

# Appendix C

## Conceptual Layouts

# ARTERIAL ALTERNATIVE



HERITAGE RANCH  
SUBDIVISION

GOLD COUNTRY  
ESTATES

DAYTON PIONEER  
LAND

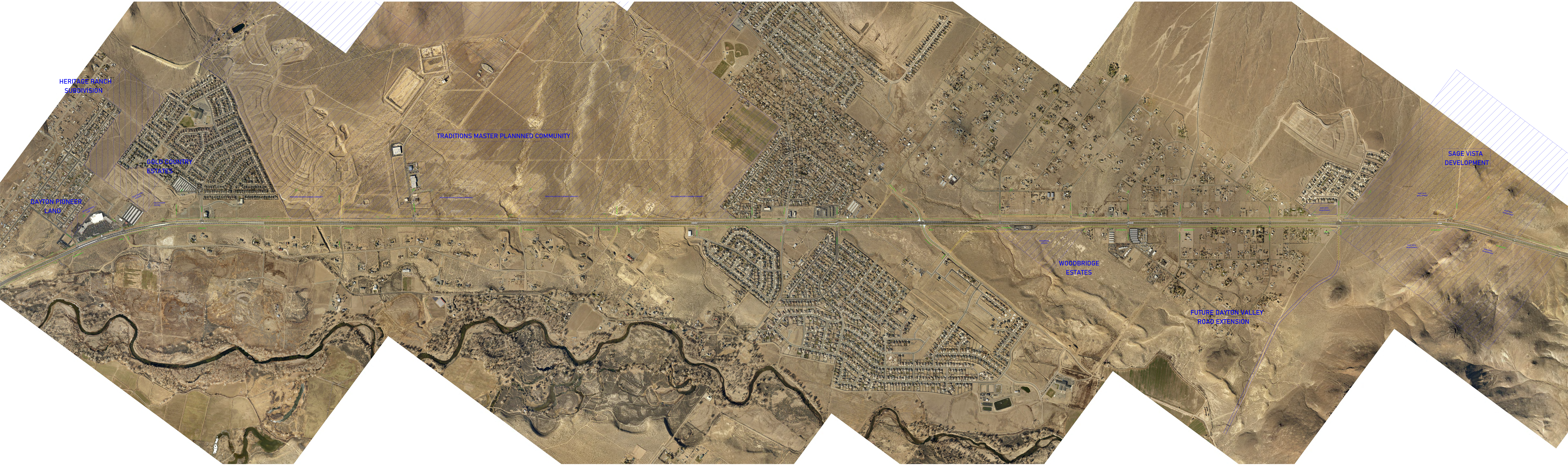
TRADITIONS MASTER PLANNED COMMUNITY

WOODBIDGE  
ESTATES

FUTURE DAYTON VALLEY  
ROAD EXTENSION

SAGE VISTA  
DEVELOPMENT

# PARKWAY ALTERNATIVE



HERITAGE RANCH  
SUBDIVISION

GOLD COUNTRY  
ESTATES

DAYTON PIONEER  
LAND

TRADITIONS MASTER PLANNED COMMUNITY

WOODBIDGE  
ESTATES

FUTURE DAYTON VALLEY  
ROAD EXTENSION

SAGE VISTA  
DEVELOPMENT

# CONTROLLED ACCESS ALTERNATIVE



# Appendix D

## IHSDM Controlled Access Data

### Freeway Segments

DATA ELEMENT	SEGMENT 1	SEGMENT 2	SEGMENT 3	SEGMENT 4	SEGMENT 5
Lanes	4.00	4.00	4.00	4.00	4.00
Start Station	49400.00	54500.00	63700.00	69850.00	76150.00
End Station	54500.00	63700.00	69850.00	76150.00	83500.00
Length (Ft)	5100.00	9200.00	6150.00	6300.00	7350.00
Length (M)	0.966	1.742	1.165	1.193	1.392
<b>Hor Curve 1</b>					
Start Station		61575.00			79950.00
End Station		61760.00			81370.00
Seg. Length (Ft)		185.00			1420.00
Seg. Length (M)		0.035			0.269
Full Length (Ft)		185.00			1420.00
Full Length (M)		0.035			0.269
Radius (Ft)		3040.00			4983.00
<b>Hor Curve 2</b>					
Start Station		62425.00			
End Station		62610.00			
Seg. Length (Ft)		185.00			
Seg. Length (M)		0.04			
Full Length (Ft)		185.00			
Full Length (M)	0.000	0.035	0.000	0.000	0.000
Radius (Ft)		3040.00			
<b>Speed Change Lane Increasing MP</b>					
Start Station	53000.00		67800.00		80750.00
End Station	54500.00		68800.00		82650.00
Entrance Length (ft)	1500.00	0.00	1000.00	0.00	1900.00
Entrance Length (M)	0.284	0.000	0.189	0.000	0.360
Start Station	50750.00		64650.00		78300.00
End Station	51700.00		65450.00		79300.00
Exit Length (ft)	950.00	0.00	800.00	0.00	1000.00
Exit Length (M)	0.180	0.000	0.152	0.000	0.189
<b>Speed Change Lane Decreasing MP</b>					
Start Station	49950.00	61000.00	65450.00		77550.00
End Station	49400.00	59700.00	63700.00		76150.00
Entrance Length (ft)	-550.00	-1300.00	-1750.00	0.00	-1400.00
Entrance Length (M)	-0.104	-0.246	-0.331	0.000	-0.265
Start Station	52100.00		69850.00		79750.00
End Station	51150.00		68950.00		78750.00
Exit Length (ft)	-950.00	0.00	-900.00	0.00	-1000.00
Exit Length (M)	-0.180	0.000	-0.170	0.000	-0.189

### Freeway Segments

DATA ELEMENT	SEGMENT 1	SEGMENT 2	SEGMENT 3	SEGMENT 4	SEGMENT 5
<b>Upstream Entrance Ramp (Xb,ent) Increasing MP</b>					
Start Station	40000.00	53000.00	53000.00	67800.00	67800.00
End Station	49400.00	54500.00	63700.00	69850.00	76150.00
Length (ft)	9400	1500	10700	2050	8350
Length (M)	1.78	0.28	2.03	0.39	1.58
<b>Downstream Exit Ramps (Xe,ext) Increasing MP</b>					
Start Station	54500.00	63700.00	69850.00	76150.00	83500.00
End Station	65450.00	65450.00	79300.00	79300.00	90000.00
Length (ft)	10950.00	1750.00	9450.00	3150.00	6500.00
Length (M)	2.074	0.331	1.790	0.597	1.231
<b>Weave Increasing MP</b>					
Start Station					
End Station					
Length (ft)	0.00	0.00	0.00	0.00	0.00
Length (M)	0.00	0.00	0.00	0.00	0.00
<b>Upstream Entrance Ramp (Xe,ent) Decreasing MP</b>					
Start Station	54500.00	63700.00	69850.00	76150.00	83500.00
End Station	61000.00	65450.00	77550.00	77550.00	90000.00
Length (ft)	6500	1750	7700	1400	6500
Length (M)	1.231	0.331	1.458	0.265	1.231
<b>Downstream ent. Ramps (Xb,ext) Decreasing MP</b>					
Start Station	40000.00	51150.00	51150.00	68950.00	68950.00
End Station	49400.00	54500.00	63700.00	69850.00	76150.00
Length (ft)	9400.00	3350.00	12550.00	900.00	7200.00
Length (M)	1.780	0.634	2.377	0.170	1.364
<b>Weave Decreasing MP</b>					
Start Station					
End Station					
Length (ft)	0.00	0.00	0.00	0.00	0.00
Length (M)	0.00	0.00	0.00	0.00	0.00
<b>AADT</b>					
2040	49615	48770	2468	40170	35330

Lane width = 12 feet

Outside Shoulder Width = 8 feet

Insider Shoulder Width = 6 feet

Median Width = 16 feet

No Rumble Strips inside and outside for entire length both sides

Median barrier width = 3 feet

Inside Median barrier for entire length, offset = 6 feet from inside lanes

Clear zone = 30 feet

No Barrier on outside for entire length for both sides, except segments below.

Segment 2, barrier on right (Decreasing MP) side 637+00 to 617+50 (1,950 ft, .37 mi)

Segment 3, barrier on right (Decreasing MP) side 654+50 to 637+00 (1750 ft, .33 mi),  
658+50 to 674+50 (Bridge) (1600 ft, .30 mi)

Segment 3, barrier on right (Increasing MP) side 659+00 to 672+00 (Bridge) (1300 ft, .25 mi)

## Ramp Segments

DATA ELEMENT	RAMP 2 EXIT	RAMP 4 ENTRANCE	RAMP 3 EXIT	RAMP 1 ENTRANCE	RAMP Occidental ENTRANCE	RAMP 7 EXIT	RAMP 7 EXIT	RAMP 8 ENTRANCE
Lanes	2.00	1.00	2.00	1.00	1.00	1.00	2.00	2.00
Start Station	0.00	0.00	0.00	0.00	0.00	0.00	1500.00	0.00
End Station	600.00	1615.00	635.00	1440.00	400.00	1500.00	2550.00	1000.00
Length (Ft)	600.00	1615.00	635.00	1440.00	400.00	1500.00	1050.00	1000.00
Length (M)	0.114	0.306	0.120	0.273	0.076	0.284	0.199	0.189
Total Length (Ft)								
Total Length (M)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MP for Begin Crv.	0.000	0.000	0.000	0.000	0.000	0.000	0.284	0.000
<b>Hor Curve 1</b>								
Start Station	0.00	165.00	0.00	155.00	0.00	0.00	1870.00	410.00
End Station	425.00	490.00	470.00	480.00	400.00	990.00	2450.00	1000.00
Length (Ft)	425.00	325.00	470.00	325.00	400.00	990.00	580.00	590.00
Length (M)	0.080	0.062	0.089	0.062	0.076	0.188	0.110	0.112
Radius (Ft)	135.00	8112.00	150.00	1990.00	800.00	3000.00	712.00	2500.00
Total Length (Ft)	425.00	325.00	470.00	800.00	400.00	1090.00	580.00	690.00
Total Length (M)	0.080	0.062	0.089	0.152	0.076	0.206	0.110	0.131
MP for Begin Crv.	0.000	0.031	0.000	0.029	0.000	0.000	0.354	0.078
<b>Hor Curve 2</b>								
Start Station		815.00		740.00				
End Station		1615.00		1440.00				
Length (Ft)		800.00		700.00				
Length (M)		0.152		0.133				
Radius (Ft)		1988.00		1988.00				
Total Length (Ft)		800.00		800.00				
Total Length (M)		0.152		0.152				
MP for Begin Crv.		0.154		0.140				
<b>Hor Curve 3</b>								
Start Station								
End Station								
Length (Ft)								
Length (M)								
Radius (Ft)								
Total Length (Ft)								
Total Length (M)								
MP for Begin Crv.								
<b>AADT</b>								
2040	1770.00	1760.00	1710.00	2010.00	3560.00	9430.00	9430.00	8010.00

For all ramps:

Signal at Terminal

Average Freeway Speed = 65 MPH

Lane Width = 12 ft

Right Shoulder Width = 8 ft

Left Shoulder Width = 4 ft



## Ramp Segments

RAMP 6 EXIT	RAMP 5 ENTRANCE	RAMP 10 EXIT	RAMP 12 ENTRANCE	RAMP 12 ENTRANCE	RAMP 11 EXIT	RAMP 9 ENTRANCE	RAMP 9 ENTRANCE
2.00	2.00	2.00	2.00	1.00	2.00	2.00	1.00
0.00	0.00	0.00	0.00	525.00	0.00	0.00	500.00
1295.00	975.00	600.00	525.00	1745.00	635.00	500.00	1560.00
1295.00	975.00	600.00	525.00	1220.00	635.00	500.00	1060.00
0.245	0.185	0.114	0.099	0.231	0.120	0.095	0.201
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.099	0.000	0.000	0.095
<b>Hor Curve 1</b>							
0.00	650.00	0.00	200.00	705.00	0.00	175.00	760.00
420.00	975.00	435.00	525.00	1745.00	470.00	500.00	1560.00
420.00	325.00	435.00	325.00	1040.00	470.00	325.00	800.00
0.080	0.062	0.082	0.062	0.197	0.089	0.062	0.152
2488.00	1000.00	135.00	812.00	2000.00	150.00	812.00	1988.00
570.00	425.00	435.00	325.00	1190.00	470.00	325.00	800.00
0.108	0.080	0.082	0.062	0.225	0.089	0.062	0.152
0.000	0.123	0.000	0.038	0.134	0.000	0.033	0.144
<b>Hor Curve 2</b>							
420.00							
760.00							
340.00							
0.064							
2488.00							
340.00							
0.064							
0.080							
<b>Hor Curve 3</b>							
970.00							
1295.00							
325.00							
0.06							
512.00							
325.00							
0.06							
0.18							
<b>AADT</b>							
13140.00	15630.00	5510.00	5730.00	5730.00	8390.00	9600.00	9600.00

For all ramps:  
 Signal at Terminal  
 Average Freeway Speed = 65 MPH  
 Lane Width = 12 ft  
 Right Shoulder Width = 8 ft  
 Left Shoulder Width = 4 ft

**Ramp Segment Lengths**

					1 Lane	2 Lanes					2 Lanes	1 Lane		2 Lanes	1 Lane
RAMP 2	RAMP 4	RAMP 3	RAMP 1	RAMP X	RAMP 7	RAMP 7	RAMP 8	RAMP 6	RAMP 5	RAMP 10	RAMP 12	RAMP 12	RAMP 11	RAMP 9	RAMP 9
435	165	470	155	400	990		410	420	650	435	200		470	175	
165	325	165	325		510		590	340	325	165	325		165	325	
	325		260			360		210				180			260
	800		700			580		325				1040			800
						110									
600	1615	635	1440	400	1500	1050	1000	1295	975	600	525	1220	635	500	1060
0.114	0.306	0.120	0.273	0.076	0.284	0.199	0.189	0.245	0.185	0.114	0.099	0.231	0.120	0.095	0.201

# Appendix E

## IHSDM Combined Results

**Combined Roadway Sections and Intersections Crash Totals (NO Build)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
			<b>Total</b>	<b>7.62</b>	<b>2679.53</b>	<b>125.67</b>	<b>39.64</b>	<b>86.03</b>	<b>21.40</b>	<b>1.85</b>	<b>0.61</b>	<b>33.49</b>

**Predicted Severity Total for Evaluation Period**

Fatal	A	B	C	PDO
21.23	94.23	359.62	780.98	1423.50

**Predicted Severity per year**

	Fatal	A	B	C	PDO	
<b>2020</b>	<b>57.67</b>	0.46	2.03	7.74	16.81	30.64
<b>2040</b>	<b>198.14</b>	1.57	6.97	26.59	57.75	105.26

**Combined Roadway Sections and Intersections Crash Totals (Arterial)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
			<b>Total</b>	<b>7.62</b>	<b>2579.02</b>	<b>122.81</b>	<b>54.03</b>	<b>68.78</b>	<b>28.67</b>	<b>2.79</b>	<b>1.77</b>	<b>56.11</b>

**Predicted Severity Total for Evaluation Period**

Fatal	A	B	C	PDO
20.44	90.69	346.13	751.68	1370.11

**Predicted Severity per year**

	Fatal	A	B	C	PDO	
<b>2020</b>	<b>59.04</b>	0.47	2.08	7.92	17.21	31.37
<b>2040</b>	<b>192.15</b>	1.52	6.76	25.79	56.00	102.08

**Combined Roadway Sections and Intersections Crash Totals (Parkway)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
			<b>Total</b>	<b>7.62</b>	<b>2566.51</b>	<b>121.67</b>	<b>49.68</b>	<b>72.10</b>	<b>31.43</b>	<b>2.84</b>	<b>5.50</b>	<b>41.64</b>

**Predicted Severity Total for Evaluation Period**

Fatal	A	B	C	PDO
19.95	90.66	347.98	724.21	1383.69

**Predicted Severity per year**

	Fatal	A	B	C	PDO	
<b>2020</b>	<b>55.73</b>	0.43	1.97	7.56	15.73	30.05
<b>2040</b>	<b>193.64</b>	1.50	6.84	26.25	54.64	104.39

**Combined Roadway Sections, Intersections, Freeway Sections, Speed Change Lanes and Freeway Ramps Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
			<b>Total</b>	<b>13.15</b>	<b>2100.22</b>	<b>100.01</b>	<b>36.12</b>	<b>63.89</b>	<b>40.59</b>	<b>7.55</b>	<b>0.75</b>	<b>10.50</b>

**Predicted Severity Total for Evaluation Period**

Fatal	A	B	C	PDO
14.40	54.63	270.06	592.45	1171.90

**Predicted Severity per year**

	Fatal	A	B	C	PDO	
<b>2020</b>	<b>92.46</b>	0.64	1.97	10.51	20.31	59.03
<b>2040</b>	<b>107.55</b>	0.73	2.43	12.53	24.78	67.06

### Roadway Section Crash Totals (NO Build)

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
Table 4. Predicted Crash Frequencies by Year (4D)										
			Total	2020	3.06					
			Total	2040	8.9					
			Total	0.65	123.15	5.8643	1.6234	4.2409	9.022	0.64
Table 11. Predicted Crash Frequencies by Year (5T)										
			Total	2020	40.29					
			Total	2040	134.15					
			Total	6.97	1,812.48	86.3084	24.4464	61.862	12.3828	1.21
			Total	2020	43.35					
			Total	2040	143.05					
			Total	7.62	1,935.63	92.17	26.07	66.10	21.40	1.85

### Intersection Crash Totals (No Build)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
Table 4. Predicted Crash Frequencies by Year (3ST)									
			Total	2020	5.01				
			Total	2040	23.89				
			Total		279.511	13.31	5.3232	7.9868	0.14
Table 11. Predicted Crash Frequencies by Year (3SG)									
			Total	2020	1.96				
			Total	2040	6.05				
			Total		82.114	3.9102	1.3023	2.6079	0.28
Table 18. Predicted Crash Frequencies by Year (4ST)									
			Total	2020	7.35				
			Total	2040	25.15				
			Total		341.769	16.2747	6.9455	9.3292	0.19
			Total	2020	14.32				
			Total	2040	55.09				
			Total		743.904	33.4949	13.571	19.9239	0.61

### Combined Roadway Section and Intersection Crash Totals (NO Build)

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
			<b>Total</b>	<b>7.62</b>	<b>2,679.53</b>	<b>125.67</b>	<b>39.64</b>	<b>86.03</b>	<b>21.40</b>	<b>1.85</b>	<b>0.61</b>	<b>33.4949</b>

Predicted					
Fatal	A	B	C	PDO	Total
1.00	4.42	16.87	36.63	66.76	125.67

	Predicted	Fatal	A	B	C	PDO	Total
2020	<b>57.67</b>	0.46	2.03	7.74	16.81	30.64	57.67
2040	<b>198.14</b>	1.57	6.97	26.59	57.75	105.26	198.14

## Roadway Section Crash Totals (NO Build)

Site Type

Type: 4D

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
1	4D	US 50	Pine Cone Road to Retail Road	0.27	50.206	2.3908	0.6625	1.7283	8.8547	0.65
2	4D	US 50	Retail Road / River Road to Fortune Drive	0.38	72.944	3.4735	0.9609	2.5126	9.1409	0.64
		Total	Total	0.65	123.15	5.8643	1.6234	4.2409	9.022	0.64

Table 4. Predicted Crash Frequencies by Year (4D)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	3.06	0.86	27.924	2.21	72.076
2021	3.32	0.93	27.924	2.39	72.076
2022	3.58	1	27.918	2.58	72.082
2023	3.84	1.07	27.907	2.77	72.093
2024	4.11	1.15	27.891	2.96	72.109
2025	4.38	1.22	27.872	3.16	72.128
2026	4.65	1.3	27.851	3.36	72.149
2027	4.93	1.37	27.827	3.56	72.173
2028	5.22	1.45	27.802	3.77	72.198
2029	5.5	1.53	27.776	3.98	72.224
2030	5.79	1.61	27.748	4.19	72.252
2031	6.09	1.69	27.72	4.4	72.28
2032	6.39	1.77	27.691	4.62	72.309
2033	6.69	1.85	27.662	4.84	72.338
2034	7	1.93	27.632	5.06	72.368
2035	7.31	2.02	27.602	5.29	72.398
2036	7.62	2.1	27.572	5.52	72.428
2037	7.94	2.19	27.542	5.75	72.458
2038	8.26	2.27	27.512	5.99	72.488
2039	8.58	2.36	27.482	6.22	72.518
2040	8.9	2.44	27.453	6.46	72.547
Total	123.15	34.09	27.683	89.06	72.317
Average	5.86	1.62	27.683	4.24	72.317

**Site Type**  
**Type: 5T**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
1	5T	US 50	Fortune Drive to Segale Road / Traditions Parkway	0.69	220.028	10.4775	2.948	7.5295	15.1848	1.22
2	5T	US 50	Segale Road / Traditions Parkway to Enterprise Way (W)	0.37	117.986	5.6184	1.5808	4.0376	15.1848	1.22
4	5T	US 50	Enterprise Way (W) to Graves Drive	0.52	165.1	7.8619	2.2123	5.6496	15.119	1.22
5	5T	US 50	Graves Drive to Ambrose Lane	0.88	282.142	13.4354	3.7822	9.6532	15.2674	1.23
6	5T	US 50	Ambrose Lane to Occidental Road (W)	0.27	85.725	4.0821	1.1487	2.9335	15.119	1.22
7	5T	US 50	Occidental Road (W) to Riverboat Road / Cardelli Road	0.16	48.439	2.3066	0.65	1.6566	14.4165	1.22
8	5T	US 50	Riverboat Road / Cardelli Road to Occidental Road (E)	0.26	71.523	3.4059	0.963	2.4429	13.0994	1.21
9	5T	US 50	Occidental Drive (E) to Six Mile Canyon Road / Fort Churchill Road	0.42	105.758	5.0361	1.4283	3.6078	11.9907	1.2
10	5T	US 50	Six Mile Canyon Road / Fort Churchill Road to Lafond Avenue	0.39	89.728	4.2727	1.2158	3.0569	10.9557	1.2
11	5T	US 50	Lafond Avenue to Mark Twain Avenue	0.35	80.224	3.8202	1.0871	2.7331	10.9148	1.2
12	5T	US 50	Mark Twain Avenue to Rainbow Drive (W)	0.29	63.781	3.0372	0.8658	2.1714	10.473	1.2
13	5T	US 50	Rainbow Drive (W) to Pinenut Drive	0.26	57.329	2.7299	0.7781	1.9519	10.4997	1.2
14	5T	US 50	Pinenut Drive to Rainbow Drive (E)	0.45	96.598	4.5999	1.3125	3.2874	10.2221	1.19
15	5T	US 50	Rainbow Drive (E) to Bryce Road / Chaves Road	0.34	74.653	3.5549	1.0133	2.5416	10.4555	1.2
16	5T	US 50	Bryce Road / Chaves Road to MP 15	1.32	253.464	12.0697	3.4604	8.6093	9.1437	1.19
		Total	Total	6.97	1,812.48	86.3084	24.4464	61.862	12.3828	1.21

Table 11. Predicted Crash Frequencies by Year (5T)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	40.29	11.82	29.335	28.47	70.665
2021	44.68	13.04	29.176	31.65	70.824
2022	49.11	14.26	29.038	34.85	70.962
2023	53.58	15.49	28.918	38.08	71.082
2024	58.08	16.73	28.812	41.34	71.188
2025	62.62	17.98	28.717	44.63	71.283
2026	67.19	19.24	28.632	47.95	71.368
2027	71.79	20.5	28.555	51.29	71.445
2028	76.42	21.77	28.484	54.66	71.516
2029	81.09	23.05	28.42	58.04	71.58
2030	85.78	24.33	28.36	61.45	71.64
2031	90.51	25.62	28.305	64.89	71.695
2032	95.26	26.91	28.254	68.34	71.746
2033	100.03	28.21	28.206	71.82	71.794
2034	104.83	29.52	28.161	75.31	71.839
2035	109.66	30.84	28.119	78.83	71.881
2036	114.51	32.15	28.079	82.36	71.921
2037	119.39	33.48	28.041	85.91	71.959
2038	124.29	34.81	28.006	89.48	71.994
2039	129.21	36.14	27.972	93.07	72.028
2040	134.15	37.48	27.94	96.67	72.06
Total	1,812.48	513.38	28.325	1,299.10	71.675
Average	86.31	24.45	28.325	61.86	71.675



## Intersection Crash Totals (No Build)

Site Type  
Type: 3ST

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Pine Cone Road	46.21	2.2005	0.832	1.3684	0.15	2.2005
2	3ST	US 50	Segale Road / Traditions Parkway	53.059	2.5266	0.9229	1.6038	0.2	2.5266
3	3ST	US 50	Enterprise Way (W)	25.989	1.2376	0.5523	0.6853	0.1	1.2376
4	3ST	US 50	Graves Drive	20.951	0.9977	0.4816	0.5161	0.08	0.9977
5	3ST	US 50	Ambrose Lane	25.415	1.2102	0.5434	0.6668	0.1	1.2102
6	3ST	US 50	Occidental Road (W)	40.022	1.9058	0.7506	1.1552	0.16	1.9058
7	3ST	US 50	Lafond Avenue	29.19	1.39	0.5537	0.8363	0.15	1.39
8	3ST	US 50	Mark Twain Avenue	38.673	1.8416	0.6867	1.1549	0.2	1.8416
		Total	Total	279.511	13.31	5.3232	7.9868	0.14	13.31

Table 4. Predicted Crash Frequencies by Year (3ST)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	5.01	2.2	43.88	2.81	56.12
2021	5.79	2.51	43.369	3.28	56.631
2022	6.56	2.81	42.899	3.75	57.101
2023	7.35	3.12	42.475	4.23	57.525
2024	8.16	3.43	42.08	4.73	57.92
2025	8.98	3.75	41.717	5.24	58.283
2026	9.84	4.07	41.375	5.77	58.625
2027	10.71	4.39	41.058	6.31	58.942
2028	11.6	4.73	40.755	6.87	59.245
2029	12.51	5.06	40.472	7.45	59.528
2030	13.45	5.41	40.2	8.04	59.8
2031	14.4	5.75	39.945	8.65	60.055
2032	15.38	6.11	39.699	9.27	60.301
2033	16.37	6.46	39.467	9.91	60.533
2034	17.39	6.82	39.242	10.56	60.758
2035	18.42	7.19	39.028	11.23	60.972
2036	19.48	7.56	38.821	11.92	61.179
2037	20.55	7.94	38.624	12.61	61.376
2038	21.65	8.32	38.432	13.33	61.568
2039	22.75	8.7	38.249	14.05	61.751
2040	23.89	9.09	38.07	14.79	61.93
Total	290.23	115.44	39.774	174.79	60.226
Average	13.82	5.5	39.774	8.32	60.226

**Site Type**  
**Type: 3SG**

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3SG	US 50	Fortune Drive	82.114	3.9102	1.3023	2.6079	0.28	3.9102
		Total	Total	82.114	3.9102	1.3023	2.6079	0.28	3.9102

Table 11. Predicted Crash Frequencies by Year (3SG)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	1.96	0.71	36.081	1.25	63.919
2021	2.13	0.76	35.761	1.37	64.239
2022	2.31	0.82	35.459	1.49	64.541
2023	2.49	0.88	35.176	1.62	64.824
2024	2.68	0.94	34.906	1.74	65.094
2025	2.87	0.99	34.652	1.87	65.348
2026	3.06	1.05	34.409	2.01	65.591
2027	3.25	1.11	34.178	2.14	65.822
2028	3.45	1.17	33.957	2.28	66.043
2029	3.65	1.23	33.746	2.42	66.254
2030	3.86	1.29	33.543	2.56	66.457
2031	4.06	1.35	33.349	2.71	66.651
2032	4.27	1.42	33.161	2.86	66.839
2033	4.49	1.48	32.981	3.01	67.019
2034	4.7	1.54	32.807	3.16	67.193
2035	4.92	1.61	32.64	3.31	67.36
2036	5.14	1.67	32.477	3.47	67.522
2037	5.36	1.73	32.321	3.63	67.679
2038	5.59	1.8	32.169	3.79	67.831
2039	5.82	1.86	32.022	3.95	67.978
2040	6.05	1.93	31.879	4.12	68.121
Total	82.11	27.35	33.305	54.77	66.695
Average	3.91	1.3	33.305	2.61	66.695

**Site Type**  
**Type: 4ST**

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Retail Road / River Road	69.57	3.3129	1.4636	1.8493	0.22	3.3129
2	4ST	US 50	River Boat Road / Cardelli Road	49.739	2.3685	1.0281	1.3404	0.19	2.3685
3	4ST	US 50	Occidental Road (E)	49.412	2.353	1.0047	1.3482	0.21	2.353
4	4ST	US 50	Six Mile Canyon Road / Fort Churchill Road	37.577	1.7894	0.7666	1.0227	0.17	1.7894
5	4ST	US 50	Rainbow Drive (W)	33.203	1.5811	0.6519	0.9292	0.17	1.5811
6	4ST	US 50	Pinenut Drive	35.133	1.673	0.6947	0.9783	0.19	1.673
7	4ST	US 50	Rainbow Drive (E)	27.385	1.3041	0.5293	0.7747	0.15	1.3041
8	4ST	US 50	Bryce Road / Chaves Road	39.749	1.8928	0.8065	1.0863	0.2	1.8928
		Total	Total	341.769	16.2747	6.9455	9.3292	0.19	16.2747

Table 18. Predicted Crash Frequencies by Year (4ST)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	7.35	2.9	39.383	4.46	60.617
2021	8.3	3.3	39.728	5	60.272
2022	9.2	3.69	40.075	5.51	59.925
2023	10.1	4.08	40.409	6.01	59.591
2024	10.98	4.47	40.73	6.51	59.27
2025	11.86	4.87	41.036	7	58.964
2026	12.74	5.27	41.328	7.48	58.672
2027	13.62	5.67	41.606	7.96	58.394
2028	14.51	6.07	41.873	8.43	58.127
2029	15.39	6.48	42.127	8.9	57.873
2030	16.27	6.89	42.371	9.38	57.629
2031	17.15	7.31	42.605	9.85	57.395
2032	18.04	7.72	42.83	10.31	57.17
2033	18.92	8.14	43.045	10.78	56.955
2034	19.81	8.57	43.253	11.24	56.747
2035	20.7	8.99	43.454	11.7	56.546
2036	21.58	9.42	43.647	12.16	56.353
2037	22.47	9.85	43.834	12.62	56.166
2038	23.36	10.28	44.015	13.08	55.985
2039	24.25	10.72	44.19	13.54	55.81
2040	25.15	11.16	44.36	13.99	55.64
Total	341.77	145.86	42.677	195.91	57.323
Average	16.27	6.95	42.677	9.33	57.323

**Roadway Section Crash Totals (Arterial)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi /yr)	Predicted Travel Crash Rate (crashes/mil lion veh-mi)
Table 3. Predicted Crash Frequencies by Year (6U)					2020 17.81					
					2040 84.02					
Total					5.65	995.37	47.40	19.09	28.31	8.39
Table 8. Predicted Crash Frequencies by Year (6D)					2020 4.24					
					2040 10.31					
Total					0.65	151.96	7.24	2.97	4.27	11.13
Table 3. Predicted Crash Frequencies by Year (5T)					2020 4.83					
					2040 19.61					
Total					1.32	253.46	12.07	3.46	8.61	9.14
					2020 26.88					
					2040 113.94					
<b>Total</b>					<b>7.62</b>	<b>1400.79</b>	<b>66.70</b>	<b>25.52</b>	<b>41.18</b>	<b>28.67</b>

**Intersection Crash Totals (Arterial)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/mil lion veh)	Intersection Crash Rate (crashes/yr)
Table 3. Predicted Crash Frequencies by Year (3ST)					2020 0.09					
					2040 0.50					
Total						5.77	0.27	0.13	0.15	0.27
Table 7. Predicted Crash Frequencies by Year (3ST_GE6)					2020 1.51					
					2040 6.48					
Total						74.89	3.57	1.39	2.17	3.57
Table 12. Predicted Crash Frequencies by Year (3SG_GE6)					2020 5.8					
					2040 10.13					
Total						169.05	8.05	4.17	3.88	8.05
Table 18. Predicted Crash Frequencies by Year (4ST)					2020 0.41					
					2040 1.26					
Total						17.55	0.84	0.33	0.51	0.84
Table 23. Predicted Crash Frequencies by Year (4ST_GE6)					2020 0.67					
					2040 5.92					
Total						66.90	3.19	1.69	1.50	3.19
Table 28. Predicted Crash Frequencies by Year (4SG)					2020 0.45					
					2040 4.28					
Total						48.07	2.29	0.80	1.49	2.29
Table 32. Predicted Crash Frequencies by Year (4SG_GE6)					2020 23.23					
					2040 49.64					
Total						796.00	37.90	20.00	17.91	37.90
					2020 32.16					
					2040 78.21					
Total						1178.23	56.11	28.51	27.60	56.11

**Combined Roadway Section and Intersection Crash Totals (Arterial)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi /yr)	Predicted Travel Crash Rate (crashes/mil lion veh-mi)	Predicted Intersection Travel Crash Rate (crashes/mil lion veh)	Intersection Crash Rate (crashes/yr)	
<b>Total</b>					<b>7.62</b>	<b>2579.02</b>	<b>122.81</b>	<b>54.03</b>	<b>68.78</b>	<b>28.67</b>	<b>2.79</b>	<b>1.77</b>	<b>56.11</b>
							Fatal 20.44	A 90.69	B 346.13	C 751.68	PDO 1370.11	2579.05	
2020					<b>59.04</b>	0.47	2.08	7.92	17.21	31.37	59.04		
2040					<b>192.15</b>	1.52	6.76	25.79	56.00	102.08	192.15		

# Roadway Section Crash Totals (Arterial)

Site Type  
Type: 6U

Table 6. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/mil lion veh-mi)
1	6U	US 50	Fortune Drive to Segale Road / Traditions Parkway	0.69	156.985	7.4755	2.9913	4.4841	10.834	0.87
2	6U	US 50	Segale Road / Traditions Parkway to Enterprise Way (W)	0.37	84.18	4.0086	1.604	2.4045	10.834	0.87
4	6U	US 50	Enterprise Way (W) to Graves Drive	0.52	117.835	5.6112	2.2452	3.366	10.7908	0.87
5	6U	US 50	Graves Drive to James Avenue / Enterprise Way (E)	0.48	42.939	2.0447	0.8457	1.199	4.2598	0.62
6	6U	US 50	James Avenue / Enterprise Way (E) to Ambrose Lane	0.4	90.642	4.3163	1.7271	2.5892	10.7908	0.87
7	6U	US 50	Ambrose Lane to Occidental Drive (W)	0.27	61.184	2.9135	1.1658	1.7477	10.7908	0.87
8	6U	US 50	Occidental Drive (W) to River Boat Road / Cardelli Road	0.16	34.87	1.6605	0.6649	0.9955	10.378	0.86
9	6U	US 50	River Boat Road / Cardelli Road to Occidental Drive (E)	0.26	48.282	2.2991	0.9253	1.3738	8.8428	0.82
10	6U	US 50	Occidental Drive (E) to Six Mile Canyon Road / Fort Churchill Road	0.42	69.22	3.2962	1.331	1.9652	7.8481	0.79
11	6U	US 50	Six Mile Canyon Road / Fort Churchill Road to Lafond Avenue	0.39	56.818	2.7056	1.0965	1.6092	6.9375	0.76
12	6U	US 50	Lafond Avenue to Mark Twain Avenue	0.35	50.87	2.4224	0.9815	1.4409	6.9211	0.76
13	6U	US 50	Mark Twain Avenue to Rainbow Drive (W)	0.29	39.671	1.8891	0.7671	1.122	6.5141	0.74
14	6U	US 50	Rainbow Drive (W) to Pinenut Drive	0.26	35.773	1.7035	0.6915	1.012	6.5518	0.75
15	6U	US 50	Pinenut Drive to Rainbow Drive (E)	0.45	59.548	2.8356	1.1526	1.683	6.3014	0.74
16	6U	US 50	Rainbow Drive (E) to Bryce Road / Chaves Road	0.34	46.552	2.2168	0.8999	1.3169	6.5199	0.75
		Total	Total	5.65	995.369	47.3985	19.0893	28.3092	8.3891	0.81

Table 7. Predicted Crash Frequencies by Year (6U)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	17.81	7.42	41.66	10.39	58.34
2021	20.01	8.31	41.52	11.7	58.48
2022	22.34	9.24	41.382	13.1	58.618
2023	24.8	10.23	41.248	14.57	58.752
2024	27.38	11.26	41.119	16.12	58.881
2025	30.09	12.34	40.995	17.75	59.005
2026	32.92	13.46	40.876	19.46	59.124
2027	35.86	14.62	40.762	21.24	59.238
2028	38.92	15.82	40.653	23.1	59.347
2029	42.09	17.07	40.549	25.02	59.451
2030	45.37	18.35	40.45	27.02	59.55
2031	48.77	19.68	40.355	29.09	59.645
2032	52.27	21.05	40.264	31.22	59.736
2033	55.88	22.45	40.176	33.43	59.824
2034	59.59	23.89	40.093	35.7	59.907
2035	63.41	25.37	40.012	38.04	59.988
2036	67.33	26.89	39.935	40.44	60.065
2037	71.35	28.44	39.86	42.91	60.14
2038	75.47	30.03	39.789	45.44	60.211
2039	79.69	31.66	39.72	48.04	60.28
2040	84.02	33.31	39.653	50.7	60.347
Total	995.37	400.88	40.274	594.49	59.726
Average	47.4	19.09	40.274	28.31	59.726

Note: Fatal and Injury Crashes and Property Damage Only Crashes do not necessarily sum up to Total Crashes because the distribution of these three crashes had been derived independently.

Table 8. Predicted USA 6U Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	2.9025	6.0773	19.3862	34.4519	94.1667
2	1.5564	3.2588	10.3955	18.4742	50.4952
4	2.1785	4.5615	14.5508	25.8587	70.6857
5	0.8206	1.7181	5.4807	9.7399	25.1799
6	1.6758	3.5088	11.1929	19.8913	54.3736
7	1.1312	2.3685	7.5552	13.4266	36.7022
8	0.6452	1.3509	4.3093	7.6581	20.9065
9	0.8978	1.8799	5.9968	10.657	28.8503
10	1.2914	2.704	8.6257	15.329	41.2699
11	1.0639	2.2276	7.1059	12.6281	33.7923
12	0.9524	1.9941	6.3611	11.3044	30.2583
13	0.7443	1.5584	4.9713	8.8347	23.5621
14	0.6709	1.4048	4.4812	7.9637	21.2522
15	1.1184	2.3417	7.4698	13.2748	35.3438
16	0.8731	1.8282	5.8319	10.3641	27.6544
Total	18.5223	38.7827	123.7144	219.8566	594.493
	1.86%	3.90%	12.43%	22.09%	59.73%

**Site Type**  
**Type: 6D**

Table 7. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi /yr)	Predicted Travel Crash Rate (crashes/mil lion veh-mi)
1	6D	US 50	Pine Cone Road to Retail Road / River Road	0.27	63.092	3.0044	1.231	1.7734	11.1273	0.81
2	6D	US 50	Retail Road / River Road to Fortune Drive	0.38	88.867	4.2318	1.739	2.4928	11.1362	0.78
		Total	Total	0.65	151.959	7.2361	2.97	4.2662	11.1325	0.79

Table 8. Predicted Crash Frequencies by Year (6D)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	4.24	1.67	39.272	2.58	60.728
2021	4.53	1.79	39.465	2.74	60.535
2022	4.82	1.91	39.649	2.91	60.351
2023	5.12	2.04	39.827	3.08	60.173
2024	5.41	2.17	39.998	3.25	60.002
2025	5.71	2.29	40.163	3.42	59.837
2026	6.01	2.42	40.322	3.58	59.678
2027	6.31	2.55	40.475	3.75	59.525
2028	6.61	2.68	40.624	3.92	59.376
2029	6.91	2.82	40.768	4.09	59.232
2030	7.21	2.95	40.907	4.26	59.093
2031	7.52	3.08	41.042	4.43	58.958
2032	7.82	3.22	41.174	4.6	58.826
2033	8.13	3.36	41.301	4.77	58.699
2034	8.44	3.5	41.425	4.94	58.575
2035	8.75	3.63	41.546	5.11	58.454
2036	9.06	3.77	41.663	5.28	58.337
2037	9.37	3.92	41.778	5.46	58.222
2038	9.68	4.06	41.89	5.63	58.11
2039	10	4.2	41.999	5.8	58.001
2040	10.31	4.34	42.105	5.97	57.895
Total	151.96	62.37	41.044	89.59	58.956
Average	7.24	2.97	41.044	4.27	58.956

Table 9. Predicted USA 6D Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.4816	2.0329	7.9046	15.4319	37.2408
2	0.6804	2.8717	11.1663	21.7999	52.3485
Total	1.162	4.9045	19.0709	37.2318	89.5893

Segment Aver: 0.76% 3.23% 12.55% 24.50% 58.96%  
1.31% 3.56% 12.49% 23.29% 59.34% 100.00%

**Site Type**  
**Type: 5T**

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Length (mi)	Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi /yr)	Predicted Travel Crash Rate (crashes/mil lion veh-mi)
1	5T	US 50	Bryce Road / Chaves Road	1.32	253.464	12.0697	3.4604	8.6093	9.1437	1.19
		Total	Total	1.32	253.464	12.0697	3.4604	8.6093	9.1437	1.19

Table 3. Predicted Crash Frequencies by Year (5T)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	4.83	1.46	30.255	3.37	69.746
2021	5.52	1.65	29.967	3.86	70.033
2022	6.21	1.85	29.733	4.37	70.267
2023	6.92	2.04	29.536	4.87	70.464
2024	7.62	2.24	29.369	5.38	70.63
2025	8.34	2.44	29.225	5.9	70.775
2026	9.06	2.63	29.099	6.42	70.901
2027	9.78	2.83	28.988	6.95	71.012
2028	10.51	3.04	28.888	7.47	71.112
2029	11.24	3.24	28.798	8.01	71.202
2030	11.98	3.44	28.717	8.54	71.283
2031	12.73	3.65	28.643	9.08	71.357
2032	13.48	3.85	28.575	9.63	71.425
2033	14.23	4.06	28.512	10.17	71.487
2034	14.99	4.26	28.454	10.72	71.546
2035	15.75	4.47	28.401	11.28	71.6
2036	16.51	4.68	28.35	11.83	71.65
2037	17.28	4.89	28.303	12.39	71.697
2038	18.05	5.1	28.259	12.95	71.741
2039	18.83	5.31	28.217	13.52	71.783
2040	19.61	5.53	28.178	14.09	71.822
Total	253.46	72.67	28.67	180.79	71.33
Average	12.07	3.46	28.67	8.61	71.33

### Intersection Crash Totals (Arterial)

Site Type  
Type: 3ST

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Neigh Road	5.77	0.27475	0.12735	0.14735	0.05	0.27475
			2020	0.09					
			2040	0.50					
		Total	Total	5.77	0.27475	0.12735	0.14735	0.05	0.27475

Site Type  
Type: 3ST\_GE6

Table 6. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Enterprise Way (W)	20.1625	0.96015	0.3367	0.6234	0.09	0.96015
			2020	0.43					
			2040	1.57					
3	3ST	US 50	Ambrose Lane	22.027	1.0489	0.38525	0.6636	0.1	1.0489
			2020	0.36					
			2040	1.88					
4	3ST	US 50	Occidental Drive (W)	27.2705	1.2986	0.58905	0.7095	0.125	1.2986
			2020	0.58					
			2040	2.07					
5	3ST	US 50	Mark Twain Avenue	5.431	0.2586	0.0834	0.1752	0.06	0.2586
			2020	0.15					
			2040	0.97					
			2020	1.51	5.89	2.5614	3.3287	0.13	5.89
			2040	6.48					
		Total	Total	74.891	3.56625	1.3944	2.1717	0.375	3.56625

Site Type  
Type: 3SG\_GE6

Table 11. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3SG	US 50	Pine Cone Road	88.165	4.1983	2.167	2.0313	0.29	4.1983
2	3SG	US 50	Fortune Drive	80.88	3.8514	2.0043	1.8471	0.27	3.8514
		Total	Total	169.045	8.0498	4.1714	3.8784	0.28	8.0498

Table 12. Predicted Crash Frequencies by Year (3SG\_GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	5.8	2.87	49.435	2.93	50.565
2021	6.05	3.01	49.726	3.04	50.274
2022	6.29	3.15	50.001	3.15	49.999
2023	6.53	3.28	50.261	3.25	49.739
2024	6.76	3.42	50.508	3.35	49.492
2025	6.99	3.55	50.742	3.44	49.258
2026	7.22	3.68	50.966	3.54	49.034
2027	7.44	3.81	51.179	3.63	48.821
2028	7.66	3.94	51.384	3.73	48.616
2029	7.88	4.07	51.58	3.82	48.42
2030	8.1	4.19	51.769	3.9	48.231
2031	8.31	4.32	51.95	3.99	48.05
2032	8.52	4.44	52.125	4.08	47.875
2033	8.73	4.56	52.293	4.16	47.707
2034	8.93	4.69	52.456	4.25	47.544
2035	9.14	4.81	52.614	4.33	47.386
2036	9.34	4.93	52.766	4.41	47.234
2037	9.54	5.05	52.914	4.49	47.086
2038	9.74	5.17	53.057	4.57	46.943
2039	9.94	5.29	53.196	4.65	46.804
2040	10.13	5.41	53.331	4.73	46.669
Total	169.04	87.6	51.82	81.45	48.18
Average	8.05	4.17	51.82	3.88	48.18

Table 13. Predicted USA 3SG\_GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.2857	2.754	12.8682	29.5996	42.6573
2	0.2643	2.5472	11.9021	27.3773	38.7891
Total	0.55	5.3012	24.7703	56.9769	81.4464
	0.33%	3.14%	14.65%	33.71%	48.18%

100.00%

Site Type  
Type: 4ST

Table 17. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Unknown	17.551	0.8358	0.3287	0.507	0.11	0.8358
		Total	Total	17.551	0.8358	0.3287	0.507	0.11	0.8358

Table 18. Predicted Crash Frequencies by Year (4ST)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	0.41	0.15	36.682	0.26	63.318
2021	0.45	0.17	36.993	0.28	63.007
2022	0.49	0.18	37.283	0.31	62.717
2023	0.54	0.2	37.557	0.34	62.443
2024	0.58	0.22	37.814	0.36	62.186
2025	0.62	0.24	38.058	0.39	61.942
2026	0.67	0.26	38.289	0.41	61.711
2027	0.71	0.27	38.509	0.44	61.491
2028	0.75	0.29	38.72	0.46	61.28
2029	0.8	0.31	38.921	0.49	61.079
2030	0.84	0.33	39.114	0.51	60.886
2031	0.88	0.35	39.299	0.53	60.701
2032	0.92	0.36	39.477	0.56	60.523
2033	0.96	0.38	39.65	0.58	60.35
2034	1.01	0.4	39.816	0.61	60.184
2035	1.05	0.42	39.976	0.63	60.024
2036	1.09	0.44	40.131	0.65	59.869
2037	1.13	0.46	40.282	0.68	59.718
2038	1.17	0.47	40.428	0.7	59.572
2039	1.22	0.49	40.57	0.72	59.43
2040	1.26	0.51	40.708	0.74	59.292
Total	17.551	6.9	39.333	10.65	60.667
Average	0.84	0.33	39.333	0.51	60.667

Site Type  
Type: 4ST\_GE6

Table 22. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Rainbow Drive (W)	17.39	0.82805	0.38245	0.4456	0.095	0.82805
			2020	0.31					
			2040	1.43					
2	4ST	US 50	Rainbow Drive (E)	20.075	0.956	0.5403	0.4156	0.11	0.956
3	4ST	US 50	Graves Lane	29.439	1.4019	0.7627	0.6392	0.11	1.4019
		Total	Total	83.644	3.9831	2.1786	1.8045	0.13	3.9831
			2020	0.67					
			2040	5.92					
		Total	Total	66.904	3.18595	1.68545	1.5004	0.315	3.18595

Table 23. Predicted Crash Frequencies by Year (4ST\_GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	0.98	0.6	61.367	0.38	38.633
2021	1.24	0.75	60.339	0.49	39.661
2022	1.51	0.9	59.483	0.61	40.517
2023	1.78	1.04	58.752	0.73	41.248
2024	2.06	1.2	58.108	0.86	41.892
2025	2.35	1.35	57.538	1	42.462
2026	2.64	1.51	57.021	1.14	42.979
2027	2.94	1.66	56.552	1.28	43.448
2028	3.25	1.82	56.119	1.43	43.881
2029	3.56	1.98	55.72	1.58	44.28
2030	3.88	2.15	55.347	1.73	44.653
2031	4.2	2.31	54.999	1.89	45.001
2032	4.53	2.48	54.672	2.05	45.328
2033	4.87	2.65	54.364	2.22	45.636
2034	5.21	2.82	54.072	2.39	45.928
2035	5.55	2.99	53.795	2.56	46.205
2036	5.9	3.16	53.532	2.74	46.468
2037	6.26	3.33	53.281	2.92	46.719
2038	6.62	3.51	53.04	3.11	46.96
2039	6.98	3.69	52.811	3.29	47.189
2040	7.35	3.87	52.59	3.48	47.41
Total	83.64	45.75	54.696	37.89	45.304
Average	3.98	2.18	54.696	1.8	45.304

Table 24. Predicted USA 4ST\_GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.0653	1.4524	5.3827	11.4866	15.7428
2	0.0403	0.8963	3.3217	7.0885	8.7286
3	0.0634	1.4106	3.387	11.1555	13.4229
Total	0.1689	3.7593	12.0913	29.7307	37.8943
	0.20%	4.49%	14.46%	35.55%	45.31%



Site Type  
Type: 4SG

Table 27. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4SG	US 50	Bryce Road / Chaves Road	48.066	2.2889	0.7998	1.489	0.24	2.2889
		Total	Total	48.066	2.2889	0.7998	1.489	0.24	2.2889

Table 28. Predicted Crash Frequencies by Year (4SG)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	0.45	0.15	33.561	0.3	66.439
2021	0.64	0.21	33.525	0.43	66.475
2022	0.81	0.27	33.607	0.54	66.393
2023	0.98	0.33	33.723	0.65	66.277
2024	1.16	0.39	33.851	0.76	66.149
2025	1.33	0.45	33.983	0.88	66.017
2026	1.5	0.51	34.116	0.99	65.884
2027	1.68	0.58	34.248	1.11	65.752
2028	1.86	0.64	34.377	1.22	65.623
2029	2.05	0.71	34.504	1.34	65.496
2030	2.24	0.78	34.627	1.46	65.373
2031	2.43	0.84	34.747	1.58	65.253
2032	2.62	0.91	34.864	1.71	65.136
2033	2.82	0.99	34.977	1.83	65.023
2034	3.02	1.06	35.087	1.96	64.913
2035	3.22	1.13	35.195	2.09	64.805
2036	3.43	1.21	35.299	2.22	64.701
2037	3.64	1.29	35.401	2.35	64.599
2038	3.85	1.37	35.499	2.48	64.501
2039	4.06	1.45	35.596	2.62	64.404
2040	4.28	1.53	35.69	2.75	64.311
Total	48.07	16.8	34.945	31.27	65.055
Average	2.29	0.8	34.945	1.49	65.055

Site Type  
Type: 4SG\_GE6

Table 31. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4SG	US 50	Retail Road / River Road	101.285	4.8231	2.5704	2.2527	0.32	4.8231
2	4SG	US 50	Segale Road / Traditions Parkway	96.712	4.6053	2.4461	2.1593	0.35	4.6053
3	4SG	US 50	James Avenue / Enterprise Way (E)	83.93	3.9967	2.1221	1.8746	0.31	3.9967
4	4SG	US 50	River Boat Road / Cardellie Road	116.397	5.5427	2.9289	2.6138	0.44	5.5427
5	4SG	US 50	Occidental Drive (E)	82.105	3.9098	2.0596	1.8501	0.34	3.9098
6	4SG	US 50	Six Mile Canyon Road / Fort Churchill Road	110.619	5.2676	2.7625	2.5051	0.49	5.2676
7	4SG	US 50	Lafond Avenue	100.502	4.7858	2.5106	2.2752	0.46	4.7858
8	4SG	US 50	Pinenut Drive	104.449	4.9738	2.5984	2.3754	0.55	4.9738
		Total	Total	796	37.9047	19.9986	17.9061	0.4	37.9047

Table 32. Predicted Crash Frequencies by Year (4SG\_GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	23.23	11.88	51.147	11.35	48.853
2021	25.35	13.02	51.372	12.33	48.628
2022	27.2	14.03	51.573	13.17	48.427
2023	28.89	14.95	51.756	13.94	48.244
2024	30.48	15.82	51.925	14.65	48.075
2025	31.97	16.65	52.081	15.32	47.919
2026	33.4	17.44	52.227	15.96	47.773
2027	34.77	18.21	52.364	16.56	47.636
2028	36.09	18.95	52.492	17.15	47.508
2029	37.38	19.66	52.613	17.71	47.387
2030	38.62	20.36	52.728	18.26	47.272
2031	39.83	21.05	52.837	18.79	47.163
2032	41.01	21.71	52.94	19.3	47.06
2033	42.17	22.36	53.039	19.8	46.961
2034	43.3	23	53.134	20.29	46.866
2035	44.4	23.63	53.224	20.77	46.776
2036	45.49	24.25	53.311	21.24	46.689
2037	46.55	24.86	53.395	21.7	46.605
2038	47.6	25.45	53.475	22.14	46.525
2039	48.62	26.04	53.553	22.59	46.447
2040	49.64	26.62	53.627	23.02	46.373
Total	796	419.97	52.76	376.03	47.24
Average	37.91	20	52.76	17.91	47.24

Table 33. Predicted USA 4SG\_GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.2954	2.8474	14.2697	36.5666	47.3063
2	0.2811	2.7097	13.5792	34.7972	45.3447
3	0.2439	2.3508	11.7808	30.1889	39.3657
4	0.3366	3.2446	16.2598	41.6663	54.8893
5	0.2367	2.2816	11.4339	29.2999	38.8531
6	0.3175	3.0602	15.3359	39.2988	52.6071
7	0.2886	2.7812	13.9375	35.7154	47.7797
8	0.2986	2.8784	14.4248	36.9642	49.8829
Total	2.2985	22.1538	111.0215	284.4973	376.0286

Intersection	0.29%	2.78%	13.95%	35.74%	47.24%	100.00%
Average	0.27%	3.47%	14.35%	35.00%	46.91%	100.00%
Segment / Intersection Ave	0.79%	3.52%	13.42%	29.15%	53.13%	100.00%

**US 50 Intersections Arterial - Enterprise Way (W)**

Site Type

Type: 3ST\_GE6

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Enterprise Way (W)	29.956	1.4265	0.553	0.8735	0.11	1.4265
			2020	0.64					
			2040	2.31					
		Total	Total	29.956	1.4265	0.553	0.8735	0.11	1.4265

Site Type

Type: 3ST\_1WA

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Enterprise Way (W)	10.369	0.4938	0.1204	0.3733	0.07	0.4938
			2020	0.22					
			2040	0.82					
		Total	Total	10.369	0.4938	0.1204	0.3733	0.07	0.4938

Site Type

Average of 3ST\_GE6 and 3ST

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Enterprise Way (W)	20.1625	0.96015	0.3367	0.6234	0.09	0.96015
			2020	0.43					
			2040	1.565					
		Total	Total	20.1625	0.96015	0.3367	0.6234	0.09	0.96015

**US 50 Intersections Arterial - Ambrose Lane (W)**

Site Type

3ST\_GE6

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
3	3ST	US 50	Ambrose Lane	32.668	1.5556	0.6454	0.9102	0.12	1.5556
			2020	0.52					
			2040	2.77					
		Total	Total	32.668	1.5556	0.6454	0.9102	0.12	1.5556

Site Type

3ST\_1WA

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Ambrose Lane	11.386	0.5422	0.1251	0.417	0.08	0.5422
			2020	0.19					
			2040	0.98					
		Total	Total	11.386	0.5422	0.1251	0.417	0.08	0.5422

Site Type

Average of 3ST\_GE6 and 3ST

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Ambrose Lane	22.027	1.0489	0.38525	0.6636	0.1	1.0489
			2020	0.355					
			2040	1.875					
		Total	Total	22.027	1.0489	0.38525	0.6636	0.1	1.0489

**US 50 Intersections Arterial - Occidental Road (W)**

Site Type  
3ST\_GE6

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
4	3ST	US 50	Occidental Road (W)	43.796	2.0855	1.0557	1.0298	0.17	2.0855
			2020	0.89					
			2040	3.44					
		Total	Total	43.796	2.0855	1.0557	1.0298	0.17	2.0855

Site Type  
3ST\_1WA

Table 7. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Occidental Drive (W)	10.745	0.5117	0.1224	0.3892	0.08	0.5117
			2020	0.26					
			2040	0.7					
		Total	Total	10.745	0.5117	0.1224	0.3892	0.08	0.5117

Site Type  
Average of 3ST\_GE6 and 3ST\_1WA

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Occidental Drive (W)	27.2705	1.2986	0.58905	0.7095	0.125	1.2986
			2020	0.58					
			2040	2.07					
		Total	Total	27.2705	1.2986	0.58905	0.7095	0.125	1.2986

**US 50 Intersections Arterial - Mark Twain Avenue**

Site Type  
3ST\_GE6

ash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Mark Twain Avenue	16.588	0.7899	0.2852	0.5047	0.09	0.7899
			2020	0.22					
			2040	1.46					
		Total	Total	16.588	0.7899	0.2852	0.5047	0.09	0.7899

Site Type  
3ST\_1WA

ash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Mark Twain Avenue	5.431	0.2586	0.0834	0.1752	0.06	0.2586
			2020	0.08					
			2040	0.48					
		Total	Total	5.431	0.2586	0.0834	0.1752	0.06	0.2586

Site Type  
Average of 3ST\_GE6 and 3ST\_1WA

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST\_1WA)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Mark Twain Avenue	11.0095	0.52425	0.1843	0.33995	0.075	0.52425
			2020	0.15					
			2040	0.97					
		Total	Total	11.0095	0.52425	0.1843	0.33995	0.075	0.52425

**US 50 Intersections Arterial - Rainbow Drive (W)**

Site Type  
3ST\_1WA

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Rainbow Drive (W)	6.191	0.2948	0.0888	0.206	0.07	0.2948
2	3ST	US 50	Rainbow Drive (W)	6.899	0.3285	0.0935	0.235	0.07	0.3285
			2020	0.17					
			2040	1.21					
		Total	Total	13.09	0.6233	0.1823	0.441	0.07	0.6233

Site Type  
4ST\_GE6

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Rainbow Drive (W)	21.69	1.0328	0.5826	0.4502	0.12	1.0328
			2020	0.45					
			2040	1.65					
		Total	Total	21.69	1.0328	0.5826	0.4502	0.12	1.0328

Site Type

Average of 3ST\_1WA and 4ST\_GE6

Predicted Crash Frequencies by Year (Ave of (3ST\_1WA+4ST\_GE6)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Rainbow Drive (W)	17.39	0.82805	0.38245	0.4456	0.095	0.82805
			2020	0.31					
			2040	1.43					
		Total	Total	17.39	0.82805	0.38245	0.4456	0.095	0.82805

**US 50 Intersections Arterial - Neigh Road**

Site Type

3ST

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Neigh Road	7.455	0.355	0.1832	0.1717	0.05	0.355
			2020	0.12					
			2040	0.63					
		Total	Total	7.455	0.355	0.1832	0.1717	0.05	0.355

Site Type

3ST\_1WA

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Neigh Road	4.085	0.1945	0.0715	0.123	0.05	0.1945
			2020	0.06					
			2040	0.36					
		Total	Total	4.085	0.1945	0.0715	0.123	0.05	0.1945

Site Type

Average of 3ST and 3ST\_1WA

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST\_1WA)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Neigh Road	5.77	0.27475	0.12735	0.14735	0.05	0.27475
			2020	0.09					
			2040	0.50					
		Total	Total	5.77	0.27475	0.12735	0.14735	0.05	0.27475

**Roadway Section Crash Totals (Parkway)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/milli on veh-mi)
Table 3. Predicted Crash Frequencies by Year (6U)					2020	14.22				
					2040	63.98				
Total					3.57	771.11	36.72	14.71	22.01	10.29
Table 8. Predicted Crash Frequencies by Year (6D)					2020	4.23				
					2040	10.31				
Total					0.65	151.79	7.23	2.97	4.26	11.12
Table 3. Predicted Crash Frequencies by Year (5T)					2020	13.15				
					2040	55.93				
Total					3.40	715.78	34.08	9.73	24.35	10.02
					2020	31.60				
					2040	130.22				
Total					7.62	1638.67	78.03	27.41	50.62	31.43

**Intersection Crash Totals (Parkway)**

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/milli on veh)	Intersection Crash Rate (crashes/yr)
Table 3. Predicted Crash Frequencies by Year (3ST)				2020	0.61				
				2040	3.08				
Total					38.43	1.83	0.83	1.00	0.07
Table 7. Predicted Crash Frequencies by Year (3ST GE6)				2020	3.07				
				2040	10.62				
Total					137.03	7.82	3.72	4.11	0.15
Table 12. Predicted Crash Frequencies by Year (3SG GE6)				2020	2.70				
				2040	4.91				
Total					80.74	3.84	2.00	1.84	0.27
Table 18. Predicted Crash Frequencies by Year (4ST)				2020	1.56				
				2040	6.76				
Total					86.75	4.13	1.65	2.49	0.47
Table 23. Predicted Crash Frequencies by Year (4ST GE6)				2020	2.01				
				2040	5.22				
Total					78.15	3.72	1.89	1.83	0.32
Table 28. Predicted Crash Frequencies by Year (4SG)				2020	0.45				
				2040	4.39				
Total					49.29	2.35	0.82	1.53	0.24
Table 32. Predicted Crash Frequencies by Year (4SG GE6)				2020	13.74				
				2040	28.44				
Total					457.45	21.78	11.52	10.26	0.41
				2020	24.13				
				2040	63.42				
Total					927.84	43.64	22.27	21.48	5.50

**Combined Roadway Section and Intersection Crash Totals (Parkway)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/milli on veh-mi)	Predicted Intersection Travel Crash Rate (crashes/milli on veh)	Intersection Crash Rate (crashes/yr)
Total				7.62	2566.51	121.67	49.68	72.10	31.43	2.84	5.50	41.64

	Fatal	A	B	C	PDO	
	19.95	90.66	347.98	724.21	1383.69	2566.48
2020	0.43	1.97	7.56	15.73	30.05	55.73
2040	1.50	6.84	26.25	54.64	104.39	193.63

## Roadway Section Crash Totals (Parkway)

Site Type  
Type: 6U

Table 6. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/milli on veh-mi)	
1	6U	US 50	Fortune Drive to Segale Road / Traditions Parkway	0.69	156.99	7.48	2.99	4.48	10.83	0.87	
2	6U	US 50	Segale Road / Traditions Parkway to Enterprise Way (W)	0.37	84.18	4.01	1.60	2.40	10.83	0.87	
4	6U	US 50	Enterprise Way (W) to Graves Drive	0.52	117.84	5.61	2.25	3.37	10.79	0.87	
5	6U	US 50	Graves Drive to James Avenue / Enterprise Way (E)	0.48	108.77	5.18	2.07	3.11	10.79	0.87	
6	6U	US 50	James Avenue / Enterprise Way (E) to Ambrose Lane	0.4	90.64	4.32	1.73	2.59	10.79	0.87	
7	6U	US 50	Ambrose Lane to Occidental Drive (W)	0.27	61.18	2.91	1.17	1.75	10.79	0.87	
8	6U	US 50	Occidental Drive (W) to River Boat Road / Cardelli Road	0.16	34.01	1.62	0.65	0.97	10.12	0.85	
9	6U	US 50	River Boat Road / Cardelli Road to Occidental Drive (E)	0.26	48.28	2.30	0.93	1.37	8.84	0.82	
10	6U	US 50	Occidental Drive (E) to Six Mile Canyon Road / Fort Churchill Road	0.42	69.22	3.30	1.33	1.97	7.85	0.79	
		<b>Total</b>	<b>Total</b>		<b>3.57</b>	<b>771.11</b>	<b>36.72</b>	<b>14.71</b>	<b>22.01</b>	<b>10.29</b>	<b>0.86</b>

Table 7. Predicted Crash Frequencies by Year (6U)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	14,220	5,890	41.428	8,330	58.572
2021	15,960	6,590	41.271	9,370	58.729
2022	17,790	7,320	41.125	10,470	58.875
2023	19,700	8,070	40.987	11,630	59.013
2024	21,700	8,870	40.857	12,830	59.143
2025	23,770	9,690	40.735	14,090	59.265
2026	25,920	10,530	40.620	15,400	59.380
2027	28,170	11,410	40.511	16,760	59.489
2028	30,490	12,320	40.407	18,170	59.593
2029	32,880	13,250	40.309	19,630	59.691
2030	35,350	14,210	40.215	21,130	59.785
2031	37,890	15,200	40.126	22,690	59.874
2032	40,510	16,220	40.041	24,290	59.959
2033	43,200	17,260	39.959	25,930	60.041
2034	45,950	18,330	39.882	27,630	60.118
2035	48,790	19,420	39.807	29,370	60.193
2036	51,690	20,540	39.735	31,150	60.265
2037	54,660	21,680	39.666	32,980	60.334
2038	57,700	22,850	39.599	34,850	60.401
2039	60,800	24,040	39.535	36,760	60.465
2040	63,980	25,250	39.473	38,720	60.527
Total	771,110	308,940	40.064	462,170	59.936
Average	36,720	14,710	40.064	22,010	59.936

Table 8. Predicted USA 6U Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	2.9025	6.0773	19.3862	34.4519	94.1667
2	1.5564	3.2588	10.3955	18.4742	50.4952
4	2.1785	4.5615	14.5508	25.8587	70.8857
5	2.0109	4.2106	13.4315	23.8695	65.2483
6	1.6758	3.5088	11.1929	19.8913	54.3736
7	1.1312	2.3685	7.5552	13.4266	36.7022
8	0.6298	1.3187	4.2066	7.4756	20.378
9	0.8978	1.8799	5.9968	10.6577	28.8933
10	1.2914	2.704	8.6257	15.329	41.2699
Total	14.2743	29.8882	95.3412	169.4338	462.1699
	1.85%	3.88%	12.36%	21.97%	59.94%

100.00%

Site Type  
Type: 6D

Table 7. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/milli on veh-mi)
1	6D	US 50	Pine Cone Road to Retail Road / River Road	0.27	62.92	3.00	1.23	1.77	11.10	0.81
2	6D	US 50	Retail Road / River Road to Fortune Drive	0.38	88.87	4.23	1.74	2.49	11.14	0.78
		<b>Total</b>	<b>Total</b>		<b>0.65</b>	<b>151.79</b>	<b>7.23</b>	<b>2.97</b>	<b>11.12</b>	<b>0.79</b>

Table 8. Predicted Crash Frequencies by Year (6D)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	4.723	1.66	39.262	2.57	60.738
2021	4.52	1.78	39.455	2.73	60.545
2022	4.81	1.91	39.641	2.9	60.359
2023	5.1	2.03	39.819	3.07	60.181
2024	5.4	2.16	39.991	3.24	60.009
2025	5.7	2.29	40.156	3.41	59.844
2026	6	2.42	40.316	3.58	59.684
2027	6.3	2.55	40.477	3.75	59.53
2028	6.6	2.68	40.619	3.92	59.381
2029	6.9	2.81	40.764	4.09	59.236
2030	7.21	2.95	40.904	4.26	59.096
2031	7.51	3.08	41.039	4.43	58.961
2032	7.82	3.22	41.171	4.6	58.829
2033	8.12	3.35	41.299	4.77	58.701
2034	8.43	3.49	41.423	4.94	58.577
2035	8.74	3.63	41.544	5.11	58.456
2036	9.05	3.77	41.662	5.28	58.338
2037	9.37	3.91	41.777	5.45	58.223
2038	9.68	4.05	41.889	5.63	58.111
2039	10	4.2	41.998	5.8	58.002
2040	10.31	4.34	42.105	5.97	57.895
Total	151.79	62.3	41.041	89.49	58.959
Average	7.23	2.97	41.041	4.26	58.959

Table 9. Predicted USA 6D Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.4802	2.027	7.8817	15.3874	37.1433
2	0.6804	2.8717	11.1463	21.7999	52.3485
Total	1.1606	4.8987	19.0481	37.1872	89.4918
	0.76%	3.23%	12.55%	24.50%	58.96%
	1.31%	3.55%	12.46%	23.24%	59.45%

100.00%

100.00%

Site Type  
Type: 5T

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/milli on veh-mi)	
1	5T	US 50	Six Mile Canyon Road / Fort Churchill Road to Lafond Avenue	0.39	89.728	4.273	1.216	3.057	10.956	1.200	
2	5T	US 50	Lafond Avenue to Mark Twain Avenue	0.35	80.224	3.820	1.087	2.733	10.915	1.200	
3	5T	US 50	Mark Twain Avenue to Rainbow Drive (W)	0.29	63.781	3.037	0.866	2.171	10.473	1.200	
4	5T	US 50	Rainbow Drive (W) to Pinenut Drive	0.26	57.329	2.730	0.778	1.952	10.500	1.200	
5	5T	US 50	Pinenut Drive to Rainbow Drive (E)	0.45	96.598	4.600	1.313	3.287	10.222	1.190	
6	5T	US 50	Rainbow Drive (E) to Bryce Road / Chaves Road	0.34	74.653	3.555	1.013	2.542	10.456	1.200	
7	5T	US 50	Bryce Road / Chaves Road to MP 15	1.32	253.464	12.070	3.460	8.609	9.144	1.190	
			Total		3.4	715.776	34.085	9.733	24.352	10.025	1.190

Table 3. Predicted Crash Frequencies by Year (5T)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	13.15	3.96	30.13	9.19	69.87
2021	15.14	4.52	29.839	10.62	70.161
2022	17.14	5.08	29.604	12.07	70.396
2023	19.17	5.64	29.409	13.53	70.591
2024	21.21	6.2	29.244	15.01	70.757
2025	23.27	6.77	29.101	16.5	70.899
2026	25.35	7.35	28.977	18	71.022
2027	27.45	7.92	28.868	19.52	71.132
2028	29.56	8.5	28.771	21.05	71.229
2029	31.68	9.09	28.683	22.59	71.317
2030	33.82	9.68	28.604	24.15	71.396
2031	35.98	10.27	28.532	25.71	71.468
2032	38.15	10.86	28.466	27.29	71.534
2033	40.33	11.46	28.405	28.87	71.595
2034	42.52	12.05	28.349	30.47	71.651
2035	44.73	12.66	28.297	32.07	71.703
2036	46.95	13.26	28.248	33.68	71.752
2037	49.17	13.87	28.202	35.31	71.798
2038	51.42	14.48	28.159	36.94	71.841
2039	53.67	15.09	28.119	38.58	71.882
2040	55.93	15.71	28.08	40.23	71.92
Total	715.78	204.4	28.556	511.38	71.444
Average	34.09	9.73	28.556	24.35	71.444

### Intersection Crash Totals (Parkway)

Site Type  
Type: 3ST

Table 3. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/milli on veh)	Intersection Crash Rate (crashes/yr)	
1	3ST	US 50	Neigh Road	2020 0.09 2040 0.495	5.77	0.4129	0.2056	0.2072	0.05	0.4129
2	3ST	US 50	Lafond Avenue		19.095	0.9093	0.3741	0.5352	0.1	0.9093
3	3ST	US 50	Mark Twian Avenue	2020 0.61 2040 2.94	10.669	0.508	0.2577		0.06	0.508
			<b>Total</b>		<b>38.434</b>	<b>1.8302</b>	<b>0.83</b>	<b>1.0002</b>	<b>0.07</b>	<b>1.8302</b>

Table 4. Predicted Crash Frequencies by Year (3ST)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	0.64	0.3	47.094	0.34	52.906
2021	0.73	0.34	47.013	0.39	52.987
2022	0.83	0.39	46.893	0.44	53.107
2023	0.93	0.44	46.786	0.5	53.214
2024	1.04	0.48	46.651	0.55	53.349
2025	1.15	0.53	46.533	0.61	53.467
2026	1.26	0.58	46.392	0.67	53.608
2027	1.37	0.63	46.271	0.74	53.729
2028	1.49	0.69	46.13	0.8	53.87
2029	1.6	0.74	46.008	0.87	53.992
2030	1.73	0.79	45.869	0.94	54.131
2031	1.85	0.85	45.749	1	54.251
2032	1.98	0.9	45.613	1.07	54.387
2033	2.1	0.96	45.496	1.15	54.504
2034	2.24	1.01	45.364	1.22	54.636
2035	2.37	1.07	45.251	1.3	54.749
2036	2.51	1.13	45.122	1.38	54.878
2037	2.64	1.19	45.012	1.45	54.988
2038	2.78	1.25	44.888	1.53	55.112
2039	2.92	1.31	44.782	1.61	55.218
2040	3.07	1.37	44.661	1.7	55.339
Total	37.22	16.96	45.569	20.26	54.431
Average	1.77	0.81	45.569	0.96	54.431

Site Type  
Type: 3ST\_GE6

Table 7. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/milli on veh)	Intersection Crash Rate (crashes/yr)	
1	3ST	US 50	Enterprise Way (W)		28.903	1.3763	0.5357	0.8406	0.11	1.3763
3	3ST	US 50	Ambrose Lane	2020 0.355 2040 1.875	22.027	1.0489	0.38525	0.6636	0.1	1.0489
4	3ST	US 50	Occidental Drive (W)	2020 0.575 2040 2.295	28.879	1.3752	0.58905	0.7095	0.125	1.2986
6	3ST	US 50	Pine Cone Road	2020 0.935 2040 2.745	37.712	1.7958	0.791	1.0048	0.155	1.7958
			<b>Total</b>		<b>164.281</b>	<b>7.8229</b>	<b>3.7172</b>	<b>4.1057</b>	<b>0.15</b>	<b>7.8229</b>
				2020 2.565 2040 9.235						
			<b>Total</b>		<b>117.521</b>	<b>7.8229</b>	<b>3.7172</b>	<b>4.1057</b>	<b>0.15</b>	<b>7.8229</b>

Table 8. Predicted Crash Frequencies by Year (3ST\_GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	3.55	1.74	49.059	1.81	50.941
2021	3.91	1.91	48.819	2	51.181
2022	4.29	2.09	48.619	2.21	51.381
2023	4.68	2.27	48.429	2.41	51.571
2024	5.08	2.45	48.271	2.63	51.729
2025	5.48	2.64	48.117	2.85	51.883
2026	5.9	2.83	47.989	3.07	52.011
2027	6.33	3.03	47.863	3.3	52.137
2028	6.76	3.23	47.759	3.53	52.241
2029	7.21	3.44	47.654	3.77	52.346
2030	7.66	3.65	47.568	4.02	52.432
2031	8.12	3.86	47.48	4.27	52.52
2032	8.6	4.08	47.409	4.52	52.591
2033	9.07	4.29	47.334	4.78	52.666
2034	9.56	4.52	47.275	5.04	52.725
2035	10.06	4.75	47.211	5.31	52.789
2036	10.56	4.98	47.161	5.58	52.839
2037	11.07	5.22	47.107	5.86	52.893
2038	11.6	5.46	47.065	6.14	52.935
2039	12.12	5.7	47.018	6.42	52.982
2040	12.66	5.95	46.983	6.71	53.017
Total	164.28	78.06	47.517	86.22	52.483
Average	7.82	3.72	47.517	4.11	52.483

Table 9. Predicted USA 3ST\_GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.0399	0.8886	3.2933	7.0278	17.6531
3	0.0498	1.1073	4.1036	8.757	19.3335
4	0.0815	1.8128	6.7184	14.337	21.8582
6	0.1059	2.3575	8.7369	18.6445	27.3741
Total	0.2771	6.1662	22.8521	48.7664	86.2189
	0.17%	3.75%	13.91%	29.68%	52.48%

100.00%



Site Type  
Type: 3SG\_GE6

Table 12. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
2	3SG	US 50	Fortune Drive	80,737	3,8446	2,0003	1,8444	0.27	3,8446
			2020		2,7				
			2040		4,91				
			Total	80,737	3,8446	2,0003	1,8444	0.27	3,8446

Table 13. Predicted Crash Frequencies by Year (3SG GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	2,7	1,34	49,515	1,36	50,485
2021	2,82	1,41	49,824	1,42	50,176
2022	2,95	1,48	50,114	1,47	49,886
2023	3,07	1,55	50,388	1,52	49,612
2024	3,19	1,61	50,648	1,57	49,352
2025	3,3	1,68	50,894	1,62	49,106
2026	3,42	1,75	51,128	1,67	48,872
2027	3,53	1,81	51,351	1,72	48,649
2028	3,65	1,88	51,565	1,77	48,435
2029	3,76	1,95	51,769	1,81	48,231
2030	3,87	2,01	51,966	1,86	48,034
2031	3,98	2,07	52,154	1,9	47,846
2032	4,08	2,14	52,336	1,95	47,664
2033	4,19	2,2	52,51	1,99	47,49
2034	4,3	2,26	52,679	2,03	47,321
2035	4,4	2,33	52,842	2,08	47,158
2036	4,5	2,39	53	2,12	47
2037	4,61	2,45	53,153	2,16	46,847
2038	4,71	2,51	53,3	2,2	46,7
2039	4,81	2,57	53,444	2,24	46,556
2040	4,91	2,63	53,583	2,28	46,417
Total	80,74	42,01	52,028	38,73	47,972
Average	3,85	2	52,028	1,84	47,972

Table 14. Predicted USA 3SG\_GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
2	0,2637	2,542	11,878	27,3218	38,7315
Total	0,2637	2,542	11,878	27,3218	38,7315
	0,33%	3,15%	14,71%	33,84%	47,97%

100,00%

Site Type  
Type: 4ST

Table 18. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)	
1	4ST	US 50	Unknown	14,958	0,7123	0,281	0,4313	0,09	0,7123	
2	4ST	US 50	Rainbow Drive (W)	2020 0,395 2040 1,74	21,7255	1,03455	0,38605	0,64845	0,115	1,03455
3	4ST	US 50	Pinenut Drive	32,843	1,564	0,6507	0,9133	0,17	1,564	
4	4ST	US 50	Rainbow Drive (E)	17,222	0,8201	0,328	0,4921	0,09	0,8201	
			Total	2020 1,555 2040 6,76	95,433	4,5444	1,8506	2,6924	0,33	4,5444
			Total	86,7485	4,13095	1,64575	2,48515	0,465	4,13095	

Table 19. Predicted Crash Frequencies by Year (4ST)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	1,78	0,66	36,964	1,12	63,036
2021	2,07	0,78	37,404	1,3	62,596
2022	2,35	0,89	37,819	1,46	62,181
2023	2,63	1	38,208	1,62	61,792
2024	2,9	1,12	38,572	1,78	61,428
2025	3,18	1,24	38,914	1,94	61,086
2026	3,45	1,35	39,237	2,1	60,763
2027	3,72	1,47	39,541	2,25	60,459
2028	4	1,59	39,83	2,4	60,17
2029	4,27	1,71	40,103	2,56	59,897
2030	4,54	1,83	40,364	2,71	59,636
2031	4,82	1,96	40,612	2,86	59,388
2032	5,09	2,08	40,85	3,01	59,15
2033	5,36	2,2	41,078	3,16	58,922
2034	5,64	2,33	41,297	3,31	58,703
2035	5,91	2,46	41,506	3,46	58,494
2036	6,19	2,58	41,709	3,61	58,291
2037	6,46	2,71	41,903	3,76	58,097
2038	6,74	2,84	42,092	3,9	57,908
2039	7,02	2,97	42,273	4,05	57,727
2040	7,29	3,1	42,45	4,2	57,55
Total	95,43	38,86	40,722	56,57	59,278
Average	4,54	1,85	40,722	2,69	59,278

Site Type  
Type: 4ST\_GE6

Table 23. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/milli on veh)	Intersection Crash Rate (crashes/yr)
3	4ST	US 50	Occidental Drive (E)	34.74	1.6543	0.73655	0.91775	0.15	1.6543
				2020 1.225					
				2040 1.75					
4	4ST	US 50	Enterprise Way (E) / James Avenue	12.2	0.5809	0.3444	0.2366	0.05	0.5809
6	4ST	US 50	Graves Drive	31.211	1.4862	0.8064	0.6798	0.12	1.4862
			Total	92.959	4.4266	2.3918	2.0348	0.12	4.4266
			2020	2.005					
			2040	5.22					
			Total	78.151	3.7214	1.88735	1.83415	0.32	3.7214

Table 24. Predicted Crash Frequencies by Year (4ST\_GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	2.83	1.55	54.78	1.28	45.22
2021	3.04	1.66	54.657	1.38	45.343
2022	3.25	1.77	54.547	1.48	45.453
2023	3.44	1.87	54.452	1.56	45.548
2024	3.62	1.97	54.365	1.65	45.635
2025	3.79	2.06	54.29	1.74	45.71
2026	3.96	2.15	54.221	1.81	45.779
2027	4.12	2.23	54.161	1.89	45.839
2028	4.28	2.31	54.105	1.96	45.895
2029	4.42	2.39	54.056	2.03	45.944
2030	4.56	2.46	54.009	2.1	45.991
2031	4.69	2.53	53.969	2.16	46.031
2032	4.82	2.6	53.93	2.22	46.07
2033	4.93	2.66	53.897	2.27	46.103
2034	5.04	2.72	53.864	2.33	46.136
2035	5.15	2.77	53.835	2.38	46.165
2036	5.24	2.82	53.806	2.42	46.194
2037	5.33	2.87	53.78	2.46	46.22
2038	5.41	2.91	53.752	2.5	46.248
2039	5.49	2.95	53.727	2.54	46.273
2040	5.55	2.98	53.699	2.57	46.301
Total	92.96	50.23	54.032	42.73	45.968
Average	4.43	2.39	54.032	2.04	45.968

Table 25. Predicted USA 4ST\_GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
3	0.0925	2.0587	7.6295	16.2814	23.487
4	0.0257	0.5713	2.1171	4.518	4.9676
6	0.0601	1.3376	4.9573	10.5789	14.2768
Total	0.1783	3.9676	14.7039	31.3783	42.7313
	0.19%	4.27%	15.82%	33.75%	45.97%

100.00%

Site Type  
Type: 4SG

Table 28. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/milli on veh)	Intersection Crash Rate (crashes/yr)
1	4SG	US 50	Bryce Road / Chaves Road	49.289	2.3471	0.8193	1.5277	0.24	2.3471
				2020 0.45					
				2040 4.39					
			Total	49.289	2.3471	0.8193	1.5277	0.24	2.3471

Table 29. Predicted Crash Frequencies by Year (4SG)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	0.45	0.15	33.561	0.3	66.439
2021	0.65	0.22	33.504	0.43	66.496
2022	0.83	0.28	33.582	0.55	66.418
2023	1.01	0.34	33.695	0.67	66.305
2024	1.18	0.4	33.821	0.78	66.179
2025	1.36	0.46	33.952	0.9	66.048
2026	1.54	0.53	34.084	1.01	65.916
2027	1.72	0.59	34.214	1.13	65.786
2028	1.91	0.66	34.343	1.25	65.657
2029	2.1	0.72	34.468	1.38	65.532
2030	2.29	0.79	34.591	1.5	65.409
2031	2.49	0.86	34.71	1.63	65.29
2032	2.69	0.94	34.826	1.75	65.174
2033	2.89	1.01	34.939	1.88	65.061
2034	3.1	1.09	35.048	2.01	64.951
2035	3.31	1.16	35.155	2.15	64.845
2036	3.52	1.24	35.259	2.28	64.741
2037	3.73	1.32	35.36	2.41	64.64
2038	3.95	1.4	35.459	2.55	64.541
2039	4.17	1.48	35.554	2.69	64.446
2040	4.39	1.56	35.648	2.82	64.352
Total	49.29	17.21	34.909	32.08	65.091
Average	2.35	0.82	34.909	1.53	65.091

Site Type  
Type: 4SG\_GE6

Table 32. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4SG	US 50	Retail Road / River Road	102.804	4.8954	2.6075	2.2879	0.33	4.8954
4	4SG	US 50	River Boat Road / Cardelle Road	130.613	6.2197	3.2928	2.9269	0.46	6.2197
6	4SG	US 50	Six Mile Canyon Road / Fort Churchill Road	122.248	5.8214	3.0503	2.771	0.52	5.8214
7	4SG	US 50	Segale Road / Traditions Parkway	101.784	4.8469	2.5732	2.2737	0.37	4.8469
			2020	13.74					
			2040	28.44					
		Total	Total	457.45	21.7833	11.5238	10.2595	0.41	21.7833

Table 33. Predicted Crash Frequencies by Year (4SG GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	13.74	7.07	51.427	6.67	48.573
2021	14.82	7.65	51.625	7.17	48.375
2022	15.79	8.18	51.806	7.61	48.194
2023	16.71	8.68	51.972	8.02	48.028
2024	17.57	9.16	52.125	8.41	47.875
2025	18.4	9.62	52.269	8.78	47.731
2026	19.19	10.06	52.403	9.14	47.597
2027	19.96	10.49	52.529	9.48	47.471
2028	20.71	10.9	52.648	9.8	47.352
2029	21.43	11.31	52.761	10.12	47.239
2030	22.14	11.7	52.869	10.43	47.131
2031	22.82	12.09	52.971	10.73	47.029
2032	23.5	12.47	53.068	11.03	46.932
2033	24.16	12.84	53.162	11.31	46.838
2034	24.8	13.21	53.251	11.59	46.749
2035	25.43	13.56	53.337	11.87	46.663
2036	26.05	13.92	53.42	12.14	46.58
2037	26.66	14.27	53.499	12.4	46.501
2038	27.27	14.61	53.576	12.66	46.424
2039	27.86	14.95	53.65	12.91	46.35
2040	28.44	15.28	53.722	13.16	46.278
Total	457.45	242	52.902	215.45	47.098
Average	21.78	11.52	52.902	10.26	47.098

Table 34. Predicted USA 4SG GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)	
1	0.2997	2.8885	14.4756	37.0944	48.0456	
4	0.3785	3.6476	18.2797	46.8425	61.4649	
6	0.3506	3.379	16.9338	43.3935	58.1914	
7	0.3393	3.2702	15.2801	35.1475	47.747	
Total	1.368	13.1854	64.9692	162.4779	215.449	
Intersection	0.30%	2.88%	14.20%	35.52%	47.10%	100.00%
Average	0.25%	3.51%	14.66%	33.20%	48.38%	100.00%
Segment / Intersection Ave	0.78%	3.53%	13.56%	28.22%	53.91%	100.00%

**US 50 Intersections Parkway - Pine Cone Road**

Site Type

Type: 3ST\_GE6

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Pine Cone Road	57.219	2.7247	1.4212	1.3035	0.19	2.7247
			2020	1.44					
			2040	4.13					
		Total	Total	57.219	2.7247	1.4212	1.3035	0.19	2.7247

Site Type

Type: 3ST\_1WA

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Pine Cone Road	18.205	0.8669	0.1608	0.7061	0.12	0.8669
			2020	0.43					
			2040	1.36					
		Total	Total	18.205	0.8669	0.1608	0.7061	0.12	0.8669

Site Type

Average of 3ST\_GE6 and 3ST

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Pine Cone Road	37.712	1.7958	0.791	1.0048	0.155	1.7958
			2020	0.935					
			2040	2.745					
		Total	Total	37.712	1.7958	0.791	1.0048	0.155	1.7958

**US 50 Intersections Parkway - Ambrose Lane (W)**

Site Type

3ST\_GE6

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
3	3ST	US 50	Ambrose Lane	32.668	1.5556	0.6454	0.9102	0.12	1.5556
			2020	0.52					
			2040	2.77					
		Total	Total	32.668	1.5556	0.6454	0.9102	0.12	1.5556

Site Type

3ST\_1WA

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Ambrose Lane	11.386	0.5422	0.1251	0.417	0.08	0.5422
			2020	0.19					
			2040	0.98					
		Total	Total	11.386	0.5422	0.1251	0.417	0.08	0.5422

Site Type

Average of 3ST\_GE6 and 3ST

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Ambrose Lane	22.027	1.0489	0.38525	0.6636	0.1	1.0489
			2020	0.355					
			2040	1.875					
		Total	Total	22.027	1.0489	0.38525	0.6636	0.1	1.0489

**US 50 Intersections Parkway - Occidental Road (W)**

Site Type  
3ST\_GE6

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
4	3ST	US 50	Occidental Road (W)	43.796	2.0855	1.0557	1.0298	0.17	2.0855
			2020	0.89					
			2040	3.44					
		Total	Total	43.796	2.0855	1.0557	1.0298	0.17	2.0855

Site Type  
3ST\_1WA

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Occidental Drive (W)	13.962	0.6649	0.1224	0.3892	0.08	0.5117
			2020	0.26					
			2040	1.15					
		Total	Total	13.962	0.6649	0.1224	0.3892	0.08	0.5117

Site Type

Average of 3ST\_GE6 and 3ST\_1WA

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Occidental Drive (W)	28.879	1.3752	0.58905	0.7095	0.125	1.2986
			2020	0.575					
			2040	2.295					
		Total	Total	28.879	1.3752	0.58905	0.7095	0.125	1.2986

**US 50 Intersections Parkway - Occidental Road (E)**

Site Type

3ST\_1WA

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Occidental Drive (E)	9.784	0.4659	0.1141	0.3518	0.09	0.4659
2	3ST	US 50	Occidental Drive (E)	10.147	0.4832	0.1179	0.3653	0.09	0.4832
			2020	0.4					
			2040	1.42					
		Total	Total	19.931	0.9491	0.232	0.7171	0.09	0.9491

Site Type

4ST

Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Occidental Drive (E)	49.549	2.3595	1.2411	1.1184	0.21	2.3595
			2020	2.05					
			2040	2.08					
		Total	Total	49.549	2.3595	1.2411	1.1184	0.21	2.3595

Site Type

Average of 3ST\_GE6 and 3ST\_1WA

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST\_1WA)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Occidental Drive (E)	34.74	1.6543	0.73655	0.91775	0.15	1.6543
			2020	1.225					
			2040	1.75					
		Total	Total	34.74	1.6543	0.73655	0.91775	0.15	1.6543

**US 50 Intersections Parkway - Rainbow Drive (W)**

Site Type  
3ST\_1WA

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Rainbow Drive (W)	6.191	0.2948	0.0888	0.206	0.07	0.2948
2	3ST	US 50	Rainbow Drive (W)	6.899	0.3285	0.0935	0.235	0.07	0.3285
			2020	0.17					
			2040	1.21					
		Total	Total	13.09	0.6233	0.1823	0.441	0.07	0.6233

Site Type

4ST

Average of 3ST\_1WA and 4ST\_GE6

Predicted Crash Frequencies and Rates by Site  
Predicted Crash Frequencies by Year (Ave of (3ST\_1WA+4ST\_GE6)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Rainbow Drive (W)	30.361	1.4458	0.5898	0.8559	0.16	1.4458
			2020	0.62					
			2040	2.27					
		Total	Total	30.361	1.4458	0.5898	0.8559	0.16	1.4458

Site Type

Average of 3ST\_1WA and 4ST\_GE6

Predicted Crash Frequencies by Year (Ave of (3ST\_1WA+4ST\_GE6)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4ST	US 50	Rainbow Drive (W)	21.7255	1.03455	0.38605	0.64845	0.115	1.03455
			2020	0.395					
			2040	1.74					
		Total	Total	21.7255	1.03455	0.38605	0.64845	0.115	1.03455

**US 50 Intersections Parkway - Neigh Road**

Site Type

3ST

Table 2. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Neigh Road	7.455	0.355	0.1832	0.1717	0.05	0.355
			2020	0.12					
			2040	0.63					
		Total	Total	7.455	0.355	0.1832	0.1717	0.05	0.355

Site Type

3ST\_1WA

Average of 3ST and 3ST\_1WA

Predicted Crash Frequencies and Rates by Site  
Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST\_1WA)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Neigh Road	4.085	0.1945	0.0715	0.123	0.05	0.1945
			2020	0.06					
			2040	0.36					
		Total	Total	4.085	0.1945	0.0715	0.123	0.05	0.1945

Site Type

Average of 3ST and 3ST\_1WA

Predicted Crash Frequencies by Year (Ave of (3ST\_GE6+3ST\_1WA)/2)

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	3ST	US 50	Neigh Road	5.77	0.27475	0.12735	0.14735	0.05	0.27475
			2020	0.09					
			2040	0.495					
		Total	Total	5.77	0.27475	0.12735	0.14735	0.05	0.27475

**Roadway Section Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
Table 8. Predicted Crash Frequencies by Year (6D)										
					2020	5.8				
					2040	14.49				
			Total	0.96		211.84	10.0876	4.134	5.9536	10.5079
					2020	5.80				
					2040	14.49				
			<b>Total</b>	<b>0.96</b>		<b>211.84</b>	<b>10.0876</b>	<b>4.134</b>	<b>5.9536</b>	<b>10.5079</b>

**Intersection Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
Table 7. Predicted Crash Frequencies by Year (3ST GE6)										
					2020	0.94				
					2040	2.75				
			Total			37.71	1.80	0.79	1.00	0.16
Table 12. Predicted Crash Frequencies by Year (3SG GE6)										
					2020	2.70				
					2040	4.91				
			Total			80.74	3.84	2.00	1.84	0.27
Table 32. Predicted Crash Frequencies by Year (4SG GE6)										
					2020	3.60				
					2040	5.98				
			Total			102.00	4.86	2.59	2.27	0.32
					2020	7.24				
					2040	13.64				
			<b>Total</b>			<b>220.45</b>	<b>10.50</b>	<b>5.38</b>	<b>5.12</b>	<b>0.75</b>

**Combined Roadway Section and Intersection Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
			<b>Total</b>		<b>0.96</b>	<b>432.29</b>	<b>20.59</b>	<b>9.51</b>	<b>11.07</b>	<b>10.51</b>	<b>0.77</b>	<b>10.50</b>

						Fatal	A	B	C	PDO	Total
						2.74	13.37	58.07	128.19	229.91	432.28
						Fatal	A	B	C	PDO	Total
2020					<b>13.04</b>	0.08	0.40	1.75	3.87	6.93	13.03
2040					<b>28.13</b>	0.18	0.87	3.78	8.34	14.96	28.12

**Freeway Segment Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	
Table 28. Predicted Crash Frequencies by Year (Freeway)					2020	50.63					
					2040	50.63					
<b>Total</b>					<b>6.45</b>	<b>1063.31</b>	<b>50.63</b>	<b>16.36</b>	<b>34.27</b>	<b>7.85</b>	<b>0.53</b>

**Freeway Speed Change Lane Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Effective Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	
Table 33. Predicted Crash Frequencies by Year (Ramp Exit Speed Change)					2020	4.28					
					2040	4.28					
<b>Total</b>					<b>1.06</b>	<b>89.92</b>	<b>4.28</b>	<b>1.24</b>	<b>3.05</b>	<b>4.05</b>	<b>0.60</b>
Table 38. Predicted Crash Frequencies by Year (Ramp Entrance Speed Change)					2020	7					
					2040	7					
<b>Total</b>					<b>1.69</b>	<b>146.98</b>	<b>7.00</b>	<b>2.29</b>	<b>4.71</b>	<b>4.15</b>	<b>0.61</b>
					2020	11.28					
					2040	11.28					
<b>Total</b>					<b>2.75</b>	<b>236.90</b>	<b>11.28</b>	<b>3.52</b>	<b>7.76</b>	<b>8.20</b>	<b>1.21</b>

**Freeway Ramp Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Effective Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	
Table 43. Predicted Crash Frequencies by Year (Ramp Exit)					2020	13.60					
					2040	13.60					
<b>Total</b>					<b>1.1</b>	<b>285.57</b>	<b>13.60</b>	<b>5.12</b>	<b>8.48</b>	<b>11.93</b>	<b>4.11</b>
Table 48. Predicted Crash Frequencies by Year (Ramp Entrance)					2020	3.91					
					2040	3.91					
<b>Total</b>					<b>1.86</b>	<b>82.14</b>	<b>3.91</b>	<b>1.60</b>	<b>2.31</b>	<b>2.11</b>	<b>0.93</b>
					2020	17.51					
					2040	17.51					
<b>Total</b>					<b>3.00</b>	<b>367.71</b>	<b>17.51</b>	<b>6.72</b>	<b>10.79</b>	<b>14.04</b>	<b>5.04</b>

**Combined Freeway Section, Speed Change Lanes and Freeway Ramps Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	
<b>Total</b>					<b>12.19</b>	<b>1667.93</b>	<b>79.43</b>	<b>26.61</b>	<b>52.82</b>	<b>30.08</b>	<b>6.78</b>
					Fatal	11.66	41.26	211.99	464.25	941.99	1671.15
					Fatal	A	B	C	PDO	Total	
2020					<b>79.42</b>	0.56	1.56	8.75	16.44	52.10	79.42
2040					<b>79.42</b>	0.56	1.56	8.75	16.44	52.10	79.42

**Combined Roadway Sections, Intersections, Freeway Sections, Speed Change Lanes and Freeway Ramps Crash Totals (Controlled Access)**

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)	Intersection Crash Rate (crashes/million veh)		
<b>Total</b>					<b>13.15</b>	<b>2100.22</b>	<b>100.01</b>	<b>36.12</b>	<b>63.89</b>	<b>40.59</b>	<b>7.55</b>	<b>0.75</b>	<b>10.50</b>
					Fatal	14.40	54.63	270.06	592.45	1171.90	2103.44		
					Fatal	A	B	C	PDO	Total			
2020					<b>92.46</b>	0.64	1.97	10.51	20.31	59.03	92.45		
2040					<b>107.55</b>	0.73	2.43	12.53	24.78	67.06	107.54		



## Roadway Section Crash Totals (Controlled Access)

Site Type  
Type: 6D

Table 6. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
1	6D	US 50	Pine Cone Road to Retail Road / River Road	0.27	63.092	3.0044	1.231	1.7734	11.1273	0.81
2	6D	US 50	Retail Road / River Road to Fortune Drive	0.38	88.867	4.2318	1.739	2.4928	11.1362	0.78
3	6D	US 50	Fortune Drive to Stat. 494+00	0.31	59.881	2.8515	1.164	1.6875	9.1983	0.72
			2020		5.8					
			2040		14.49					
		Total	Total	0.96	211.84	10.0876	4.134	5.9536	10.5079	0.77

Table 3. Predicted Crash Frequencies by Year (6D)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	5.8	2.27	39.173	3.53	60.827
2021	6.21	2.45	39.369	3.77	60.631
2022	6.63	2.62	39.557	4.01	60.443
2023	7.05	2.8	39.738	4.25	60.262
2024	7.48	2.98	39.912	4.49	60.088
2025	7.9	3.17	40.08	4.73	59.92
2026	8.33	3.35	40.242	4.98	59.758
2027	8.76	3.54	40.398	5.22	59.602
2028	9.19	3.73	40.549	5.46	59.451
2029	9.62	3.92	40.695	5.71	59.305
2030	10.05	4.11	40.837	5.95	59.163
2031	10.49	4.3	40.974	6.19	59.026
2032	10.93	4.49	41.108	6.44	58.892
2033	11.37	4.69	41.237	6.68	58.763
2034	11.81	4.88	41.363	6.92	58.637
2035	12.25	5.08	41.485	7.17	58.515
2036	12.7	5.28	41.605	7.42	58.395
2037	13.14	5.48	41.721	7.66	58.279
2038	13.59	5.69	41.834	7.91	58.166
2039	14.04	5.89	41.944	8.15	58.056
2040	14.49	6.09	42.052	8.4	57.948
Total	211.84	86.81	40.981	125.03	59.019
Average	10.09	4.13	40.981	5.95	59.019

Table 4. Predicted USA 6D Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.4816	2.0329	7.9046	15.4319	37.2408
2	0.6804	2.8717	11.1663	21.7999	52.3485
3	0.8661	1.8893	7.3464	14.3423	35.4369
Total	2.0281	6.7939	26.4173	51.5741	125.0262
Segment Ave	0.96%	3.21%	12.47%	24.35%	59.02%

### Intersection Crash Totals (Controlled Access)

Site Type  
Type: 3ST\_GE6

Same as Parkway Option

Table 7. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
6	3ST	US 50	Pine Cone Road	37.712	1.7958	0.791	1.0048	0.155	1.7958
			2020	0.935					
			2040	2.745					
			Total	37.712	1.7958	0.791	1.0048	0.155	1.7958

Site Type  
Type: 3SG\_GE6

Table 12. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
2	3SG	US 50	Fortune Drive	80.737	3.8446	2.0003	1.8444	0.27	3.8446
			2020	2.7					
			2040	4.91					
			Total	80.737	3.8446	2.0003	1.8444	0.27	3.8446

Table 13. Predicted Crash Frequencies by Year (3SG GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	2.7	1.34	49.515	1.36	50.485
2021	2.82	1.41	49.824	1.42	50.176
2022	2.95	1.48	50.114	1.47	49.886
2023	3.07	1.55	50.388	1.52	49.612
2024	3.19	1.61	50.648	1.57	49.352
2025	3.3	1.68	50.894	1.62	49.106
2026	3.42	1.75	51.128	1.67	48.872
2027	3.53	1.81	51.351	1.72	48.649
2028	3.65	1.88	51.565	1.77	48.435
2029	3.76	1.95	51.769	1.81	48.231
2030	3.87	2.01	51.966	1.86	48.034
2031	3.98	2.07	52.154	1.9	47.846
2032	4.08	2.14	52.336	1.95	47.664
2033	4.19	2.2	52.51	1.99	47.49
2034	4.3	2.26	52.679	2.03	47.321
2035	4.4	2.33	52.842	2.08	47.158
2036	4.5	2.39	53	2.12	47
2037	4.61	2.45	53.153	2.16	46.847
2038	4.71	2.51	53.3	2.2	46.7
2039	4.81	2.57	53.444	2.24	46.556
2040	4.91	2.63	53.583	2.28	46.417
Total	80.74	42.01	52.028	38.73	47.972
Average	3.85	2	52.028	1.84	47.972

Table 14. Predicted USA 3SG GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
2	0.2637	2.542	11.878	27.3218	38.7315
Total	0.2637	2.542	11.878	27.3218	38.7315
	0.33%	3.15%	14.71%	33.84%	47.97%

100.00%

Site Type  
Type: 4SG

Table 18. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Intersection Travel Crash Rate (crashes/million veh)	Intersection Crash Rate (crashes/yr)
1	4SG	US 50	Retail Road / River Road	101.999	4.8571	2.5874	2.2697	0.32	4.8571
			2020	3.6					
			2040	5.98					
			Total	101.999	4.8571	2.5874	2.2697	0.32	4.8571

Table 23. Predicted Crash Frequencies by Year (4SG GE6)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	3.6	1.88	52.119	1.73	47.881
2021	3.75	1.96	52.264	1.79	47.736
2022	3.88	2.04	52.4	1.85	47.6
2023	4.02	2.11	52.528	1.91	47.472
2024	4.15	2.19	52.649	1.97	47.351
2025	4.28	2.26	52.763	2.02	47.237
2026	4.41	2.33	52.872	2.08	47.128
2027	4.53	2.4	52.975	2.13	47.025
2028	4.66	2.47	53.074	2.19	46.926
2029	4.78	2.54	53.168	2.24	46.832
2030	4.89	2.61	53.259	2.29	46.741
2031	5.01	2.67	53.346	2.34	46.654
2032	5.12	2.74	53.429	2.39	46.571
2033	5.24	2.8	53.509	2.44	46.491
2034	5.35	2.87	53.587	2.48	46.413
2035	5.46	2.93	53.661	2.53	46.339
2036	5.56	2.99	53.734	2.57	46.266
2037	5.67	3.05	53.804	2.62	46.196
2038	5.78	3.11	53.871	2.66	46.129
2039	5.88	3.17	53.937	2.71	46.063
2040	5.98	3.23	54.001	2.75	45.999
Total	102	54.34	53.271	47.66	46.729
Average	4.86	2.59	53.271	2.27	46.729

Table 24. Predicted USA 4SG GE6 Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.2974	2.8663	14.3639	36.8082	47.6636
Total	0.2974	2.8663	14.3639	36.8082	47.6636
Intersection Ave Segment / Intersection Ave	0.29%	2.81%	14.08%	36.09%	46.73%
	0.31%	2.98%	14.40%	34.96%	47.35%
	0.63%	3.09%	13.43%	29.65%	53.18%

### Freeway Segment Crash Totals (Controlled Access)

Site Type  
Type: Freeway

Table 7. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Effective Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
1	Four-lane Freeway	US 50	Segment 1	0.97	201.46	9.5933	3.036	6.5573	9.89	0.55
2	Four-lane Freeway	US 50	Segment 2	1.74	358.704	17.0812	5.4157	11.6655	9.8168	0.55
3	Four-lane Freeway	US 50	Segment 3	1.01	93.785	4.466	1.5701	2.8959	4.4218	0.49
4	Four-lane Freeway	US 50	Segment 4	1.34	215.579	10.2657	3.3065	6.9592	7.6609	0.52
5	Four-lane Freeway	US 50	Segment 5	1.39	193.786	9.2279	3.0317	6.1962	6.6388	0.52
	Total	Total	Total	6.45	1,063.31	50.634	16.3601	34.274	7.8502	0.53

Table 28. Predicted Crash Frequencies by Year (Freeway)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	50.63	16.36	32.31	34.27	67.69
2021	50.63	16.36	32.31	34.27	67.69
2022	50.63	16.36	32.31	34.27	67.69
2023	50.63	16.36	32.31	34.27	67.69
2024	50.63	16.36	32.31	34.27	67.69
2025	50.63	16.36	32.31	34.27	67.69
2026	50.63	16.36	32.31	34.27	67.69
2027	50.63	16.36	32.31	34.27	67.69
2028	50.63	16.36	32.31	34.27	67.69
2029	50.63	16.36	32.31	34.27	67.69
2030	50.63	16.36	32.31	34.27	67.69
2031	50.63	16.36	32.31	34.27	67.69
2032	50.63	16.36	32.31	34.27	67.69
2033	50.63	16.36	32.31	34.27	67.69
2034	50.63	16.36	32.31	34.27	67.69
2035	50.63	16.36	32.31	34.27	67.69
2036	50.63	16.36	32.31	34.27	67.69
2037	50.63	16.36	32.31	34.27	67.69
2038	50.63	16.36	32.31	34.27	67.69
2039	50.63	16.36	32.31	34.27	67.69
2040	50.63	16.36	32.31	34.27	67.69
Total	1,063.31	343.56	32.31	719.75	67.69
Average	50.63	16.36	32.31	34.27	67.69

Table 29. Predicted Freeway Sites Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	1.1124	2.8692	20.072	39.7033	137.7027
2	1.9204	5.0097	35.3925	71.4069	244.9738
3	0.5336	1.4059	10.178	20.8547	60.8132
4	1.2726	3.2627	22.8613	42.0159	146.1103
5	1.2014	3.101	21.2629	38.1001	130.1206
Total	6.0404	15.6485	109.7667	212.0808	719.7206
	0.57%	1.47%	10.32%	19.95%	67.69%

100.00%

## Freeway Speed Change Lanes Crash Totals (Controlled Access)

Site Type

Type: Ramp Exit Speed Change Lane

Table 32. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Effective Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
1	Four-lane Freeway Speed Change	US 50	Segment 1 - EB Off Ramp - (Ramp 3)	0.179	20.39	0.9709	0.2794	0.6916	5.4243	0.6
2	Four-lane Freeway Speed Change	US 50	Segment 3 - WB Off Ramp - (Ramp 7)	0.17	9.915	0.4721	0.1376	0.3345	2.7773	0.62
3	Four-lane Freeway Speed Change	US 50	Segment 3 - EB Off Ramp - (Ramp 6)	0.151	8.829	0.4204	0.1233	0.2971	2.7842	0.62
4	Four-lane Freeway Speed Change	US 50	Segment 5 - WB Off Ramp - (Ramp 11)	0.189	15.323	0.7297	0.2101	0.5196	3.8607	0.6
5	Four-lane Freeway Speed Change	US 50	Segment 5 - EB Off Ramp - (Ramp 10)	0.189	15.323	0.7297	0.2101	0.5196	3.8607	0.6
6	Four-lane Freeway Speed Change	US 50	Segment 1 - WB Off Ramp - (Ramp 2)	0.179	20.14	0.9591	0.2758	0.6832	5.3579	0.6
	Total	Total	Total	1.057	89.92	4.2819	1.2363	3.0456	4.051	0.6

Table 33. Predicted Crash Frequencies by Year (Ramp Exit Speed Change)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	4.28	1.24	28.873	3.05	71.126
2021	4.28	1.24	28.873	3.05	71.126
2022	4.28	1.24	28.873	3.05	71.126
2023	4.28	1.24	28.873	3.05	71.126
2024	4.28	1.24	28.873	3.05	71.126
2025	4.28	1.24	28.873	3.05	71.126
2026	4.28	1.24	28.873	3.05	71.126
2027	4.28	1.24	28.873	3.05	71.126
2028	4.28	1.24	28.873	3.05	71.126
2029	4.28	1.24	28.873	3.05	71.126
2030	4.28	1.24	28.873	3.05	71.126
2031	4.28	1.24	28.873	3.05	71.126
2032	4.28	1.24	28.873	3.05	71.126
2033	4.28	1.24	28.873	3.05	71.126
2034	4.28	1.24	28.873	3.05	71.126
2035	4.28	1.24	28.873	3.05	71.126
2036	4.28	1.24	28.873	3.05	71.126
2037	4.28	1.24	28.873	3.05	71.126
2038	4.28	1.24	28.873	3.05	71.126
2039	4.28	1.24	28.873	3.05	71.126
2040	4.28	1.24	28.873	3.05	71.126
Total	89.92	25.96	28.873	63.96	71.126
Average	4.28	1.24	28.873	3.05	71.126

Table 34. Predicted Exit Speed Change Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.1024	0.264	1.8471	3.6536	14.5229
2	0.053	0.1358	0.9519	1.7494	7.0249
3	0.0475	0.1217	0.8527	1.5671	6.2398
4	0.0809	0.2074	1.4532	2.6707	10.9109
5	0.0809	0.2074	1.4532	2.6707	10.9109
6	0.1018	0.2624	1.8365	3.592	14.3476
Total	0.4664	1.1988	8.3944	15.9034	63.9569
	0.52%	1.33%	9.34%	17.69%	71.13%

100.00%

**Site Type**  
**Type: Ramp Entrance Speed Change Lane**

Table 37. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Effective Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Rate (crashes/million veh-mi)
1	Four-lane Freeway Speed Change	US 50	Segment 1 - EB On Ramp - (Ramp 4)	0.284	32.258	1.5361	0.4395	1.0966	5.4088	0.6
2	Four-lane Freeway Speed Change	US 50	Segment 1 - WB On Ramp - (Ramp 1)	0.104	13.988	0.6661	0.198	0.4681	6.4049	0.71
3	Four-lane Freeway Speed Change	US 50	Segment 2 - WB On Ramp - (Ramp near Occidental)	0.246	28.755	1.3693	0.4327	0.9366	5.5662	0.62
5	Four-lane Freeway Speed Change	US 50	Segment 3 - EB On Ramp (Ramp 8)	0.189	10.45	0.4976	0.1787	0.3189	2.6328	0.58
4	Four-lane Freeway Speed Change	US 50	Segment 3 - WB On Ramp - (Ramp 5)	0.3	16.059	0.7647	0.2828	0.4819	2.5491	0.57
6	Four-lane Freeway Speed Change	US 50	Segment 5 -WB On Ramp - (Ramp 9)	0.265	21.723	1.0344	0.3689	0.6656	3.9036	0.6
7	Four-lane Freeway Speed Change	US 50	Segment 5 -EB On Ramp - (Ramp 12)	0.3	23.631	1.1253	0.3801	0.7452	3.751	0.58
		Total	Total	1.688	146.865	6.9936	2.2806	4.713	4.1431	0.61

Table 38. Predicted Crash Frequencies by Year (Ramp Entrance Speed Change)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	6.99	2.28	32.61	4.71	67.39
2021	6.99	2.28	32.61	4.71	67.39
2022	6.99	2.28	32.61	4.71	67.39
2023	6.99	2.28	32.61	4.71	67.39
2024	6.99	2.28	32.61	4.71	67.39
2025	6.99	2.28	32.61	4.71	67.39
2026	6.99	2.28	32.61	4.71	67.39
2027	6.99	2.28	32.61	4.71	67.39
2028	6.99	2.28	32.61	4.71	67.39
2029	6.99	2.28	32.61	4.71	67.39
2030	6.99	2.28	32.61	4.71	67.39
2031	6.99	2.28	32.61	4.71	67.39
2032	6.99	2.28	32.61	4.71	67.39
2033	6.99	2.28	32.61	4.71	67.39
2034	6.99	2.28	32.61	4.71	67.39
2035	6.99	2.28	32.61	4.71	67.39
2036	6.99	2.28	32.61	4.71	67.39
2037	6.99	2.28	32.61	4.71	67.39
2038	6.99	2.28	32.61	4.71	67.39
2039	6.99	2.28	32.61	4.71	67.39
2040	6.99	2.28	32.61	4.71	67.39
Total	146.87	47.89	32.61	98.97	67.39
Average	6.99	2.28	32.61	4.71	67.39

Table 39. Predicted Entrance Speed Change Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.161	0.4153	2.9055	5.7471	23.0294
2	0.0726	0.1872	1.3093	2.5898	9.8297
3	0.1608	0.4141	2.8983	5.6128	19.6687
5	0.0688	0.1764	1.236	2.2716	6.6966
4	0.1089	0.2791	1.9559	3.5946	10.1207
6	0.142	0.3641	2.5512	4.6887	13.9774
7	0.1463	0.3752	2.6287	4.8312	15.6497
Total	0.8604	2.2114	15.4848	29.3359	98.9722
	0.59%	1.51%	10.54%	19.97%	67.39%

100.00%

### Freeway Speed Change Lanes Crash Totals (Controlled Access)

Site Type  
Type: Ramp Exit

Table 42. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Effective Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
1	Two-lane Ramp Exit	US 50	Segment 1 - WB Off Ramp - (Ramp 2)	0.114	31.913	1.5196	0.551	0.9687	13.3302	20.63
2	Two-lane Ramp Exit	US 50	Segment 1 - EB Off Ramp - (Ramp 3)	0.12	27.917	1.3294	0.4827	0.8467	11.0783	17.75
3	Two-lane Ramp Exit	US 50	Segment 3 - EB Off Ramp - (Ramp 6)	0.245	27.596	1.3141	0.5149	0.7992	5.3636	1.12
4	Two-lane Ramp Exit	US 50	Segment 3 - WB Off Ramp - (Ramp 7)	0.199	17.458	0.8313	0.3268	0.5045	4.1775	1.21
5	Two-lane Ramp Exit	US 50	Segment 5 - WB Off Ramp - (Ramp 10)	0.114	75.862	3.6125	1.3282	2.2843	31.6886	15.76
6	Two-lane Ramp Exit	US 50	Segment 5 - EB Off Ramp - (Ramp 11)	0.12	95.122	4.5296	1.6752	2.8544	37.7469	11.58
7	One-lane Ramp Exit	US 50	Segment 3 - WB Off Ramp - (Ramp 7)	0.284	15.117	0.7199	0.3591	0.3608	2.5348	0.74
			Total	1.196	290.985	13.8564	5.2379	8.6186	11.5857	3.84

Table 43. Predicted Crash Frequencies by Year (Ramp Exit)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	13.86	5.24	37.801	8.62	62.199
2021	13.86	5.24	37.801	8.62	62.199
2022	13.86	5.24	37.801	8.62	62.199
2023	13.86	5.24	37.801	8.62	62.199
2024	13.86	5.24	37.801	8.62	62.199
2025	13.86	5.24	37.801	8.62	62.199
2026	13.86	5.24	37.801	8.62	62.199
2027	13.86	5.24	37.801	8.62	62.199
2028	13.86	5.24	37.801	8.62	62.199
2029	13.86	5.24	37.801	8.62	62.199
2030	13.86	5.24	37.801	8.62	62.199
2031	13.86	5.24	37.801	8.62	62.199
2032	13.86	5.24	37.801	8.62	62.199
2033	13.86	5.24	37.801	8.62	62.199
2034	13.86	5.24	37.801	8.62	62.199
2035	13.86	5.24	37.801	8.62	62.199
2036	13.86	5.24	37.801	8.62	62.199
2037	13.86	5.24	37.801	8.62	62.199
2038	13.86	5.24	37.801	8.62	62.199
2039	13.86	5.24	37.801	8.62	62.199
2040	13.86	5.24	37.801	8.62	62.199
Total	290.99	110	37.801	180.99	62.199
Average	13.86	5.24	37.801	8.62	62.199

Table 44. Predicted Exit Ramp Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.3443	1.044	3.5291	6.6528	20.3424
2	0.3016	0.9146	3.0917	5.8282	17.7812
3	0.3218	0.9757	3.2983	6.2177	16.7824
4	0.2042	0.6192	2.0931	3.9458	10.5953
5	0.6852	2.0776	7.2464	17.8835	47.9698
6	0.8642	2.6204	9.1393	22.5551	59.9433
7	0.2355	0.7141	2.9691	3.6229	7.5758
Total	2.9567	8.9655	31.367	66.706	180.9902
	1.02%	3.08%	10.78%	22.92%	62.20%

100.00%

**Site Type**  
**Type: Ramp Entrance**

Table 47. Predicted Crash Frequencies and Rates by Site

Site No.	Type	Highway	Site Description	Effective Length (mi)	Total Predicted Crashes for Evaluation Period	Predicted Total Crash Frequency (crashes/yr)	Predicted FI Crash Frequency (crashes/yr)	Predicted PDO Crash Frequency (crashes/yr)	Predicted Crash Rate (crashes/mi/yr)	Predicted Travel Crash Rate (crashes/million veh-mi)
1	One-lane Ramp Entrance	US 50	Segment 1 - On Ramp (Ramp 1)	0.273	4.37	0.2081	0.1002	0.1079	0.7623	1.04
2	One-lane Ramp Entrance	US 50	Segment 1 - On Ramp (Ramp 4)	0.306	4.405	0.2098	0.1016	0.1082	0.6855	1.07
3	One-lane Ramp Entrance	US 50	Segment 2 - On Ramp (Ramp near Occidental))	0.076	2.601	0.1238	0.0568	0.067	1.6294	1.25
4	Two-lane Ramp Entrance	US 50	Segment 3 - On Ramp (Ramp 5)	0.185	23.02	1.0962	0.3961	0.7001	5.9253	1.04
5	Two-lane Ramp Entrance	US 50	Segment 3 - On Ramp (Ramp 8)	0.189	11.709	0.5575	0.2034	0.3542	2.95	1.01
6	One-lane Ramp Entrance	US 50	Segment 3 - On Ramp (Ramp 9)	0.201	10.701	0.5096	0.2332	0.2763	2.5352	0.72
7	One-lane Ramp Entrance	US 50	Segment 5 - On Ramp (Ramp 12)	0.231	8.321	0.3962	0.1841	0.2121	1.7152	0.82
8	Two-lane Ramp Entrance	US 50	Segment 5 - On Ramp (Ramp 12)	0.099	5.245	0.2497	0.0932	0.1566	2.5226	1.21
9	Two-lane Ramp Entrance	US 50	Segment 5 - On Ramp (Ramp 9)	0.095	7.604	0.3621	0.131	0.2311	3.8114	1.09
		Total	Total	1.655	77.974	3.713	1.4996	2.2135	2.2435	0.97

Table 48. Predicted Crash Frequencies by Year (Ramp Entrance)

Year	Total Crashes	FI Crashes	Percent FI (%)	PDO Crashes	Percent PDO (%)
2020	3.71	1.5	40.386	2.21	59.614
2021	3.71	1.5	40.386	2.21	59.614
2022	3.71	1.5	40.386	2.21	59.614
2023	3.71	1.5	40.386	2.21	59.614
2024	3.71	1.5	40.386	2.21	59.614
2025	3.71	1.5	40.386	2.21	59.614
2026	3.71	1.5	40.386	2.21	59.614
2027	3.71	1.5	40.386	2.21	59.614
2028	3.71	1.5	40.386	2.21	59.614
2029	3.71	1.5	40.386	2.21	59.614
2030	3.71	1.5	40.386	2.21	59.614
2031	3.71	1.5	40.386	2.21	59.614
2032	3.71	1.5	40.386	2.21	59.614
2033	3.71	1.5	40.386	2.21	59.614
2034	3.71	1.5	40.386	2.21	59.614
2035	3.71	1.5	40.386	2.21	59.614
2036	3.71	1.5	40.386	2.21	59.614
2037	3.71	1.5	40.386	2.21	59.614
2038	3.71	1.5	40.386	2.21	59.614
2039	3.71	1.5	40.386	2.21	59.614
2040	3.71	1.5	40.386	2.21	59.614
Total	77.97	31.49	40.386	46.48	59.614
Average	3.71	1.5	40.386	2.21	59.614

Table 49. Predicted Entrance Ramp Crash Severity

Site No.	Fatal (K) Crashes (crashes)	Incapacitating Injury (A) Crashes (crashes)	Non-Incapacitating Injury (B) Crashes (crashes)	Possible Injury (C) Crashes (crashes)	No Injury (O) Crashes (crashes)
1	0.0449	0.1361	0.8666	1.0574	2.2655
2	0.0455	0.1379	0.8779	1.0713	2.2724
3	0.0254	0.0771	0.4911	0.5992	1.4076
4	0.1687	0.5115	2.6475	4.9909	14.7011
5	0.0866	0.2626	1.3593	2.5624	7.4376
6	0.1044	0.3167	2.0163	2.4602	5.8033
7	0.0797	0.2418	1.5492	1.9949	4.4549
8	0.0286	0.0867	0.4719	1.3689	3.2883
9	0.0457	0.1386	0.7402	1.8268	4.8525
Total	0.6296	1.9092	11.02	17.932	46.4832
	0.81%	2.45%	14.13%	23.00%	59.62%
Freeway Ave	0.70%	1.97%	11.02%	20.71%	65.60%
Intersection / Freeway Ave	0.50%	2.47%	12.71%	27.83%	56.48%