

Broadway for Everybody

via the Route 9 Active Transportation Plan

Presentation to the
Irvington Green Policy Task Force
January 8, 2020



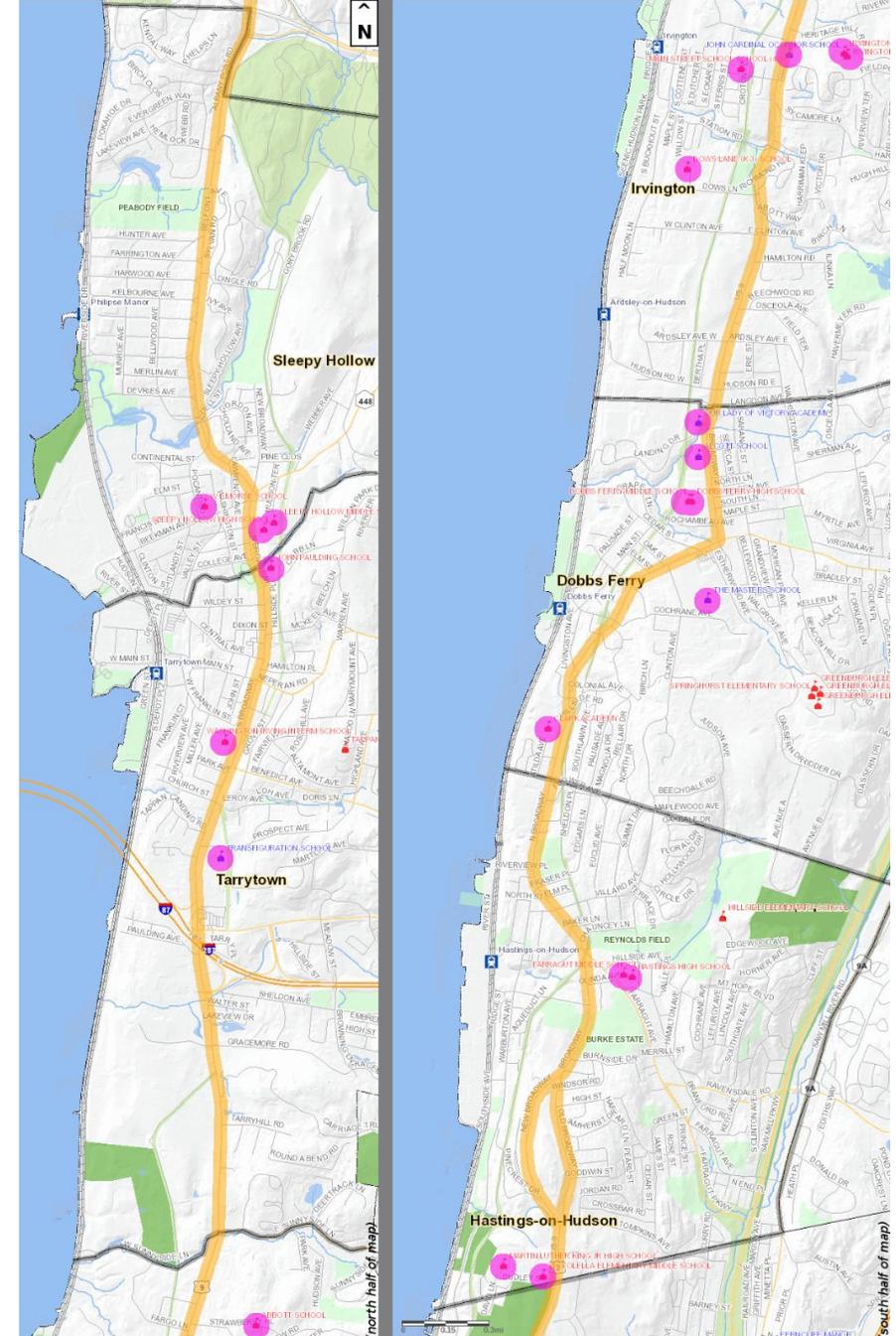
PRESENTER

- Daniel Convissor
- Director of Bike Tarrytown
 - biketarrytown.org
- Steering Committee Member, Route 9 Active Transportation Conceptual Design Plan
 - route9active.org
- 30 years experience in transportation policy
- Lives in Sleepy Hollow since 2013



ORIGIN

- New NY Bridge Community Benefits Program
- Idea for study started in Hastings-on-Hudson
- Spread to Dobbs Ferry, Irvington, Tarrytown & Sleepy Hollow
- These 5 villages because
 - Strong social ties
 - Similar demographics & geography
 - Significant governmental collaboration
 - Same problems with Route 9
 - Schools adjacent to Route 9 (22 of them)



PROBLEMS

- Crashes (1,526 in 2007 - 2016 *)
 - 828 Minor Injuries
 - 42 Major Injuries
 - 1 Death (2 more people since then)
 - Resulting costs: \$18 M **
- Speeding
 - Over 40% of people driving ***
- Congestion
- Limited Options: drive, risk safety, don't travel



* On Broadway, via NYS Accident Location Information System

** National Safety Council, via Abrahamson & Uiterwyk

*** In Sleepy Hollow by Pierson Ave in October 2015. Via 24 hour counts by TRC in a report for the Village, released January 2016.

PROBLEMS: IRVINGTON

- Crashes (2007 - 2016 *)
 - 380 Crashes
 - 166 Minor Injuries
 - 9 Major Injuries
- Speeding **
 - 44% of northbound drivers
 - 51% of southbound drivers



* On Broadway, via NYS Accident Location Information System

** August, 2011, on Broadway 130' south of Sycamore Ln, NYS DOT ([PDF](#))

OPPORTUNITIES

- New bridge will bring **more people** walking and cycling to Route 9
 - 5,000 people cycling in Piermont on nice Sundays *
- **Sufficient width and capacity** to create space for active transportation modes
- Connectivity with **Tappan Zee Bridge & Old Croton Aqueduct Trail**



* Piermont Police Chief

OPPORTUNITIES

- Most trips are **short trips**
 - school
 - sports
 - friends
 - food
 - library
 - etc
- Safe streets **cut congestion** by converting short trips to walking and cycling

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

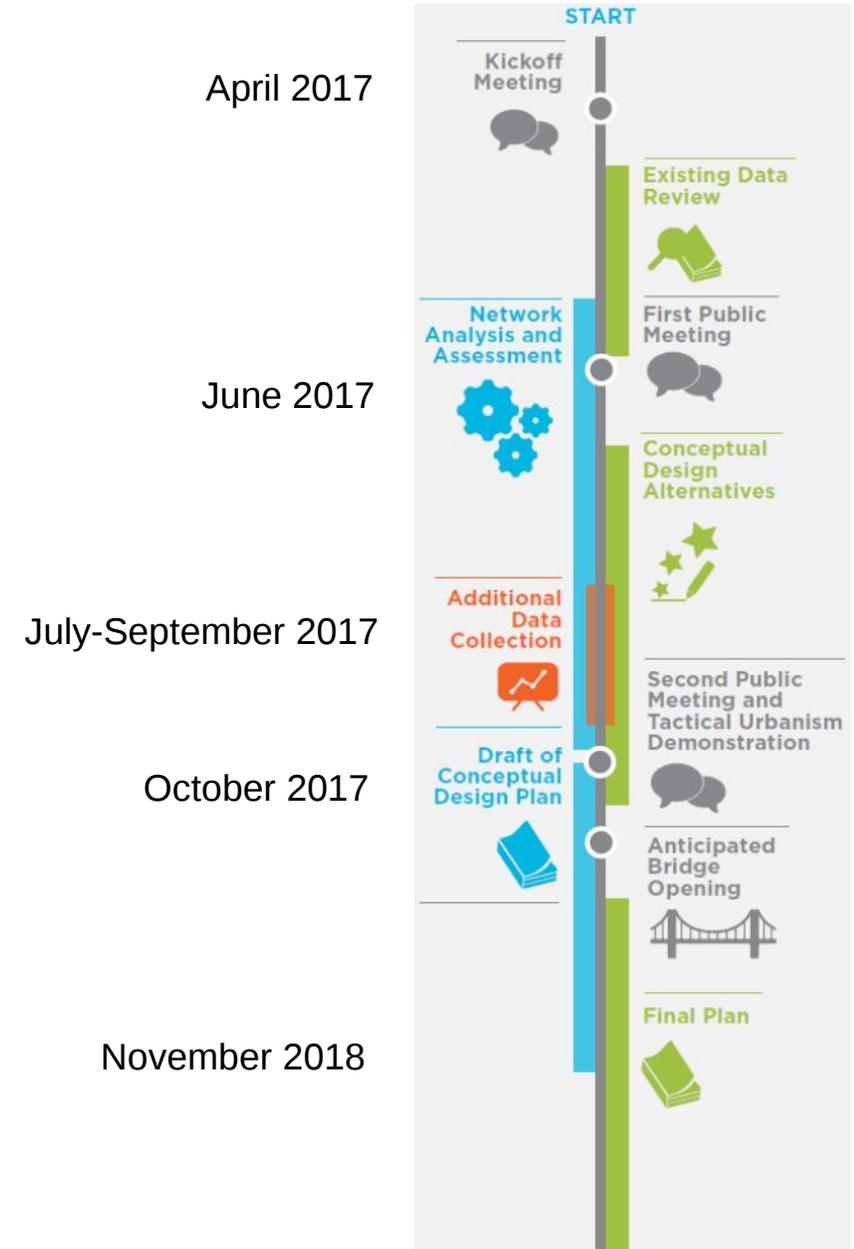
Data: 2017 National Household Travel Survey, USDOT
Tabulation of all person trips in trippub.csv by:



BIKE TARRYTOWN

GOALS

- Improve safety for everybody
- Invite people using the Tappan Zee Bridge to local shops and restaurants
- Inspire cycle commuting via the Bridge
- Interest locals in walking along & across Route 9
- Interconnect the villages with family friendly cycling infrastructure
- Induce bus use



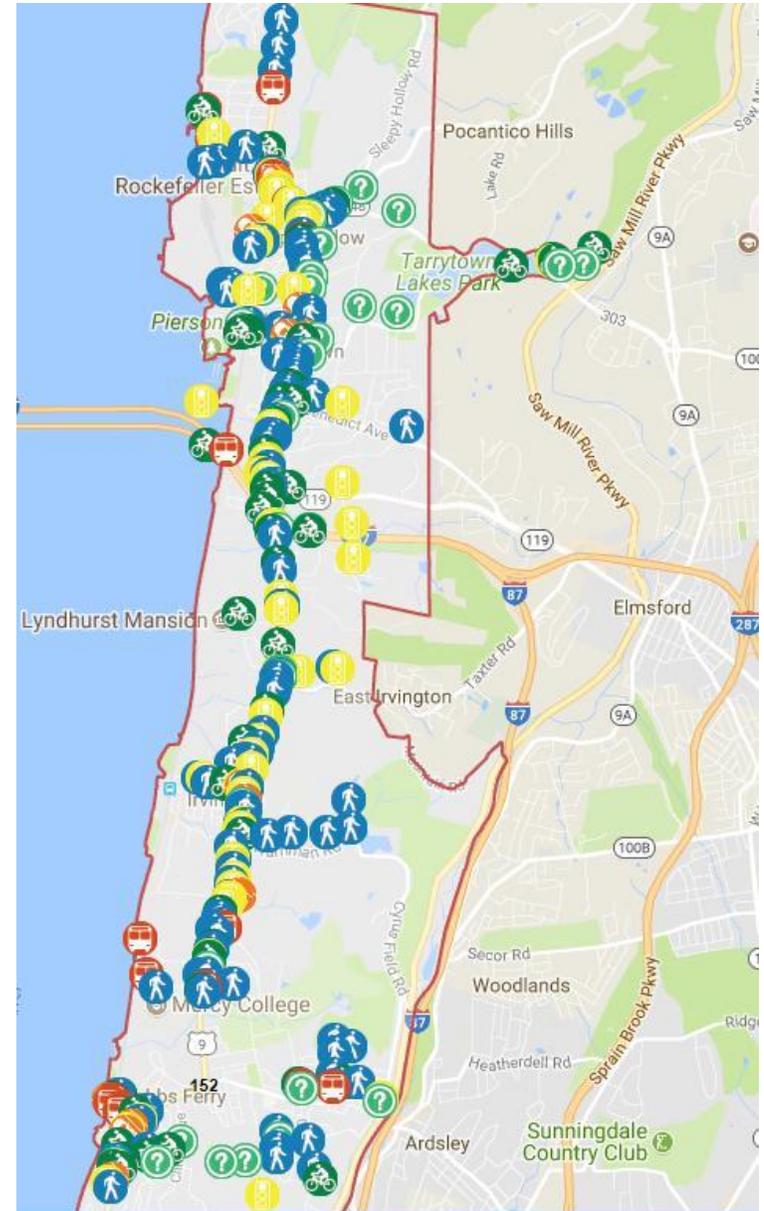
CHALLENGES

- Route 9 is dominated by vehicular traffic
- Walking, biking, and taking transit feel **unsafe**
- **On-street parking** is highly valued
- Some **pinch points** due to on-street parking, higher traffic volumes, walls
- **Unsuitable parallel routes** in many locations due to hills, lighting or surface type



PUBLIC ENGAGEMENT

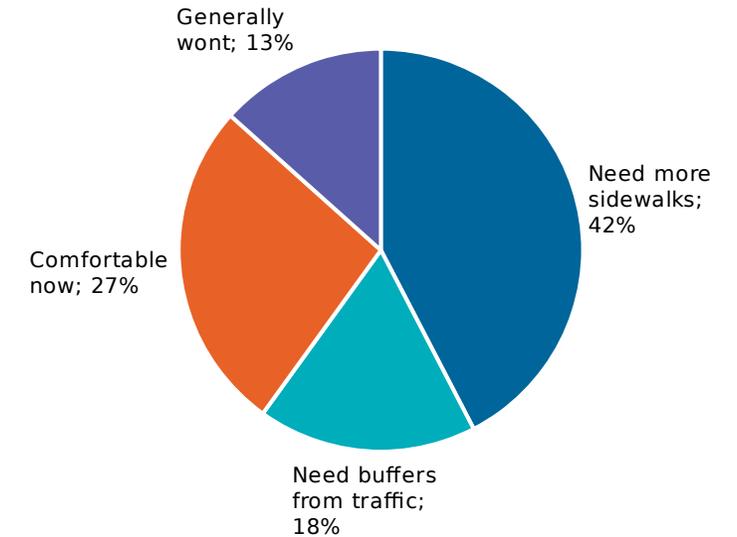
- June 2017 Workshops:
 - 140 attendees
- Online tools:
 - Trade-offs questions
 - 496 responses
 - WikiMap
 - 813 responses



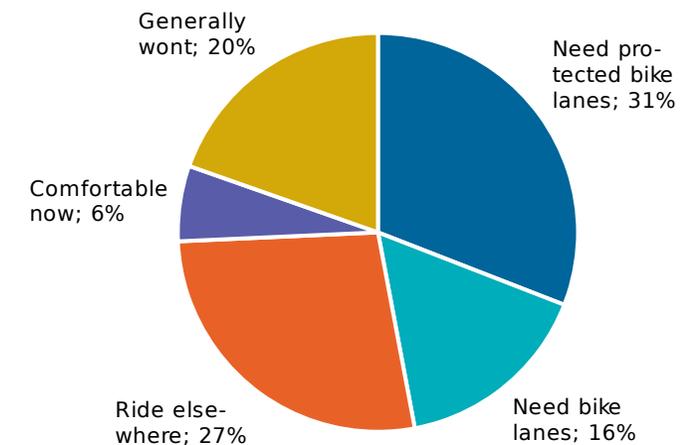
PUBLIC ENGAGEMENT

- October 2017 Workshops:
 - 100 attendees
- Online Survey:
 - Level of biking and walking along Route 9
 - Street design options
 - Over 1,000 responses

Walking



Cycling



DESIGN ELEMENTS

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



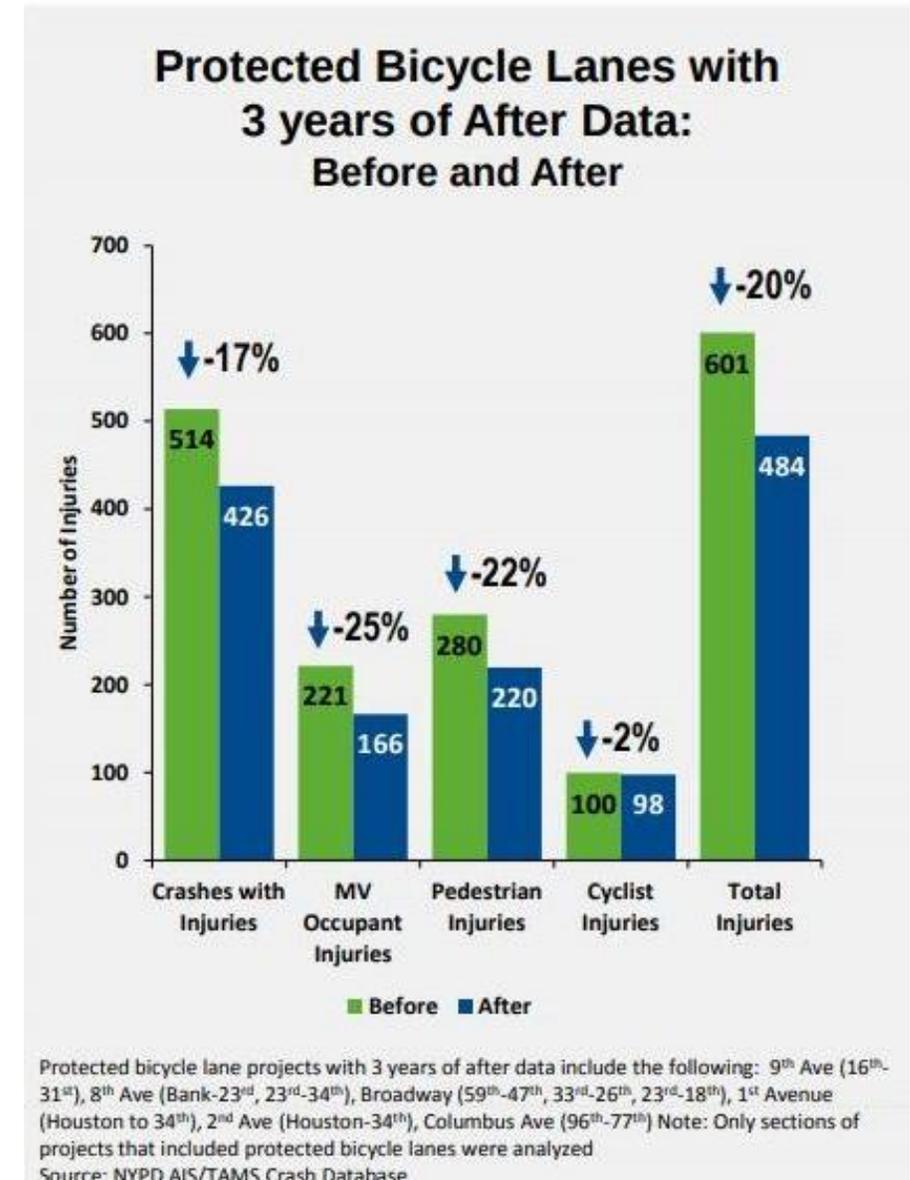
TRAFFIC IMPACT

- 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

- Significant crash & injury reductions
 - Modal separation
 - Shorter crossing distances
 - Enhanced visibility
 - Dedicated turn lanes
 - Engineering to reduce speeding
 - Slower turning speed geometry
- Detailed review will be conducted during the permitting process

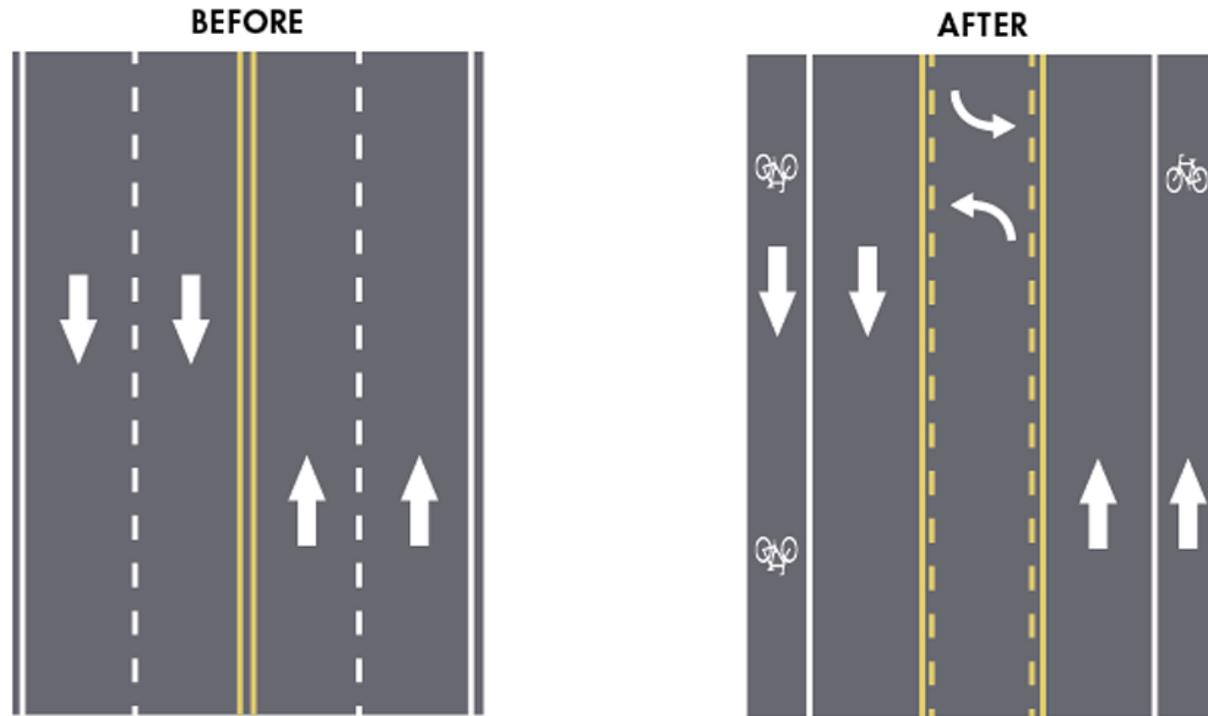


TRANSIT IMPACT

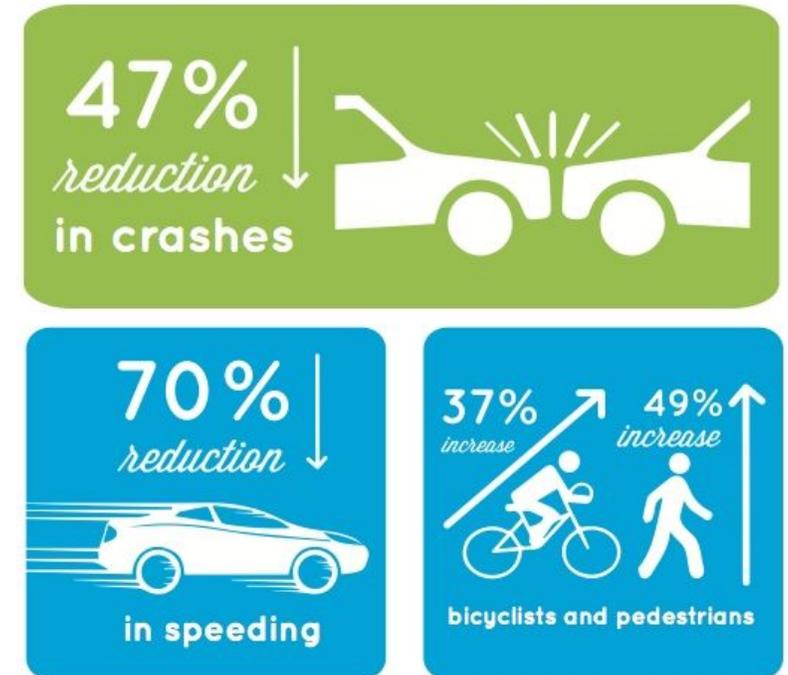
- Replace pole only stops with shelters and benches
- Connect all bus stops to walking network with new sidewalk and crosswalks
- In lane stops overlapping with bike network supported with boarding platform
- Improve bus stop locations and spacing



ROAD DIET



Road Diet Benefits



PRELIMINARY COST ESTIMATES

- Total construction estimate \$6M to \$36M, depending on options chosen
- Expectation of joint grant application and funding for engineering design and construction

Village	Low cost estimate	High cost estimate
Sleepy Hollow	\$0.9 M	\$5.0 M
Tarrytown	\$1.5 M	\$9.2 M
Irvington	\$1.3 M	\$6.8 M
Dobbs Ferry	\$1.3 M	\$5.8 M
Hastings-on-Hudson	\$1.6 M	\$9.4 M
Total	\$6.6 M	\$36.2 M

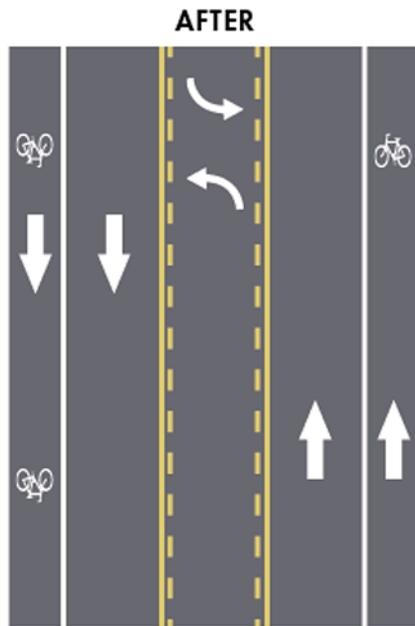
REFINEMENTS NEEDED

- Consultants provided extensive work after budget exhausted
- Many details need fixing during next phases
- Example: Downing Ct
 - Continue sidewalk on east side
 - Continue widening western sidewalk
 - Eliminate merge across bike lane
 - Add median refuges for people crossing



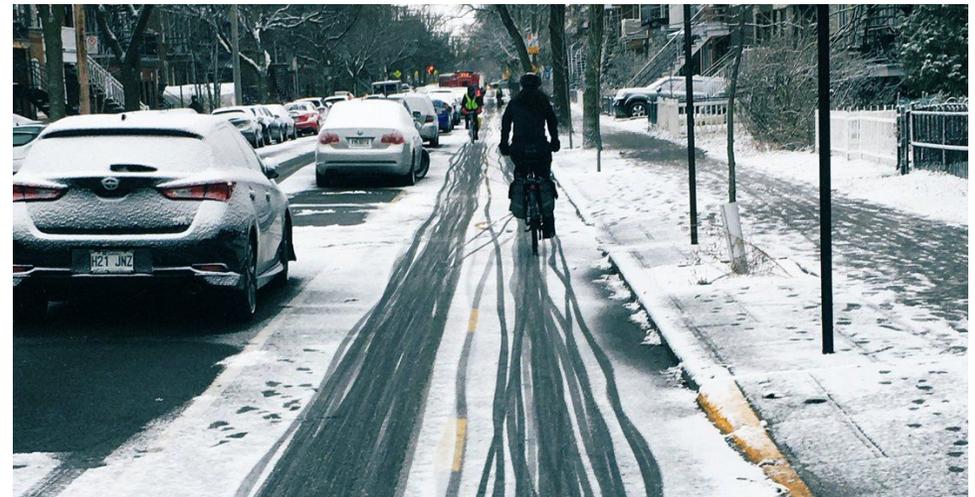
REFINEMENTS NEEDED

- Meandering lanes moderate speeds and make room for more walking & cycling



REFINEMENTS NEEDED

- Plan: 1-way lanes on both sides of street
- Consider: 2-way lane on one side of street
 - Saves space: 1 buffer instead of 2
 - Maintenance: regular sweeper & plows
 - Continuity
 - Dobbs Ferry: west side
 - Tarrytown: Steering Committee recommends west side
 - Parking at Main St
 - Fewer driveways & cross streets



PUSHBACK THE PUSHBACK

- *If* additional delays
 - a few seconds
 - during a few moments of the day
 - peak hour: 500 vehicles / direction *
- Entitlement
- Streets are public space for use by everybody
- Need to fairly allocate that space
- Matter of safety, equity, environment, health
- Envisioning change is hard
- When changes are made, people adjust

* August, 2011, on Broadway 130' south of Sycamore Ln, NYS DOT ([PDF](#))



TRAVEL CHOICES ARE SHAPED BY PUBLIC POLICY



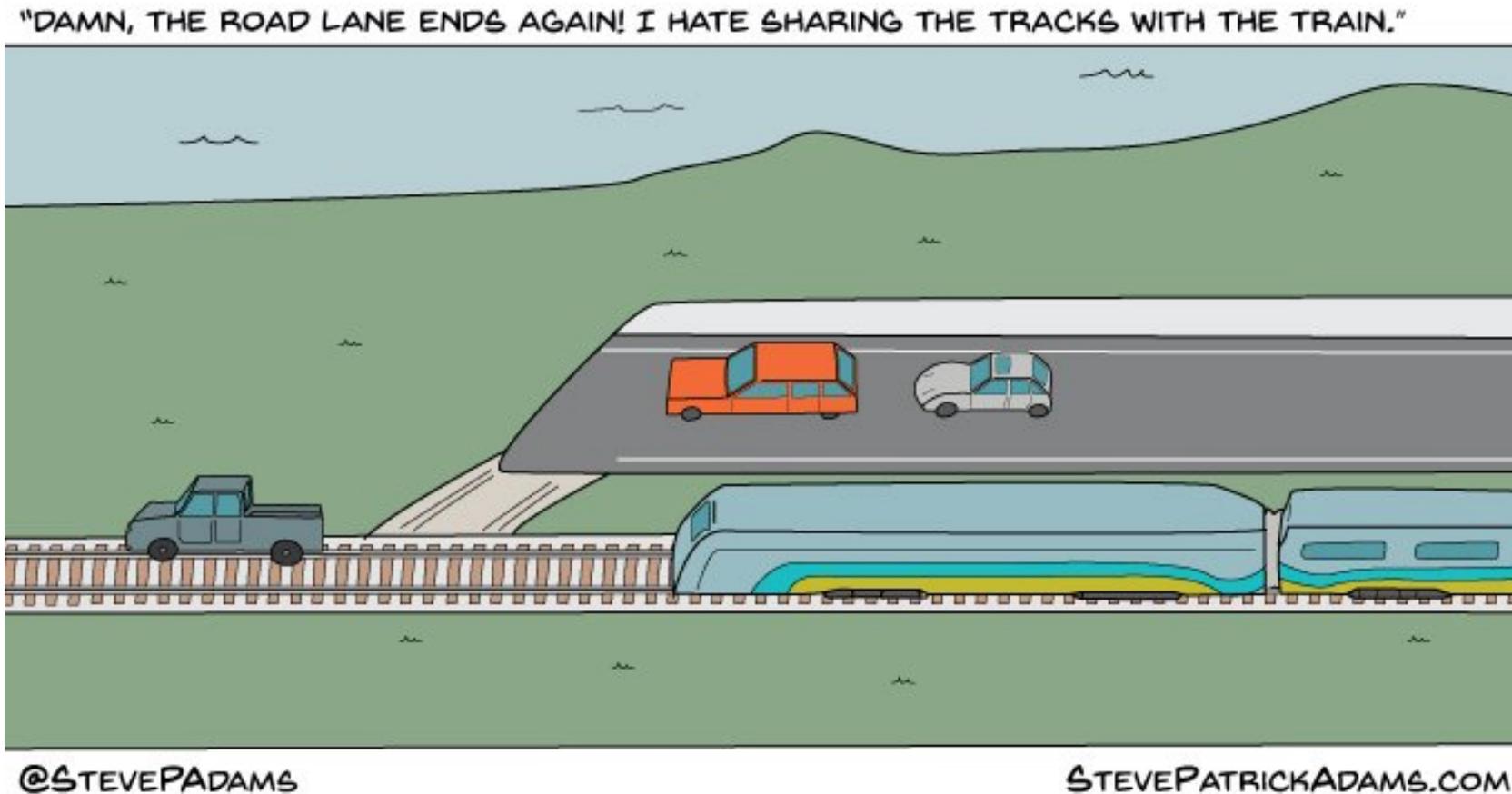
Haarlemmerdijk, Amsterdam, 1971 & 2013

TRAVEL CHOICES ARE SHAPED BY PUBLIC POLICY



PUSHBACK THE PUSHBACK

- Must connect to Main St



PUSHBACK THE PUSHBACK

- Bikes mean business

Spending from 20' of Curb Space
(say your average customer spends \$20)

1 Car: \$20-\$40
(average 1-2 people)
(max. 5 people: \$100)

10 Bikes: \$200 !

\$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20

BIKE TARRYTOWN

NEXT STEPS

- Get Governor to tell DOT to “get this done”
- Get project into the regional funding plan (Transportation Improvement Program)
- Secure grant funding
- Preliminary engineering for design
- Collaborative engagement with DOT
- Evaluation and approval



NEXT STEPS: IRVINGTON

- Refine the plan
- Communicate with Trustees

