Lane Mile Inventory

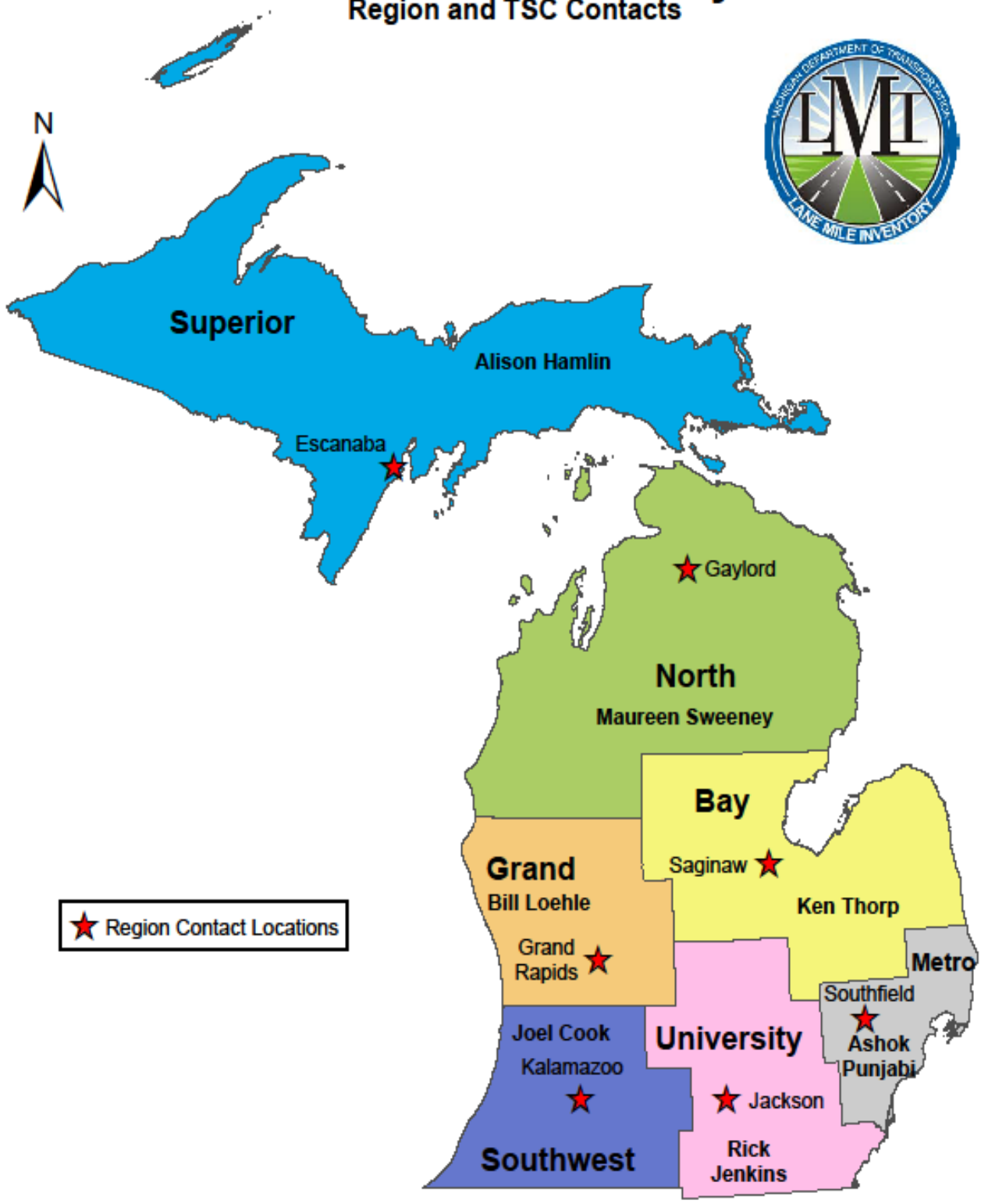
Asset Management Division
Bureau of Transportation Planning

July 18, 2013

MDOT
Michigan Department of Transportation

Lane Mile Inventory

Region and TSC Contacts



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Planning Bureau
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Updated by : Grahaml 2012.12.21

2012 & 2013 Lane Mile Summaries

REGION SUMMARY		
	2012	2013
Region	LMI*	LMI*
Bay	4895.00	4897.55
Grand	3338.77	3341.73
Metro	5537.59	5548.95
North	5083.20	5085.86
Southwest	3918.85	3919.36
Superior	4417.21	4417.55
University	4783.49	4781.09
Statewide	**31974.11**	**31992.09**

*facilities included in LMI 2013 Totals

2013 LMI Summary by Region

Bay	*Count*	*Lane Miles*
Trunkline Roads		4804.15
Rest Areas	9	28.80
Welcome Centers	1	3.20
Weigh Stations	2	6.40
Roadside Parks	11	11.00
Carpool Lots	43	43.00
	Total:	**4897.55**

Southwest	*Count*	*Lane Miles*
Trunkline Roads		3837.16
Rest Areas	10	32.00
Welcome Centers	2	6.40
Weigh Stations	4	12.80
Truck Turnout	1	1.00
Roadside Parks	4	4.00
Carpool Lots	26	26.00
	Total:	**3919.36**

Grand	*Count*	*Lane Miles*
Trunkline Roads		3249.13
Rest Areas	11	35.20
Welcome Centers	0	0.00
Weigh Stations	2	6.40
Roadside Parks	10	10.00
Carpool Lots	41	41.00
	Total:	**3341.73**

Superior	*Count*	*Lane Miles*
Trunkline Roads		4291.95
Rest Areas	5	16.00
Welcome Centers	6	19.20
Weigh Stations	2	6.40
Truck Turnout	1	1.00
Roadside Parks	33	33.00
Carpool Lots	41	41.00
	Total:	**4380.70**

Metro	*Count*	*Lane Miles*
Trunkline Roads		5490.72
Rest Areas	7	22.40
Welcome Centers	2	6.40
Weigh Stations	2	6.40
Roadside Parks	0	0.00
Carpool Lots	23	23.00
	Total:	**5548.95**

University	*Count*	*Lane Miles*
Trunkline Roads		4656.09
Rest Areas	14	44.80
Welcome Centers	2	6.40
Weigh Stations	9	28.80
Roadside Parks	4	4.00
Carpool Lots	41	41.00
	Total:	**4788.90**

North	*Count*	*Lane Miles*
Trunkline Roads		4974.06
Rest Areas	13	41.60
Welcome Centers	1	3.20
Weigh Stations	0	0.00
Scenic	18	18.00
Roadside Parks	22	22.00
Carpool Lots	27	27.00
	Total:	**5085.86**

Lane Mile Inventory
Description and Definition

Description

The Lane Mile Inventory (LMI) is an inventory of the total lane miles of Michigan state highway (trunkline).

Another description could refer to it as a “striped lane mile inventory”.

Lane Mile – Definition

One mile of roadway that is intended for driving

Lane Mile Guidelines

The following is a detailed methodology and listing of features that were collected as part of the inventory:

All existing roadway lanes and their ever-changing (increasing/decreasing) number of drivable lanes were collected at the beginning and ending tapers/gores.

COUNTED

1 Lanes marked with the following:
- -"Right Lane Must Turn Right" or "Left Lane Must Turn Left" sign
- -Painted turn arrows, the word "Only" or the word "Turn"
- -Lines forming a dedicated turn pocket

2 Passing flairs opposite a street entrance where traffic makes a left turn.

3 Turn lanes that appeared after a parking lane ended were counted from the first "No parking this side of sign" sign, or the last parking spot.

4 Median left-hand turn lanes

5 Passing lanes

6 Exit (off) and Entrance (on) Ramp
- -Subsequent lanes on ramps were also included

NOT COUNTED

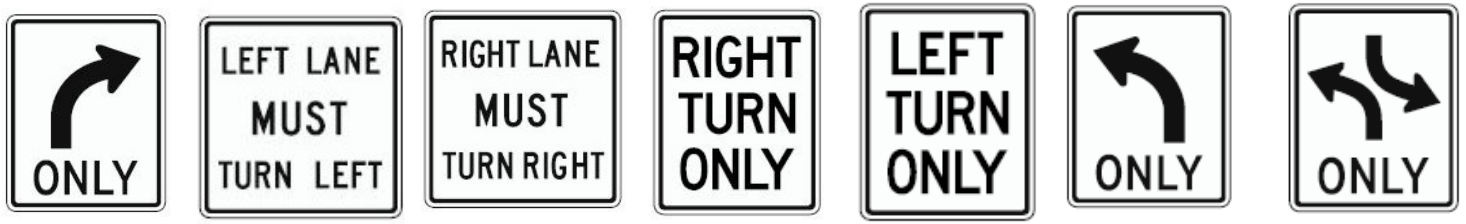
1 Lanes marked with the following:
- -Hash marks through the lane
- -Raised pavement levels
- -Poured curbs between the roadway and lane
- -Non-MDOT concrete/pavement

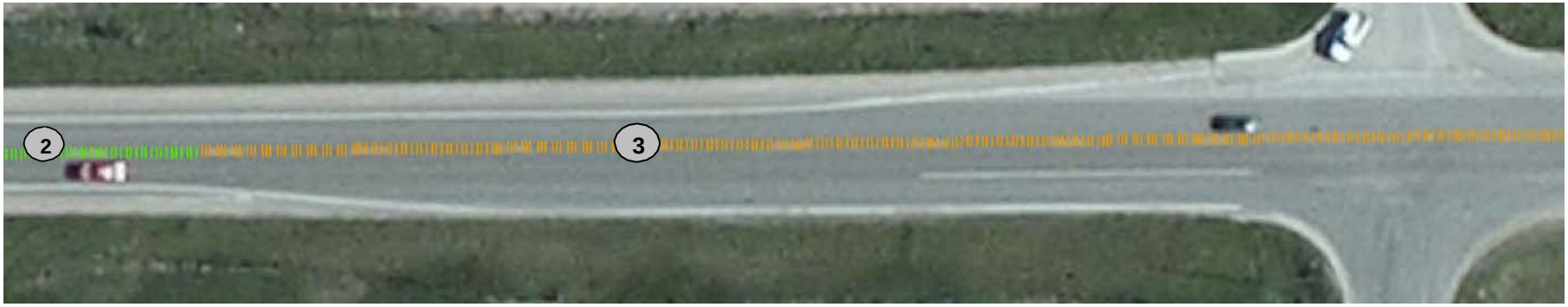
2 Shoulders

3 Parking Lanes (Full or Part-time)

4 Bike Lanes

Lane Mile Guidelines cont'd...



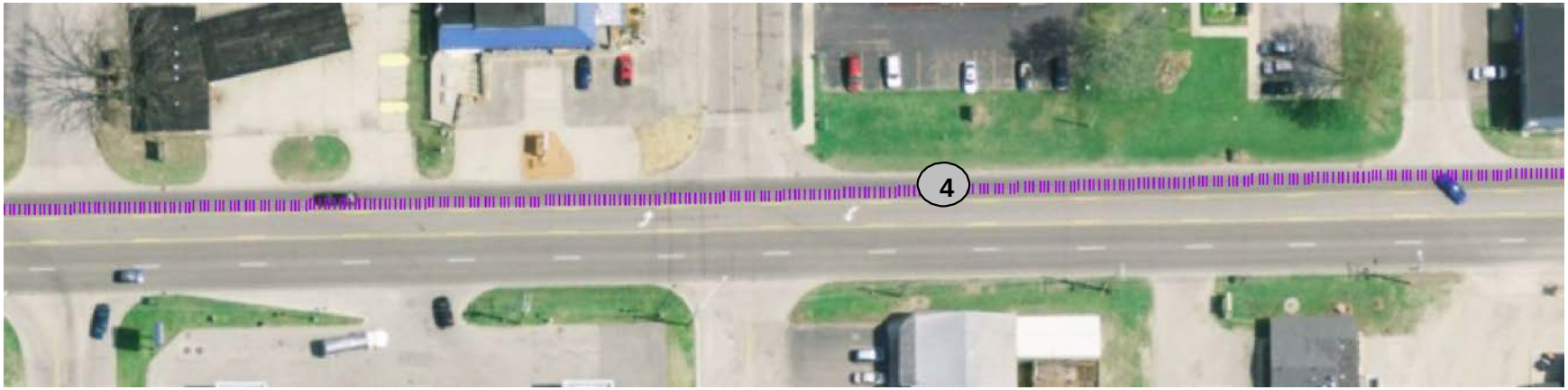


At the top are examples of signs and pavement markings used to help identify drivable lanes and assist in collecting lane miles.

The above image depicts a right hand turn lane defined by a dedicated turn pocket painted in the lane that starts at the beginning taper where the two lane, green line meets the three lane, orange line.

The image below shows a two lane highway with one middle left hand turn lane forming the three lane, orange line. As the line changes into a four lane, pink line a marked right hand turn lane opens up at the top of the image and the middle left hand turn lane changes into a dedicated left hand turn lane for advancing traffic. Therefore the number of lanes only increases by one, from three to four lanes.

Lane Mile Guidelines cont'd...



The above image shows a center left turn lane on a four lane highway represented in total by the five lane, purple line on the image. These center turn lanes were counted in the lane mile inventory when marked as a solid line with a dashed line on the inside representing a center left turn lane.

The photograph below depicts a two lane highway with alternating left and turn lanes in the center shown as the orange lined, three lane highway. The three lanes stay consistent because the left hand turn lane is alternating between each side of the road, but a continuous turn lane is always present. As the line changes to a purple, four lane road, a right hand turn lane opens at the top of the photograph and the left hand turn is still present.

Lane Mile Guidelines cont'd...

Seen in both the image above and the image below, the passing flair begins as the two lane, green line changes into a three lane, orange line at the beginning taper to the right and ends in the same way to the left.

Lane Mile Guidelines cont'd...

Both the image above and the image below depict exit (off) ramps that begin at the tapers shown as the green lined, two lane freeway changes to an orange lined, three lane freeway until the ramp exits at the gore marked by the split in line work into a blue, one lane ramp and a continuing green, two lane freeway.

Lane Mile Guidelines cont'd...

The photograph above depicts a four lane highway with a center left turn lane. The green line represents a continuous five lane road. The two turn lanes shown are separated from the highway by poured curves with drainage, and in the case of the top turn lane, placed with non-MDOT concrete. These turn lanes were not counted in the inventory.

The image below shows a four lane highway with a center turn lane depicted by the five lane, green line on either edge of the picture. As the highway approaches an overhead railroad crossing, the center turn lane is painted with hash marks symbolizing a non-drivable lane not counted in the inventory that runs under the bridge due to the railroad bridge support anchored to the center lane on the road below. The four lane, purple line shows the decrease of one lane due to the non-drivable center lane under the bridge.