



MEMORANDUM

TO: Southwest Washington Regional Transportation Council Board of Directors
FROM: Matt Ransom, Executive Director
DATE: January 28, 2014
SUBJECT: **Safety Management Assessment: Collision Data**

AT A GLANCE

This is an informational agenda item to begin the update process for the Safety Management Assessment for Clark County. An initial look at county-wide collision data is presented in this Memorandum to provide an opportunity for the Board to understand the safety needs of the region.

INTRODUCTION

Safety for all modes of travel is an important component of the metropolitan transportation planning process. The federal transportation act designates Safety as a stand-alone planning factor and mandated that Metropolitan Planning Organizations develop a Safety Element as part of their long-range transportation plans.

The attached information provides a first look at 2009-2011 regional collision data that will be used to update the Safety Management Assessment for Clark County, Washington. The recommendations from the Safety Management Assessment will be incorporated into the next update to the Regional Transportation Plan.

At the February RTC Board meeting, staff will begin discussion of the Safety Management Assessment for Clark County by presenting an initial look at county-wide collision data.

WASHINGTON STATE SAFETY PLAN

Each state is required to develop a statewide-coordinated Strategic Highway Safety Plan. Washington State's Strategic Highway Safety Plan is Target Zero. An update to Target Zero was completed in late 2013. Target Zero helps to assess the safety needs statewide, encouraging and promoting good safety practices in the design and operation of the transportation system, as well as promoting safety by system users. The vision and goal of Target Zero is to reduce traffic fatalities and serious injuries to zero by 2030.

RTC'S SAFETY PLAN

Each Metropolitan Planning Organization is required to incorporate safety within their Regional Transportation Plan (RTP). RTC adopted a Safety Management Assessment for Clark County in 2011. The 2014 Safety Management Assessment will replace the 2011 report.

COLLISION DATA

Most of the data contained within this plan comes from safety databases maintained by the Washington State Department of Transportation, Washington Traffic Safety Commission, and by local jurisdictions. The data comes from collision reports that are completed by police officers. The data that is being analyzed is from the three year span of 2009-2011. This 2009-2011 data will be compared to the 2005-2009 data used to develop the 2011 Safety Management Assessment for Clark County.

COLLISION FACTORS

Target Zero contains three levels of priorities based on the percentage of traffic fatalities and serious injuries associated with each factor. Each collision can have multiple factors. Clark County's factors are consistent with state-wide factors for each of the three priority levels, but differ within each of the priority levels. Most notable differences include a higher collision rate of young drivers and a lower collision rate associated with run off the road. The collision factors for Clark County are attached.

HIGH COLLISION LOCATIONS

The analysis of Clark County collision data identified 23 intersections with 20 or more collisions for the three year period of 2009 to 2011. The list of high collision locations includes fewer intersections than the 2007-2009 high collision locations. This may be due to a number of factors, such as the continual shift from police-reported to self-reported collisions and transportation improvements.

Analysis of collision data also identified the SR-500/SR-503 corridor from Fourth Plain to NE 99th Street as a corridor with a collision rate significantly higher than average. WSDOT has identified the safety needs along this corridor and is in the process of installing center curbs to reduce the collision rate through much of the corridor. This corridor should be monitored over time to see if additional safety improvements are needed.

Collision rates can be an effective tool to measure the relative safety at a particular location. The combination of collisions per year and traffic volumes results in a collision rate. Intersection collision rates are expressed as collisions per million entering vehicles. This collision rate analysis method can be a useful "first brush" tool when determining how a roadway location compares to other locations.

RTC is forming a regional Safety Committee to review collision rates at the high collision locations and identify potential needs and to discuss potential corrective measures. In each case, more detailed engineering analysis should be completed by local agencies prior to implementing identified safety improvements. A list and map of high collision locations by collision rates are attached.

NEXT STEPS

RTC staff will provide the RTC Board with updates to the Safety Management Assessment over the next few months. The RTC Board will be asked to adopt the Safety Management Assessment this spring.

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**Comparison of Factors Involved in Traffic Fatalities and Serious Injuries
Clark County**

Factors	2009-2011 Clark County		2009-2011 Clark County	
	Death	Percent	Serious Injuries	Percent
Priority One				
Impaired Driver Involved	28	51.9%	96	22.0%
Young Driver 16-25 Involved	19	35.2%	195	44.7%
Speeding Involved	21	38.9%	116	26.6%
Run off the Road	20	37.0%	125	28.7%
Distracted Driver Involved	17	31.5%	56	12.8%
Intersection Related	9	16.7%	166	38.1%
Traffic Data System	NA	NA	NA	NA
Priority Two				
Unrestrained Passenger Vehicle Occupant	15	27.8%	50	11.5%
Pedestrians	11	20.4%	58	13.3%
Opposite Direction Multi-Vehicle Collisions	11	20.4%	40	9.2%
Motorcyclist	9	16.7%	66	15.1%
Unlicensed Driver Involved	NA	NA	NA	NA
EMS and Trauma Care Systems	NA	NA	NA	NA
Priority Three				
Heavy Truck Involved	4	7.4%	10	2.3%
Older Driver 75+ Involved	3	5.6%	21	4.8%
Bicyclist	1	1.9%	25	5.7%
Drowsy Driver Involved	0	0.0%	10	2.3%
Work Zone	0	0.0%	9	2.1%
Wildlife	0	0.0%	7	1.6%
School Bus Involved	0	0.0%	1	0.2%
Vehicle-Train	0	0.0%	0	0.0%
Total	54		436	

2009-2011 High Collision Intersections

By Accident Rate

Intersection	Total Collisions	Accident Rate
SR-500 @ 54th Avenue	94	1.38
NE 119th Street @ NE 72nd Avenue	29	1.16
SR-500/SR-503 @ Padden Parkway	67	1.09
Padden Parkway @ 94th Avenue	39	1.05
SR-500 @ NE 152nd Avenue	23	1.03
SR-500 @ 42nd Avenue	62	0.97
SR-503 @ SR-502	46	0.90
SR-500 @ Fourth Plain	64	0.86
NE 18th Street @ NE 112th Avenue	25	0.84
SR-503 @ NE 99th Street	29	0.74
Highway 99 @ 78th Street	40	0.73
SR-502 @ SW 12th Avenue	22	0.68
SR-500 @ 76th Street	30	0.61
Fourth Plain @ Andresen Road	26	0.60
Highway 99 @ NE 99th Street	22	0.56
Mill Plain @ 164th Avenue	28	0.54
NE 78th Street @ NE St. Johns Road	21	0.54
SR-503 @ NE 199th Street	20	0.54
Andresen Road @ Padden Parkway	29	0.52
SR-500 @ NE 65th Street	21	0.49
Mill Plain @ 136th Avenue	31	0.47
SE 164th Avenue @ SE 34th Steet	20	0.44
Mill Plain @ Chkalov Drive	27	0.35

Clark County High Collision Intersections 2009 - 2011 Collision Rate

Collision Rate: ● ≥ 1.0 / MEV
MEV = Million Entering Vehicles ● < 1.0 / MEV

Safety Management Plan for Clark County, Washington
Regional Transportation Council, January 2014

