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MEMORANDUM

TO: Eileen M. Donoghue, City Manager *EMD*

FROM: Diane N. Tradd, Assistant City Manager/DPD Director

DATE: September 8, 2020

SUBJECT: Summary of MassDOT Safety Analysis of Pawtucket Boulevard/VFW Highway

After the fatal crash which took place in May 2020 on VFW Highway in Lowell, and in response to letters from the State Delegation, MassDOT undertook a safety analysis of the portion of the roadway where the crash took place. The City of Lowell received a copy of the report, entitled Lowell – Pawtucket Boulevard (State Route 113) Safety Analysis on August 24, 2020. The report length totals 780 pages, including the Appendices. A brief summary of the report is below.

- The study limits are the Tyngsboro/Lowell line to Stockbridge Avenue, 2.6 miles in length.
- Per the report, the speed limit ranges from 40 to 50 mph for this stretch of the roadway. Note that the City of Lowell adopted a special speed regulation (266-43, numbers 19 and 20) designating a 35 mph speed limit on both sides of the road from Lebanon Street to Old Ferry Road in 1990. Then in 1997, the City also adopted a special speed regulation (266-45, numbers 21 and 22) designating the speed limit range from 40 to 45 mph for the City-owned portion of the roadway.
- MassDOT noted missing or damaged speed limit signs and recommends they be replaced.
- Traffic counts taken April 26, 2019-May 2, 2019 indicated that there are 18,960 vehicles per day (VPD) for this segment of the roadway. The traffic count drops to 11,105 VPD at the Tyngsboro/Lowell line.
- This segment experienced 289 total crashes, with 205 occurring directly on Pawtucket Boulevard. There are no Top Crash intersections or HSIP intersections *within* the study area. Note that per the 2017 Regional Transportation Safety Report - Top 100 Crash intersections in NMCOG, there are five Top Crash Intersections on VFW Highway within the City limits (#1 VFW Hwy @ Bridge Street; #3 VFW Hwy @ School/Mammoth; #5 VFW Hwy @ Aiken; #13 VFW Hwy @ University Avenue; #40 VFW Hwy @ Riverside Street)
- The report broke the study area into 15 segments and made recommendations based on those segments as follows:

Segment	Description	# of Crashes	Recommendations
1. Tyngsboro Town line to Riverbend Condos*	Curved 2-lane undivided highway segment	4	Removal of the 2-way eastbound passing zone
2. Riverbend Condos to Westminster Village*	Straight 2-lane undivided highway segment	14	Removal of the 2-way passing zone
3. Westminster Village to 1226 Pawtucket Boulevard*	Straight 2-lane undivided highway segment	23	Removal of the 2-way passing zone Consolidation of access points
4. 1226 Pawtucket Boulevard to Wedgewood Circle*	Curved alignment transitions from 2-lane undivided highway to 4-lane divided highway	6	Relocation of the westbound transition to a point further east of Wedgewood Circle
5. Wedgewood Circle to Power Easement*	Curved alignment 4-lane divided highway	0	None
6. Power Easement to Cross River Center*	Curved alignment 4-lane divided highway	4	None
7. Cross River Center to Lowell City Water Utility*	Straight alignment 4-lane divided highway	0	None
8. Lowell City Water Utility to Old Ferry Road*	Straight alignment 4-lane divided highway	1	None
9. Old Ferry Road to Rourke Bridge**	Straight alignment 4-lane divided highway	15 (all at Old Ferry intersection)	Suggest City review signal timing; Add backplates with reflectorized borders <i>(MB will do this as part of mitigation)</i>
10. Rourke Bridge to Vandenberg Esplanade**	Straight alignment 4-lane divided highway	46	No recommendations since Rourke Bridge project is underway
11. Vandenberg Esplanade to Regatta Field**	Straight alignment 4-lane divided highway	46	Suggest City review signal phasing, signal timing and detector placement; Add backplates with reflectorized borders
12. Regatta Field to Camelot Court II**	Curved alignment 4-lane divided highway	8	Suggest City review and adjust vehicle and pedestrian clearance time; Add backplates with reflectorized borders
13. Camelot Court II to Cheryl Lee Lane**	Straight alignment 4-lane divided highway	14	Restrict traffic to right turn only out of Camelot Court (already done); Suggest City review and adjust vehicle and pedestrian clearance time at pedestrian signal; Add backplates with reflectorized borders

14. Cheryl Lee Lane to Delaware Avenue**	Curved alignment 4-lane divided highway	6	None
15. Delaware Avenue to Varnum Avenue**	Curved alignment 4-lane divided highway	18	Suggest the City add signage with speed advisory; Suggest City review and adjust vehicle and pedestrian clearance time at pedestrian signal; Add backplates with reflectorized borders

* under MassDOT control

** under City of Lowell control

Suggested Safety Improvements for the corridor as a whole include:

- Review the condition of signs and pavement markings, performed by respective owners
- Conduct a new speed study for the City-owned portion of the roadway (performed by MassDOT)
- Implement a road diet from Wedgewood Circle to Stockbridge Avenue

NV/ns

cc: Natasha Vance, Transportation Engineer