VISION ZERØ

CITY OF PHILADELPHIA

MARKET/JFK VISION ZERO PILOT PROJECT

FEBRUARY 2019 EVALUATION REPORT

WHY IS THIS PROJECT IMPORTANT?

Market Street and JFK Boulevard in Center City are key east-west corridors in the core business district. Major commercial high-rise buildings, large apartment buildings, preschools and daycares, and SEPTA Suburban Station are notable destinations that make these corridors a major hub for all transportation modes. Despite the area's multimodal attractions, the design was overwhelmingly auto-oriented. Both JFK and Market had four wide vehicle travel lanes, which led to high vehicle speeds, long pedestrian crossing distances, and other safety concerns. The pilot project is testing a road reconfiguration with several treatments designed to improve safety. In evaluating the corridors and considering roadway changes, the City considered four major components: safety, user experience, network needs, and timing.

SAFETY

- Market Street is identified on the Vision Zero High Injury Network.
- From 2012-2016, 154 people were injured in 140 crashes along Market Street & JFK Boulevard between 15th and 20th Streets.
- Several serious crashes and one fatal crash occured on JFK Boulevard in the past several years.

EXPERIENCE

Before the project, people who walk along the corridors reported that turning drivers often did not yield to pedestrians at crosswalks and reported difficulty crossing the wide streets. Drivers were also regularly observed traveling at high speed along both corridors.

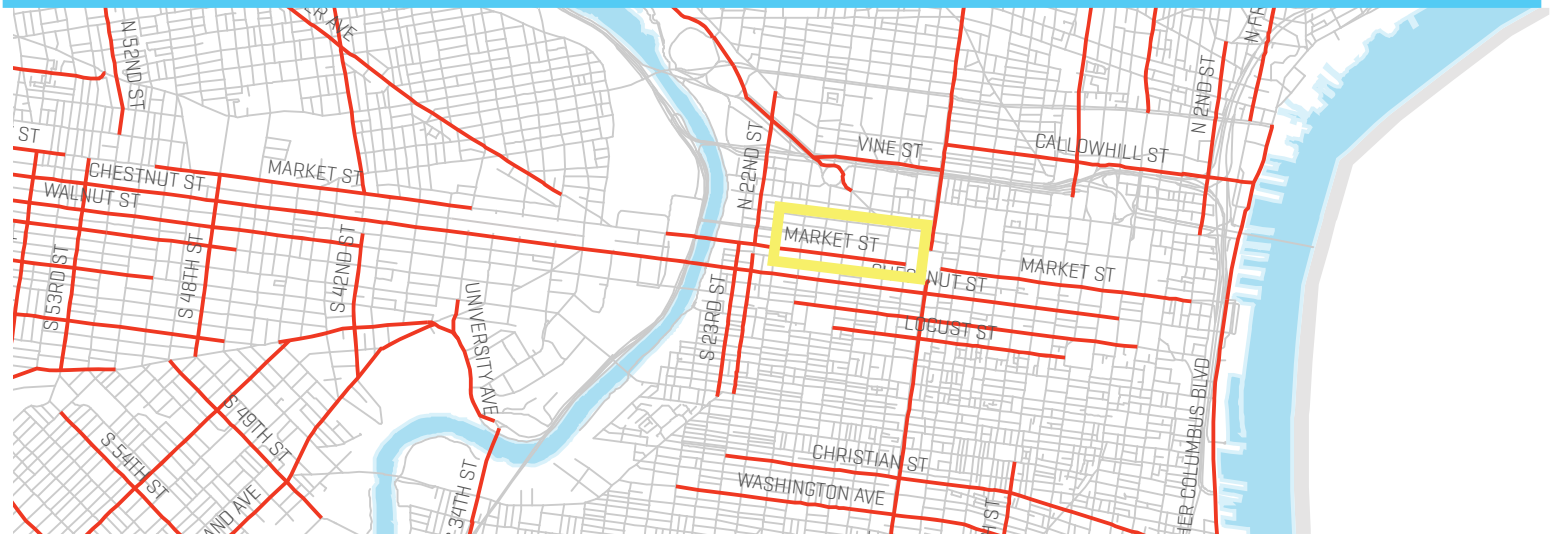
NETWORK NEEDS

Market Street and JFK Boulevard are key corridors for building a protected bicycle lane network in Center City. These streets create east-west links for people biking between the 30th Street Station and City Hall.

TIMING

An upcoming paving project on JFK Boulevard presents the opportunity to change the layout of JFK and Market for a trial period to study the impacts before permanent installation.

VISION ZERO HIGH INJURY NETWORK DETAIL



VISION ZERO HIGH INJURY NETWORK

VISION ZERO PILOT PROJECT AREA

STEERING COMMITTEE & OUTREACH

In January 2018, the City created a project steering committee led by the Office of Complete Streets within the Office of Transportation, Infrastructure, and Sustainability (oTIS). Members of the group include oTIS, the Streets Department, Council President Clarke's office, the Philadelphia Parking Authority, the Commerce Department, Comcast, Central Philadelphia Transportation Management Association (CPTMA), neighboring civic organizations, and other key property owners and building managers along the corridors.

The steering committee met several times in the spring and fall of 2018 to discuss the details and progress of the pilot project, issues and concerns of property owners and businesses, concurrent project coordination, and next steps for the corridors. The group was integral in defining the project goals and the education, enforcement, and evaluation plans.

Community engagement, especially for residents along the corridors, has been a focus of this project. oTIS and Council staff have regularly met with residents of Kennedy House and Penn Center House, as well as Center City Residents Association and Logan Square Neighborhood Association. Their feedback and input has been crucial to the implementation of the project. To ensure a wider range of input, Center City District partnered with oTIS to create and administer an online survey for workers and residents in the project area to gauge the perceived comfort and safety of the corridors before and after the project.

WHAT IS THE PILOT PROJECT?

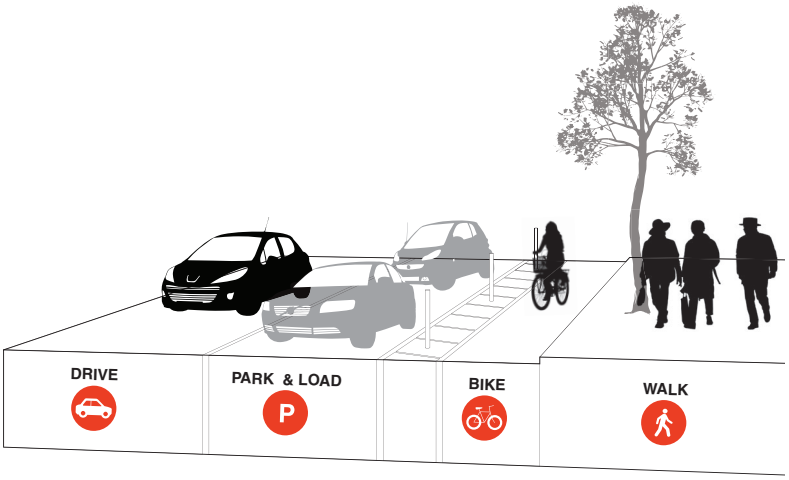
Installed in June 2018, the Market/JFK Vision Zero Pilot Project:

1. Updated and relocated on-street parking and loading away from the curb, added a parking-protected bike lane, and shortened pedestrian crossing distances. This created delineated space in the roadway for people on bikes, and made crossing both JFK and Market more comfortable for people walking.

2. Installed new turn lanes at the following higher volume turn locations:
   - 17th St & JFK Blvd
   - 19th St & JFK Blvd
   - 18th & Market Streets

   Previously, there was just one dedicated turn lane along the corridors (16th & Market).

3. Installed the City's first bicycle traffic signals at:
   - 16th St & Market St
   - 20th St & JFK Blvd



BEFORE CONDITIONS

May 2018

AFTER CONDITIONS

October 2018

PILOT PROJECT GOALS

The pilot project was designed to improve the safety, mobility, and quality of life of people living, working, and traveling along the corridors. There were four overarching project goals, along with the more specific project measures.

- Manage driver speeds, in accordance with posted speed limit.
- Increase people riding bicycles on the corridors.
- Reduce the number of severe traffic crashes.
- Increase comfort of pedestrians crossing the street.

ENFORCEMENT

The steering committee and residents along the corridors clearly stated that a strong enforcement focus would determine the success of the project. While many stakeholders agreed that the pilot's physical improvements could impact unsafe driving behavior and improve pedestrian and cyclist comfort, they also emphasized that driver behavior would be slow to change without targeted enforcement. They also requested enforcement of laws prohibiting riding bicycles on sidewalks to help train road users to take advantage of the spaces provided to them safely

oTIS partnered with Council President Clarke's office and the Philadelphia Police Department's 9th District, developing a focused educational enforcement period coinciding with the beginning of the pilot project. Officers initially handed out educational palm-cards to drivers who failed to yield to pedestrians and to people riding bicycles on sidewalks. After two weeks issuing educational materials and warnings, the Police began issuing violations at key intersections identified by project stakeholders.

Educational palm cards

EDUCATION

In response to stakeholder concerns related to people biking yielding to pedestrians, the City installed educational signs for people bicycling along the two corridors. The messages focused on yielding to pedestrians, yielding to people unloading from their cars, and called attention to mixing zones where people riding bikes need to be particularly aware of potential conflicts. The signs were mounted on the flexible delineator posts to be directly within bicyclists' line of sight.

Rhyming educational signs

As you hurry

●○○○

to work today

○●○○

give pedestrians

○○●○

the right of way.

○○○●

#VISIONZEROPHL

City of Philadelphia

EVALUATION PLAN

To measure the impact of the pilot project, oTIS worked with partners on an extensive data collection and evaluation plan before and during the pilot project. Partner agencies include PennDOT, SEPTA, Delaware Valley Regional Planning Commission (DVRPC), and Central Philadelphia Transportation Management Association (CPTMA). The crash measures require a longer evaluation time period than 9 months and the City will continue gathering data on these metrics.

Performance Measure	Preferred Outcome	Method of Evaluation
Severity and Number of Crashes, Number of Injuries	Reduce	PennDOT and Philadelphia Police Department crash data
Vehicle Peak Speeds	Reduce	City speed study for off-peak hours
Vehicle Volume	Maintain	City data via tube counter
Vehicle Travel Time	Maintain	City data via vehicle runs with Global Positioning System (GPS)
Bicycle Volume	Increase	DVRPC data via tube counter
Pedestrian Volume	Maintain	CPTMA data via electronic counter
Bus Travel Time	Maintain	SEPTA data via On-Board Bus Global Positioning System (GPS)
Employee/Business Satisfaction	Increase	CPTMA surveys, In-person outreach
Resident Satisfaction	Increase	CPTMA surveys, In-person outreach
Comfort Level	Increase	CPTMA surveys, In-person outreach

People who live, work, and own property along the project corridors are uniquely poised to evaluate the project, as they experience the street every day. In addition to data evaluation, the City conducted in-person outreach to residents and business owners during steering committee and resident group meetings.

RESULTS

The majority of the performance measures in the data evaluation plan showed improvements towards the safety, mobility, and quality of life of those living, working, and traveling along the corridors. There were several outlier variables that impacted the data gathering efforts, such as construction on several blocks in and adjacent to the project area and a lag in crash data reporting. However, the data results and public sentiment remain largely positive towards the project.

Manage driver speeds, in accordance with posted speed limit.

ON MARKET ST & JFK BLVD,

12.8%

REDUCTION IN THE NUMBER OF VEHICLES WITH SPEEDS ABOVE POSTED SPEED LIMIT (25MPH) DURING OFF-PEAK HOURS.

Source:
Radar speed study (May 2018, October 2018)

Increase comfort of pedestrians crossing the street.

ON MARKET ST & JFK BLVD,

37%

OF RESPONDENTS FEEL IT IS SAFER TO CROSS AND 37% FEEL IT IS THE SAME COMFORT LEVEL TO CROSS THE STREET AFTER THE PILOT. 26% FEEL IT IS LESS SAFE.

Source:
Central Philadelphia Transportation Management Association Survey

Increase the number of people riding bicycles on the corridors.

ON MARKET ST & JFK BLVD,

21%

INCREASE IN THE NUMBER OF PEOPLE BIKING ALONG THE THE CORRIDORS.

Source:
DVRPC tube counts (March, July, September 2018)

Maintain driver through-put, avoid shifting traffic to other streets.

ON MARKET ST & JFK BLVD, THROUGH-TRAFFIC WAS

MAINTAINED

AT APPROXIMATELY 15,000 AADT (AVERAGE ANNUAL DAILY TRAFFIC), BEFORE AND AFTER THE PILOT PROJECT INSTALLATION.

Source:
DVRPC vehicle counts (March, August, October 2018)

RESULTS

Maintain driver travel times, avoid causing congested conditions.

ON MARKET ST & JFK BLVD, NEUTRAL IMPACT ON DRIVER TRAVEL TIMES WERE

ACHIEVED

IN THE MORNING AND EVENING PEAK PERIODS.

Source:
Streets Department travel time runs

Increase traveler comfort.

ON MARKET ST & JFK BLVD,

76%

OF AREA RESIDENTS SURVEYED SUPPORT MAKING THE PILOT PROJECT PERMANENT.

Source:
CPTMA Survey

CONCLUSIONS & NEXT STEPS

The City will continute gathering data along the corridors and meeting with the project steering committee, residential stakeholders, community groups, and business representatives to monitor the progress of the pilot through the Winter. The goal is to continue the pilot project until the repaving of JFK Boulevard, expected in 2019, and pursue opportunities for formalizing the design treatments. To date, engagement with residential stakeholders demonstrated support for the project and safety and enforcement improvements along the corridors. In January 2019, the two area community associations sent letters of support or non-opposition to oTIS and Council President Clarke.

As the pilot installation runs the course of the 9-month time period, the City will continue making minor design adjustments as needed to improve safety and increase the pilot's positive impacts. Areas of focus will include replacing and adjusting the spacing of flexible delineator posts, developing a snow clearing management strategy, and working with Police District 9 on continuing focused enforcement along the corridors.

A key next step for the project is to work with City Council President Clarke's office to pass the legislation necessary to finalize the travel lane changes. Once legislation moves forward, oTIS will work with Streets and PennDOT to design the permanent installation as part of the 2019 repaving project, partner with the Center City District on streetscape features, and pursue additional funding for signal upgrades and further enhancements for the corridors.