

SAFE ROUTES TO SCHOOL

FALL 2016



BAYONNE

SCHOOL DISTRICT

SCHOOL TRAVEL PLAN

About the Studio

Edward J. Bloustein School of
Planning and Public Policy -
Rutgers University

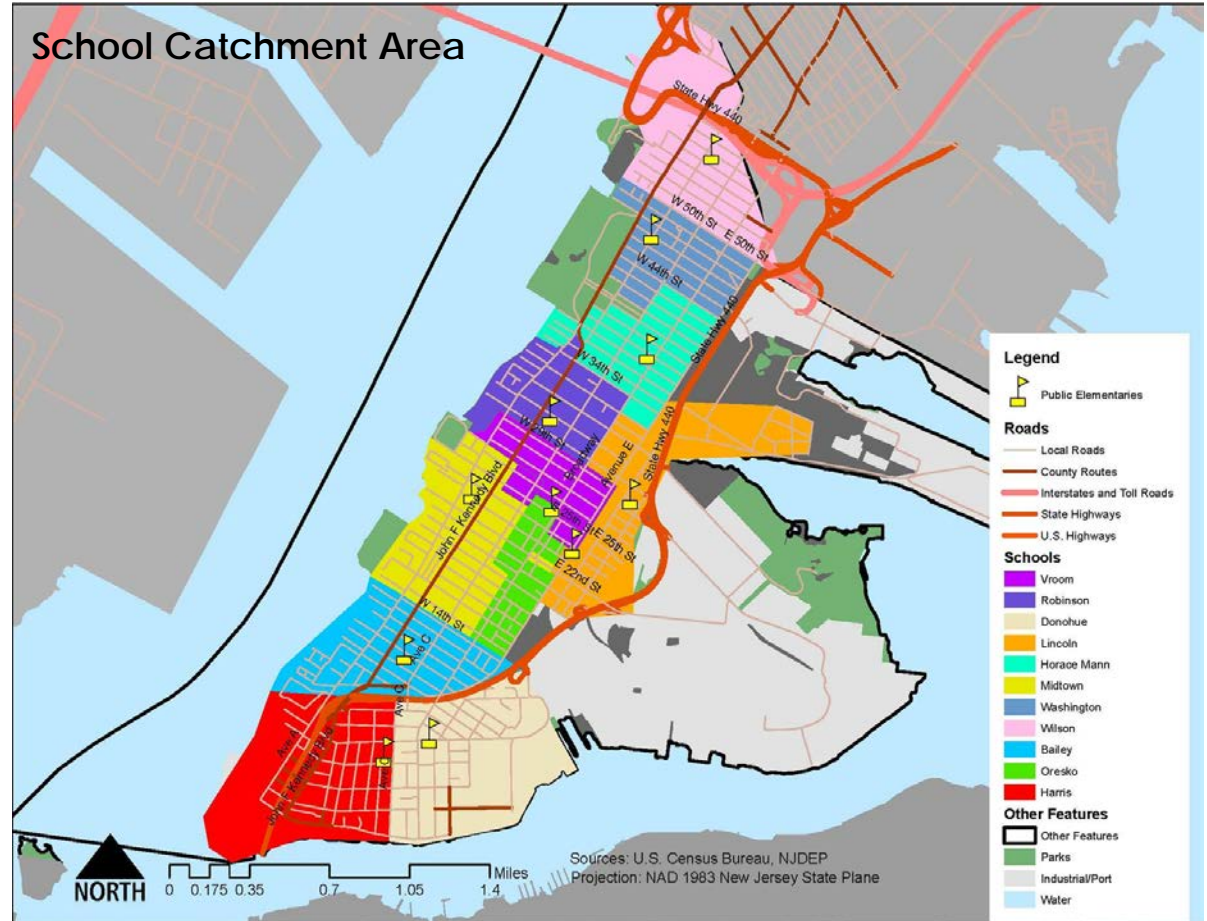
- ❖ Purpose of studio:
 - Help City of Bayonne apply for **Safe Routes to School (SRTS) funding** by producing a **School Travel Plan (STP)**



Background Research

Our studio compiled a wide range of data about Bayonne, including:

- ❖ Demographics
- ❖ Policies/Planning Information
- ❖ Crash Analysis
- ❖ Schools Data

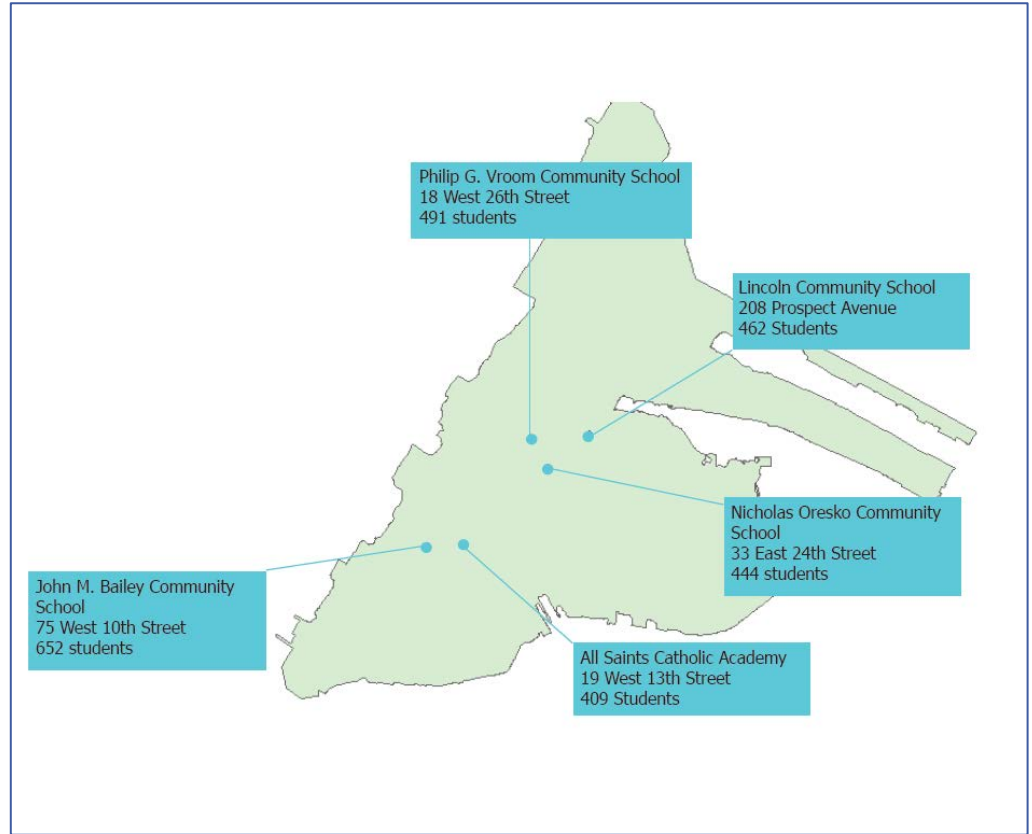




┌ First Client
○ Meeting

On October 14, 2016, the studio team held a meeting at Bayonne City Hall

- ❖ **Objective** of meeting was to prioritize specific issues and schools
- ❖ **Double parking** and **speeding** were main concerns
- ❖ Neighborhoods/schools selected:
 - **John M. Bailey (No.12)**
 - **All Saints Catholic Academy**
 - **Lincoln Community (No. 5)**
 - **Philip G. Vroom (No. 2)**
 - **Nicholas Oresko (No. 14)**















Student Travel Tallies











In October 2016, Bayonne public schools were given Safe Routes to School Students Arrival and Departure Tally Sheets

- ❖ Majority of students are already walking to and from school.
- ❖ School buses are reserved for students with disabilities, so the next most common travel mode for students is family vehicle.
- ❖ The lack of students biking to school may be a reflection of the absence of bicycle parking at schools.

	Morning	Afternoon
		
 walk	49%	57%
 bike	0%	0%
 school bus	8%	11%
 family vehicle	40%	29%
 carpool	2%	1%
 transit	0.20%	0.40%
	0.00%	0.10%
	18,399	17,602











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PHILIP G. VROOM
ELEMENTARY SCHOOL

SUPER HERO DRAGONS
ASSEMBLY
A MARVELOUS YEAR
AWAITS YOU!



RICHMOND COUNTY SAVINGS FOUNDATION

3
0 Principal
Survey

School Principal Survey

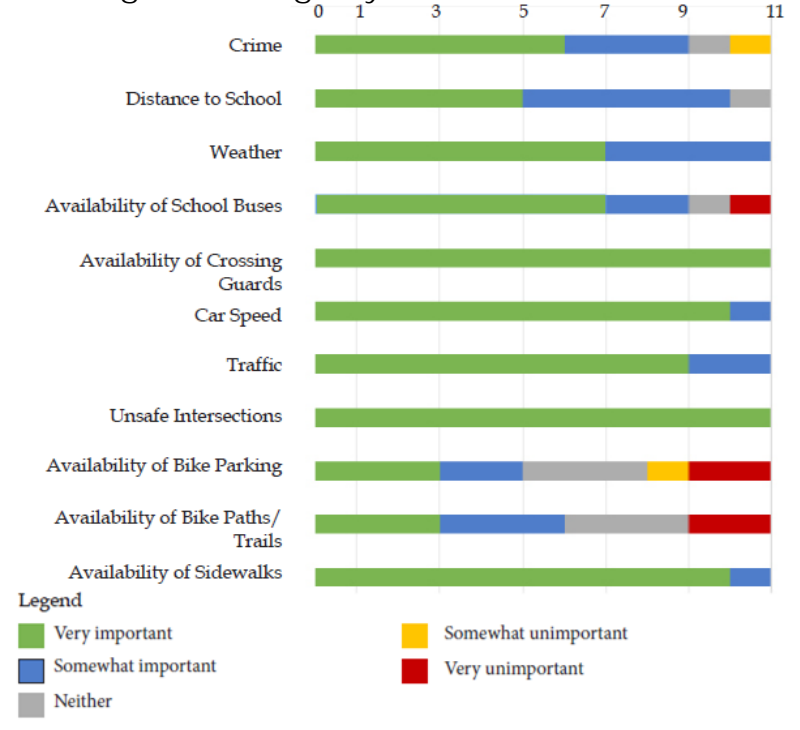
100% "very important"

- crossing guards
- unsafe intersections

Other high priority

- Car speed
- Availability of sidewalks
- Traffic

Please rate the following factors as they relate to walking and biking at your school:



School Principal Survey

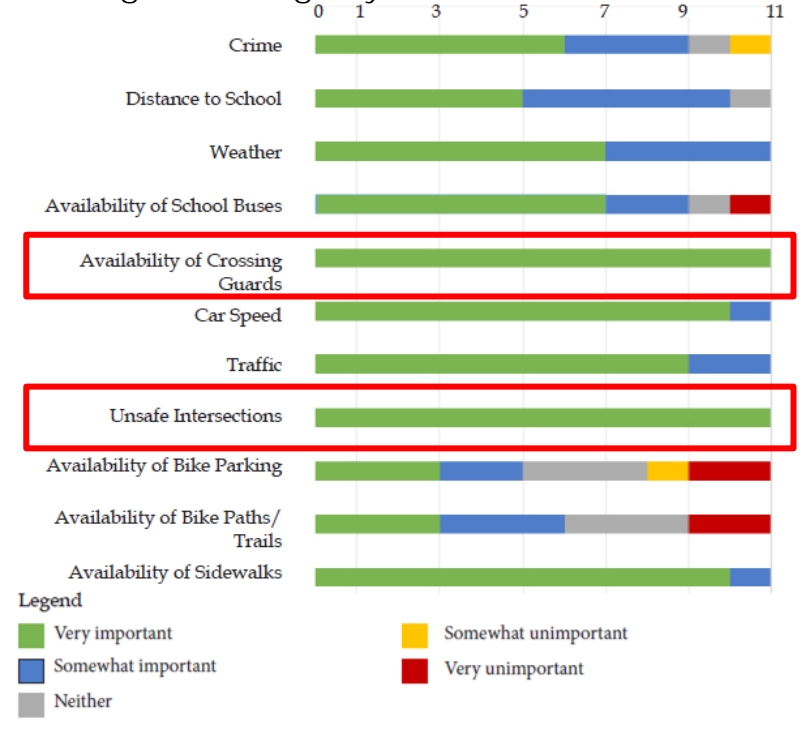
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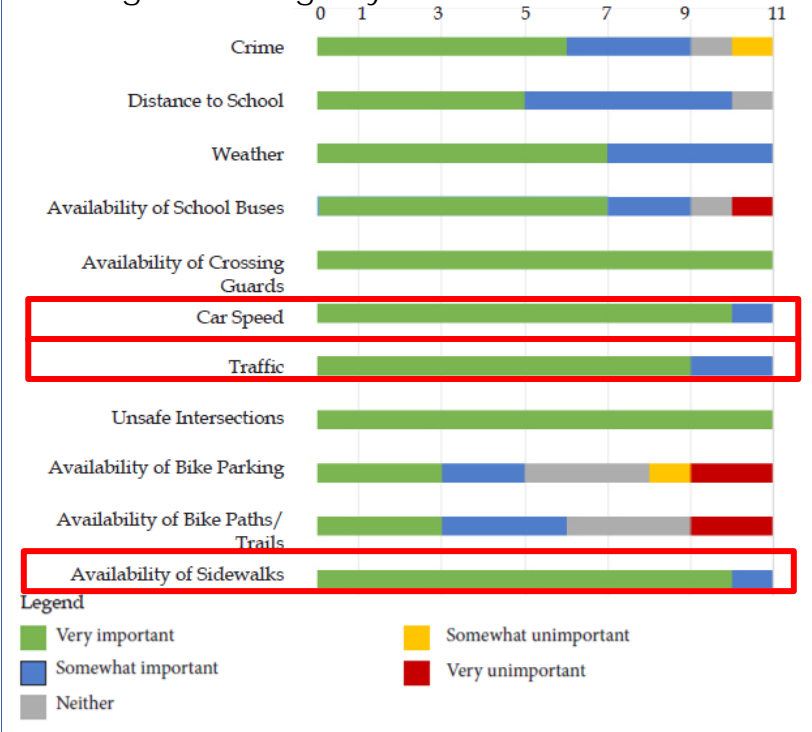
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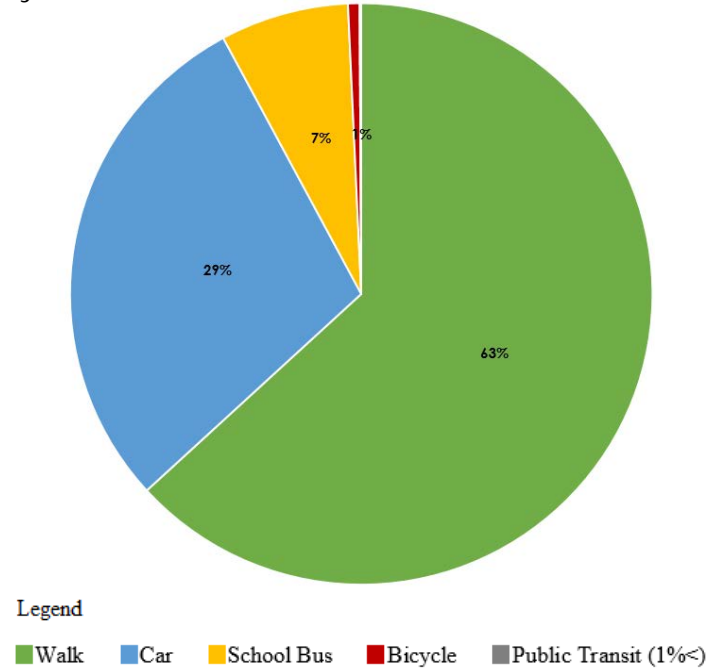


School Principal Survey

Other key findings:

- Walking is most popular
 - Car is 2nd most popular
 - Bus is 3rd most popular
- Low percent bicycle to school
- Virtually no one reported public transit
- Open-ended response revealed more bicycle use at schools if bike parking was available

Approximately what percentage of students at your school regularly travel to school by walking, bicycling, bus, car or transit?



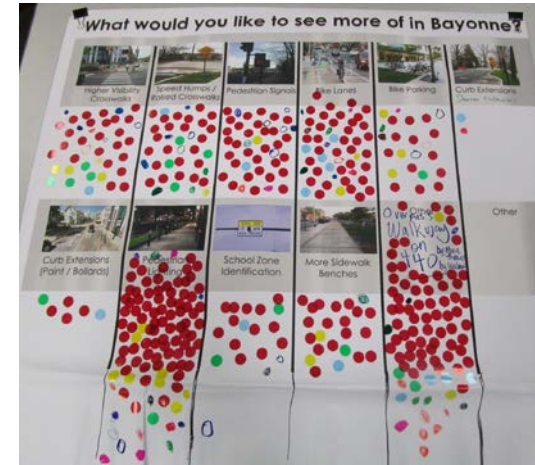
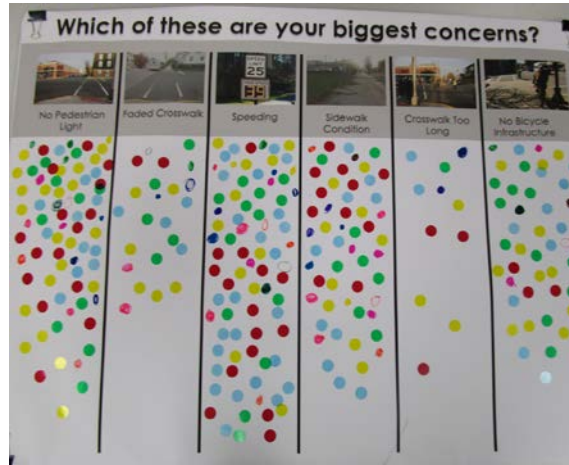
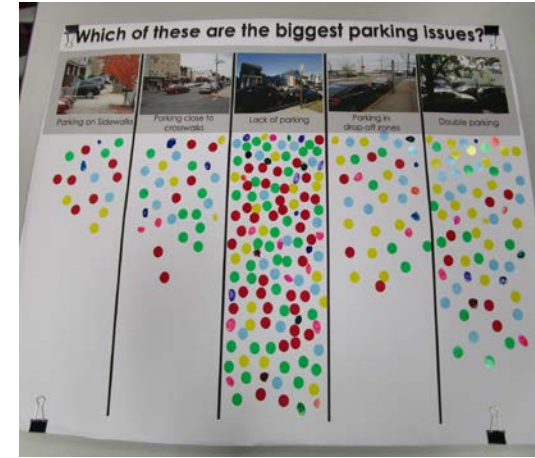


 Oresko Open
House

Visual Preference Board Activity

Parents, students, and staff voted on their top priorities

- ❖ About 150 participants cast over 1,000 votes
- ❖ Eager to participate and share their concerns
- ❖ Other concerns were noted as well



Which of these are the biggest parking issues?



Parking on Sidewalks



Parking close to crosswalks



Lack of parking



Parking in drop-off zones



Double parking

Which of these are your biggest concerns?



No Pedestrian Light



Faded Crosswalk



Speeding



Sidewalk Condition



Crosswalk Too Long

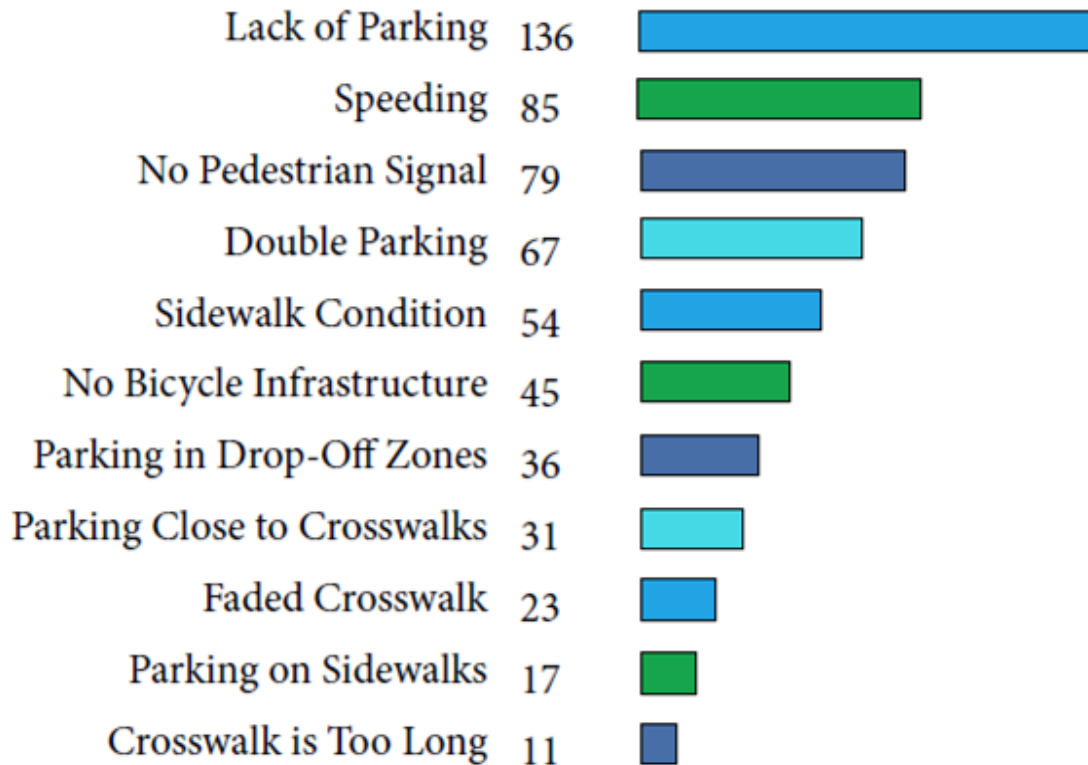


No Bicycle Infrastructure

What are your main concerns?

Primary requests:

1. Lack of parking
2. Speeding
3. No pedestrian signal
4. Double parking



What would you like to see more of in Bayonne?



Higher Visibility
Crosswalks



Speed Humps /
Raised Crosswalks



Pedestrian Signals



Bike Lanes



Bike Parking



Curb Extensions



Curb Extensions
(Paint / Bollards)



Pedestrian
Lighting



School Zone
Identification



More Sidewalk
Benches

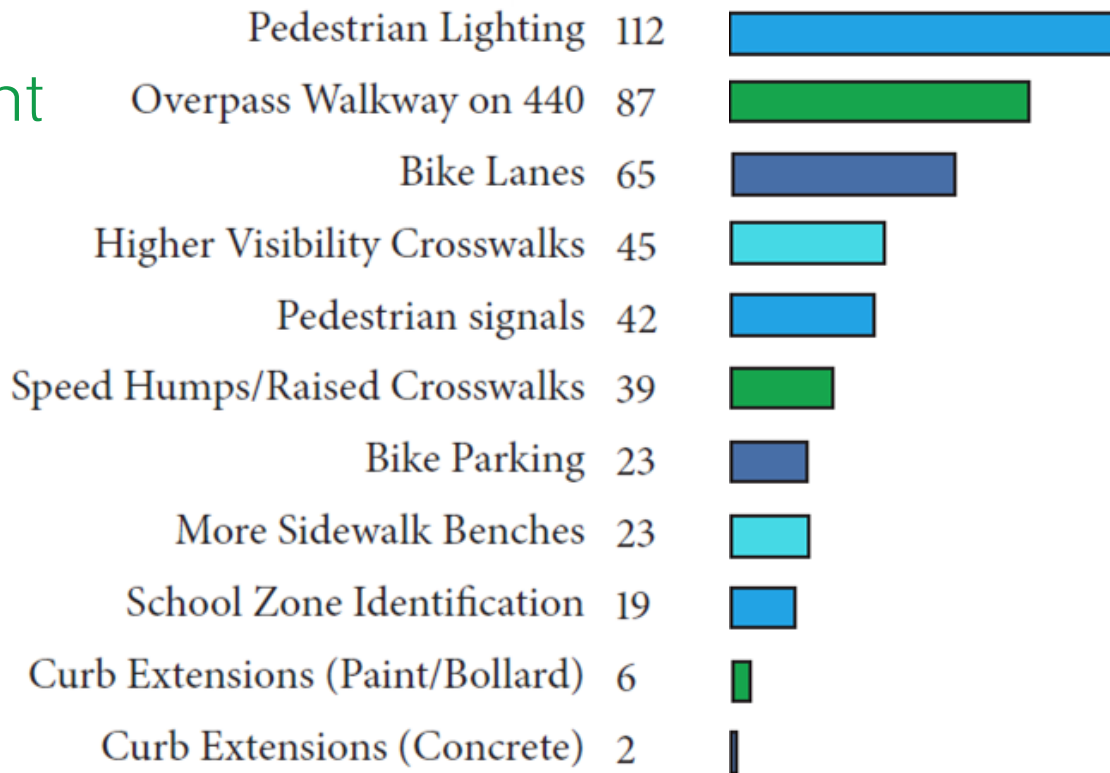
Other

Other

What do you want to see more of?

Primary requests:

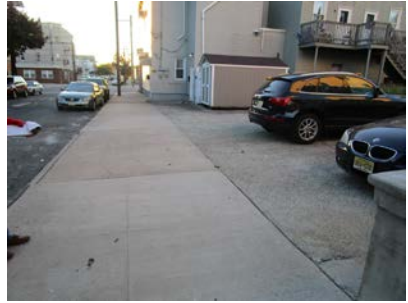
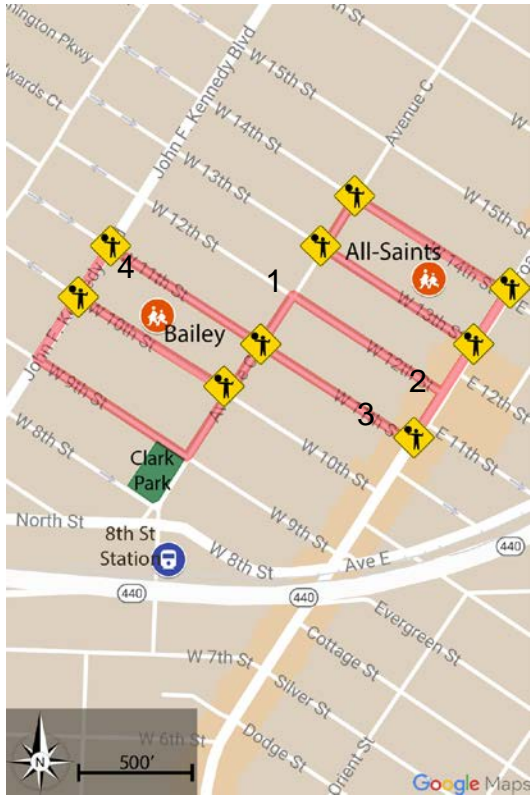
1. Pedestrian lighting
2. Crossing 440
3. Bike lanes





 Walkability
Assessments

Bailey & All-Saints Walkability Assessment



1. Wide driveway on West 12th at Avenue C



2. Severe sidewalk damage on West 12th and Broadway



3. Wide driveway on West 11th between Avenue C and Broadway



4. Severe sidewalk damage at West 11th and JFK

Oresko & Vroom Walkability Assessment



1. Long crosswalk, missing truncated dome, no pedestrian countdown signal.



2. Severe sidewalk damage.



3. Reverse bump encourages longer crosswalks, no pedestrian countdown signal.



4. Park in front of school missing sidewalk.

Lincoln Walkability Assessment



1. Pedestrian-vehicular conflicts at E.29th street and Avenue E.



2. Potential for street furniture and pedestrian lighting on E.30th street.



3. Potential for Pedestrian signal at 30th street and Broadway/ Faded crosswalks.

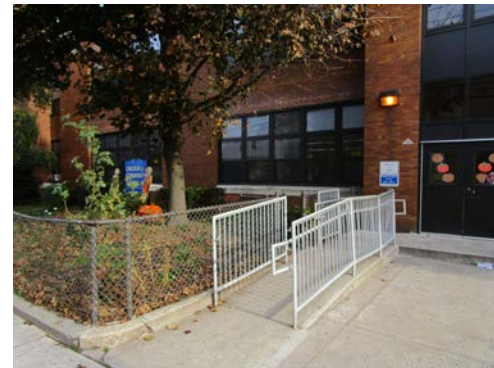


4. Delineate driveways from sidewalks on E.29th street.

Lincoln Walkability Assessment



5. Makeshift bike parking on E.27th street adjacent to Lincoln School.



6. Potential for bicycle parking in front of Lincoln School.

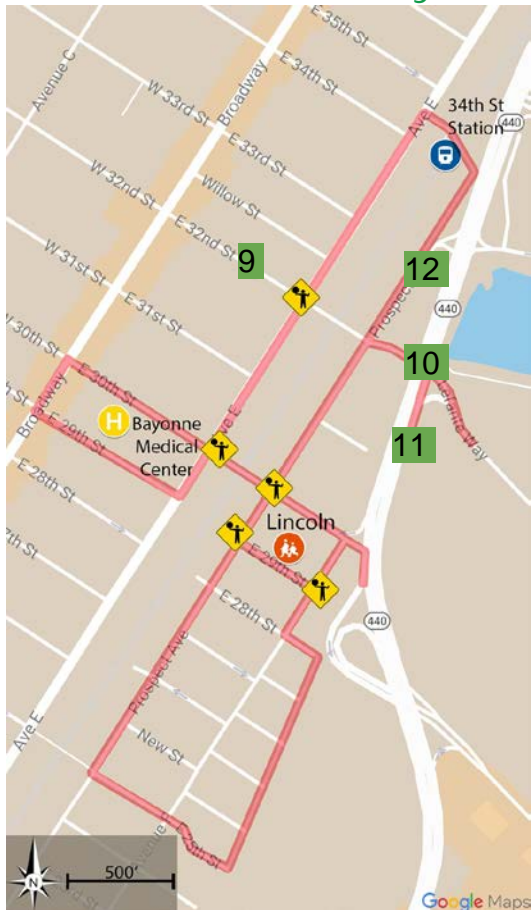


7. Missing crosswalk and truncated dome on Prospect Ave. and E.27th street.

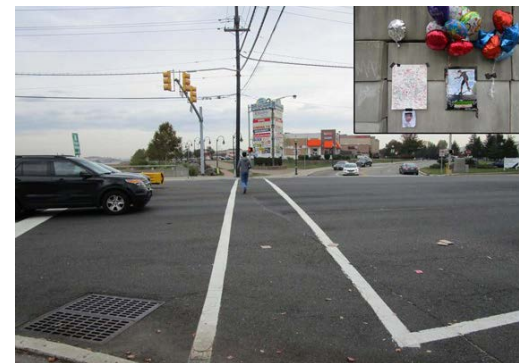


8. Kids play area at Ave.F and E.28th Street.

Lincoln Walkability Assessment



9. Uneven sidewalk on E. 32nd ramp - ADA noncompliance.



10. Speeding concerns on Route 440 / Long crosswalk, short ped. signal time.



11. Pedestrians walking along Route 440 - need protected walkways.

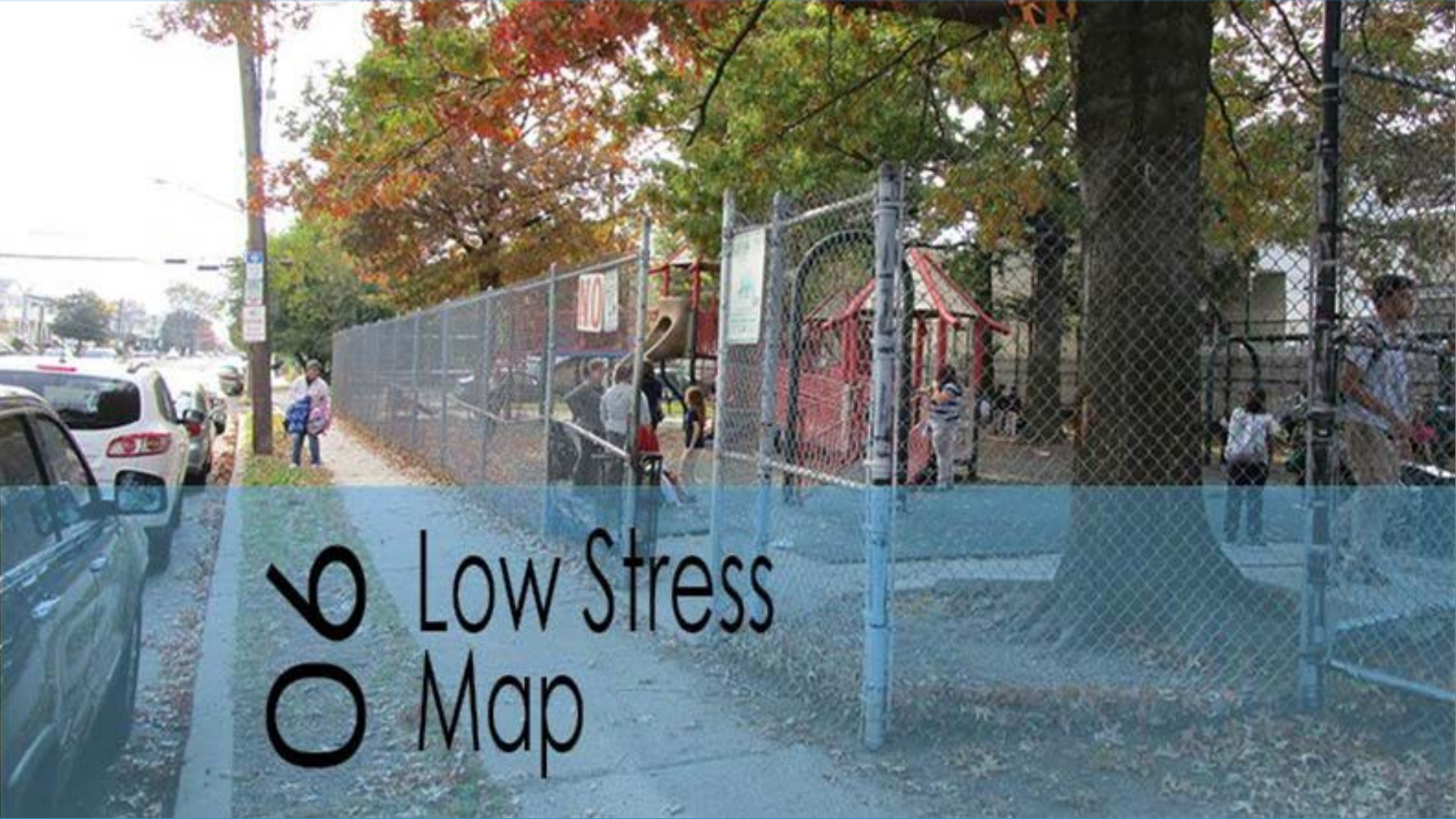


12. Missing curb cut / faded crosswalk on Prospect Avenue by 34th street station parking.

Speed Limits Along Route 440

Jurisdiction	Miles
NJDOT	4.04 m
Source: NJDOT, July 2015	





 Low Stress
Map

Level of Traffic Stress (LTS) Methodology

LTS Level	Meaning
1	Typically suitable for those uncomfortable with cycling in traffic situations.
2	Can be tolerated by the mainstream American adult population.
3	Acceptable for an experienced, confident cyclist.
4	Only tolerated by the most adventurous of cyclists.

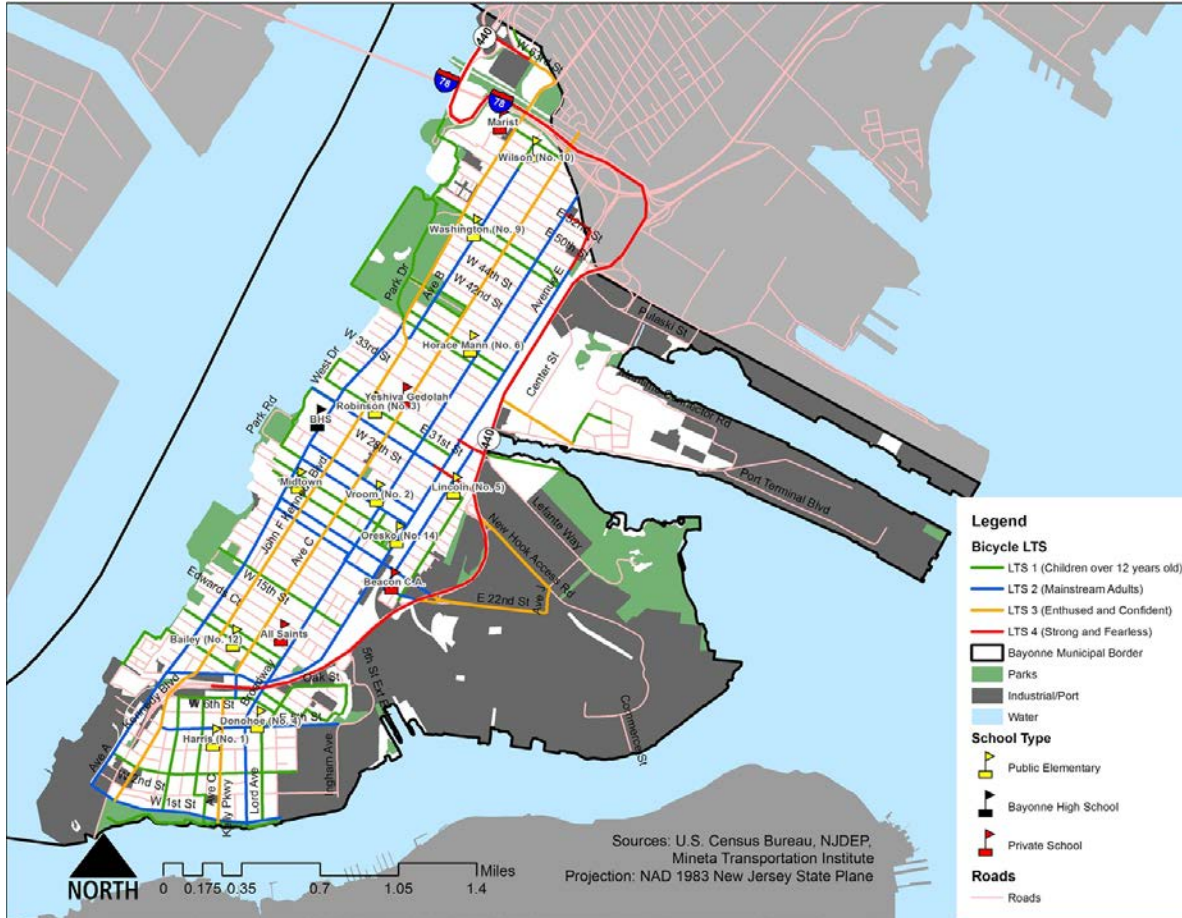
Table 4. Criteria for Level of Traffic Stress in Mixed Traffic

Speed Limit	Street Width		
	2-3 lanes	4-5 lanes	6+ lanes
Up to 25 mph	LTS 1 ^a or 2 ^a	LTS 3	LTS 4
30 mph	LTS 2 ^a or 3 ^a	LTS 4	LTS 4
35+ mph	LTS 4	LTS 4	LTS 4

Note: ^a Use lower value for streets without marked centerlines or classified as residential and with fewer than 3 lanes; use higher value otherwise.

Source: Mineta Transportation Institute, Report 11-19

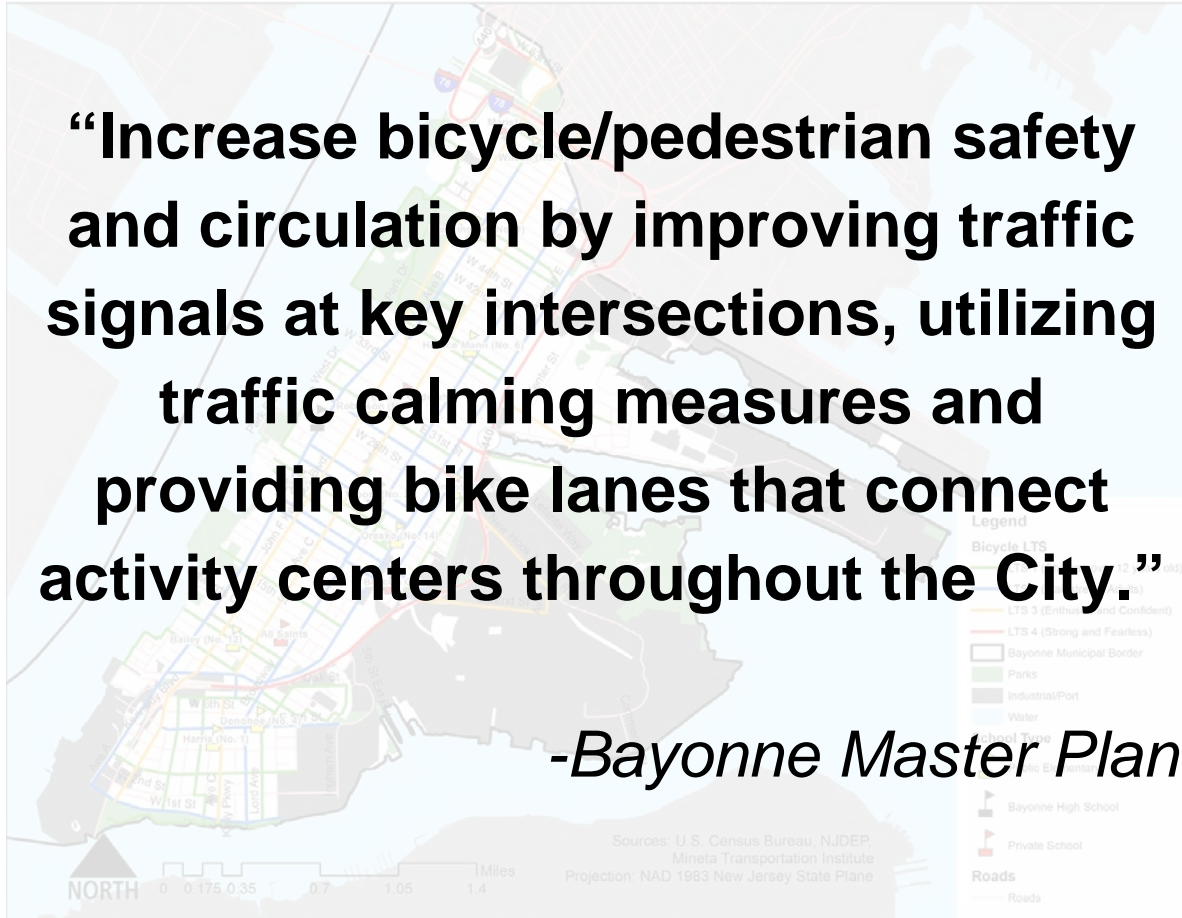
Level of Traffic Stress (LTS) Map



Level of Traffic Stress (LTS)Map

“Increase bicycle/pedestrian safety and circulation by improving traffic signals at key intersections, utilizing traffic calming measures and providing bike lanes that connect activity centers throughout the City.”

-Bayonne Master Plan





↙ Action
○ Steps



The 5 E's

- Engineering
- Enforcement
- Education
- Encouragement
- Evaluation

Timeframe Definition	Cost Definition
Short-term = between 1 to 6 months	Low = Less than \$2,000
Mid-term = less than 1 year	Medium = between \$2,000 and \$10,000
Long-term = between 1 to 5 years	High = more than \$10,000

Timeframes and Costs of Recommendations



ENGINEERING

ACTION	RESPONSIBLE AGENCY	NEXT STEP	TIMELINE	COST
Increase safety at W.29th street and Avenue E Pedestrian crossing.	City	Install pedestrian hybrid signals, reflective bollards and introduce new stop markings at the street intersection.	Medium	Low to Moderate
Traffic calming measures on Route 440.	State, City	Introduce pedestrian refuges and create a protected pedestrian walkway along route 440.	Medium-Long-term	High
Pedestrian countdown timers.	City	Install pedestrian countdown timers on all signalized intersections especially on Broadway and the Avenues.	Medium - Long-term	High
Increase school zone identification and signage.	City	Increase school zone identification in and around all schools to increase awareness of pedestrian and bicyclists. Also install timed flashing school crossing signs.	Short-term	Low to Moderate
Improve school bicycle parking facilities and explore opportunities for bicycle lanes.	School district, City	Create paved areas with covered bike parking that are secured and easily accessible. Also investigate opportunities for bicycle lanes.	Medium	Medium



ENFORCEMENT

ACTION	RESPONSIBLE AGENCY	NEXT STEP	TIMELINE	COST
Enhanced speed limit enforcement	Police Dept.	Prosecute speeders and dangerous drivers – especially on the Avenues, JFK, and Broadway	Ongoing	Low
Enhanced enforcement of parking laws	Police Dept.	Ticket illegally parked vehicles, especially those that hinder pedestrian safety – no parking near intersections, in crosswalks, on sidewalks, in front of hydrants, and driveways	Ongoing	Low
Discourage distracted driving	Police Dept.	Increase penalties for distracted drivers (i.e. use of cell phone while driving)	Ongoing	Low
More police officers on bicycles	Police Dept.	Integrate bicycle enforcement training into the police academy curriculum for new officers	Medium	Low to Moderate

EDUCATION

ACTION	RESPONSIBLE AGENCY	NEXT STEP	TIMELINE	COST
Provide parents with information regarding driver and pedestrian safety within the school zone	Police Dept., Schools, TMA	Decide how to distribute material and what information is important to school zone	Ongoing	Low
Work with Hudson TMA to develop and implement educational bicycle and pedestrian SRTS safety programming	Schools, TMA, City	Work with Hudson TMA to schedule programming in all schools	Ongoing	Low
Create municipal websites and/or add to existing websites with the purpose of 1) providing anti-idling law education to parents and community members, and 2) spreading awareness of "Stop and Stay Stopped" law	Schools, TMA, City	Compile and organize information, and advertise website via email and/or mail	Short-term	Low
Provide parents with information regarding driver and pedestrian safety within the school zone	Police Dept., Schools, TMA	Decide how to distribute material and what information is important to school zone	Ongoing	Low

ENCOURAGEMENT

ACTION	RESPONSIBLE AGENCY	NEXT STEP	TIMELINE	COST
Schedule and participate in Walk to School Day in October and National Bike to School Day in May, as well as NJ Walk and Bike to school month each year.	Schools, TMA	Decide on the type of event, form a team, and pick a date	Short-term	Low
Develop SRTS programs at all schools including student poster or art contests, walking mileage clubs, golden sneaker awards, etc. centered on walking and biking to school activities.	Schools, TMA	Decide on the type of event, form a team, and pick a date	Short-term	Low
Install wayfinding signage	NJDOT or City	Identify intersections that could benefit from improved pedestrian-scale signage	One-time	Low to Moderate
Host Bike/Walk to School Days throughout the school year	Schools, TMA	Decide on the type of event, form a team, and pick a date	Short-term	Low
Work with Hudson TMA to develop walking School Bus program.	PTAs, Schools, TMA	Identify key partners in the community and begin gathering parties interested in participating.	Ongoing	Low
Work with Hudson TMA to include pedestrian and bicycle safety information within school curriculum.	Schools, TMA	Provide ideas for teachers to lead lessons including a walk and bike-themed component.	Short-term or ongoing	Low



EVALUATION

ACTION	RESPONSIBLE AGENCY	NEXT STEP	TIMELINE	COST
Conduct speed analysis of targeted enforcement areas before and after enforcement	City of Bayonne and Police Dept.	Identify enforcement priority corridors	Ongoing	Low
Create SRTS sub-committee to encourage and increase public involvement in SRTS programs	Schools, School District	Consider maintaining the School Travel Plan Working group as a SRTS committee	Short-term	Low
Adopt a Complete Streets policy	City	Complete Streets include all ages and abilities	Short-term	Low to Moderate
Monitor long-term crash data after road engineering improvements	City of Bayonne or Police Dept.	Identify key intersections and hot spots	Ongoing	Low



∞ Recommendations

○

E.32nd Street and Route 440 Existing Conditions



- Long crosswalks creating pedestrian safety concerns.
- Illegible crosswalk markings.
- Service pole minimizes pedestrian access on sidewalk.

[renderings not to scale]

E.32nd Street and Route 440 Proposed Enhancements



- 1 Introduce pedestrian refuge.
- 2 Introduce visible crosswalk markings.
- 3 Introduce pedestrian push button.
- 4 Relocate service pole or extend sidewalk.
- 5 Remove right turn bay - right turns can be made on Prospect Ave.

[renderings not to scale]

E.29th Street and Avenue E Existing Conditions



- Pedestrian vehicular conflicts.
- Parking in no-parking zones.

E.29th Street and Avenue E Proposed Enhancements



- 1 Introduce pedestrian hybrid signal (HAWK signal).
- 2 Introduce stop bar road markings.
- 3 Make no-parking zones more visible.
- 4 Introduce reflective bollards.

[Renderings not to scale]

E.24th Street and Gregg Lane Existing Conditions



- Speeding concerns.
- Missing curb cuts.

E.24th Street and Gregg Lane Proposed Enhancements



- 1 Introduce raised crosswalk (speed hump).

Avenue C Existing Intersection Condition



Large intersection with lack of pedestrian and bicycle features

Avenue C Bicycle Pedestrian Improvements



- 1 Install street lights to promote pedestrian safety at night
- 2 Introduce bicycle racks, or “corrals,” to provide bike parking and daylight crosswalks
- 3 Install bollards at intersection as a cheaper alternative to sidewalk “bump-outs”
- 4 Ensure every intersection is properly equipped with truncated dome for ADA compliance
- 5 Add pedestrian countdown signal at all intersections
- 6 Install protected bicycle lanes at wide roads

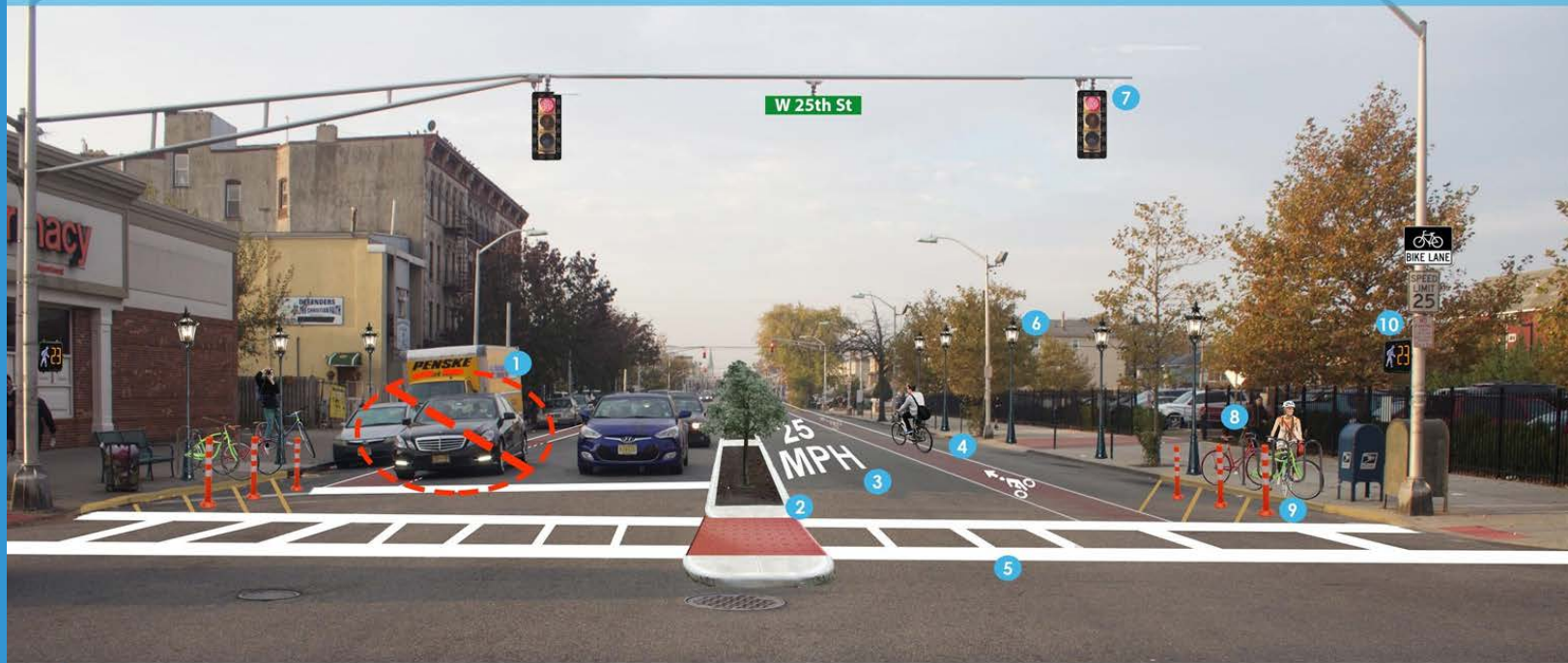
[Renderings not to scale]

Avenue C Existing Road Condition



Four-lane wide road with motorist driving above the speed limit
Crosswalk paint faded and low visibility
Lack of signage, pedestrian signals, and bicycle features

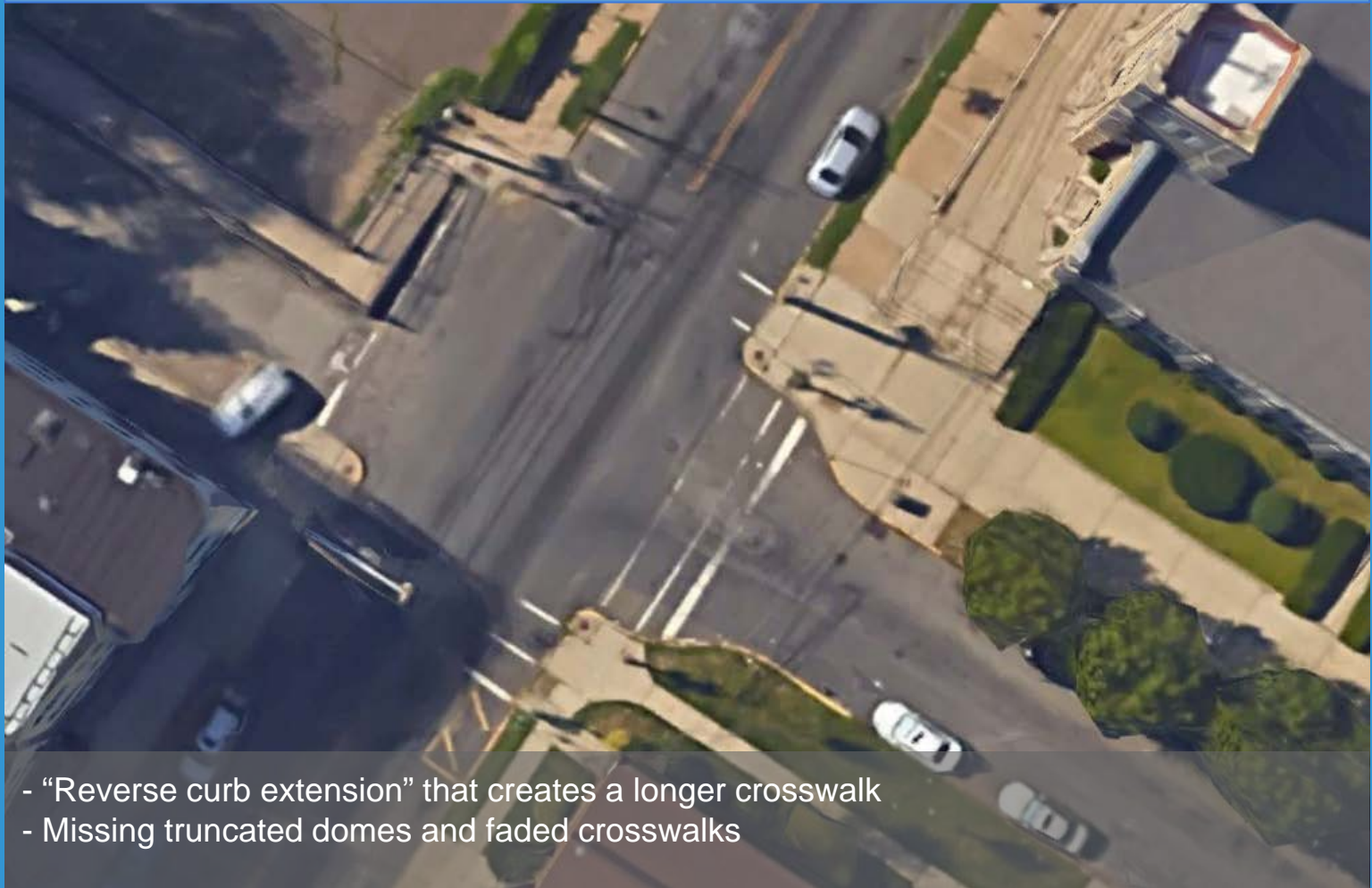
Avenue C Proposed Road Diet Enhancements



- 1 Reduce lanes to encourage lower speeds
- 2 Introduce pedestrian refuge island with truncated dome
- 3 More speed limit markings
- 4 Introduce bicycle lane, narrows road to encourage lower speeds
- 5 High-visibility crosswalks
- 6 Pedestrian lights to enhance safety at night
- 7 Extend street light and introduce back plates to discourage "light running"
- 8 Add bicycle parking
- 9 Introduce street bollards to discourage illegal parking
- 10 Add pedestrian countdown signals at intersections

[Renderings not to scale]

E. 25th Street and Avenue E Existing Conditions



- “Reverse curb extension” that creates a longer crosswalk
- Missing truncated domes and faded crosswalks

E. 25th Street and Avenue E Proposed Improvements



- Add curb extensions to shorten crosswalk lengths and improve visibility
- Install high visibility crosswalks and truncated domes
- Add stop bar and no parking zone 25' prior to crosswalks
- Add pedestrian countdown signals on every corner

Questions?



Thank you!

