

City of Laguna Beach

Cost/Benefit Analysis and Feasibility Study for the Acquisition of SR-133 from Coast Highway to El Toro Road

TASK 1: COST ANALYSIS

The purpose of this task is to perform a cost analysis to get an understanding of the costs associated with ownership of SR-133 (Laguna Canyon Road) from Coast Highway to El Toro Road.

This cost analysis identifies an estimated cost associated with the following elements:

- Capital improvement projects planned along SR-133 for the next 10 years
- Contaminant remediation costs prior to or during project construction
- Road closures (e.g., traffic hazards, brushfires)
- Roadway operations and maintenance
- Roadway accidents (fatal, injury, and property damage only)
- Claims/settlements
- Legal expenses

The [SUMMARY](#) tab of this workbook presents an overview table of the costs associated with roadway ownership. The costs relating specifically to capital projects along the roadway have been kept separate from the recurring costs that are directly related to the acquisition of the roadway.

As shown in the cost matrix, the various cost elements associated with roadway acquisition have been grouped into cost categories (e.g., operations and maintenance) and are differentiated based on whether they are infrequent / non-recurring costs or annually recurring costs.

The remaining tabs in this workbook contain the sources, assumptions, and detailed calculations for how the cost (or cost range) of each individual element was determined.

The source documents referenced within each individual tab can be found in the project folder.

Cost Matrix

	CAPITAL PROJECT-RELATED COSTS
Items	Capital Improvement Projects
Capital improvement projects planned along SR-133 for next 10 years	\$110,144,000
Contaminant remediation costs prior to or during project construction*	
Hazardous materials soil removal/disposal	\$350 - \$400 per cubic yard
Contaminated materials soil removal/disposal	\$350 to \$300 per cubic yard
Removal/disposal of yellow-painted stripe	\$5 to \$6 per linear foot

*The cost ranges presented here represent costs used for the removal/disposal of hazardous materials on recent Southern California-based projects. The first two do not include the actual soil excavation, which could range from \$75-\$150 per cubic yard. The cost of contaminant remediation along the roadway is dependent on the identification/clear definition of the future project that would require remediation. In other words, the cost of contaminant remediation is a project-related cost, not a relinquishment-related cost. The specific costs to the City for remediation of these standard issues can be determined after a project along the roadway has been identified.

	COSTS OF ACQUISITION				
Items	Maintenance & Operations	Special Programs	Claims		Accidents
Infrequent / Non-Recurring Costs					
Annual average road closures/emergency roadwork costs	-	\$193,000	-	-	-
Annual average settlement costs	-	-	\$10,000	\$10,000	-
Annual average legal expenses	-	-	\$58,000	\$1,500,000	-
Total	\$0	\$193,000	low-end estimate \$68,000	high-end estimate \$1,510,000	\$0

Annually Recurring Costs				
Annual average operating and maintenance costs (including, but not limited to, pavement, lighting, signals, landscape, and road patrol)	\$193,000	-	-	-
Annual average accident costs (including injury crashes, fatal crashes, and property damage only crashes)	-	-	-	\$11,002,000
Total	\$193,000	\$0	\$0	\$11,002,000

Cost of Capital Improvement Projects

Source: [1_D12 Route 133 Approved Project List Color Coded.xlsx](#)

Assumptions

This cost element considers the cost of all capital improvement projects planned along SR-133 in the next 10 years.

Although capital improvement projects north of the study area were also provided by Caltrans and are identified in the table below, the cost analysis only considers the costs for capital improvement projects within the study area (SR-133 from Coast Highway to El Toro Road).

Cost Calculation

Project Nickname	Project Description - Long	Work Description - Long	Program Year	Structures Cap Cost	Roadway Cap Cost	ROW Cap Cost	Sup/Cap Ratio %
CA-133 Multi Asset Project	In Orange County In Laguna Beach From Pacific Coast Highway (CA-1) To SR-73	AC Pavement & drainage systems	2026	\$0	\$12,048,000	\$0	
12-0N870 Extend NB merge lane at Canyon Acres.	In Orange County In Laguna Beach From Canyon Acres Drive To 0.4 Mile North of Canyon Acres Drive	Refresh Striping	2018	\$0	\$182,000	\$0	1015.91
12-0Q670 SR133 Pedestrian & bicycle circulation, transit, utilities	In Orange County In Laguna Beach From Canyon Acres Drive To El Toro Road - Unfunded project by others.	Enhance pedestrian and bicycle circulation, transit access, and roadway safety by under grounding the existing overhead utilities.		\$0	\$90,000,000	\$0	
12-0N060 Rte133-Widening	In Orange County In Laguna Beach From Philips Street To El Toro Road	Re-striping Roadway To Improve Channelization. To be implemented with SR-73 to El Toro Project	2018	\$0	\$6,032,000	\$2,064,000	63.44
12-0Q360 Drainage System Restoration	In Orange County In Laguna Beach From El Toro Road To Route 73	Establish a detention basin, construct trapezoidal concrete channel along the southbound, and regrade the flow path to prevent flooding.	2020	\$0	\$2,095,000	\$435,000	208.56
12-0P94U SR-133 Widening and Drainage Improvement	In Orange County, in the City of Laguna Beach, from 0.2 mile south of El Toro Road to Route 73/133 Separation	SR-133 Widening and Drainage Improvement.	2026	\$0	\$13,249,000	\$6,165,000	20.53
12-0P940 Shoulder Widening for Class II Bike Lanes	In Orange County In Laguna Beach From El Toro Road To State Route 73	Widening shoulders for Bikeway Class III, SCE utilities relocation, drainage improvements, and additional lane at El Toro / SR 133 intersection.		\$0	\$8,915,000	\$3,666,000	48.40
12-0N660 Rte 133 Replace Damaged and Outdated MBGR	In Orange County in Laguna Beach and Irvine From 0.1 mi south of Rte 73/133 IC to Rte 133/241 IC.	Replace damaged and outdated MBGR, non-standard AC dikes. Install permanent crash cushions. electroliers, fill/regrade slopes, relocate controller cabinets, headwalls and replace temp railing.	2019	\$0	\$9,500,000	\$17,000	49.36
HM3 Bridge Rehab	In Orange County in various cities	Replace joints, patch spalls, methacrylate deck & replace polyester concrete	2021	\$1,295,000	\$576,000	\$0	44.43
HM3 Bridge Rehab	In Orange County in various cities on Northbound Toll Road Route 73	Replace failed bearings, patch concrete, methacrylate deck & replace polyester concrete	2021	\$2,699,000	\$687,000	\$0	24.55
Rte 133, Multi Asset Project	In Orange County In Irvine From Lake Forest Dr To CA 241-WB 133 Tunnel	Methacrylate to seal cracks on deck (bridge health), change out tunnel HPS & fluorescent lighting to LED, construct treatment system for highway run-off.	2027	\$0	\$46,881,000	\$0	
12-0N100 Rt 133 Roadside Worker Safety	IN ORANGE COUNTY IN IRVINE 133 FROM RTE 405 TO RTE 241.	Relocate facilities, construct roadside paving, access roads and improve worker safety		\$0	\$1,900,000	\$0	49.14
Resurface mainline and shoulder with RHMA	In Orange County in Irvine From 405 to 5 NB/SB Baranca off-on ramps. SB 5/SB 133; SB133/NB 405 connectors	Remove and replace RHMA on ramps & connectors		\$0	\$810,000	\$0	47.02
12-0Q520 133/405 Min B safety lighting & optical speed bar 12A1741	In Orange County in the City of Irvine on SB Route 133 connector to SB Route 405.	Remove and replace 7 electroliers, install 650 If Optical Speed bars, replace controller cabinet and AC dike	2018	\$0	\$292,000	\$0	138.14
In Orange County	In Orange County in Irvine Route 133/405 Sep to Marine Way UC	Resurface mainline / connectors with RHMA	2020	\$0	\$2,000,000	\$0	30.16
12-0N890 Add 2nd lane to SB 133 SB 5 connector	In Orange County In Irvine From I-405 To I-5	Extend the No. 4 lane on SBSR-133 from SB I-5 Connector & add a second lane to NB 405 Connector.	2018	\$0	\$14,926,000	\$1,045,000	60.35
12-0G009 Non-SHOPP SR 133/Great Park Bl. Construct Interchange	In Orange County In Irvine From South of Marine Way To North of Great Park Blvd	Trabuco Road Interchange Add new IC On Eastern Trans. Coord East Leg		\$14,000,000	\$56,000,000	\$0	10.45
12-0R700 TMC Min B DO Repair Water Damage	In Orange County in Irvine at District 12 Transportation Management Center Facility	Repair damage facility due to water line break (walls, ceiling, carpet & plumbing repairs)	2019	\$0	\$100,000	\$0	11.92
12-0R060 Non-SHOPP PEER SR 133 Venta Spur Overcrossing Project	In Orange County in Irvine 0.5 mi south of Irvine Blvd.	Construct a new Class 1 two way off-street bikeway and pedestrian bridge that will span over the State Route 133.	2021	\$1,554,000	\$220,000	\$0	34.47

North of Study Area

TOTAL COST (only projects within study area)

\$0 \$108,080,000 \$2,064,000

Cost of Soil/Groundwater Contaminant Remediation

Source: SR-133 Laguna Canyon Road PSR/PDS Initial Site Assessment Checklist and Memorandum (HDR 2018)

Assumptions

This cost element considers the cost associated with remediation of soil/groundwater contamination along the roadway.
It does not appear that there are contaminant soil/groundwater from hazardous waste releases. However, there are standard issues related to the roadway that need to be remediated either in the PA/ED phase, PS&E phase, or prior to construction:
Aerially-Deposited Lead (ADL) - Previously undisturbed soil areas and any unpaved areas within Caltrans ROW along the shoulders of SR-133 have the potential to contain ADL soils.
Paint and Thermoplastic Striping - Yellow paint used for lane striping and pavement marking along SR-133 may contain lead chromate.
Polychlorinated Biphenyls (PCBs) - Utility pole and pad-mounted electrical transformers within the project limits may contain PCBs.
Creosote and Pentachlorophenol - Wooden utility within the project limits may contain creosote and pentachlorophenol.

The detailed costs to the City for remediation of these standard issues can be determined after a specific project along the roadway has been identified.

Cost Calculation

These cost ranges were used recently on some Southern California-based projects for removal/disposal of hazardous materials. The first two do not include the actual soil excavation, which could range from \$75 to \$150/CY.

	Cost Range	Unit
Hazardous Materials Soil Removal/Disposal	\$350 - \$400	CY
Contaminated Materials Soil Removal/Disposal	\$250 - \$300	CY
Removal/disposal of yellow painted traffic stripe (hazardous waste)	\$5 - \$6	LF

Cost of Road Closures/Emergency Roadwork

Sources: [8a. List of road closures per year due to rain or natural events.pdf](#)

[9. 133 Emergency DO.xlsx](#)

[December 2019 Landslide Rte 133 slide v3.pdf](#)

Assumptions

This cost element considers the costs associated with unexpected road closures and emergency director's orders projects (emergency roadwork) caused by rain/flooding, brush fires, traffic hazards, etc. A list of road closures and emergency roadwork assignments along SR-133 from 2005/2006, 2010/2011, and 2017-2019 was provided by Caltrans. This list does not include all road closures within the study area - it only includes the road closures that were created by Caltrans (i.e., road closures implemented by the City are not tracked). Costs associated with the emergency roadwork were provided by Caltrans. Costs associated with their road closures were not provided.

In total, there were 7 road closures/emergency roadwork assignments in 2005/2006, 2010/2011, and 2017-2019.

An annual average cost associated with road closures/emergency roadwork was calculated based on available information.

Cost Calculation

Date	Description		Cost
2005/2006	emergency roadwork	Traffic signal post which resulted from a vehicle hit	\$22,863
2010/2011	emergency roadwork	Remove debris and repair rock drapery which resulted from a 2011 winter rainstorm event	\$150,000
	emergency roadwork	Repair stormwater basin which resulted from a 2011 winter rainstorm event	\$295,420
May 13, 2018	road closure	Closure due to brush fire	n/a
November 29, 2018	road closure	Traffic hazard due to foam coming from gutter out onto the roadway	n/a
June 6, 2018	road closure	Closure due to brush fire	n/a
December 26, 2019	emergency roadwork	Landslide on SR-133 near Canyon Acres Drive	\$300,000

Annual average road closures/emergency roadwork costs \$192,070.82

Cost of Maintenance and Operations

Sources: [2a. 12ORA133 PM 0.0 to 4.17 07012010 to 01142014 LEMO Expenditure Report.xlsx](#)
[2b. 12ORA133 A PM 0.0 to 4.17 01102014 to 12172019 LEMO Expenditure Report.xlsx](#)
[2c. 2019 1217 12ORA133 Assets.xlsx](#)
[2d. 2019 1220 Prorate ORA133.xlsx](#)

*Note: Data from 2a and 2b are accounted for in the 2d spreadsheet

Assumptions

This cost element considers the costs associated with regular maintenance and operations of the roadway (e.g., repair/replace lighting and signals, landscaping, sidewalk cleaning).

The prorated maintenance costs for 2011-2019 were provided by Caltrans. The total annual average cost was assumed as the annual maintenance and operations cost for this cost analysis.

Cost Calculation

The data shown below can be found in the "Report" tab of the 2d spreadsheet:

Prorated Maintenance Costs for 12-ORA-133 PM 0.0 to RPM 4.17											
Activity	Activity Description	Fiscal Year									Annual Average Cost
		2011	2012	2013	2014	2015	2016	2017	2018	2019	
A10001	INSPECTION A FAMILY	\$ 74.22	\$ 1,766.01	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 204.47
A10002	COMPLAINT INVESTIG. A FAMILY	\$ 127.91	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14.21
A10030	PATCH POT HOLES FLEX LANE	\$ 3,612.04	\$ 1,646.68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 584.30
A10060	OVERLAY/LEVELING FLEX LANE	\$ 230.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25.66
A10110	CRACK SEAL FLEX PAVEMENT	\$ -	\$ -	\$ -	\$ -	\$ 21,735.37	\$ -	\$ -	\$ -	\$ -	\$ 2,415.04
A11020	CRACK SEAL FLEX RAMP	\$ -	\$ 1,533.87	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170.43
A11030	PATCH POT HOLES FLEX RAMP	\$ -	\$ 756.39	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 84.04
A20010	OVERLAY/LEVELING FLEX PAVEMENT	\$ -	\$ -	\$ -	\$ 8,562.26	\$ 4,650.94	\$ -	\$ -	\$ 3,542.18	\$ -	\$ 1,861.71
A30010	DIG OUT FLEX PAVEMENT	\$ -	\$ -	\$ -	\$ -	\$ 3,552.94	\$ -	\$ 3,656.15	\$ -	\$ -	\$ 801.01
A40010	PATCH POT HOLES FLEX PAVEMENT	\$ -	\$ -	\$ 4,615.39	\$ 1,739.35	\$ 932.86	\$ 413.90	\$ -	\$ -	\$ 2,300.57	\$ 1,111.34
A50010	SEAL (ALL OTHER) FLEX PAVEMENT	\$ -	\$ -	\$ -	\$ 1,025.69	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 113.97
C10010	LATERAL SUPPORT - NATIVE MATL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 666.98	\$ -	\$ -	\$ 74.11
C11010	LATERAL SUPPORT - IMPORT MATL	\$ -	\$ -	\$ 2,174.95	\$ 5,432.98	\$ 5,754.90	\$ -	\$ -	\$ 1,152.95	\$ 8,238.47	\$ 2,528.25
C12010	LATERAL SUPPORT - IMPORT MATL	\$ -	\$ 6,528.25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 725.36
C20001	INSPECTION C FAMILY	\$ 45.34	\$ 191.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26.37
C20002	COMPLAINT INVESTIG. C FAMILY	\$ 198.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22.04
C20010	MECHANICAL CONTROL	\$ 21,662.04	\$ 720.89	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,486.99
C20012	CHEMICAL CONTROL ROADSIDE	\$ 3,809.97	\$ 4,495.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 922.82
C20014	MANUAL CONTROL ROADSIDE	\$ 32,950.71	\$ 15,415.38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,374.01
C20040	MECHANICAL CONTROL ROADSIDE	\$ -	\$ -	\$ 14,669.98	\$ 18,898.67	\$ 19,803.62	\$ 2,045.07	\$ 1,503.82	\$ 1,777.41	\$ 5,086.18	\$ 7,087.19
C21040	CHEMICAL CONTROL ROADSIDE	\$ -	\$ -	\$ 2,277.82	\$ 1,107.67	\$ 1,952.56	\$ 3,328.43	\$ 1,151.87	\$ 6,207.91	\$ -	\$ 1,780.70
C22040	MANUAL CONTROL ROADSIDE	\$ -	\$ -	\$ 8,056.55	\$ 14,020.28	\$ 34,249.37	\$ 70,357.31	\$ 21,811.47	\$ 10,732.26	\$ 28,289.09	\$ 20,835.15
C30001	TREE INSPECTION ROADSIDE	\$ 1,307.66	\$ 255.67	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 173.70
C30010	BRUSH CONTROL ROADSIDE	\$ 330.99	\$ 1,323.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 183.89
C30020	TREE INSPECTION	\$ -	\$ -	\$ 596.08	\$ 760.54	\$ 604.52	\$ 506.35	\$ 213.67	\$ 380.99	\$ 1,862.99	\$ 547.24
C30040	TREE TRIMMING	\$ -	\$ -	\$ -	\$ 2,062.75	\$ 1,389.68	\$ 3,807.86	\$ 3,875.65	\$ -	\$ 25,687.61	\$ 4,091.51
C32040	BRUSH CONTROL	\$ -	\$ -	\$ 1,285.56	\$ 477.51	\$ -	\$ 5,470.07	\$ -	\$ 106.62	\$ 6,123.47	\$ 1,495.91
C40010	REPAIR/REPLACE FENCE	\$ -	\$ -	\$ -	\$ 3,026.81	\$ 1,873.18	\$ 1,600.28	\$ 51.45	\$ 4,015.39	\$ 587.88	\$ 1,239.44
C50050	CLEAN DITCH/CHANNEL	\$ 2,822.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 313.63
C50150	CLEAN DITCH/CHANNEL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,295.36	\$ -	\$ -	\$ -	\$ 2,921.71
C51010	REPAIR/REPLACE CURB/DIKE	\$ -	\$ 1,066.48	\$ -	\$ -	\$ -	\$ 1,201.15	\$ -	\$ -	\$ -	\$ 251.96
C60010	REPAIR/REPLACE DRAINAGE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 264.08	\$ -	\$ -	\$ 29.34

Prorated Maintenance Costs for 12-ORA-133 PM 0.0 to RPM 4.17											
Activity	Activity Description	Fiscal Year									Annual Average Cost
		2011	2012	2013	2014	2015	2016	2017	2018	2019	
C60050	CLEAN DRAINAGE	\$ -	\$ -	\$ -	\$ -	\$ 919.75	\$ -	\$ -	\$ -	\$ -	\$ 102.19
C64050	CLEAN INLET	\$ 379.19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42.13
C91050	CLEAN BIKE PATH	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 617.14	\$ -	\$ -	\$ -	\$ 68.57
C92010	REPAIR/REPLACE SIDEWALK	\$ -	\$ 344.63	\$ -	\$ 157.84	\$ 1,651.24	\$ 2,437.95	\$ 1,629.90	\$ -	\$ -	\$ 691.28
C92050	CLEAN SIDEWALK	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 257.25	\$ -	\$ 123.09	\$ 42.26
D10050	DEBRIS/CARCASS PICK-UP	\$ -	\$ -	\$ 1,825.31	\$ 10,804.67	\$ 2,281.40	\$ 2,882.38	\$ -	\$ -	\$ -	\$ 1,977.08
D20000	ROAD PATROL/PICKUP	\$ 2,473.12	\$ 532.74	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 333.99
D20001	AREA INSPECTION ROADWAY	\$ 68.01	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7.56
D20020	SUPERVISOR AREA INSPECTION	\$ -	\$ -	\$ -	\$ 376.31	\$ 1,449.09	\$ 54.52	\$ 7,700.53	\$ 1,919.70	\$ 7,573.20	\$ 2,119.26
D30050	SWEEP HWY/SHOULDER	\$ -	\$ -	\$ -	\$ 2,012.37	\$ 7,277.30	\$ 6,374.69	\$ 78,316.24	\$ 6,149.05	\$ 10,458.26	\$ 12,287.55
D40050	LITTER CONTROL	\$ -	\$ -	\$ 4,951.39	\$ 1,867.33	\$ 2,146.26	\$ 3,759.54	\$ 8,552.22	\$ 3,534.21	\$ 5,613.80	\$ 3,380.53
D40150	ROAD PATROL / DEBRIS PICKUP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,231.76	\$ 2,655.80	\$ 2,923.98	\$ 1,534.62
D50000	SPILLS RWY,LANE,SHLDR & APPURT	\$ 228.45	\$ 1,398.12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 180.73
D60050	GRAFFITI REMOVAL ALL ASSETS	\$ -	\$ -	\$ 535.15	\$ 2,253.24	\$ 1,230.42	\$ 368.65	\$ -	\$ 1,526.39	\$ 1,060.70	\$ 774.95
D90000	ILLEGAL SIGN REMOVAL	\$ 417.85	\$ 1,047.09	\$ -	\$ -	\$ 104.02	\$ -	\$ 702.12	\$ 600.04	\$ -	\$ 319.01
E10010	MECHANICAL CONTROL	\$ -	\$ 398.40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44.27
E10012	CHEMICAL CONTROL LANDSCAPE	\$ -	\$ 1,512.22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 168.02
E10014	MANUAL CONTROL LANDSCAPE	\$ 5,374.34	\$ 14,583.18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,217.50
E10040	MECHANICAL CONTROL LANDSCAPE	\$ -	\$ -	\$ -	\$ 461.23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51.25
E11040	MANUAL CONTROL LANDSCAPE	\$ -	\$ -	\$ 14,786.41	\$ 39,746.07	\$ 18,615.55	\$ 3,935.84	\$ 6,021.93	\$ -	\$ 1,281.73	\$ 9,376.39
E12040	CHEMICAL CONTROL LANDSCAPE	\$ -	\$ -	\$ -	\$ 352.32	\$ 1,398.65	\$ 1,759.83	\$ 1,334.49	\$ 7,099.79	\$ 2,944.77	\$ 1,654.43
E14040	ALL OTHER CONTROL LANDSCAPE	\$ -	\$ -	\$ 20,586.40	\$ 18,047.75	\$ -	\$ -	\$ 844.24	\$ -	\$ -	\$ 4,386.49
E20031	REMOVE TREE LANDSCAPE	\$ 1,149.67	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127.74
E20040	PRUNING (T,S,V) LANDSCAPE	\$ 3,657.64	\$ 197.53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 428.35
E30010	IRRIGATION SYSTEM REPAIR LNDSC	\$ 217.72	\$ -	\$ 179.48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 364.14	\$ 84.59
E30013	BACKFLOW PREVENTER CERT LNDSC	\$ 457.22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50.80
E31010	IRRIG ELECTRICAL REPAIR LNDSCP	\$ -	\$ -	\$ -	\$ -	\$ 433.72	\$ -	\$ -	\$ -	\$ -	\$ 48.19
E32020	BACKFLOW PREVENTER CERT LNDSCP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 262.61	\$ 337.94	\$ -	\$ 66.73
F20001	INSPECTION DRAIN INLET	\$ 221.99	\$ 1,570.58	\$ 3,918.33	\$ 2,028.89	\$ 1,729.31	\$ -	\$ -	\$ -	\$ -	\$ 1,052.12
F20005	DRAIN STENCILING	\$ -	\$ -	\$ 1,632.61	\$ -	\$ 4,284.18	\$ -	\$ -	\$ -	\$ -	\$ 657.42
F20020	DRAIN INLET INSPECTION	\$ -	\$ -	\$ -	\$ -	\$ 3,961.47	\$ 2,031.33	\$ 1,216.62	\$ 3,158.95	\$ 7,012.24	\$ 1,931.18
F20050	DRAIN CLEANING	\$ 5,200.16	\$ 1,128.72	\$ -	\$ 2,442.52	\$ 792.99	\$ 30,227.45	\$ 21,364.00	\$ 1,332.22	\$ 11,339.88	\$ 8,203.10
F20051	SWEEP HWY/SHOULDER	\$ 1,821.78	\$ 5,048.26	\$ 11,301.43	\$ 1,135.07	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,145.17
F30010	REPAIR/REPL CORRECTIVE MEASURE	\$ -	\$ -	\$ 622.84	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69.20
F40001	INSPECT SOIL STAB/SEDIMENT/RSP	\$ 1,897.37	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 210.82
F40020	INSTALL SOIL STAB/SEDIMENT/RSP	\$ -	\$ -	\$ 1,185.92	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 131.77
F40310	REPAIR/REPLACE EXISTING CNTRL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,481.56	\$ 4,889.30	\$ 5,617.26	\$ -	\$ 1,887.57
F50007	FIELD ACTIVITY/FACILITY BMPS	\$ -	\$ -	\$ 3,216.12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 357.35
F70020	TREATMENT BMP INSPECTION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54.52	\$ -	\$ -	\$ -	\$ 6.06
F70101	FIELD ACTIVITIES BMPS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,695.73	\$ -	\$ 638.40	\$ 259.35
H10020	INSPECTION - H FAMILY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 321.28	\$ 424.25	\$ 82.84
H10110	BMS SUB - REPAIR/REPLACE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 191.16	\$ -	\$ 21.24
K10000	INVENTORY UPDATE HWY LIGHTING	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,258.75	\$ 250.97
K10003	NIGHT INSPECTION HIGHWAY LIGHT	\$ -	\$ 225.25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25.03
K10010	REPAIR/REPLACE HIGHWAY LIGHTNG	\$ 25,710.97	\$ 1,594.75	\$ 12,966.04	\$ 34,152.57	\$ 15,577.08	\$ 7,863.60	\$ 422.34	\$ 225.49	\$ -	\$ 10,945.87
K10011	3RD PARTY DAMAGE HWY LIGHTING	\$ 286.59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31.84
K10120	NIGHT INSPECTION HWY LIGHTING	\$ -	\$ -	\$ 74.78	\$ -	\$ 219.41	\$ 642.44	\$ 20.80	\$ -	\$ 149.02	\$ 122.94
K10140	GROUP RELAMP HWY LIGHTING	\$ -	\$ -	\$ -	\$ -	\$ 787.47	\$ -	\$ -	\$ -	\$ -	\$ 87.50
K20010	REPAIR/REPLACE SIGN LIGHTING	\$ 459.65	\$ 9,939.15	\$ 848.49	\$ 355.61	\$ 165.99	\$ 4,405.69	\$ 724.53	\$ 3,467.49	\$ -	\$ 2,262.95
K20120	NIGHT INSPECTION SIGN LIGHTING	\$ -	\$ -	\$ -	\$ -	\$ 129.58	\$ 750.77	\$ -	\$ -	\$ 149.02	\$ 114.37

Prorated Maintenance Costs for 12-ORA-133 PM 0.0 to RPM 4.17											
Activity	Activity Description	Fiscal Year									Annual Average Cost
		2011	2012	2013	2014	2015	2016	2017	2018	2019	
K20140	GROUP RELAMP SIGN LIGHTING	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 185.40	\$ -	\$ -	\$ 20.60
K40000	INVENTORY UPDATE TRAFFIC SGNL	\$ -	\$ -	\$ 1,137.14	\$ -	\$ 297.03	\$ -	\$ -	\$ -	\$ -	\$ 159.35
K40001	PRJCT INSPECTION TRAFFIC SGNLS	\$ -	\$ 109.79	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12.20
K40004	INVENTORY UPDATE TRAFFIC SGNLS	\$ 72.46	\$ 350.55	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47.00
K40005	PM CHECK TRAFFIC SIGNALS	\$ 1,435.76	\$ 580.94	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 224.08
K40010	REPAIR/REPLACE TRAFFIC SIGNAL	\$ 9,854.90	\$ 10,576.25	\$ 6,777.53	\$ 5,149.09	\$ 10,409.23	\$ 6,384.03	\$ 16,572.24	\$ 4,456.84	\$ 5,799.31	\$ 8,442.16
K40011	3RD PARTY DAMAGE TRFFC SIGNAL	\$ 143.01	\$ 81.08	\$ -	\$ 679.39	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100.39
K40025	PM CHECK TRAFFIC SIGNAL	\$ -	\$ -	\$ 1,758.91	\$ 1,474.07	\$ 1,228.18	\$ 1,408.66	\$ 1,190.66	\$ 1,580.46	\$ 1,895.48	\$ 1,170.71
K40026	CONFLICT MONITOR CHECK SIGNAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 541.31	\$ 450.76	\$ 556.58	\$ 172.07
K40140	GROUP RELAMP TRAFFIC SIGNAL	\$ -	\$ -	\$ -	\$ -	\$ 14,710.88	\$ -	\$ -	\$ -	\$ -	\$ 1,634.54
K50000	INVENTORY UPDATE FLASHN BEACON	\$ -	\$ -	\$ -	\$ 43.16	\$ -	\$ 239.17	\$ -	\$ -	\$ -	\$ 31.37
K50005	PM CHECK FLASHING BEACONS	\$ 629.85	\$ 720.79	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150.07
K50010	REPAIR/REPLACE FLASHING BEACON	\$ 11,963.73	\$ 1,423.98	\$ 53.81	\$ 7,118.91	\$ 4,448.04	\$ 56.53	\$ 106.22	\$ 464.69	\$ 463.80	\$ 2,899.97
K50011	3RD PARTY DAMEG FLASHNG BEACON	\$ -	\$ -	\$ -	\$ -	\$ 715.10	\$ 2,648.91	\$ -	\$ 393.73	\$ -	\$ 417.53
K50025	PM CHECK FLASHING BEACON	\$ -	\$ -	\$ 419.45	\$ 898.32	\$ 747.92	\$ 978.48	\$ 1,216.31	\$ 1,366.41	\$ 2,100.69	\$ 858.62
K60000	INVENTORY UPDATE RAMP METERS	\$ -	\$ -	\$ -	\$ -	\$ 279.15	\$ -	\$ -	\$ -	\$ -	\$ 31.02
K70010	REPAIR/REPLACE TOS EQUIPMENT	\$ 792.13	\$ 43.71	\$ 15,358.72	\$ 8,203.70	\$ 409.70	\$ 1,757.79	\$ 169.68	\$ -	\$ -	\$ 2,970.60
M10002	COMPLAINT INVESTIG. M FAMILY	\$ 94.91	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10.55
M10003	NIGHT INSPECT STRIPING	\$ 302.83	\$ 329.44	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70.25
M10010	REPAIR/REPLACE STRIPING	\$ -	\$ -	\$ -	\$ -	\$ 26,855.52	\$ -	\$ -	\$ -	\$ -	\$ 2,983.95
M10120	NIGHT INSPECTION STRIPING	\$ -	\$ -	\$ 522.22	\$ 172.58	\$ 173.33	\$ 138.35	\$ 238.15	\$ 275.84	\$ 264.65	\$ 198.35
M20010	REPAIR/REPLACE MARKINGS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,239.69	\$ -	\$ 443.04	\$ 3,654.43	\$ 704.13
M20020	DAY LABOR MARKINGS	\$ -	\$ 495.90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55.10
M20120	NIGHT INSPECTION MARKINGS	\$ -	\$ -	\$ 168.20	\$ 169.80	\$ 173.33	\$ 137.55	\$ 192.83	\$ 449.68	\$ 447.13	\$ 193.17
M30120	NIGHT INSPECTION PVMNT MARKERS	\$ -	\$ -	\$ -	\$ 169.80	\$ 173.33	\$ 60.86	\$ 38.85	\$ 205.29	\$ 262.13	\$ 101.14
M40000	SIGN FABRICATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,548.21	\$ -	\$ -	\$ -	\$ 394.25
M40003	NIGHT INSPECTION SIGNS	\$ 217.40	\$ 738.83	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 106.25
M40010	REPAIR/REPLACE SIGNS	\$ 1,725.60	\$ 856.81	\$ 573.61	\$ 1,584.31	\$ 5,053.30	\$ 3,730.57	\$ 7,436.87	\$ 3,020.13	\$ 9,125.46	\$ 3,678.52
M40020	DAY LABOR SIGNS	\$ 1,122.19	\$ 85.87	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 134.23
M40120	NIGHT INSPECTIONS SIGNS	\$ -	\$ -	\$ 570.42	\$ 258.87	\$ 260.00	\$ 60.86	\$ 198.55	\$ 208.65	\$ 194.20	\$ 194.62
M41010	REPAIR/REPLACE SIGN STRUCTURES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,107.74	\$ -	\$ -	\$ -	\$ 345.30
M50010	REPAIR/REPLACE DELINEATORS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,175.59	\$ -	\$ -	\$ 918.04	\$ 232.63
M60010	REPAIR/REPLACE GUARDRAIL	\$ -	\$ 4,063.12	\$ 1,142.59	\$ 1,108.36	\$ 173.47	\$ 10,807.33	\$ 17,484.88	\$ 4,184.95	\$ 2,868.28	\$ 4,648.11
M61010	REPAIR/REPLACE END TREATMNT GR	\$ -	\$ -	\$ -	\$ -	\$ 2,036.96	\$ -	\$ -	\$ 5,943.47	\$ 1,076.24	\$ 1,006.30
M80010	REPAIR/REPLACE ATTENUATOR	\$ -	\$ 3,672.46	\$ 7,741.05	\$ 4,213.47	\$ 3,833.24	\$ -	\$ -	\$ -	\$ -	\$ 2,162.25
M90000	EMERGENCY TRAFFIC CONTROL	\$ 14,265.51	\$ 3,095.16	\$ 3,602.21	\$ 4,563.74	\$ 13,268.01	\$ 2,217.92	\$ 1,512.03	\$ 10,934.52	\$ 6,981.94	\$ 6,715.67
S20000	STORM PATROL	\$ 4,562.07	\$ 828.29	\$ 3,792.06	\$ 3,025.06	\$ 3,821.25	\$ 6,001.16	\$ 41,556.60	\$ 2,800.56	\$ 12,387.53	\$ 8,752.73
S21000	FLOOD CONTROL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,852.86	\$ 205.87
S30000	EMERGENCY DAMAGE REPAIR	\$ 5,612.77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 623.64
S30012	MINOR SLIDE/SLIP REMOVE/REPAIR	\$ 12,974.44	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,441.60
S30110	MINOR SLIDE/SLIP REMOVE/REPAIR	\$ -	\$ -	\$ -	\$ -	\$ 6,626.51	\$ 4,430.14	\$ 2,266.53	\$ 3,105.18	\$ 10,037.00	\$ 2,940.60
YK0000	WORK FOR OTHERS K FAMILY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140.44	\$ 1,118.25	\$ 935.54	\$ 243.80
YM0000	WORK FOR OTHERS M FAMILY	\$ -	\$ -	\$ 1,431.10	\$ 2,378.31	\$ 2,384.88	\$ 447.19	\$ 937.33	\$ -	\$ -	\$ 842.09
Grand Total		\$ 182,964.10	\$ 103,274.58	\$ 157,356.04	\$ 214,519.24	\$ 259,733.19	\$ 241,250.39	\$ 269,366.66	\$ 107,454.93	\$ 194,312.75	\$ 192,247.99

Cost of Roadway Accidents

Sources: [5a. 10 yr Accident.pdf](#)

[5b. 10 yr Accident-Table B.pdf](#)

<https://dot.ca.gov/programs/transportation-planning/economics-data-management/transportation-economics/vehicle-operation-cost-parameters>

Assumptions

This cost element considers the costs associated with accidents (fatal, injury, and property damage only) on the roadway.

The accident cost parameters come from the Caltrans Vehicle Operation Cost Parameters, which contain standard economic valuations for application in benefit-cost analysis (used consistently across the Cal-B/C model).

The accident cost parameters are shown in 2016 current dollar value. According to the Caltrans website, the Cal-B/C Framework is set up to evaluate costs and benefits in constant dollars without escalating future values.

The number of total crashes within the study area (SR-133 from Coast Highway to El Toro Road) over a 10-year period (January 2009 - December 2018) was provided by Caltrans.

Caltrans Accident Cost Parameters (dollar per accident, 2016)

Injury Crash	\$148,800
Fatal Crash	\$10,800,000
PDO Crash	\$9,700

Total Crashes	
(1/1/09 - 12/31/18)	847
Injury Crashes	344
Fatal Crashes	5
PDO Crashes	498



Travel

ACCIDENT COST PARAMETERS

Cost of Highway Accident	Dollar Per Accident
Fatal Accident	\$ 10,800,000
Injury Accident	\$ 148,800
Property Damage Only (PDO) Accident	\$ 9,700
Average Cost per Accident	\$ 185,600

Cost Calculation

Annual Average Total

Crashes	84.7
Injury Crashes	34.4
Fatal Crashes	0.5
PDO Crashes	49.8

Injury Crashes	\$5,118,720
Fatal Crashes	\$5,400,000
PDO Crashes	\$483,060

Annual Average Cost for	
All Crash Types	\$11,001,780

Cost of Claims/Settlements

Sources: [6. UPDATED Claims.docx](#)
[6. & 7. Ten Years' Caltrans Legal Expense Summary.docx](#)

Assumptions

This cost element considers the costs associated with claims and settlements for issues along the roadway (e.g., tripping/falling along the sidewalk, potholes, roadway debris).

Claims data for the study area (SR-133 from Coast Highway to El Toro Road) from 2009 to 2019 was provided by Caltrans.

As shown in the table below, expenses related to claims/settlements fluctuate from year to year as cases are either settled or dismissed. Only 2 of the 16 claims since 2009 have reached a settlement. Both events occurred in 2013 - one was settled in 2015 and the other was settled in 2019.

Per the City of Laguna Beach, a casualty claim could be anywhere from \$5 million to \$10 million.

The estimated cost of claims/settlements only considers the settlement amounts, not the legal expenses associated with litigation. The legal expenses are presented as a separate cost element. See the 'Legal Expenses' tab.

Cost Calculation

Claims Data (including settlement amounts) for the study area from 2009-2019:

Year	Claimed Defect	Claim or Suit	Settlement Amount	Notes
2009	Debris in roadway	Claim		12-09-0050, Unknown postmile, \$421.17, Denied: No Notice of Hazard
2010	Debris in roadway	Claim		12-10-0089, postmile 3.40 +/-, \$1499.79, Denied: No Notice of Hazard
	Debris in roadway	Claim		12-10-0014, postmile 0.00/4.00 +/-, \$490/\$1008, Denied: No Notice of Hazard
2011	Debris in roadway	Claim		12-11-0203, postmile 0.31 +/-, \$1935.93, Denied and Tendered to Contractor All American Asphalt
2012	None	None		none
2013	Debris in roadway	Claim		12-13-0031, postmile 3.4 +/-, \$750.00, Denied: No Liability;
	Miscellaneous road design	Suit	\$80,000	G613785 plus 6 related Torts, postmile 0.00 +/-, RACING DOCTORS, STATE'S RESPONSIBILITY SETTLED AT \$80,000.00 ON 09/03/2019
	Ped trip/fall	Suit	\$25,000	none; 6D28857, postmile 0.60 +/-, PED TRIP AND FALL, STATE'S RESPONSIBILITY SETTLED AT \$25,000.00 ON 08/11/2015
2014	Lighting	Suit		Dismissed for waiver of costs
2015	Debris in roadway	Claim		12-15-0035, Unknown postmile, \$1833.35, Denied: No Liability
2016	Debris in roadway	Claim		12-16-0101, postmile 3.4/4.0 +/-, \$1847.62, Denied: No Notice of Hazard
	Unknown	Claim		G16005815, Unknown postmile, Unknown claim amount, Denied by GCP in 2016 and no further action seen at this time
2017	Pothole	Claim		12-17-0043, postmile 0.60 +/-, \$534.00, Denied: No Notice of Hazard
	Unknown	Claim		G17007142, Unknown postmile, \$10,000+, Tort, Unknown Disposition at this time- DENIAL AND REFERRED TO COURT BY GCP
2018	None	None		none
2019	Sidewalk trip/fall	Litigation		6D47960, postmile less than 3.00, PED TRIP AND FALL ON PARKING LOT SIDEWALK, NO DISPOSITION AT THIS TIME

Total Cost Spent on Settlements (2009-2019) \$105,000

Annual Average Spent on Settlements (2009-2019) \$9,545.45

Cost of Legal Expenses

Sources: City of Laguna Beach

[City Lawsuit Costs Report \(2016, Governing.com\)](#)

Assumptions

This cost element considers the legal fees and court costs associated with claims and litigation resulting from issues along the roadway (e.g. tripping/falling along the sidewalk, potholes, roadway debris, etc.). See the 'Claims & Settlement Costs' tab. This cost analysis assumes \$150,000 as the average cost of legal fees for each case that goes to trial, and \$3,000 as the average cost of legal fees for the average claim. These estimates were provided by the City of Laguna Beach for the purpose of this study only as Caltrans declined to provide information on legal expenses.

According to the City, casualty claims could range from \$5 million to \$10 million. For the purposes of this cost analysis, the legal fees associated with casualty claims (assuming litigation and settlement) were conservatively assumed to be 15% of the total claim amount. Therefore, for this cost analysis, the legal fees associated with casualty claims are conservatively estimated to range from \$750,000 - \$1,500,000.

For reference, according to a 2016 study of the lawsuit settlement and litigation costs for the 20 largest U.S. cities (link provided), the ratio of legal costs to payout cost was approximately 6%-11%.

A range of legal costs is provided for this cost analysis. The best-case scenario assumes only an annual average spent on legal fees associated with average claims/settlements. The worst-case scenario assumes the higher-end of the legal fees associated with settlement of a casualty claim.

Cost Calculation

Claims Data (including settlement amounts) for the study area from 2009-2019:

Year	Claimed Defect	Claim or Suit	Settlement Amount	Notes	Estimated Legal Fees
2009	Debris in roadway	Claim		12-09-0050, Unknown postmile, \$421.17, Denied: No Notice of Hazard	\$3,000
2010	Debris in roadway	Claim		12-10-0089, postmile 3.40 +/-, \$1499.79, Denied: No Notice of Hazard	\$3,000
	Debris in roadway	Claim		12-10-0014, postmile 0.00/4.00 +/-, \$490/\$1008, Denied: No Notice of Hazard	\$3,000
2011	Debris in roadway	Claim		12-11-0203, postmile 0.31 +/-, \$1935.93, Denied and Tendered to Contractor All American Asphalt	\$3,000
2012	None	None		none	\$0
2013	Debris in roadway	Claim		12-13-0031, postmile 3.4 +/-, \$750.00, Denied: No Liability:	\$3,000
	Miscellaneous road design	Suit	\$80,000	G613785 plus 6 related Torts, postmile 0.00 +/-, RACING DOCTORS, STATE'S RESPONSIBILITY SETTLED AT \$80,000.00 ON 09/03/2019	\$150,000
	Ped trip/fall	Suit	\$25,000	none; 6D28857, postmile 0.60 +/-, PED TRIP AND FALL, STATE'S RESPONSIBILITY SETTLED AT \$25,000.00 ON 08/11/2015	\$150,000
2014	Lighting	Suit		Dismissed for waiver of costs	\$150,000
2015	Debris in roadway	Claim		12-15-0035, Unknown postmile, \$1833.35, Denied: No Liability	\$3,000
2016	Debris in roadway	Claim		12-16-0101, postmile 3.4/4.0 +/-, \$1847.62, Denied: No Notice of Hazard	\$3,000
	Unknown	Claim		G16005815, Unknown postmile, Unknown claim amount, Denied by GCP in 2016 and no further action seen at this time	\$3,000
2017	Pothole	Claim		12-17-0043, postmile 0.60 +/-, \$534.00, Denied: No Notice of Hazard	\$3,000
	Unknown	Claim		G17007142, Unknown postmile, \$10,000+, Tort, Unknown Disposition at this time- DENIAL AND REFERRED TO COURT BY GCP	\$3,000
2018	None	None		none	\$0
2019	Sidewalk trip/fall	Litigation		6D47960, postmile less than 3.00, PED TRIP AND FALL ON PARKING LOT SIDEWALK, NO DISPOSITION AT THIS TIME	\$150,000

Total Spent on Legal Fees (2009-2019) **\$630,000**

Annual Average Spent on Legal Fees (best-case scenario) **\$57,272.73**

Legal Fees Associated with Settlement of a Casualty Claim (low-end estimate) **\$750,000**

Legal Fees Associated with Settlement of a Casualty Claim (high-end estimate) **\$1,500,000**