Addressing Speed-Related Crashes with a Focus on Protecting Children



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November 8, 2017





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⇒ Webinar issues?

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⇒ Questions?

Submit your questions at any time in the Questions box.

Archive and Certificates

Archive posted at www.pedbikeinfo.org/webinars

- **Copy of presentations**
- ⇒ Recording (within 1-2 days)
- ⇒ Links to resources

Follow-up email will include...

- ⇒ Link to certificate of attendance
- ⇒ Information about webinar archive



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Our view

- 1. Vision Zero and making real impact on preventing speed-related crashes requires:
 - Political will/City staff buy-in
 - Public support



2. Children and youth are the right place to start



- 3. Provide:
 - Opportunities for elected official commitment – Walk to School Day
 - Action steps
 - Case studies





Mayors invited to sign on to Vision Zero for Youth

Use Walk to School Day to show public commitment.

Washington, DC Mayor Bowser signing Mayors' Statement.

Impact to date

In October 2017 a record-setting **5,581 schools** registered Walk to School Day events.

30% of events included a mayor or other elected official.

1,600 mayors were invited to participate.

More than 50% of events lead to policy or engineering changes.

Menu of options available to take action.

One Vision Zero for Youth Leadership Award.

www.visionzeroforyouth.org



Why it matters
Join
Take action
Stories



Communities creating safer streets starting where youth walk and bike

Around the world, communities are committing to eliminating traffic fatalities and serious injuries, with an approach called Vision Zero. A growing group of these cities is focused on improving safety in school zones and other places where children and youth walk and bicycle.

Vision Zero for Youth recognizes that starting with youth can be the catalyst to build community support for Vision Zero, and that Vision Zero should include a focus on youth.

Addressing Speed-Related Crashes with a Focus on Protecting Children



Leah Walton

Safety Advocate

National Transportation Safety Board





Los Angeles Mayor Eric Garcetti and Seleta Reynolds, General Manager of LADOT accept Vision Zero for Youth Leadership Award from Nancy Pullen-Seufert, National Center for Safe Routes to School

Addressing Speed-Related Crashes with a Focus on Protecting Children



Margot Ocañas

Program Coordinator, Safe Routes to School

Los Angeles Department of Transportation

Addressing Speed-Related Crashes with a Focus on Protecting Children



Nina Haiman

Director of School Safety

Juan Martinez

Director of Traffic Operations Policy

New York City Department of Transportation





Reducing Speeding-Related Crashes Involving Passenger Vehicles

Leah Walton

PBIC Webinar

November 8, 2017

About the NTSB

- Independent federal agency
- Investigates every US civil aviation accident and significant accidents in other modes
- Carries out special studies about transportation safety





NTSB Speeding Safety Study

- Reducing Speeding-Related
 Crashes Involving Passenger
 Vehicles
- Adopted by Board on 7/25/2017
- 19 safety recommendations to US DOT, NHTSA, FHWA, GHSA, IACP, NSA, and 50 states

Reducing Speeding-Related Crashes Involving Passenger Vehicles Safety Study

Why the NTSB Did This Study

- Speeding is one of most common crash factors
- From 2005-2014, nearly 113,000 fatalities
- Most speeding vehicles in fatal crashes are passenger vehicles



Study Goals

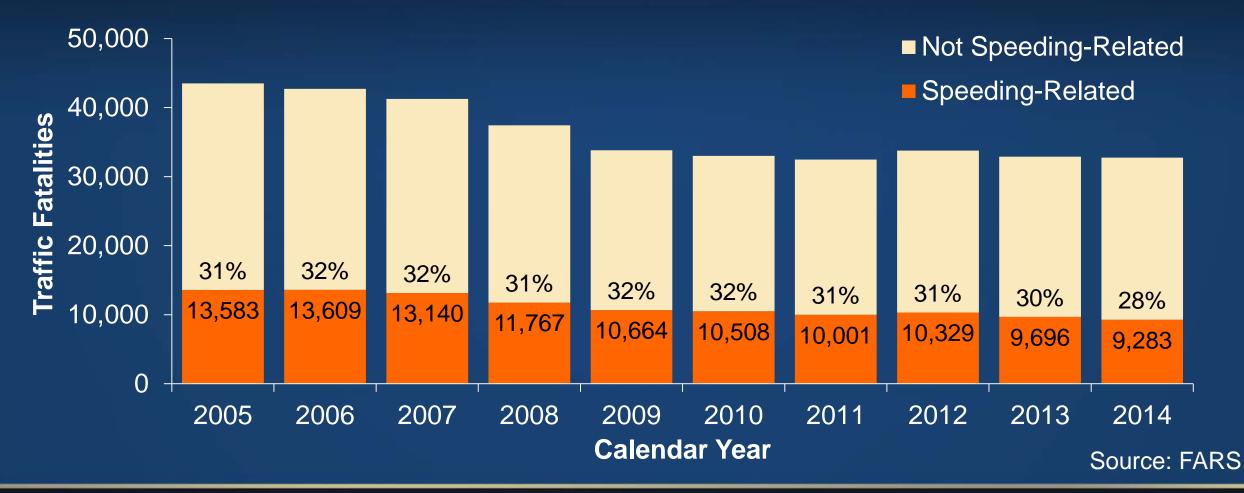
- Summarize scope of problem
- Describe risks of speeding
- Promote proven and emerging countermeasures that are broadly applicable, but underused or ineffectively used

Study Methodology

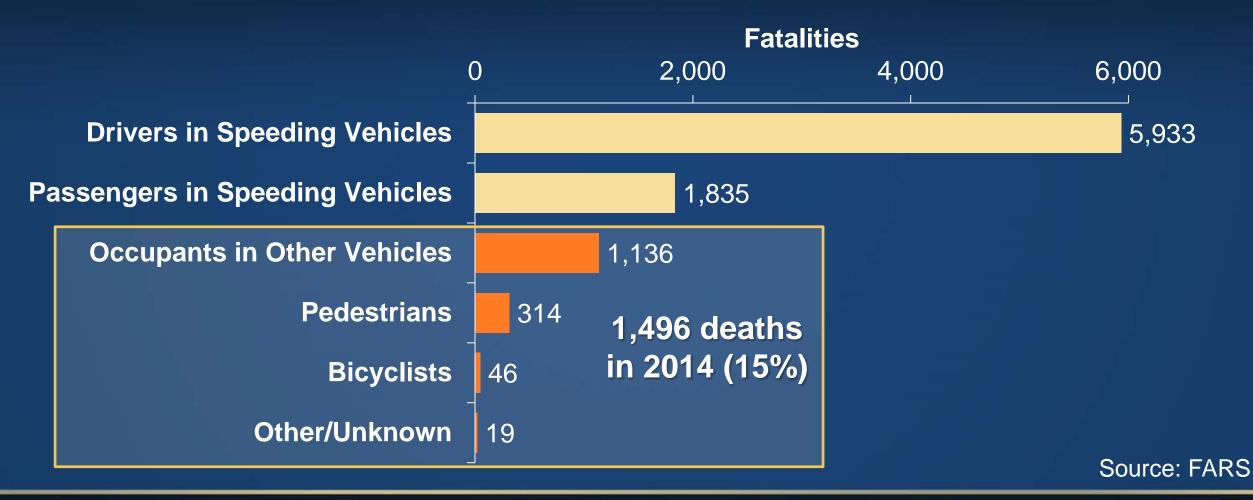
- Literature survey
- Quantitative analysis of crash data
- Stakeholder interviews
- Stakeholder technical review of study

- Federal Highway Administration (FHWA)
- National Highway Traffic Safety Administration (NHTSA)
- State and local DOTs, highway safety offices
- State and local law enforcement
- Vehicle manufacturers, equipment vendors
- Researchers, advocates, professional associations

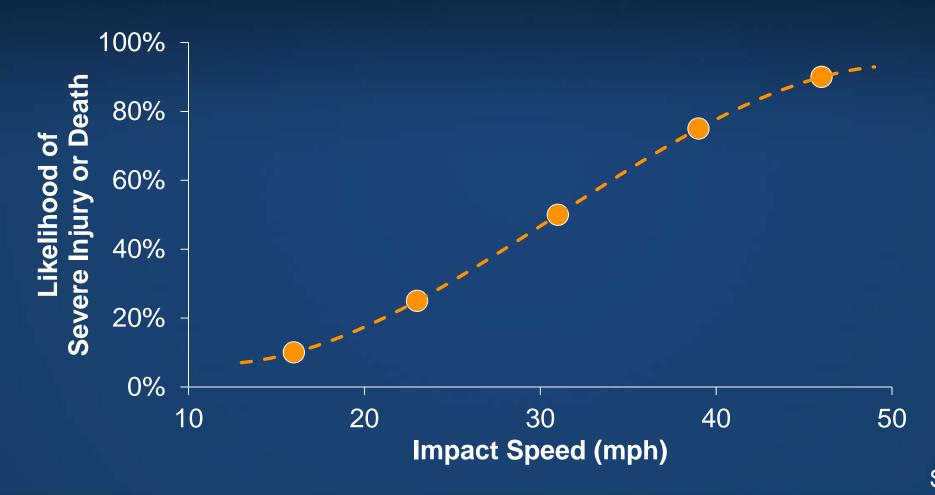
Speeding-Related Fatalities, 2005-2014



Speeding-Related Fatalities by Person Type, 2014



Speed and Pedestrian Injuries



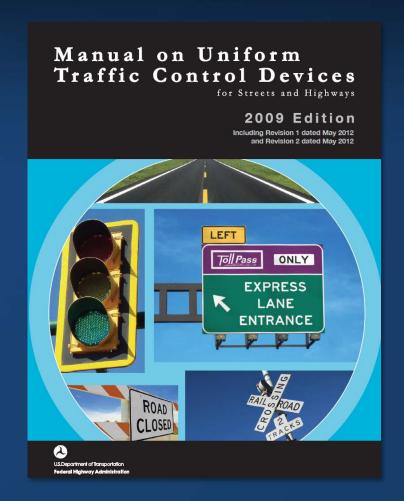
Source: Tefft 2011

Safety Issues

- Speed limits
- Data-driven speed enforcement
- Automated speed enforcement (ASE)
- Intelligent speed adaptation (ISA)
- National leadership

Speed Limits: Findings

- MUTCD guidance for setting speed limits is based on 85th percentile speed of free-flowing traffic
- No strong evidence that 85th percentile speed equates to lowest crash involvement rate
- Use of 85th percentile can result in unintended consequences, including higher operating speeds



Speed Limits: Findings (continued)

- Expert systems can systematically incorporate other factors (such as crash statistics) when setting speed limits
- The safe system approach to setting speed limits in urban areas is an improvement over conventional approaches

Speed Limits: Recommendations

- FHWA: Revise MUTCD
 - Require factors that are currently optional for setting speed limits (such as crash statistics)
 - Require that an expert system be used for validation
 - Remove guidance that speed limits be within 5 mph of 85th percentile
 - Incorporate the safe system approach for urban roads

Automated Speed Enforcement: Findings

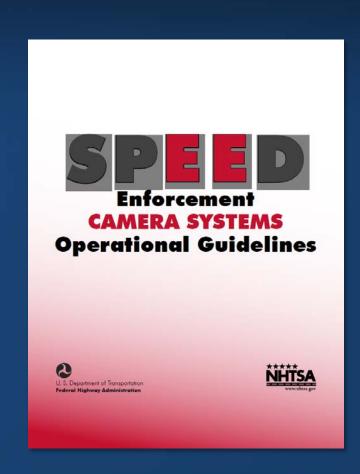
- ASE is an effective countermeasure to reduce speeding-related crashes and injuries
- Federal guidelines for ASE are outdated and not well known among program administrators
- Point-to-point enforcement has been effective in other countries, but has not been used in US



Source:
Washington, DC,
Department of
Transportation

Automated Speed Enforcement: Recommendations

- 50 states
 - Pass or amend laws to allow greater use of ASE
- NHTSA and FHWA
 - Update and promote ASE guidelines
 - Assess effectiveness of point-to-point speed enforcement



National Leadership: Findings

- The current level of emphasis on speeding as a national traffic safety issue is lower than warranted and insufficient to achieve the goal of zero traffic fatalities in the US
- Current federal-aid programs to not require or incentivize states to fund speed management activities at a level commensurate with the national injury burden of speeding

National Leadership: Recommendations

NHTSA

 Collaborate with other traffic safety stakeholders to develop and implement an ongoing program to increase public awareness of speeding as a national traffic safety issue, including an annual enforcement mobilization

US DOT

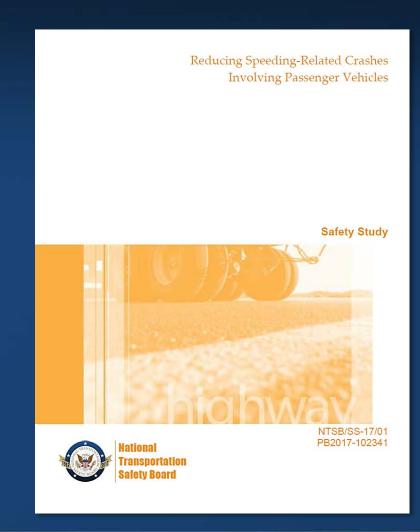
 Complete the actions called for in the 2014 Speed Management Program Plan

How will this study help?

- Advocating for local or state policies and laws around speeding
- Developing effective countermeasures for speed
- Promoting the implementation of the recommendations

For More Information

- Report
 - www.ntsb.gov > Publications > Safety Studies
- Presentations and webcast
 - www.ntsb.gov > News & Events





LOS ANGELES SAFE ROUTES TO SCHOOL





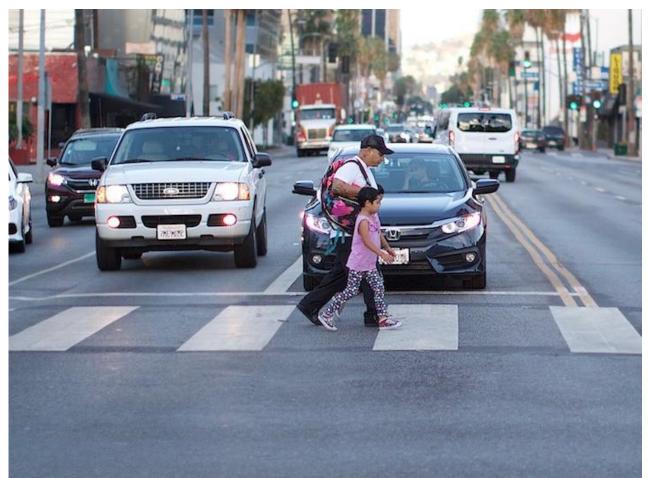
AOUTES TO

Safe Routes to School Strategic Plan



Objectives

- Establish datadriven approach
- Build strong partnerships
- Enhance funding application competitiveness
- Enhance operational efficiencies



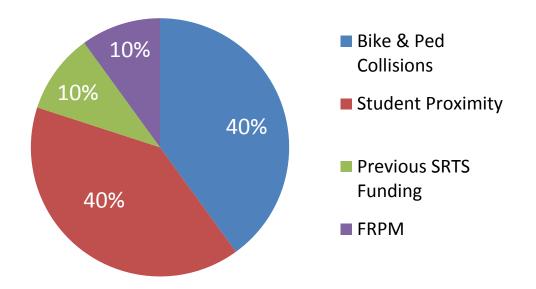


Prioritization



Ranking Methodology

- Weighted indicators balances crashes with other variables
- Data-driven ranking of schools with the most need
- Roadmap for SRTS applications and activities





Vision Zero Los Angeles



Citywide Safety Imperative



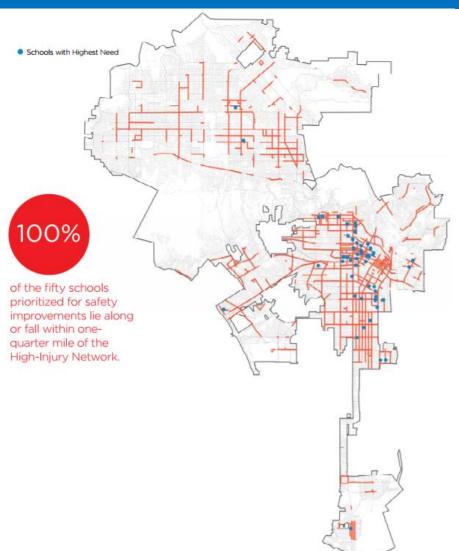


Vision Zero High Injury Network & Top 50 Schools



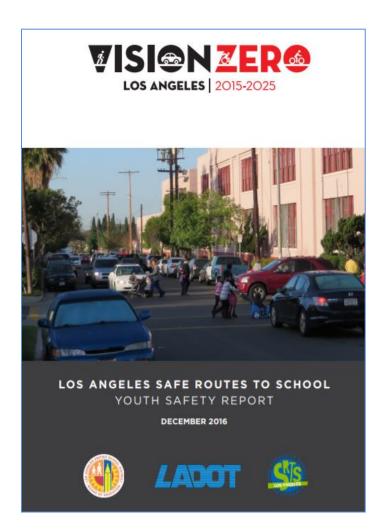
Focus Areas

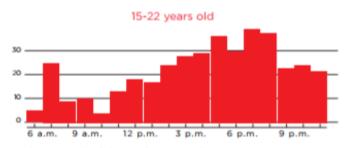
6% of the city's 7,500 miles of street account for 86% of all fatalities that involve people walking.



Youth Collisions Analysis







Crashes near Schools by Local District and Severity

LOCAL DISTRICT	KILLED	SEVERE INJURY	INJURY	TOTAL	PROPORTION BY DISTRICT	KSI TOTAL
Central	60	292	3546	3898	40%	352
East	10	37	492	539	6%	47
Northeast	20	73	827	920	9%	93
Northwest	14	59	626	699	7%	73
South	27	140	1050	1217	13%	167
West	41	243	2190	2474	25%	284
TOTAL	172	844	8631	9647	100%	1,016

Note: All ages throughout the day.

KSI Victims by Local District and Age Group Near Schools During Drop-Off and Pick-Up Hours

AGE GROUP	CENTRAL	EAST	NORTH- EAST	NORTH- WEST	SOUTH	WEST	TOTAL
0-5	8	0	1	1	6	1	17
6-11	3	1	1	3	11	6	25
12-14	7	1	3	3	8	10	32
15-22	20	2	5	4	7	19	57
23+	65	4	18	7	17	44	155
Missing Age Group	3	0	0	2	2	1	8
Total <=22	38	4	10	11	32	36	131
% of Total KSI Youth	29%	3%	8%	8%	24%	27%	100%
Total all ages	106	8	28	20	51	81	294
% of Total KSI	36%	3%	10%	7%	17%	28%	100%



The 5 E's Portfolio



Evaluation/Fund

Private /ehicle, 33.6%

Bike, 1.1%

SRTS Plans

Encouragement



Education



\$3M

Walk to School Day, Safety Campaigns, Education Programs, Safety Zones and Safety Patrols

Enforcement



Engineering



\$17M

Construction

\$3M

Planning

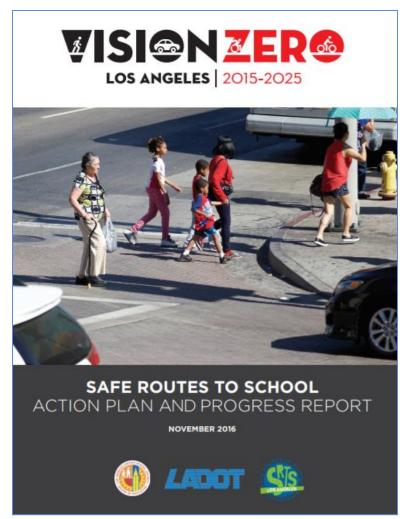


Vision Zero & Safe Routes to School Outcomes

LOS ANGELE

Share Outcomes

- Create Safe Streets for All
- Develop a Culture of Safety
- Adopt new Policy & Legislation to Address Safety
- Respond to Relevant Data





SRTS Plans: Implementation

LOS ANGELES CALLEO BULA

Infrastructure Toolbox

- Build out the Neighborhood Enhanced Network
- Innovative treatments
- Traffic calm school neighborhood networks
- Evaluation









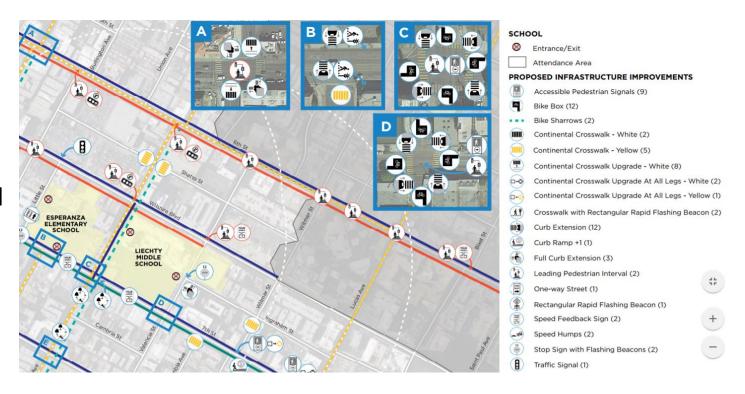


SRTS Plans: Public Participatory Planning



Walking Safety Assessments

- Cross-agency engagement
- Middle school champions
- Route to school map app





Near-Term Implementation



Low-Cost Safety Solutions

- High-viz crosswalks
- Curb extensions
- Lead Pedestrian Interval (LPI)
- Crosswalk timing
- Demonstration projects





Institutionalizing Data Collection



Local School Mode Share Reporting

- LAUSD-endorsed
- Schooladministered
- School reports
- SRTS Plans

SAFE ROUTES TO SCHOOL	A CONTRACTOR OF THE PARTY OF TH				
STUDENT TRAVEL TALLY PROJECT	CT LISANGE ES				
The Travel Tally Project is a TWO (2) DAY in-classroom data collection exercise to travel to and from school. Analysis of students' travel behavior assists Safe Route developing plans to reduce speed and promote responsible travel by adults and streets. Thank you for joining other schools by collecting your data on Septembe SCHOOL NAME: TEACHER'S LAST NAME: DATA COLLECTION DATE CLASSROOM NUMBER CLASS SIZE "If there are multiple gade les proportion, and clarify the ray	o capture how students es to School (SRTS) in children on our city				
Tell students to raise their hand only once for each question. (Be creative with your younger students to support this outcome). 2. Ask "How will you leave so your younger students to support this outcome). Please confirm "To" and younger students to you leave so you you leave so you lea	one at a time. They may of travel. when each travel choice d write the number in the chool today?" when each travel choice I "From" counts are equal. es in the Day 2 comment box.				
SURVEY DAY WEDNESDAY # OF STUDENTS SURVEYED WEATHER SU - SUNNY RA - RAINY OV - OVERCAST					
Cholces WALK BIKE SCOTIESCENDE SCHOOL BUS FAMILY VEHICLE (Hamble is car) its time.	RPOOL PUBLIC TRANSIT Motro or city bus, subway				
FROM School Pleas	se turn over for Day Two				



Citywide & Local School Safety Campaigns







Institutionalizing Education



Walk to School Day

- Safety emphasis
- Tiered promotion, registration and logistics
- LAUSD "boots on the ground"
- Online tools and reporting
- Cost-efficient scaling





Institutionalizing Education



Elementary School Safety Education

- On-yard, handson activities
- Active transportation emphasis
- Comprehensive engagement





Institutionalizing Education



Middle School Safety Education

- Physical Education curriculumorientation
- On-bike activities
- Active transportation emphasis





Speed Enforcement

LOS ANGELES CALLEORNIA

High Injury Network Speed Surveys

- Survey expirations
- Prioritization
- School communications
- SRTS Plans

CITY OF LOS ANGELES

INTER-DEPARTMENTAL MEMORANDUM

Date: October 7, 2015

To: Transportation Committee

c/o City Clerk, Room 395, City Hall Attention: Honorable Mike Bonin, Chair

From: Seleta J. Reynolds, General Manage
Department of Transportation

Subject: ENHANCED SPEED ENFORCEMENT AND TOOLS TO REDUCE SPEEDING

(COUNCIL FILE NO. 15-1006)

SUMMARY

Council Motion 15-1006 (Englander-Bonin) asked the Los Angeles Department of Transportation (LADOT), in consultation with the Los Angeles Police Department (LAPD), to provide a report on the current state of speed enforcement in the City of Los Angeles, and make recommendations to more effectively enforce safe travel speeds. Additionally, the departments were asked to report on pilot projects that could be implemented quickly to reduce speeding.

The process of setting speed limits in California can present challenges for municipalities. With Vision Zero, proper perspective on the Issue of speed as it relates to motor vehicle injuries, guides a path forward.

BACKGROUND

Vision Zero and the High Injury Network

The Mayor's Executive Directive No. 10, issued on August 24, 2015, commits the City to eliminate traffic fatalities by 2025. Fundamental to the Vision Zero principles and goals is a discussion on vehicle speeds since speed is a primary indicator of whether or not a person will survive a crash. According to the Federal Highway Administration (FHWA) and the Insurance Institute of Highway Safety, speeding was a contributing factor in about 30% of crash fatalities nationwide in 2013.¹

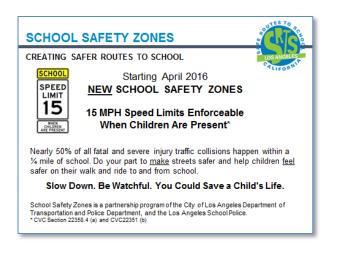


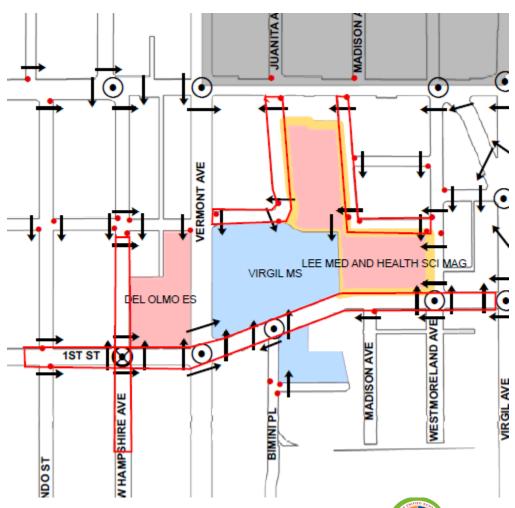


School Neighborhood Safety Zones



- 11 pilot sites
- Cross-agency collaboration
- Outreach
- Enforcement
- Evaluation



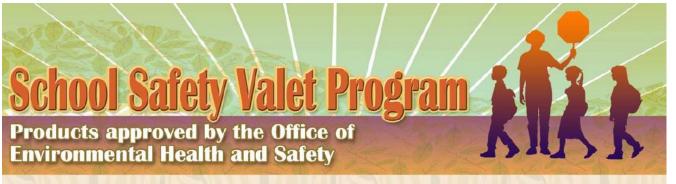


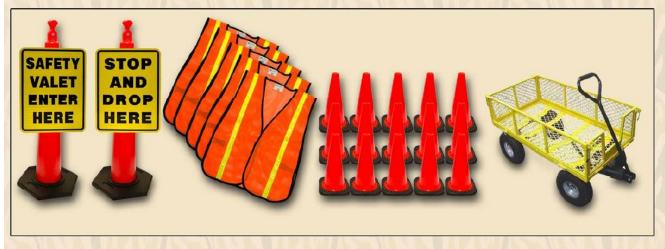
School Safety Valet & Patrol Program





- Top 50 Pilots
- Peer education
- District-owned
- Cross-agency engaged







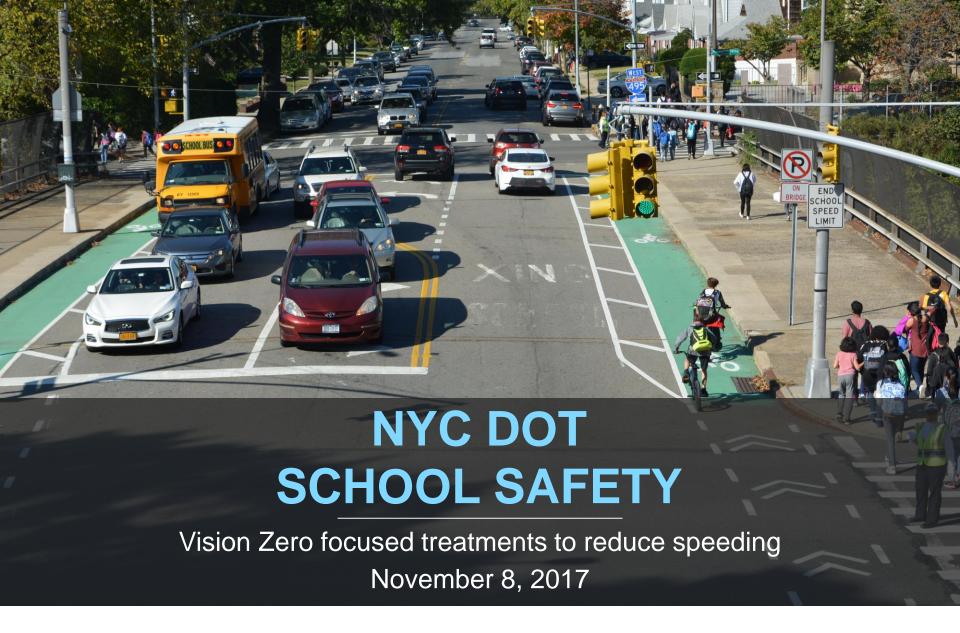
Thank You!



Margot Ocanas
Safe Routes to School Coordinator
Los Angeles Department of Transportation
(213) 928-9707

margot.ocanas@lacity.org







VISION ZERO

- Multi-agency effort to reduce traffic fatalities in NYC
- Borough Action Plans released in 2015
- Priority Intersections, Corridors, and Areas identified for each borough



2

VISION ZERO & SCHOOLS

Schools

- NYC DOT School Safety overlays school locations on VZ map
- Unit generally focuses on schools near VZ priority geographies



STREET REDESIGNS

- NYC DOT focused on street redesigns, whether conducted by in-house or capital crews
- Movement away from signage based treatments





SAMPLE PROJECTS

OCEANIA ST - 210 ST: LOCATION



OCEANIA ST/210 ST: PRIOR CONDITIONS



OCEANIA STREET-210 ST: PRIOR CONDITIONS

Illegal U-Turns & Double Parking in Front of School



OCEANIA STREET - 210 ST: SPEEDING

Speeding

Location 1 Oceania St, from Horace Harding Expy S Service Rd to Slip

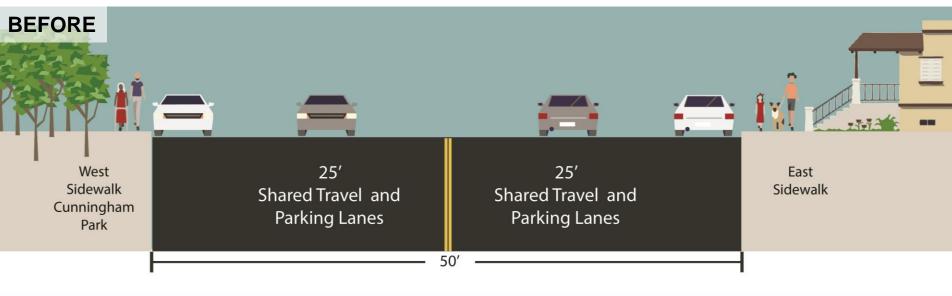
- 89% above 25 MPH speed limit
- Maximum speed recorded = 40 MPH

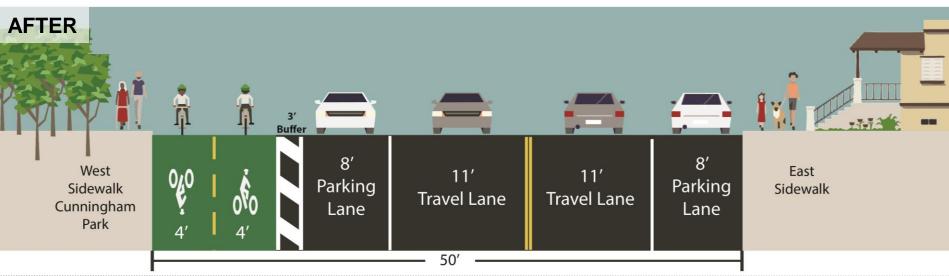
Location 2 210 St, from 67 Av to 69 Av

- 94% above 25 MPH speed limit
- Maximum speed recorded = 49 MPH



OCEANIA ST - 210 ST: NEW STREET DESIGN





OCEANIA ST - 210 ST: STUDENT INVOLVEMENT







OCEANIA ST - 210 ST: BEFORE & AFTER





OCEANIA ST - 210 ST: BEFORE & AFTER





OCEANIA STREET - 210 ST: SPEEDING DATA

Project reduced speeding in front of the school by 50%

Oceania St adjacent to MS 74 (between HHE and slip lane)	Before	After	
Average Speed	30.6 mph	23.6 mph	
% Above Speed Limit	88.5 %	39.4 %	
85 th Percentile Speed	35.0 mph	28.3 mph	

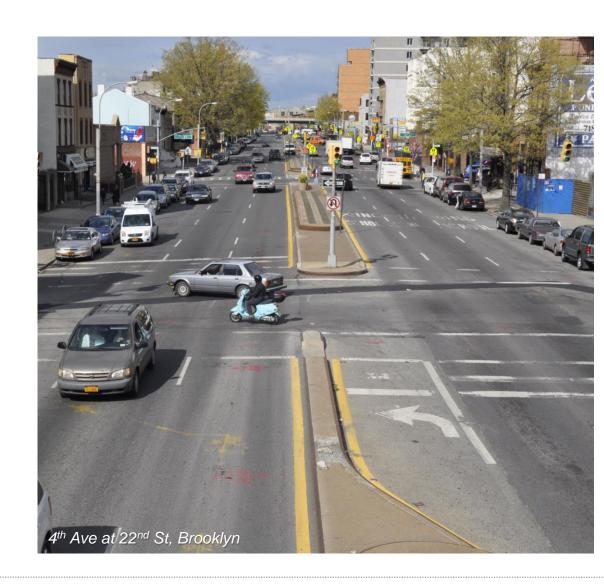
210 St between 67 Ave and 69 Ave	Before	After
Average Speed	34.4 mph	31.2 mph
% Above Speed Limit	94.4 %	87.0 %
85 th Percentile Speed	40.7 mph	36.0 mph

4TH AVE, BROOKLYN



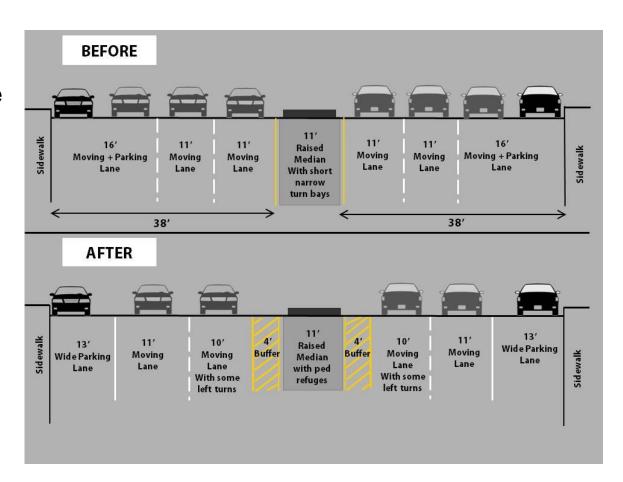
4TH AVE: PRIOR CONDITIONS

- High speed, high crash corridor bisecting dense neighborhood
- Speeding: >50% Midday (10am-4pm): up to 80% Evenings (after 7pm)
- 7 pedestrian fatalities:
 2006-2011 = top 10%
 severest corridor in
 Brooklyn
- High percentage of children along corridor walk to school, low car ownership



4TH AVE: NEW STREET DESIGN

- Remove one moving lane in each direction
- Lengthen left turn lanes
- Add pedestrian median refuges
- Ban selected left turns



4TH AVE: SCHOOL SUPPORT

	School	Туре	Primary Student Transport
Gowanus Bay	Al-Noor	K-12	Bus
	Beacon	Elementary	Car/Walk
278	SP HS	High	Walk/MTA
Sylvan	PS371	High/Special Ed	Bus
and the state of t	PS24	Elementary	Walk
	MS136	Middle	Walk
Sunset Park	PS503	Elementary	Walk
Son Son Service Servic	PS506	Elementary	Walk
The There is the state of the s	PS971	Elementary	Walk

4TH AVE: BEFORE & AFTER





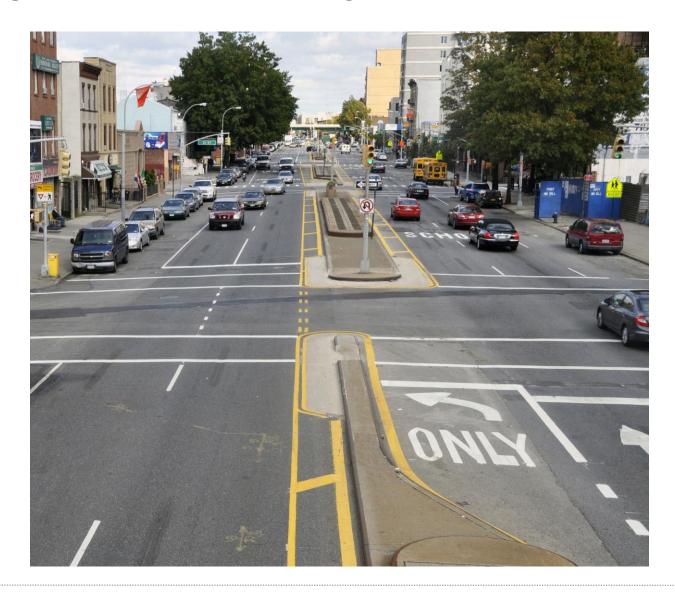
4TH AVE: BEFORE & AFTER



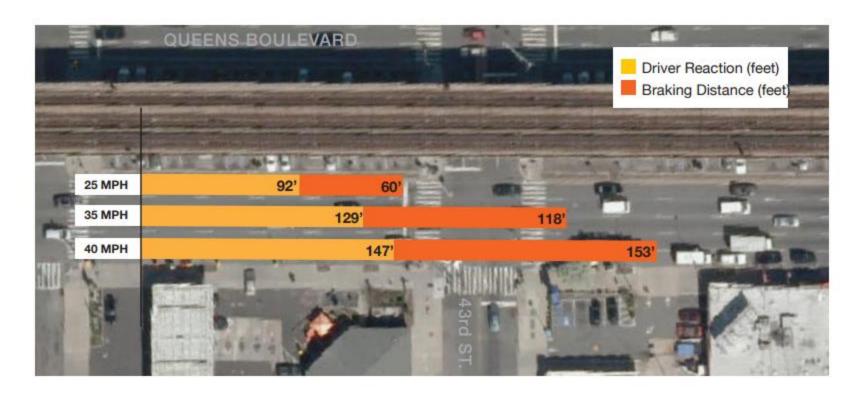


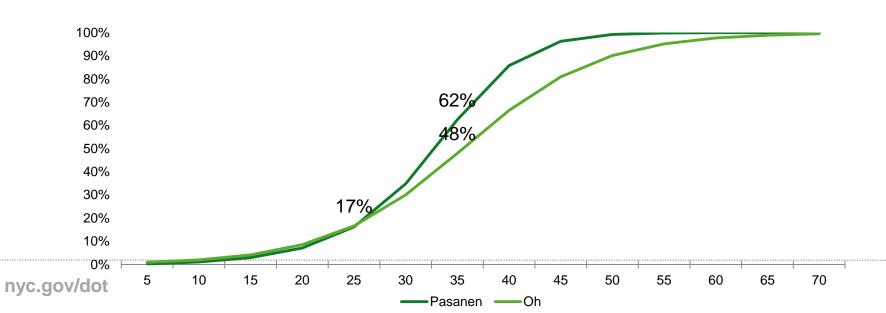
4TH AVE: POST IMPLEMENTATION DATA

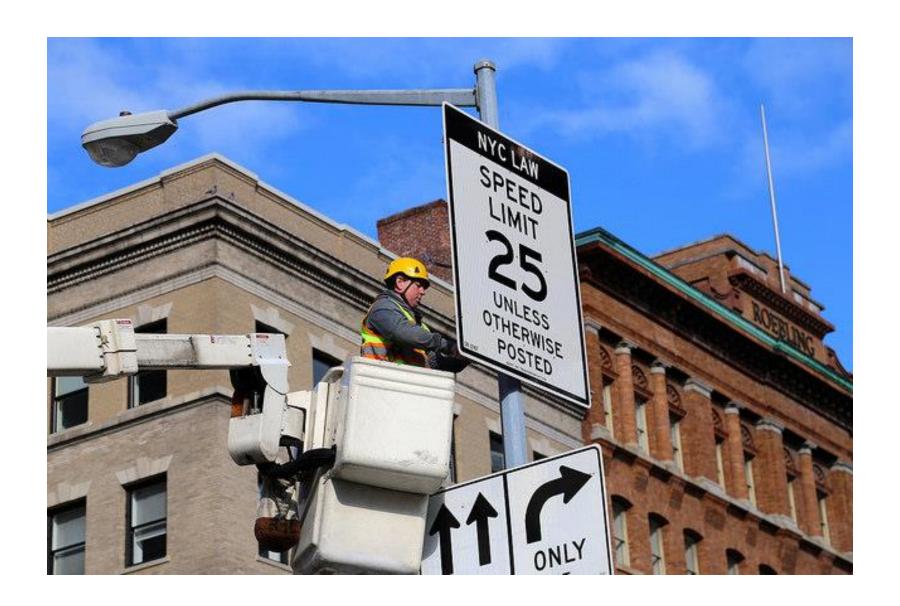
- Total crashes were reduced by 12%
- Pedestrian injuries decreased by 29%
- Speeding was reduced by 38%

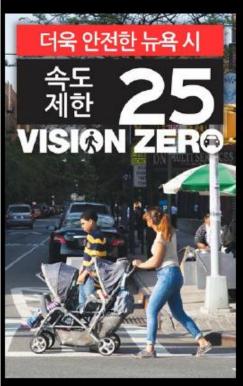


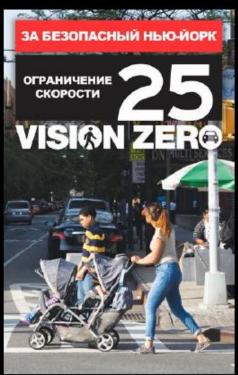
AUTOMATED ENFORCEMENT PROGRAM

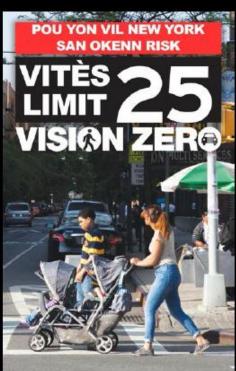


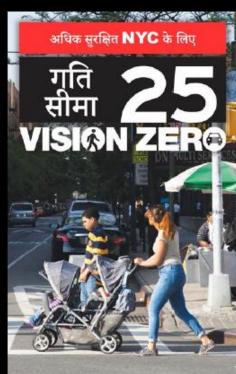




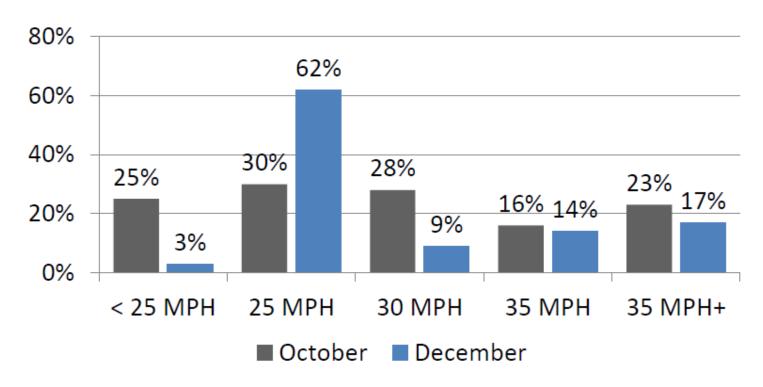








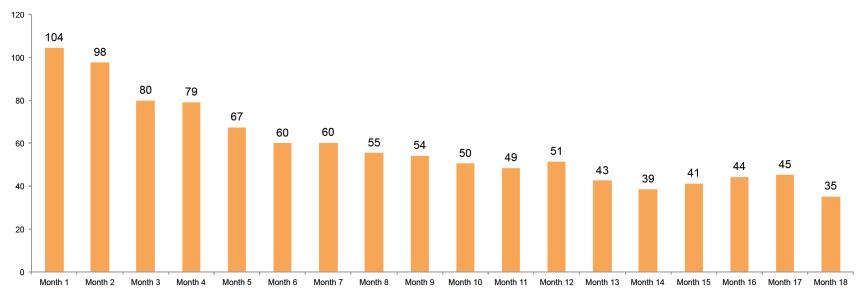
Drivers: What do you think the speed limit is in New York City? Please enter a number in MPH.



From October through December, knowledge of the speed limit doubled from 28% to 62%, and the median speed dropped 5 MPH.



AVERAGE DAILY VIOLATION AT TYPICAL SPEED CAMERA LOCATION BY MONTH



DECLINE IN SPEEDING DURING SCHOOL HOURS ON KEY CORRIDORS (DAILY AVERAGE)

Midland Avenue



FIRST DEC MONTH 2016 96 42

-56%

Atlantic Avenue



FIRST DEC MONTH 2016 182 518

-65%

Park Avenue



FIRST DEC MONTH 2016 39 10

-74%

Ocean Parkway



FIRST DEC MONTH 2016 432 104

-76%

Hillside Avenue



FIRST DEC **MONTH 2016** 532 102

-80%

Grand Concourse



FIRST DEC MONTH 2016 75 460

-84%

Baychester Avenue



FIRST DEC MONTH 2016 216 60

-72%

Union Turnpike



FIRST DEC MONTH 2016 590 127

-78%

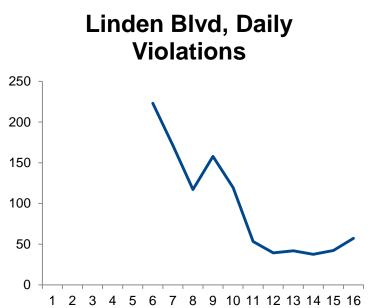
Flatbush Avenue



FIRST DEC MONTH 2016

506 75

-85%



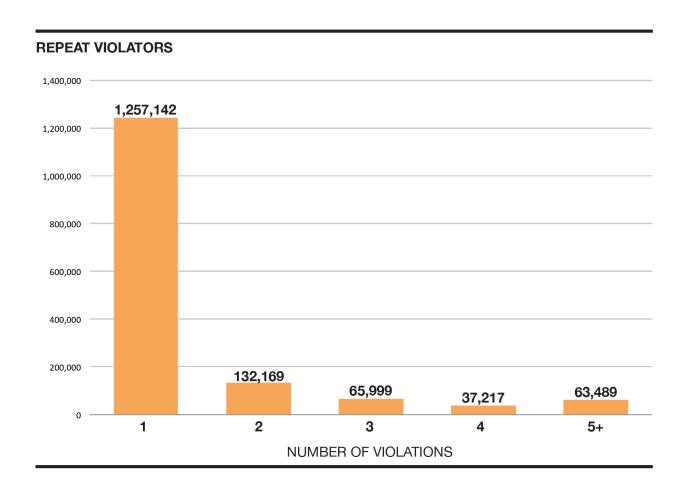


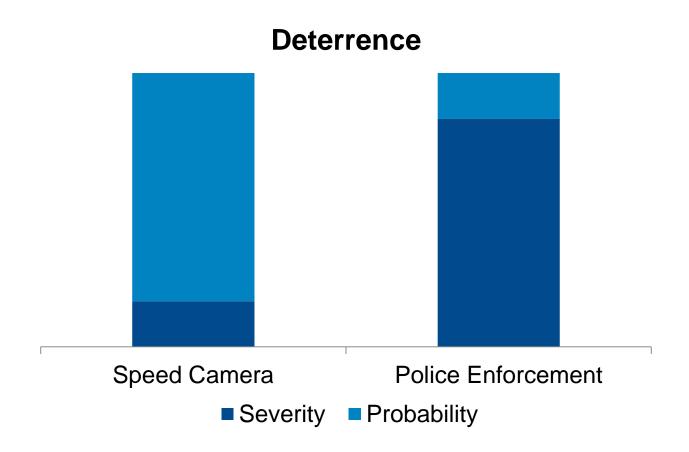
BEFORE/AFTER CHANGE IN CRASHES AND INJURIES IN SCHOOL ZONES WITH SPEED CAMERAS

(Before: 3 years prior to installation

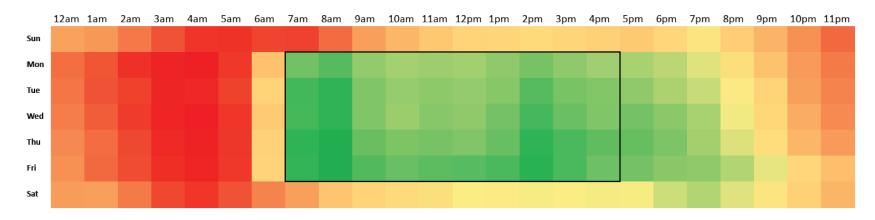
After: an average of the full years after installation)

	Before Period, Citywide	After Period, Citywide	Percent Change
CRASHES			
Total Crashes	7,980	7,361	-7.8%
Crashes w/ Injuries	1,833	1,556	-15.1%
INJURIES			
Motor Vehicle Occupant	1,914	1,665	-13.0%
Pedestrian	541	415	-23.3%
Cyclist	142	132	-7.0%
Total Injuries	2,597	2,213	-14.8%

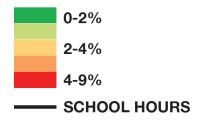




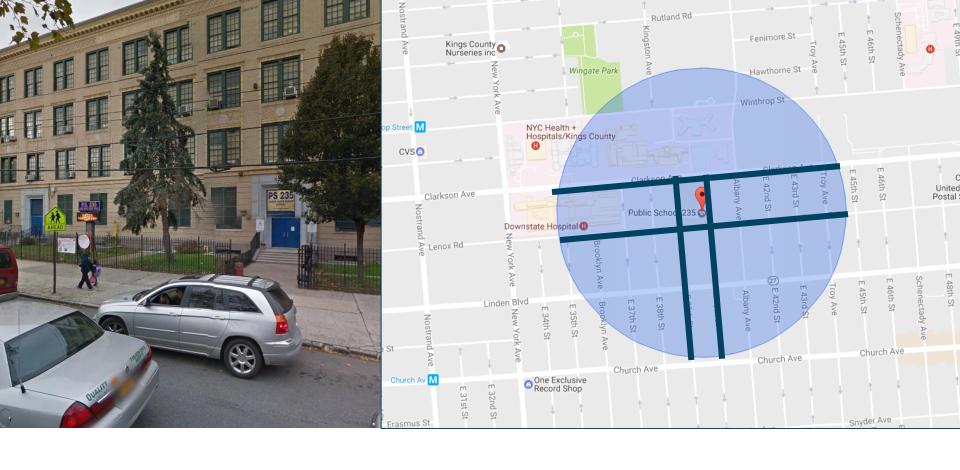
SPEEDING BY TIME OF DAY



Percent observed vehicles speeding 11 MPH and above by speed cameras.



Fewer than 1 in 10 speeding deaths occurred on school days during school hours.



PS 232 in Brooklyn
Top Quartile of Injuries
Zero speeding tickets issued on all mobile
deployments



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NYC DOT

Discussion

⇒ Send us your questions



- ⇒ Follow up with us:
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