

Philadelphia Pike Improvements Project

Focus Group Meetings
October 21 and 22, 2009



CRDC
Claymont
Renaissance
Development
Corporation

WILMAPCO

**URBAN
ENGINEERS**
Formulating Excellence

Purpose of This Effort

- **Identify and develop affordable improvements that can:**
 - **Support the 2003 Claymont Transportation Plan,**
 - **Incorporate Complete Streets legislation, and**
 - **Continue community and economic development objectives**

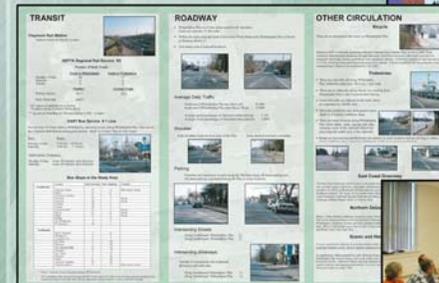
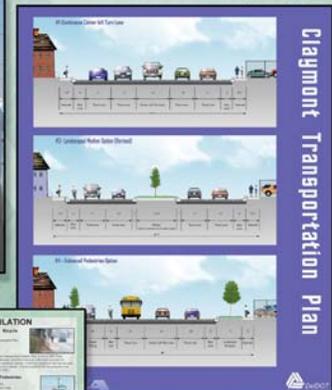
Purpose of Tonight's Meeting

- Present and get feedback on:
 - A refined Claymont Transportation Plan
 - Short-term projects

2003 Claymont Transportation Plan

- Recommended returning Philadelphia Pike to its commercial “Main Street” function
- Recommended landscaping, access management controls, improved intersection controls and pedestrian improvements

Claymont Transportation Plan Report

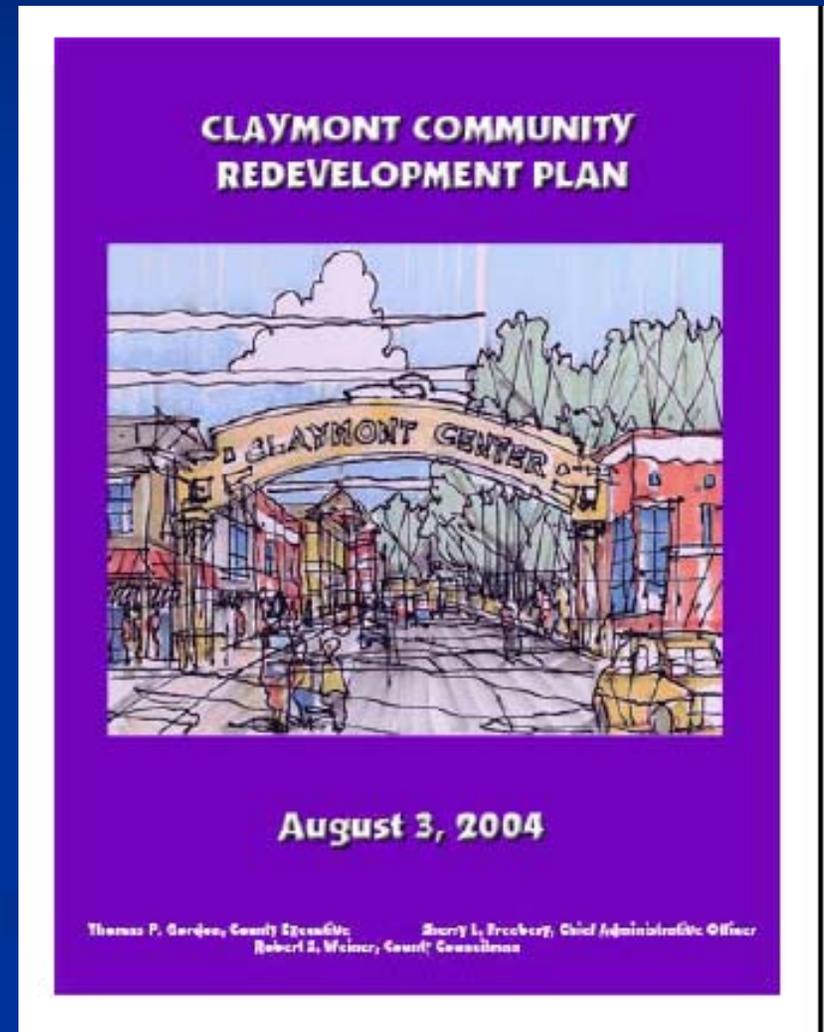


Concerns with Preferred Alternative

- **Raised median and potential access impacts to businesses**
- **Construction past the curb line:**
 - Utility relocation
 - Potential full-depth road reconstruction
- **Right-of-Way acquisition**
 - Impacts to businesses and community
 - Increases time and cost

2004 Community Redevelopment Plan

- Created a comprehensive vision for the community
- Completed a plan to create a Hometown Overlay District (as set out in the 2002 New Castle County Comprehensive Plan Update)
- Identified three separate areas— core center, transition and edge
- Redevelopment of the Brookview neighborhood was an early outcome of the plan

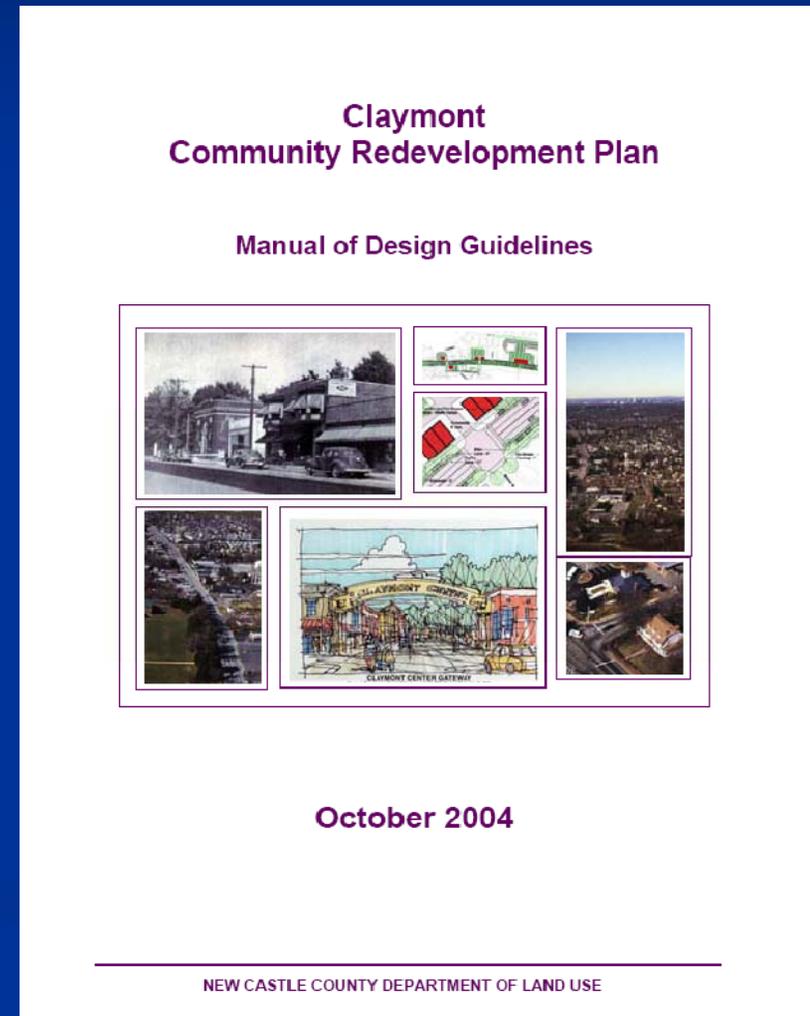


Community Redevelopment Plan Vision

- A **pedestrian-oriented** place is envisioned where people can live, work, shop, learn, recreate, and worship in a small town environment
- A compact, mixed-use, **walkable** town center is viewed as a critical component to the enhanced connection and enjoyment of civic assets such as the post office, schools, churches, library, community center, and train station
- Any improvements should also complement further transportation goals, including:
 - **Create a multi-modal Philadelphia Pike that accommodates vehicles, bicycles, and pedestrians**
 - Complement future plans for mixed-use, *pedestrian-friendly* development at key intersections including Manor Drive, Commonwealth Boulevard, and Harvey Road
 - **Improve safety along Philadelphia Pike for all transportation modes**

2004 Manual of Design Guidelines

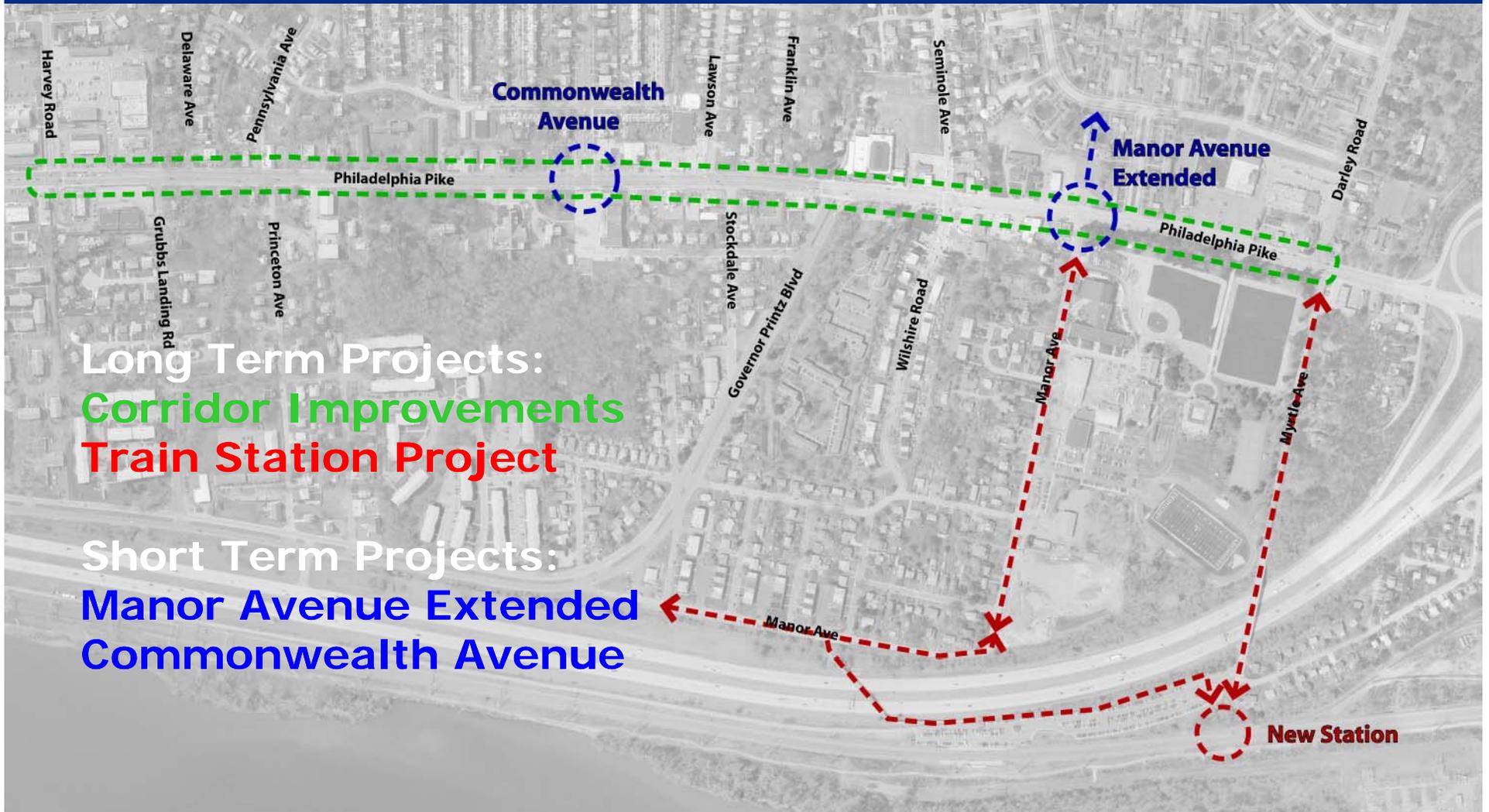
- Developed in response to the Redevelopment Plan vision
- Defined elements such as lighting, landscaping, pedestrian and bicycle facilities, parking and transit stops



Governor's Complete Streets Initiative (EO 6)

- A "Complete Street" is a roadway that is built to accommodate all travelers, particularly public transit users, bicyclists, pedestrians (including all ages and disabilities), and motorists
- Creating Complete Streets means planning, designing, constructing, maintaining and operating streets and related components for motorized and non-motorized modes as appropriate for the area
- The concept of Complete Streets is consistent with the work in Claymont to date

Refined Claymont Transportation Plan

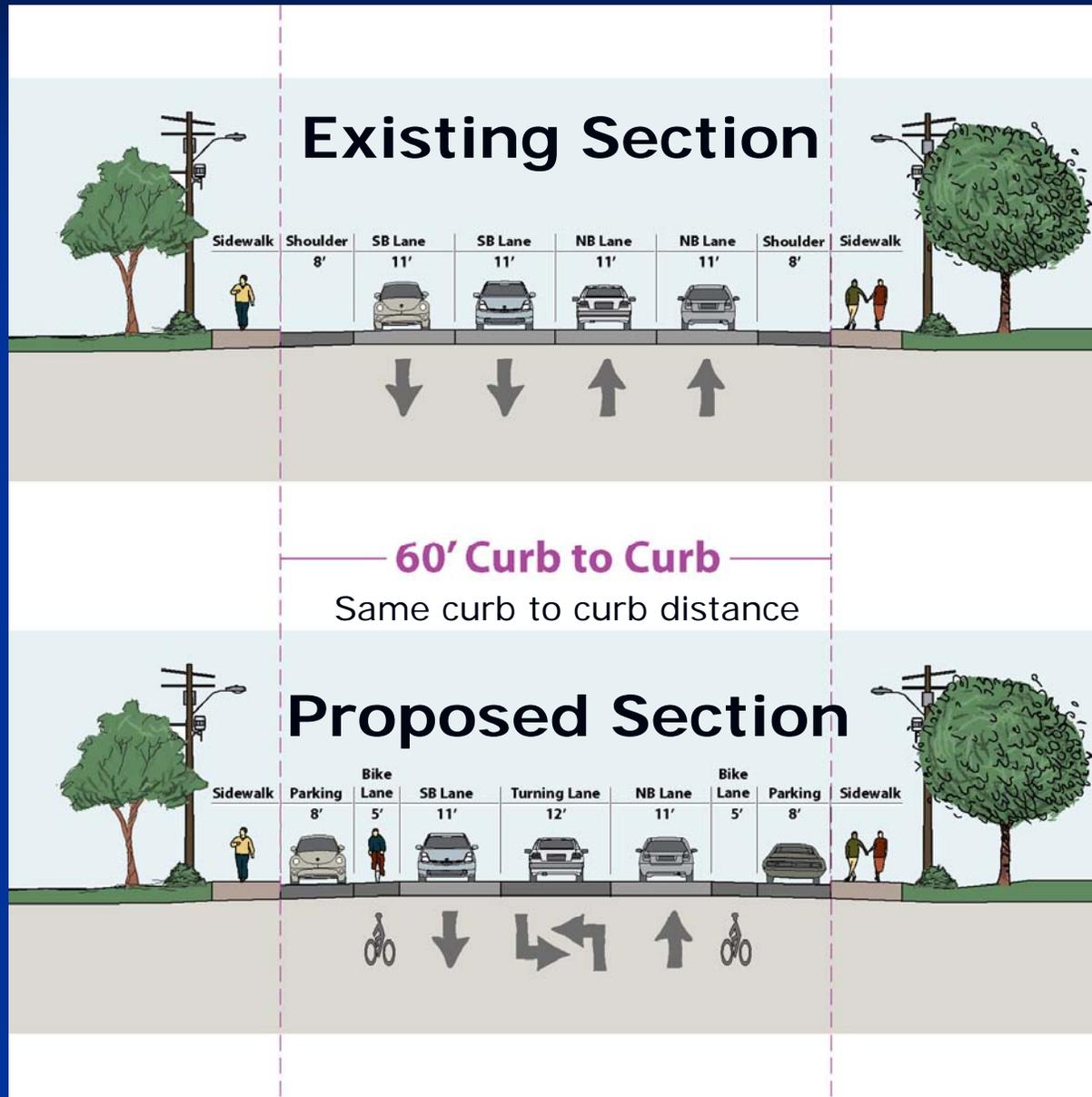


Hometown Overlay District



- Core Claymont Center
- Transition
- Edge

Harvey to Gov. Printz



Harvey to Gov. Printz Corridor Improvements

- **Safety**
- **Performance**
- **Consistent with previous work and Complete Streets**

Crash Types and Patterns

Crashes examined from October 2005 to September 2008

Vehicles:

Angle/Head-on Collisions (45% of total)

Rear-end Collisions involving left-turning vehicles (18%)

Sideswipe Collisions (7%)

Bicycles and Pedestrians:

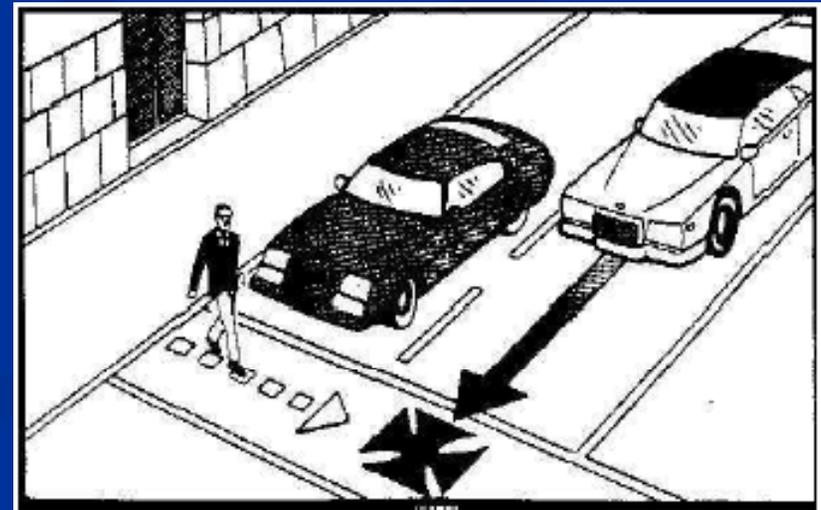
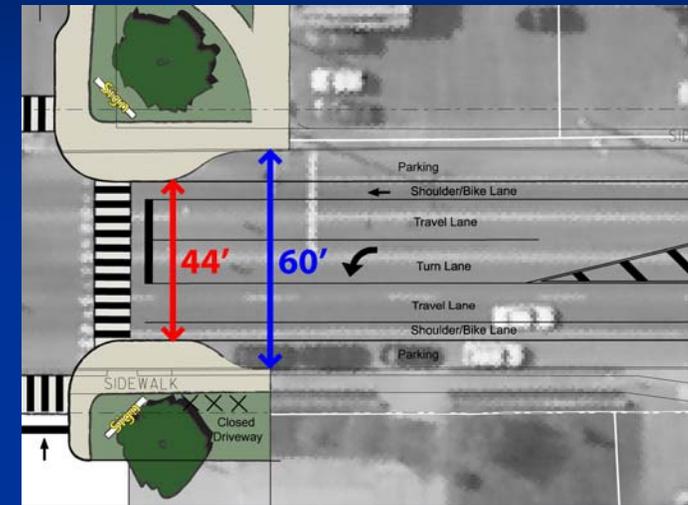
2 crashes and 1 fatality

Vehicular Safety

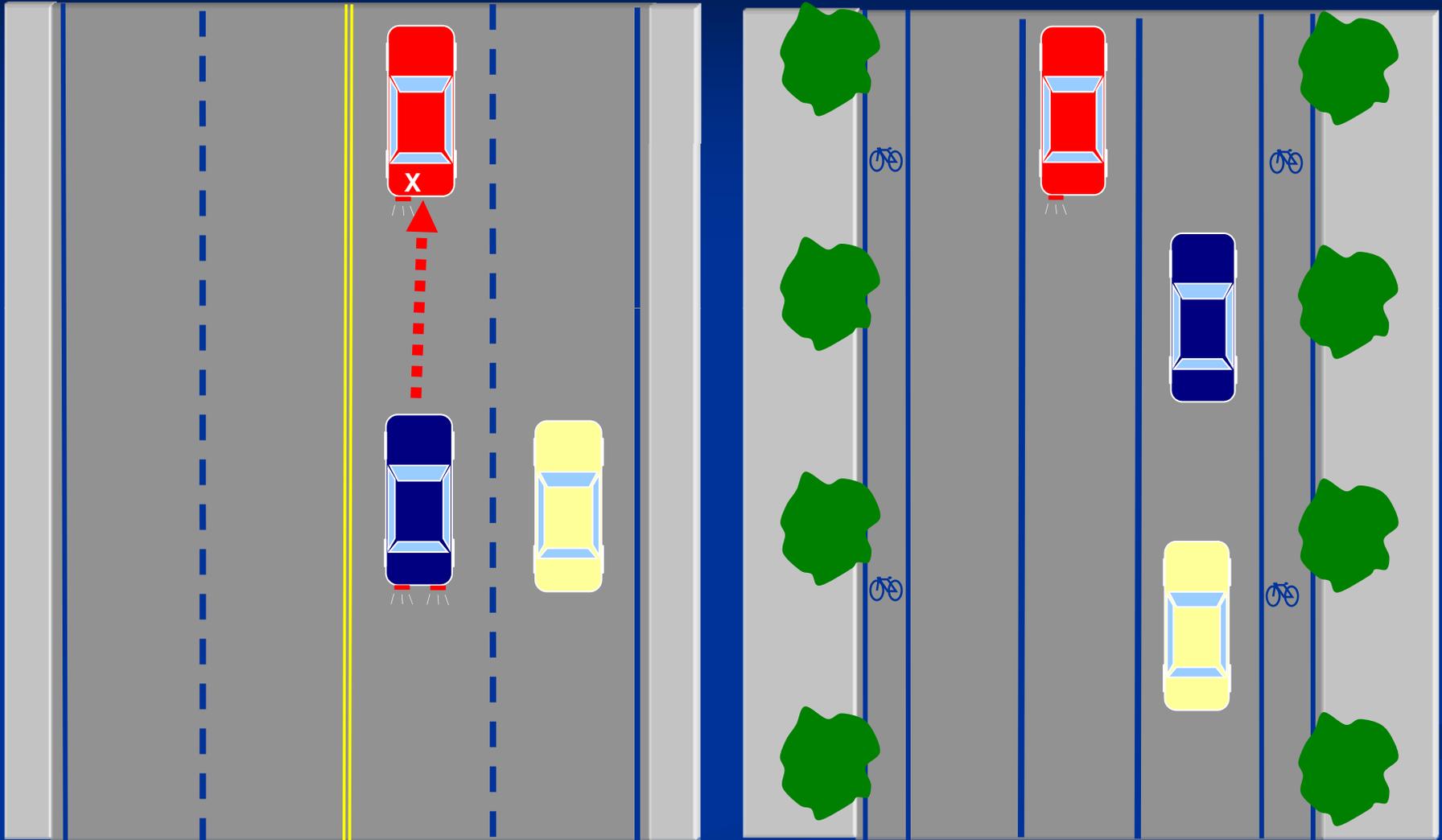
- **Angle/Head-on Collisions (45% of crashes)**
 - Separating opposing traffic reduces head-on probability
 - Vehicles turning on/off side streets only cross 1 traffic lane
 - Speed reduction increases gaps in traffic
- **Rear-End Collisions with left-turning vehicles (18%)**
 - Dedicated left-turn or Two-Way-Left-Turn-Lane reduces or eliminates these crashes
 - Lower speeds reduce braking distance
- **Sideswipe Collisions (7%)**
 - Only 1 lane of traffic reduces or eliminates weaving or sideswipe possibilities

Pedestrian and Bike Safety

- Bike/pedestrian crashes along Philadelphia Pike:
 - 2 crashes & 1 fatality
- Refined Section provides:
 - Simplified crossing and reduced crossing distance
 - Reduced exposure to multiple threat crashes
 - Separate lane for bicyclists

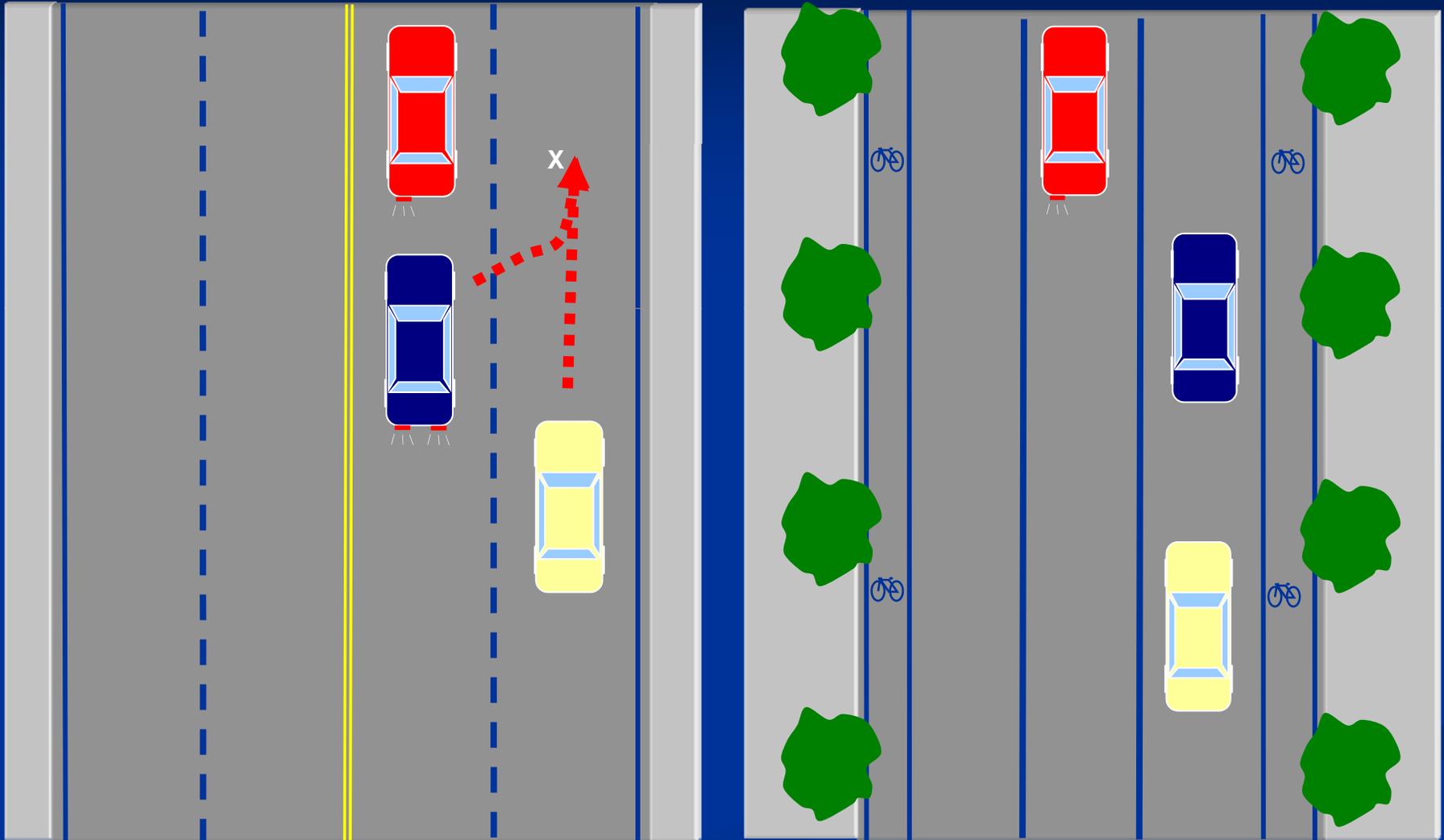


Rear End Collisions



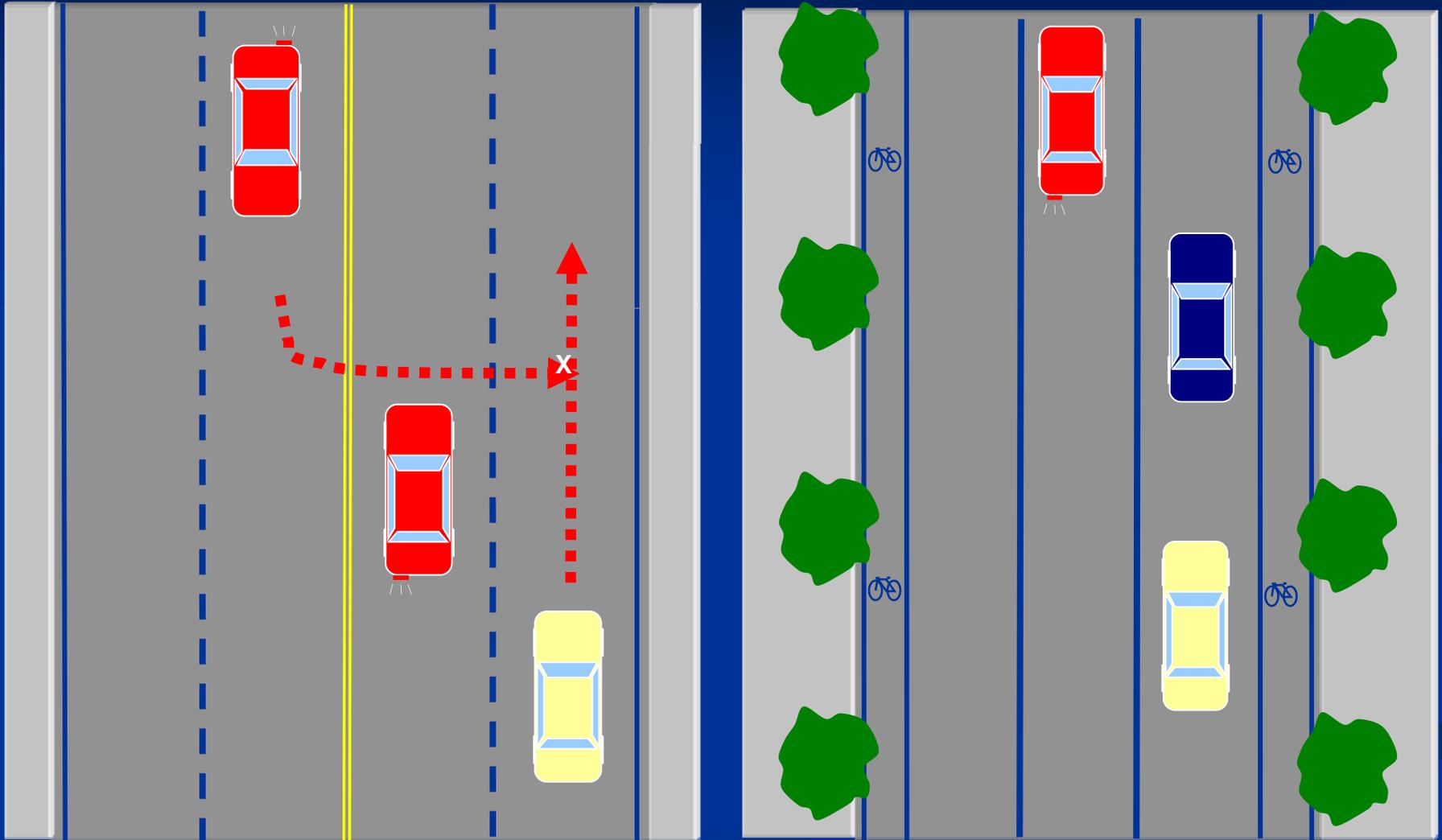
Source: *Creating Healthy Communities*, www.walkable.org/resources

Side Swipes



Source: *Creating Healthy Communities*, www.walkable.org/resources

Left Turn/Broadside



Source: *Creating Healthy Communities*, www.walkable.org/resources

Updated Traffic Volumes and Operations

- **Average Daily Traffic (ADT)**
 - 2008 ADT: 16,900
 - Projected future (2033) ADT: 21,200
- **Level of Service (LOS) & Volume-Capacity (V/C) ratio**
 - High-volume, critical intersections were examined:
 - Harvey Road
 - Commonwealth Avenue
 - Governor Printz Boulevard
- **2008: LOS range B-C; V/C range 0.62-0.74**
2033: LOS range C-D; V/C range 0.81-0.95

V/C and LOS

	V/C				LOS			
	Existing		Proposed		Existing		Proposed	
	AM	PM	AM	PM	AM	PM	AM	PM
Harvey	<.76 EBL	<.73 EBL	<.81 SBTR	<.82 SBTR	C/25.5	C/24.7	C/25.9	C/31.6
Commonwealth	<.44 NB	<.58 EB	<.76 SBTR	<.94 SBTR	A/7.4	A/6.0	C/20.3	C/21.1
Gov. Printz	<.72 WBR	<.64 WBR	>.68 SBT	<.76 SBT	B/10.8	A/8.0	C/20.3	C/23.8

Notes:

V/C column indicates the highest V/C condition and approach; all others perform better

LOS column indicates the level of service for the entire intersection

Queue Length

	Existing		Proposed	
	AM	PM	AM	PM
Harvey	217' SB	235' SB	185' NB	247' NB
Commonwealth	37' SB	66' SB	223' SB	260' SB
Gov. Printz	114' NB	83' NB	195' SB	258' SB

Notes:

Queue column indicates average queue length in the intersection and approach

Parallel Roadways/Supporting Network

- **Utilization:**
 - Current ADT of only 5100 vehicles
- **Design:**
 - Four lanes
 - Wide lanes and shoulders
 - Median separation
 - Limited access
- **Location:**
 - Adjacent to I-495
 - Good access to network
 - Redundant to the Pike



Vehicle Speed and Queuing

■ Speed

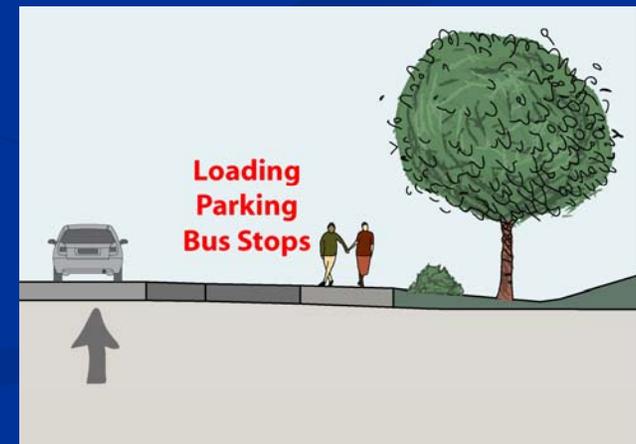
- Posted Speed 35-40 mph
- Refined section encourages a consistent speed; helps reduce speeding and excessive speeding (more than 10 mph over)

■ Preliminary Queue and Gap Assessment

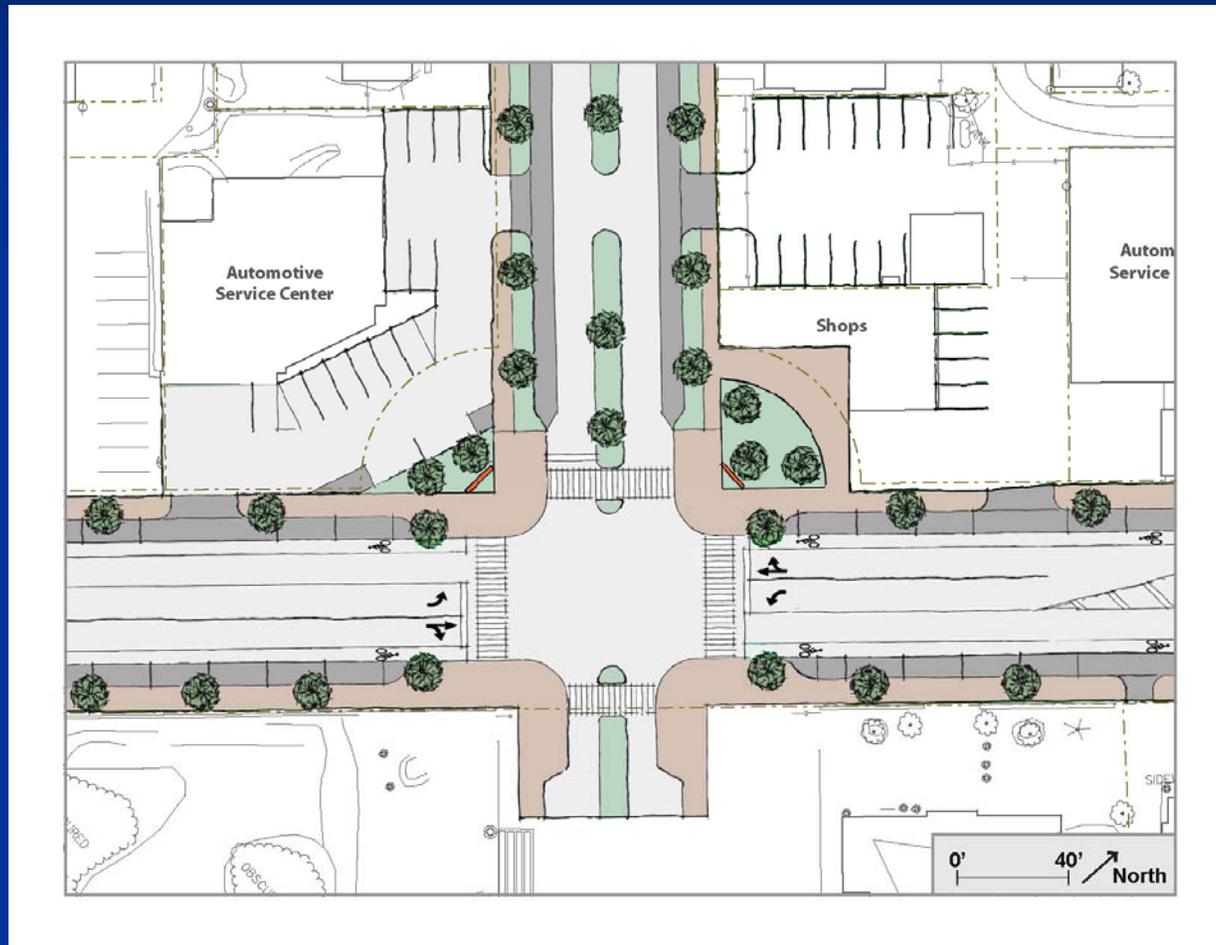
- 95th percentile queues in 2008 rarely extend through adjacent minor side streets
- 95th percentile queues in 2033 projected to possibly extend through some intersections – points to need for access management and land use coordination
- Off-peak volumes much less than peak volumes – potential little impact on driveways/side streets
- Signal spacing will create gaps for vehicles entering the Pike from driveways and side streets

Frequent-Stop and/or Slow-Moving Vehicles

- Bus (.9% of volume)
 - DART Route 1 - frequent, well utilized service
 - Refined Section can provide bus pull-off opportunities (buses would not block through travel lanes)
- Trucks (6.1% of volume)
 - Mostly local delivery, with very few (1.2%) tractor-trailers
 - Refined Section can provide dedicated loading pull-offs
- Parking
 - Parallel parking can be designed to provide larger spaces for faster, easier parking maneuvers



Long Term Plan at Commonwealth Avenue Intersection



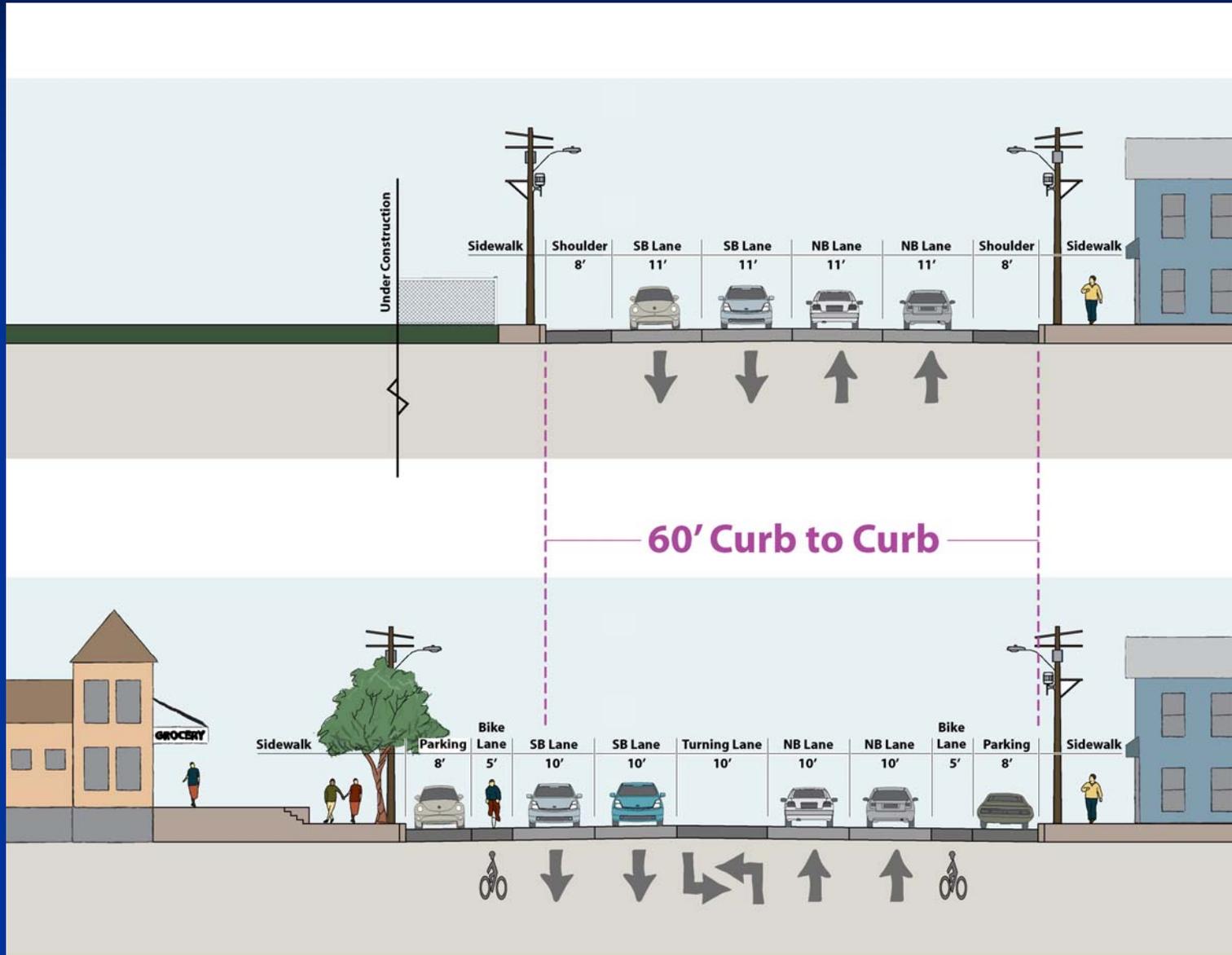
Long Term Improvements at Commonwealth Avenue



Long Term Improvements at Commonwealth



Gov. Printz to 495

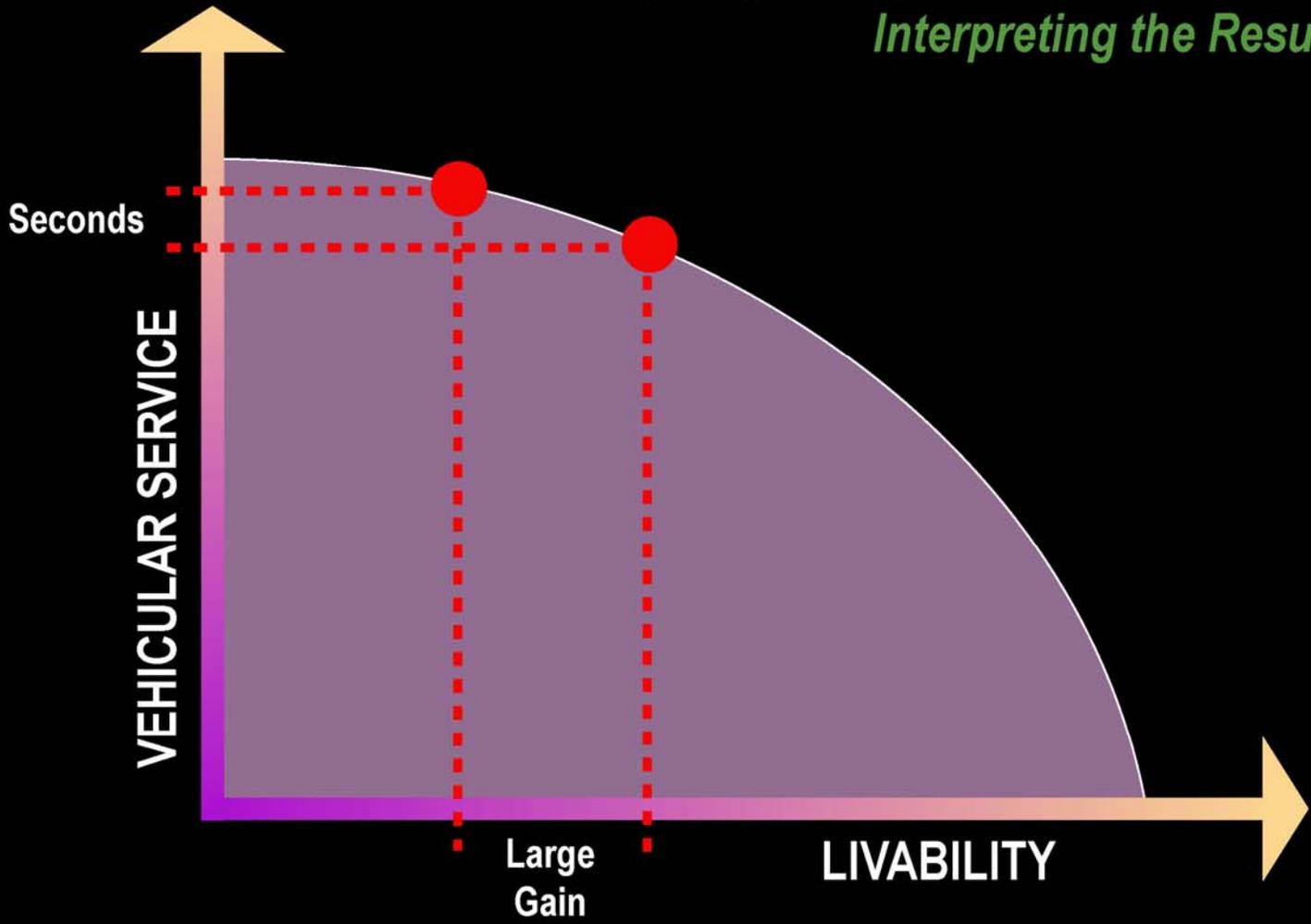


Benefits of Long Term Improvements

- Safer cross section
- Reduced ROW needs:
 - No ROW needs from Harvey to Gov. Printz
 - Minimal impacts from Gov. Printz to Myrtle
- More room for:
 - Pedestrians
 - Bicycles
 - Buses
 - Parking
 - Landscaping
- Better access for businesses
- Consistent with objectives of the Vision and Complete Streets policy
- Affordable

Reframing Key Transportation Conventions

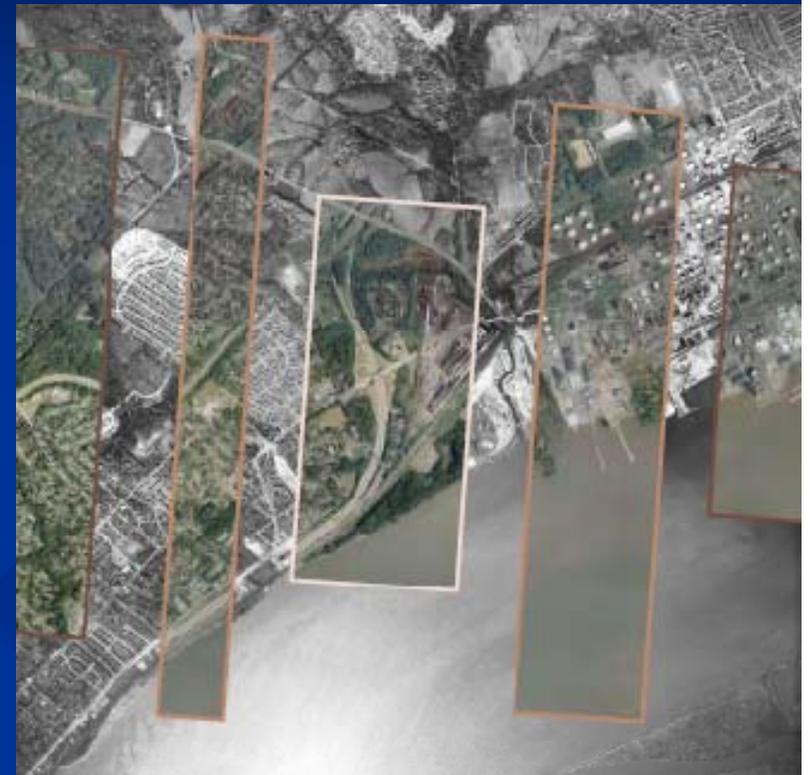
Interpreting the Results



For a small amount of vehicular delay, big gains can be made in livability

Claymont Station Improvement Project

- \$20M project:
 - New station: \$10M
 - New high level platforms: \$6M
 - Later phase parking deck: \$3.7M



CLAYMONT STATION

IMPROVEMENT PROJECT

WILMAPCO

KISE STRAW & KOLODNER

Preferred Station Concept



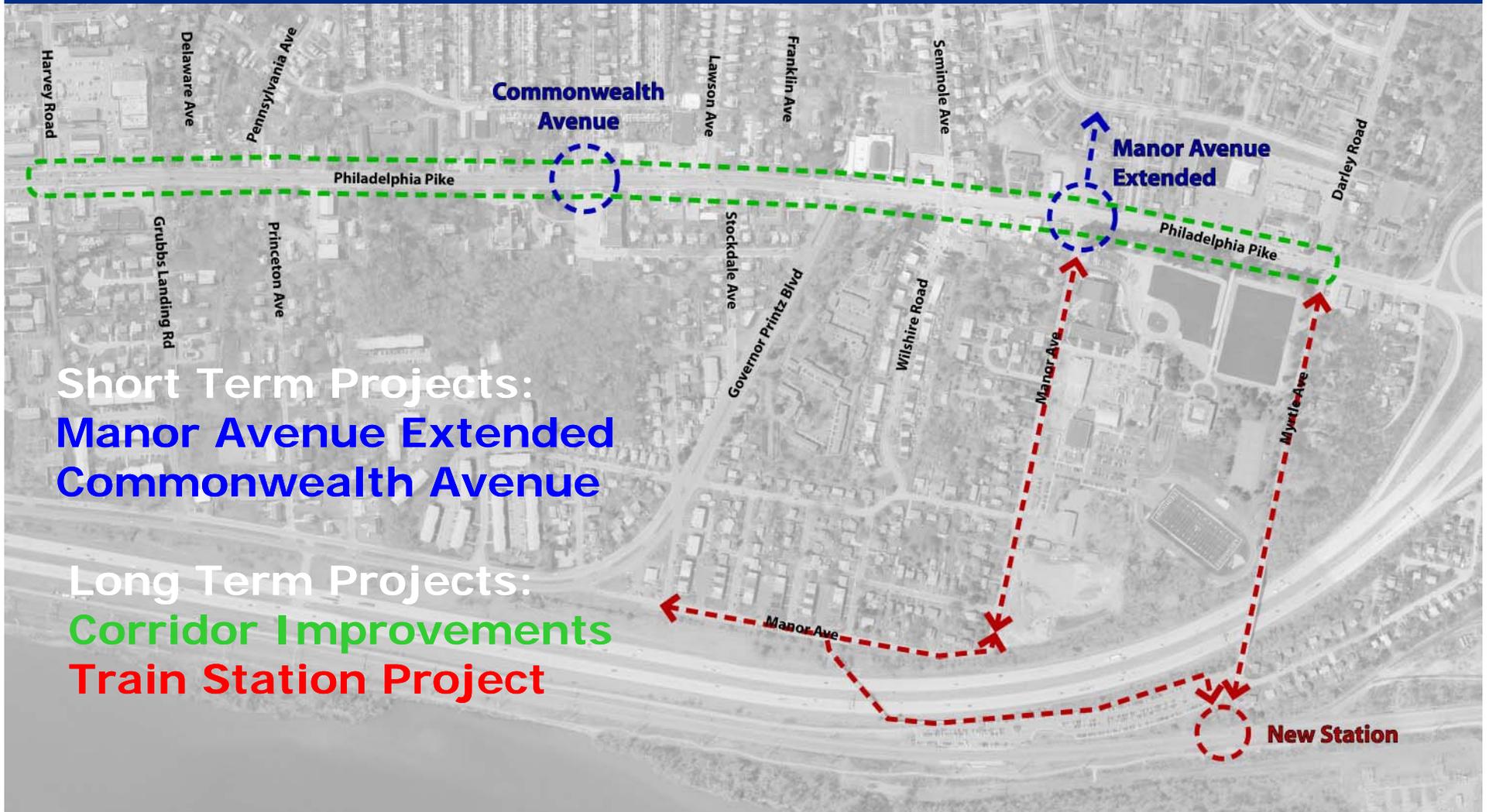
- Relocate platforms closer to Myrtle Avenue
- New entrance with separate bus lane and waiting area
- Preferred parking for carpool and carshare users
- 4000 sq ft station building with waiting room
- Ticket sales and coffee shop
- Pedestrian concourse over tracks
- Two sets of stairs and elevators
- ADA Compliant, high-level platforms
- Full length canopies
- Station plaza with landscaping and public art
- Potential for parking deck at a later phase if secondary access is in place

Myrtle Avenue Sidewalk Improvements



- Darley/Myrtle Avenue intersection pedestrian improvements
- Sidewalks both sides of Myrtle to Train Station
- Preliminary cost estimate: \$750,000

Refined Claymont Transportation Plan



Manor Avenue Extended Intersection



Manor Avenue Extended Intersection



Blueprint Communities

- Historic Overlook Colony community one of nine Delaware communities to receive grant
- Comprehensive revitalization initiative

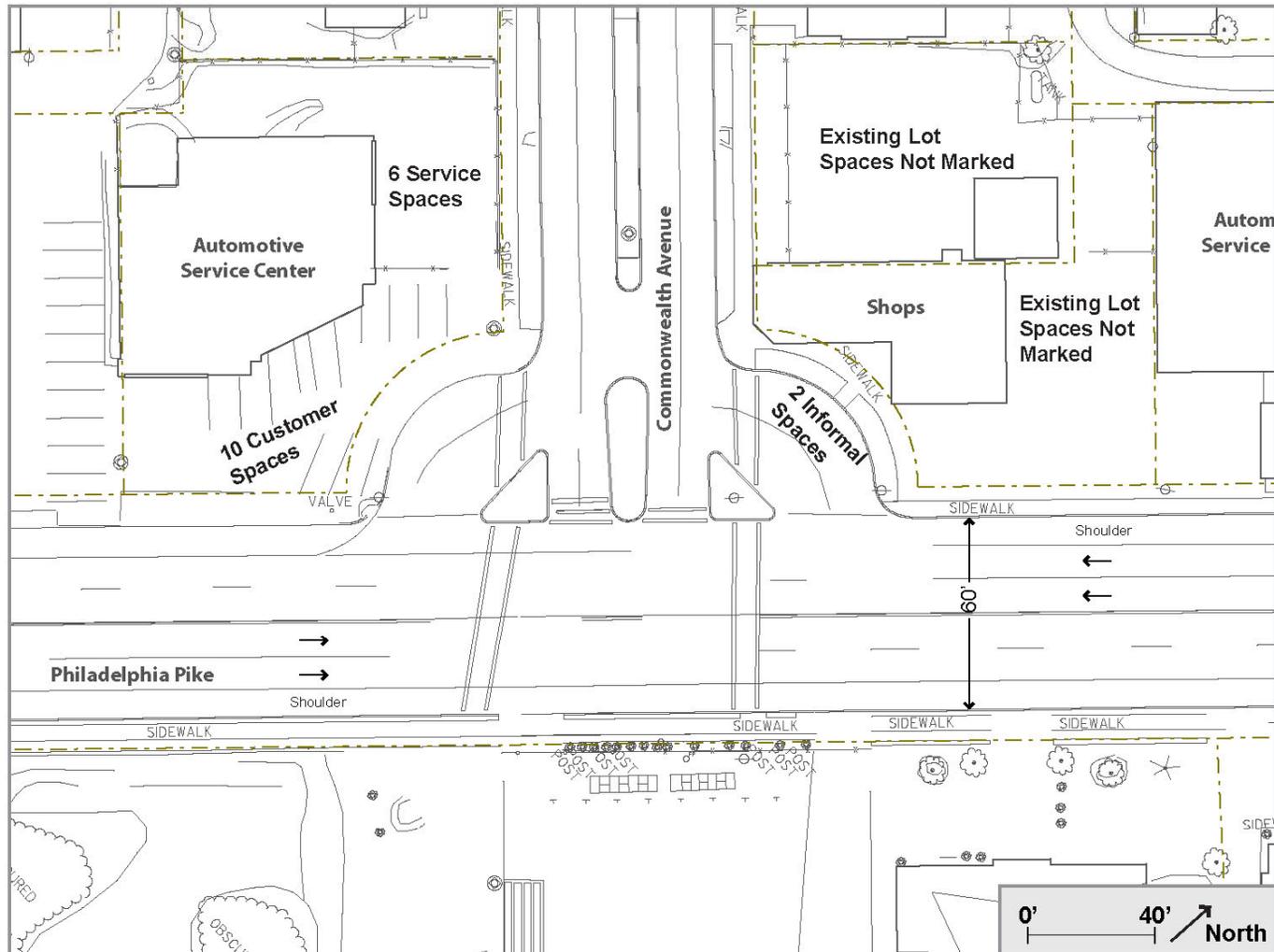


Blueprint
COMMUNITIES

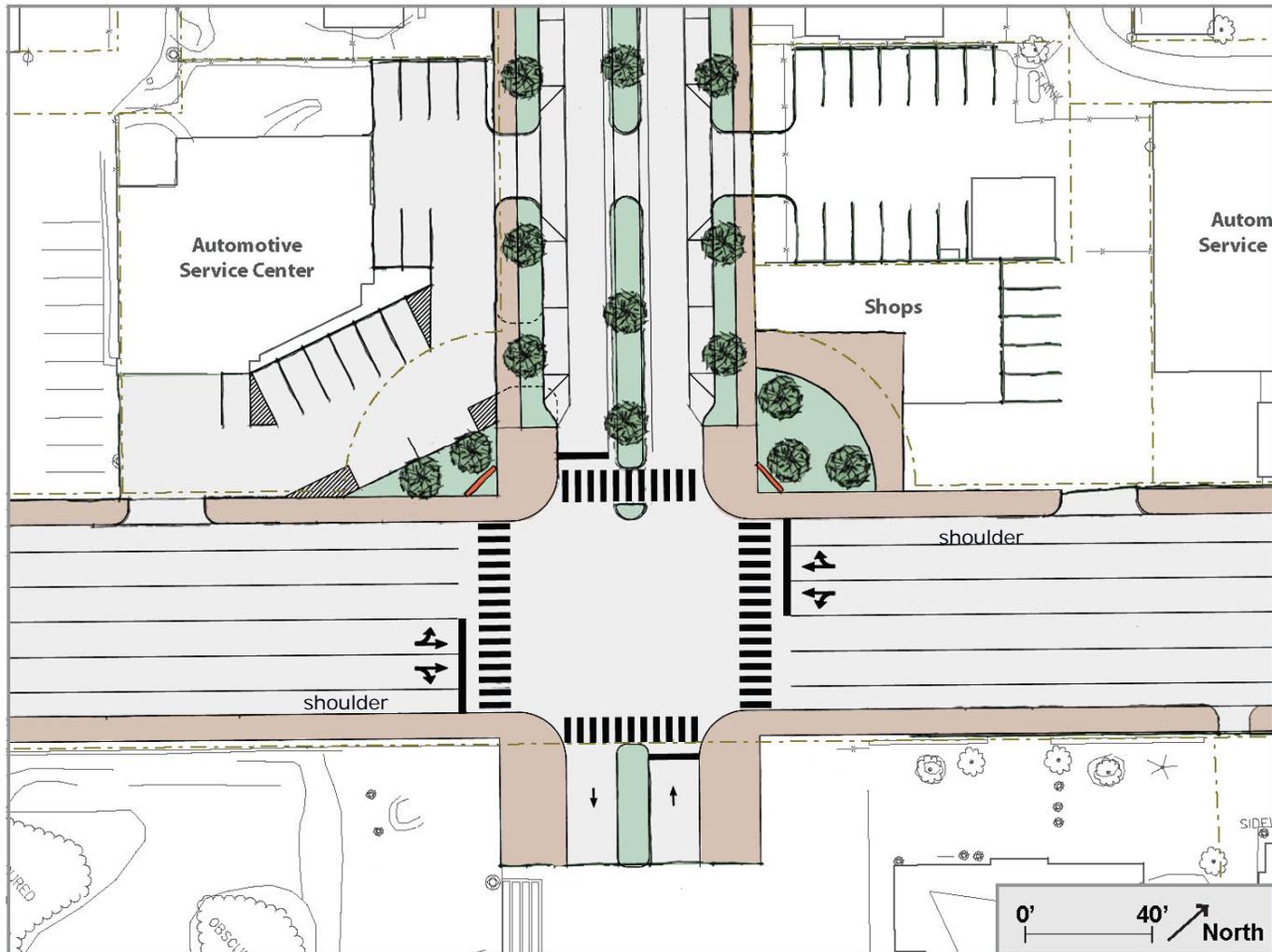
Commonwealth Avenue Intersection



Commonwealth Avenue Intersection – Existing Condition



Commonwealth Avenue Intersection – Short Term



Current Fiscal Environment

- Projections for revenue are continuing to decline
- As a result, over the next several years DeIDOT's major focus will be limited to:
 - Pavement rehab projects
 - Safety projects

Next Steps

- Finalize Plans for Short term Projects
- Continue Public Involvement
- Complete Refined Claymont Transportation Plan
- Propose Implementation Strategy

Potential Implementation Strategy

- Manor Avenue Extended – implemented by developer
- Commonwealth Ave intersection - implemented by DeIDOT
- Corridor improvements – two phased approach:
 - Phase 1: restripe new lane configuration and signal upgrade through a Pavement Rehab project
 - Phase 2: add amenities through a separate Capital (CTP) project

Please Give Us Your Comments

- Please visit each station with your survey and provide feedback for the refined Claymont Transportation Plan, the Claymont Station Improvements Project/sidewalks projects and the Commonwealth Avenue intersection project

- 1** Manor Avenue Extended:
 - Information only
- 2** Commonwealth Avenue Intersection:
 - Short-term improvements
 - Long term section
- 3** Claymont Train Station Improvements Project:
 - Prioritize improvements
 - Sidewalk project
- 4** Corridor Improvements:
 - Refined Section
 - Implementation Strategy

