NEW YORK
Empire State Trail

alta
PLANNING + DESIGN

NEW YORK
STATE OF
OPPORTUNITY.

Hudson River
Valley Greenway

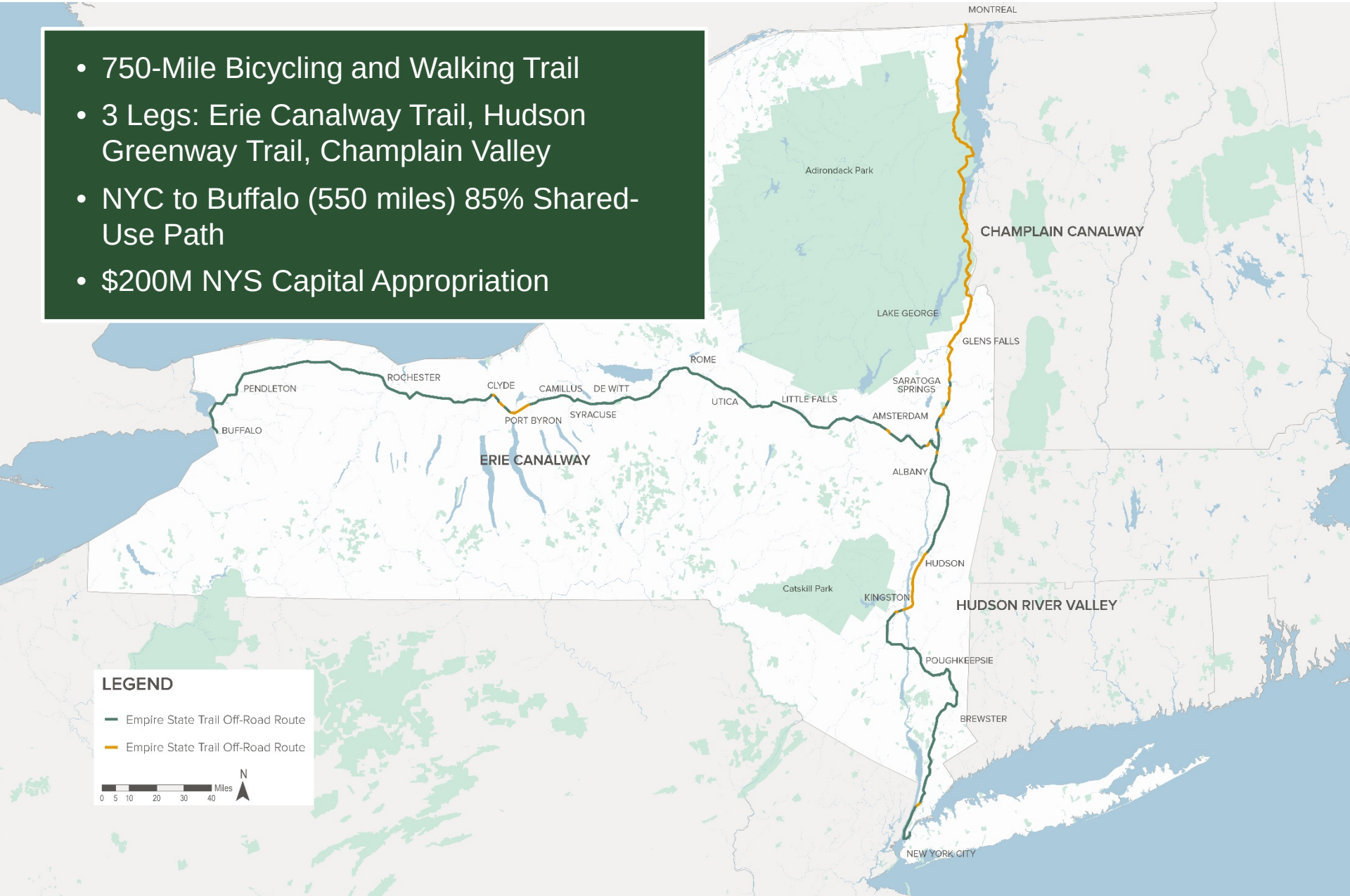
WE'VE COME A LONG WAY IN 25 YEARS

GOVERNOR CUOMO'S ANNOUNCEMENT

LINK TO ANNOUNCEMENT

Empire State Trail

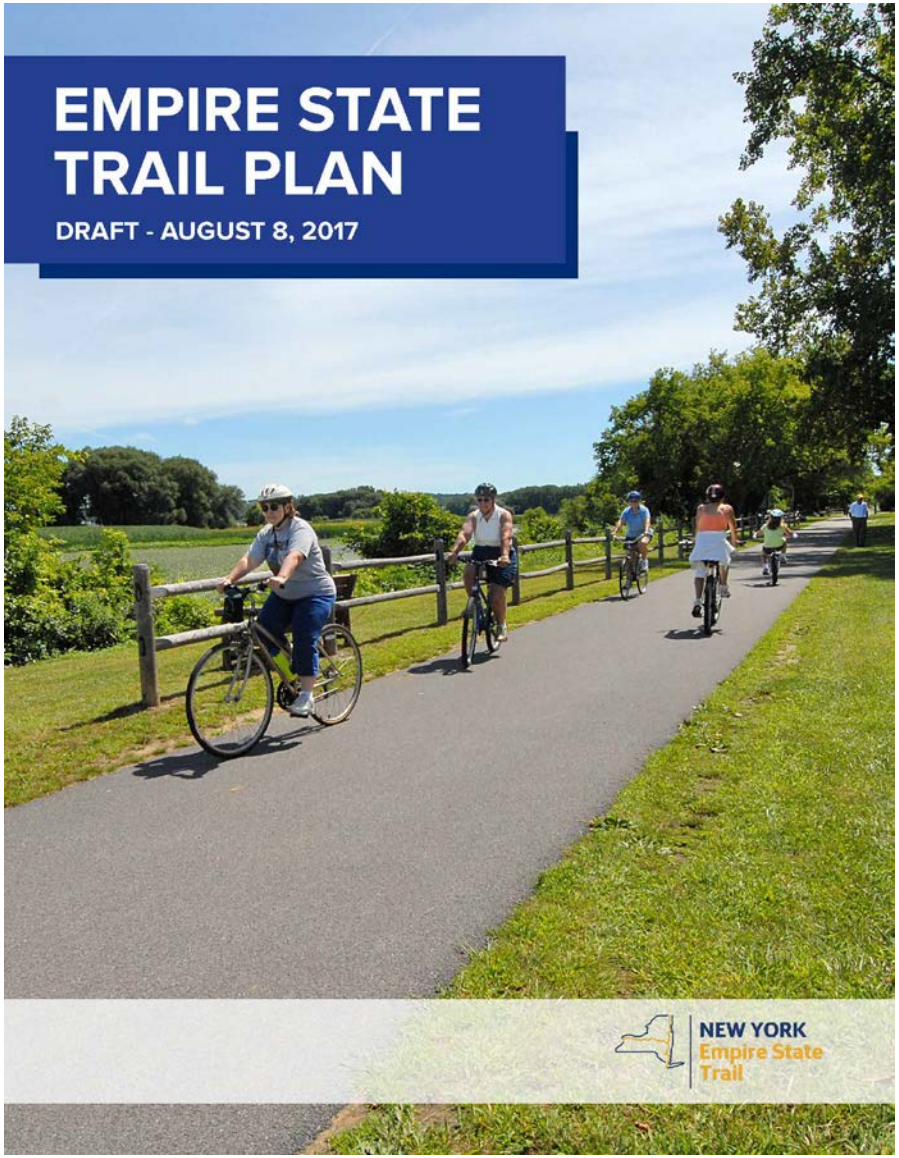
- 750-Mile Bicycling and Walking Trail
- 3 Legs: Erie Canalway Trail, Hudson Greenway Trail, Champlain Valley
- NYC to Buffalo (550 miles) 85% Shared-Use Path
- $200M NYS Capital Appropriation



Empire State Trail Plan

- August, 2017 Draft
- Key sections include AHET, Beacon and Erie Blvd
- Available for download on Hudson River Valley Greenway's website:

www.hudsongreenway.ny.gov



EXECUTIVE SUMMARY

- 345 New Trail Miles
- 750 Total Trail Miles
- $199M
- Erie Canalway Trail: 350 Miles
- Hudson River Valley Greenway: 260 Miles
- Connection to Canada
- Hudson River Valley Greenway & Erie Canalway Trails: More than 85% Shared-Use Path

Erie Boulevard Dewitt

Tonawandas Gateway Harbor

Beacon Rail Trail

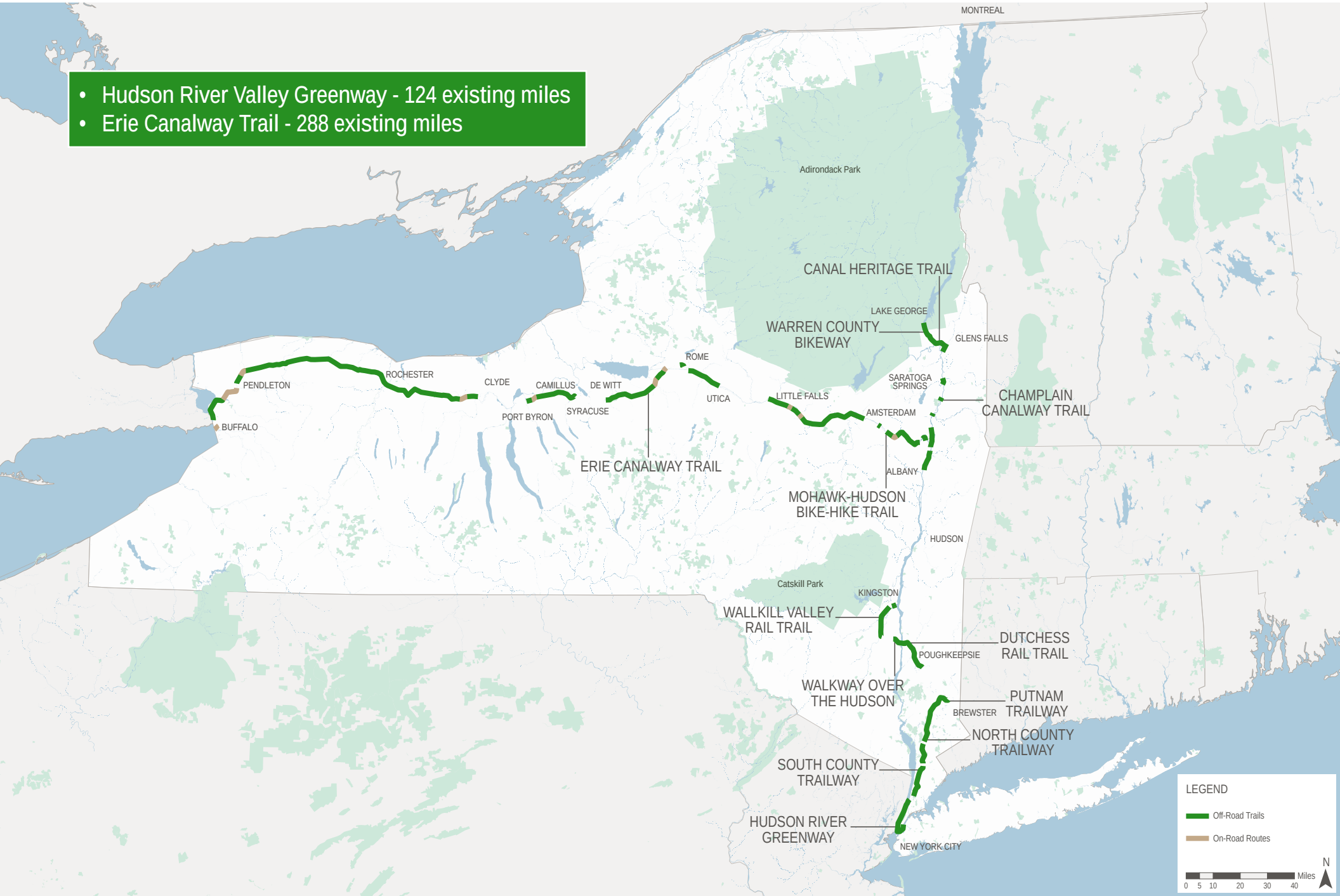
Walkway Over the Hudson

MONTREAL
LAKE GEORGE
GLENS FALLS
SARATOGA SPRINGS
AMSTERDAM
ROME
UTICA
LITTLE FALLS
CLYDE
CAMILLUS
DE WITT
SYRACUSE
PORT BYRON
ROCHESTER
PENDLETON
BUFFALO
ALBANY
HUDSON
Catskill Park
KINGSTON
POUGHKEEPSIE
BREWSTER
NEW YORK CITY

LEGEND
Off-Road Trails
On-Road Routes
Miles
0 5 10 20 30 40
N

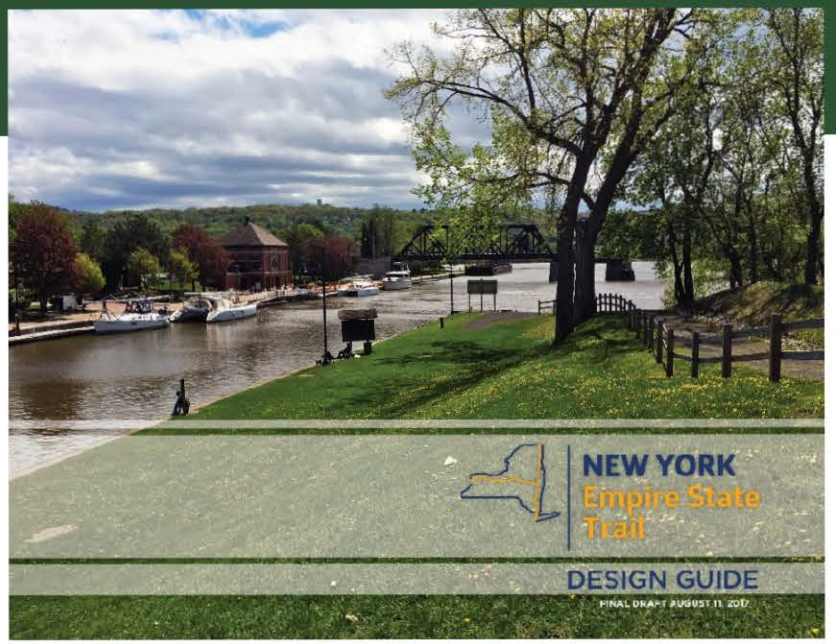
EXISTING TRAILS

- Hudson River Valley Greenway - 124 existing miles
- Erie Canalway Trail - 288 existing miles



EXISTING TRAILS

Coming Soon:
EST Design Guide



SHARED USE PATHS WITHIN NATIONAL GRID UTILITY CORRIDORS

TYPICAL APPLICATION

These guidelines are for sections of trails within National Grid utility corridors.

DESIGN FEATURES

Ⓐ Typical trail width will be 12 feet. In constrained areas, the width may be reduced to 8 feet, though within most of the trail corridor, a minimum width of 10 feet is preferred.

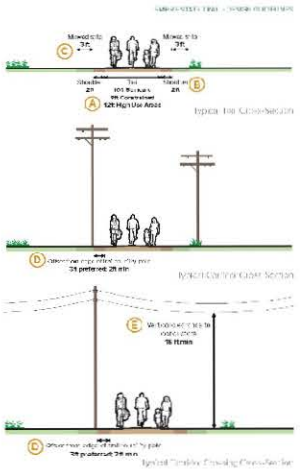
Ⓑ Shoulders, 2 feet in width will be provided on both sides of the trail. The shoulders will be graded in a consistent slope to the corridor, to allow debris to move across the trail surface. The shoulder surfaces may be grass or low-growth, depending on local conditions.

Ⓒ A mowed area 3 feet wide will be maintained on both sides of the trail surface. While this is usually grass, they will be part of the mowed area.

Ⓓ Preferred offset from the trail surface to utility poles and other equipment is 3 feet. The width of the shoulder and the trail surface is 2 feet.

Ⓔ Where practicable, between the trail surface and the lowest point of the adjacent slope, a 10 foot wide corridor will be maintained. Clearances shall meet requirements of National Electrical Safety Code.

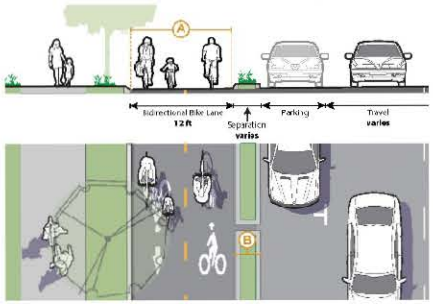
Ⓕ The trail shall meet, at a minimum, requirements of the AASHTO Guide for the Development of Bicycle Facilities.



SEPARATED BIKE LANE (BIDIRECTIONAL)

Bidirectional separated bike lanes are bicycle facilities that allow bicycle movement in both directions on one side of a road. These facilities are always in the adjacent roadway, within the road ROW and physically separated by a vertical element. Two-way separated bikeways share some of the same design characteristics as one-way separated bicycle lanes, but may require additional considerations at driveway and side street crossings.

To simplify roadway user functions, bidirectional separated bike lanes function best on the left side of one-way streets.



TYPICAL APPLICATION

- Generally to be considered and assume designs for directional separated bike lanes.
- Roadforms well as "Rail-with" shared use path connections.
- Roadforms well on streets with few conflicts such as driveways or cross-streets on one side of the street.

DESIGN FEATURES

Ⓐ Standard bidirectional separated bike lane width is 12 ft (3.6 m) (FHWA Separated Bike Lane Guide 2015). Reduced width is 10 ft (3.0 m) (NACTO Bike Guide 2012).

Ⓑ Separation width can be an object separation method. Minimum separation width next to parking is 3 ft (0.9 m) to accommodate opening doors (NACTO Bike Guide 2012).

- In constrained conditions for short segments, a minimum width is 8 ft (2.4 m) (AASHTO Bike Guide 2012).

PEDESTRIAN ACCOMMODATION

- Bidirectional separated bike lanes are not the ideal facility for pedestrians and pedestrians are expected to travel along a separate pedestrian facility, which is a sidewalk or path. In the absence of a pedestrian facility, pedestrians may legally walk along the roadway.

FURTHER CONSIDERATIONS

- General recognition and guidance for separated bike lanes can be found in the FHWA Separated Bike Lane Planning and Design Guide 2015. Separated bike lane buffers and barriers are covered in the MUTCD as preferential lane markings (section 3D.01) and channelizing devices (section 3H.01). If buffer is 4 feet or wider, white chevron or diagonal markings should be used (section 9C.04). Curbs may be used as a channelizing device, refer to the NY State Supplement to the MUTCD section on traffic diverging islands (section 3I.01).
- Two-way bikeways introduce additional complexities at intersections and driveways. Protected signal timing, modified geometric design or other markings are sometimes necessary to mitigate conflicts. Refer to Separated Bike Lanes at Intersections in this guide.
- Refer to the FHWA Separated Bike Lane Guide 2015 for information on the treatment of transit stops, accessible parking and loading zones (pgs. 92, 97, and 99).

MAINTENANCE

Bidirectional separated bike lanes tend to be easier to maintain due to increased bikeway width, and all bicycle facilities should be cleared of snow prior to the start of the trail's normal operations.

REFERENCES

AASHTO Guide for the Development of Bicycle Facilities, 2012.
FHWA Separated Bike Lane Planning and Design Guide, 2015.
FHWA Separated Bike Lane Temporary Design Guide, 2015.
FHWA Interim Approval for Optional Use of a Combined Bike Signal and Signal Head, 2016.
NACTO Urban Bikeway Design Guide, 2012.

Further Guidance Available

AASHTO Bike Guide | FHWA MUTCD | FHWA SBL Guide | RURAL GUIDE | NACTO Bike Guide

AMENITIES

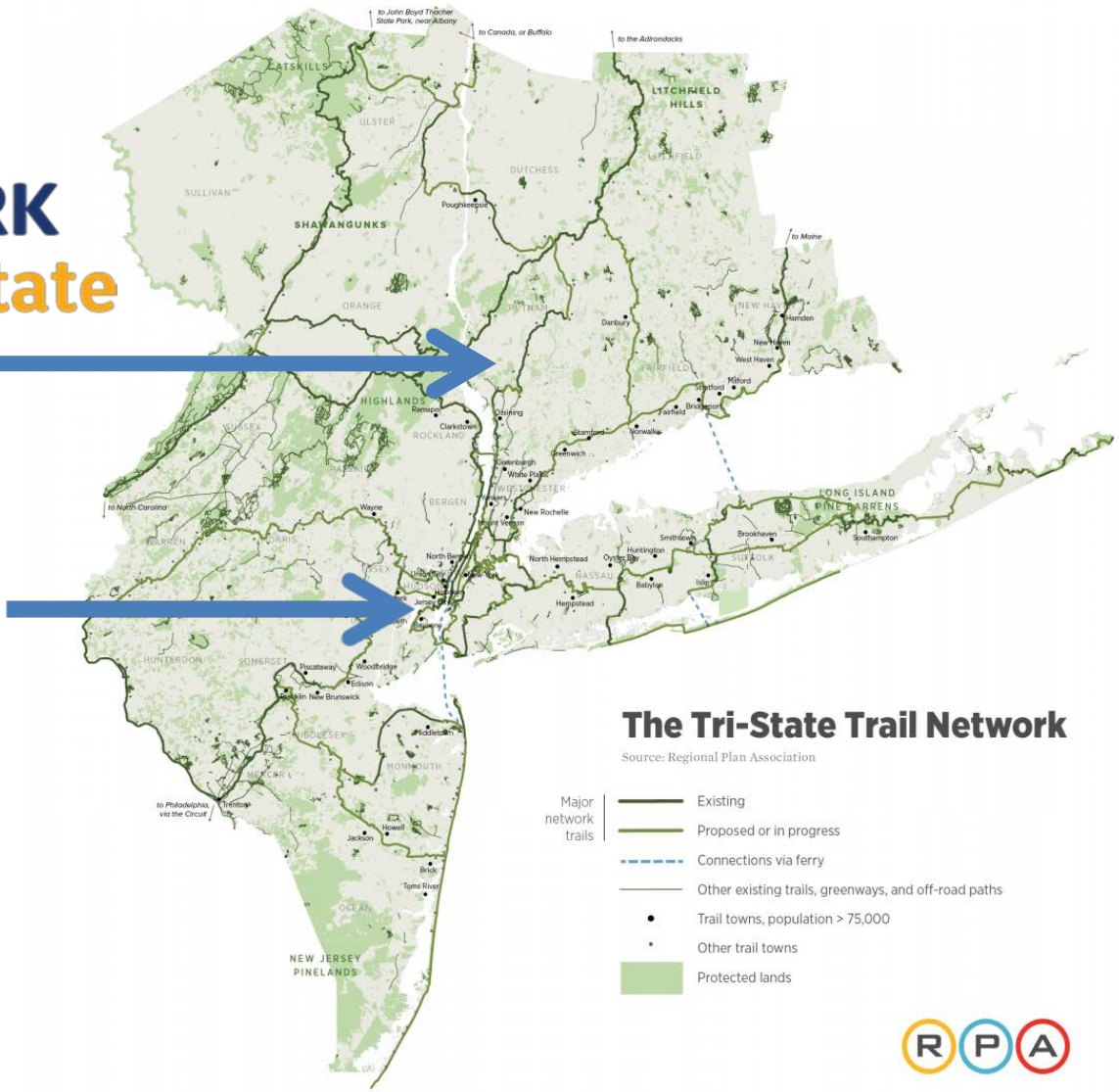
Tonawandas Gateway Harbor

New York City
145 Miles
Buffalo
360 Miles

Making the Connection

NEW YORK
Empire State
Trail

East Coast
Greenway®



NY EMPIRE STATE TRAIL SYSTEM: 2020

NEW YORK STATE OF OPPORTUNITY. Parks, Recreation and Historic Preservation | Hudson River Valley Greenway | PARKS & TRAILS NEW YORK | alta PLANNING + DESIGN

Erie Boulevard Dewitt

Route 4

Route 9J

Beacon Rail Trail

MONTREAL
Adirondack Park
LAKE GEORGE
GLENS FALLS
SARATOGA SPRINGS
AMSTERDAM
LITTLE FALLS
UTICA
ROME
DE WITT
SYRACUSE
CAMILLUS
CLYDE
PORT BYRON
ROCHESTER
PENDLETON
BUFFALO
ALBANY
HUDSON
KINGSTON
POUGHKEEPSIE
BREWSTER
NEW YORK CITY

LEGEND
Off-Road Trails
On-Road Routes
N
Miles
0 5 10 20 30 40

THANK YOU!

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