



Providence Bicycle and Pedestrian Advisory Commission

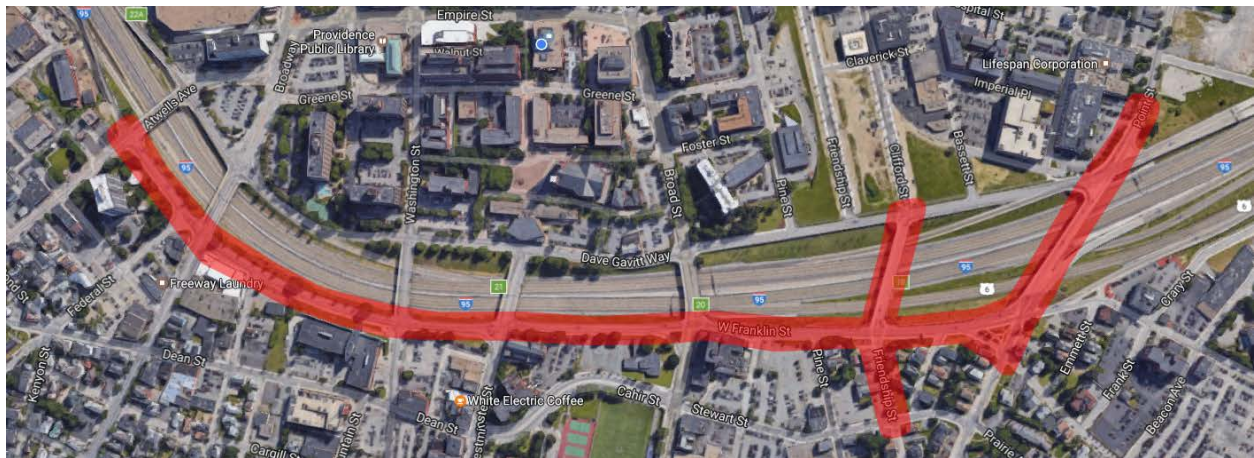
Jorge O. Elorza, Mayor

Staff Report: “Service Road RSA” – Upper South Providence, Federal Hill – Wards 11 and 13 (For Action)

Presented at June 21, 2017 BPAC meeting

Project Description

The City seeks comments from the BPAC regarding the draft Road Safety Assessment for the I-95 Service Road between Atwells Avenue and Point Street completed by VHB. The RSA includes an analysis of crashes that have occurred on the Service Road from 2009-2015 as well as proposed solutions to improve safety along the corridor. When advanced in the future, this project will come back to the BPAC for preliminary plan review.



The City of Providence selected the I-95 Service Road for an RSA because it abuts multiple corridors with high crash frequency between 2009-2015. During a RSA, the City of Providence, RIDOT, and an interdisciplinary team evaluated existing conditions and identified possible factors contributing to vulnerable road user safety at these locations. The findings were then prioritized in order of perceived importance and associated with potential opportunities for targeted improvement/corrective mitigation. Service Road is a three-lane, one-way principal arterial that has a generally north-south orientation. Service Road provides a connection from the east and west sides of Providence toward Interstate 95 North and South. The land use in this area is a majority of commercial use with some residential use. Approximately 10,800 vehicles per day travel along Service Road within the study area based on historic traffic volumes.



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Along the Service Road there were 14 vulnerable user crashes occurred from 2009 to 2015. Eight of those crashes (67%) involved pedestrians with serious injuries (KAB), two of those crashes (13%) involved bicycles with B-type injuries, while the remaining 34 percent were complaints of pain or property damage only crashes.

Key observations and potential mitigation measures that are included in the RSA report are as follows:

- **Pavement was found to be wide with limited striping.**
 - **IMMEDIATE:** Restripe corridor due to lack of pavement marking visibility and ensure continental style crosswalk pavement markings are utilized at all crossings.
 - **IMMEDIATE:** Utilize striping to implement a road diet to reduce the number of travel lane and provide multimodal accommodations (bikes, buses, etc.).
 - **LONG TERM:** Consider utilizing a road diet and multimodal principles to create a boulevard through geometric improvements (landscaping, shifting of curb line, raised medians, etc.). **should not be considered until immediate and near term improvements were implemented and reviewed for effectiveness. A traffic capacity analysis is required to determine the feasibility of a Road Diet to reduce number of travel lanes.*
- **Bicycle connectivity is not provided along the Service Road.**
 - **IMMEDIATE:** Consider creating bicycle connectivity for the City of Providence, where feasible. **If implemented, follow the City of Providence Bike Plan and coordinate with Bicycle & Pedestrian Advisory Commission.*
 - **NEAR TERM:** Revise traffic signal timings, where needed, to accommodate bicycle detection and clearance times.
- **Traffic signs are small, inconsistent, unclear, obstructed, or missing along the Service Road.**
 - **IMMEDIATE:** Consider a comprehensive sign audit to verify sign height, retro-reflectivity, current sign standards, consistency, redundancy, and unnecessary signs. Revise signs accordingly.
- **Vehicles travel at a high rate of speed along the Service Road.**
 - **IMMEDIATE:** Consider a speeding enforcement campaign on the Service Road to discourage speeding.
 - **IMMEDIATE:** Remove all speed limit signs along the corridor and install new signs space more appropriately.
 - **IMMEDIATE:** Consider reviewing the posted speed limit and revise accordingly.
 - **IMMEDIATE:** Consider traffic calming techniques such as narrowing the lane widths to discourage speeding.
 - **NEAR TERM:** Install dynamic speed feedback signs to discourage speeding along the corridor.
 - **NEAR TERM:** Construct bump outs, where feasible, to narrow the roadway cross section to reduce travel speeds.



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- **Pedestrians wait for long periods of time before receiving a walk signal. Not all pedestrian signals may be functioning properly. ADA compliant wheelchair ramps and facilities are not consistently provided at intersections.**
 - **IMMEDIATE:** Review pedestrian signal equipment to identify and resolve any issues.
 - **IMMEDIATE:** Investigate crosswalk addition/ consolidations along the corridor to better serve pedestrians.
 - **IMMEDIATE:** Work with community groups to identify opportunities to reach out to the community concerning transportation safety issues for drivers and pedestrians.
 - **NEAR TERM:** Reconstruct all non-compliant sidewalks and wheelchair ramps with an ADA compliant design.
 - **Drivers do not behave with an awareness of other roadway users, specifically pedestrians and bicyclists. Sight lines for pedestrians are inadequate due to the limited right-of-way (i.e. buildings at back of sidewalk, bridge structions close to edge of pavement)**
 - **IMMEDIATE:** Restripe crosswalks with continental style pavement markings for enhanced visibility.
 - **IMMEDIATE:** At signalized intersections, evaluate the pedestrian clearance times.
 - **IMMEDIATE:** Enhance crosswalks with warning signs and “PED X-ING AHEAD” pavement markings that are compliant with the MUTCD.
 - **IMMEDIATE:** Continue enforcement of State Ordinance prohibiting parking within 20 feet of a crosswalk and 25 feet of a curb cut.
 - **NEAR TERM:** Construct bump outs on each side of crosswalks, where feasible, to provide better visibility of the pedestrians and shorten the pedestrian crossing. **Near term improvements should not be considered until immediate term improvements were implemented and reviewed for effectiveness.*
 - **Lack of sufficient street lighting – No street lighting provided along the corridor, which may contribute to the number of crashes at this location that occur under dusk or dark lighting conditions.**
 - **IMMEDIATE:** Conduct a lighting study to determine deficiencies and potential improvements.
 - **NEAR TERM:** Implement area-wide lighting installation to improve safety for vehicles and vulnerable road users.
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Respectfully submitted by Alex Ellis.