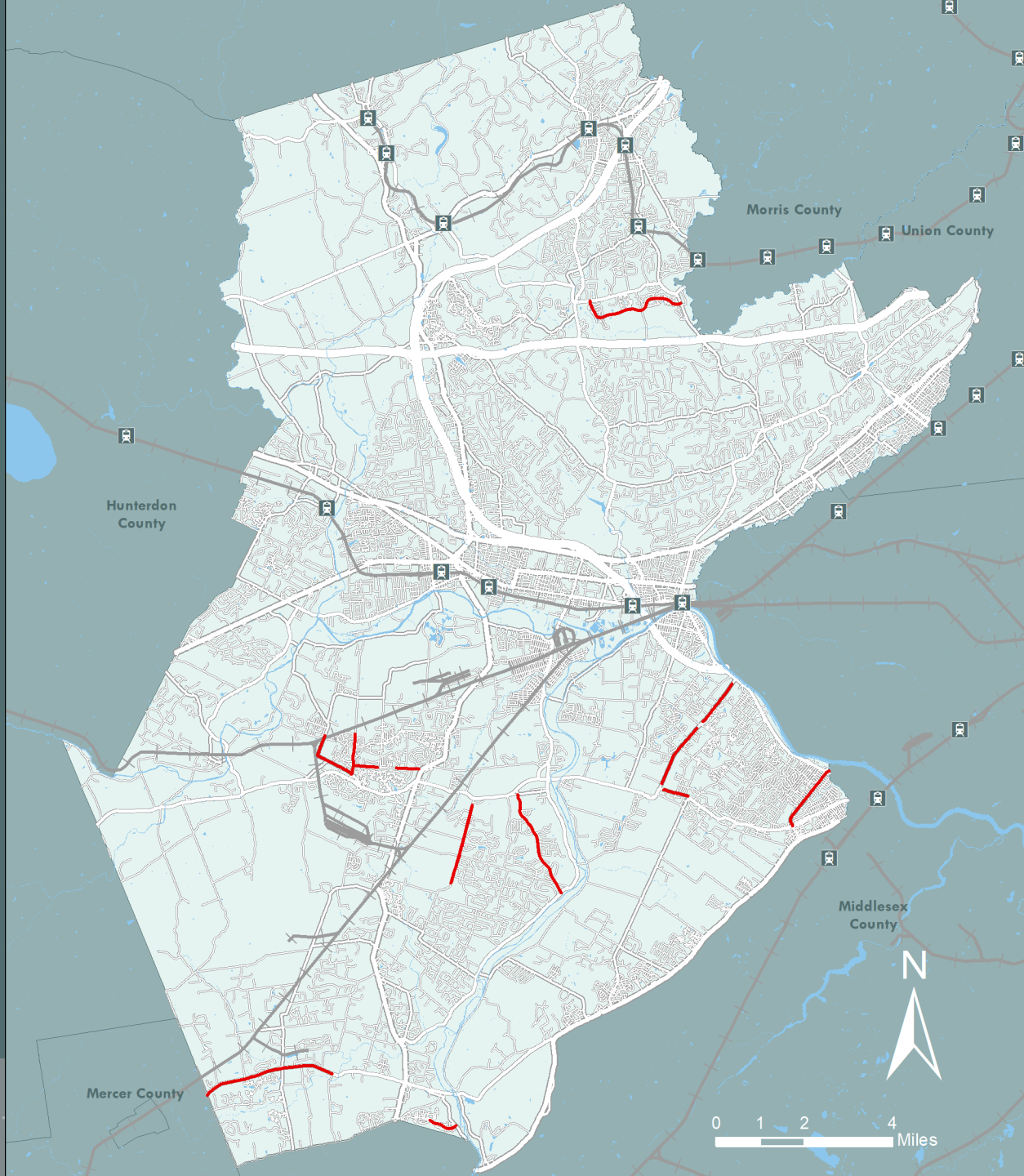
Existing Facilities: Off-Road

- Trail - Natural Surface
- Shared-Use - Paved



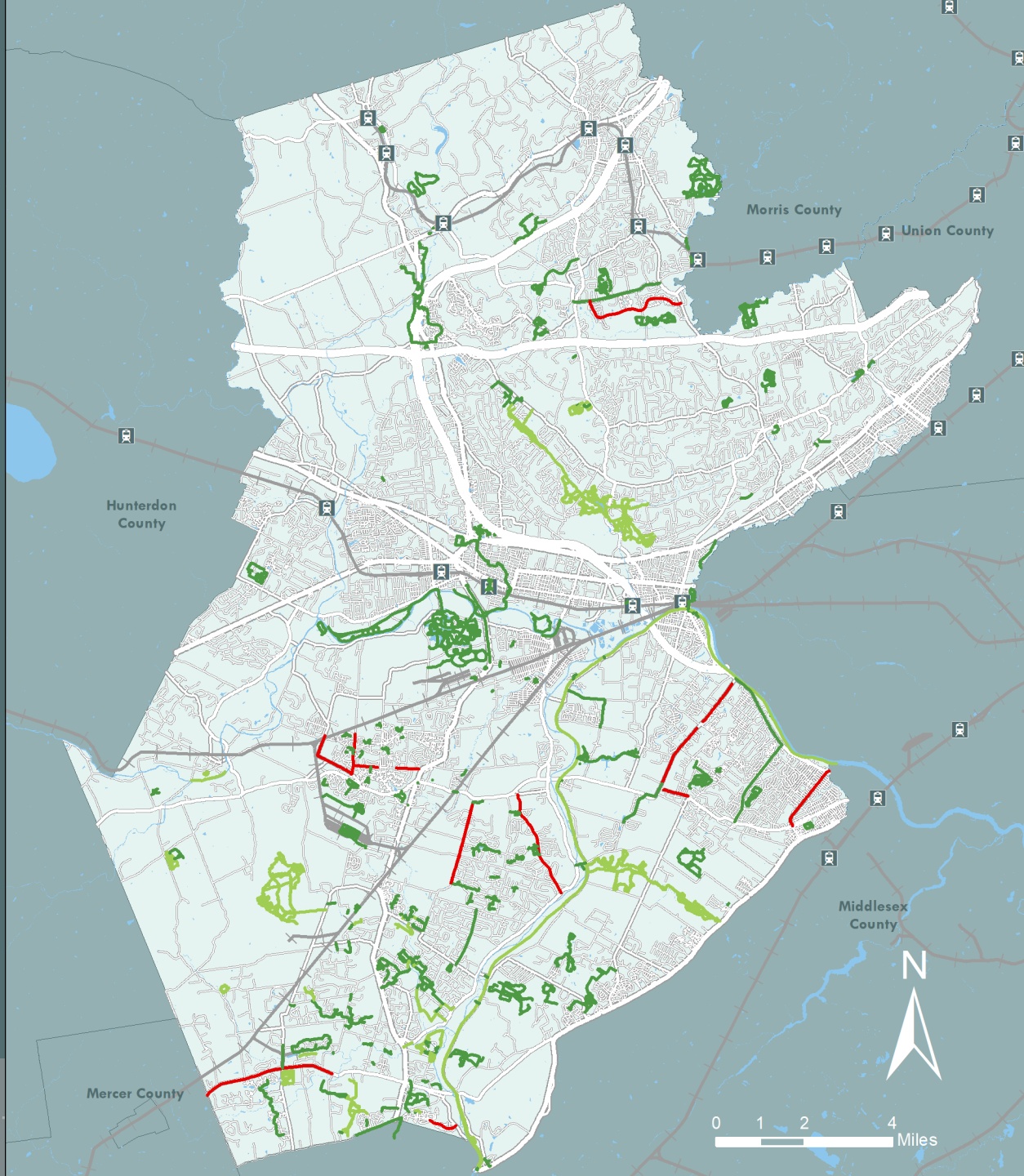
Existing Facilities: On-Road

— Bike Lane



Combined Existing Facilities

- Trail - Natural Surface
- Shared-Use - Paved
- Bike Lane



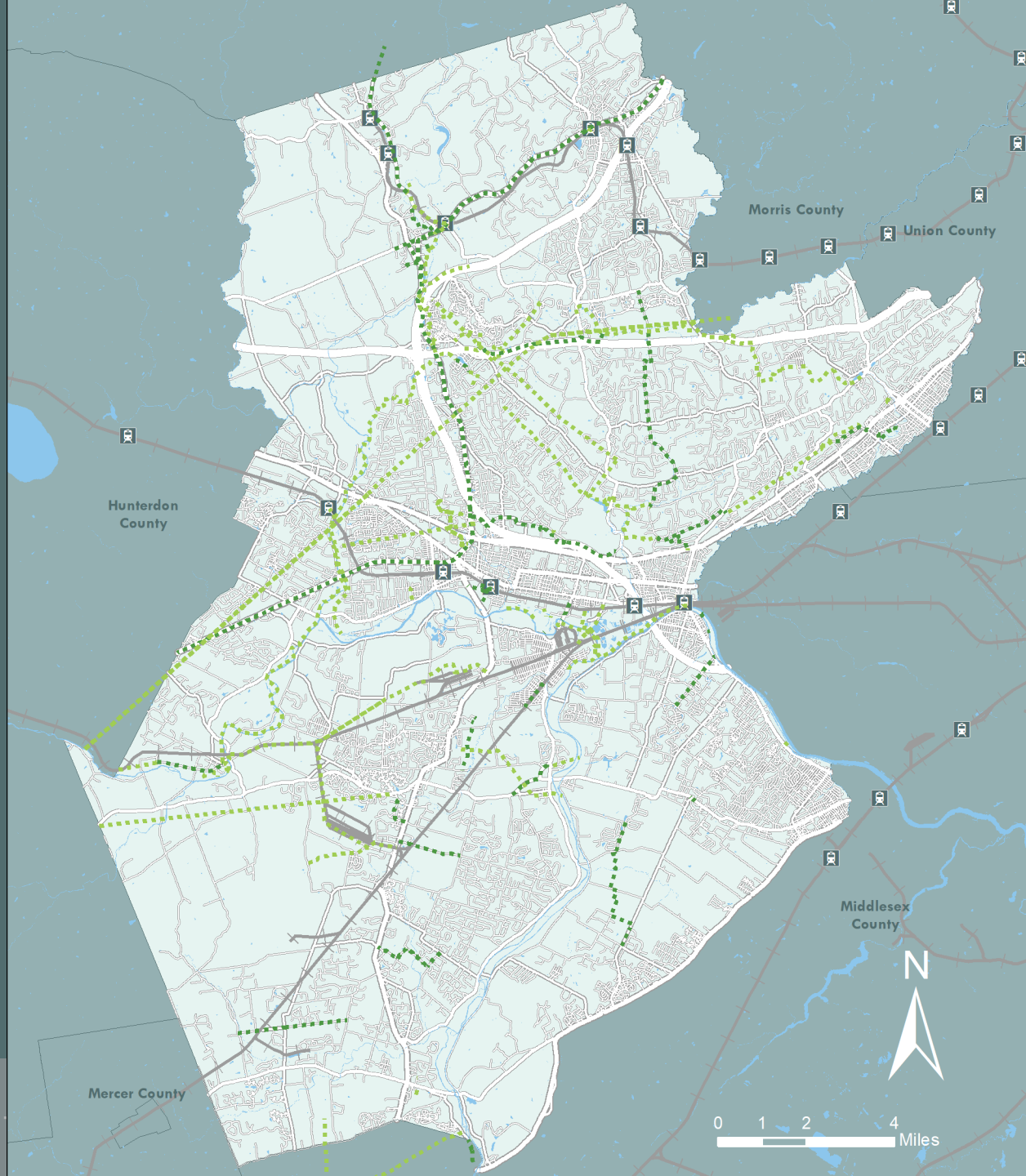
Summary Metrics - Existing

Facility Type	Existing (Miles)	Potential New (Miles)	Total (Miles)
Trail	140		
Shared-Use Path	207		
Bicycle Boulevard			
Buffered Bicycle Lane			
Bicycle Lane	22		
Shared Lane Markings			
Total	369		

Build the County-wide Network

- Existing Facilities
  - Trails and Paths
  - On-road Bike Network
- *Draft Potential Facilities*
  - Trails and Paths
  - On-road Bike Network
- Draft Focus Area Concept Plans

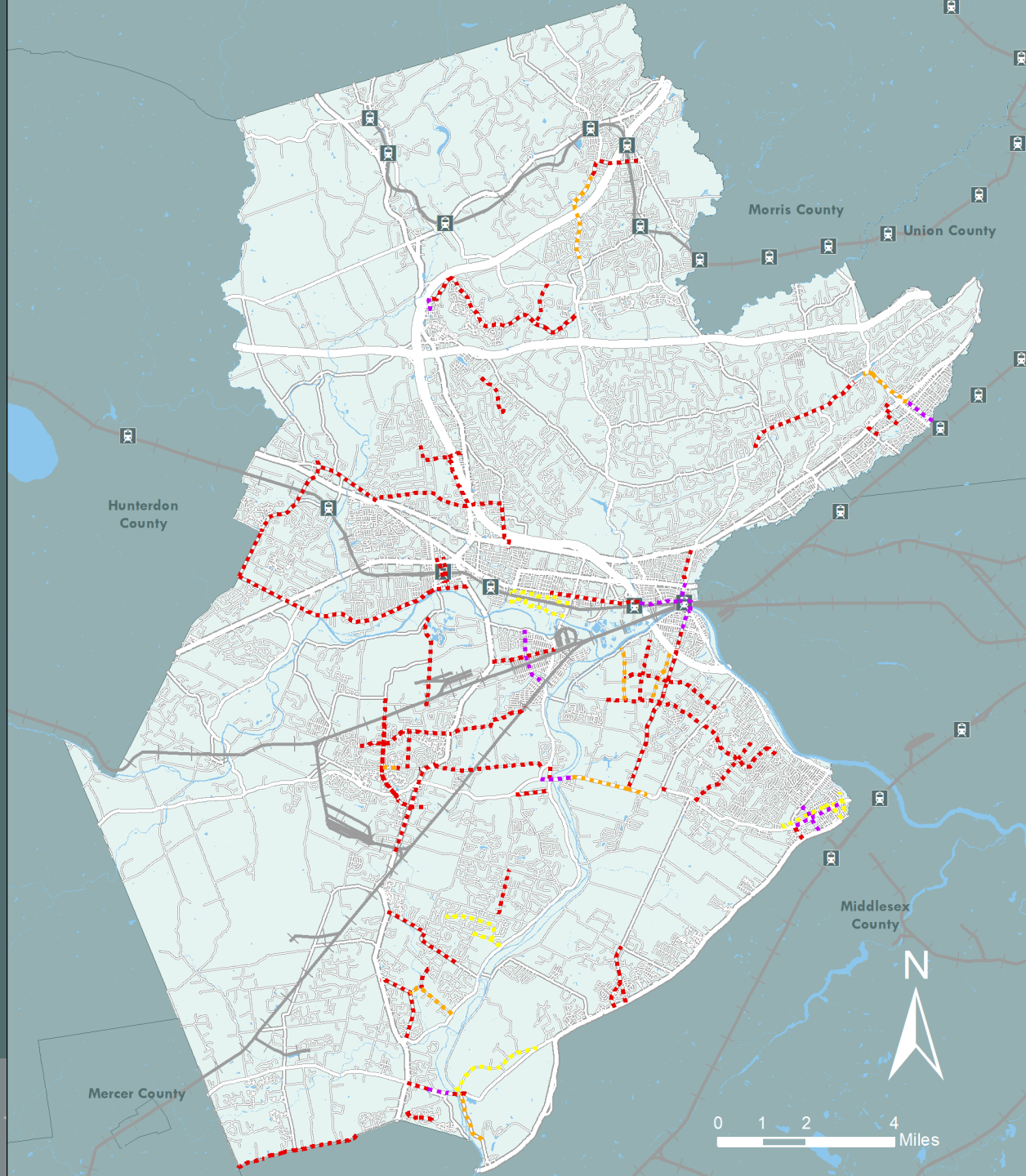
Draft Potential Network: Off-Road



Potential New Off-Road

- Trail
- Shared-Use Path

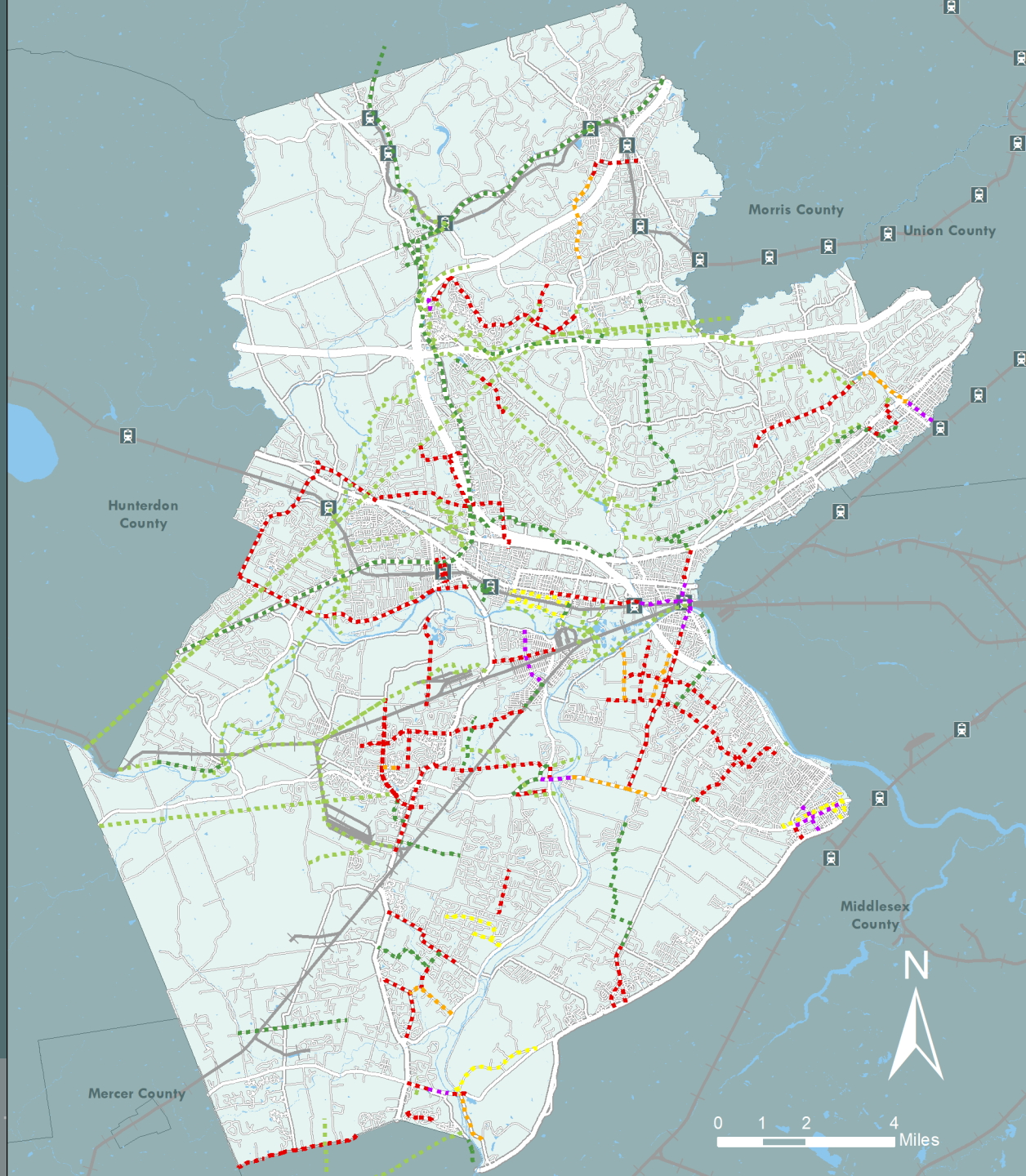
Draft Potential Network: On-Road



Potential New On-Road

- Bike Boulevard
- Buff Bike Lane
- Bike Lane
- Shared Lane Markings

Draft Combined Potential Network



Potential New Off-Road + On-Road

- Trail
- Shared-Use Path
- Bike Boulevard
- Buff Bike Lane
- Bike Lane
- Shared Lane Markings

Summary Metrics – Potential New

Facility Type	Existing (Miles)	Potential New (Miles)	Total (Miles)
Trail		139	
Shared-Use Path		66	
Bicycle Boulevard		10	
Buffered Bicycle Lane		10	
Bicycle Lane		80	
Shared Lane Markings		8	
Total		313	

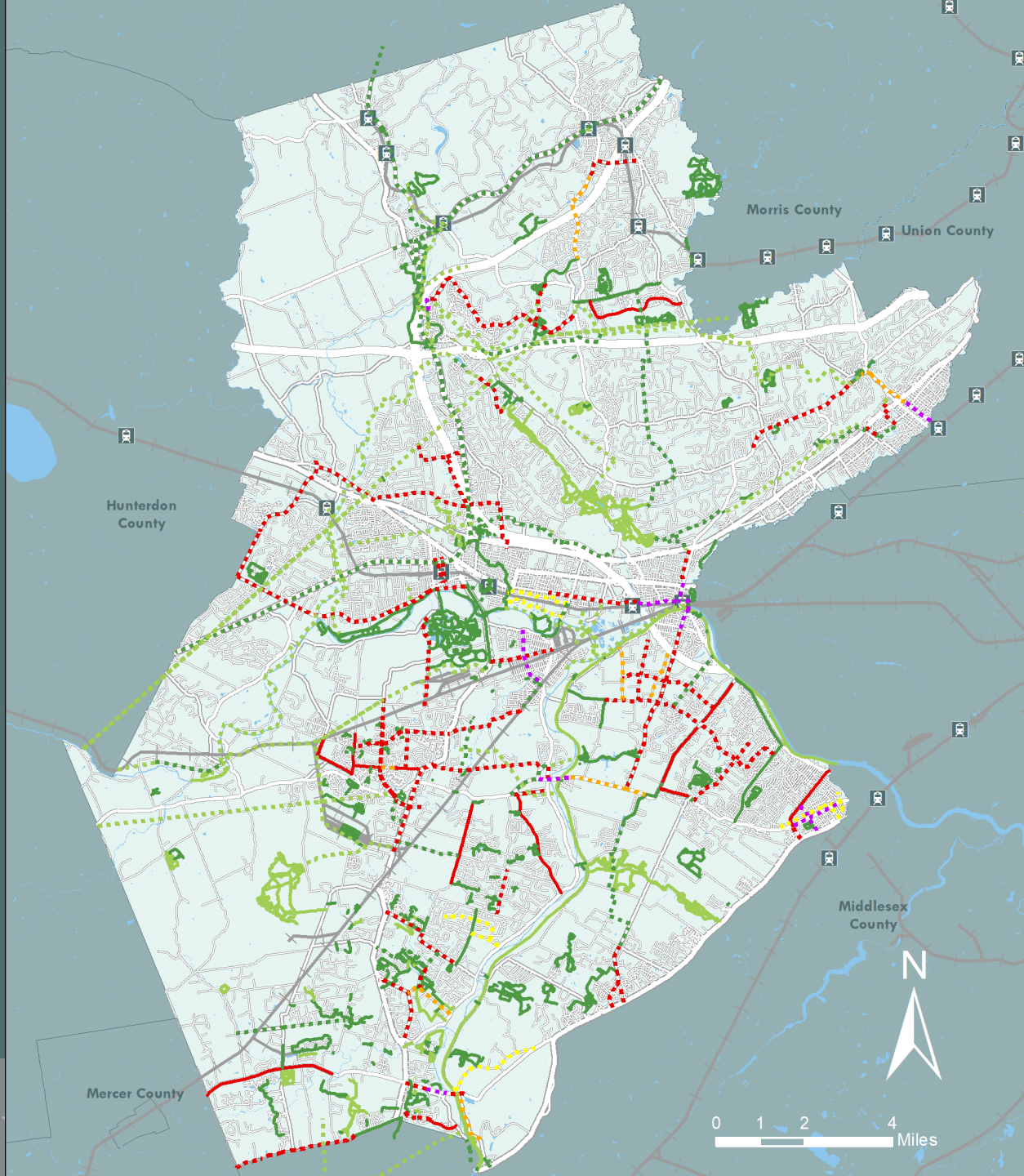
Existing + Draft Potential Network

Existing

- Trail
- Shared-Use Path
- Bike Lane

Potential New Off-Road + On-Road

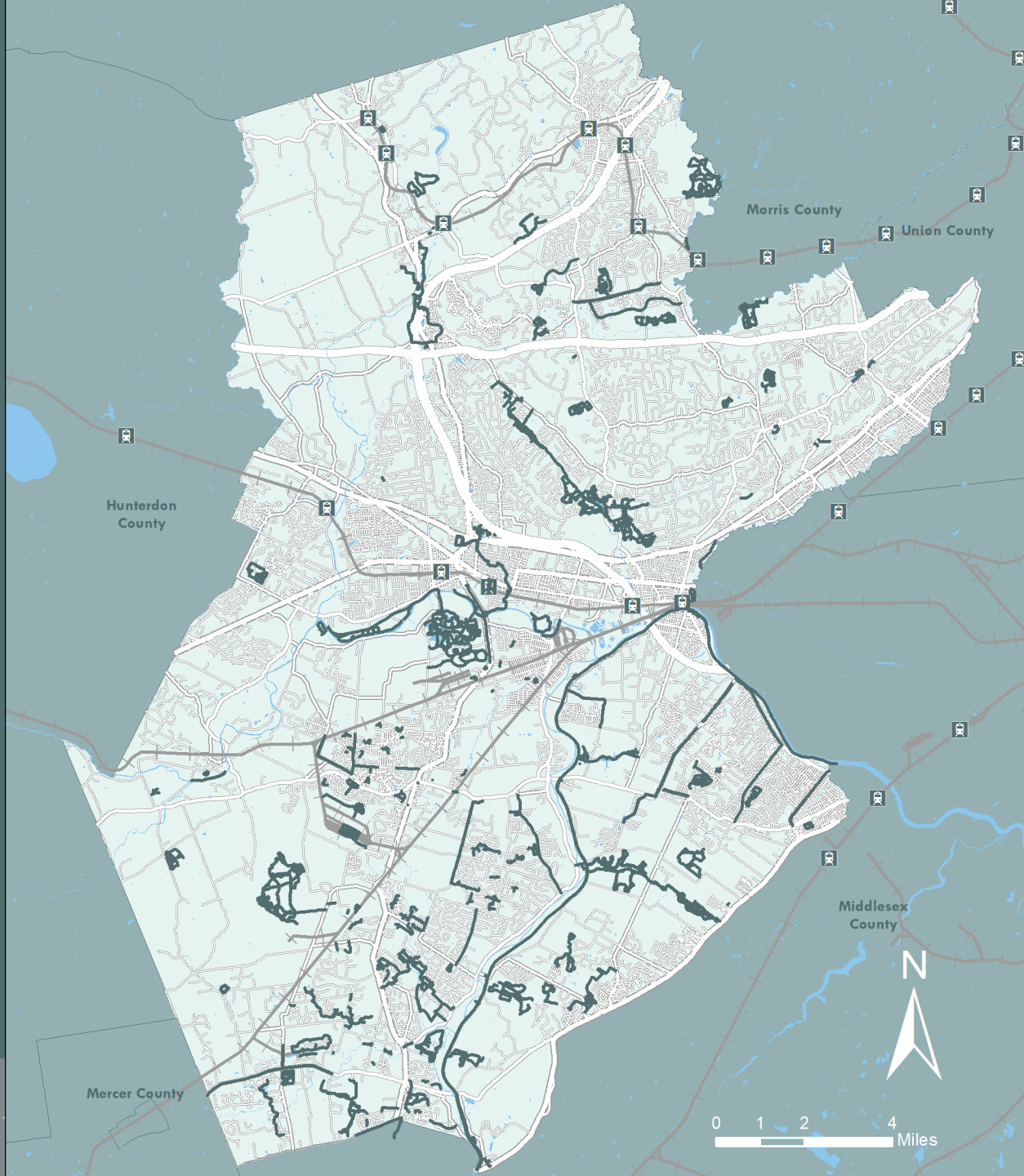
- Trail
- Shared-Use Path
- Bike Boulevard
- Buff Bike Lane
- Bike Lane
- Shared Lane Markings



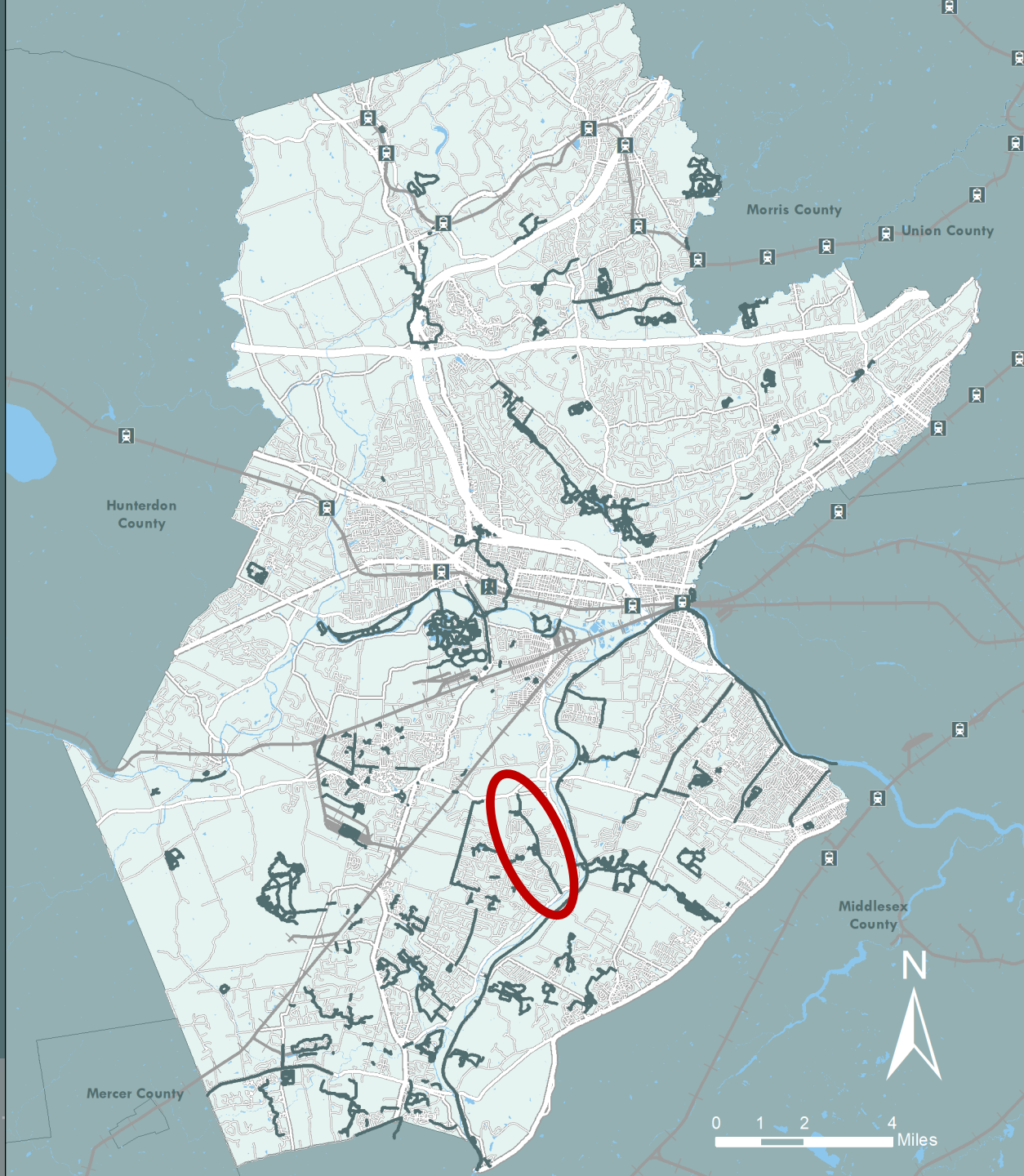
Summary Metrics: Existing+Potential

Facility Type	Existing (Miles)	Potential New (Miles)	Total (Miles)
Trail	140	139	279
Shared-Use Path	207	66	273
Bicycle Boulevard		10	10
Buffered Bicycle Lane		10	10
Bicycle Lane	22	80	102
Shared Lane Markings		8	8
Total	369	313	682

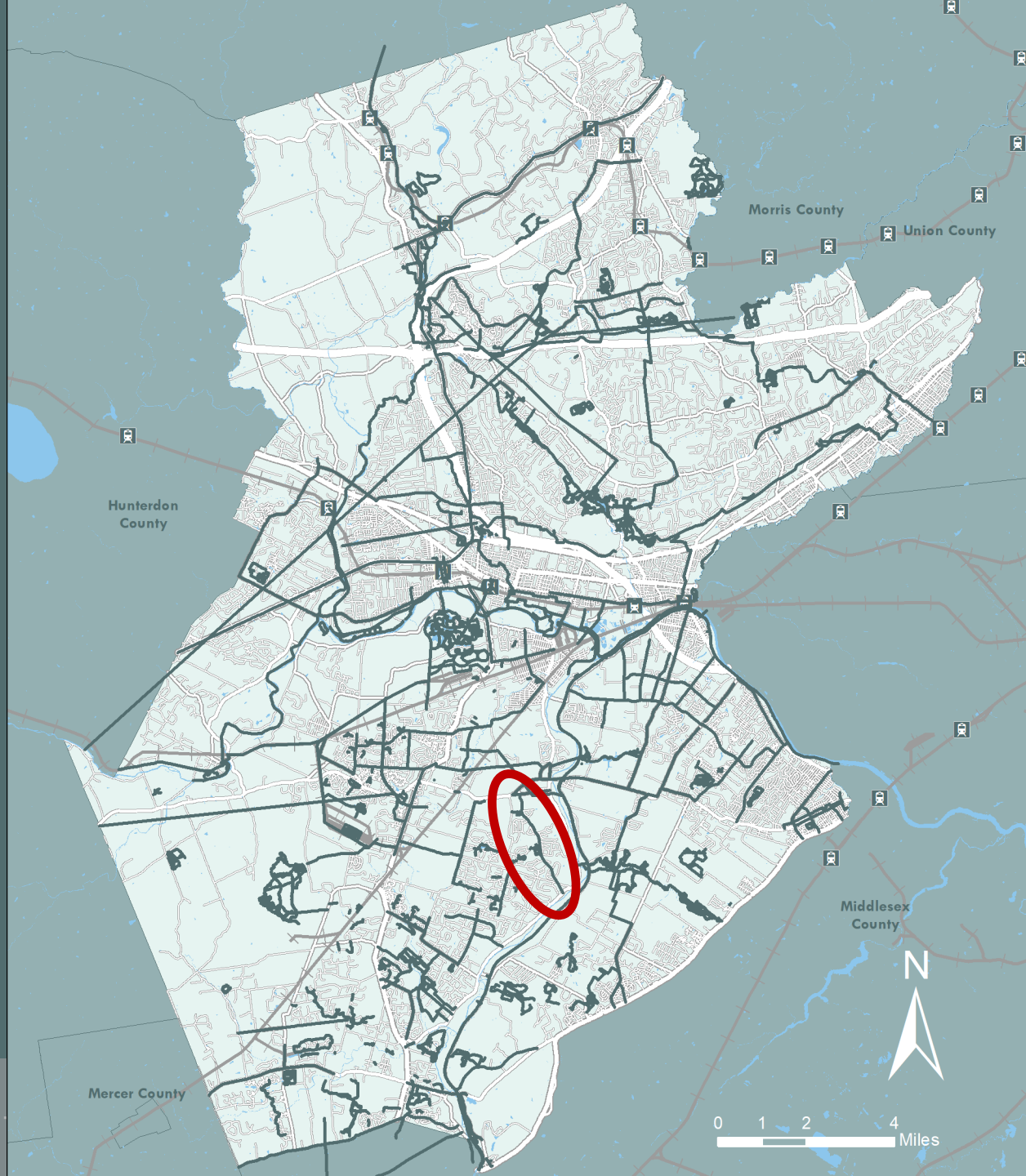
Combined Existing Facilities



Combined Existing Facilities



Existing + Draft Potential Network



Build the County-wide Network

- Existing Facilities
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- *Draft Potential Facilities*
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- Draft Focus Area Concept Plans

Draft Focus Area Concept Plans

- Five Generals Houses
- Duke Farms-Sourlands-LHT Interconnect
- Raritan River Greenway
- D&R Canal Towpath/East Coast Greenway
- Watchung Ridge Greenway

Five Generals Houses: *Existing*

Generals Houses

Five Generals Houses: *Existing + Potential*

- Generals Houses

Five Generals Houses: *Existing Access*

Five Generals Houses: *Existing + Potential*

WalkBikeHike Pattern Book

- How proposed facilities should look, feel, and be designed (Design Guidance)
- Consistent design across all locations and communities
- Rooted in established standards and professional resources
- Build upon ‘patterns’ in the existing landscape and communities

Proposed Facility Types

- Trails
  - Natural surface, stone, or gravel
- Shared-Use Path (Sidepath)
  - Physically separated from motor vehicle traffic
  - Typically two-way, minimum 8-10 feet wide
  - Most consistent with “low stress, all ages”
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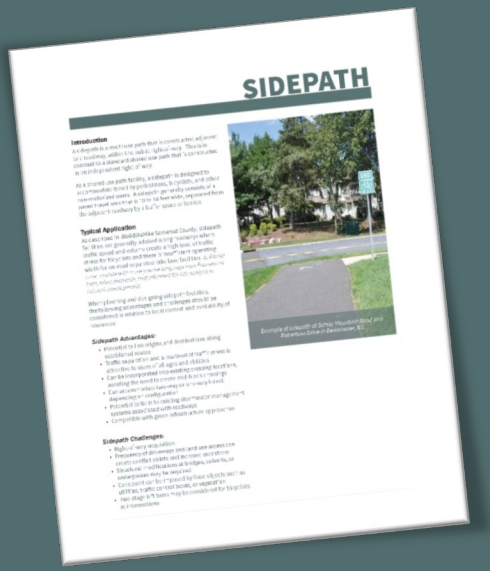
Pattern Book Design Elements

Surface Materials

Green Infrastructure



Aesthetics & Livability

Maintenance

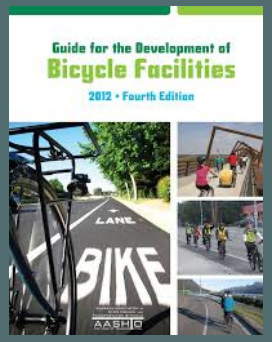
Smart Technology

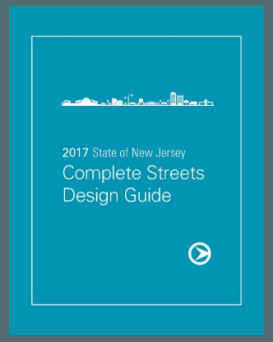
Smart Zoning

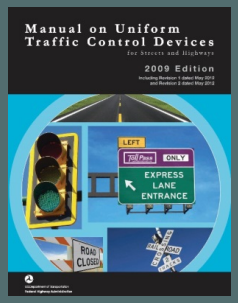
Typical Costs

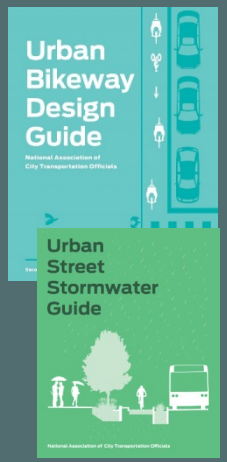
Compliant with Professional Standards

- AASHTO Bicycle Facilities
- NJDOT Complete Streets Design Guide
- MUTCD
- NACTO
- US Access Board: ADAAG, PROWAG, Outdoor Developed Areas





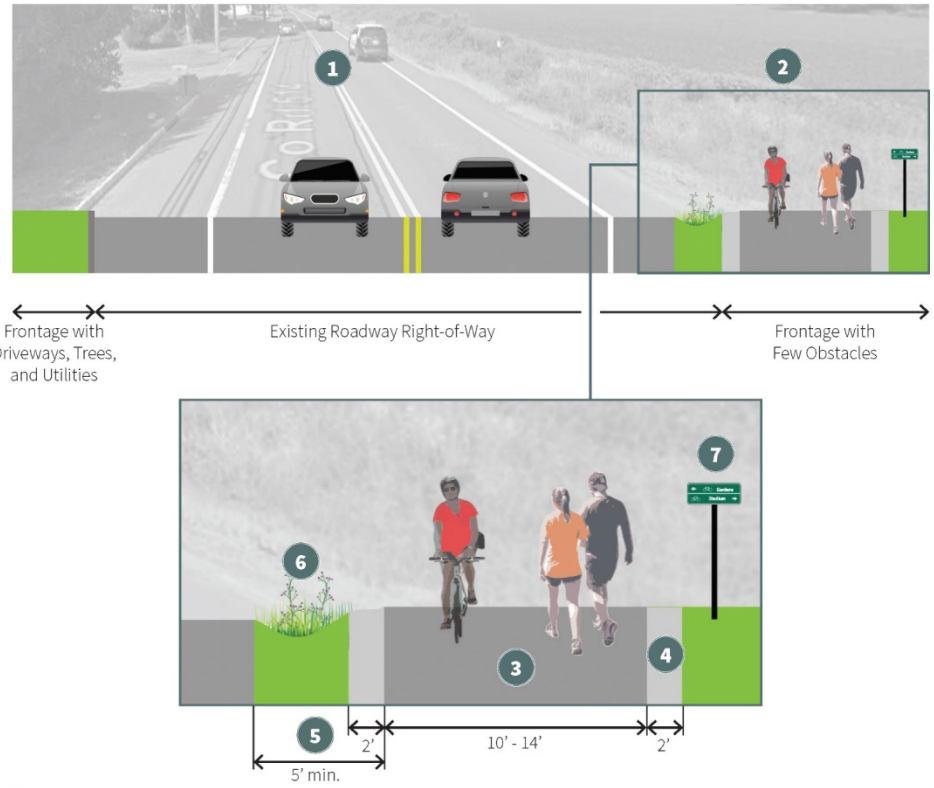




Pattern Book

Sample Page with Recommended Design Features for each Facility Type

TYPICAL SIDEPATH CONFIGURATION



RECOMMENDED DESIGN FEATURES*

1. Sidepaths are considered for roadways that have a high level of traffic stress due to traffic speed or volume, lack ample space for a separated on-road bicycle facility, and have a relatively low number of driveways and intersections.
2. Construction of a sidepath may require the roadway right-of-way to be expanded.
3. The paved width for a bidirectional sidepath is 10 to 14 feet, depending on anticipated usage volume. In constrained areas, a paved width of 8 feet is acceptable.
4. A gravel shoulder at least 2 feet wide along both edges reduces maintenance of vegetation and provides clearance from signs, posts, or other obstacles.
5. The minimum separation between the edge of the sidepath and the edge of the roadway should be 5 feet or a vertical barrier (bicycle-compatible fence or railing) should be provided.
6. Green infrastructure opportunities include pervious paving systems, grass swales, and/or bioretention systems.
7. Wayfinding and interpretive signs should be provided to orient users and convey direction and distance to destinations.

*Recommended sidepath design features and dimensions are consistent and compatible with AASHTO *Guide for the Development of Bicycle Facilitys* (2012) and NJDOT *Complete Streets Design Guide* (2017).

Next Steps and Milestones

- Review and comment period
  - County and Municipal review
  - Public comment by April 26
    - walkbikehike@co.somerset.nj.us
    - https://www.co.somerset.nj.us/government/public-works/planning/walk-bike-hike-plan
    - Submit written comments
- Final Report available August 2019

Your Questions and Comments

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