

Streets for People:

Using Data to Plan Baltimore's Slow Streets



What you will learn

What we will cover	Focus	Presenter
Introductions and framing the discussion of Slow Streets in Baltimore	Session Moderator	Yolanda Takesian
Introduction to Slow Streets and peer city examples with focus on Oakland, CA	Their Value and Current Practice	Carol Kachadoorian
The evolution of and opportunities for Slow Streets in Baltimore City	Baltimore City Program	Matthew Hendrickson
Goals, criteria and data for assessing Slow Streets candidates	Data Sources	Matthew Hendrickson
Discussion of data, selection criteria and future possibilities	Participant Discussion	Liz Gordon

S l o w S t r e e t s



More people out walking and bicycling



Not enough space



Pedestrians and bicyclists on Castellana Avenue, which was closed to vehicles, in downtown Madrid on May 10. CESAR LUIS DE LUCA/PICTURE-ALLIANCE/DPA/AP IMAGES



One response: Slow Streets

- Provide room for physical activity, while respecting social distancing
- Temporary neighborhood street closure to through traffic

What it's not:

- Quick build for a bike network
- Not community event space



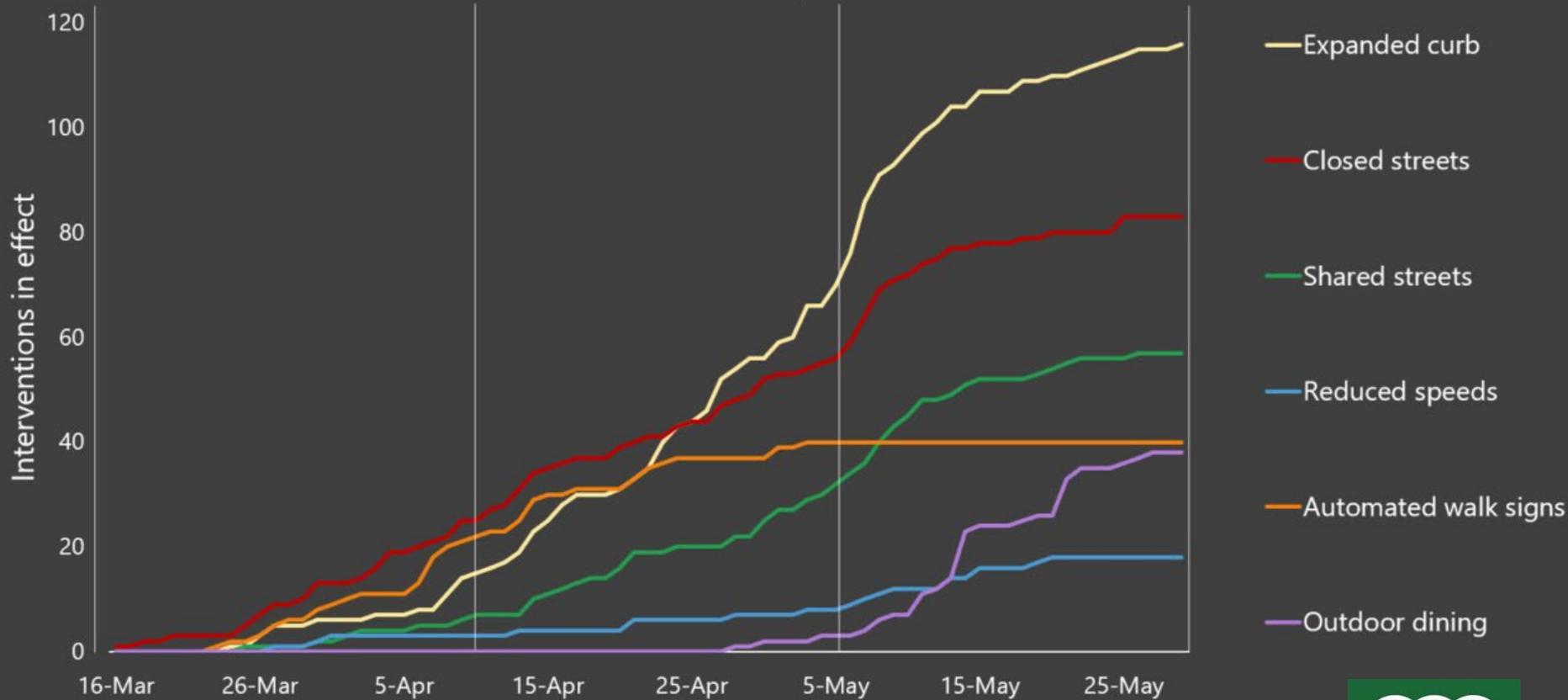


Allow for freight and delivery, emergency services

St. Paul, MN, Walker Consultants



Intervention Adoption over Time





San Diego, CA



Minneapolis



New York



Los Angeles



Boston



Oakland

Are older adults remaining active?

Survey:
March 31 to April 7
May 4 to 17

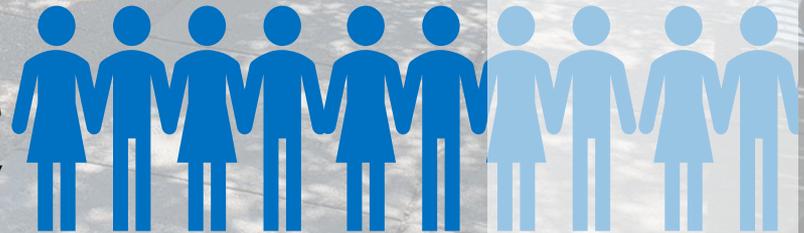
94% to 96%



45% 3 to 5 days a week



55% to 65% same or more activity



Are more people cycling?

Older adults

- 6% cycling again
- 47.2% cycling more often

Bike shop observation:

- More people who haven't ridden in 10 or 20+ years buying bikes
- Buy basic bike at the start of the pandemic; now upgrading
- More immigrants and people of color

Common experiences and case study





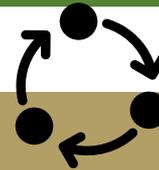
Highlights

Goals



- Clear safety and health impact goals
- Further equity efforts
- Reflect delivery and emergency access needs
- Target miles, geographic balance

Processes and logistics



- Leverage active transportation network
- Community volunteers maintain
- Coordinate with agencies; support goals
- Identify staffing and financial resources

Equity actions



- Community engagement and on-going dialogue
- Cultivate community paid liaison for outreach and engagement
- Adjust program for equity needs



Oakland, CA

APRIL 11

Slow
Streets



MAY 22

Essential
Places



JUNE 19

Flex Streets
Initiative



JULY +

Evaluate
and plan

OAKLAND
SLOW
STREETS

CALLES LENTAS
慢行路 Đường Phố
Đi Chậm Lại

#OaklandSlowStreets
tinyurl.com/oaklandslowstreets

CITY OF Oakland
Oak 311 to report issues



LET'S OAKLAND

2019 OAKLAND BIKE PLAN



City of
Oakland

Department of
Transportation



- ✓ Community engagement
- ✓ Agency consultation
- ✓ Stakeholder consultation





- ✓ Community engagement
- ✓ Agency consultation
- ✓ Stakeholder consultation

Bike plan was the wrong model





- ✓ Community engagement
- ✓ Agency consultation
- ✓ Stakeholder consultation

Bike plan was the wrong model

Greater concern for traffic violence



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Insufficient equity considerations



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→ A different tack



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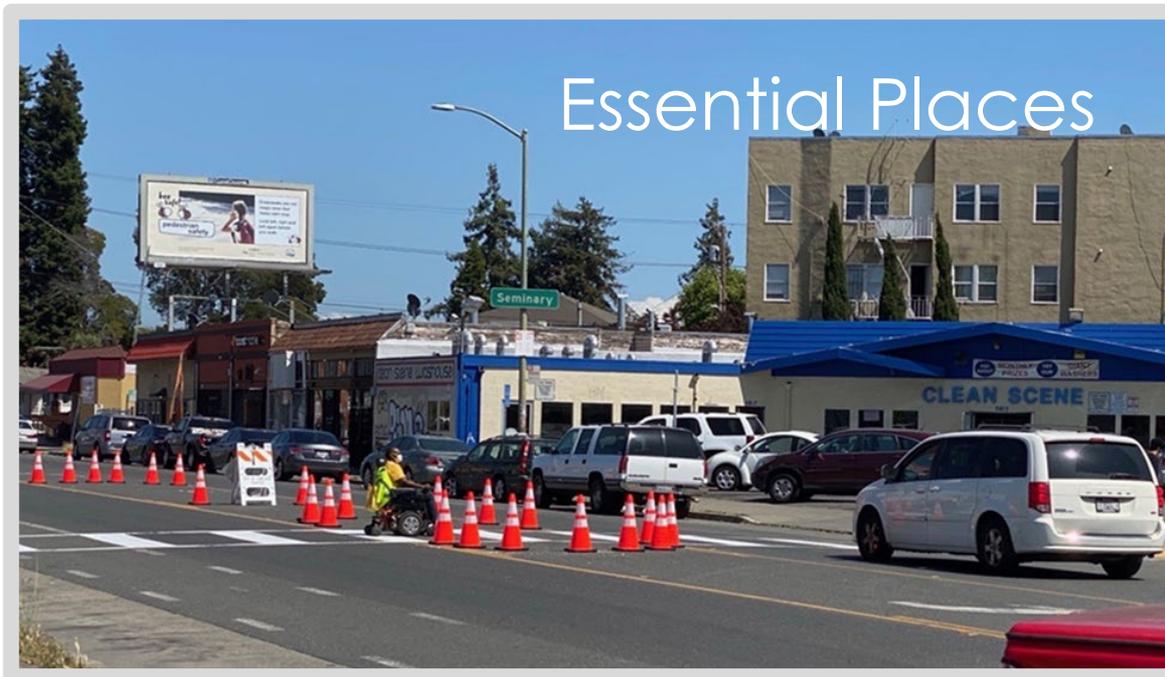
Beyond the Bike Plan

Community feedback

- Online survey skewed wealthier, whiter neighborhoods
- More and different engagement approach needed

Race/Ethnicity	% of Oaklanders	% of Respondents	# of Respondents
American Indian and Alaska Native or Native Hawaiian and Other Pacific Islander	1%	0%	0
Asian	13%	8%	53
Black or African American	20%	7%	46
Hispanic/Latinx	23%	5%	36
Mixed Race/Other or Wrote In	19%	13%	87
White	24%	67%	444
Grand total	100%	100%	666

Slow Streets evolution



Need room for your customers to maintain physical distance?

THE FLEX STREETS INITIATIVE CAN HELP!

The City of Oakland is streamlining its permitting requirements and waiving all permitting fees to make it easier for businesses to physically distance customers in the following areas:

SIDEWALKS AND PARKING LANES

A TRAFFIC LANE

PRIVATE PARKING LOT OR OUTDOOR AREA

CITY-OWNED OUTDOOR PROPERTY

Businesses can use these spaces for extra seating, expanded merchandise displays, or customer queuing.

Learn more at [OaklandCA.gov/FlexStreets](https://oaklandca.gov/FlexStreets) or call (810) 238-7398.

¿Necesita espacio para que sus clientes mantengan la distancia física?

¡LA INICIATIVA FLEX STREETS PUEDE AYUDAR!

La Ciudad de Oakland está racionalizando sus requisitos para la obtención de permisos y renunciando a todas las tarifas de permisos para facilitar a los negocios la distancia física de los clientes en las siguientes áreas:

ACERAS Y CARRILES DE ESTACIONAMIENTO

UN CARRIL DE TRÁFICO

UN ESTACIONAMIENTO PRIVADO U OTRA ÁREA EXTERIOR PRIVADA

PROPIEDAD AL AIRE LIBRE DE LA CIUDAD

Los negocios pueden usar estas espacios para sillas de ruedas, exhibiciones expandidas de mercancía o sillas para que los clientes separen en fila.

Aprenda más en [OaklandCA.gov/FlexStreets](https://oaklandca.gov/FlexStreets) o llame al (810) 238-7398.





Beyond the Bike Plan



Oakland Slow Streets Program Feedback Form

Thank you for providing feedback on your use and your views on the Oakland Slow Streets Program below. If you have a location-specific issue, please instead report it to OAK 311 (<https://www.oaklandca.gov/services/oak311>).

Gracias por darnos su opinión sobre su utilización y sus puntos de vista sobre el Programa Slow Streets de Oakland. Si tiene un problema específico a una ubicación, por favor repórtelo a OAK 311 (<https://www.oaklandca.gov/services/oak311>).

謝謝您在下面針對「屋崙(奧克蘭)市慢行街道」計劃提供使用經驗和看法。如果您有關於特定地點的問題，請向OAK 311回報(<https://www.oaklandca.gov/services/oak311>)。

Volunteer Sign-Up to Help Seniors, low-income families and other vulnerable populations in Oakland!!

Please fill this form out if you are able to help Oakland respond to COVID-19 (e.g. posting signs for slow streets, distribute food to seniors or call them and other vulnerable populations (undocumented, LGBTQ +)

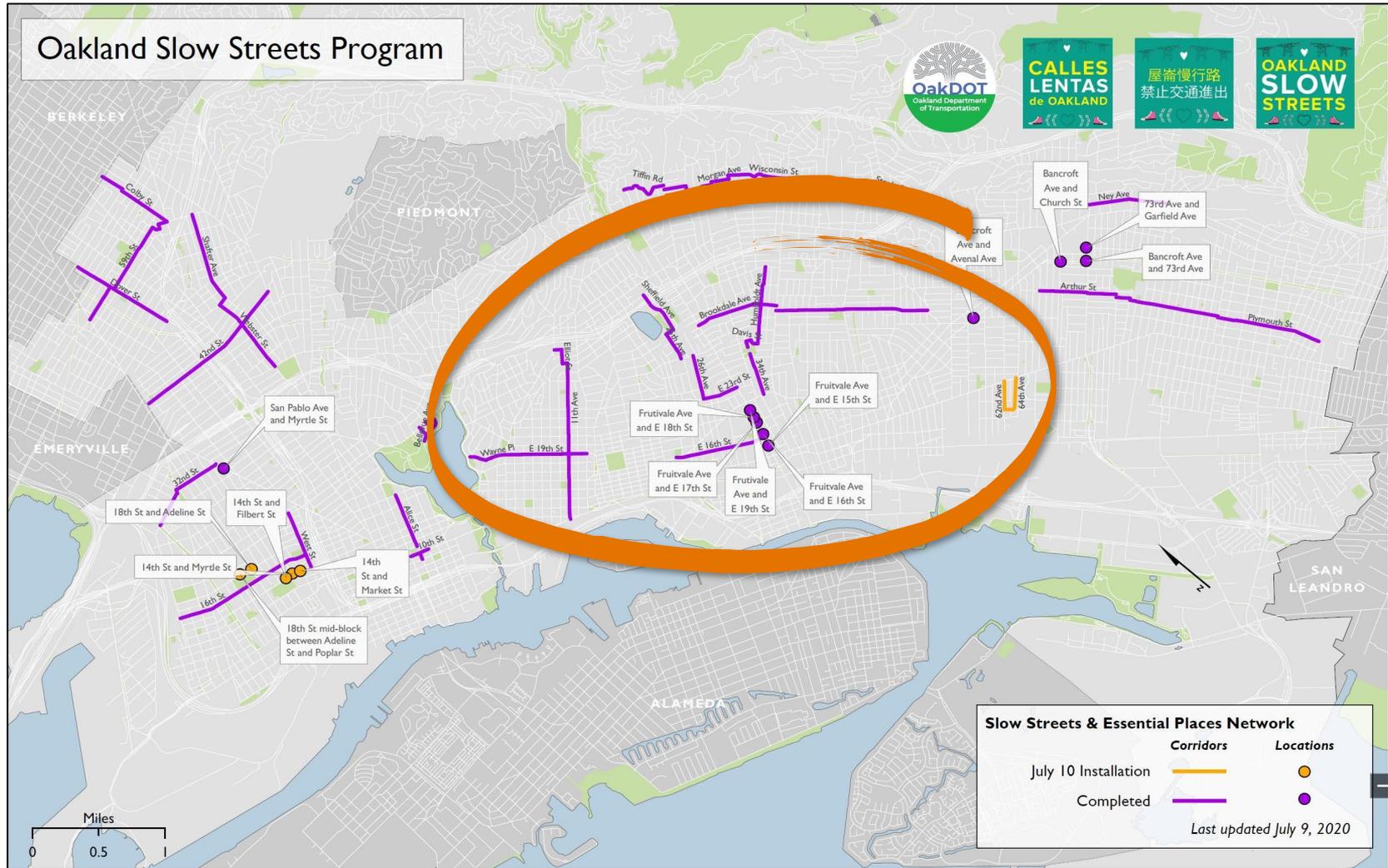
* Required

Name (First & Last) *

Your answer

Email address *

Oakland Slow Streets Program



Slow Streets & Essential Places Network

	Corridors	Locations
July 10 Installation		
Completed		

Last updated July 9, 2020

What's next?

- Leveraging bicycle and pedestrian master plans
- Evaluating program
- Revamped community engagement for Phase 2 (next 1-2 years)
 - Use when restrictions lifted
 - Responding to traffic violence concerns





GOLDEN
GATE
DONUTS

Benjamin Moore
Paints
Mark's Paint Mart

ROAD CLOSED
TO
THRU TRAFFIC



TRAFFIC MANAGEMENT INC.
800 263-2999
WWW.TRAFFICMANAGEMENT.COM



dbiTilde
collaborative

Mobility planners and practitioners

Thank you
Carol Kachadoorian
carol@dbiTildeCollaborative.com

Resident collaboration and City DOT are bringing...new uses to Baltimore streets

- ▶ Neighbors in East Baltimore are organizing around the concept of Livable Streets
 - ▶ 27,400 residents
 - ▶ Close to half of households do not have access to a vehicle

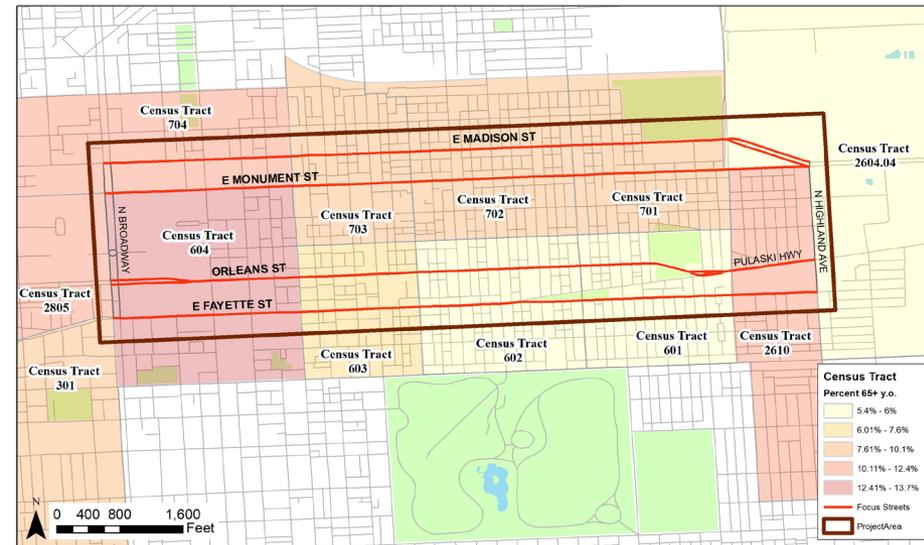
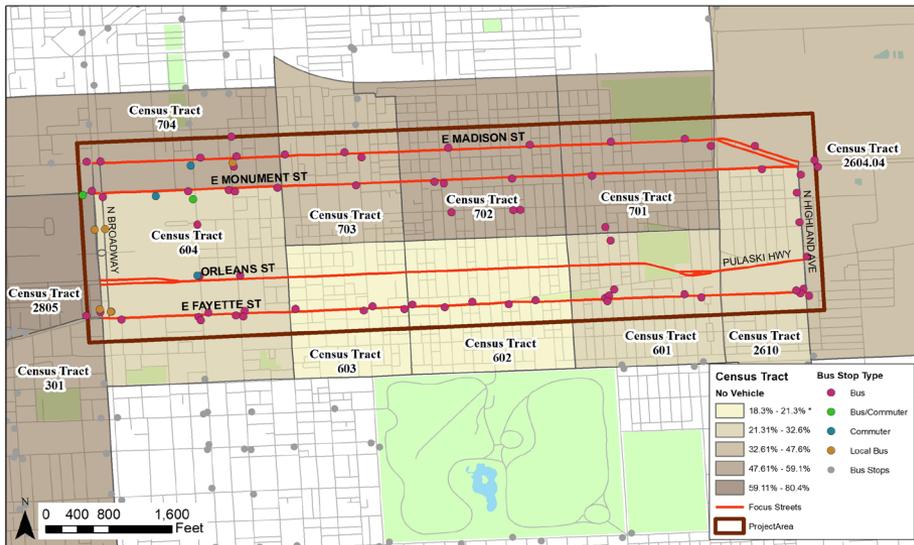
While major commuter routes are a critical focus, Slow Streets have helped to start the conversation



Household Vehicle Availability and Transit Options



Percent 65+ Year Old by Census Tract



*City Average: 28.9%

July 6, 2020
dbi|Tilde collaborative
Mobility planners and practitioners

June 19, 2020
dbi|Tilde collaborative
Mobility planners and practitioners



Baltimore Slow Streets Program: Data and Feedback



Slow Streets

The City of Baltimore recognized

- **A need** to provide residents with more space to be outside and maintain social distance in response to COVID-19 pandemic
- **An opportunity** to respond to safety concerns on City streets with this new program
 - Traffic volumes are down but speeding is up
 - Treatments can help reduce traffic conflicts especially in areas with more people now walking and biking



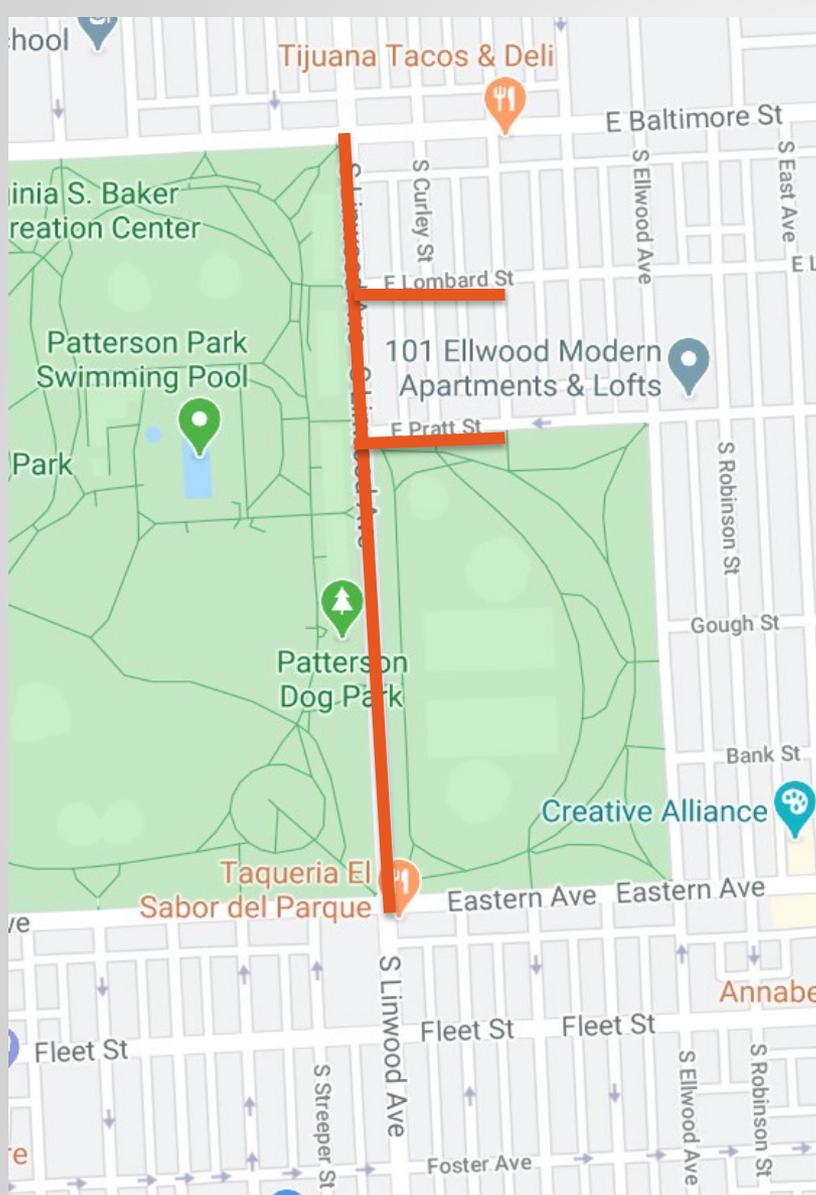
Implemented Example: Druid Hill Park and Lake Montebello

- Park visitors are not always leaving physical distance
- This can be improved both through communication and providing more space
- Previous treatments at Lake Montebello and Druid Hill Park
- Newest installation on Linwood Street at Patterson Park
- **City Council Bill passed – 25 miles required city wide**





Implemented Example: Patterson Park Area



DOT implemented a slow streets pilot in Patterson Park on South Linwood Avenue:

- Boundaries are from East Baltimore Street to Eastern Avenue and on Lombard and Pratt to Ellwood.
- All residents and park users have access to the park, and cut-through traffic is greatly diminished.
- These are not road closures
- Parking is not reduced
- Vehicles still have SLOW access to the roadway (5 MPH)



Implemented Examples: Patterson Park Area





Slow Streets Legislation

CITY OF BALTIMORE
ORDINANCE **20-380**
Council Bill 20-0532

Introduced by: President Scott, Councilmembers Dorsey, Middleton, Bullock, Clarke, Burnett, Henry, Stokes, Cohen, Costello, Schleifer, Sneed
Introduced and read first time: May 11, 2020
Assigned to: Transportation Committee
Committee Report: Favorable
Council action: Adopted
Read second time: May 18, 2020

AN ORDINANCE CONCERNING

Temporary Street Space for Pedestrians and Cyclists

FOR the purpose of requiring the Department of Transportation to provide additional street space to pedestrians and cyclists during the pendency of certain temporary spacing orders; requiring that the provision of additional street space be distributed equitably through the City; setting forth certain factors for the Department to consider when providing additional street space; providing for the expiration of additional street space requirements; requiring certain reports; defining certain terms; and providing for a special effective date.

BY adding
Article 31 - Transit and Traffic
Section(s) 2-6.2
Baltimore City Code
(Edition 2000)

SECTION 1. BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF BALTIMORE, That the Laws of Baltimore City read as follows:

Baltimore City Code

Article 31. Transit and Traffic

Subtitle 2. General Administration

§ 2-6.2. TEMPORARY STREET SPACE FOR PEDESTRIANS AND CYCLISTS.

(A) DEFINITIONS.

(1) IN GENERAL.

IN THIS SECTION, THE FOLLOWING TERMS HAVE THE MEANINGS INDICATED.

EXPLANATION: CAPITALS indicate matter added to existing law.
[Brackets] indicate matter deleted from existing law.
Underlining indicates matter added to the bill by amendment.
Strikethrough indicates matter stricken from the bill by amendment or deleted from existing law by amendment.

City DOT is tasked with implementing a slow streets program as required by **Council Bill 20-0532**:

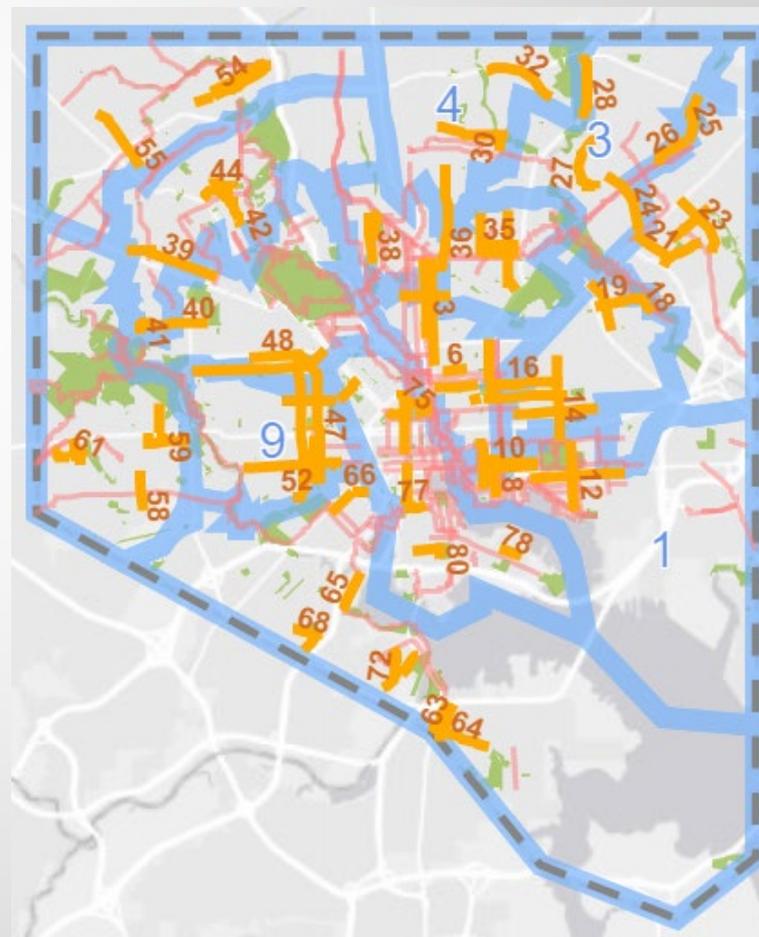
- CB 20-0532 was introduced on May 11th and advanced 3rd reader for final passage on May 18th
- Bill mandates that DOT implement a minimum of 25 miles of Slow Streets within 14 days of being enacted (from July 13th)
- Each Council District to receive a minimum of 1 mile
- No Council District to receive more than 15% of Slow Streets total mileage
- DOT must implement without significant agency resources



Implementing the Program

Requirements:

- 25 miles required city wide
- Minimum of one mile per district
- **Two weeks to implement once signed (July 27!)**
- Simple & efficient barrier production & signage
- Selection to be based on DOT and resident recommendations
- **Councilmember coordination + outreach**





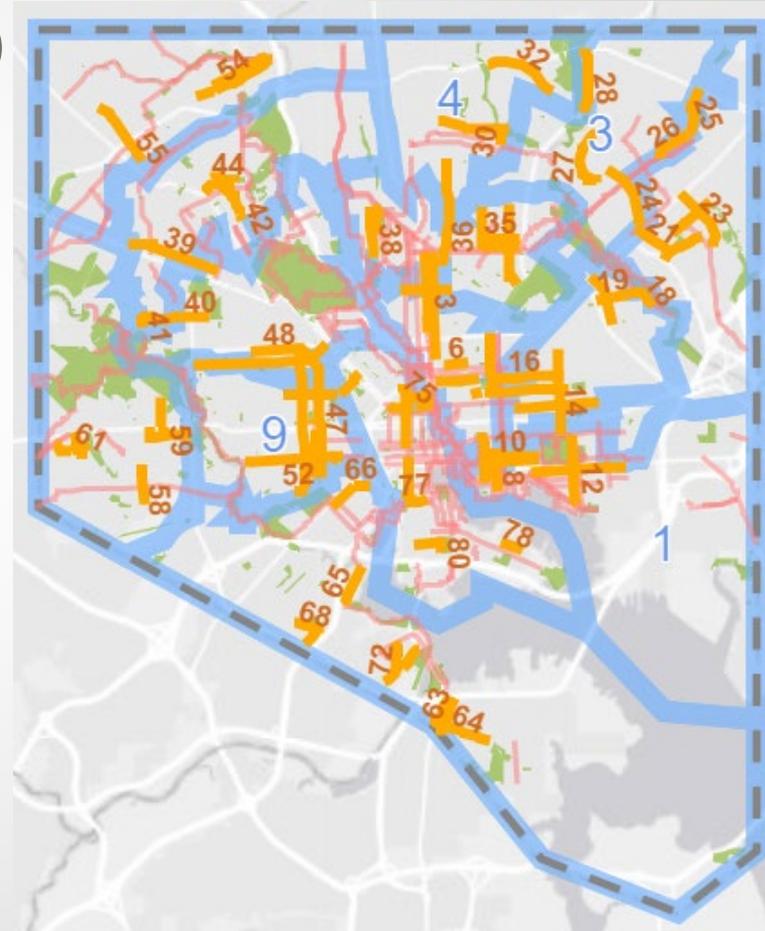
Implementing the Program

DOT selection considerations

- Preference for residential streets and long stretches (may be prone to cut-through traffic)
- Preference to connect neighborhoods to parks
- Will consider adopted bike and other plans
- Will attempt to avoid truck routes and routes with frequent bus service

Councilmember and BCDOT Coordination for

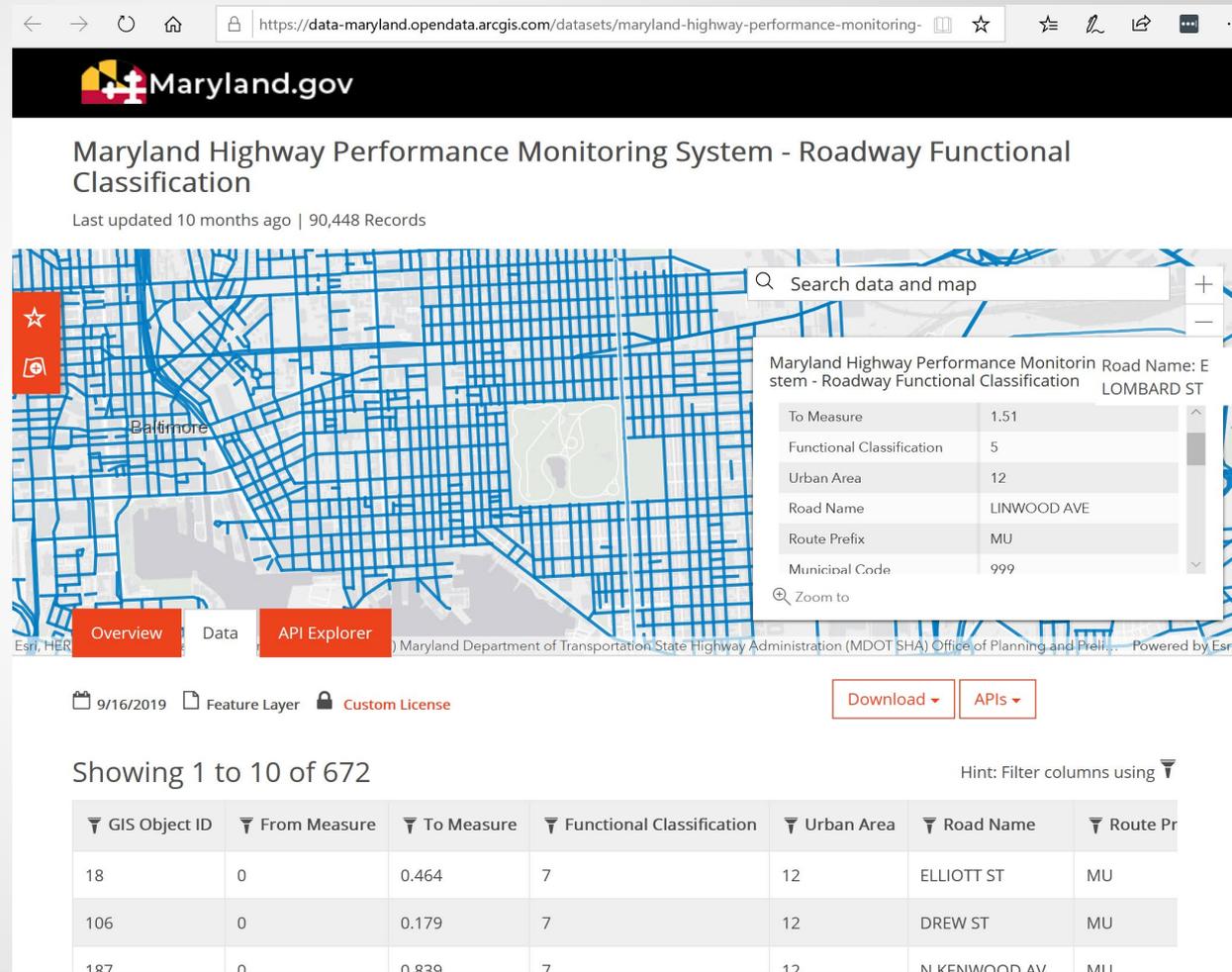
- Neighborhood and business outreach and engagement
- Councilmember sponsorship



Data Source for Candidate Evaluation: Linwood Ave

Consideration criteria

- Community support
- Park or trail connection
- Residential use
- Multiple block segments
- Functional Classification is Collector or Lower order traffic function



<https://data-maryland.opendata.arcgis.com/datasets/maryland-highway-performance-monitoring->

Maryland.gov
Maryland Highway Performance Monitoring System - Roadway Functional Classification
 Last updated 10 months ago | 90,448 Records

Search data and map

Maryland Highway Performance Monitoring System - Roadway Functional Classification
 Road Name: E LOMBARD ST

To Measure	1.51
Functional Classification	5
Urban Area	12
Road Name	LINWOOD AVE
Route Prefix	MU
Municipal Code	999

Overview | Data | API Explorer

9/16/2019 | Feature Layer | Custom License | Download | APIs

Showing 1 to 10 of 672

GIS Object ID	From Measure	To Measure	Functional Classification	Urban Area	Road Name	Route Prefix
18	0	0.464	7	12	ELLIOTT ST	MU
106	0	0.179	7	12	DREW ST	MU
187	0	0.839	7	12	N KENWOOD AV	MU

Source is <https://data-maryland.opendata.arcgis.com/datasets/maryland-highway-performance-monitoring-system-roadway-functional-classification/data?geometry=-76.738%2C39.253%2C-76.510%2C39.346>



Candidate Identification

Communication and Process

DOT has added an FAQ webpage to the agency's website providing residents information on the program

The screenshot shows the Baltimore City Department of Transportation website. At the top right, there is a 'Subscribe' button with an envelope icon and several small flags representing different languages. Below this is a search bar with the text 'Search' and a magnifying glass icon. The main header reads 'Baltimore City Department of Transportation'. Below the header, there is a breadcrumb trail: 'Home > Slow Streets Program'. On the left side, there is a 'Main Menu' with the following items: Director's Page, About Us, News/Traffic Alerts/Community Updates, How Do I? / FAQs, Map Gallery, Quick Forms, Vehicle Towing, Automated Traffic Violation Enforcement System (ATVES), Snow Center, Bike Baltimore, and Complete Streets. The main content area is titled 'Slow Streets Program'. The text explains that the program is intended to support safe, essential physical activity by creating more space for social distancing in response to the COVID-19 pandemic. It mentions that DOT will implement temporary "Road Closed: Local Traffic Only" soft closure barriers. A paragraph states that the Baltimore City Council passed a bill on Monday, May 18th of 2020 to mandate a minimum of 25-miles of Slow Streets in Baltimore City. Below this, there is a section titled 'Frequently Asked Questions:'. A yellow box contains the question 'Is this really a response to the COVID-19 pandemic?' followed by the answer: 'Yes, the goal of the program is to provide a minimum of six feet of social distancing when performing essential trips and activities. This is based on best practices from the CDC and the Baltimore City Health Department. For more information on the citywide response to COVID-19 visit: <https://coronavirus.baltimorecity.gov/>'



Candidate Identification

Communication and Process

The program's webpage includes [a link for residents to submit applications for Slow Streets implementation in their neighborhood](#)

Main Menu

- Director's Page
- About Us
- News/Traffic Alerts/Community Updates
- How Do I? / FAQs
- Map Gallery
- Quick Forms
- Vehicle Towing
- Automated Traffic Violation Enforcement System (ATVES)
- Snow Center
- Bike Baltimore
- Complete Streets

Slow Streets Application

The Baltimore City Council passed a bill on Monday, May 18, 2020, to mandate a minimum of 25-miles of Slow Streets in Baltimore City. This program discourages residents and visitors from driving on all "Slow Streets" unless they are necessary to reach your final destination. Slow Streets will also urge all people driving to drive slowly and safely to respectfully share the road with people walking and biking. To see if your street will qualify as a slow street, apply below.

Start
Complete

Name *

Address *

Phone Number

Email *

District *

- Select -

Council Member *

- Select -



Decision Framework

Corridor is Proposed

By DOT

By Residents



Corridor is Evaluated and Sponsored

Evaluated by DOT based on technical data

Sponsored by Council Member (based on constituent process)



Corridor is Installed, Deferred or Denied

Installed if all criteria is met

Deferred or denied based on technical/community issues



Post-Installation Evaluation

Goals	Tools/Data
Measuring number of users	<ul style="list-style-type: none">- Strava- Scooter data- Observations
Feedback from users	<ul style="list-style-type: none">- Online survey- Upvote/downvote map- Council member outreach- Volunteer facility ambassadors?
Learning issues (with facilities, designs, or process)	<ul style="list-style-type: none">- Online survey- Intercept survey on select facilities- Mail-in survey (possible door hangers with web address and phone number to receive survey)- Council member outreach
Learning desired changes	<ul style="list-style-type: none">- Neighborhood association/community group feedback- Council member outreach
Learning changes in vehicle behavior	<ul style="list-style-type: none">- Google API (historic traffic travel time and delay)- Neighborhood association parking audits?

Mobility Data Specification

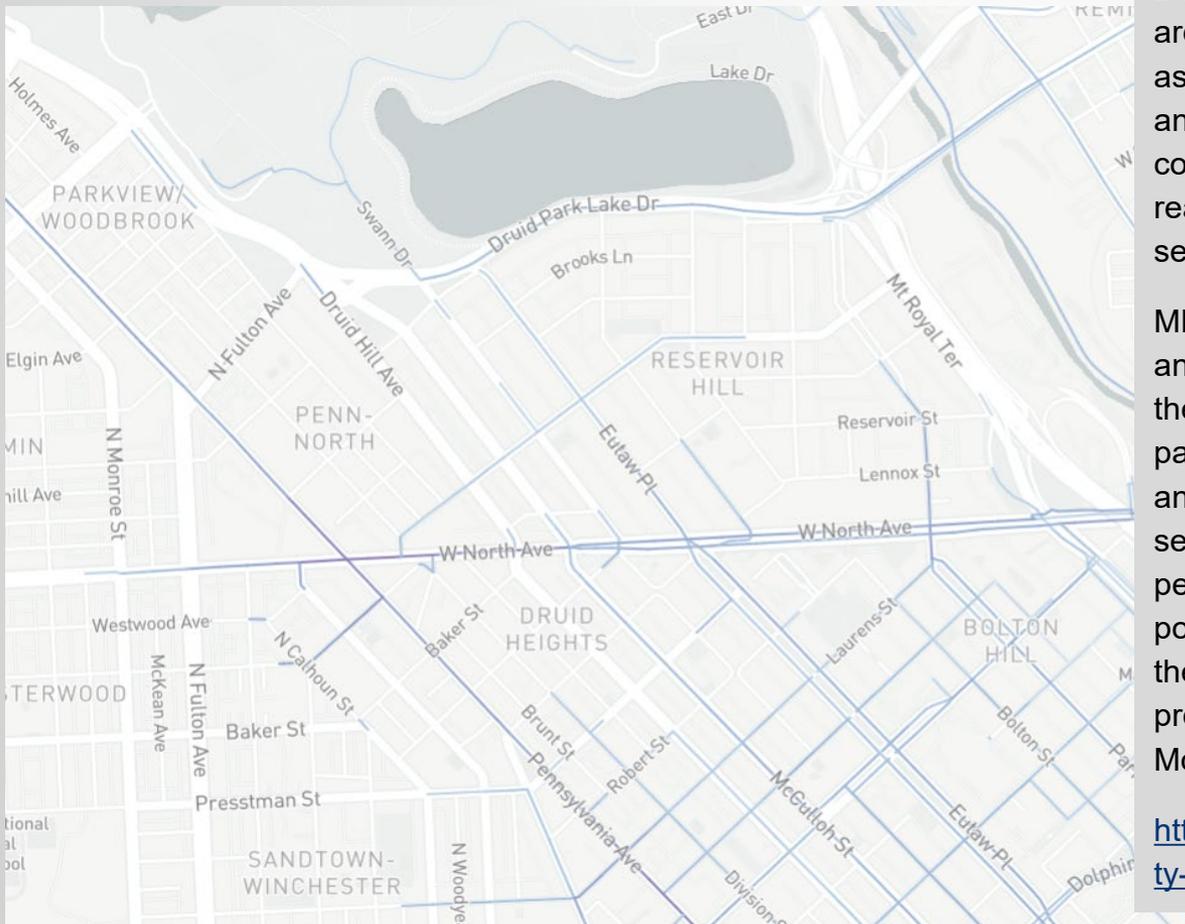
The Mobility Data Specification (MDS) is the Application Program Interface (API) that conveys trip data from dockless vehicles to BCDOT. The data contents, format, and coding are standardized so that each company, as well as cities across the nation, can collect, analyze, and share comparable data. The data are conveyed through an API or link that contains real-time data conveyed at least every 30 seconds.

MDS was developed by the City of Los Angeles and, recently, stewardship was transferred to the Open Mobility Foundation. Baltimore participates in conversations with other cities and national groups about how the format serves the monitoring that Baltimore needs to perform for the permit program. MDS is a powerful tool that is still being refined to strike the balance between delivering useful data and protecting personal and proprietary information. More information can be found at:

<https://github.com/openmobilityfoundation/mobility-data-specification>

E-scooter trip data

- Trip start/end location
- Number of trips on any road segment



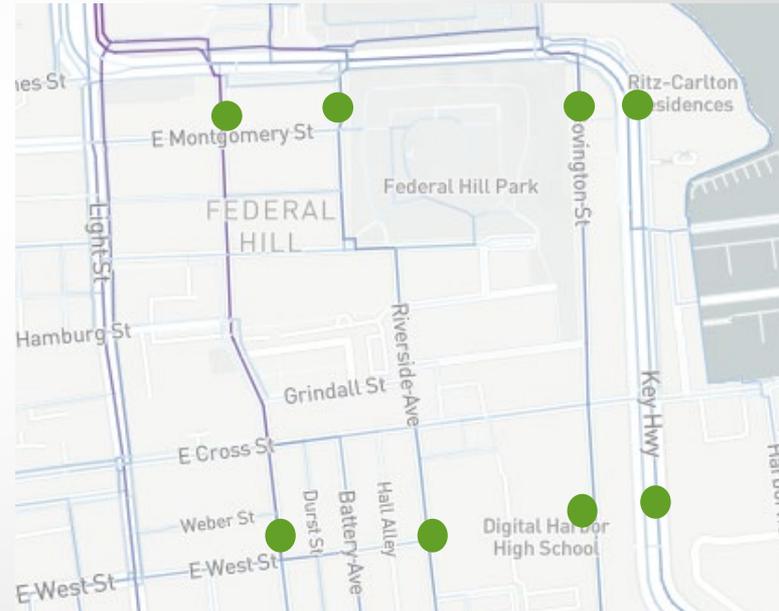
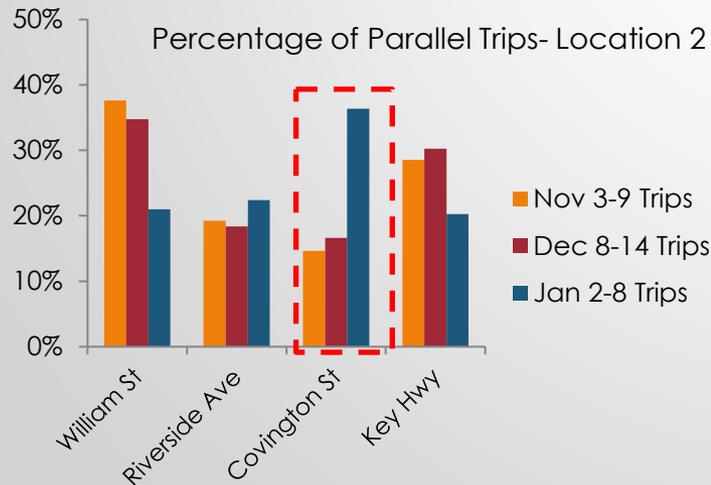
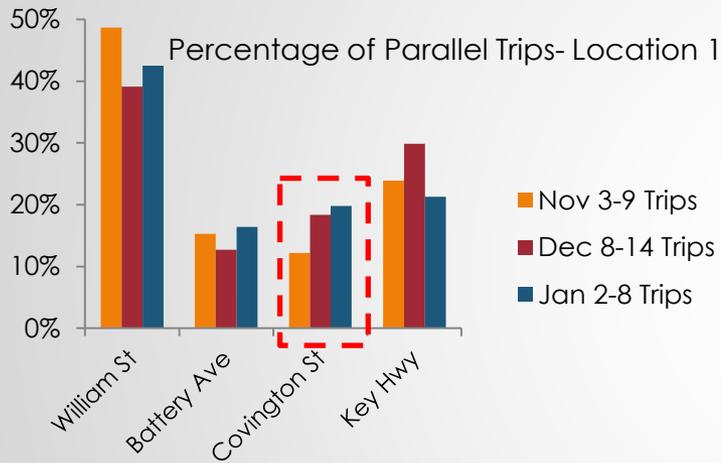
Post-Project Performance: Scooter Use Data



E-scooter trip data: Covington Street Case Study

In late November, Covington Street in Federal Hill became a low stress bike connection with DOT installing a cycle track and other treatments.

Dockless data shows use growing on Covington street and reduced on adjacent Key Highway.





Discussion: Evaluation Criteria

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Measuring number of users	<ul style="list-style-type: none">- Strava- Scooter data- Observations
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Slow Streets

Thank You!

Matthew Hendrickson
DOT Lead Bike Planner

Matthew.Hendrickson@baltimorecity.gov

443-401-4520





Discussion: Where to go from here

Are there other data sources and resources DOT should consider, especially to improve equity in project selection?

How can ongoing evaluation and iteration be used to help the program be responsive to residents' needs?

What possibilities do you see this program opening for the future?

What's next for use of Baltimore's rights-of-way?



<https://www.nytimes.com/2020/07/17/nyregion/coronavirus-nyc-schools-reopening-outdoors.html?referringSource=articleShare>

Discussion: Where to go from here

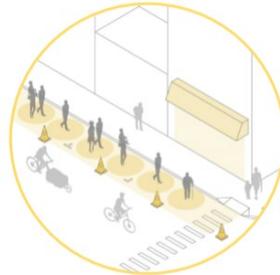
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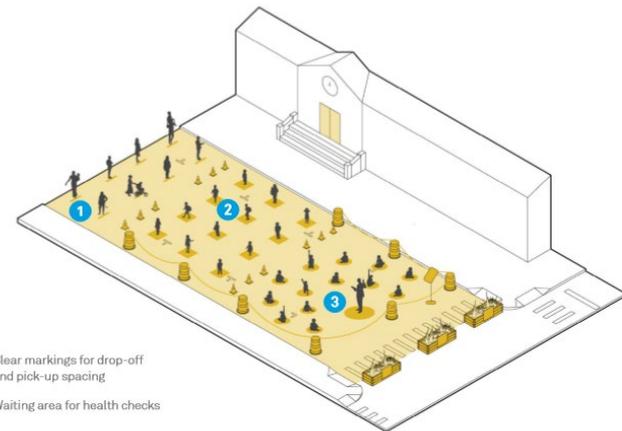
https://nacto.org/wp-content/uploads/2020/07/NACTO_Streets-for-Pandemic-Response-and-Recovery_2020-07-15.pdf



Streets for Pandemic Response & Recovery



SCHOOL STREETS



- 1 Clear markings for drop-off and pick-up spacing
- 2 Waiting area for health checks
- 3 Outdoor classroom and education space

Provide outdoor classroom and recreation space, and safe pick-up/drop-off and health check zones.

CONTEXT

- Streets and parking lots adjacent to schools, daycares, and facilities used by students and children.
- Streets near and around schools used as routes for walking and rolling to school.

KEY STEPS

- Provide car-free on-street space for schools and care facilities to conduct classes and hold recess and assemblies.
- Create safe routes to schools using expanded sidewalks, bike and roll lanes, safe crossings, and speed management.



Credit: LightRocket via Getty Image

Turin, Italy

Thank you!

