

BOARD OF POLICE COMMISSIONERS BICYCLE LANES AND POLICY REVIEW

“THE CITY OF DETROIT WILL BE THE MOST CYCLE FRIENDLY CITY IN AMERICA, A PLACE WHERE ALL DETROITERS WILL FEEL SAFE USING BICYCLES AS A MODE OF TRANSPORTATION.” – Maurice Cox



DETROIT RIDES

WHY BIKE LANES IN
THE MOTOR CITY?

CREATING MOBILITY OPTIONS FOR ALL DETROITERS

Detroiters have the right to a choice of safe, quality Mobility Options, whether they walk, drive, ride their bike or take the bus.

Due to high traffic speeds, unsafe conditions or a lack of proper infrastructure to protect them, many residents do not consider bicycles as a viable mobility option.

By redesigning our streets for safety, all Detroiters benefit.

- *More Choices*
- *Improved Pedestrian Conditions*
- *Slower but steady vehicular movements*
- *Defined Parking*



SPEED KILLS

Hit by a vehicle traveling at

20
MPH



9 out of 10 pedestrians survive.

Hit by a vehicle traveling at

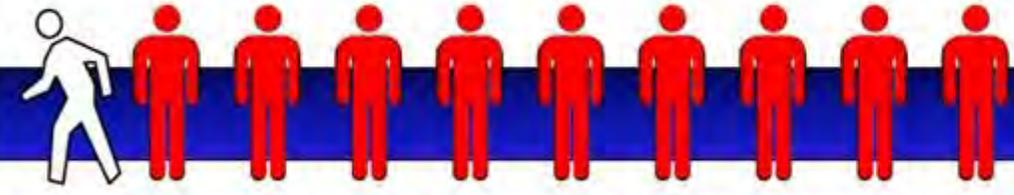
30
MPH



5 out of 10 pedestrians survive.

Hit by a vehicle traveling at

40
MPH

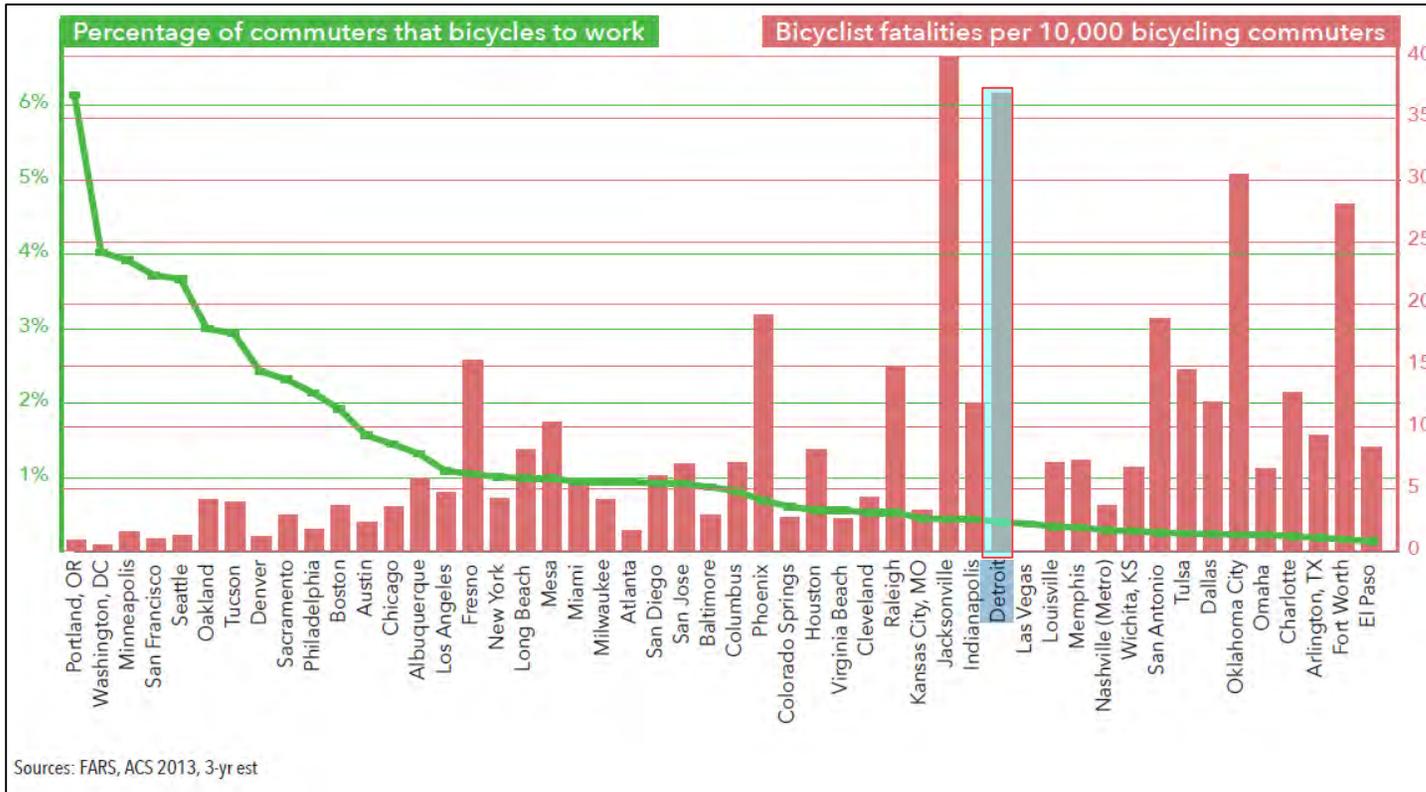


only 1 out of 10 pedestrians survives.

PEDESTRIAN & BICYCLIST FATALITY RATES

CITY WIDE CRASH DATA 2012-2016:

103,806 Vehicle Crashes
 2,314 Pedestrian Crashes
 727 Bike Crashes
 206 Deaths



Big-City Fatality Rates

The number of pedestrian deaths varies widely among the 50 largest U.S. cities. The cities with Vision Zero programs are in bold.



WHY BIKE LANES IN THE MOTOR CITY?

- **One-third of Detroiters do not have access to a car**
- **Over 50 bike clubs**
- **Weekly group rides**
- **Connecting Neighborhoods**
- **243 Miles of trails, bike lanes and greenways**
- **Regional Destination**
- **Health Benefits**
- **Affordable**



THE 'BIG PICTURE'
VISION FOR DETROIT'S
BICYCLE NETWORK

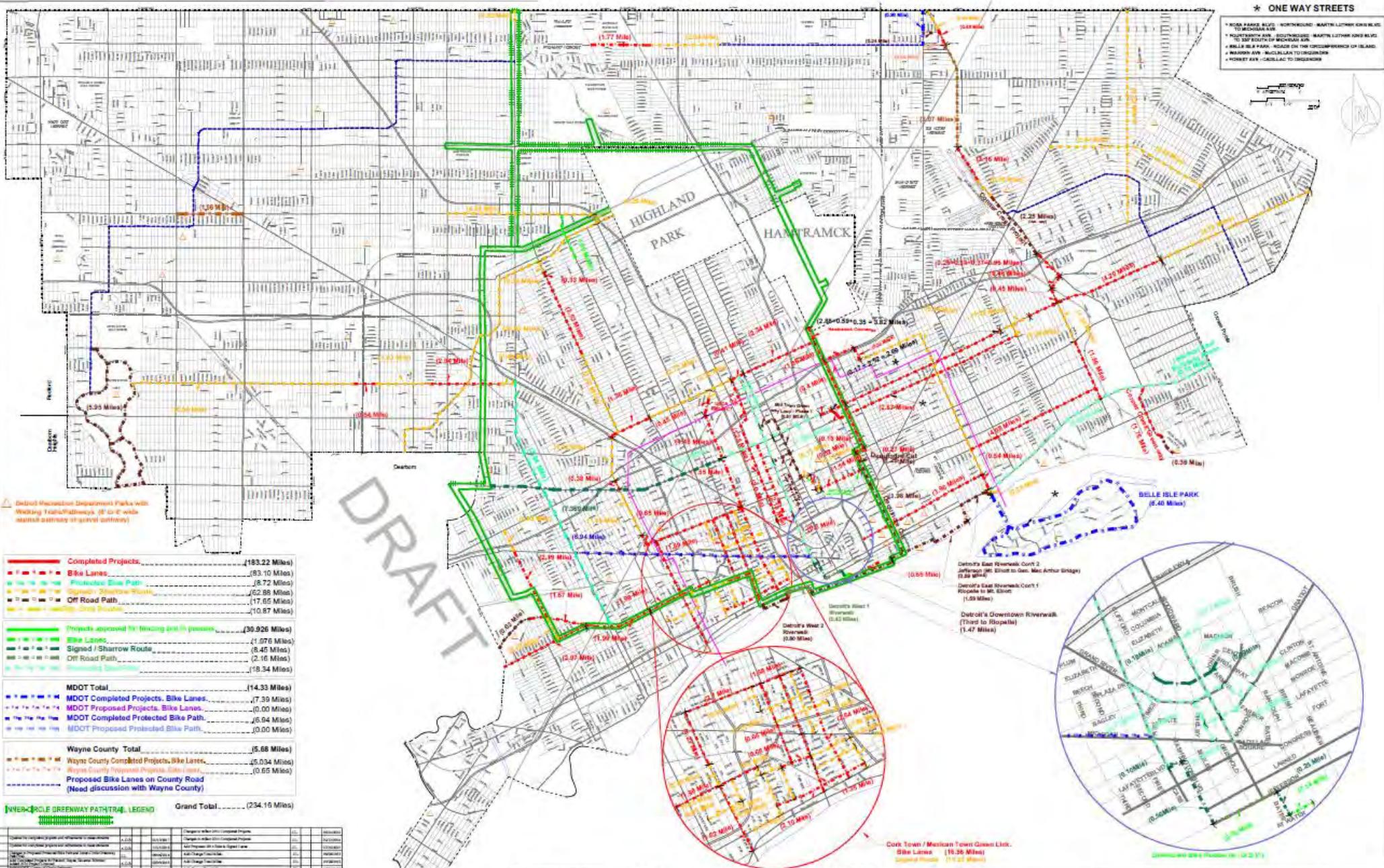
BUILDING A WORLD-CLASS BICYCLE NETWORK

A COMPREHENSIVE BICYCLE NETWORK IS:

- Protected, connected, attractive, and accessible
- Meets quality standards that make residents of all ages and abilities feel safe & comfortable
- Clear and understandable



DPW NON-MOTORIZED NETWORK PLAN



*** ONE WAY STREETS**

- 1 HOOD PARKS BLVD - NORTHBOUND - NORTH LUTHER KING BLVD TO MICHELANA AVE
- 2 MICHELANA AVE - SOUTHBOUND - NORTH LUTHER KING BLVD TO 327 SOUTH OF MICHELANA AVE
- 3 BELLE ISLE PARK - HOV3 ON THE CIRCUMFERENCE OF ISLAND
- 4 WOODRUFF AVE - BUCKLEUP TO ORGARDSON
- 5 HOBBS AVE - BUCKLEUP TO ORGARDSON

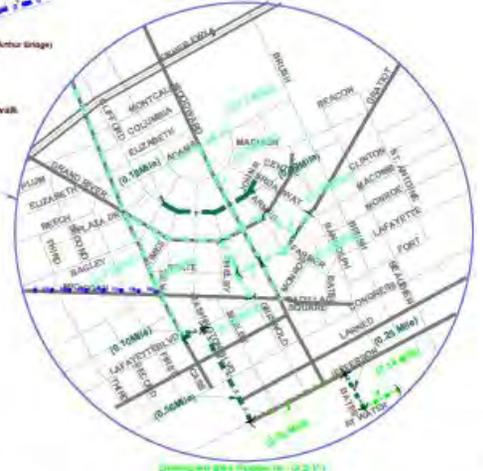
Delimited Recreation Department Parks with Working Trails/Pathways (8' or 6' wide, match existing or gravel surface)

Completed Projects	.....	(183.22 Miles)
Bike Lanes	.....	(83.10 Miles)
Protected Bike Path	.....	(8.72 Miles)
Shared-Use Paths	.....	(62.88 Miles)
Off Road Path	.....	(17.65 Miles)
Shared-Use Paths	.....	(10.87 Miles)
Projects approved for funding and in process	.....	(30.926 Miles)
Bike Lanes	.....	(1.076 Miles)
Signed / Sharrow Route	.....	(8.45 Miles)
Off Road Path	.....	(2.16 Miles)
Shared-Use Paths	.....	(19.34 Miles)
MDOT Total	.....	(14.33 Miles)
MDOT Completed Projects, Bike Lanes	.....	(7.30 Miles)
MDOT Proposed Projects, Bike Lanes	.....	(0.00 Miles)
MDOT Completed Protected Bike Path	.....	(5.04 Miles)
MDOT Proposed Protected Bike Path	.....	(0.00 Miles)
Wayne County Total	.....	(5.68 Miles)
Wayne County Completed Projects, Bike Lanes	.....	(5.034 Miles)
Wayne County Proposed Projects, Bike Lanes	.....	(0.65 Miles)
Proposed Bike Lanes on County Road (Need discussion with Wayne County)	.....
Grand Total	.....	(234.16 Miles)

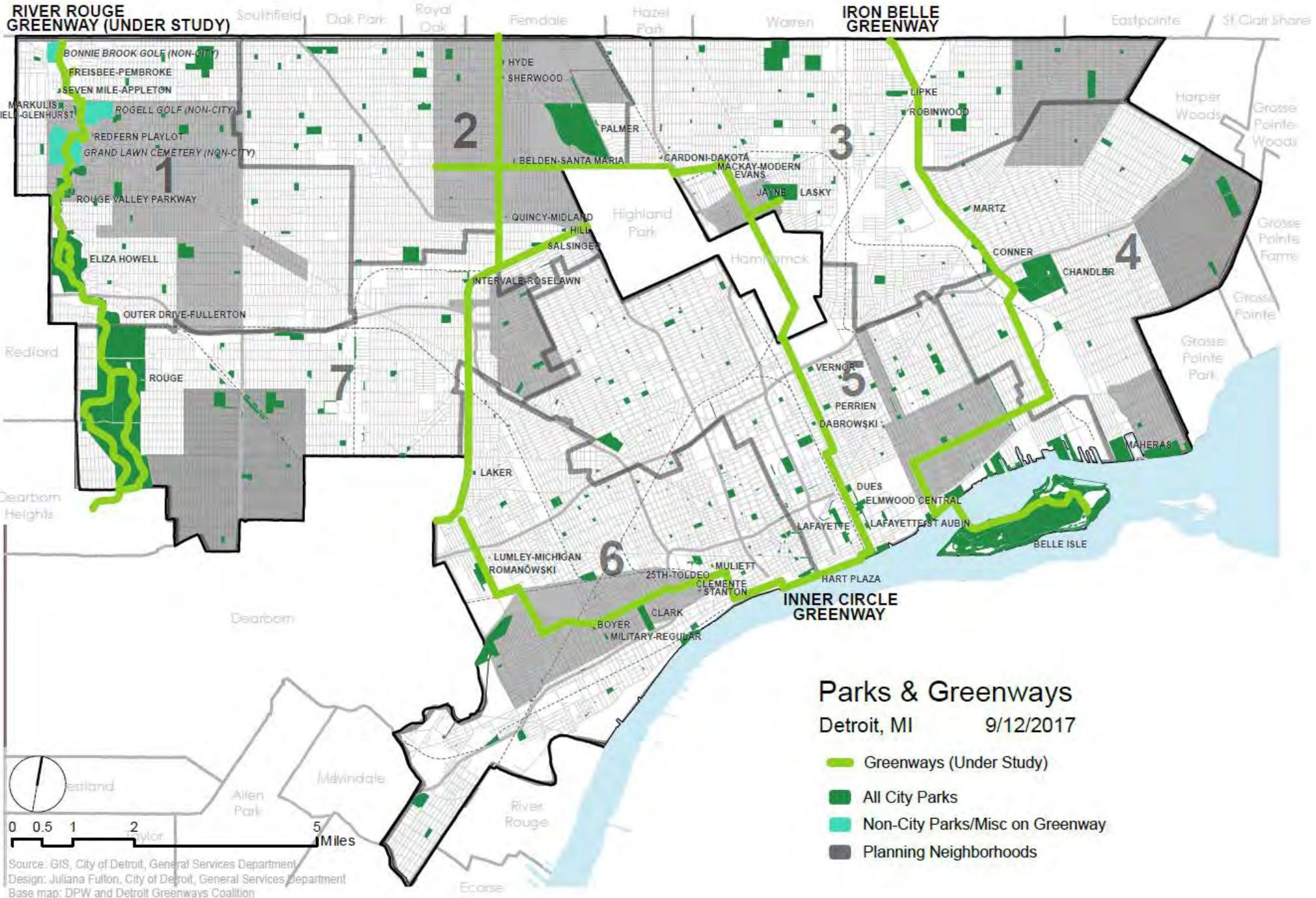
INTEGRAL GREENWAY PATHWAY LEGEND

Project Name	Project Description	Project Status	Project Location	Project Length (Miles)
1.001	1.001	1.001	1.001	1.001
1.002	1.002	1.002	1.002	1.002
1.003	1.003	1.003	1.003	1.003
1.004	1.004	1.004	1.004	1.004
1.005	1.005	1.005	1.005	1.005
1.006	1.006	1.006	1.006	1.006
1.007	1.007	1.007	1.007	1.007
1.008	1.008	1.008	1.008	1.008
1.009	1.009	1.009	1.009	1.009
1.010	1.010	1.010	1.010	1.010

Project Name	Project Description	Project Status	Project Location	Project Length (Miles)
1.011	1.011	1.011	1.011	1.011
1.012	1.012	1.012	1.012	1.012
1.013	1.013	1.013	1.013	1.013
1.014	1.014	1.014	1.014	1.014
1.015	1.015	1.015	1.015	1.015
1.016	1.016	1.016	1.016	1.016
1.017	1.017	1.017	1.017	1.017
1.018	1.018	1.018	1.018	1.018
1.019	1.019	1.019	1.019	1.019
1.020	1.020	1.020	1.020	1.020



GREENWAYS



THE VISION FOR DETROIT STREETS



1. PEDESTRIAN REFUGE ISLAND
2. INTERNATIONAL CROSSWALK
3. ADA RAMP
4. GREEN THERMOPLASTIC SURFACE PAINT AND MARKERS

5. WIDE CYCLE TRACK
6. CYCLE TRACKS SEPARATED BY PERMANENT RAISED CURB
7. ON-STREET VEHICLE PARKING
8. REDUCED VEHICLE LANES AND TRAFFIC CALMING



Gratiot at Chene • Late Phase

MAINTENANCE

MAINTAINING BIKE LANES IN MICHIGAN



NEW EQUIPMENT TO HELP DPW

- Recently purchased equipment will help maintain bike lanes through all seasons
- DWSD cleaning catch basins reduces curb-side flooding



BIKE LANES 101

WHAT IS A BIKE LANE?



BIKE LANES

- **Painted Bike lanes** increase comfort and confidence by separating bicycle traffic flow from auto traffic
- **Designated bike lanes** increase predictability of bicyclist and motorist positioning



BUFFERED BIKE LANES

- **Buffered Bike lanes** are conventional bike lanes paired with a buffer space further separating the bike lane from the adjacent auto travel or parking lane



PROTECTED BIKE LANES:

- **Protected Bike Lanes** can use a variety of methods for physical vertical protection from vehicle travel lanes
- **Barriers** between the bike lane and motor vehicle travel lane could be curbs, planters, parked cars, or bollards

* ALWAYS RIDE WITH TRAFFIC OR IN THE DIRECTION AS MARKED !

PROTECTED BICYCLE NETWORK PROJECTS:

COMPLETED:



Cass Avenue



Michigan Avenue



Livernois Avenue

IN PROGRESS:



East Jefferson Avenue



Grand River Avenue



Warren Avenue

LESSONS LEARNED IN BIKE LANE IMPLEMENTATION

EAST JEFFERSON AVENUE

- **Lesson:** The parking lane in the Jefferson Chalmers area is too narrow and people do not feel comfortable parking and opening their doors
- **Solution:** The new striping plan includes wider parking spaces

LIVERNOIS AVENUE

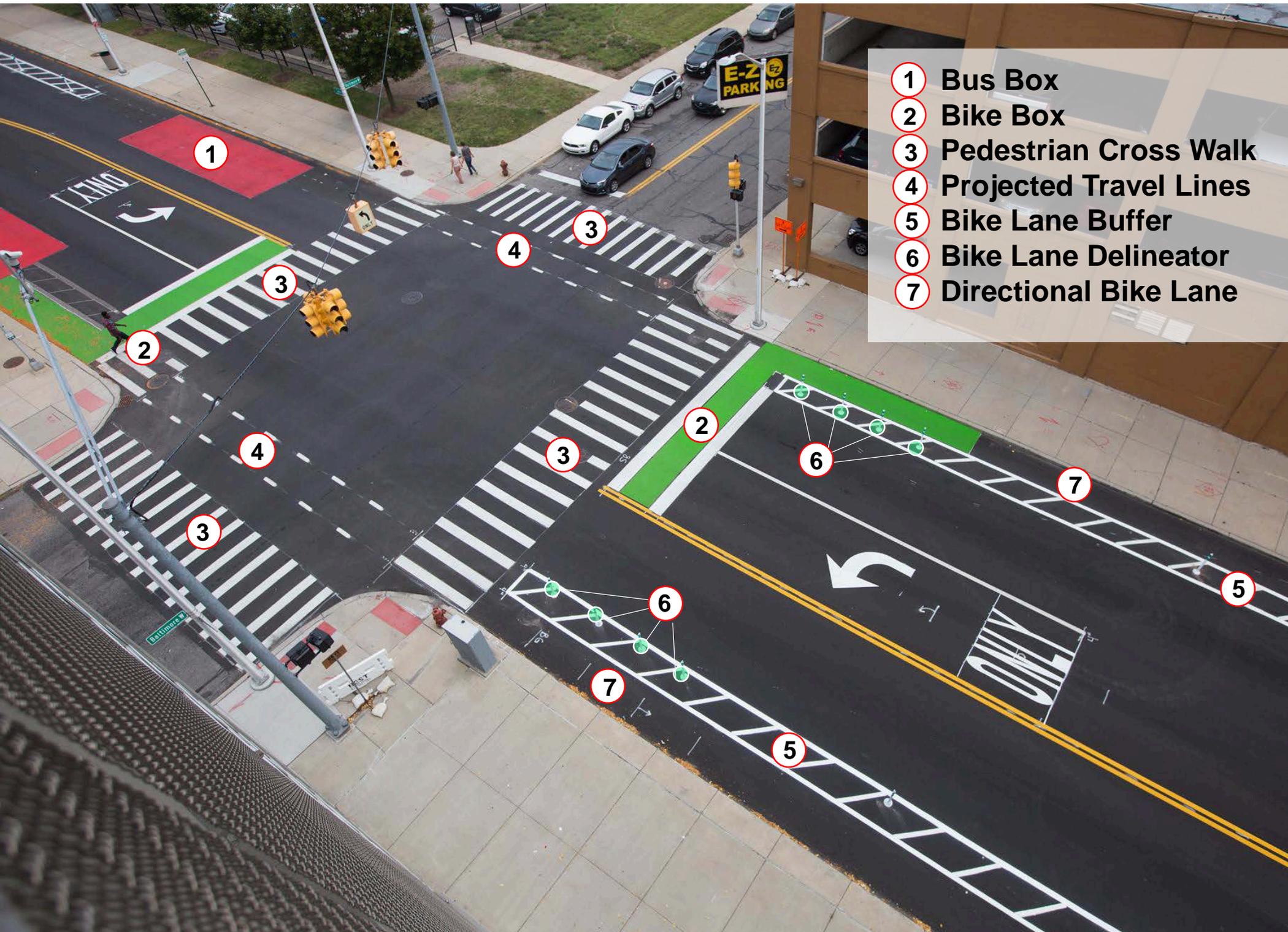
- **Lesson:** Without bollards or posts, it is confusing for drivers to know where to park and where the bike lane is
- **Solution:** We will be installing bollards for the entirety of the East Jefferson Project

MICHIGAN AVENUE

- **Lesson:** There is a lack of green paint to highlight vehicle/ bike conflict areas (intersections and driveways)
- **Solution:** We will be painting major driveways and intersections to help drivers be more aware of bikers and bikers be more aware of where drivers might be.



CASS AVE: PROTECTED BIKE INFRASTRUCTURE



- 1 Bus Box
- 2 Bike Box
- 3 Pedestrian Cross Walk
- 4 Projected Travel Lines
- 5 Bike Lane Buffer
- 6 Bike Lane Delineator
- 7 Directional Bike Lane

CASS AVE: PROTECTED BIKE LANES

THE BUFFER:

- Protects cyclists from traffic
- Space between parked cars and moving cyclists to allow for passengers to exit
- Prevents cyclist from being hit by a door



CASS AVE: PROTECTED BIKE LANES

THE BOLLARD:

- A physical, vertical delineator that dedicates and protects space for bicyclists
- Reduces fear & risk of collisions with over-taking vehicles
- Reduces the risk of “dooring”



CASS AVE: PROTECTED BIKE LANES

GREEN PAINT:

- Green, thermoplastic paint marks bike lanes and potential conflict areas between bikes and cars
- Used at minor street crossings, across driveways, intersections, and at bike boxes



CASS AVE: PROTECTED BIKE LANES

THE BIKE BOX:

- Designated for cyclists who need to turn across traffic
- Green thermoplastic paint is used to mark the space
- Motorists stop before the white line



CASS AVE: PROTECTED BIKE LANES

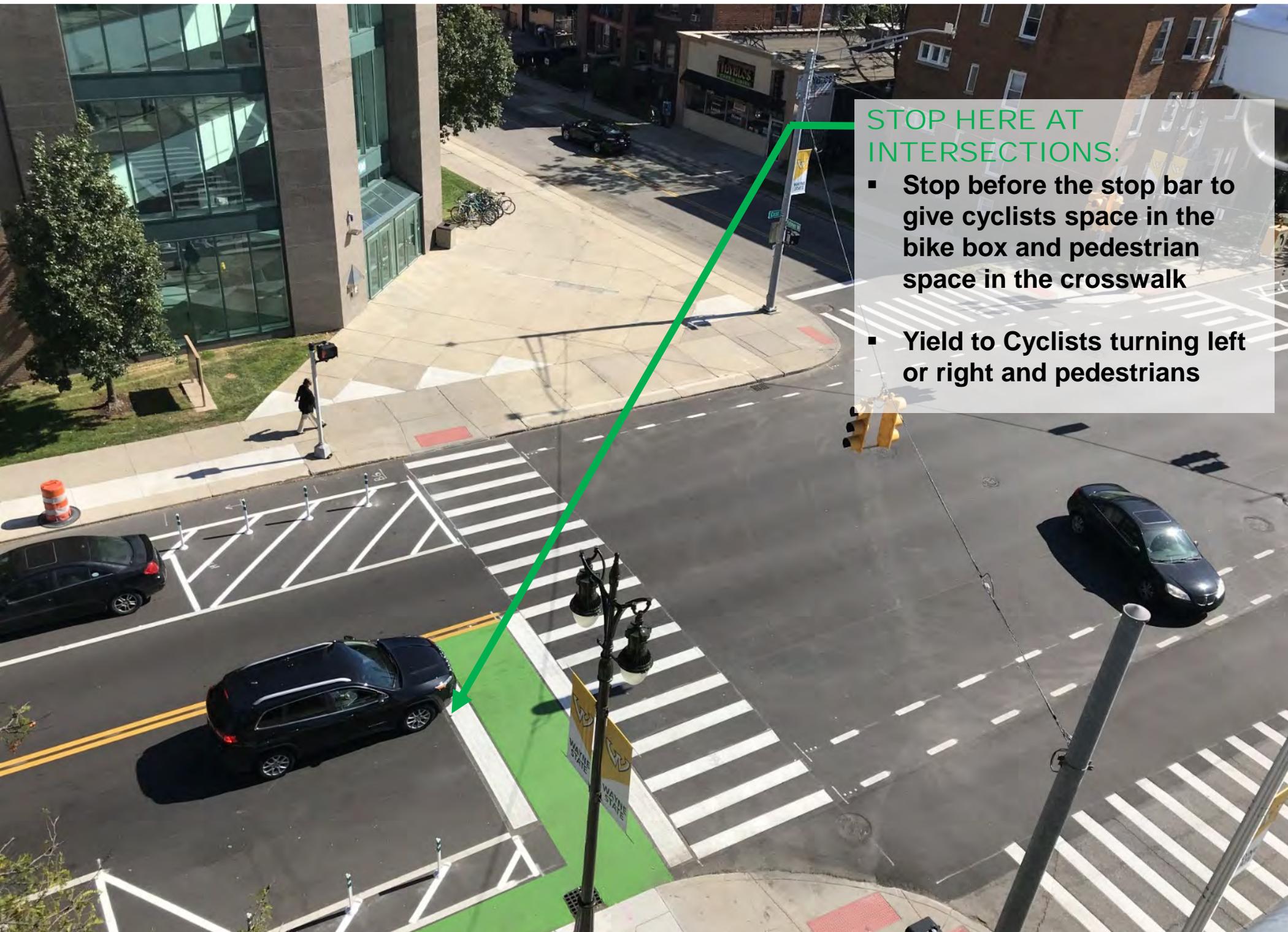
THE BUS BOX:

- Designated by red paint
- Alerts cars, cyclists and pedestrians to areas where bus stops are located
- Avoid blocking or standing in this area
- Cyclists need to be aware of bus and pedestrian movements



Driver Interaction

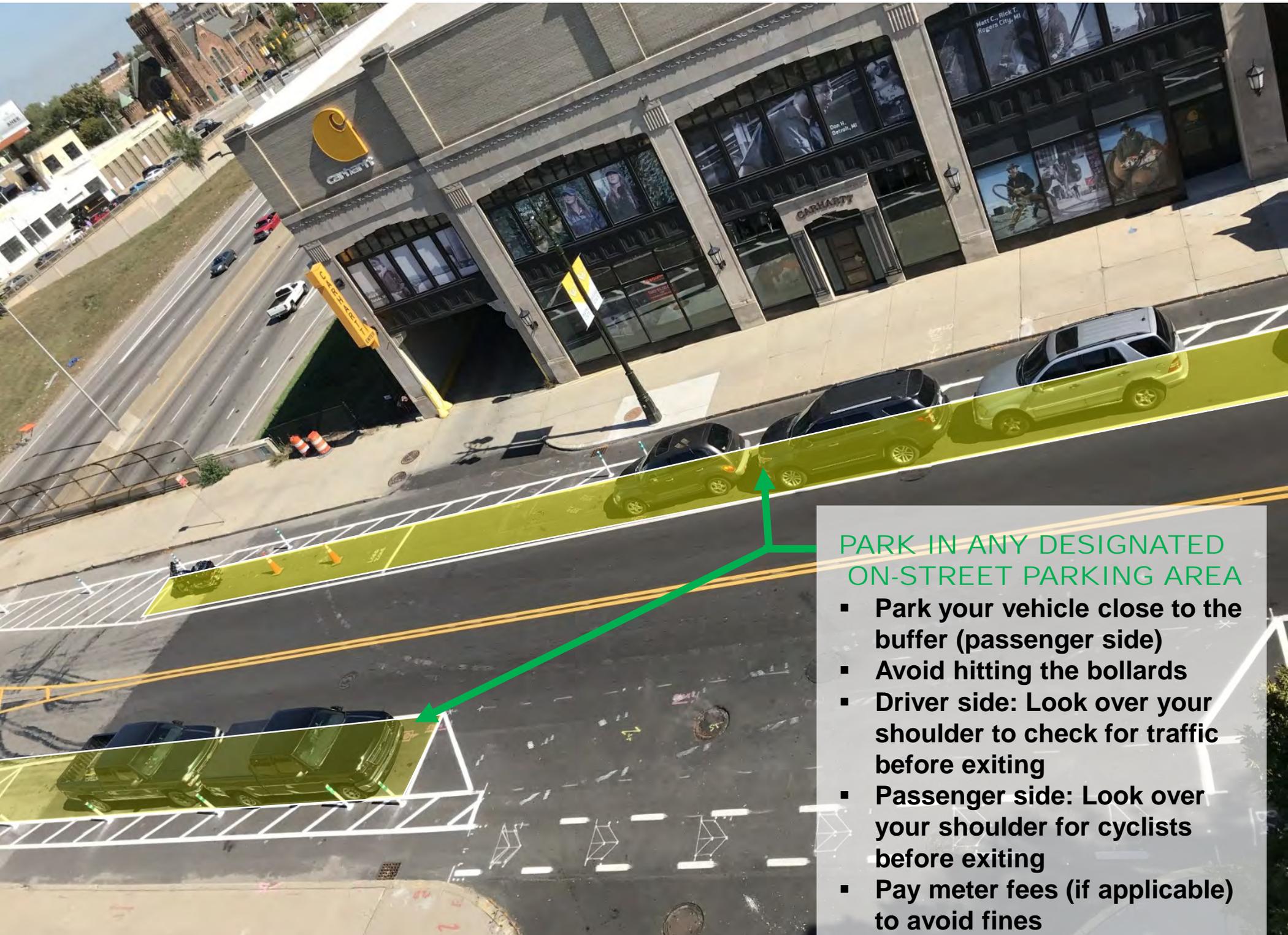
DRIVING WITH PROTECTED BIKE LANES



STOP HERE AT INTERSECTIONS:

- Stop before the stop bar to give cyclists space in the bike box and pedestrian space in the crosswalk
- Yield to Cyclists turning left or right and pedestrians

PARKING WITH PROTECTED BIKE LANES



PARK IN ANY DESIGNATED ON-STREET PARKING AREA

- Park your vehicle close to the buffer (passenger side)
- Avoid hitting the bollards
- Driver side: Look over your shoulder to check for traffic before exiting
- Passenger side: Look over your shoulder for cyclists before exiting
- Pay meter fees (if applicable) to avoid fines

DETROIT RIDES,
TOGETHER.

DETROIT RIDES SAFETY & EDUCATION CAMPAIGN



DETROIT RIDES
TOGETHER.

PROJECT AREA:
EAST JEFFERSON AVE
LAKEWOOD TO RIVARD

September 2017

Detroit is building a future for everyone, and whether you walk, bike or drive, we all move together.

JOINT SAFETY EFFORT

- Detroit Rides began in spring 2017
- Created to provide safety education to all road users to help reduce traffic deaths and serious injuries
- Product of PDD and DPW's Bicycle and Pedestrian Safety and Education Work Group, including 32 stakeholders from local organizations
- Distributes educational information in print and online
- "Like" or follow Detroit Rides on Facebook and Instagram for updates on bike & pedestrian projects and events
- @Detroit_Rides



This fall, East Jefferson will become a safer street by reducing the number of lanes to improve traffic flow, slowing auto speeds and designating protected space for cyclists and pedestrians.



If you walk, bike, ride the bus or drive, you can expect the changes on East Jefferson to benefit residents of all ages and abilities.



HOW CAN I LEARN MORE?

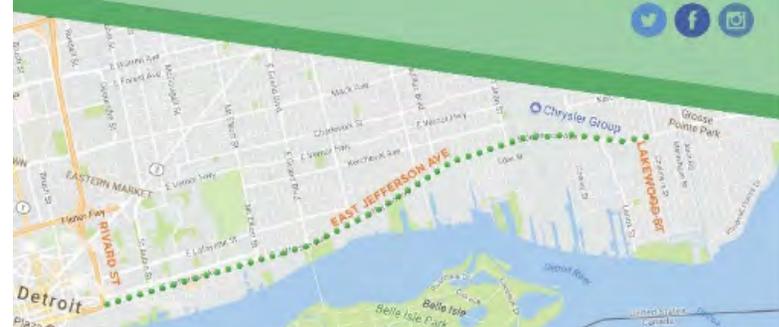
Planning & Development Department
Department of Public Works
Call: 313-224-1339
@Detroit_Rides



KEY IMPROVEMENTS:

- Traffic calming
- Protected bike lanes
- Designated on-street parking
- Safer and additional pedestrian crossings
- Road re-striping

Jefferson East, Inc.
Go East



THANK YOU



DETROITRIDES