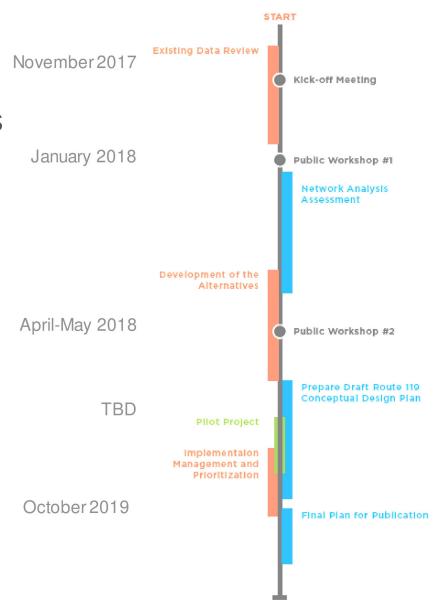


GOALS

- Integrated network of safe sidewalks and crosswalks
- Protected cycling infrastructure linking:
 - Mario M Cuomo Bridge
 - Old Croton Aqueduct Trail
 - South County Trailway (Empire State Trail)
 - Bronx River Trailway
 - Downtown White Plains
- Make buses attractive
- Enhance sense of place in downtowns
- Address parking, snow removal, maintenance
- Emphasize "quick build" opportunities



OPPORTUNITIES

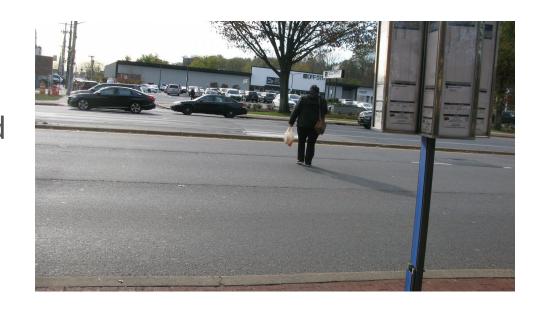
- New bridge is bringing more people walking and cycling to Route 119
- Links Mario M Cuomo Bridge to Empire State Trail, 2 other key trails & White Plains
- Sufficient width and capacity to create space for active transportation modes
- 50,000 people live next to Route 119
- Most trips are short trips (school, sports, friends, food, library, etc)
- Safe routes reduce congestion by converting short trips to walking and cycling





CHALLENGES

- Variety of contexts (road configurations and land use)
- Route 119 is dominated by motor vehicles
- Walking, biking, and taking transit feel unsafe
- Some pinch points due to on-street parking, higher traffic volumes
- Unsuitable parallel routes in most locations (don't exist, hills)





CONCERNS

- 570 crashes each year *
 - 88 injuries per year
 - 24 per year to people walking and cycling
- Excessive speed
- People driving flagrantly fail to yielding to people walking
- Missing sidewalks and shoulders
- Long crossings
- Angled intersections





^{*} NYS Accident Location Information System, January 2012 - June 2017

PUBLIC ENGAGEMENT

- Winter 2018: live workshops, online wikimap
- Spring 2018: in person and online surveys of alternatives
- People feel endangered by Route 119
 - 15% comfortable walking along it
 - 33% comfortable walking across it
 - 19% comfortable taking transit
 - 4% comfortable cycling
- Improved infrastructure would change outlook
 - 66% would be comfortable walking
 - 50% would be comfortable taking transit
 - 4% would be comfortable cycling



DESIGN ELEMENTS

- Sidewalks
- Crosswalks
- Roundabout
- Curb extensions
- Pedestrian islands
- Protected bike lanes
- Bus platforms & shelters
- Signal timing adjustments







TRAFFIC IMPACT

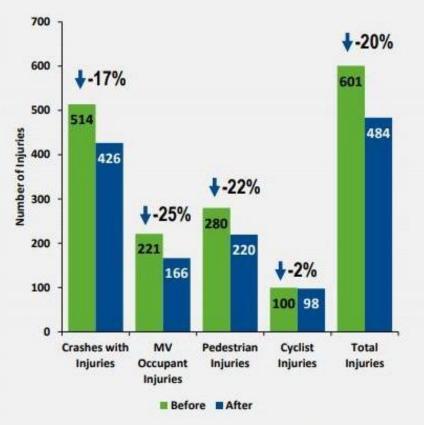
- Intersections operating below NYS threshold will continue to
- Delay at other intersections will meet LOS thresholds
- Detailed analysis will be conducted during permitting process
- Future analysis should account for mode shift created by new options



SAFETY IMPACT

- Similar projects have reduced injuries (for one example, see graph, right)
- Modal separation
- Shorter crossing distances
- Enhanced visibility
- Dedicated turn lanes
- Reduced speeding
- Careful turning geometry
- Detailed review will be conducted during the permitting process

Protected Bicycle Lanes with 3 years of After Data: Before and After



Protected bicycle lane projects with 3 years of after data include the following: 9th Ave (16th-31th), 8th Ave (Bank-23td, 23td-34th), Broadway (59th-47th, 33td-26th, 23td-18th), 1st Avenue (Houston to 34th), 2td Ave (Houston-34th), Columbus Ave (96th-77th) Note: Only sections of projects that included protected bicycle lanes were analyzed Source: NYPD AIS/TAMS Crash Database

TRANSIT IMPACT

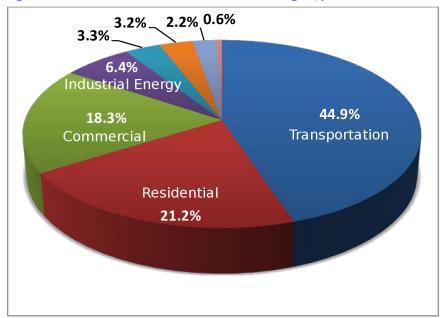
- Replace pole only stops with shelters and benches
- Connect all bus stops to walking network with new sidewalk and crosswalks
- In lane stops overlapping with bike network supported with boarding platform
- Improve bus stop locations and spacing



ENVIRONMENTAL IMPACT

- Transport is region's top carbon emission
- Most trips are short trips
- Safe streets invite more walking and cycling instead of forcing people to drive

Figure 1 - 2010 GHG Emissions in the Mid-Hudson Region, per Sector



Trip Distance Distribution

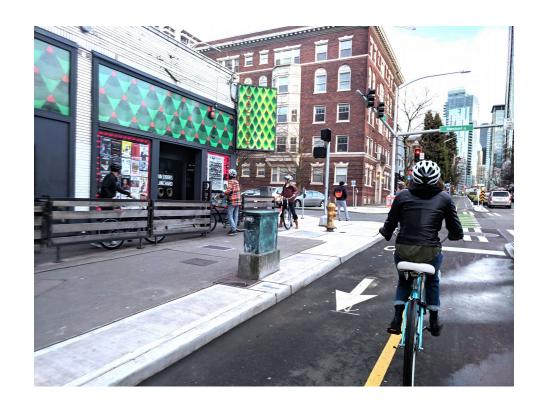
Percent	Cumulative	Distance
19%	19%	< 1 mile
15%	34%	< 2 miles
11%	46%	< 3 miles
8%	54%	< 4 miles
6%	61%	< 5 miles
5%	66%	< 6 miles
12%	78%	< 10 miles
8%	86%	< 15 miles
14%	100%	>= 15 miles

Data: 2017 National Household Travel Survey, USDOT Tabulation of all person trips in trippub.csv by:



ECONOMIC IMPACT

- Numerous studies show cycling and walking enhancements increase retail sales. People walking and cycling:
 - Shop locally
 - Spend more money per month locally
 - Fit more people in a given space
 - Free up parking spaces
 - Make places calmer and vibrant, attracting more people to spend time and money there



EQUITY IMPACT

- Low income residents tend to rely on walking, cycling and transit
- Car ownership strains family budgets, costing \$9,300 / year *



^{*} AAA, "Your Driving Costs," 2019

PRELIMINARY COST ESTIMATES

15 - 20 million dollars *



^{*} Rough estimate. Awaiting updated report with corrected figures.