

Making Route 9 Great

via the Route 9 Complete Streets Project

Presentation to NYSDOT
June 20, 2023



NYSDOT CAN DO GREAT

- Empire State Trail
 - Top: Route 100, New Castle
 - Bottom: Route 266, Buffalo



“WHERE FEASIBLE”

- Everyone has different ideas of feasibility
- Different experience, capabilities, vision
- Engage Route 9 as a challenge
 - “Let's figure out how to a great job!”
- While right of way is limited, focus:
 - not on how much space we have
 - but on how we use it
- You get what you build



LANE WIDTHS

- NYSDOT Manual: 12' lanes where possible
- FHWA: no requirements if ≤ 50 mph
- AASHTO: 10' acceptable if ≤ 45 mph
- NYSDOT on Route 9:
 - 10' lanes in many areas
 - 8.5' and 9.5' lanes at Hemlock Dr, Sleepy Hollow after 2015 resurfacing
- One narrow lane per direction encourages lower speeds, safer behavior
- Design Exceptions are doable and necessary to make Broadway safe for everybody



Before / after images of 't Goylaan @ Constant Erzeijstraat, Utrecht

CONGESTION / LOS

- Folks waiting in climate controlled cars eventually get home fine
 - Never seen a skeleton sitting at a signal
- People walking / cycling not so fortunate
 - Rocco DePaolo, Dobbs Ferry, 2019
 - Luis Zhizhpon, Sleepy Hollow, 2012
- Safe system: moderates speed, enables flow
 - Refuges, short crosswalks, roundabouts, smart signals
- Best way to cut congestion is cutting # of cars
 - Most trips are short trips



People who bike aren't a fixed number of constituents to be placated



We are an untapped resource to be cultivated

BE OPEN TO CYCLE TRACKS

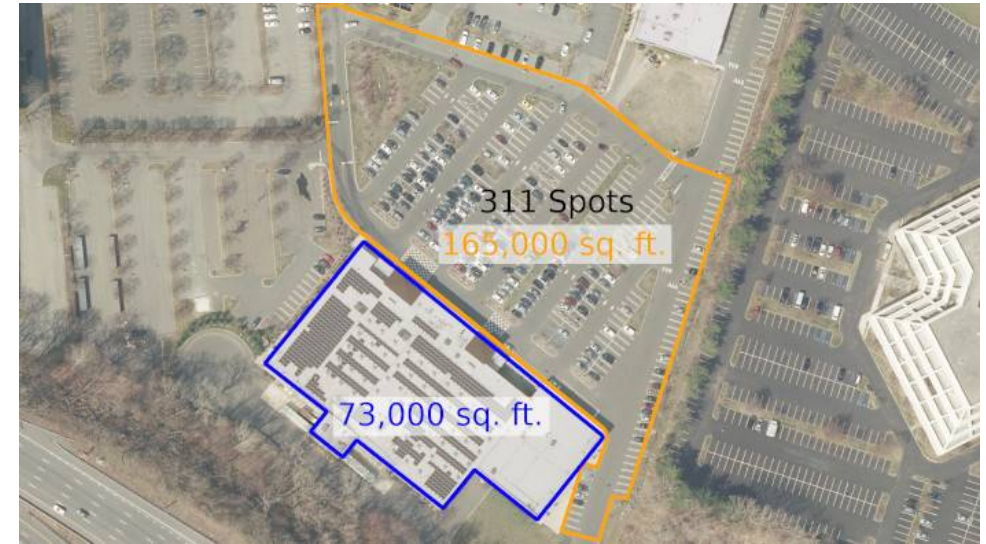
- 2-way mobility lanes on 1 side of the road
- Saves space by only needing 1 barrier
- People cycling can chat, or pass, easily
- Good in areas with few cross streets
 - As several stretches on Route 9 do
- NYSDOT precedents:
 - Route 100, Briarcliff Manor and Ossining
 - Route 5, Syracuse (photo, above)
 - Route 266, Buffalo



HOW **GREAT** STREETS HELP THE **GOVERNOR**

ECONOMIC DEVELOPMENT

- Downtowns win on experience
 - can't beat big stores on parking
- Places without cars are quieter, prettier, have room for more people & commerce
- Safe streets to downtowns and attractions
- Bike share at transit stations
- Means less traffic and more parking for out of town visitors who do drive
- Locals walking & cycling spend more on goods & services than local drivers *



* Clifton, et al, "Consumer Behavior and Travel Choices," TRB, 2013

MORE HOUSING

- Better transit, cycling and walking lowers car ownership and use
- Cut car parking mandates
 - Reduces building costs
 - Increases homes per acre
 - Without increasing car traffic
- Produces places to live and enjoy, instead of places to pass through
- More people, more political power
 - Population shifts to states with housing



CLIMATE LEADERSHIP

- Transport is 45% of GHGs in Mid-Hudson *
- Walking, cycling and transit scale quickly
- Electric cars can't scale
 - Existing cars stay around for years
 - Cars & roads are resource intensive
 - Charging network has long lead time
 - All of this is expensive
 - They're *still* cars (big, dangerous)
 - Hinder safe streets & efficient land use needed to really tackle problem



* NYSEERDA, "Mid-Hudson Regional Greenhouse Gas Emissions Inventory," 2012

WHAT **GREAT** STREETS LOOK LIKE

WHAT **GREAT** LOOKS LIKE — BETWEEN INTERSECTIONS

- 't Goylaan, Utrecht, Netherlands
- Connects highway to neighborhood
- Link in local access ring road
- Redesigned in 2016
 - 4 lanes → 2 lanes
 - Lanes now 10' 8" wide (3.25 m)
- Trucks are same width in Europe & US
- Separate spaces for driving, cycling, walking
- Route 9: **use center lines** mid-block; use space for wider sidewalks & bus stops



WHAT **GREAT** LOOKS LIKE — AT MEDIUM INTERSECTIONS

- 't Goylaan @ Constant Erzeijstraat
- Redesigned in 2016, refined in 2020
- Was 6 lane wide signalized intersection
- Now 1 lane per direction “priority square”
 - Horizontal deflection at entry & exit
 - Similar to roundabout, but main road:
 - doesn't yield
 - optional: stop signal for main road if cross traffic or turning traffic backs up
- Separate spaces for driving, cycling, walking



WHAT **GREAT** LOOKS LIKE — AT MINOR INTERSECTIONS

- Bad: Route 9 near Sunnyside Ln, Irvington
 - 4 lanes (straight, 10' wide)
 - No turn lanes or crosswalks
 - Encourages fast driving
- Great: Graafseweg, s'Hertogenbosch, NL
 - 2 lanes, each about 10.5 feet wide
 - Horizontal & vertical deflection
 - Turn pocket between median islands
 - Encourages safe behavior by all users
 - Separate spaces: driving, cycling, walking



WHAT **GREAT** LOOKS LIKE — AT SIDE STREETS & DRIVEWAYS

- Bad: Route 9 @ Central Ave, Tarrytown, NY
 - People walking go down into street
 - Contradicts legal priority
 - People drive fast
 - More errors, more severe injuries
- Great: Biltstraat @ Obrechtstraat, Utrecht, NL
 - Sidewalk & bike lane stay raised
 - Reinforces legal priority
 - Forces people to drive slower
 - Fewer errors, only minor injuries



WHAT **GREAT** LOOKS LIKE — AT SIGNALIZED INTERSECTIONS

- Sint Josephlaan, Utrecht
- Medians extend beyond crosswalks
 - Controls speed of turning drivers
 - Refuge for slow walkers
 - Shortens conflict zones
- Separate spaces & signals for driving, cycling, walking
- Signal sensors for all users, plus smart software, means short wait times
- “Near side” signals only
 - Gets drivers to stop at the stop bar
 - Visual cue: this is a local street



WHAT **GREAT** LOOKS LIKE — AT ROUNDABOUTS

- Bad: Route 9G @ Route 23, Greenport, NY
 - Entrances & exits go to edge
 - Encourages faster speeds
 - More appropriate term: “throughabout”
- Great: Verspycklaan, Naaldwijk, NL
 - Entrances & exits go to middle
 - Encourages safer speeds
 - Separate spaces: driving, cycling, walking
 - 1 lane
 - Diam.: Island 52', Car 100', Walk 162'



WHAT **GREAT** LOOKS LIKE — AT BUS STOPS

- Bad: Route 9, near Sunnyside Ln, Irvington
 - Squeezed between wall and road
 - ADA Fail
- Great: Route 9 @ Elizabeth St, Tarrytown
 - Sidewalk
 - Seat
 - Shelter
 - Information
 - Fare machine





WE'VE GOT TO MAKE ROUTE 9 GREAT