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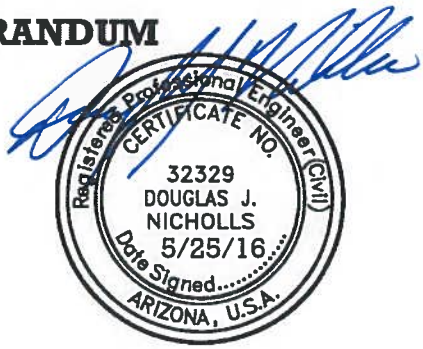
TECHNICAL MEMORANDUM

Date: May 25, 2016

To: Michael Blankenship, P.E.

From: Douglas J. Nicholls, P.E.
Kevin L. Burge, P.E., R.L.S.

Re: YMPO Transportation Safety Study
Project Summary and B/C Analysis



Expires 3/31/19

Using data provided by Amec Foster Wheeler, Core Engineering Group, PLLC reviewed data for Severity Level 4 (serious injury) and Level 5 (fatal) accidents along the following corridors that were selected by the YMPO for analysis. Note the top three most common type of accidents for each corridor is noted:

	Corridor	1st	2nd	3rd
1.	8th St from Ave B to 4th Ave	Rear-end	Angle	Left-turn
2.	4th Ave from 1st St to 14th St	Rear-end	Angle	Left-turn
3.	16th St from Pacific Ave to Ave 3E	Rear-end	Angle	Left-turn
4.	24th St form Ave B to Pacific Ave	Rear-end	Left-turn	Angle
5.	Ave B from 1st St to 32nd St	Rear-end	Left-turn	Angle
6.	County 14th St from US 95 to Ave D	Rear-end	Single-Veh.	Left-turn
7.	Ave 3E from County 19th St to 32nd St	Rear-end	Left-turn	Angle
8.	Co. 19th St from Avenue B to US 95	Single-Veh.	Rear-end	Angle
9.	Somerton Ave from Co. 13th St to County 19th St	Rear-end	Angle	Left-turn

A detailed review of the corridors characteristics was done and any noted pattern was determined through a review of the most recent 5 year set of accident data. It should be noted that for County 14th Street, no TAC reviewed countermeasure was identified that would provide a B/C ratio at or exceeding 1.5.

A summary of the proposed projects at specific locations can be found in Appendix A that are being suggested to address specific patterned problems. They include such projects like a pedestrian HAWK signal, median improvements, rumble strips (centerline only), traffic signal, traffic signal modifications, improvement of left turn lane with inadequate storage/taper and change to protected phasing. Detailed B/C HSIP application summaries can be found in Appendix B and planning level cost estimates can be found in Appendix C.

The CMF Clearinghouse website found at http://www.cmfclearinghouse.org/ was used to determine appropriate countermeasures and a detailed description of each is provided in Appendix D. Primarily, 4 and 5 star rated countermeasures were used for development of the Crash Modification Factor (CMF) reduction.