



COLORADO

Department of
Transportation



I-70 Mountain Express Lane (MEXL) 2017 Summer Season Summary (May 29 – Sep 4, 2017)



I-70 Mtn. Express Lanes – Agenda



- ❖ **Overview of 2017 Summer Season Operations**
- ❖ **Findings**
- ❖ **Next Steps**





I-70 Mtn. Express Lanes – Overview



Summer 2017 MEXL Overview

2017 Summer Season – Memorial Day through Labor Day (May 29th through September 4th)

- ❖ 31 days of operation
 - ❖ 31 percent of 100 days allowed in 2017
- ❖ 290 hours of operation
 - ❖ 25 percent of 1,168 hours allowed in 2017
- ❖ Typical opening time
 - ❖ 9 AM
- ❖ Typical closing time
 - ❖ 6 PM Saturday, 7-8 PM Sunday



I-70 Mtn. Express Lanes – Overview



Year to Date Operation Summary

January 1st 2017 through September 4th (New Years through Labor Day)

- ❖ 66 days of operation
 - ❖ 66 percent of 100 days allowed in 2017

- ❖ 613 hours of operation
 - ❖ 52 percent of 1,168 hours allowed in 2017

- ❖ 2017 Calendar Year End Projection
 - ❖ 88 days (88 percent of allowable)
 - ❖ 775 Hours (66 percent of allowable)



Summer Season Volume Summary

❖ Corridor

- ❖ 1.08 million vehicles (31 days – 35,000 vpd)
- ❖ Last year: 1.06 million (29 days – 36,500 vpd)

❖ MEXL

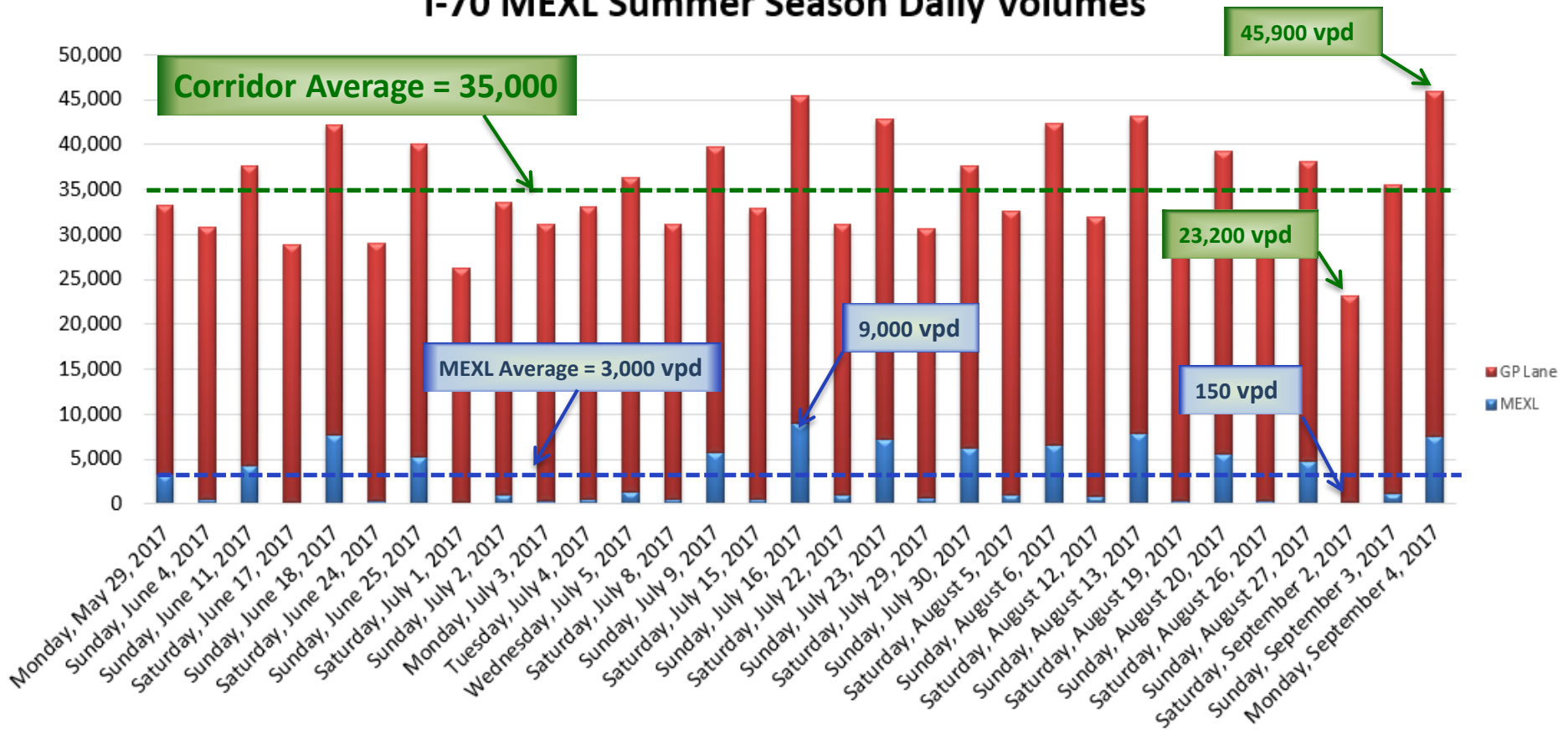
- ❖ 92,700 vehicles (3,000 vpd)
 - ❖ 8.6 percent capture rate
- ❖ Last Year (2016): 82,600 vehicles (2,850 vpd)
 - ❖ 7.8 percent capture rate



I-70 Mtn. Express Lanes – Findings



I-70 MEXL Summer Season Daily Volumes





I-70 Mtn. Express Lanes – Findings



Averages by Day

❖ Saturday

- ❖ 2017: 29,700 vpd on corridor
 - ❖ 550 vpd in MEXL (1.9% capture rate)
- ❖ 2016: 30,300 vpd on corridor
 - ❖ 480 vpd in MEXL (1.6% capture rate)

❖ Sunday

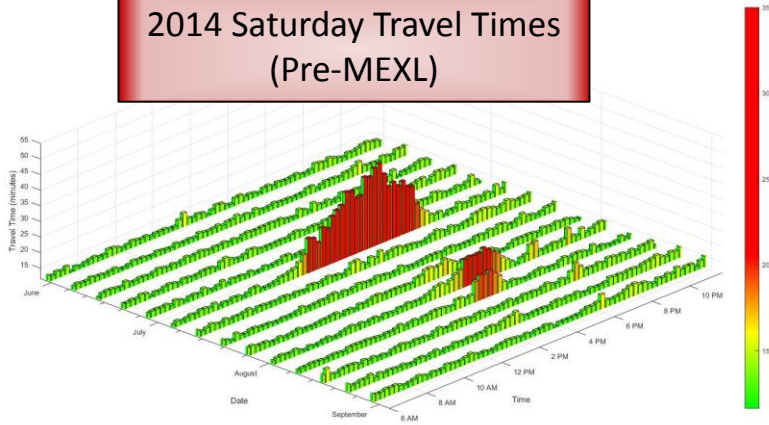
- ❖ 2017: 39,100 vpd on corridor
 - ❖ 5,200 vpd in MEXL (13.3% capture rate)
- ❖ 2016: 41,000 vpd on corridor
 - ❖ 4,700 vpd in MEXL (11.5% capture rate)



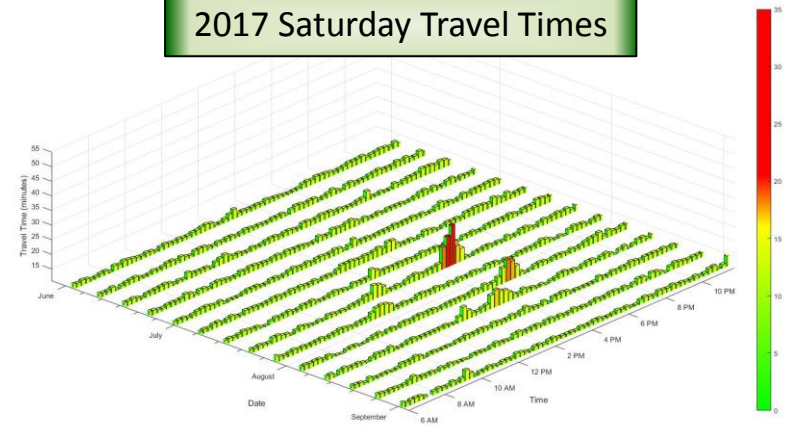
I-70 Mtn. Express Lanes – Findings



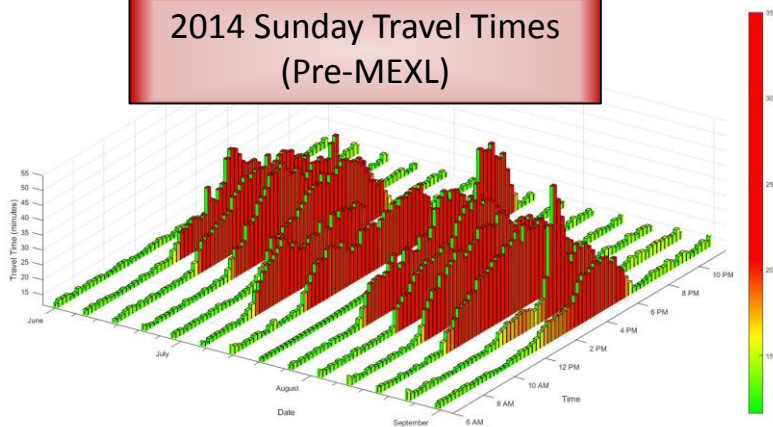
2014 Saturday Travel Times (Pre-MEXL)



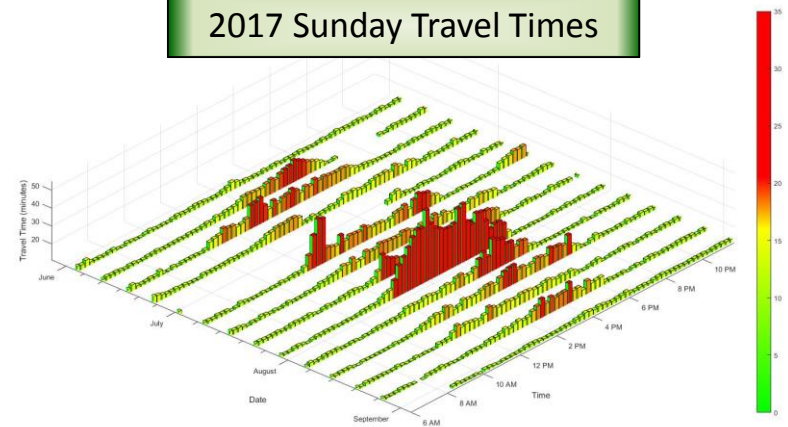
2017 Saturday Travel Times



2014 Sunday Travel Times (Pre-MEXL)



2017 Sunday Travel Times





I-70 Mtn. Express Lanes – Findings



- **Incidents (MEXL Open)**

- ❖ 2017: 16 incidents: 6 stalled vehicles, 10 crashes

- ❖ 10 crashes

- ❖ 0 in MEXL

- ❖ 2 straddled MEXL and GP lanes

- ❖ 8 in GP lanes

- ❖ 2017: 21 incidents: 7 stalled vehicles, 14 crashes

- ❖ Average of 27 minutes between incident reported and incident cleared

- ❖ 2016: 18 minutes



I-70 Mtn. Express Lanes – Findings



I-70 MEXL 2017 Summer Season Crashes by Mile Marker



0 0.5 1 2 3 4 Miles

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



I-70 Mtn. Express Lanes – Findings



Tolling

- ❖ Saturday - \$5 Toll
- ❖ Sunday
- ❖ \$5 Toll through July 2
- ❖ \$6 Toll July 9 through Labor Day



I-70 Mtn. Express Lanes – Findings



Summary

- ❖ Corridor volumes were generally similar to 2016
- ❖ MEXL capture rate increased slightly
- ❖ There were 4 fewer crashes this summer than in 2016
- ❖ Incident response times increased over last summer
- ❖ \$5 tolls on Saturday and \$6 tolls on Sunday provided a good balance between MEXL and GP lane speed differential, MEXL use, and revenue



I-70 Mtn. Express Lanes – Next Steps



Next Steps

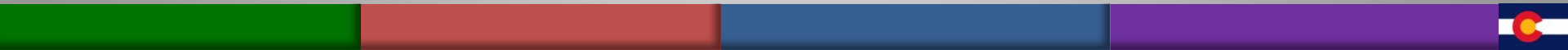
- ❖ Fall Season continues through October
 - ❖ MEXL generally only open on Sundays
- ❖ Winter Season begins Thanksgiving Weekend
- ❖ Amended MOU is executed and distributed
- ❖ Change annual reporting cycle
 - ❖ Current: January 1st through December 31st
 - ❖ New: November 1st through October 31st



I-70 Mtn. Express Lanes



Thank You
Any Questions??





I-70 Mtn. Express Lanes – Summary



Date	Express Lane Volume	General Purpose Lanes Volume	Total Corridor Volume	Peak Hour	Peak Hour Volume	MEXL Peak Hour Speed	GP Lanes Peak Hour Speed	Time Opened	Time Closed	Notes
Summer Season 2017										
Monday, May 29, 2017	3,333	29,952	33,285	1:00 PM	3,877	42 MPH	36 MPH	9:00 AM	6:00 PM	Two incidents
Sunday, June 4, 2017	470	30,330	30,800	2:00 PM	2,863	58 MPH	56 MPH	2:45 PM	5:00 PM	No Incidents
Sunday, June 11, 2017	4,252	33,409	37,661	2:00 PM	3,475	59 MPH	41 MPH	9:00 AM	6:30 PM	No Incidents
Saturday, June 17, 2017	285	28,564	28,849	4:00 PM	2,559	52 MPH	63 MPH	9:00 AM	6:00 PM	One Incident
Sunday, June 18, 2017	7,633	34,551	42,184	11:00 AM	3,514	54 MPH	30 MPH	9:00 AM	7:30 PM	One Incident
Saturday, June 24, 2017	357	28,639	28,996	4:00 PM	2,698	60 MPH	59 MPH	9:00 AM	6:00 PM	No Incidents
Sunday, June 25, 2017	5,187	34,890	40,077	1:00 PM	3,385	54 MPH	38 MPH	9:00 AM	8:35 PM	One Incident
Saturday, July 1, 2017	203	25,952	26,155	2:00 PM	2,067	50 MPH	66 MPH	9:00 AM	7:00 PM	No Incidents
Sunday, July 2, 2017	1,060	32,423	33,483	2:00 PM	2,974	61 MPH	56 MPH	9:00 AM	7:00 PM	No Incidents
Monday, July 3, 2017	367	30,789	31,156	2:00 PM	2,731	61 MPH	65 MPH	9:00 AM	5:00 PM	No Incidents
Tuesday, July 4, 2017	621	32,383	33,004	1:00 PM	2,867	56 MPH	63 MPH	9:00 AM	5:00 PM	No Incidents
Wednesday, July 5, 2017	1,431	34,918	36,349	12:00 PM	3,317	58 MPH	42 MPH	11:30 AM	5:00 PM	No Incidents
Saturday, July 8, 2017	578	30,486	31,064	2:00 PM	2,655	64 MPH	62 MPH	9:00 AM	6:00 PM	No Incidents
Sunday, July 9, 2017	5,721	34,014	39,735	1:00 PM	3,743	52 MPH	38 MPH	9:00 AM	7:15 PM	One Incident
Saturday, July 15, 2017	555	32,255	32,810	4:00 PM	2,895	59 MPH	60 MPH	9:00 AM	7:00 PM	One Incident
Sunday, July 16, 2017	8,964	36,407	45,371	1:00 PM	3,624	54 MPH	39 MPH	9:00 AM	9:00 PM	No Incidents
Saturday, July 22, 2017	1,060	29,997	31,057	3:00 PM	2,787	61 MPH	32 MPH	9:00 AM	6:30 PM	Two incidents
Sunday, July 23, 2017	7,191	35,550	42,741	4:00 PM	3,715	52 MPH	37 MPH	9:00 AM	8:00 PM	One incident
Saturday, July 29, 2017	651	30,011	30,662	11:00 AM	2,650	52 MPH	39 MPH	9:00 AM	6:00 PM	No Incidents
Sunday, July 30, 2017	6,267	31,330	37,597	12:00 PM	3,272	50 MPH	28 MPH	9:00 AM	7:40 PM	Three incidents
Saturday, August 5, 2017	1,079	31,562	32,641	5:00 PM	2,983	60 MPH	41 MPH	9:00 AM	6:30 PM	No Incidents
Sunday, August 6, 2017	6,628	35,705	42,333	12:00 PM	3,614	59 MPH	47 MPH	9:00 AM	7:30 PM	One incident
Saturday, August 12, 2017	899	31,028	31,927	3:00 PM	2,954	60 MPH	37 MPH	9:00 AM	6:00 PM	No Incidents
Sunday, August 13, 2017	7,822	35,310	43,132	3:00 PM	3,557	55 MPH	37 MPH	9:00 AM	8:00 PM	No Incidents
Saturday, August 19, 2017	434	29,869	30,303	4:00 PM	2,850	69 MPH	66 MPH	9:00 AM	6:00 PM	No Incidents
Sunday, August 20, 2017	5,503	33,758	39,261	1:00 PM	3,593	53 MPH	35 MPH	9:00 AM	7:00 PM	One incident
Saturday, August 26, 2017	460	28,631	29,091	4:00 PM	2,847	63 MPH	64 MPH	9:00 AM	6:00 PM	No Incidents
Sunday, August 27, 2017	4,831	33,247	38,078	12:00 PM	3,647	61 MPH	44 MPH	9:00 AM	7:00 PM	One incident
Saturday, September 2, 2017	152	23,027	23,179	4:00 PM	1,993	49 MPH	68 MPH	9:00 AM	5:30 PM	No Incidents
Sunday, September 3, 2017	1,152	34,372	35,524	4:00 PM	3,163	61 MPH	47 MPH	9:00 AM	7:00 PM	No Incidents
Monday, September 4, 2017	7,596	38,300	45,896	10:00 AM	3,965	62 MPH	50 MPH	9:00 AM	7:00 PM	Two incidents