

APPENDIX A

TRAFFIC DATA



Traffic Data Collection

Traffic Data Collection, LLC
7504 Sawgrass Drive
www.tdccounts.com
Washington, Michigan, United States 48094
Ph. (586) 786-5407
Reliable Traffic Data

Project: RCOC Orchard
Lake Traffic Study
Corridor: Orchard Lake
(Commerce - Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU61A
SE

Count Name: TMC_1
Orchard Lake &
Commerce_9-22-20
Site Code: TMC_1
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 1

Turning Movement Data

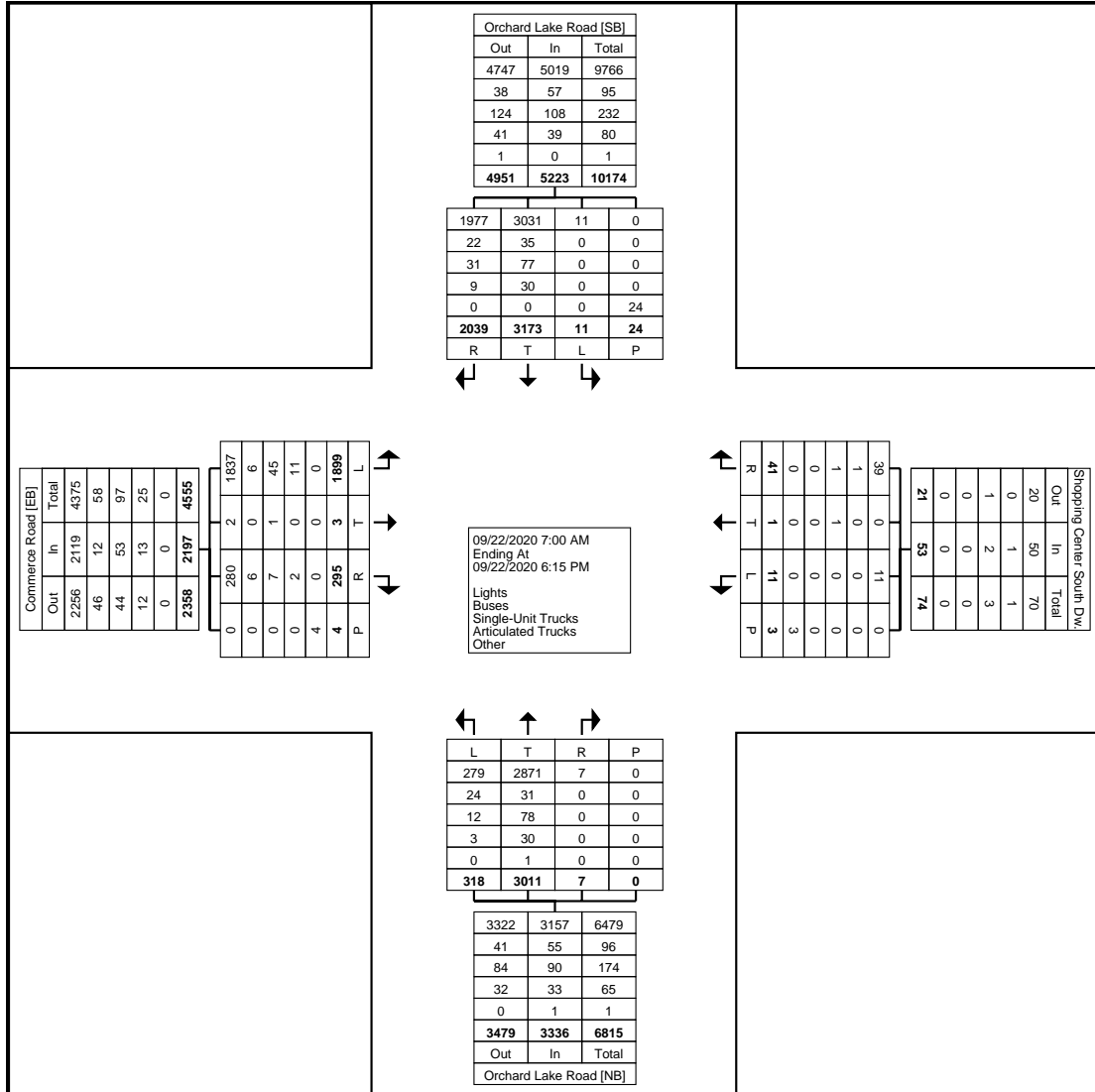
Table with columns for Start Time, Orchard Lake Road (Southbound, Northbound), Shopping Center South Dw. (Westbound), and Commerce Road (Eastbound). Rows include hourly totals and grand totals for various traffic metrics like Right, Thru, Left, Peds, App. Total, and Int. Total.

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Turning Movement Data Plot



Traffic Data Collection

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Turning Movement Peak Hour Data (7:15 AM)

Start Time	Orchard Lake Road Southbound					Shopping Center South Dw. Westbound					Orchard Lake Road Northbound					Commerce Road Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
7:15 AM	88	147	1	3	236	1	0	0	0	1	1	64	17	0	82	20	0	103	0	123	442
7:30 AM	92	169	0	5	261	1	0	0	0	1	0	102	18	0	120	13	0	121	1	134	516
7:45 AM	83	180	0	1	263	1	0	0	0	1	1	98	28	0	127	19	0	98	0	117	508
8:00 AM	64	166	0	0	230	3	0	0	0	3	0	74	8	0	82	18	1	82	0	101	416
Total	327	662	1	9	990	6	0	0	0	6	2	338	71	0	411	70	1	404	1	475	1882
Approach %	33.0	66.9	0.1	-	-	100.0	0.0	0.0	-	-	0.5	82.2	17.3	-	-	14.7	0.2	85.1	-	-	-
Total %	17.4	35.2	0.1	-	52.6	0.3	0.0	0.0	-	0.3	0.1	18.0	3.8	-	21.8	3.7	0.1	21.5	-	25.2	-
PHF	0.889	0.919	0.250	-	0.941	0.500	0.000	0.000	-	0.500	0.500	0.828	0.634	-	0.809	0.875	0.250	0.835	-	0.886	0.912
Lights	315	607	1	-	923	6	0	0	-	6	2	317	62	-	381	66	1	395	-	462	1772
% Lights	96.3	91.7	100.0	-	93.2	100.0	-	-	-	100.0	100.0	93.8	87.3	-	92.7	94.3	100.0	97.8	-	97.3	94.2
Buses	3	22	0	-	25	0	0	0	-	0	0	0	7	-	7	1	0	1	-	2	34
% Buses	0.9	3.3	0.0	-	2.5	0.0	-	-	-	0.0	0.0	0.0	9.9	-	1.7	1.4	0.0	0.2	-	0.4	1.8
Single-Unit Trucks	8	17	0	-	25	0	0	0	-	0	0	15	1	-	16	3	0	5	-	8	49
% Single-Unit Trucks	2.4	2.6	0.0	-	2.5	0.0	-	-	-	0.0	0.0	4.4	1.4	-	3.9	4.3	0.0	1.2	-	1.7	2.6
Articulated Trucks	1	16	0	-	17	0	0	0	-	0	0	6	1	-	7	0	0	3	-	3	27
% Articulated Trucks	0.3	2.4	0.0	-	1.7	0.0	-	-	-	0.0	0.0	1.8	1.4	-	1.7	0.0	0.0	0.7	-	0.6	1.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	9	-	-	-	0	-	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

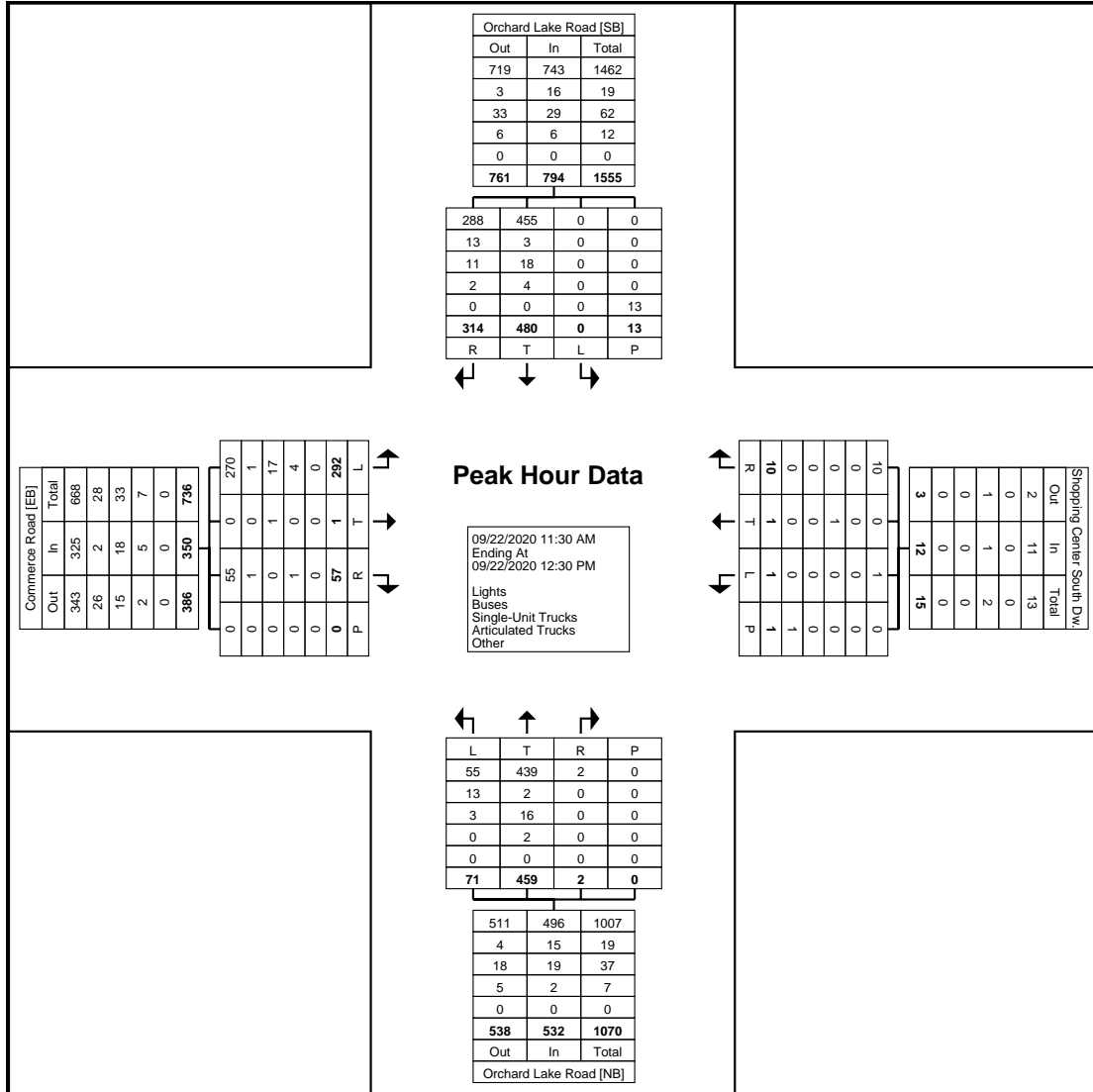


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Site Code: TMC_1
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LLC
Start Date: 09/22/2020
Page No: 7



Turning Movement Peak Hour Data Plot (11:30 AM)

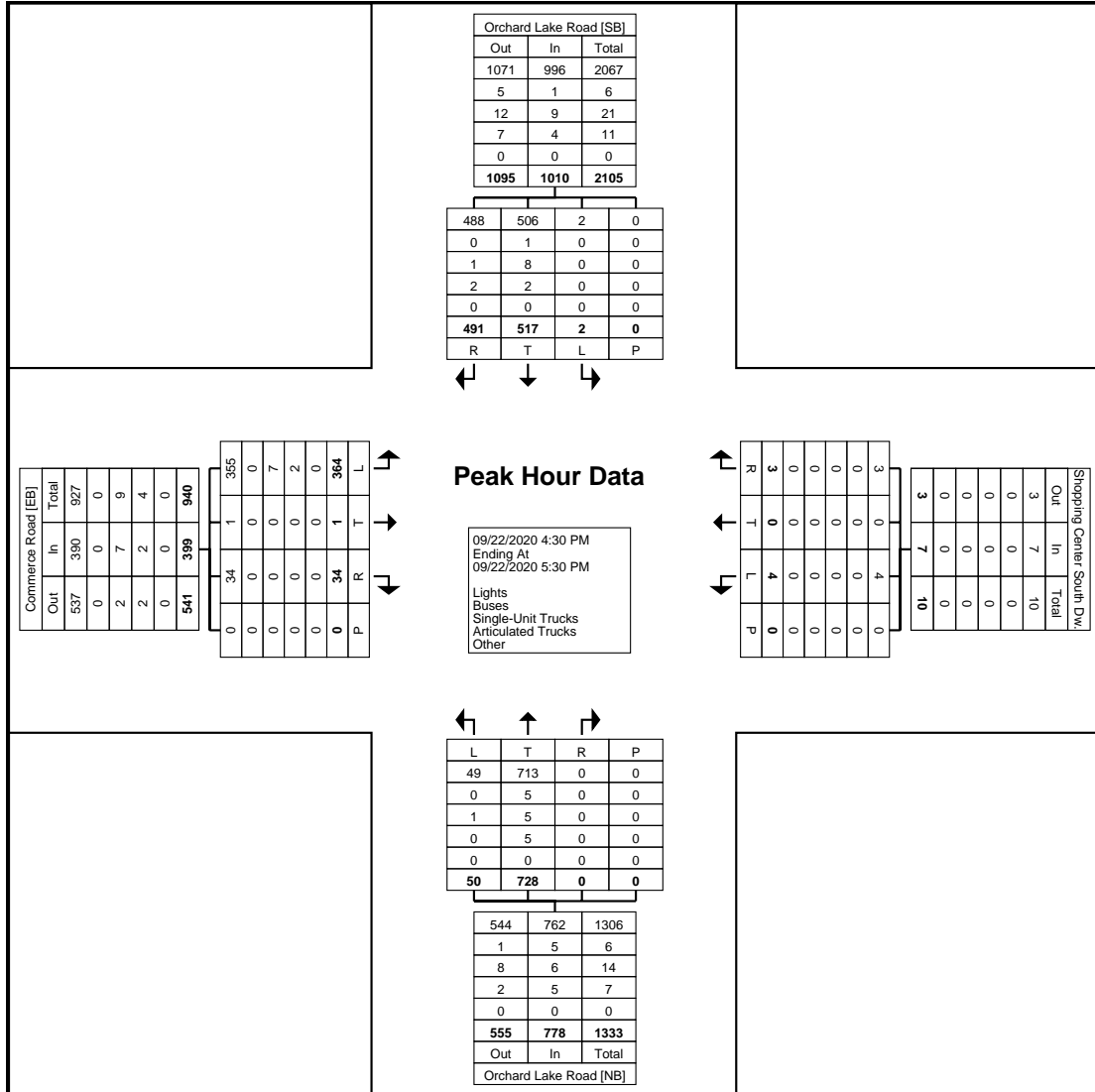
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Turning Movement Peak Hour Data Plot (4:30 PM)



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TDC Traffic Comments: 6 hour multi-modal intersection study includes video premium vehicle classification turning movement count conducted during typical weekday (Tuesday) from 7:00-9:00 AM morning, 11:00 AM - 1:00 PM mid-day & 4:00-6:00 PM afternoon peak hours, while school was in session during COVID-19.

TMC was performed with Miovision video VCU scout recording cameras for RCOC Orchard Lake Road Traffic Study for OHM Advisor Project Supplement No. 57.

Skewed signalized controlled SCATS intersection, push button ped. signals for north & west legs. Restricted NTOR signed for SB approach. SB left turns prohibited. School located with SE intersection quadrant. Video VCU camera was located within NE intersection quadrant. All intersection shared video files have been uploaded to Miovision DataLink cloud platform.

Multi-Modal Classification Summary Details & Percentages: Seven (7) Groupings:

- 1) Lights Includes: FHWA Classes 1-3 (Motorcycles, Pick Up Trucks, Vans, Light Goods Vehicles)***
- 2) Buses Includes: FHWA Class 4 (School Buses & Regional Transportation Metro Buses)***
- 3) Single-Unit Trucks Includes: FHWA Classes 5-7 (2-4 Axle SU Medium Trucks)***
- 4) Articulated Trucks Includes: FHWA Classes 8-12 (Heavy Trucks W/Single & Multi Unit Trailers)***
- 5) Bicycles On Road Includes: All bicycles on the roadway***
- 6) Bicycles On Crosswalk Includes: All bicycles using sidewalk***
- 7) Pedestrians Includes: All pedestrians using crosswalk***



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Count Name: TMC_2
 Orchard Lake & Wards
 Point_9-22-20
 Site Code: TMC_2
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 1

Turning Movement Data

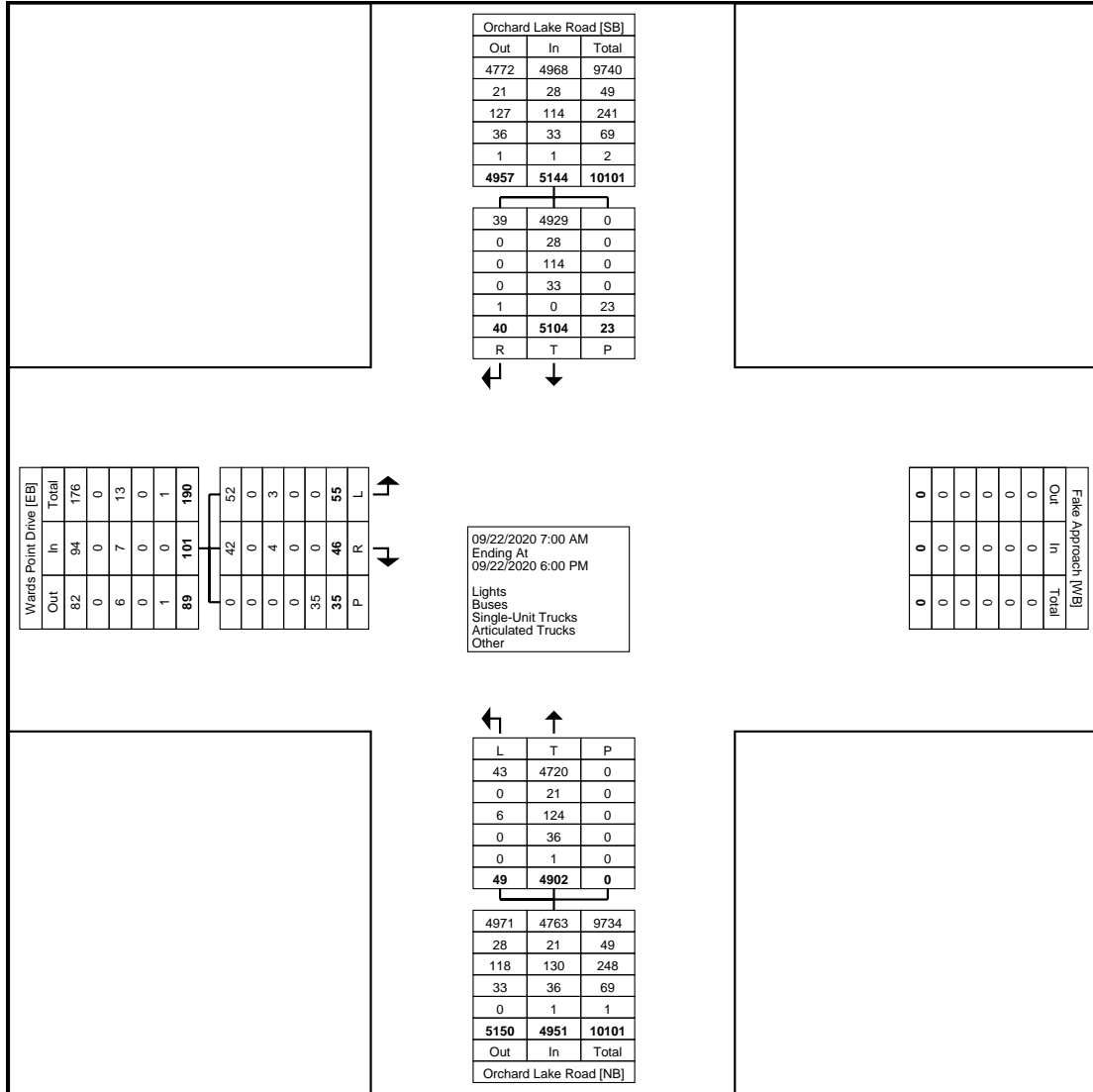
Start Time	Orchard Lake Road Southbound				Orchard Lake Road Northbound				Wards Point Drive Eastbound				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	
7:00 AM	0	217	0	217	108	0	0	108	0	0	0	0	325
7:15 AM	1	233	0	234	161	1	0	162	1	2	0	3	399
7:30 AM	0	237	0	237	231	1	0	232	2	1	1	3	472
7:45 AM	1	269	1	270	193	0	0	193	2	2	2	4	467
Hourly Total	2	956	1	958	693	2	0	695	5	5	3	10	1663
8:00 AM	1	216	0	217	148	0	0	148	0	2	0	2	367
8:15 AM	0	176	0	176	172	1	0	173	1	2	0	3	352
8:30 AM	3	192	0	195	201	1	0	202	0	4	0	4	401
8:45 AM	1	184	0	185	170	0	0	170	0	1	0	1	356
Hourly Total	5	768	0	773	691	2	0	693	1	9	0	10	1476
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	135	0	135	166	2	0	168	1	4	0	5	308
11:15 AM	2	175	2	177	142	1	0	143	1	1	9	2	322
11:30 AM	1	195	0	196	172	6	0	178	3	2	4	5	379
11:45 AM	4	190	0	194	222	7	0	229	3	2	1	5	428
Hourly Total	7	695	2	702	702	16	0	718	8	9	14	17	1437
12:00 PM	1	190	0	191	171	1	0	172	1	3	0	4	367
12:15 PM	1	211	2	212	191	1	0	192	1	2	0	3	407
12:30 PM	2	183	0	185	199	4	0	203	2	1	4	3	391
12:45 PM	0	202	0	202	205	0	0	205	5	1	0	6	413
Hourly Total	4	786	2	790	766	6	0	772	9	7	4	16	1578
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4	222	0	226	246	4	0	250	7	3	1	10	486
4:15 PM	2	245	1	247	246	2	0	248	2	6	5	8	503
4:30 PM	3	274	6	277	274	4	0	278	5	4	1	9	564
4:45 PM	5	229	7	234	262	3	0	265	3	4	1	7	506
Hourly Total	14	970	14	984	1028	13	0	1041	17	17	8	34	2059
5:00 PM	2	237	3	239	252	2	0	254	2	2	0	4	497
5:15 PM	2	263	0	265	278	4	0	282	0	1	0	1	548
5:30 PM	1	226	0	227	239	3	0	242	4	4	3	8	477
5:45 PM	3	203	1	206	253	1	0	254	0	1	3	1	461
Hourly Total	8	929	4	937	1022	10	0	1032	6	8	6	14	1983
Grand Total	40	5104	23	5144	4902	49	0	4951	46	55	35	101	10196
Approach %	0.8	99.2	-	-	99.0	1.0	-	-	45.5	54.5	-	-	-
Total %	0.4	50.1	-	50.5	48.1	0.5	-	48.6	0.5	0.5	-	1.0	-
Lights	39	4929	-	4968	4720	43	-	4763	42	52	-	94	9825
% Lights	97.5	96.6	-	96.6	96.3	87.8	-	96.2	91.3	94.5	-	93.1	96.4
Buses	0	28	-	28	21	0	-	21	0	0	-	0	49
% Buses	0.0	0.5	-	0.5	0.4	0.0	-	0.4	0.0	0.0	-	0.0	0.5
Single-Unit Trucks	0	114	-	114	124	6	-	130	4	3	-	7	251
% Single-Unit Trucks	0.0	2.2	-	2.2	2.5	12.2	-	2.6	8.7	5.5	-	6.9	2.5
Articulated Trucks	0	33	-	33	36	0	-	36	0	0	-	0	69
% Articulated Trucks	0.0	0.6	-	0.6	0.7	0.0	-	0.7	0.0	0.0	-	0.0	0.7
Bicycles on Road	1	0	-	1	1	0	-	1	0	0	-	0	2
% Bicycles on Road	2.5	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	3	-	-	-	0	-	-	-	6	-	-
% Bicycles on Crosswalk	-	-	13.0	-	-	-	-	-	-	-	17.1	-	-
Pedestrians	-	-	20	-	-	-	0	-	-	-	29	-	-
% Pedestrians	-	-	87.0	-	-	-	-	-	-	-	82.9	-	-

Project: RCOC Orchard Lake Traffic Study
 Corridor: Orchard Lake (Commerce – Middlebelt)
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Turning Movement Data Plot



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Turning Movement Peak Hour Data (7:15 AM)

Start Time	Orchard Lake Road Southbound				Orchard Lake Road Northbound				Wards Point Drive Eastbound				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	
7:15 AM	1	233	0	234	161	1	0	162	1	2	0	3	399
7:30 AM	0	237	0	237	231	1	0	232	2	1	1	3	472
7:45 AM	1	269	1	270	193	0	0	193	2	2	2	4	467
8:00 AM	1	216	0	217	148	0	0	148	0	2	0	2	367
Total	3	955	1	958	733	2	0	735	5	7	3	12	1705
Approach %	0.3	99.7	-	-	99.7	0.3	-	-	41.7	58.3	-	-	-
Total %	0.2	56.0	-	56.2	43.0	0.1	-	43.1	0.3	0.4	-	0.7	-
PHF	0.750	0.888	-	0.887	0.793	0.500	-	0.792	0.625	0.875	-	0.750	0.903
Lights	3	909	-	912	703	2	-	705	5	7	-	12	1629
% Lights	100.0	95.2	-	95.2	95.9	100.0	-	95.9	100.0	100.0	-	100.0	95.5
Buses	0	5	-	5	3	0	-	3	0	0	-	0	8
% Buses	0.0	0.5	-	0.5	0.4	0.0	-	0.4	0.0	0.0	-	0.0	0.5
Single-Unit Trucks	0	36	-	36	19	0	-	19	0	0	-	0	55
% Single-Unit Trucks	0.0	3.8	-	3.8	2.6	0.0	-	2.6	0.0	0.0	-	0.0	3.2
Articulated Trucks	0	5	-	5	8	0	-	8	0	0	-	0	13
% Articulated Trucks	0.0	0.5	-	0.5	1.1	0.0	-	1.1	0.0	0.0	-	0.0	0.8
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	1	-	-	-	0	-	-	-	3	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	100.0	-	-

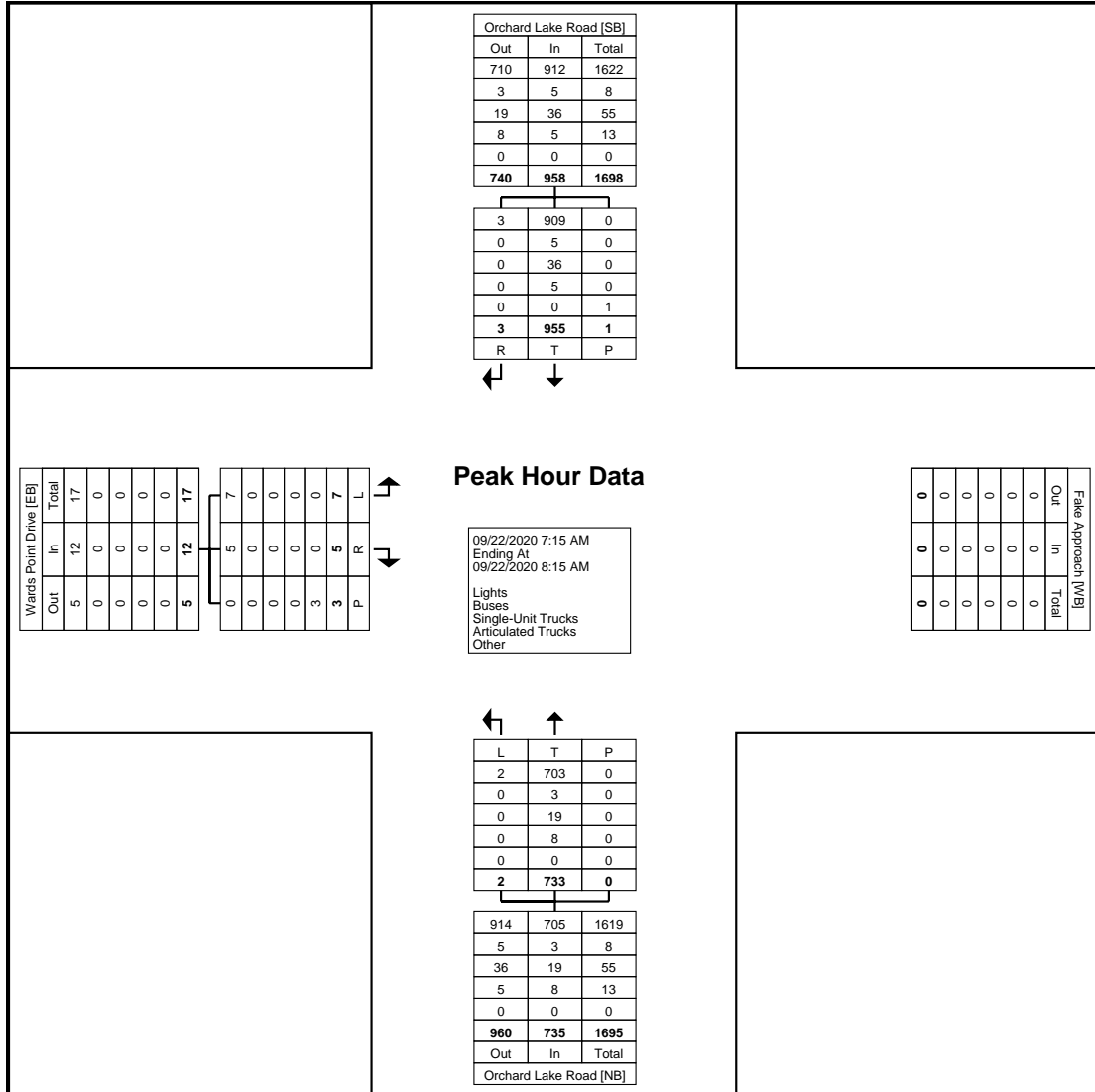
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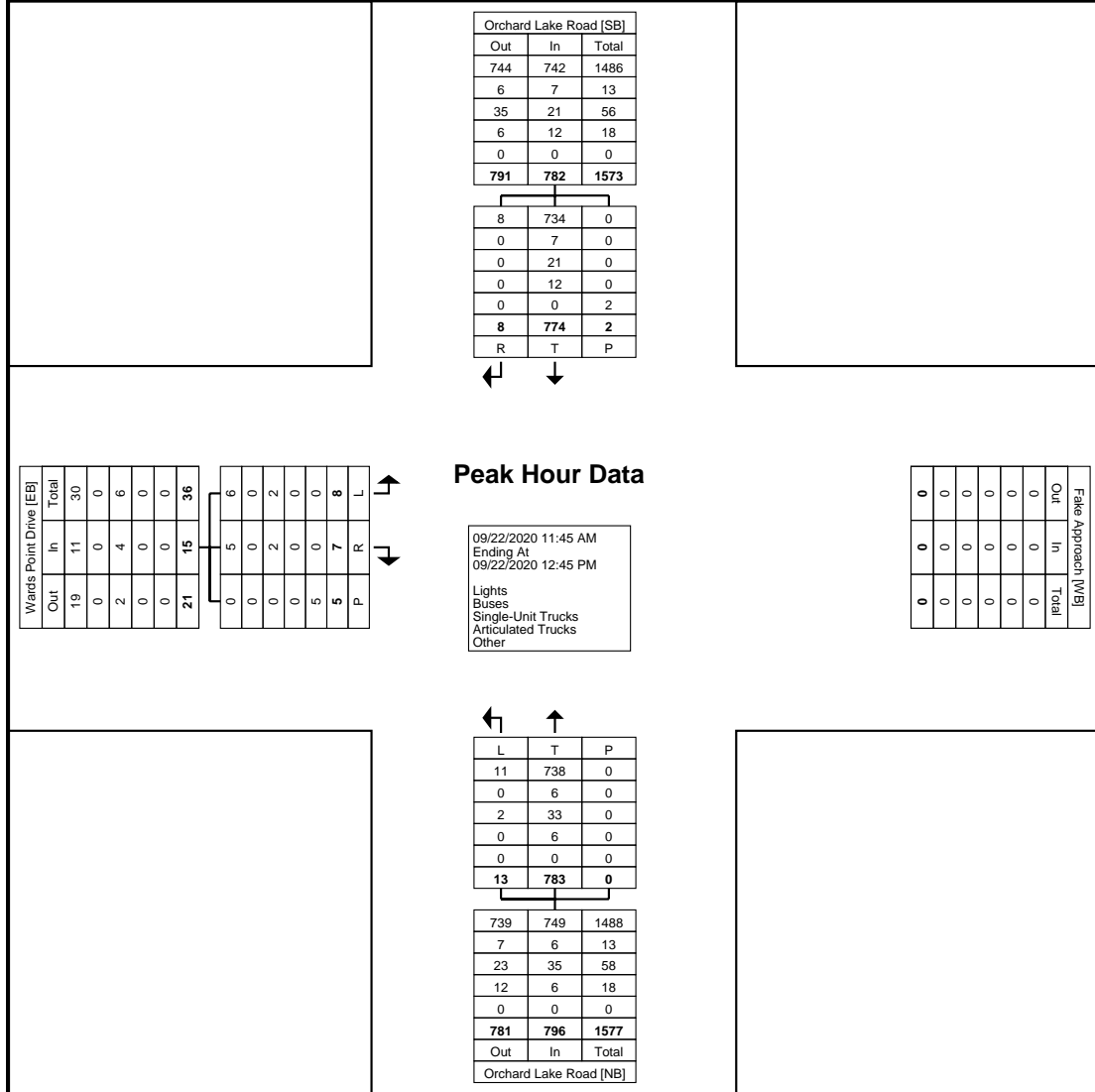
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11:45 AM	4	190	0	194	222	7	0	229	3	2	1	5	428
12:00 PM	1	190	0	191	171	1	0	172	1	3	0	4	367
12:15 PM	1	211	2	212	191	1	0	192	1	2	0	3	407
12:30 PM	2	183	0	185	199	4	0	203	2	1	4	3	391
Total	8	774	2	782	783	13	0	796	7	8	5	15	1593
Approach %	1.0	99.0	-	-	98.4	1.6	-	-	46.7	53.3	-	-	-
Total %	0.5	48.6	-	49.1	49.2	0.8	-	50.0	0.4	0.5	-	0.9	-
PHF	0.500	0.917	-	0.922	0.882	0.464	-	0.869	0.583	0.667	-	0.750	0.930
Lights	8	734	-	742	738	11	-	749	5	6	-	11	1502
% Lights	100.0	94.8	-	94.9	94.3	84.6	-	94.1	71.4	75.0	-	73.3	94.3
Buses	0	7	-	7	6	0	-	6	0	0	-	0	13
% Buses	0.0	0.9	-	0.9	0.8	0.0	-	0.8	0.0	0.0	-	0.0	0.8
Single-Unit Trucks	0	21	-	21	33	2	-	35	2	2	-	4	60
% Single-Unit Trucks	0.0	2.7	-	2.7	4.2	15.4	-	4.4	28.6	25.0	-	26.7	3.8
Articulated Trucks	0	12	-	12	6	0	-	6	0	0	-	0	18
% Articulated Trucks	0.0	1.6	-	1.5	0.8	0.0	-	0.8	0.0	0.0	-	0.0	1.1
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	-	-	-	-	20.0	-	-
Pedestrians	-	-	2	-	-	-	0	-	-	-	4	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	80.0	-	-

Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU34N
 SE



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Count Name: TMC_2
 Orchard Lake & Wards
 Point_9-22-20
 Site Code: TMC_2
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 6



Turning Movement Peak Hour Data Plot (11:45 AM)



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Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU34N
 SE

Count Name: TMC_2
 Orchard Lake & Wards
 Point_9-22-20
 Site Code: TMC_2
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 7

Turning Movement Peak Hour Data (4:30 PM)

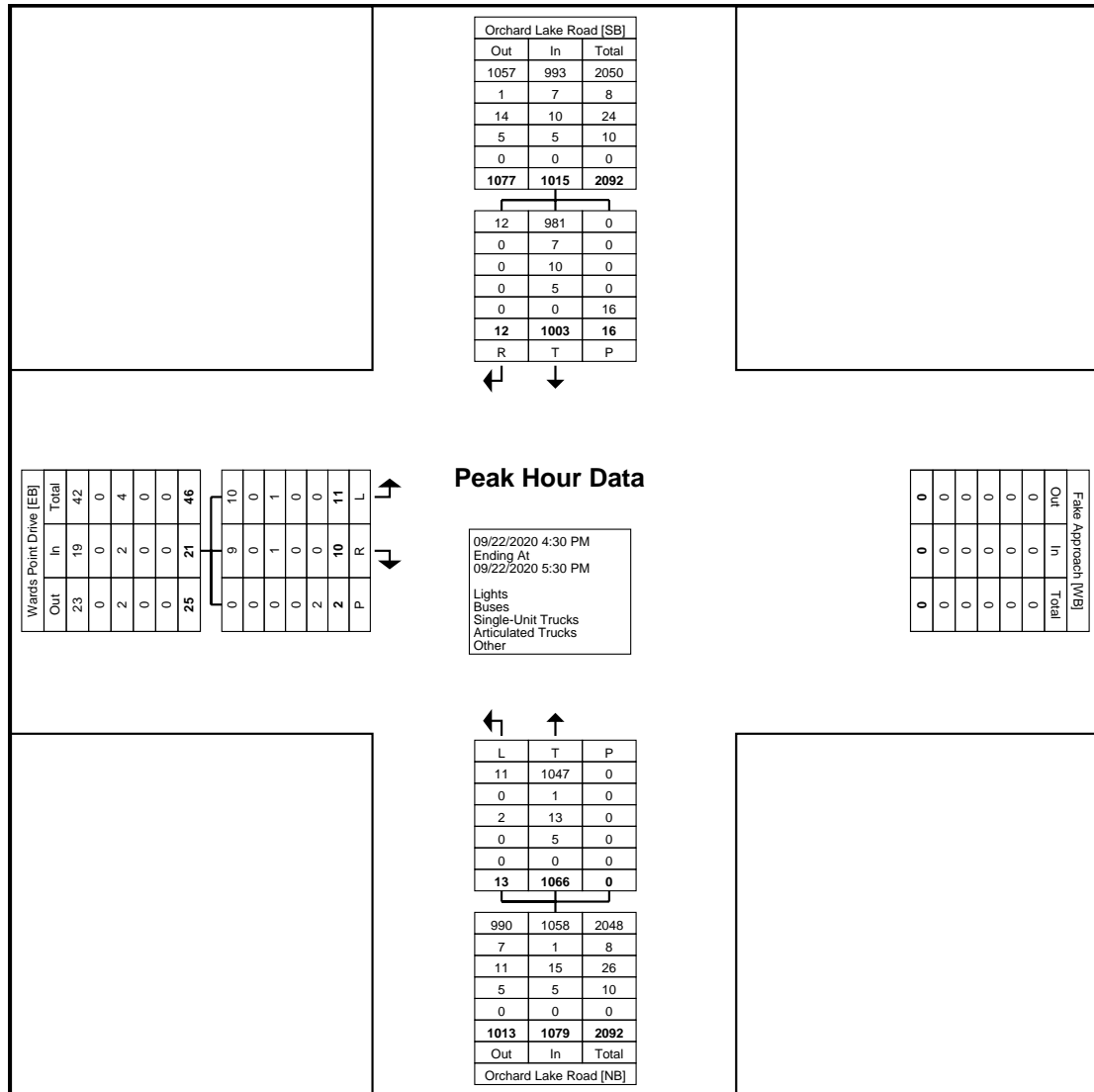
Start Time	Orchard Lake Road Southbound				Orchard Lake Road Northbound				Wards Point Drive Eastbound				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	
4:30 PM	3	274	6	277	274	4	0	278	5	4	1	9	564
4:45 PM	5	229	7	234	262	3	0	265	3	4	1	7	506
5:00 PM	2	237	3	239	252	2	0	254	2	2	0	4	497
5:15 PM	2	263	0	265	278	4	0	282	0	1	0	1	548
Total	12	1003	16	1015	1066	13	0	1079	10	11	2	21	2115
Approach %	1.2	98.8	-	-	98.8	1.2	-	-	47.6	52.4	-	-	-
Total %	0.6	47.4	-	48.0	50.4	0.6	-	51.0	0.5	0.5	-	1.0	-
PHF	0.600	0.915	-	0.916	0.959	0.813	-	0.957	0.500	0.688	-	0.583	0.938
Lights	12	981	-	993	1047	11	-	1058	9	10	-	19	2070
% Lights	100.0	97.8	-	97.8	98.2	84.6	-	98.1	90.0	90.9	-	90.5	97.9
Buses	0	7	-	7	1	0	-	1	0	0	-	0	8
% Buses	0.0	0.7	-	0.7	0.1	0.0	-	0.1	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	10	-	10	13	2	-	15	1	1	-	2	27
% Single-Unit Trucks	0.0	1.0	-	1.0	1.2	15.4	-	1.4	10.0	9.1	-	9.5	1.3
Articulated Trucks	0	5	-	5	5	0	-	5	0	0	-	0	10
% Articulated Trucks	0.0	0.5	-	0.5	0.5	0.0	-	0.5	0.0	0.0	-	0.0	0.5
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	3	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	18.8	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	13	-	-	-	0	-	-	-	2	-	-
% Pedestrians	-	-	81.3	-	-	-	-	-	-	-	100.0	-	-

Project: RCOC Orchard Lake Traffic Study
 Corridor: Orchard Lake (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU34N
 SE



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Count Name: TMC_2
 Orchard Lake & Wards Point_9-22-20
 Site Code: TMC_2
 Traffic Data Collection, LLC
 Start Date: 09/22/2020
 Page No: 8



Turning Movement Peak Hour Data Plot (4:30 PM)



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Project: RCOC Orchard
Lake Traffic Study
Corridor: Orchard Lake
(Commerce – Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU34N
SE

Count Name: TMC_2
Orchard Lake & Wards
Point_9-22-20
Site Code: TMC_2
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 9

TDC Traffic Comments: 6 hour multi-modal intersection study includes video premium vehicle classification turning movement count conducted during typical weekday (Tuesday) from 7:00-9:00 AM morning, 11:00 AM - 1:00 PM mid-day & 4:00-6:00 PM afternoon peak hours, while school was in session during COVID-19.

TMC was performed with Miovision video VCU scout recording cameras for RCOC Orchard Lake Road Traffic Study for OHM Advisor Project Supplement No. 57.

Signalized controlled SCATS intersection, ped. signals for west & north legs. Push buttons exist for north leg. Video VCU camera was located within SE intersection quadrant. All intersection shared video files have been uploaded to Miovision DataLink cloud platform.

Multi-Modal Classification Summary Details & Percentages: Seven (7) Groupings:

- 1) Lights Includes: FHWA Classes 1-3 (Motorcycles, Pick Up Trucks, Vans, Light Goods Vehicles)***
- 2) Buses Includes: FHWA Class 4 (School Buses & Regional Transportation Metro Buses)***
- 3) Single-Unit Trucks Includes: FHWA Classes 5-7 (2-4 Axle SU Medium Trucks)***
- 4) Articulated Trucks Includes: FHWA Classes 8-12 (Heavy Trucks W/Single & Multi Unit Trailers)***
- 5) Bicycles On Road Includes: All bicycles on the roadway***
- 6) Bicycles On Crosswalk Includes: All bicycles using sidewalk***
- 7) Pedestrians Includes: All pedestrians using crosswalk***



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Lake Traffic Study
Corridor: Orchard Lake
(Commerce - Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU24L
SW & SCU3DQ NE

Count Name: TMC_3
Orchard Lake & Cass
Lake_9-22-20
Site Code: TMC_3
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 1

Turning Movement Data

Table with columns for Start Time, Road Name (Cass Lake Road, Orchard Lake Road, Cass Lake Blvd.), Direction (Southbound, Westbound, Northbound, Eastbound), and various traffic metrics (Right, Thru, Left, U-Turn, Peds, App. Total, Int. Total).

Pedestrians	-	-	-	-	15	-	-	-	-	1	-	-	-	-	12	-	-	-	-	16	-	-
% Pedestrians	-	-	-	-	93.8	-	-	-	-	5.9	-	-	-	-	63.2	-	-	-	-	80.0	-	-



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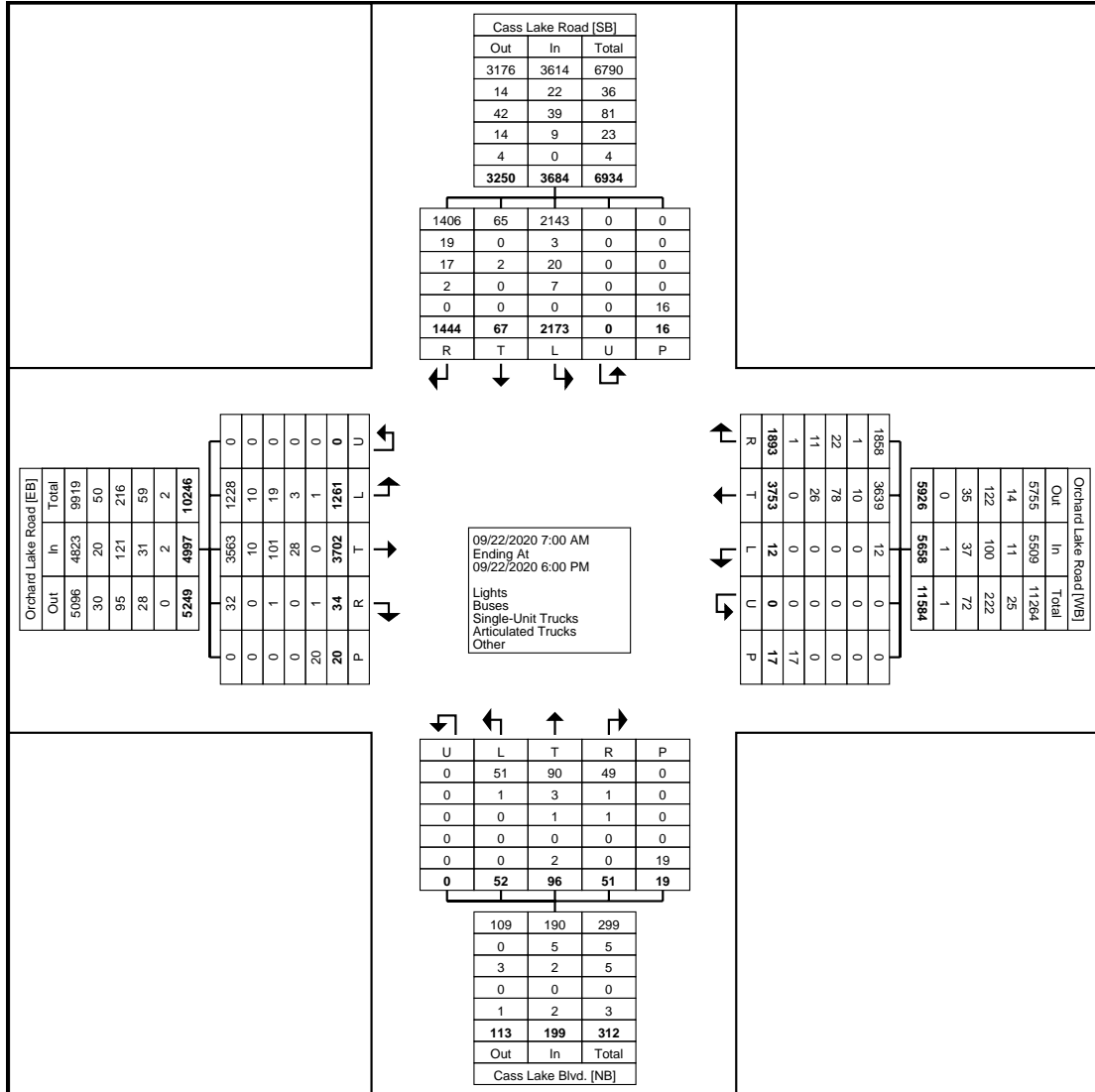
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Reliable Traffic Data

Project: RCOC Orchard
Lake Traffic Study
Corridor: Orchard Lake
(Commerce – Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU24L
SW & SCU3DQ NE

Count Name: TMC_3
Orchard Lake & Cass
Lake_9-22-20
Site Code: TMC_3
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 3



Turning Movement Data Plot



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 SW & SCU3DQ NE

Count Name: TMC_3
 Orchard Lake & Cass
 Lake_9-22-20
 Site Code: TMC_3
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 4

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Cass Lake Road Southbound						Orchard Lake Road Westbound						Cass Lake Blvd. Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:15 AM	90	0	103	0	4	193	19	139	0	0	0	158	1	0	5	0	0	6	1	138	16	0	0	155	512
7:30 AM	90	2	139	0	0	231	24	169	0	0	0	193	10	1	7	0	0	18	1	209	21	0	0	231	673
7:45 AM	101	2	148	0	0	251	33	161	0	0	0	194	2	3	0	0	0	5	1	166	29	0	0	196	646
8:00 AM	69	2	149	0	0	220	38	147	0	0	0	185	2	2	4	0	0	8	2	131	24	0	0	157	570
Total	350	6	539	0	4	895	114	616	0	0	0	730	15	6	16	0	0	37	5	644	90	0	0	739	2401
Approach %	39.1	0.7	60.2	0.0	-	-	15.6	84.4	0.0	0.0	-	-	40.5	16.2	43.2	0.0	-	-	0.7	87.1	12.2	0.0	-	-	-
Total %	14.6	0.2	22.4	0.0	-	37.3	4.7	25.7	0.0	0.0	-	30.4	0.6	0.2	0.7	0.0	-	1.5	0.2	26.8	3.7	0.0	-	30.8	-
PHF	0.866	0.750	0.904	0.000	-	0.891	0.750	0.911	0.000	0.000	-	0.941	0.375	0.500	0.571	0.000	-	0.514	0.625	0.770	0.776	0.000	-	0.800	0.892
Lights	344	6	531	0	-	881	112	579	0	0	-	691	14	5	16	0	-	35	5	625	88	0	-	718	2325
% Lights	98.3	100.0	98.5	-	-	98.4	98.2	94.0	-	-	-	94.7	93.3	83.3	100.0	-	-	94.6	100.0	97.0	97.8	-	-	97.2	96.8
Buses	3	0	0	0	-	3	0	2	0	0	-	2	1	0	0	0	-	1	0	1	1	0	-	2	8
% Buses	0.9	0.0	0.0	-	-	0.3	0.0	0.3	-	-	-	0.3	6.7	0.0	0.0	-	-	2.7	0.0	0.2	1.1	-	-	0.3	0.3
Single-Unit Trucks	2	0	4	0	-	6	2	25	0	0	-	27	0	1	0	0	-	1	0	14	1	0	-	15	49
% Single-Unit Trucks	0.6	0.0	0.7	-	-	0.7	1.8	4.1	-	-	-	3.7	0.0	16.7	0.0	-	-	2.7	0.0	2.2	1.1	-	-	2.0	2.0
Articulated Trucks	1	0	4	0	-	5	0	10	0	0	-	10	0	0	0	0	-	0	0	4	0	0	-	4	19
% Articulated Trucks	0.3	0.0	0.7	-	-	0.6	0.0	1.6	-	-	-	1.4	0.0	0.0	0.0	-	-	0.0	0.0	0.6	0.0	-	-	0.5	0.8
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

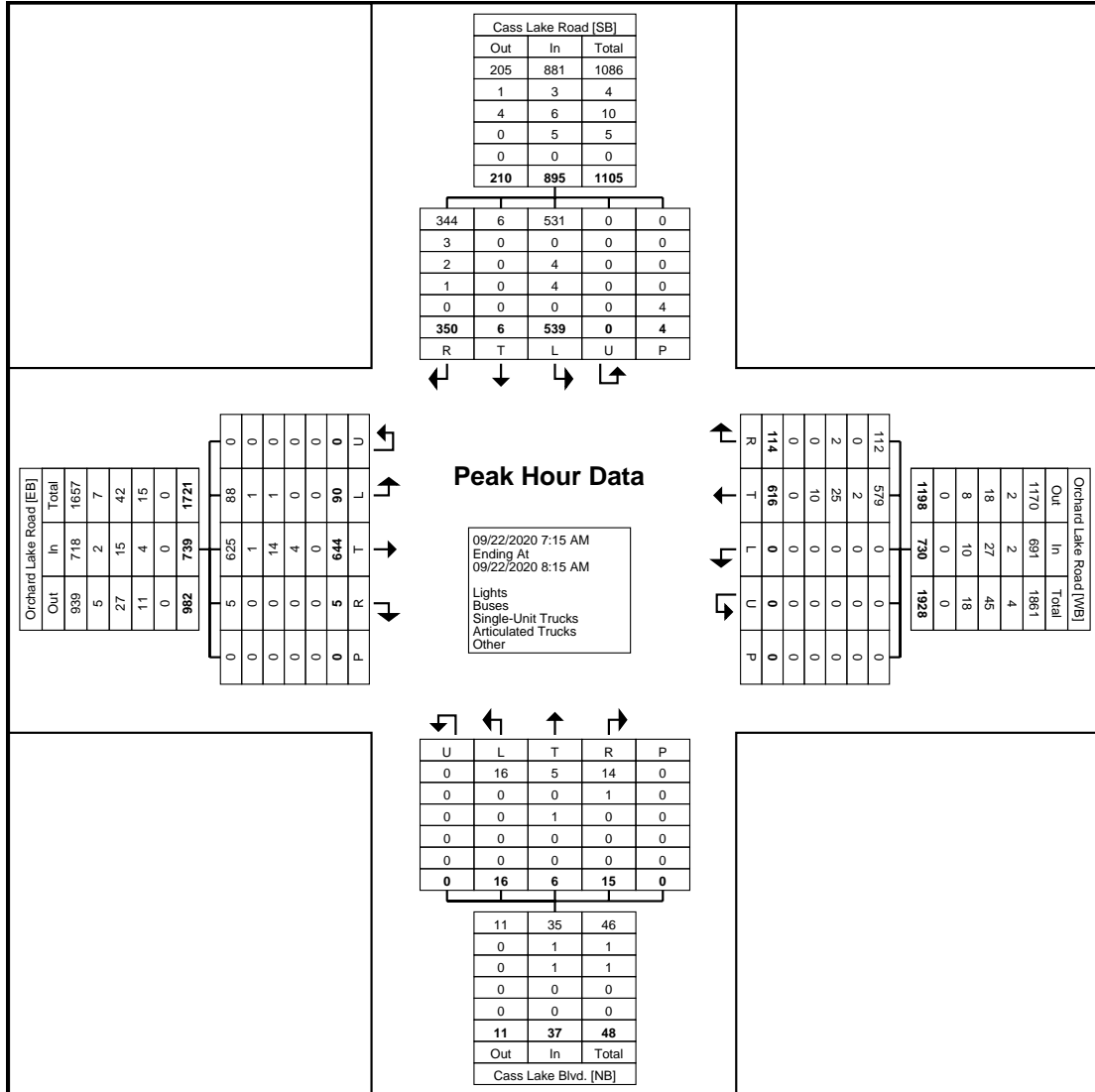


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Washington, Michigan, United States 48094
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Reliable Traffic Data

Project: RCOC Orchard
Lake Traffic Study
Corridor: Orchard Lake
(Commerce – Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU24L
SW & SCU3DQ NE

Count Name: TMC_3
Orchard Lake & Cass
Lake_9-22-20
Site Code: TMC_3
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 5



Turning Movement Peak Hour Data Plot (7:15 AM)



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 Orchard Lake & Cass
 Lake_9-22-20
 Site Code: TMC_3
 Traffic Data Collection,
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 Start Date: 09/22/2020
 Page No: 6

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Cass Lake Road Southbound						Orchard Lake Road Westbound						Cass Lake Blvd. Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	34	3	68	0	0	105	65	101	0	0	0	166	0	4	2	0	0	6	2	124	46	0	0	172	449
11:15 AM	64	1	64	0	1	129	62	120	2	0	0	184	5	2	0	0	1	7	1	110	32	0	0	143	463
11:30 AM	56	2	80	0	0	138	66	142	0	0	1	208	1	5	3	0	1	9	0	132	48	0	0	180	535
11:45 AM	51	6	71	0	1	128	82	135	0	0	0	217	0	5	4	0	0	9	1	149	64	0	2	214	568
Total	205	12	283	0	2	500	275	498	2	0	1	775	6	16	9	0	2	31	4	515	190	0	2	709	2015
Approach %	41.0	2.4	56.6	0.0	-	-	35.5	64.3	0.3	0.0	-	-	19.4	51.6	29.0	0.0	-	-	0.6	72.6	26.8	0.0	-	-	-
Total %	10.2	0.6	14.0	0.0	-	24.8	13.6	24.7	0.1	0.0	-	38.5	0.3	0.8	0.4	0.0	-	1.5	0.2	25.6	9.4	0.0	-	35.2	-
PHF	0.801	0.500	0.884	0.000	-	0.906	0.838	0.877	0.250	0.000	-	0.893	0.300	0.800	0.563	0.000	-	0.861	0.500	0.864	0.742	0.000	-	0.828	0.887
Lights	200	11	278	0	-	489	270	479	2	0	-	751	5	16	9	0	-	30	4	489	180	0	-	673	1943
% Lights	97.6	91.7	98.2	-	-	97.8	98.2	96.2	100.0	-	-	96.9	83.3	100.0	100.0	-	-	96.8	100.0	95.0	94.7	-	-	94.9	96.4
Buses	2	0	1	0	-	3	0	1	0	0	-	1	0	0	0	0	-	0	0	2	6	0	-	8	12
% Buses	1.0	0.0	0.4	-	-	0.6	0.0	0.2	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.4	3.2	-	-	1.1	0.6
Single-Unit Trucks	3	1	3	0	-	7	4	12	0	0	-	16	1	0	0	0	-	1	0	20	4	0	-	24	48
% Single-Unit Trucks	1.5	8.3	1.1	-	-	1.4	1.5	2.4	0.0	-	-	2.1	16.7	0.0	0.0	-	-	3.2	0.0	3.9	2.1	-	-	3.4	2.4
Articulated Trucks	0	0	1	0	-	1	1	6	0	0	-	7	0	0	0	0	-	0	0	4	0	0	-	4	12
% Articulated Trucks	0.0	0.0	0.4	-	-	0.2	0.4	1.2	0.0	-	-	0.9	0.0	0.0	0.0	-	-	0.0	0.0	0.8	0.0	-	-	0.6	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	50.0	-	-	-	-	-	100.0	-	-	-	-	-	0.0	-	-	-	-	-	50.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	50.0	-	-	-	-	-	0.0	-	-	-	-	-	100.0	-	-	-	-	-	50.0	-	-

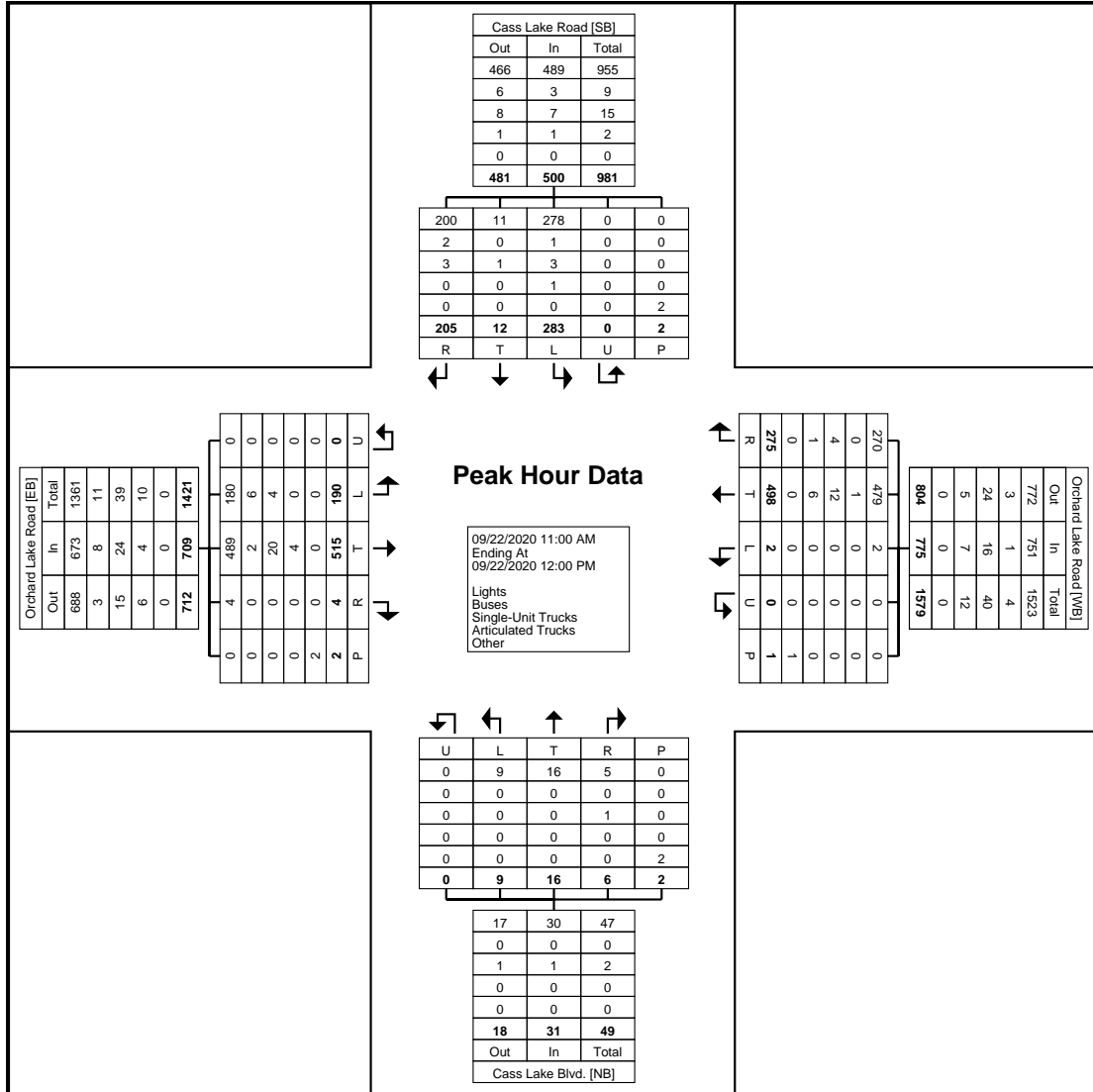


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Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU24L
 SW & SCU3DQ NE

Count Name: TMC_3
 Orchard Lake & Cass
 Lake_9-22-20
 Site Code: TMC_3
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 7



Turning Movement Peak Hour Data Plot (11:00 AM)



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Count Name: TMC_3
 Orchard Lake & Cass
 Lake_9-22-20
 Site Code: TMC_3
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 8

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Cass Lake Road Southbound						Orchard Lake Road Westbound						Cass Lake Blvd. Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
12:00 PM	64	2	87	0	0	153	77	131	0	0	1	208	2	4	3	0	0	9	1	138	49	0	2	188	558
12:15 PM	53	1	108	0	1	162	85	143	2	0	0	230	3	2	1	0	0	6	0	155	44	0	0	199	597
12:30 PM	45	6	65	0	0	116	78	155	1	0	0	234	2	1	6	0	0	9	2	142	47	0	0	191	550
12:45 PM	58	3	76	0	0	137	64	142	0	0	0	206	7	3	2	0	0	12	4	164	52	0	0	220	575
Total	220	12	336	0	1	568	304	571	3	0	1	878	14	10	12	0	0	36	7	599	192	0	2	798	2280
Approach %	38.7	2.1	59.2	0.0	-	-	34.6	65.0	0.3	0.0	-	-	38.9	27.8	33.3	0.0	-	-	0.9	75.1	24.1	0.0	-	-	-
Total %	9.6	0.5	14.7	0.0	-	24.9	13.3	25.0	0.1	0.0	-	38.5	0.6	0.4	0.5	0.0	-	1.6	0.3	26.3	8.4	0.0	-	35.0	-
PHF	0.859	0.500	0.778	0.000	-	0.877	0.894	0.921	0.375	0.000	-	0.938	0.500	0.625	0.500	0.000	-	0.750	0.438	0.913	0.923	0.000	-	0.907	0.955
Lights	210	12	330	0	-	552	296	555	3	0	-	854	14	9	11	0	-	34	6	566	183	0	-	755	2195
% Lights	95.5	100.0	98.2	-	-	97.2	97.4	97.2	100.0	-	-	97.3	100.0	90.0	91.7	-	-	94.4	85.7	94.5	95.3	-	-	94.6	96.3
Buses	4	0	0	0	-	4	0	1	0	0	-	1	0	0	1	0	-	1	0	3	1	0	-	4	10
% Buses	1.8	0.0	0.0	-	-	0.7	0.0	0.2	0.0	-	-	0.1	0.0	0.0	8.3	-	-	2.8	0.0	0.5	0.5	-	-	0.5	0.4
Single-Unit Trucks	6	0	6	0	-	12	6	15	0	0	-	21	0	0	0	0	-	0	1	28	6	0	-	35	68
% Single-Unit Trucks	2.7	0.0	1.8	-	-	2.1	2.0	2.6	0.0	-	-	2.4	0.0	0.0	0.0	-	-	0.0	14.3	4.7	3.1	-	-	4.4	3.0
Articulated Trucks	0	0	0	0	-	0	2	0	0	0	-	2	0	0	0	0	-	0	0	2	1	0	-	3	5
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.7	0.0	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.5	-	-	0.4	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	1	0	-	1	2
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	10.0	0.0	-	-	2.8	0.0	0.0	0.5	-	-	0.1	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

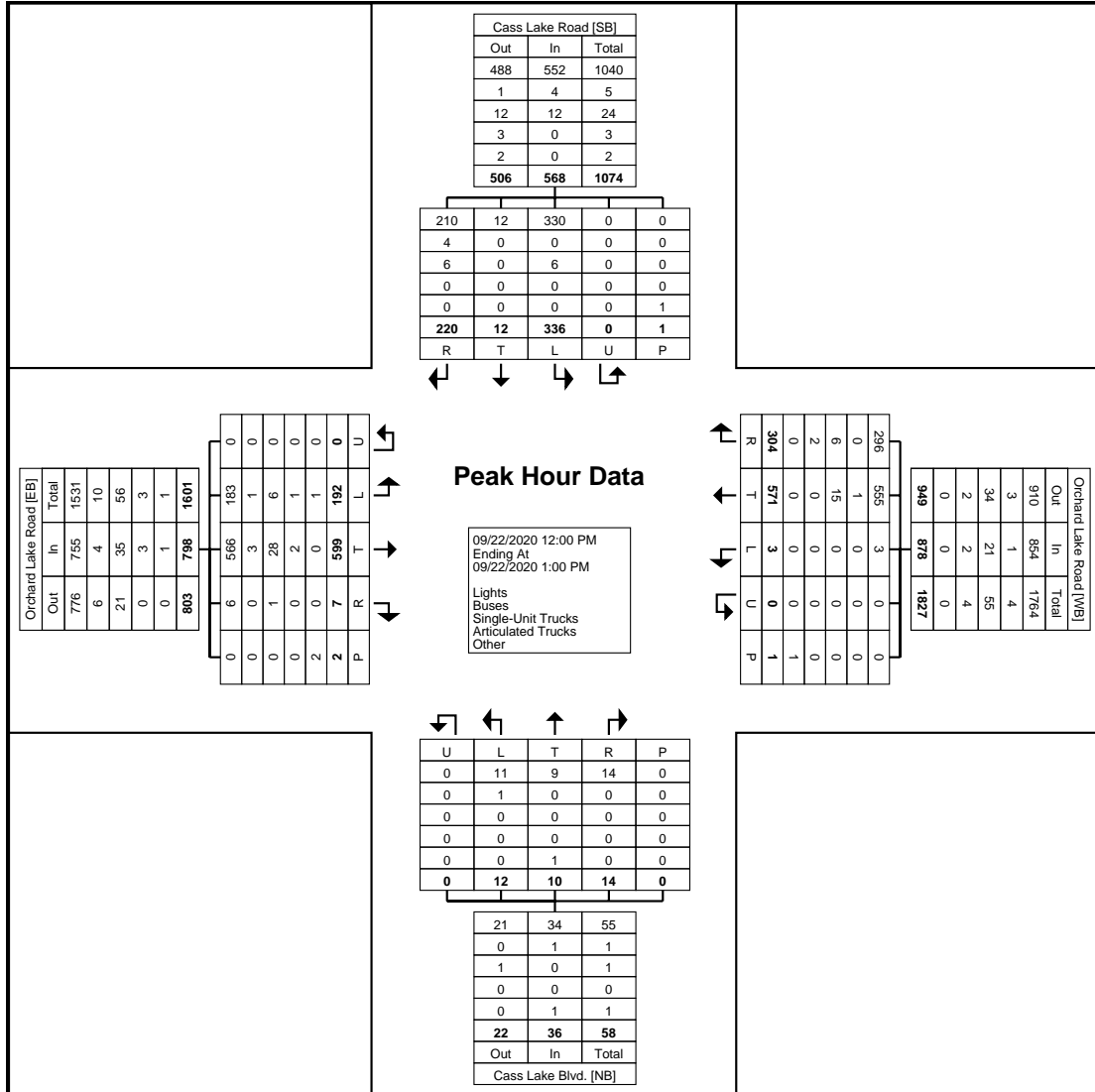


Traffic Data Collection

Traffic Data Collection, LLC
 7504 Sawgrass Drive
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 Washington, Michigan, United States 48094
 Ph. (586) 786-5407
 Reliable Traffic Data

Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU24L
 SW & SCU3DQ NE

Count Name: TMC_3
 Orchard Lake & Cass
 Lake_9-22-20
 Site Code: TMC_3
 Traffic Data Collection,
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 Start Date: 09/22/2020
 Page No: 9



Turning Movement Peak Hour Data Plot (12:00 PM)



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 Video VCU ID#: SCU24L
 SW & SCU3DQ NE

Count Name: TMC_3
 Orchard Lake & Cass
 Lake_9-22-20
 Site Code: TMC_3
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 10

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Cass Lake Road Southbound						Orchard Lake Road Westbound						Cass Lake Blvd. Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:30 PM	53	5	75	0	2	133	159	237	1	0	2	397	0	8	0	0	8	8	0	204	96	0	0	300	838
4:45 PM	61	2	82	0	0	145	123	180	0	0	5	303	2	5	2	0	4	9	3	162	97	0	0	262	719
5:00 PM	47	4	72	0	3	123	140	197	0	0	0	337	3	2	1	0	0	6	4	173	72	0	0	249	715
5:15 PM	43	2	72	0	0	117	166	225	1	0	5	392	1	5	2	0	0	8	1	191	86	0	3	278	795
Total	204	13	301	0	5	518	588	839	2	0	12	1429	6	20	5	0	12	31	8	730	351	0	3	1089	3067
Approach %	39.4	2.5	58.1	0.0	-	-	41.1	58.7	0.1	0.0	-	-	19.4	64.5	16.1	0.0	-	-	0.7	67.0	32.2	0.0	-	-	-
Total %	6.7	0.4	9.8	0.0	-	16.9	19.2	27.4	0.1	0.0	-	46.6	0.2	0.7	0.2	0.0	-	1.0	0.3	23.8	11.4	0.0	-	35.5	-
PHF	0.836	0.650	0.918	0.000	-	0.893	0.886	0.885	0.500	0.000	-	0.900	0.500	0.625	0.625	0.000	-	0.861	0.500	0.895	0.905	0.000	-	0.908	0.915
Lights	197	12	298	0	-	507	577	827	2	0	-	1406	6	20	5	0	-	31	8	714	348	0	-	1070	3014
% Lights	96.6	92.3	99.0	-	-	97.9	98.1	98.6	100.0	-	-	98.4	100.0	100.0	100.0	-	-	100.0	100.0	97.8	99.1	-	-	98.3	98.3
Buses	4	0	1	0	-	5	0	3	0	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	8
% Buses	2.0	0.0	0.3	-	-	1.0	0.0	0.4	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.3
Single-Unit Trucks	2	1	2	0	-	5	6	6	0	0	-	12	0	0	0	0	-	0	0	8	3	0	-	11	28
% Single-Unit Trucks	1.0	7.7	0.7	-	-	1.0	1.0	0.7	0.0	-	-	0.8	0.0	0.0	0.0	-	-	0.0	0.0	1.1	0.9	-	-	1.0	0.9
Articulated Trucks	1	0	0	0	-	1	5	3	0	0	-	8	0	0	0	0	-	0	0	8	0	0	-	8	17
% Articulated Trucks	0.5	0.0	0.0	-	-	0.2	0.9	0.4	0.0	-	-	0.6	0.0	0.0	0.0	-	-	0.0	0.0	1.1	0.0	-	-	0.7	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	7	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	100.0	-	-	-	-	-	58.3	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	0.0	-	-	-	-	-	41.7	-	-	-	-	-	100.0	-	-



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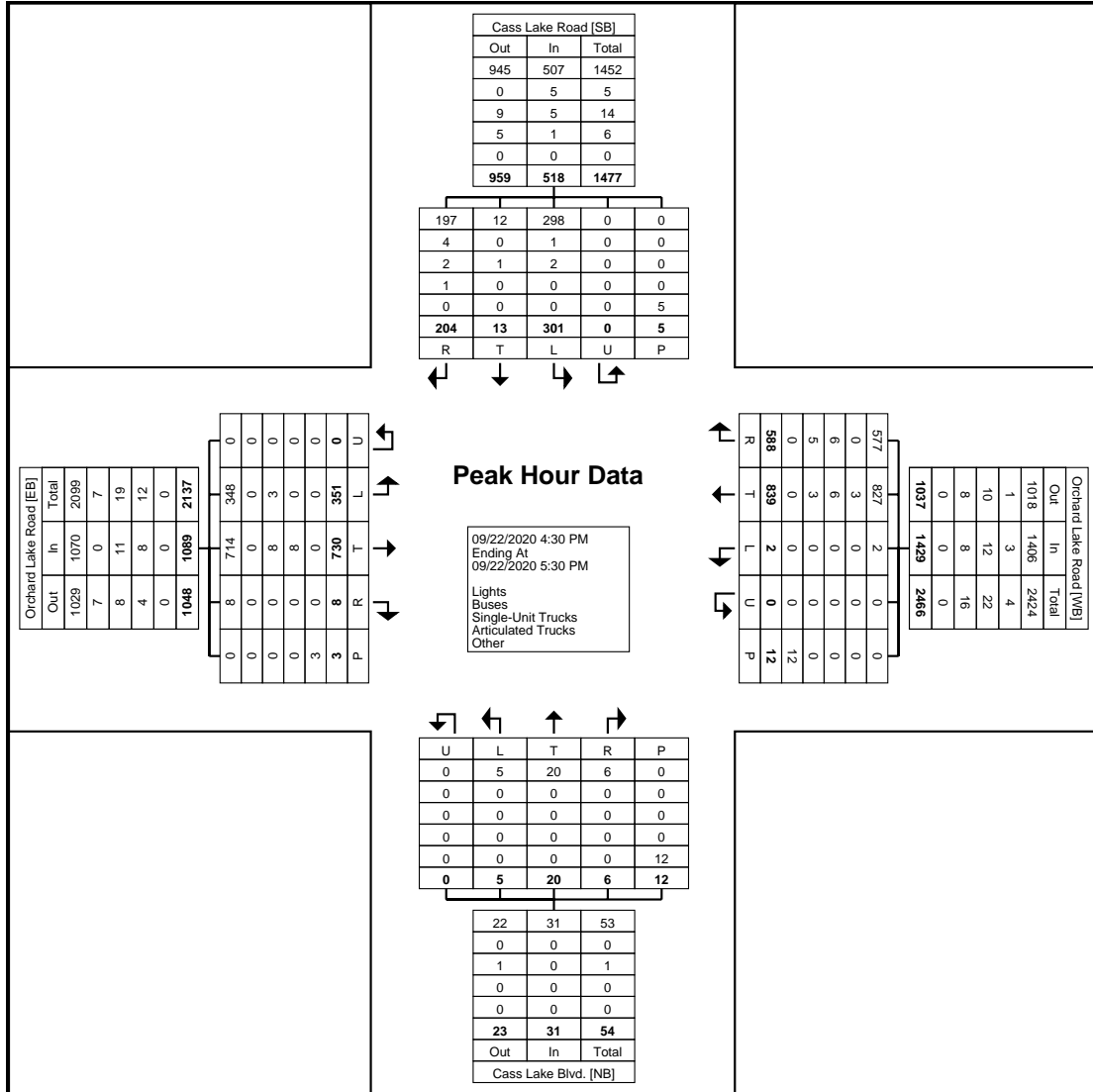
Washington, Michigan, United States 48094

Ph. (586) 786-5407

Reliable Traffic Data

Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU24L
 SW & SCU3DQ NE

Count Name: TMC_3
 Orchard Lake & Cass
 Lake_9-22-20
 Site Code: TMC_3
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 11



Turning Movement Peak Hour Data Plot (4:30 PM)



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Lake Traffic Study
Corridor: Orchard Lake
(Commerce – Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU24L
SW & SCU3DQ NE

Count Name: TMC_3
Orchard Lake & Cass
Lake_9-22-20
Site Code: TMC_3
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 12

TDC Traffic Comments: 6 hour multi-modal intersection study includes video premium vehicle classification turning movement count conducted during typical weekday (Tuesday) from 7:00-9:00 AM morning, 11:00 AM - 1:00 PM mid-day & 4:00-6:00 PM afternoon peak hours, while school was in session during COVID-19.

TMC was performed with Miovision video VCU scout recording cameras for RCOC Orchard Lake Road Traffic Study for OHM Advisor Project Supplement No. 57.

Signalized controlled SCATS intersection, ped. signals for all quadrants. Push buttons exist for east & west legs. Restriction NTOR signed for SB approach. Video VCU cameras were located within SW & NE intersection quadrants. All intersection shared video files have been uploaded to Miovision DataLink cloud platform.

Multi-Modal Classification Summary Details & Percentages: Seven (7) Groupings:

- 1) Lights Includes: FHWA Classes 1-3 (Motorcycles, Pick Up Trucks, Vans, Light Goods Vehicles)***
- 2) Buses Includes: FHWA Class 4 (School Buses & Regional Transportation Metro Buses)***
- 3) Single-Unit Trucks Includes: FHWA Classes 5-7 (2-4 Axle SU Medium Trucks)***
- 4) Articulated Trucks Includes: FHWA Classes 8-12 (Heavy Trucks W/Single & Multi Unit Trailers)***
- 5) Bicycles On Road Includes: All bicycles on the roadway***
- 6) Bicycles On Crosswalk Includes: All bicycles using sidewalk***
- 7) Pedestrians Includes: All pedestrians using crosswalk***



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Lake Traffic Study
Corridor: Orchard Lake
(Commerce - Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU1US
SE

Count Name: TMC_4
Orchard Lake &
Warwick_9-22-20
Site Code: TMC_4
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 1

Turning Movement Data

Table with columns for Start Time, Warwick Street Southbound, Orchard Lake Road Westbound, Brick Yard Car Wash Northbound, Orchard Lake Road Eastbound, and Int. Total. Rows include hourly and grand totals for various times of day.

% Pedestrians	-	-	-	-	81.8	-	-	-	-	0.0	-	-	-	-	87.5	-	-	-	-	66.7	-	-
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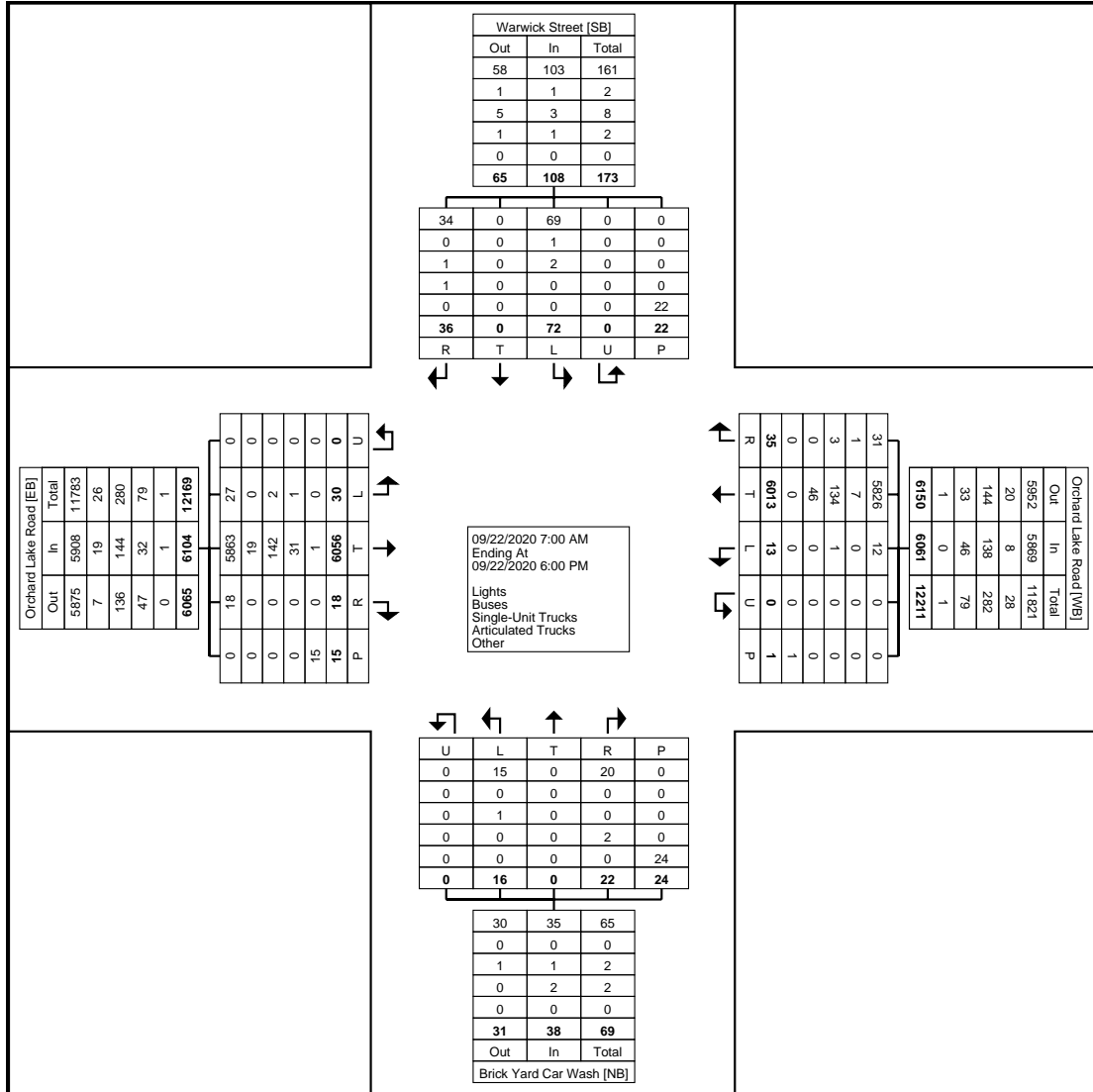
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Reliable Traffic Data

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 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
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 SE

Count Name: TMC_4
 Orchard Lake &
 Warwick_9-22-20
 Site Code: TMC_4
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 Page No: 3



Turning Movement Data Plot



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 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU1US
 SE

Count Name: TMC_4
 Orchard Lake &
 Warwick_9-22-20
 Site Code: TMC_4
 Traffic Data Collection,
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 Start Date: 09/22/2020
 Page No: 4

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Warwick Street Southbound						Orchard Lake Road Westbound						Brick Yard Car Wash Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:30 AM	0	0	4	0	0	4	0	201	1	0	0	202	0	0	0	0	0	0	1	358	1	0	0	360	566
7:45 AM	0	0	6	0	0	6	0	198	0	0	0	198	1	0	0	0	0	1	2	318	1	0	0	321	526
8:00 AM	1	0	3	0	0	4	0	181	1	0	0	182	0	0	1	0	0	1	2	282	1	0	0	285	472
8:15 AM	1	0	5	0	0	6	0	166	0	0	0	166	0	0	0	0	2	0	0	281	0	0	0	281	453
Total	2	0	18	0	0	20	0	746	2	0	0	748	1	0	1	0	2	2	5	1239	3	0	0	1247	2017
Approach %	10.0	0.0	90.0	0.0	-	-	0.0	99.7	0.3	0.0	-	-	50.0	0.0	50.0	0.0	-	-	0.4	99.4	0.2	0.0	-	-	-
Total %	0.1	0.0	0.9	0.0	-	1.0	0.0	37.0	0.1	0.0	-	37.1	0.0	0.0	0.0	0.0	-	0.1	0.2	61.4	0.1	0.0	-	61.8	-
PHF	0.500	0.000	0.750	0.000	-	0.833	0.000	0.928	0.500	0.000	-	0.926	0.250	0.000	0.250	0.000	-	0.500	0.625	0.865	0.750	0.000	-	0.866	0.891
Lights	2	0	18	0	-	20	0	705	2	0	-	707	1	0	1	0	-	2	5	1193	3	0	-	1201	1930
% Lights	100.0	-	100.0	-	-	100.0	-	94.5	100.0	-	-	94.5	100.0	-	100.0	-	-	100.0	100.0	96.3	100.0	-	-	96.3	95.7
Buses	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	3	0	0	-	3	4
% Buses	0.0	-	0.0	-	-	0.0	-	0.1	0.0	-	-	0.1	0.0	-	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.2
Single-Unit Trucks	0	0	0	0	-	0	0	28	0	0	-	28	0	0	0	0	-	0	0	37	0	0	-	37	65
% Single-Unit Trucks	0.0	-	0.0	-	-	0.0	-	3.8	0.0	-	-	3.7	0.0	-	0.0	-	-	0.0	0.0	3.0	0.0	-	-	3.0	3.2
Articulated Trucks	0	0	0	0	-	0	0	12	0	0	-	12	0	0	0	0	-	0	0	6	0	0	-	6	18
% Articulated Trucks	0.0	-	0.0	-	-	0.0	-	1.6	0.0	-	-	1.6	0.0	-	0.0	-	-	0.0	0.0	0.5	0.0	-	-	0.5	0.9
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



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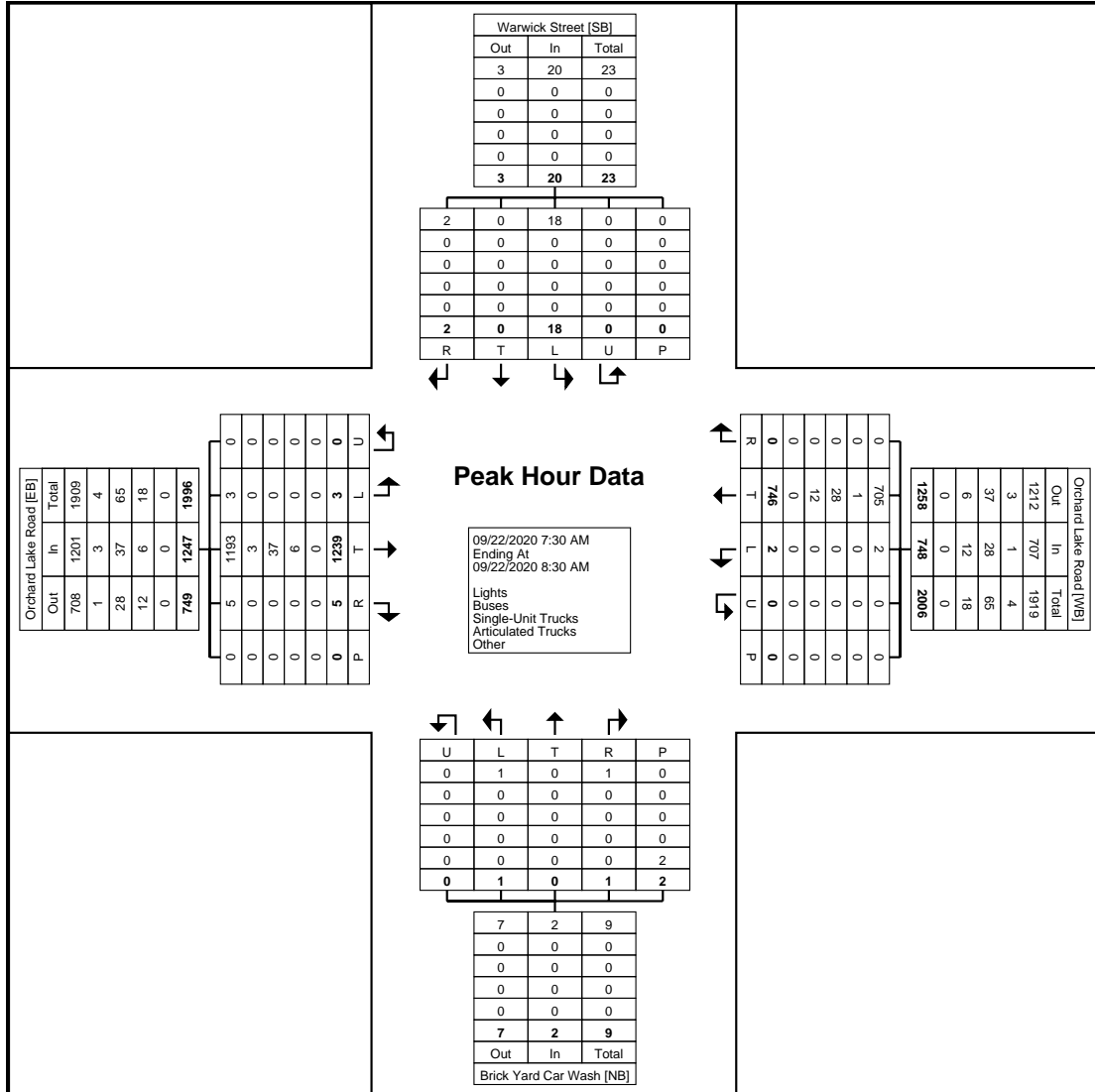
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Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU1US
 SE

Count Name: TMC_4
 Orchard Lake &
 Warwick_9-22-20
 Site Code: TMC_4
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 5



Turning Movement Peak Hour Data Plot (7:30 AM)



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Count Name: TMC_4
 Orchard Lake &
 Warwick_9-22-20
 Site Code: TMC_4
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 6

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Warwick Street Southbound						Orchard Lake Road Westbound						Brick Yard Car Wash Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
12:00 PM	0	0	3	0	2	3	3	219	2	0	0	224	2	0	0	0	0	2	1	241	2	0	0	244	473
12:15 PM	3	0	4	0	0	7	1	248	0	0	0	249	1	0	3	0	1	4	3	240	1	0	1	244	504
12:30 PM	1	0	4	0	0	5	0	228	0	0	0	228	0	0	1	0	0	1	1	227	1	0	0	229	463
12:45 PM	5	0	4	0	1	9	6	241	2	0	0	249	2	0	0	0	1	2	0	261	0	0	0	261	521
Total	9	0	15	0	3	24	10	936	4	0	0	950	5	0	4	0	2	9	5	969	4	0	1	978	1961
Approach %	37.5	0.0	62.5	0.0	-	-	1.1	98.5	0.4	0.0	-	-	55.6	0.0	44.4	0.0	-	-	0.5	99.1	0.4	0.0	-	-	-
Total %	0.5	0.0	0.8	0.0	-	1.2	0.5	47.7	0.2	0.0	-	48.4	0.3	0.0	0.2	0.0	-	0.5	0.3	49.4	0.2	0.0	-	49.9	-
PHF	0.450	0.000	0.938	0.000	-	0.667	0.417	0.944	0.500	0.000	-	0.954	0.625	0.000	0.333	0.000	-	0.563	0.417	0.928	0.500	0.000	-	0.937	0.941
Lights	8	0	13	0	-	21	10	907	4	0	-	921	5	0	4	0	-	9	5	932	3	0	-	940	1891
% Lights	88.9	-	86.7	-	-	87.5	100.0	96.9	100.0	-	-	96.9	100.0	-	100.0	-	-	100.0	100.0	96.2	75.0	-	-	96.1	96.4
Buses	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	4	0	0	-	4	5
% Buses	0.0	-	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	-	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.4	0.3
Single-Unit Trucks	1	0	2	0	-	3	0	25	0	0	-	25	0	0	0	0	-	0	0	31	1	0	-	32	60
% Single-Unit Trucks	11.1	-	13.3	-	-	12.5	0.0	2.7	0.0	-	-	2.6	0.0	-	0.0	-	-	0.0	0.0	3.2	25.0	-	-	3.3	3.1
Articulated Trucks	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	0	2	0	0	-	2	5
% Articulated Trucks	0.0	-	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.3	0.0	-	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Traffic Data Collection

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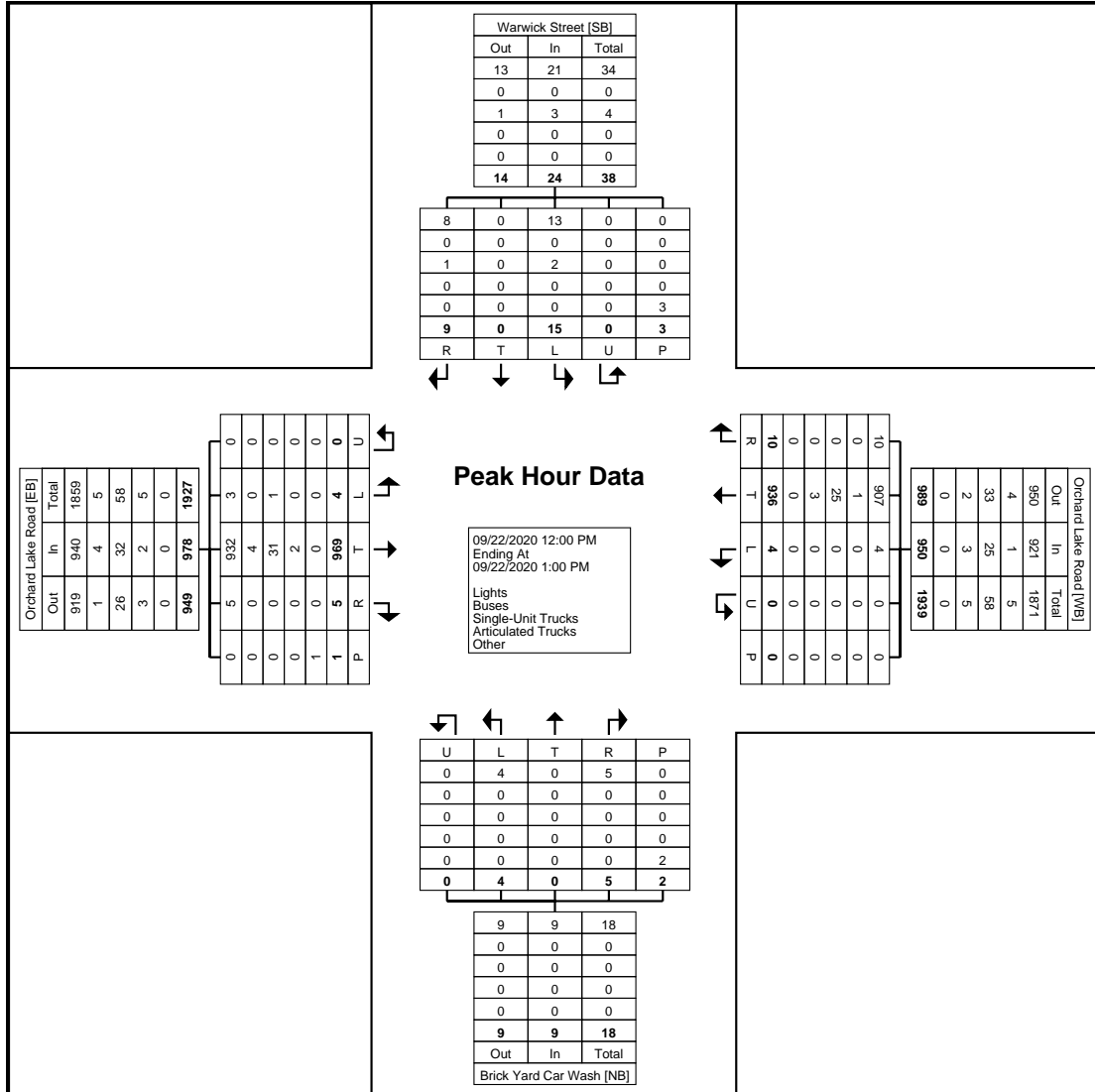
Washington, Michigan, United States 48094

Ph. (586) 786-5407

Reliable Traffic Data

Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU1US
 SE

Count Name: TMC_4
 Orchard Lake &
 Warwick_9-22-20
 Site Code: TMC_4
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 7



Turning Movement Peak Hour Data Plot (12:00 PM)



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 Ph. (586) 786-5407
 Reliable Traffic Data

Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU1US
 SE

Count Name: TMC_4
 Orchard Lake &
 Warwick_9-22-20
 Site Code: TMC_4
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 8

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Warwick Street Southbound						Orchard Lake Road Westbound						Brick Yard Car Wash Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:30 PM	2	0	1	0	0	3	1	359	0	0	0	360	0	0	0	0	1	0	0	282	3	0	1	285	648
4:45 PM	4	0	1	0	7	5	3	345	0	0	0	348	0	0	0	0	0	0	0	233	2	0	1	235	588
5:00 PM	1	0	3	0	0	4	2	336	0	0	0	338	0	0	0	0	0	0	1	274	3	0	1	278	620
5:15 PM	1	0	0	0	0	1	0	405	0	0	0	405	0	0	0	0	0	0	0	261	3	0	2	264	670
Total	8	0	5	0	7	13	6	1445	0	0	0	1451	0	0	0	0	1	0	1	1050	11	0	5	1062	2526
Approach %	61.5	0.0	38.5	0.0	-	-	0.4	99.6	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.1	98.9	1.0	0.0	-	-	-
Total %	0.3	0.0	0.2	0.0	-	0.5	0.2	57.2	0.0	0.0	-	57.4	0.0	0.0	0.0	0.0	-	0.0	0.0	41.6	0.4	0.0	-	42.0	-
PHF	0.500	0.000	0.417	0.000	-	0.650	0.500	0.892	0.000	0.000	-	0.896	0.000	0.000	0.000	0.000	-	0.000	0.250	0.931	0.917	0.000	-	0.932	0.943
Lights	8	0	5	0	-	13	6	1412	0	0	-	1418	0	0	0	0	-	0	1	1026	10	0	-	1037	2468
% Lights	100.0	-	100.0	-	-	100.0	100.0	97.7	-	-	-	97.7	-	-	-	-	-	-	100.0	97.7	90.9	-	-	97.6	97.7
Buses	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	0	3	0	0	-	3	6
% Buses	0.0	-	0.0	-	-	0.0	0.0	0.2	-	-	-	0.2	-	-	-	-	-	-	0.0	0.3	0.0	-	-	0.3	0.2
Single-Unit Trucks	0	0	0	0	-	0	0	23	0	0	-	23	0	0	0	0	-	0	0	14	1	0	-	15	38
% Single-Unit Trucks	0.0	-	0.0	-	-	0.0	0.0	1.6	-	-	-	1.6	-	-	-	-	-	-	0.0	1.3	9.1	-	-	1.4	1.5
Articulated Trucks	0	0	0	0	-	0	0	7	0	0	-	7	0	0	0	0	-	0	0	6	0	0	-	6	13
% Articulated Trucks	0.0	-	0.0	-	-	0.0	0.0	0.5	-	-	-	0.5	-	-	-	-	-	-	0.0	0.6	0.0	-	-	0.6	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Bicycles on Road	0.0	-	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	-	-	-	-	-	-	0.0	0.1	0.0	-	-	0.1	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	100.0	-	-

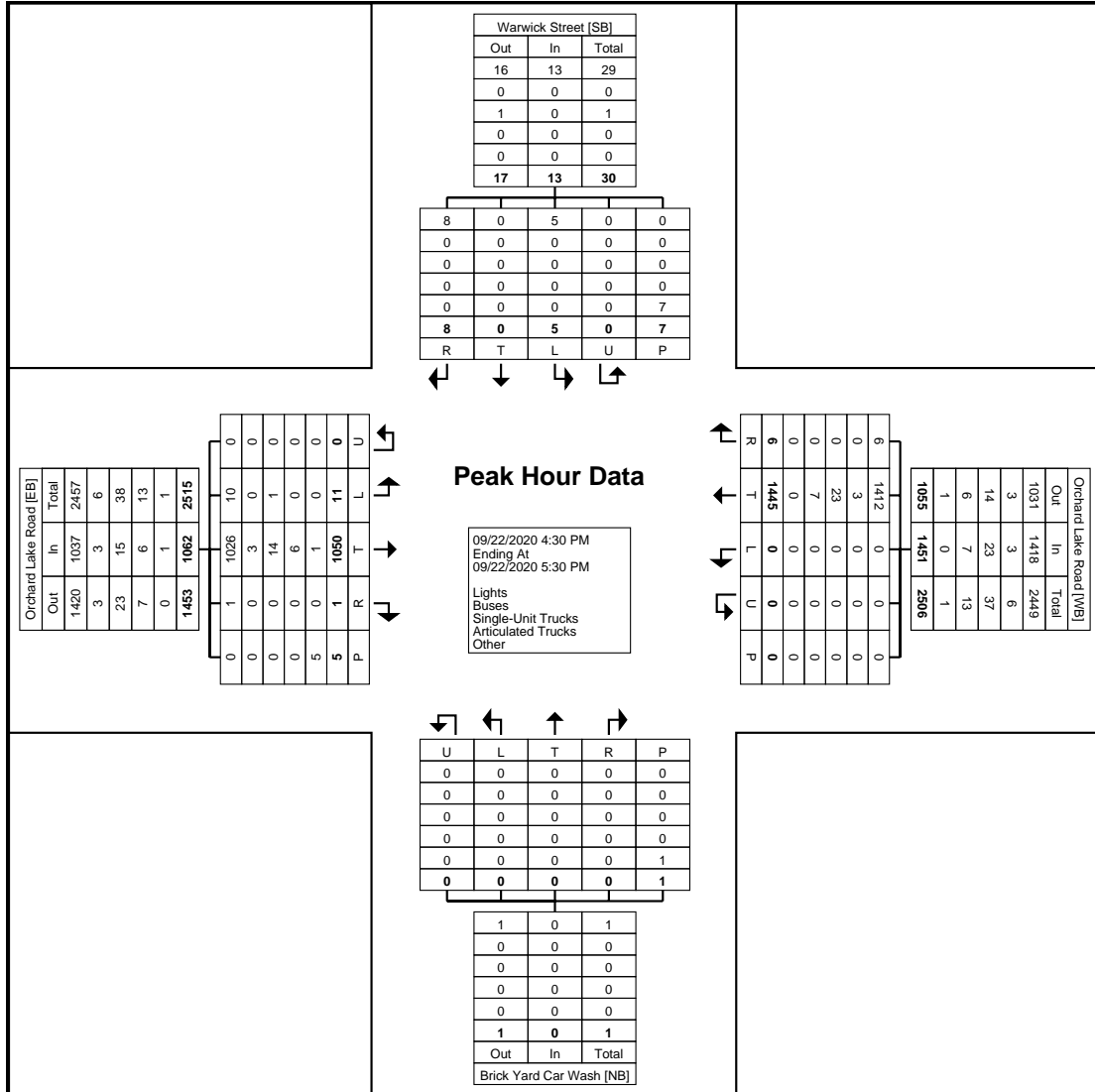
Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU1US
 SE



Traffic Data Collection

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 Washington, Michigan, United States 48094
 Ph. (586) 786-5407
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Count Name: TMC_4
 Orchard Lake &
 Warwick_9-22-20
 Site Code: TMC_4
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 9



Turning Movement Peak Hour Data Plot (4:30 PM)

Project: RCOC Orchard
Lake Traffic Study
Corridor: Orchard Lake
(Commerce – Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU1US
SE



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Count Name: TMC_4
Orchard Lake &
Warwick_9-22-20
Site Code: TMC_4
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 10

TDC Traffic Comments: 6 hour multi-modal intersection study includes video premium vehicle classification turning movement count conducted during typical weekday (Tuesday) from 7:00-9:00 AM morning, 11:00 AM - 1:00 PM mid-day & 4:00-6:00 PM afternoon peak hours, while school was in session during COVID-19.

TMC was performed with Miovision video VCU scout recording cameras for RCOC Orchard Lake Road Traffic Study for OHM Advisor Project Supplement No. 57.

Signalized controlled SCATS intersection, ped. signals for west & north legs. Push buttons exist for west leg. Video VCU camera was located within SE intersection quadrant. All intersection shared video files have been uploaded to Miovision DataLink cloud platform.

Multi-Modal Classification Summary Details & Percentages: Seven (7) Groupings:

- 1) Lights Includes: FHWA Classes 1-3 (Motorcycles, Pick Up Trucks, Vans, Light Goods Vehicles)***
- 2) Buses Includes: FHWA Class 4 (School Buses & Regional Transportation Metro Buses)***
- 3) Single-Unit Trucks Includes: FHWA Classes 5-7 (2-4 Axle SU Medium Trucks)***
- 4) Articulated Trucks Includes: FHWA Classes 8-12 (Heavy Trucks W/Single & Multi Unit Trailers)***
- 5) Bicycles On Road Includes: All bicycles on the roadway***
- 6) Bicycles On Crosswalk Includes: All bicycles using sidewalk***
- 7) Pedestrians Includes: All pedestrians using crosswalk***



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Reliable Traffic Data

Project: RCOC Orchard
Lake Traffic Study
Corridor: Orchard Lake
(Commerce - Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU4G2
SW

Count Name: TMC_5
Orchard Lake &
Middlebelt_9-22-20
Site Code: TMC_5
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 1

Turning Movement Data

Table with columns for Start Time, Inverness Street Southbound, Orchard Lake Road Westbound, Middlebelt Road Northbound, Orchard Lake Road Eastbound, and Int. Total. Rows include hourly and grand totals for various times of day.

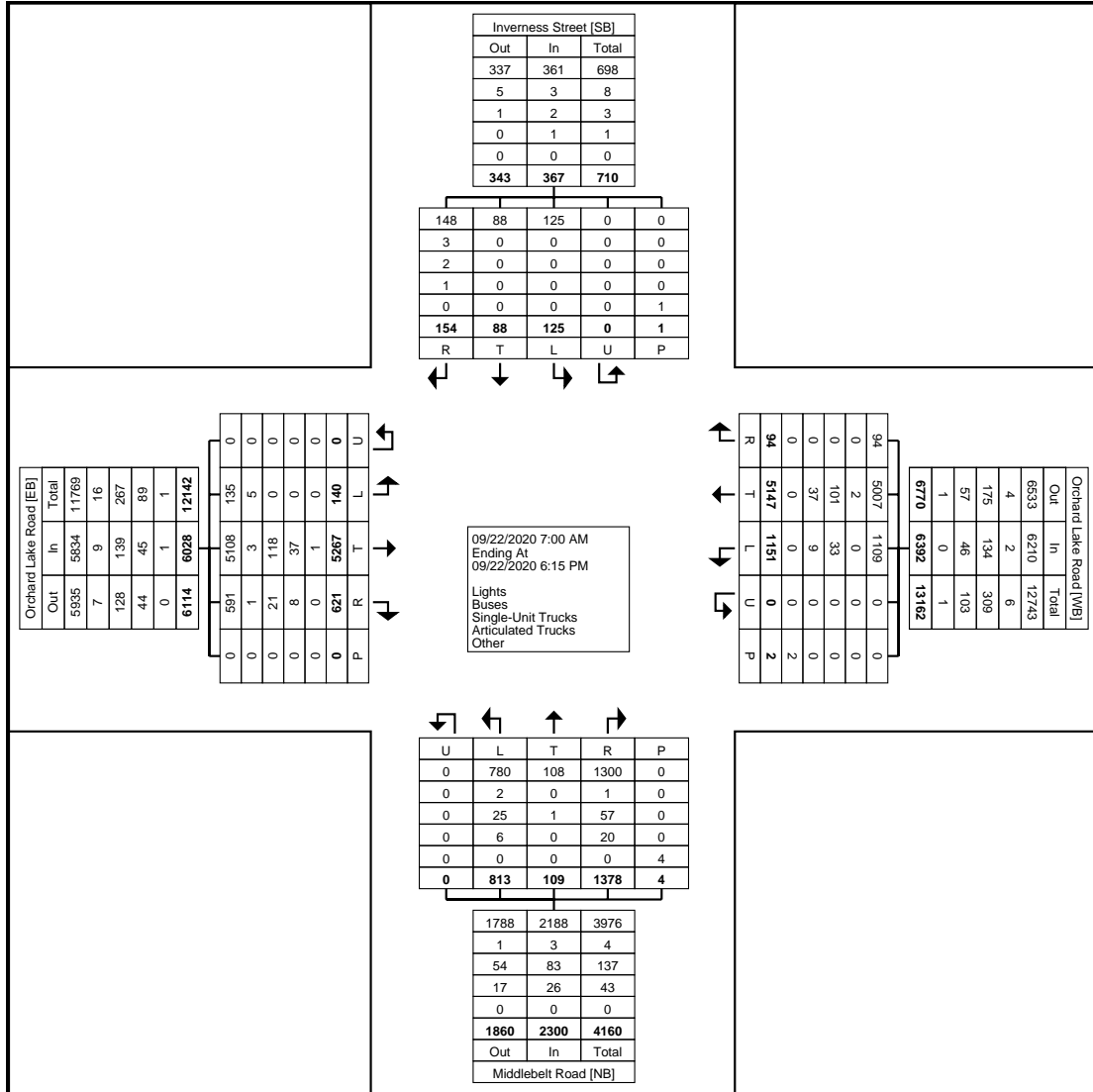


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Project: RCOC Orchard
Lake Traffic Study
Corridor: Orchard Lake
(Commerce – Middlebelt)
Weather: Pt. Sunny, Dry
Temp. 70 Degree's
Video VCU ID#: SCU4G2
SW

Count Name: TMC_5
Orchard Lake &
Middlebelt_9-22-20
Site Code: TMC_5
Traffic Data Collection,
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Start Date: 09/22/2020
Page No: 3



Turning Movement Data Plot



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Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU4G2
 SW

Count Name: TMC_5
 Orchard Lake &
 Middlebelt_9-22-20
 Site Code: TMC_5
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 4

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Inverness Street Southbound						Orchard Lake Road Westbound						Middlebelt Road Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:30 AM	3	4	1	0	0	8	1	184	53	0	0	238	42	1	15	0	0	58	34	310	3	0	0	347	651
7:45 AM	6	4	3	0	0	13	2	190	58	0	0	250	56	2	13	0	1	71	43	293	5	0	0	341	675
8:00 AM	6	2	1	0	0	9	1	166	64	0	0	231	57	1	13	0	0	71	35	248	2	0	0	285	596
8:15 AM	5	4	3	0	0	12	1	141	63	0	0	205	57	0	22	0	0	79	36	221	6	0	0	263	559
Total	20	14	8	0	0	42	5	681	238	0	0	924	212	4	63	0	1	279	148	1072	16	0	0	1236	2481
Approach %	47.6	33.3	19.0	0.0	-	-	0.5	73.7	25.8	0.0	-	-	76.0	1.4	22.6	0.0	-	-	12.0	86.7	1.3	0.0	-	-	-
Total %	0.8	0.6	0.3	0.0	-	1.7	0.2	27.4	9.6	0.0	-	37.2	8.5	0.2	2.5	0.0	-	11.2	6.0	43.2	0.6	0.0	-	49.8	-
PHF	0.833	0.875	0.667	0.000	-	0.808	0.625	0.896	0.930	0.000	-	0.924	0.930	0.500	0.716	0.000	-	0.883	0.860	0.865	0.667	0.000	-	0.890	0.919
Lights	19	14	8	0	-	41	5	638	225	0	-	868	199	4	63	0	-	266	135	1049	15	0	-	1199	2374
% Lights	95.0	100.0	100.0	-	-	97.6	100.0	93.7	94.5	-	-	93.9	93.9	100.0	100.0	-	-	95.3	91.2	97.9	93.8	-	-	97.0	95.7
Buses	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	2
% Buses	5.0	0.0	0.0	-	-	2.4	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	6.3	-	-	0.1	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	28	10	0	-	38	8	0	0	0	-	8	8	20	0	0	-	28	74
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	4.1	4.2	-	-	4.1	3.8	0.0	0.0	-	-	2.9	5.4	1.9	0.0	-	-	2.3	3.0
Articulated Trucks	0	0	0	0	-	0	0	15	3	0	-	18	5	0	0	0	-	5	5	3	0	0	-	8	31
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	2.2	1.3	-	-	1.9	2.4	0.0	0.0	-	-	1.8	3.4	0.3	0.0	-	-	0.6	1.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



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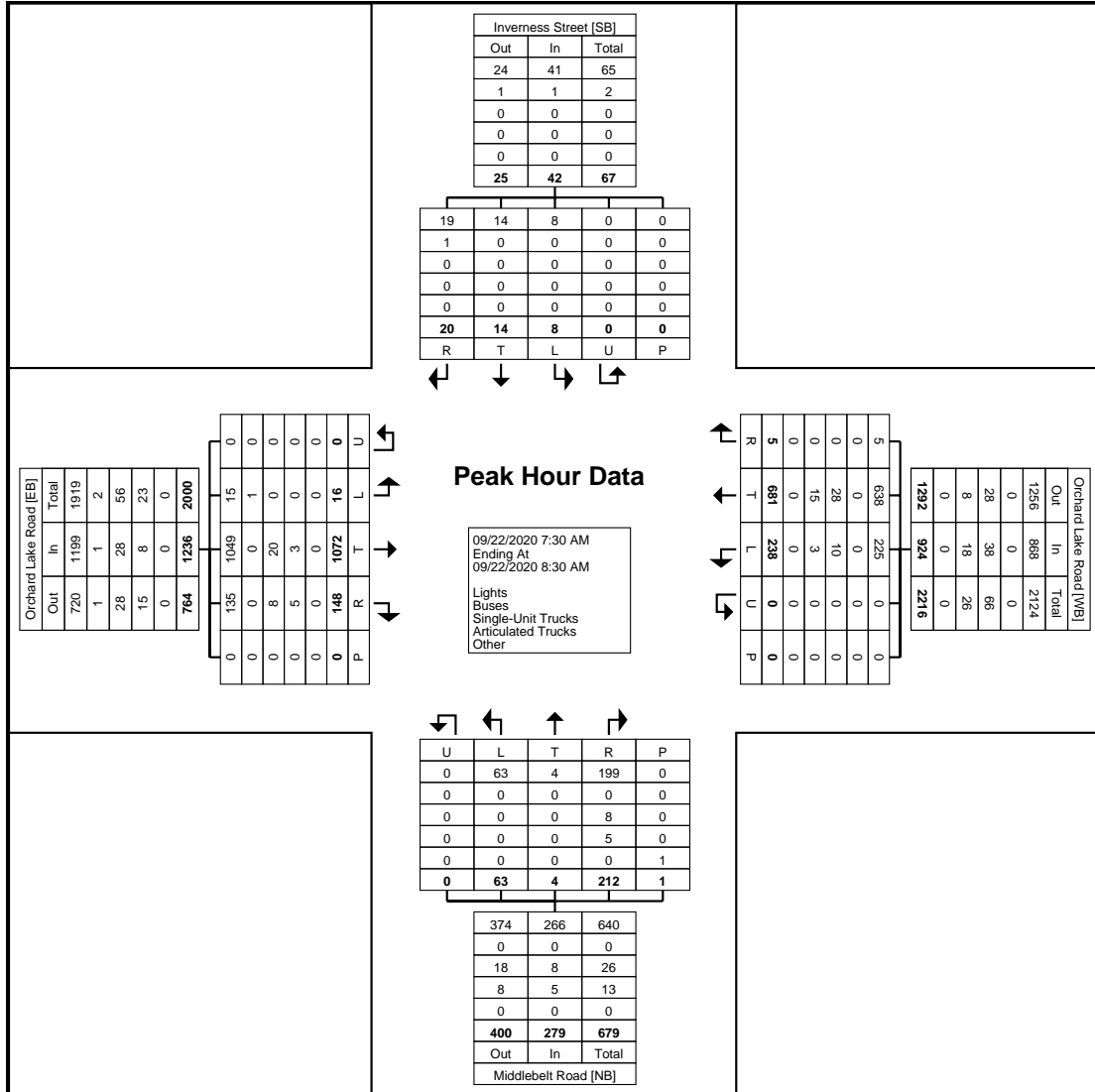
Washington, Michigan, United States 48094

Ph. (586) 786-5407

Reliable Traffic Data

Project: RCOC Orchard Lake Traffic Study
 Corridor: Orchard Lake (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU4G2 SW

Count Name: TMC_5
 Orchard Lake & Middlebelt_9-22-20
 Site Code: TMC_5
 Traffic Data Collection, LLC
 Start Date: 09/22/2020
 Page No: 5



Turning Movement Peak Hour Data Plot (7:30 AM)



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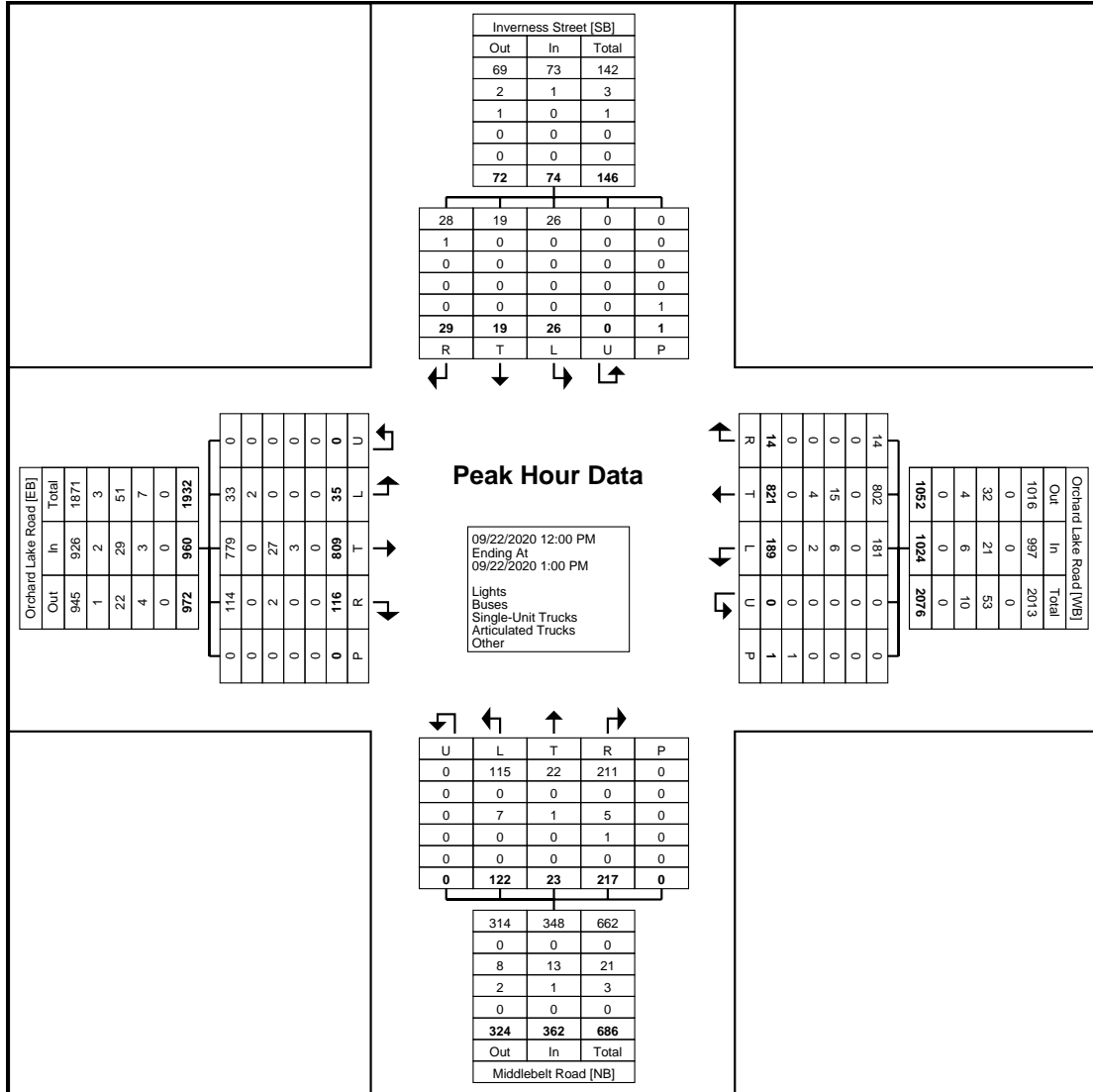
Washington, Michigan, United States 48094

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Reliable Traffic Data

Project: RCOC Orchard Lake Traffic Study
 Corridor: Orchard Lake (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU4G2
 SW

Count Name: TMC_5
 Orchard Lake & Middlebelt_9-22-20
 Site Code: TMC_5
 Traffic Data Collection, LLC
 Start Date: 09/22/2020
 Page No: 7



Turning Movement Peak Hour Data Plot (12:00 PM)



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Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU4G2
 SW

Count Name: TMC_5
 Orchard Lake &
 Middlebelt_9-22-20
 Site Code: TMC_5
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 8

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Inverness Street Southbound						Orchard Lake Road Westbound						Middlebelt Road Northbound						Orchard Lake Road Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:30 PM	6	6	10	0	0	22	8	293	49	0	0	350	82	5	73	0	1	160	18	237	7	0	0	262	794
4:45 PM	11	3	3	0	0	17	6	288	42	0	0	336	67	7	57	0	0	131	17	210	12	0	0	239	723
5:00 PM	7	3	9	0	0	19	6	264	40	0	0	310	69	6	58	0	0	133	28	238	6	0	0	272	734
5:15 PM	9	4	8	0	0	21	4	343	49	0	0	396	71	8	60	0	0	139	22	240	6	0	0	268	824
Total	33	16	30	0	0	79	24	1188	180	0	0	1392	289	26	248	0	1	563	85	925	31	0	0	1041	3075
Approach %	41.8	20.3	38.0	0.0	-	-	1.7	85.3	12.9	0.0	-	-	51.3	4.6	44.0	0.0	-	-	8.2	88.9	3.0	0.0	-	-	-
Total %	1.1	0.5	1.0	0.0	-	2.6	0.8	38.6	5.9	0.0	-	45.3	9.4	0.8	8.1	0.0	-	18.3	2.8	30.1	1.0	0.0	-	33.9	-
PHF	0.750	0.667	0.750	0.000	-	0.898	0.750	0.866	0.918	0.000	-	0.879	0.881	0.813	0.849	0.000	-	0.880	0.759	0.964	0.646	0.000	-	0.957	0.933
Lights	30	16	30	0	-	76	24	1172	177	0	-	1373	267	26	236	0	-	529	83	902	30	0	-	1015	2993
% Lights	90.9	100.0	100.0	-	-	96.2	100.0	98.7	98.3	-	-	98.6	92.4	100.0	95.2	-	-	94.0	97.6	97.5	96.8	-	-	97.5	97.3
Buses	1	0	0	0	-	1	0	1	0	0	-	1	1	0	1	0	-	2	0	0	1	0	-	1	5
% Buses	3.0	0.0	0.0	-	-	1.3	0.0	0.1	0.0	-	-	0.1	0.3	0.0	0.4	-	-	0.4	0.0	0.0	3.2	-	-	0.1	0.2
Single-Unit Trucks	2	0	0	0	-	2	0	11	2	0	-	13	17	0	9	0	-	26	2	17	0	0	-	19	60
% Single-Unit Trucks	6.1	0.0	0.0	-	-	2.5	0.0	0.9	1.1	-	-	0.9	5.9	0.0	3.6	-	-	4.6	2.4	1.8	0.0	-	-	1.8	2.0
Articulated Trucks	0	0	0	0	-	0	0	4	1	0	-	5	4	0	2	0	-	6	0	5	0	0	-	5	16
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.6	-	-	0.4	1.4	0.0	0.8	-	-	1.1	0.0	0.5	0.0	-	-	0.5	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-

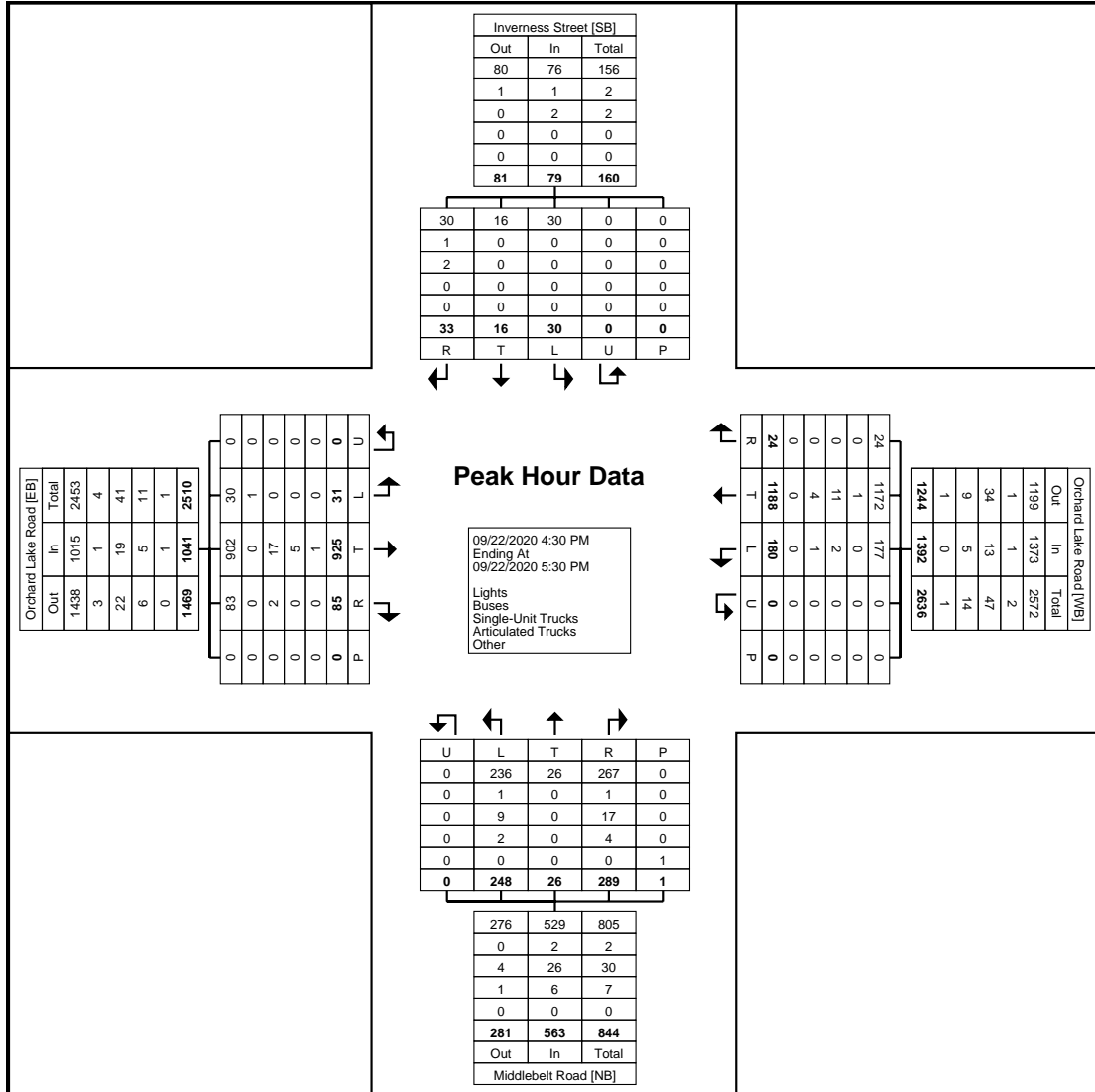


Traffic Data Collection

Traffic Data Collection, LLC
 7504 Sawgrass Drive
 www.tdccounts.com
 Washington, Michigan, United States 48094
 Ph. (586) 786-5407
 Reliable Traffic Data

Project: RCOC Orchard
 Lake Traffic Study
 Corridor: Orchard Lake
 (Commerce – Middlebelt)
 Weather: Pt. Sunny, Dry
 Temp. 70 Degree's
 Video VCU ID#: SCU4G2
 SW

Count Name: TMC_5
 Orchard Lake &
 Middlebelt_9-22-20
 Site Code: TMC_5
 Traffic Data Collection,
 LLC
 Start Date: 09/22/2020
 Page No: 9



Turning Movement Peak Hour Data Plot (4:30 PM)



Traffic Data Collection

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Orchard Lake &
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Site Code: TMC_5
Traffic Data Collection,
LLC
Start Date: 09/22/2020
Page No: 10

TDC Traffic Comments: 6 hour multi-modal intersection study includes video premium vehicle classification turning movement count conducted during typical weekday (Tuesday) from 7:00-9:00 AM morning, 11:00 AM - 1:00 PM mid-day & 4:00-6:00 PM afternoon peak hours, while school was in session during COVID-19.

TMC was performed with Miovision video VCU scout recording cameras for RCOC Orchard Lake Road Traffic Study for OHM Advisor Project Supplement No. 57.

Signalized controlled SCATS intersection, push button ped. signals for north, east & south legs. Video VCU camera was located within SW intersection quadrant. All intersection shared video files have been uploaded to Miovision DataLink cloud platform.

Multi-Modal Classification Summary Details & Percentages: Seven (7) Groupings:

- 1) Lights Includes: FHWA Classes 1-3 (Motorcycles, Pick Up Trucks, Vans, Light Goods Vehicles)***
- 2) Buses Includes: FHWA Class 4 (School Buses & Regional Transportation Metro Buses)***
- 3) Single-Unit Trucks Includes: FHWA Classes 5-7 (2-4 Axle SU Medium Trucks)***
- 4) Articulated Trucks Includes: FHWA Classes 8-12 (Heavy Trucks W/Single & Multi Unit Trailers)***
- 5) Bicycles On Road Includes: All bicycles on the roadway***
- 6) Bicycles On Crosswalk Includes: All bicycles using sidewalk***
- 7) Pedestrians Includes: All pedestrians using crosswalk***