Eastern Sierra Corridor Freight Study



Mono County Local Transportation Commission



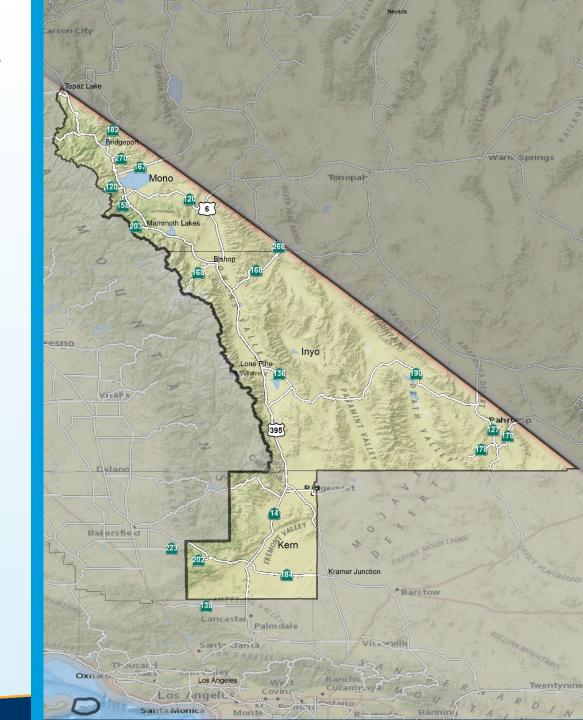
Think >> Forward



Eastern Sierra Corridor

- Mono County
- Inyo County
- Eastern Kern County
- Highways
 - US 395
 - US 6
 - SR 14
 - SR 58





Study Purpose

- Document existing and future freight conditions
 - Importance of the Eastern Sierra Region in freight movement
 - Freight impacts from outside the Corridor
 - Freight impacts on highways which also serve as Main Street
- Identify short and long-term cost effective strategies to:
 - Improve goods movement, safety, and congestion
 - Mitigate freight impacts on local communities and transportation infrastructure
- Identify potential funding opportunities







Existing and Future Freight Conditions



Freight impacts from outside the Corridor: Actual







Estimated Future Truck Volumes

	2015 AADTT		2040 Low		2040 High	
Highway Segment	All Trucks	5+ Axles	All Trucks	5+ Axles	All Trucks	5+ Axles
US-395 North Segment (Bridgeport)	824	294	1,133	404	1,305	466
US-395 Middle Segment (Big Pine)	1,468	684	2,023	943	2,340	1,090
US-395 South Segment (Inyokern)	622	357	864	496	873	501
SR-14 North Segment (Indian Wells)	968	775	1,316	1,054	1,326	1,062
SR-14 South Segment (Mojave)	1,826	954	2,452	1,281	2,460	1,285
SR-58 (Tehachapi)	6,434	3,906	9,966	6,050	*10,192	6,187
US-6 (Benton)	693	369	953	507	1,098	584

^{*}The Caltrans Statewide Travel Demand Model forecasts 12,395

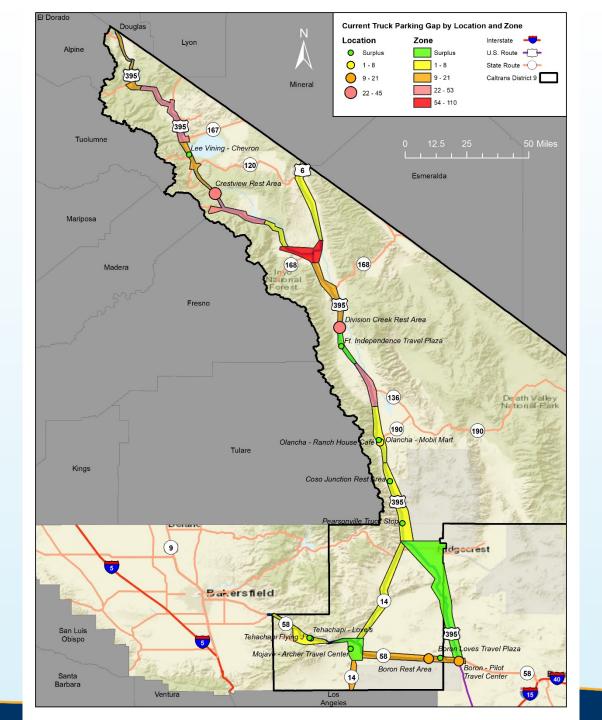






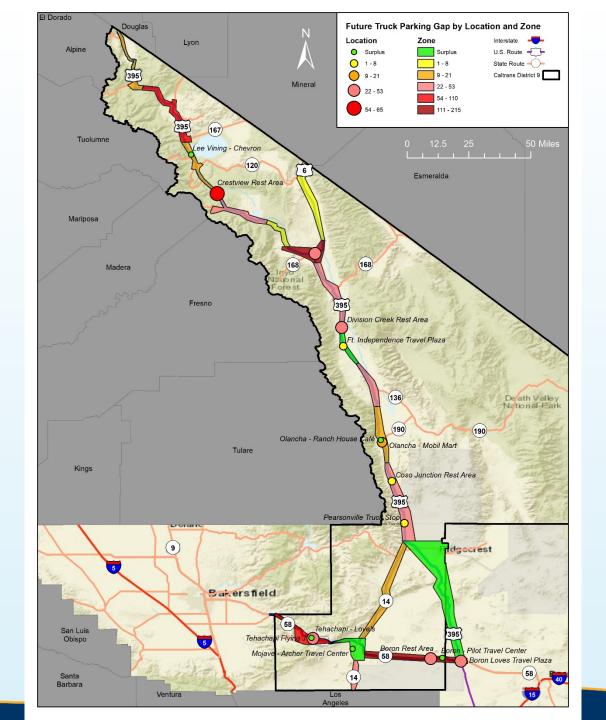
Freight Impacts: Undesignated Truck Parking















Recommendations: Increase Truck Parking Spaces (Current – Future)

Encourage Private Investment

- Bishop: 110 150
- Bridgeport: 55 75
- Lone Pine: 35 50
- Boron/Kramer Junction: 10 115
- Tehachapi: 0 100
 - Observations indicate a current gap of 15-25 in Tehachapi

Consider Public Investment

- Crestview Rest Area: 45 65
- Division Creek Rest Area: 35 50
- Boron Rest Area: 15 40
- Areas where private investment is not forthcoming

Minimum public lot design considerations

- Graded, gravel lot, approximately 20 spaces/acres
- Lighting, vault toilets & trash receptacles
- Near other services







Freight Impacts on Highways which also Serve as Main Street



Economic Benefits of Truck Parking

Economic Impact Measure	Truck Stop with Truck Repair	Truck Stop without Truck Repair	Truck Fuel Stop
Total Annual Sales (a)	\$45,863,888	\$43,615,658	\$17,420,971
Full Time Employment (FTE)	71	60	15
Annual Local Tax Revenue (a)	\$72,955	\$72,955	\$22,257
Employee Compensation per FTE Employee (b)	\$23,726	\$23,723	\$25,311

Note: All amounts are in 2017 dollars for marked items as follows: (a) converted from 2010 dollars, and (b) converted from 2003 dollars. The estimates are national averages. Actual tax revenue and employee compensation would depend on local conditions.

Source: Virginia Tech, Impact of Commercial Rest Areas on Business Activity at Interstate Highway Interchanges, Performed for NATSO, 2011; NATSO, Fueling American Prosperity, 2003; Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average.





Short- and Long-term Strategies

Short-term

- Pilot test restricting trucks to left lane through one town for 1-2 month period
- Continue Complete Street studies and implementation in communities along US 395
- As part of Bishop Airport expansion studies, consider:
 - Alternate Truck Route
 - Truck parking facility at Industrial Park

> Long-term

- Passing/climbing lanes on SR 58 over Tehachapi Pass, both directions
- Passing/climbing lane on US 395 southbound, north of Conway Summit







Questions?



Back-up Truck Parking Data

		ATRI Raw		Caltrans				Gap	Growth Factor	Future_Gap
		Counts	ATRI Expanded	2018 AADTT	% 2+ Hour	MaxLongP	AuthPark	(Demand -	(Low Growth	[Demand*(1+Growth
Name	ZorP	(Range)	Counts (Range)	(5+ axle)	Parking	(Demand)	(Supply)	Supply)	Scenario)	Factor)-Supply]
Lee Vining - Chevron	Location	0-1	0-5	321*	0.00%	0	10	-10	37%	-10
Crestview Rest Area	Location	0-23	0-146	370*	36.46%	53	8	45	37%	<i>65</i>
Division Creek Rest Area	Location	14-50	41-148	687	29.13%	43	10	33	38%	49
Ft. Independence Travel Plaza	Location	9-44	26-133	687	30.21%	40	50	-10	38%	5
Olancha - Ranch House Café	Location	0-1	0-3	687	0.00%	0	10	-10	38%	-10
Olancha - Mobil Mart	Location	2-20	5-60	687	18.15%	11	5	6	38%	10
Coso Junction Rest Area	Location	2-15	4-34	461	35.54%	12	12	0	38%	5
Pearsonville Truck Stop	Location	4-22	9-50	461	40.90%	21	25	-4	38%	4
Tehachapi - Love's	Location	106-213	169-337	1,418	25.67%	87	90	-3	55%	45
Mojave - Archer Travel Center	Location	5-40	7-64	1,418	46.23%	30	85	-55	55%	-39
Boron Rest Area (EB & WB)	Location	53-117	84-117	1,418	24.00%	45	30	15	55%	40
Boron - Pilot Travel Center	Location	57-122	91-194	1,418	33.25%	65	50	15	55%	51
US 6 Shoulder, Bishop	Location	9-34	23-64	402	38.27%	25	0	25	37%	34
Tehachapi Flying J	Location	0	0	0	0	0	99	-99	55%	-99
Boron Loves Travel Plaza	Location	0	0	0	0	0	99	-99	55%	-99
Walker	Zone	2-17	8-68	307*	16.81%	11	0	11	37%	15
Bridgeport	Zone	4-34	24-139	236*	29.85%	53	0	53	37%	73
Lee Vining	Zone	1-23	5-136	332*	16.33%	22	10	12	37%	20
Mammoth	Zone	3-41	22-280	424*	15.71%	44	8	36	37%	52
Mam-Bish	Zone	1-15	3-46	333	19.63%	9	8	1	37%	4
Bishop	Zone	33-131	102-407	836	26.98%	110	0	110	38%	152
Benton	Zone	1-10	2-20	402	22.55%	5	0	5	38%	7
Big Pine	Zone	4-27	16-104	936	23.24%	24	3	21	38%	30
Independence	Zone	18-67	57-217	687	18.82%	41	60	-19	38%	-3
Lone Pine	Zone	10-61	29-194	687	18.52%	36	0	36	38%	50
Olancha	Zone	6-30	19-91	687	19.60%	18	15	3	38%	10
Coso Junction	Zone	20-67	41-141	461	28.56%	43	37	6	38%	22
Ridgecrest	Zone	20-140	57-378	524*	26.20%	99	200	-101	39%	-62
SR 14 North	Zone	1-18	4-85	321	9.62%	8	0	8	36%	11
Tehachapi	Zone	184-487	292-774	1,418	24.64%	191	189	2	55%	107
Mohave	Zone	28-128	44-202	1,418	30.35%	61	110	-49	55%	-15
Rosamond	Zone	4-44	12-141	1,021*	12.39%	18	0	18	34%	24
Boron	Zone	154-511	249-808	1,418	23.46%	190	179	11	55%	116
* 2016 Caltrans Average used instead of detailed monthly counts from 2018, May Long P. (Demand) used maximum value from ATD Expanded Count										

* 2016 Caltrans Average used instead of detailed monthly counts from 2018. MaxLongP (Demand) used maximum value from ATRI Expanded Count





