

DOWNTOWN PEDESTRIAN AND TRAFFIC SAFETY MEASURES – CURRENT AND POTENTIAL

CITY COUNCIL WORK SESSION
OCTOBER 8, 2019

PEDESTRIAN SAFETY DOWNTOWN - GENERAL

- Downtown's Walk Score is an impressive **91** (of a possible 100)

	Walk Score	Bike Score
90-100	Walker's Paradise – daily errands do not require a car	Biker's Paradise – daily errands can be accomplished on a bike

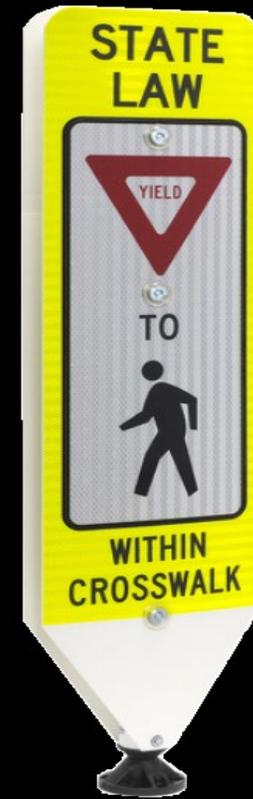
- The City's Overall Walk Score is **45**.

25-49	Car Dependent – most errands require a car	Somewhat Bikeable – minimal bike infrastructure
--------------	--	---

Source: Walk Score

IN-STREET PEDESTRIAN CROSSWALK SIGNS

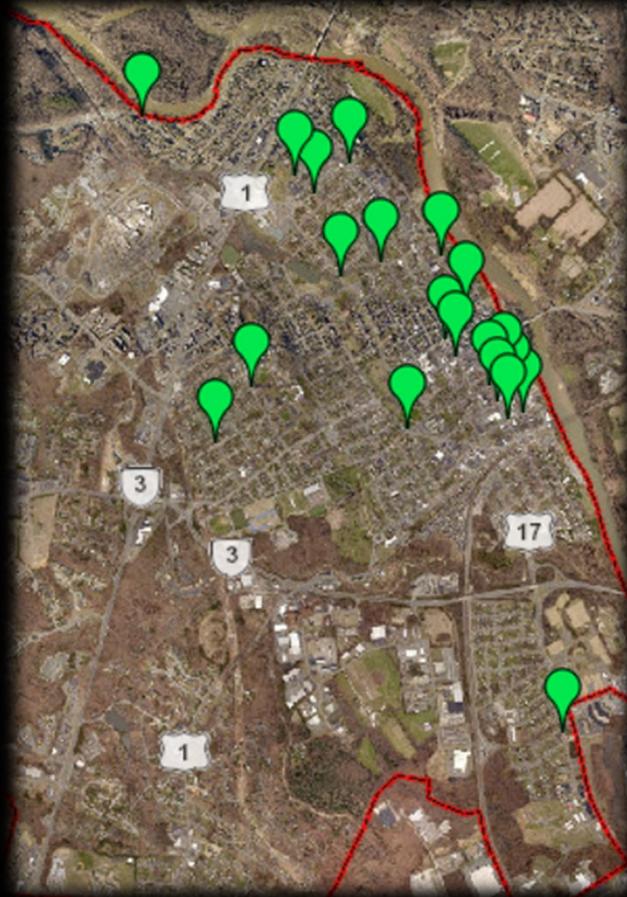
Alert motorists to local laws concerning yielding to or stopping for pedestrians in crosswalks ideal for mid-block crosswalk identification.



IN-STREET PEDESTRIAN CROSSWALK SIGNS

IN-STREET YIELD SIGN LOCATIONS

- Amelia St @ Charles St
- Caroline St @ Wolfe St
- Caroline St @ Charlotte St
- Caroline St @ Hanover St
- Caroline St @ Lewis St
- Caroline St @ Germania St
- Caroline St @ Pitt St
- College Ave @ Payne St
- Fall Hill Ave/Canal St @ Rappahannock Canal path
- Fall Hill Ave @ Hunter St
- Fall Hill Ave @ Germania St/ Washington Ave
- Fall Hill Ave @ Linden Ave
- Princess Anne St @ Hanover St
- Princess Anne St @ Charlotte St
- Princess Anne St @ Wolfe St
- Princess Anne St @ Hunter St
- Stafford Ave @ Brent St
- Washington Ave @ Rappahannock Canal path
- William St @ Charles St
- Hanover @ Kenmore
- Airport Ave



NEW TRAFFIC SIGNALS



- Amelia Street/Caroline Street
- Amelia Street/Princess Anne Street
- Amelia Street/Prince Edward Street
- Lafayette Boulevard/Princess Anne Street
- Lafayette Boulevard/Caroline Street



SIGNALIZED PEDESTRIAN LPI CROSSWALKS



LEADING PEDESTRIAN INTERVAL

An LPI gives pedestrians an **advance walk signal** before motorists get a green signal, giving the pedestrian several seconds to start crossing before a concurrent signal is provided to vehicles.

This makes **pedestrians more visible to motorists** and motorists more likely to yield to them.

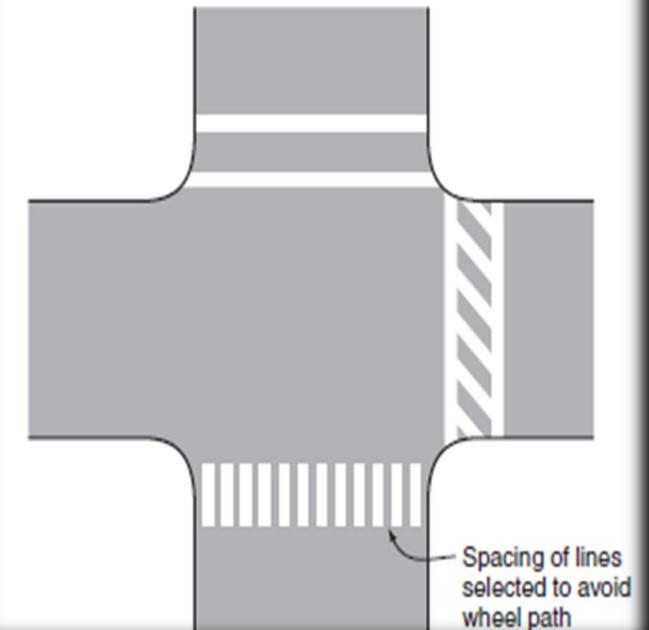


CONTINENTAL STYLE CROSSWALKS

Crosswalk markings provide guidance for pedestrians who are crossing roadways **by defining and delineating paths on approaches to intersections.**

Crosswalk markings also serve to **alert road users of a pedestrian crossing point across roadways not controlled by traffic signals or STOP signs.**

Figure 3B-19. Examples of Crosswalk Markings



CONTINENTAL STYLE CROSSWALKS

DOWNTOWN LOCATIONS

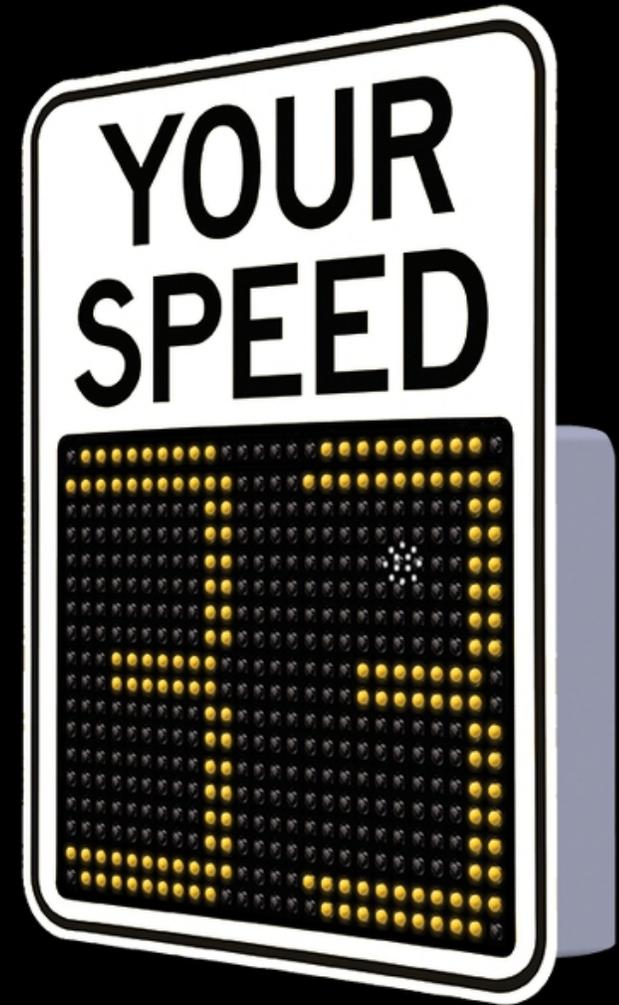
- Prince Edward St @ Amelia St
- Prince Edward St @ William St
- Prince Edward St @ George St
- Charles St @ Amelia St
- Charles St @ William St
- Princess Anne St @ Amelia St
- Princess Anne St @ William St
- Princess Anne St @ George St
- Princess Anne St @ Hanover St
- Princess Anne St @ Charlotte St
- Princess Anne St @ Wolfe St
- Princess Anne St @ Lafayette Blvd
- Caroline St @ Amelia St
- Caroline St @ William St
- Caroline St @ George St
- Caroline St @ Hanover St
- Caroline St @ Charlotte St
- Caroline St @ Wolfe St
- Caroline St @ Lafayette Blvd



RADAR FEEDBACK SIGNS

Radar speed signs are an **effective and affordable tool** to slow drivers down.

Studies have shown radar signs produce **10-20% reductions in average roadway speeds**, along with an increase in compliance with the posted speed limit.



RADAR FEEDBACK SIGNS

LOCATIONS

- 1407 Caroline St
- 1900 Washington Ave
- 921 William St



TRAFFIC CALMING

CURB EXTENSIONS / “BUMP OUTS”

Extend the sidewalk or curb line out into the parking lane, reducing the effective street width.

Curb extensions significantly improve pedestrian crossings by:

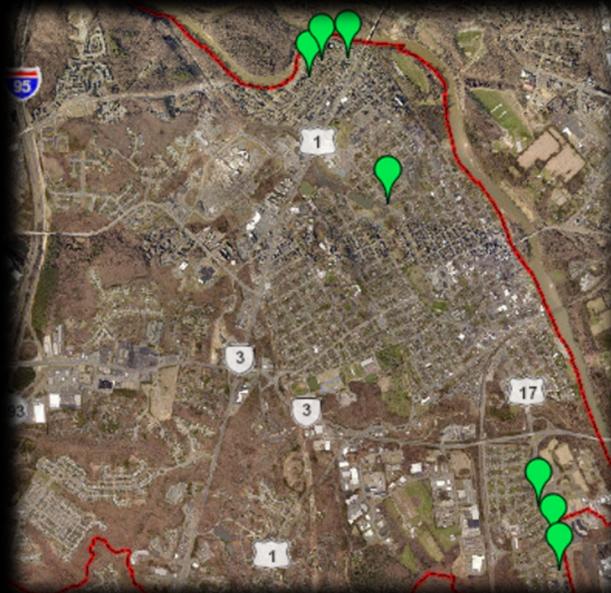
- reducing the pedestrian crossing distance (and thus, the time pedestrians are in the street); and
- improving the ability of pedestrians and motorists to see each other.



SPEED TABLES & RAISED PEDESTRIAN WALKWAYS

TRAFFIC CALMING RAISED PAVEMENT LOCATIONS

- 1400 Blk Airport Ave
- 1700 Blk Airport Ave
- 1800 Blk Airport Ave
- Charles St @ Hanson Ave
- Wellford St @ Hanson Ave
- Woodford St @ Hanson Ave
- Washington Ave @ Canal Path



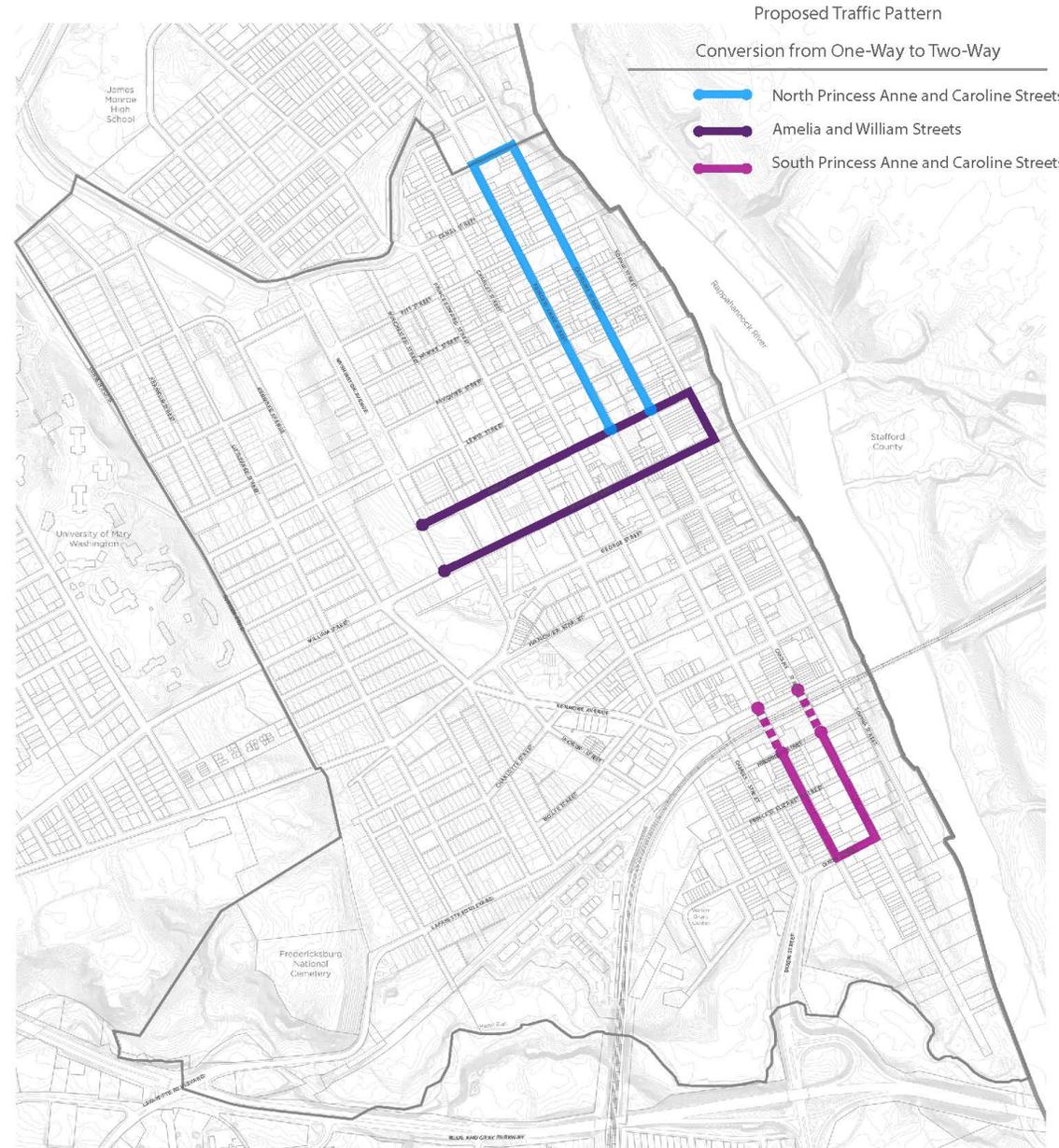
Speed tables are **midblock traffic calming devices** that raise the entire wheelbase of a vehicle to reduce its traffic speed.

Speed tables are **longer than speed humps and flat-topped.**

DOWNTOWN PEDESTRIAN SAFETY/TRAFFIC MANAGEMENT PLAN

- Identify the impacts to changing traffic patterns on Downtown streets
- Develop appropriate solutions
- Evaluate additional traffic calming practices
- Evaluate additional bicycle route and pedestrian improvements

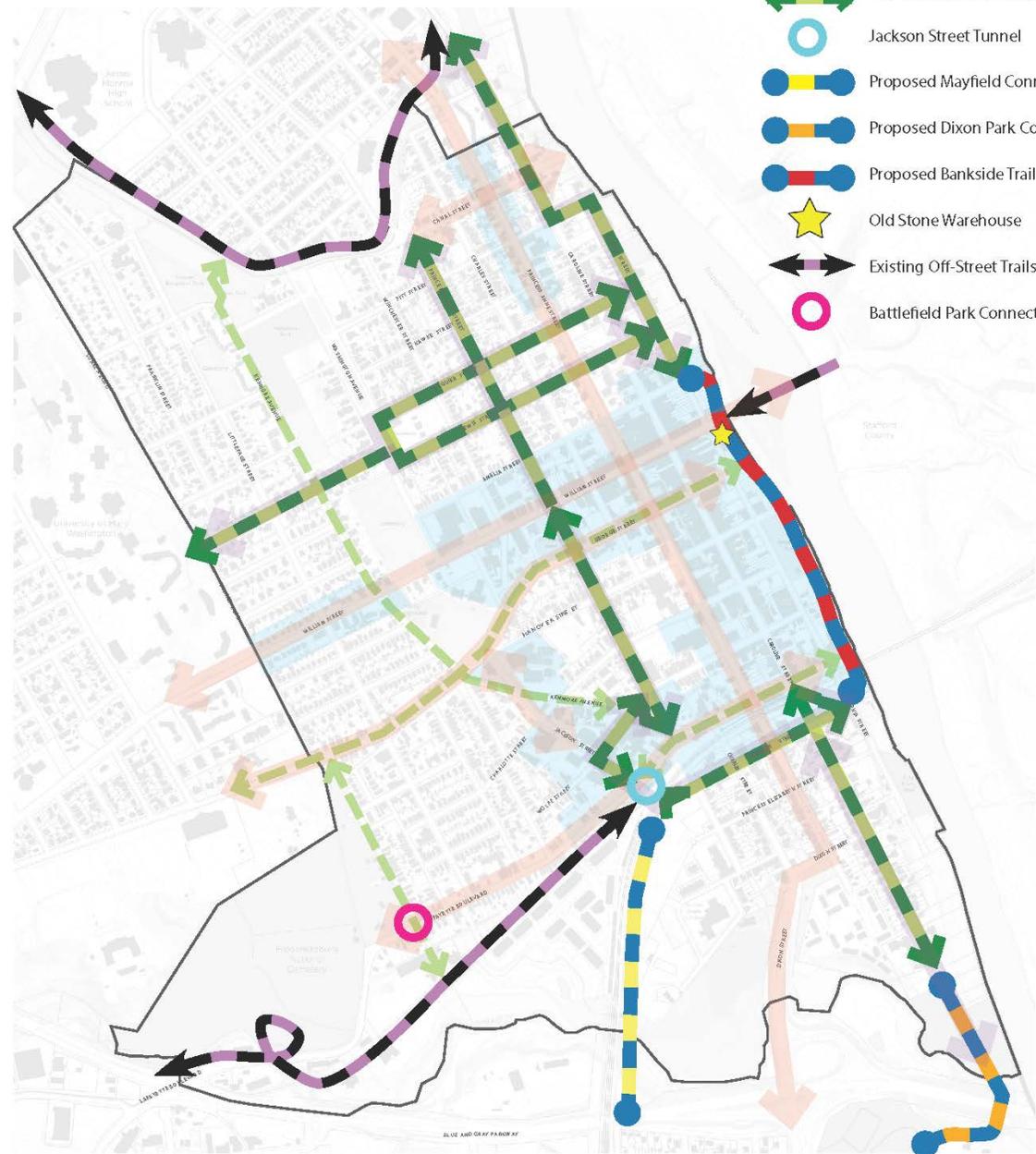
CONVERT ONE-WAY TO TWO-WAY TRAFFIC



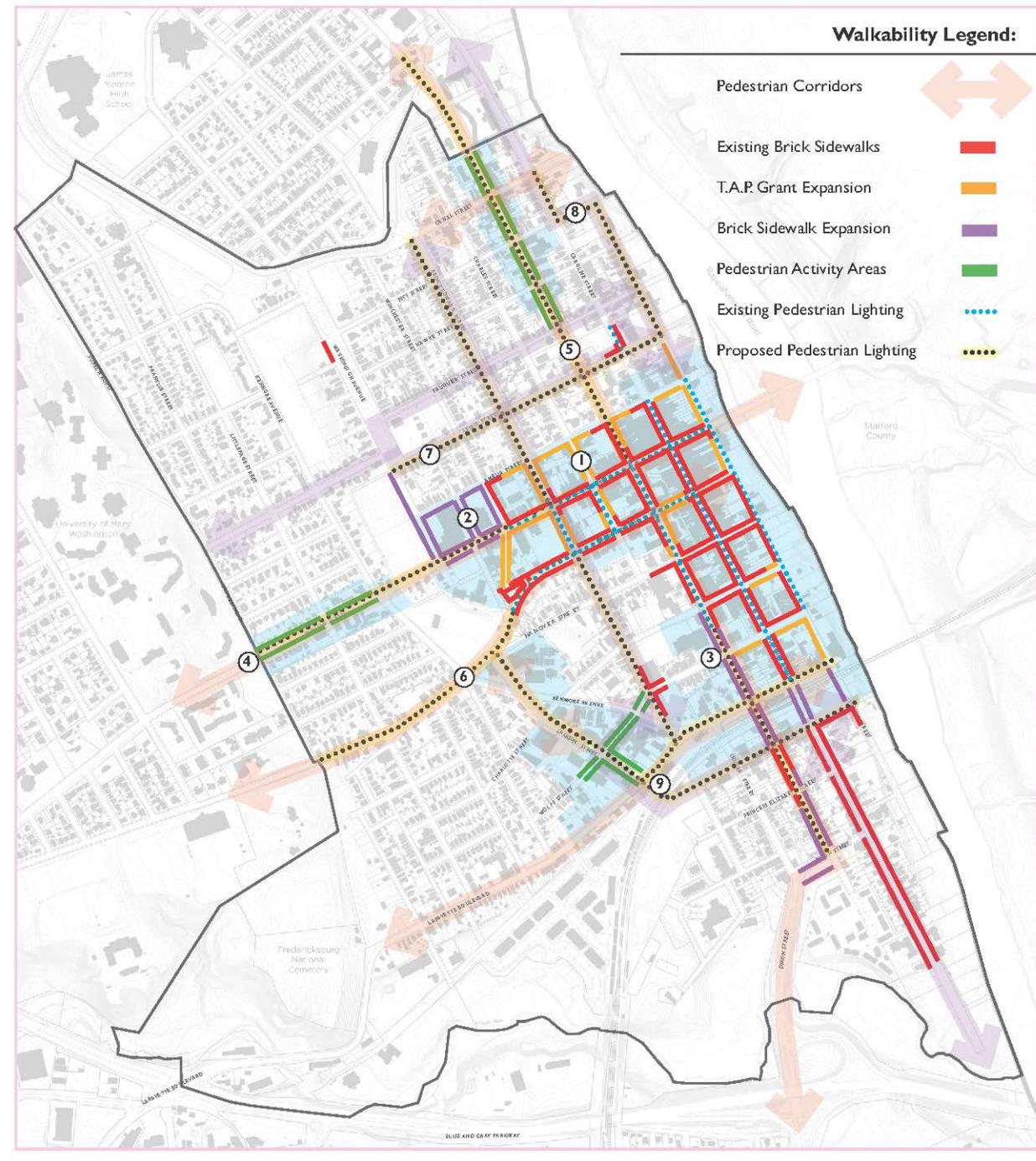
EXPAND BICYCLE CORRIDORS

Bicycle Corridor Legend:

-  Planned Shared Roadways
-  Bicycle Boulevard Expansion
-  Jackson Street Tunnel
-  Proposed Mayfield Connector
-  Proposed Dixon Park Connector
-  Proposed Bankside Trail
-  Old Stone Warehouse
-  Existing Off-Street Trails
-  Battlefield Park Connector



UPGRADE PEDESTRIAN CORRIDORS



POTENTIAL FUTURE IMPROVEMENTS

- Pedestrian improvements at Princess Anne and George Streets
- Speed tables on Sophia Street at Riverfront Park
- Reduce speed limit on Caroline Street
 - To 20 MPH in central business district
 - To 25 MPH (Herndon Street to Amaret Street)
- Pedestrian improvements associated with Lafayette Boulevard roundabout at Kenmore and Charles Streets.

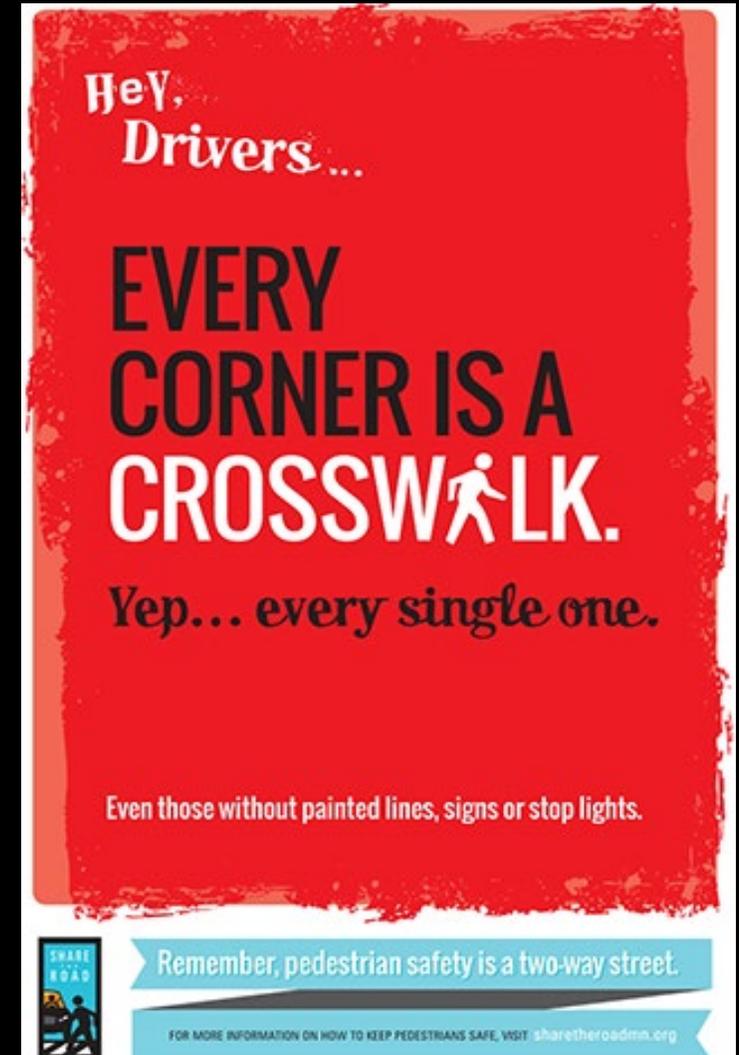
THE ROLE EVERYONE CAN PLAY IN IMPROVING SAFETY

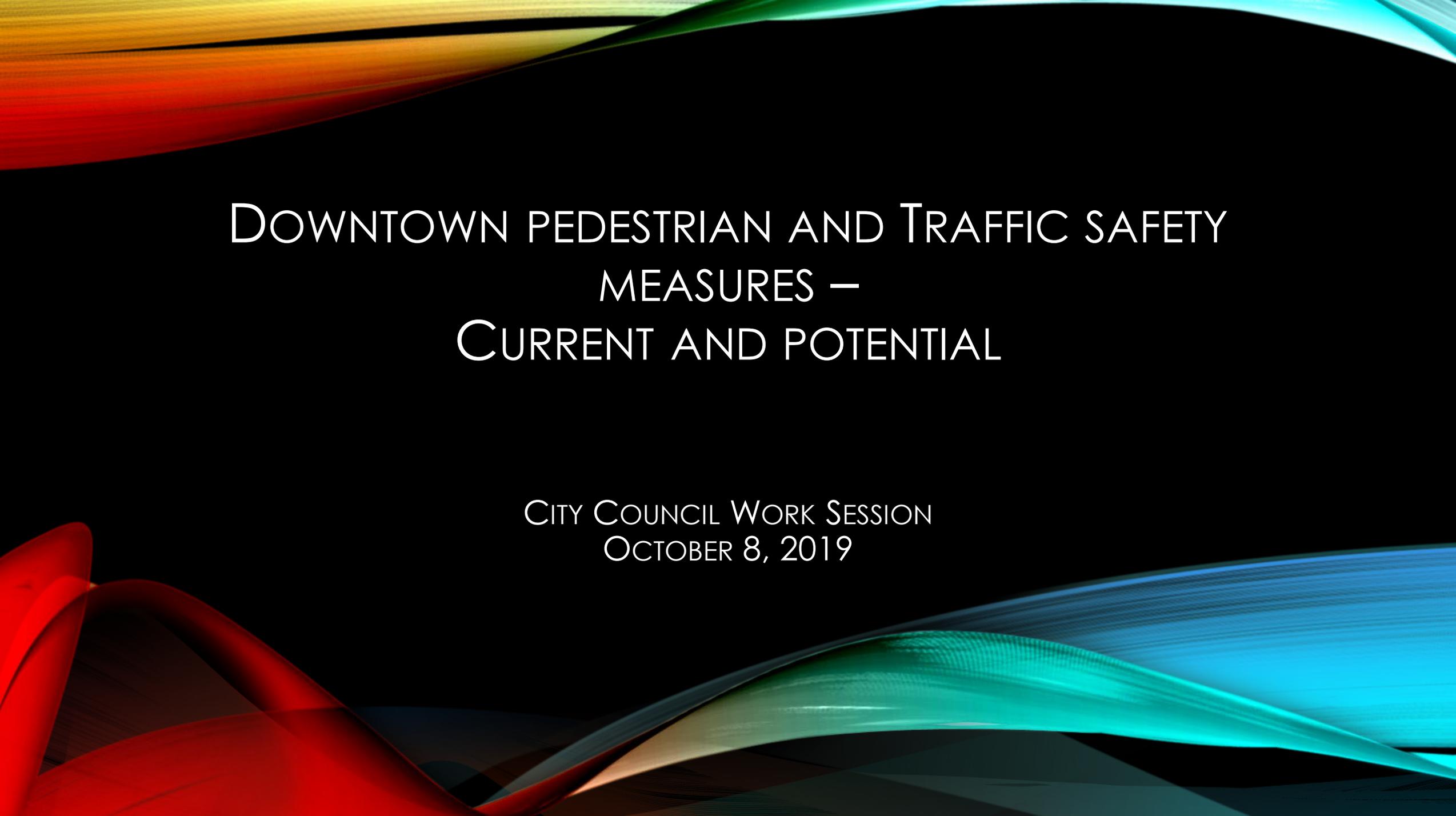
• Drivers

- Be on high alert in heavy pedestrian areas
- **Yield** to pedestrians in crosswalks (**It's the law!**)

• Pedestrians

- **Cross only at crosswalks** (or at nearest intersection if no crosswalk nearby)
- Never enter the travel lane from between parked cars
- **Do not assume** a driver has seen you; **Make eye contact** with the driver before entering the travel lane
- Be a "**Defensive Walker**"





DOWNTOWN PEDESTRIAN AND TRAFFIC SAFETY MEASURES – CURRENT AND POTENTIAL

CITY COUNCIL WORK SESSION
OCTOBER 8, 2019