Final Report

Quantifying the Impact of Out-of-County Waste Transport on San Benito County



The Economics of Land Use

Prepared for:

San Benito County

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December 29, 2017

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Table of Contents

1.	Introduction	1
	Roadway Deterioration Impacts	1
	Traffic Impacts	2
	Public Safety Impacts	2
	Summary of Key Findings	2
2.	PAVEMENT IMPACTS	4
	Existing Pavement Conditions	4
	Out-of-County Waste Transport Trends	6
	Pavement Improvement Requirements	8
	Ongoing Maintenance Requirements	12
	Priority Capital Improvements	13
3.	Traffic and Safety Impacts	14
	Data Collection	14
	Intersection Level of Service Analysis	14
	Intersection and Roadway Safety	15
	Potential Safety Improvements	16

Attachments

ATTACHMENT A: Pavement Analysis Detail

ATTACHMENT B: Traffic and Safety Analysis Detail

List of Figures

Figure 1	PCI by Road Segment	5
Figure 2	Calculated TI and ESALS by Road Segment	6
Figure 3	John Smith Landfill Waste Disposal Tonnage 2011-16	7
Figure 4	Out-of-County Waste Transport ESAL Estimated Trend 2011-16	8
Figure 5	Capital Improvement Costs	. 10
Figure 6	Past Due Impact of Out-of-County Waste Transport 2014-16	. 12
Figure 7	Maintenance Costs for Continued Out-of-County Waste Transport	. 13
Figure 8	Intersection Performance (LOS) Analysis	. 15
Figure 9	Intersection Collision Analysis	. 16
Figure 10	Road Segment Collision Analysis	. 16

1. INTRODUCTION

Economic & Planning Systems, Inc. (EPS), in collaboration with Pavement Engineering Inc. (PEI) and TJKM, has prepared *Quantifying the Impact of Out-of-County Waste Transport on San Benito County* (Study) for San Benito County. The Study focuses on a range of impacts that result from the transport of waste from outside of San Benito County to John Smith Landfill, including pavement deterioration, traffic, and roadway safety effects.

EPS assisted the County with an initial review of out-of-county waste transport impacts in early 2017. This prior "scoping" effort identified potential impact categories and the methodologies that could be employed to quantify in economic terms the impact of out-of-county waste disposal in San Benito County. In this work, EPS considered an expansive list of cost categories affected by out-of-county waste disposal, including the following:

- Landfill Administration
- Landfill Capacity
- Point-Source Air Quality Impacts
- Mobile-Source Air Quality Impacts
- Roadway Deterioration
- Traffic
- Public Safety

Ultimately, the County determined that (1) Roadway Deterioration, (2) Traffic Impacts, and (3) Public Safety impacts should be addressed by this Study. After completing the scoping exercise, the County sought the services of a technical consultant team to complete a rigorous assessment of waste transport cost effects through a credible evaluation of key impacts attributable to waste hauling activities. To best assist San Benito County with the study, EPS partnered with Pavement Engineering (PEI), a civil engineering firm specializing in pavement preservation, maintenance, and rehabilitation, and TJKM, experts in traffic engineering and transportation planning. This consultant team brings deep expertise in cost analysis, transportation, and roadway maintenance, with extensive experience in Northern California.

In the Study, "out-of-county waste transport" refers to solid waste tons that originate from outside San Benito County boundaries and are disposed at the County-owned John Smith Landfill. The out-of-county tonnage delivered to the Landfill has dramatically increased in recent years and currently accounts for roughly 80 percent of the tonnage going into the Landfill. As a result of the increased waste disposal and associated negative impacts, San Benito County seeks to quantify costs attributable to out-of-county waste hauling activities.

Roadway Deterioration Impacts

Heavyweight trucks, such as waste-hauling transfer trailer trucks weighing 80,000 pounds (40 tons), cause significant damage to pavements, which in turn leads to accelerated demand for roadway rehabilitation or reconstruction. As part of the Study, the consultant team quantifies necessary roadway improvements and the associated costs, and isolates costs attributable to heavyweight trucks transporting solid waste from outside San Benito County. The approach relies

on well-accepted methods for roadway damage, with supporting information from primary data collection (e.g., road coring data and traffic counts), secondary data concerning truck volumes and weights (i.e., landfill operation records), and data from industry sources.

Traffic Impacts

Heavyweight trucks contribute to roadway congestion and travel delays, which may require capital improvements to mitigate effects. As part of this study, the consultant team examines traffic volumes and congestion at key intersections along the waste haul route. In particular, the study includes a peak-hour level of service analysis for five important intersections to assess the need for capital improvements.

Public Safety Impacts

Trucks contribute to traffic collisions that result in fatalities and injuries. As part of this study, the consultant team examines intersection and road segment collision data to evaluate public safety along the haul route. Truck collision rates recorded at study intersections and road segments are compared with statewide collision rates at intersections and roadways with similar characteristics, to assess whether the truck route is safe relative to statewide standards.

Summary of Key Findings

Much of the County roadway along the haul route is in poor condition. Heavyweight trucks hauling out-of-county waste typically weigh 80,000 pounds (40 tons). Pavement analysis finds that County roads on the haul route were not built for the current prevalence of heavyweight trucking activity. As a result, pavement conditions have been significantly affected by out-of-county waste hauling activities. On the haul route analyzed, 13 of the 20 segments studied exhibit pavement that is in "poor to failed condition" based on evaluation using the standard Pavement Condition Index (PCI) scale.¹

Out-of-county waste transport activity necessitates capital investments to provide suitable pavement conditions. Haul route roadway pavement must be reconstructed to be significantly more durable. Improvement of existing roads to achieve suitable haul route roadway pavement, that supports out-of-county waste transport activities and other traffic at current levels, would cost about \$38.8 million, in 2017 dollars. About \$15.4 million of the total necessary capital improvement cost is attributable to out-of-county waste transport activities, based on the roadway deterioration caused by those vehicles relative to all other roadway users.

A portion of the capital investment necessary to support out-of-county waste transport is past due, with significant out-of-county waste transport occurring between 2014 through 2016. During the period from 2014 through 2016, out-of-county waste transport activities increased dramatically as compared with historic trends at the John Smith Landfill (see Figure 3). If the haul route roadway had been reconstructed prior to 2014 to accommodate this increase in waste hauling, the out-of-county waste transport activities alone would have

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¹ It should be noted that some segments on John Smith Road appear to be in good condition based on PCI (a visual measure) may not be. Recent pavement overlays mask the pavement's true condition. Analysis performed by PEI shows that these segments are structurally inadequate.

consumed approximately two to seven percent of the reconstructed pavement's lifespan during the 2014 through 2016 period. Given the estimated cost of pavement reconstruction, the Study values roadway deterioration between 2014 and 2016 at \$1.2 million, in 2017 dollars.

After roadway reconstruction, significant ongoing maintenance costs are attributable to out-of-county waste transport activities. Ongoing maintenance is required to protect pavement from the adverse effects of oxidation and roadway use. The Study recommends that the County adhere to best practices for pavement maintenance, by conducting regular activities including crack sealing, digouts (i.e., localized repairs), and slurry seals. The estimated cost of the recommended maintenance plan is \$26.4 million over 30 years, in 2017 dollars. The fair share cost attributable to out-of-county waste transport activities is more than half of that total, approximately \$14.1 million. Over the 30-year plan, the average annual cost attributable to out-of-county waste transport activities is about \$470,000.

Roadway improvements can be phased over time. Due to the range of existing pavement conditions along the haul route, the recommended improvements may be staggered over time. As part of this study, the consultant team considered pavement conditions and structural deficiencies to formulate a five-year improvement program schedule. Early improvements are focused primarily on Fairview Road. The complete year-by-year schedule for recommended improvements is presented in **Attachment A** (**Table 13**).

Analysis of traffic delays finds that key haul route intersections currently achieve satisfactory level of service (LOS) ratings. While out-of-county waste transport activities do increase traffic, existing intersections have been able to accommodate this traffic without causing unacceptable delays. A LOS analysis on key intersections along the haul route identifies that average delays are acceptable relative to County standards. Using field data collected as inputs to the analysis, the LOS analysis finds that intersections achieve level "B" or level "C" ratings. LOS B rated intersections support "low delay occurring with good progression." LOS C intersections achieve "average delays resulting from fair progression." According to the San Benito County General Plan, LOS C shall be used for the accepted minimum standard of operation for intersections and roadways. LOS D or worse would require mitigation. A sensitivity analysis of the Level C intersections finds that, even with high levels of truck activity, vehicle volumes would need to increase by two to seven times current levels before any intersection falls to a "D" LOS rating, with longer delays.

Between 2013 and 2016 there were ten truck-related collisions along the haul route, but the roadways and intersections generally are safe relative statewide conditions.

This analysis compares the overall collision rate observed at specific intersections and road segments on the haul route to statewide collision rates for similar intersections and roadways. The analysis finds that the rates of collision at study locations are in most cases below or similar to the statewide averages. Based on field observations and collision data, truck volumes and speed do not significantly impact safety on the roadways segments and at study intersections. Nonetheless, the Study recommends speed limit signage and warning signs on John Smith Road, including an advanced warning signal for the John Smith Landfill. The estimated cost of the signs and signal is \$28,000. In addition, the Study is supportive of a contemplated \$2.7 million roadway realignment of John Smith Road to intersect Fairview Road at St. Benedict Way. The project would add left and right turn lanes into John Smith Road that could improve roadway safety.

2. PAVEMENT IMPACTS

The consultant team has conducted a pavement impact analysis that reflects current pavement conditions, historic and current roadway traffic volumes by vehicle type, and out-of-county waste transport activities reported by the landfill operator. The analysis comprises an assessment of the roadway pavement improvements necessary to adequately support current levels of out-of-county waste transport to John Smith Landfill, with consideration of past roadway deterioration attributable to out-of-county waste transport between 2014 and 2016. The analysis also provides a recommended pavement maintenance program for rehabilitated roads and a potential schedule for improvements.

Existing Pavement Conditions

The Study considers two key measures of pavement condition, including (1) a visual assessment reported using Pavement Condition Index scoring and (2) technical evaluation of structural adequacy.

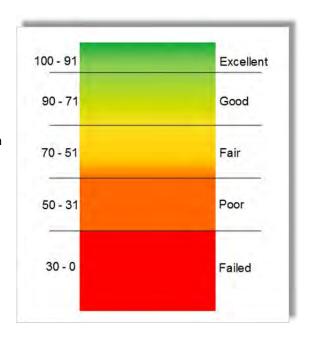
Pavement Condition Index

Pavement Condition Index (PCI) is a quality rating metric that relies on visual field inspections to rate pavement condition in terms of cracking, patching, depressions, and weathering. Quantified distresses are tabulated to compute PCI, a score based on a scale that ranges from 0 (failed pavement) to 100 (no distress). PCI measures for each segment of the haul route are from the County's recent update of its Pavement

Management System.²

This Study reports PCI for 20 road segments along the out-of-county waste transport haul route. The PCI scoring finds 13 of the 20 segments have a PCI score below 50, which is interpreted to mean the pavement is in poor to failed condition, which warrants rehabilitation or reconstruction of the road. Four segments have PCI scores in the range of 51 to 70, which indicates that the pavement is in fair condition but is at risk of needing more aggressive rehabilitation treatments unless the pavement needs are addressed soon. Only the two road segments on the haul route have pavements considered in good condition, based on the observed visual distresses. These segments are on John Smith Road. Figure 1 presents PCI rating for each road segment on the haul route.

Pavement Condition Index



² Pavement Management System Update, Final Report, County of San Benito, August 2016.

Figure 1 PCI by Road Segment

Road Segment	From	То	PCI
Shore Road	Highway 25	1 Mile East of Highway 25	60
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	47
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	35
Shore Road	3 Miles East of Highway 25	San Felipe Road	54
Fairview Road	San Felipe Road	Ludis Lane	67
Fairview Road	Ludis Lane	Highway 156	51
Fairview Road	Highway 156	Los Vivoras	39
Fairview Road	Los Vivoras	Acquistapace Road	45
Fairview Road	Acquistapace Road	Spring Grove Road	28
Fairview Road	Spring Grove Road	Fallon Road	40
Fairview Road	Fallon Road	Rosa Moranda Road	49
Fairview Road	Rosa Moranda Road	Dixie Drive	37
Fairview Road	Dixie Drive	McClosky Road	34
Fairview Road	McClosky Road	Santa Ana Road	26
Fairview Road	Santa Ana Road	Hillcrest Road	25
Fairview Road	Hillcrest Road	Sunnyslope Road	55
Fairview Road	Sunnyslope Road	John Smith Road	35
John Smith Road	Fairview Road	Change of Pavement	49
John Smith Road	Change of Pavement	Best Road	89
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	87

Source: Pavement Engineering, Inc.

Structural Adequacy

To more fully understand the adequacy of haul route pavement, the consultant team collected primary data on pavement structure and soil conditions at constant intervals along the haul route. Pavement structure is assessed through collection and analysis of core samples and soil samples. The core samples reveal pavement structure, including the thickness of the Asphalt Concrete (AC) layer and the Aggregate Base (AB) layer. Soil samples are evaluated for their Resistance Value (R-Value), a measure of the response of subgrade soils to vertically applied pressure.

This Study calculates and reports the existing condition of roadway pavement along the haul route using the industry standard metrics "Traffic Index" and "Equivalent Single Axel Loads." These metrics characterize the original design and structural adequacy of the haul route pavement.

- Traffic Index (TI) is a measure of the deteriorating effects that vehicle loads have on pavement. The calculation of TI for haul route segments reflects findings from the pavement core samples and soil samples. The existing thickness of the AC layer and AB layer, along with soil condition data (R-Value), inform the calculation of TI.
- Equivalent Single Axel Loads (ESALs) are a standardized measure of pavement damage resulting from mixed traffic vehicle loads. Heavier trucks have dramatically more impact on pavement than lighter vehicles (e.g., one fully-loaded five-axel truck weighing 40 tons has

about the same pavement impact as 15,000 medium-sized SUVs). Using ESALs, the impact of trucks is measured in equivalent single 18,000-pound axel loads. As traffic drives over pavement it consumes ESALs, similar to withdrawals from a bank account.

TI reflects the total number of ESALs that pavement will support before it begins to fail. For example, a design TI of 5.0 is equal to 7,160 ESALs and a design TI of 8.0 is equal to 372,000 ESALs. As shown in **Figure 2**, this study identifies the TI and ESALs for each segment along the haul route.

Figure 2 Calculated TI and ESALS by Road Segment

Road Segment	From	То	Calculated Traffic Index (TI)	Calculated ESALs
Shore Road	Highway 25	1 Mile East of Highway 25	7.42	196,413
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	7.57	232,768
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	7.54	225,493
Shore Road	3 Miles East of Highway 25	San Felipe Road	8.76	795,827
Fairview Road	San Felipe Road	Ludis Lane	7.61	243,875
Fairview Road	Ludis Lane	Highway 156	7.41	195,567
Fairview Road	Highway 156	Los Vivoras	6.70	83,436
Fairview Road	Los Vivoras	Acquistapace Road	9.54	1,634,816
Fairview Road	Acquistapace Road	Spring Grove Road	7.98	362,152
Fairview Road	Spring Grove Road	Fallon Road	8.00	371,025
Fairview Road	Fallon Road	Rosa Moranda Road	7.84	313,336
Fairview Road	Rosa Moranda Road	Dixie Drive	7.19	151,801
Fairview Road	Dixie Drive	McClosky Road	6.78	92,724
Fairview Road	McClosky Road	Santa Ana Road	6.50	64,926
Fairview Road	Santa Ana Road	Hillcrest Road	6.62	75,925
Fairview Road	Hillcrest Road	Sunnyslope Road	8.22	468,958
Fairview Road	Sunnyslope Road	John Smith Road	6.21	44,284
John Smith Road	Fairview Road	Change of Pavement	4.20	1,666
John Smith Road	Change of Pavement	Best Road	5.53	16,724
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	5.19	9,871

Source: Pavement Engineering, Inc.

Out-of-County Waste Transport Trends

Landfill Tonnage Trends

The landfill operator maintains historical records of waste disposal at John Smith Landfill. These data reveal the number of trucks, weight, truck characteristics, and whether the waste is from inside or outside of San Benito County. The dataset indicates that there has been a dramatic increase in the disposal of out-of-county waste since 2011, with a notable surge commencing in 2014. In 2016, out-of-county tonnage exceeded 2011 tonnage by more than 460 percent. In 2016, out-of-county waste transports to the Landfill totaled an estimated 269,000 tons.

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³ See **Attachment A** for detailed explanation of the relatively significant pavement impacts caused by heavyweight trucks.

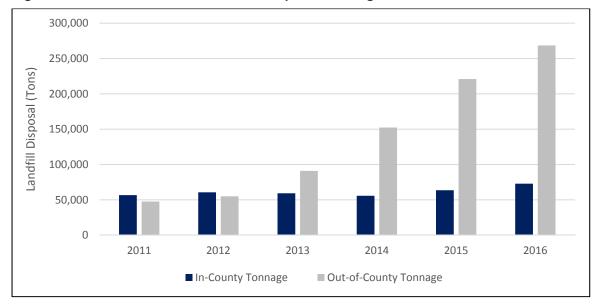


Figure 3 John Smith Landfill Waste Disposal Tonnage 2011-16

Source: Waste Connections

Out-of-County Waste Transport ESAL Trend

Relying on detailed data concerning out-of-county waste transport to John Smith Landfill during calendar year 2016, this analysis calculates the pavement damage attributable to out-of-county waste transport activities for that year. Truck counts, truck weights, and axel configuration information allows for derivation of the ESALs attributable to out-of-county waste transport activities. In 2016, this analysis finds that the roughly 269,000 tons of out-of-county waste disposed of at the Landfill generated about 43,300 ESALs on County roads. Assuming that the profile of truck types observed in 2016 is representative of hauling activities in prior years, the analysis establishes the ESAL trend for 2011 through 2016 based on the tonnage trend reported by the landfill operator. Between 2014 and 2016, out-of-county waste transport was responsible for about 103,500 ESALs on the haul route.

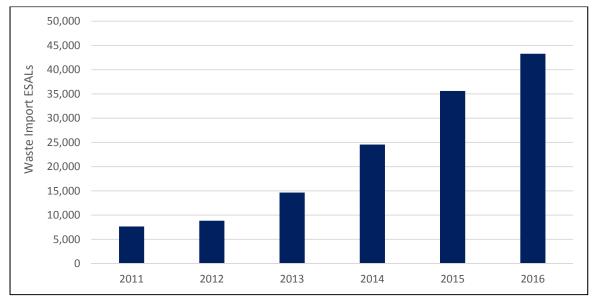


Figure 4 Out-of-County Waste Transport ESAL Estimated Trend 2011-16

Source: Pavement Engineering, Inc.

Pavement Improvement Requirements

The Study considers pavement improvements that are necessary to ensure the structural adequacy of haul route roadways to support current levels of out-of-county waste transport and other traffic. The analysis assumes that current levels of waste hauling and other road usage continue into the future. For each road segment along the haul route, the analysis identifies an appropriate structural design, estimates a range of costs associated with the capital improvements, and calculates the "fair share" of the improvement cost attributable to out-of-county waste transport loads, relative to other traffic demands on the roads.

To identify appropriate pavement designs for road segments on the haul route, the analysis considers overall existing traffic conditions in combination with landfill operations data. Existing traffic conditions are characterized by daily traffic data collected as part of this study. The traffic data reveal vehicle volumes and characteristics (i.e., cars and trucks by axle count). The analysis relies on industry standard "truck constants" (i.e., typical truck weights by truck type) to estimate ESALs attributable to existing traffic. These data, in concert with out-of-county waste transport ESAL estimates, allow calculation of total ESALs by road segment along the haul route. Total ESAL estimates form the basis of this study's recommended roadway pavement designs.

The study considers pavement development costs for a full-depth reclamation, with partial removal and recycling of the remaining material in-place to strengthen the pavement structure.⁶ The costs estimates provided reflect the design TI (20-year design life) calculated from ESAL

⁴ These data are detailed in **Attachment B**.

⁵ Truck constant assumptions from Asphalt Institute MS-1 Manual.

⁶ The full depth reclamation (FDR) roadway improvement approach in further detail in **Attachment A**.

requirements, and subgrade conditions (R-Values) identified through field work. The Study estimates the capital investment in pavement that is necessary to support current traffic activity on the haul route at about \$38.8 million, in 2017 dollars.

Under current conditions, out-of-county waste transport activities are responsible for about 40 percent of the cost burden to reconstruct pavement along the haul route. The out-of-county waste transport trucks account for a higher proportion of pavement damage on roadways closer to the Landfill. On Shore Road, near Highway 25, out-of-county waste transport activity is responsible for about 29 percent of roadway deterioration. On Fairview Road, near John Smith Road, the share is about 48 percent. On John Smith Road, out-of-county waste transport activities account for approximately 82 of the pavement damage. Given these calculations of the relative impact to pavement generated by out-of-county waste transport, the fair share of the capital investment in pavement that is needed to support the current traffic activity on the haul route is an estimated \$15.4 million.

Figure 5 Capital Improvement Costs

				Tota	al Construction Cost		al Adjusted Cost Out-of-County Trucks
Road Segment	From	То	Design Traffic Index (TI-20 years)		tment Cost Full h Reclaimation (FDR)	Impact of Out-of- County Trucks	reatment Cost Full Depth laimation (FDR)
Shore Road	Highway 25	1 Mile East of Highway 25	11.0	\$	2,857,883.00	29%	\$ 828,786.07
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	11.0	\$	2,857,883.00	29%	\$ 828,786.07
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	11.0	\$	2,857,883.00	29%	\$ 828,786.07
Shore Road	3 Miles East of Highway 25	San Felipe Road	11.0	\$	2,300,379.00	29%	\$ 667,109.91
Fairview Road	San Felipe Road	Ludis Lane	11.0	\$	2,715,530.00	29%	\$ 787,503.70
Fairview Road	Ludis Lane	Highway 156	10.5	\$	926,270.00	31%	\$ 287,143.70
Fairview Road	Highway 156	Los Vivoras	10.5	\$	2,470,912.00	31%	\$ 765,982.72
Fairview Road	Los Vivoras	Acquistapace Road	10.5	\$	1,022,580.00	31%	\$ 316,999.80
Fairview Road	Acquistapace Road	Spring Grove Road	10.5	\$	2,057,414.00	31%	\$ 637,798.34
Fairview Road	Spring Grove Road	Fallon Road	10.5	\$	1,617,550.00	31%	\$ 501,440.50
Fairview Road	Fallon Road	Rosa Moranda Road	10.5	\$	1,250,725.00	39%	\$ 487,782.75
Fairview Road	Rosa Moranda Road	Dixie Drive	10.5	\$	2,600,857.00	39%	\$ 1,014,334.23
Fairview Road	Dixie Drive	McClosky Road	10.5	\$	1,686,646.00	39%	\$ 657,791.94
Fairview Road	McClosky Road	Santa Ana Road	10.5	\$	2,178,788.00	39%	\$ 849,727.32
Fairview Road	Santa Ana Road	Hillcrest Road	10.5	\$	1,522,870.00	39%	\$ 593,919.30
Fairview Road	Hillcrest Road	Sunnyslope Road	10.0	\$	1,829,489.00	48%	\$ 878,154.72
Fairview Road	Sunnyslope Road	John Smith Road	10.0	\$	1,563,240.00	48%	\$ 750,355.20
John Smith Road	Fairview Road	Change of Pavement	9.5	\$	924,779.00	82%	\$ 758,318.78
John Smith Road	Change of Pavement	Best Road	9.5	\$	1,974,121.00	82%	\$ 1,618,779.22
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	9.5	\$	1,600,434.00	82%	\$ 1,312,355.88
				\$	38,816,233.00		\$ 15,371,856.22

Source: Pavement Engineering, Inc.

Past Due Impact of Out-of-County Waste Transport

During the period from 2014 through 2016, out-of-county waste transport activities increased dramatically as compared with historic trends at the John Smith Landfill (see **Figure 3**). If the haul route roadway had been reconstructed prior to 2014 to accommodate this increase in waste hauling, the out-of-county waste transport activities alone would have consumed approximately two to seven percent of the reconstructed pavement's lifespan between 2014 and 2016. Given the estimated cost of pavement reconstruction, the Study values roadway deterioration between 2014 and 2016 at \$1.2 million, in 2017 dollars.

To determine the degree to which out-of-county waste transport activities have consumed pavement capacity, the Study considers ESALs attributable to out-of-county waste transport activities from 2014 through 2016. This consumption then is compared to the ESAL capacity of each rebuilt road segment on the haul route. The analysis estimates that between 2014 and 2016, out-of-county waste transport activities consumed approximately 103,500 ESALs (see **Figure 4**). With rebuilt sections supporting between 1.6 million ESALs and 5.4 million ESALs, the out-of-county waste transport would have consumed two to seven percent of the total ESAL budget between 2014 and 2016, depending on the roadway segment. Applying the calculated out-of-county waste transport ESAL consumption (as a percent of total ESALs available after reconstruction) to the necessary capital improvement cost yields a hypothetical past due value associated with the 2014 through 2016 period. **Figure 6** presents the past due calculation.

Figure 6 Past Due Impact of Out-of-County Waste Transport 2014-16

Road Segment	From	То	Design Traffic Index (TI-20 years)	ESALs for TI-20 years (Column A)	Calculated Out-of- County Trucks ESALs from 2014 - 2016 (Column B)	Treatment Cost Full Depth Reclaimation (FDR)	Past Due Impact of Out-of- County Trucks from 2014- 2016 (Column B / Column A)	Past Due Cost of Out-of-County Trucks from 2014- 2016
Shore Road	Highway 25	1 Mile East of Highway 25	11.0	5,399,511	103,460	\$ 2,857,883	2%	\$ 54,760
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	11.0	5,399,511	103,460	\$ 2,857,883	2%	\$ 54,760
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	11.0	5,399,511	103,460	\$ 2,857,883	2%	\$ 54,760
Shore Road	3 Miles East of Highway 25	San Felipe Road	11.0	5,399,511	103,460	\$ 2,300,379	2%	\$ 44,078
Fairview Road	San Felipe Road	Ludis Lane	11.0	5,399,511	103,460	\$ 2,715,530	2%	\$ 52,032
Fairview Road	Ludis Lane	Highway 156	10.5	3,652,398	103,460	\$ 926,270	3%	\$ 26,238
Fairview Road	Highway 156	Los Vivoras	10.5	3,652,398	103,460	\$ 2,470,912	3%	\$ 69,993
Fairview Road	Los Vivoras	Acquistapace Road	10.5	3,652,398	103,460	\$ 1,022,580	3%	\$ 28,966
Fairview Road	Acquistapace Road	Spring Grove Road	10.5	3,652,398	103,460	\$ 2,057,414	3%	\$ 58,280
Fairview Road	Spring Grove Road	Fallon Road	10.5	3,652,398	103,460	\$ 1,617,550	3%	\$ 45,820
Fairview Road	Fallon Road	Rosa Moranda Road	10.5	3,652,398	103,460	\$ 1,250,725	3%	\$ 35,429
Fairview Road	Rosa Moranda Road	Dixie Drive	10.5	3,652,398	103,460	\$ 2,600,857	3%	\$ 73,673
Fairview Road	Dixie Drive	McClosky Road	10.5	3,652,398	103,460	\$ 1,686,646	3%	\$ 47,777
Fairview Road	McClosky Road	Santa Ana Road	10.5	3,652,398	103,460	\$ 2,178,788	3%	\$ 61,718
Fairview Road	Santa Ana Road	Hillcrest Road	10.5	3,652,398	103,460	\$ 1,522,870	3%	\$ 43,138
Fairview Road	Hillcrest Road	Sunnyslope Road	10.0	2,423,911	103,460	\$ 1,829,489	4%	\$ 78,088
Fairview Road	Sunnyslope Road	John Smith Road	10.0	2,423,911	103,460	\$ 1,563,240	4%	\$ 66,724
John Smith Road	Fairview Road	Change of Pavement	9.5	1,575,144	103,460	\$ 924,779	7%	\$ 60,742
John Smith Road	Change of Pavement	Best Road	9.5	1,575,144	103,460	\$ 1,974,121	7%	\$ 129,666
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	9.5	1,575,144	103,460	\$ 1,600,434	7%	\$ 105,121
						\$ 38,816,233		\$ 1,191,761

Source: Pavement Engineering, Inc.

Ongoing Maintenance Requirements

In addition to the initial capital investment in new roadway pavement along the haul route, ongoing maintenance will be required to protect the pavement from the adverse effects of oxidation and roadway use, thereby slowing the pavement aging process. The maintenance program recommended here assumes that the haul route is reconstructed and that the County adheres to best practices for pavement maintenance. Maintenance activities include crack sealing, digouts (i.e., localized repairs), and slurry seals. Eventually, the pavement will need some minor rehabilitation.⁷

The estimated cost of the haul route maintenance plan for a 30-year period is \$26.4 million, in 2017 dollars. The fair share cost attributable to out-of-county waste transport activities is slightly more than half of that total, approximately \$14.0 million. Over the 30-year plan, the average annual cost attributable to out-of-county waste transport activities is about \$470,000, though actual costs are uneven and generally increase over time.

⁷ Maintenance activities and their unit costs are detailed in **Attachment A**.

Figure 7 Maintenance Costs for Continued Out-of-County Waste Transport

Road Segment	From	То	Total Estimated Maintenance Cost	Percent Impact of Out- of-County Trucks	Total Adjusted Estimated Maintenance Cost for Out-of-County Trucks	Average Annual Cost
Shore Road	Highway 25	1 Mile East of Highway 25	\$1,799,820	37%	\$665,933	\$22,198
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	\$1,799,820	37%	\$665,933	\$22,198
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	\$1,799,820	37%	\$665,933	\$22,198
Shore Road	3 Miles East of Highway 25	San Felipe Road	\$1,448,719	37%	\$536,026	\$17,868
Fairview Road	San Felipe Road	Ludis Lane	\$1,710,170	37%	\$632,763	\$21,092
Fairview Road	Ludis Lane	Highway 156	\$645,845	40%	\$258,338	\$8,611
Fairview Road	Highway 156	Los Vivoras	\$1,722,850	40%	\$689,140	\$22,971
Fairview Road	Los Vivoras	Acquistapace Road	\$712,997	40%	\$285,199	\$9,507
Fairview Road	Acquistapace Road	Spring Grove Road	\$1,434,538	40%	\$573,815	\$19,127
Fairview Road	Spring Grove Road	Fallon Road	\$1,127,842	40%	\$451,137	\$15,038
Fairview Road	Fallon Road	Rosa Moranda Road	\$872,072	54%	\$470,919	\$15,697
Fairview Road	Rosa Moranda Road	Dixie Drive	\$1,813,455	54%	\$979,266	\$32,642
Fairview Road	Dixie Drive	McClosky Road	\$1,176,019	54%	\$635,050	\$21,168
Fairview Road	McClosky Road	Santa Ana Road	\$1,519,166	54%	\$820,350	\$27,345
Fairview Road	Santa Ana Road	Hillcrest Road	\$1,061,826	54%	\$573,386	\$19,113
Fairview Road	Hillcrest Road	Sunnyslope Road	\$1,303,551	73%	\$951,593	\$31,720
Fairview Road	Sunnyslope Road	John Smith Road	\$1,113,843	73%	\$813,106	\$27,104
John Smith Road	Fairview Road	Change of Pavement	\$695,953	100%	\$695,953	\$23,198
John Smith Road	Change of Pavement	Best Road	\$1,485,647	100%	\$1,485,647	\$49,522
John Smith Road	Best Road	Change of Pavement	\$1,204,425	100%	\$1,204,425	\$40,148
			\$26,448,378		\$14,053,911	\$468,464

Source: Pavement Engineering, Inc.

Priority Capital Improvements

With such a significant capital improvement program identified to support ongoing out-of-county waste transport activities, a phasing plan for pavement improvement likely will be necessary. Relying on PCI ratings and the Study's structural deficiency assessment, the Study recommends a schedule of prioritization for haul route pavement reconstruction. Specifically, the consultant team recommends a five-year improvement program schedule. Early improvements focus primarily on Fairview Road. The complete year-by-year schedule for recommended improvements is presented in **Attachment A** (**Table 13**).

3. Traffic and Safety Impacts

The consultant team has conducted a traffic and safety analysis that reflects current conditions on the haul route, and has considered the contribution of out-of-county waste transport activities to these conditions. The analysis reflects primary data (collected in the field as part of the Study) concerning intersection performance and traffic counts as well as secondary data on landfill operations and collisions. The study focuses on level-of-service (LOS) performance at key intersections and roadway safety at intersections and on haul route roadway segments.

Data Collection

Primary Data

Primary data collected as part of this study include turn movement counts and lane geometry for each study intersection and 24-hour traffic counts at five locations on the haul route. The consultant team collected these data on August 23, 2017.⁸ The resulting dataset informs the intersection LOS analysis, as well as the pavement impact analysis discussed in **Section 2** above. Detailed vehicle counts are provided in **Attachment B** (**Table 1**).

Secondary Data

As part of the traffic and safety analyses, the consultant team acquired a significant quantity of data from the landfill operator. These data include truck loads and tonnage, broken down by incounty versus out-of-county waste disposal. The consultant team examined these data by day of the week and by month to establish existing conditions, and to inform the pavement impact analysis discussed in **Section 2**. In addition, the safety analysis relies on collision data from the California Statewide Integrated Traffic Records System (SWITRS). Detailed landfill data and collision data are provided in **Attachment B**.

Intersection Level of Service Analysis

The LOS analysis considers signalized and unsignalized intersections on the out-of-county waste transport haul route. The analysis focuses on intersection performance during one-hour peak periods (AM and PM) on a typical weekday and seeks to identify whether average delays are acceptable relative to County standards. Using field data collected as inputs to the analysis, the Study models the performance of signalized study intersections using Traffix software. For unsignalized intersections, the Study relies on the 2000 HCM Operations Methodology to analyze

⁸ Traffic engineers typically rely on traffic counts for a single day as representative of typical or average conditions. This is because studies and observations have shown that traffic does not vary significantly from day to day, particularly in the middle of the week including Tuesdays, Wednesdays and Thursdays. Consequently, the one-day traffic counts adequately depicts typical midweek conditions, as discussed further in **Attachment B**.

⁹ Data tables provided in **Attachment B**.

LOS.¹⁰ Despite the presence of relatively heavy truck traffic, the Study finds that all intersections considered currently perform at an acceptable level of service, with scoring of level "B" or level "C." Level B rated intersections support "low delay occurring with good progression." Level C intersections achieve "average delays resulting from fair progression."

A sensitivity analysis of the Level C intersections finds that vehicle volumes would need to increase by two to seven times current levels before LOS falls to a "D" rating, with longer delays. Per the analysis, the volumes would have to increase three to seven times in order to degrade to LOS D at the intersection of Fairview Road and Sunnyslope Road. At the intersection of Pacheco Pass Highway and Fairview Road, vehicle volumes would have to increase two to three times in order to degrade to LOS D.

Figure 8 Intersection Performance (LOS) Analysis

#	Should International	Control	Peak Hour ¹	Existing		
#	Study Intersections	Control	Peak nour	Delay ²	LOS ³	
1	Fairview Road and John Smith Road	One Way Sten	AM	10.7	В	
1	rairview Road and John Smith Road	One-Way Stop	PM	10.0	В	
2	Fairview Road and Sunnyslope Road	Signalized	AM	27.7	С	
		Signanzed	PM	23.9	С	
3	Fairview Road and Santa Ana Road	C:l:l	AM	11.6	В	
3		Signalized	PM	10.5	В	
4	Pacheco Pass Highway (SR 156) and Fairview	C:l:l	AM	21.8	С	
4	Road	Signalized	PM	27.7	С	
_	San Falina Dand and Shana Dand Faiminn Dand	All Man C+==	AM	11.8	В	
5	San Felipe Road and Shore Road - Fairview Road	All-Way Stop	PM	24.3	С	

Notes:

Intersection and Roadway Safety

The consultant team obtained data on traffic collisions along the haul route to evaluate intersection and roadway safety. These data from SWITRS cover four years, from 2013 through 2016. During these four years, there were 37 collisions on the route. Of the 37 collisions, three occurred at Study intersections and 34 occurred on Study roadway segments. About 43 percent of these collisions are attributable to "unsafe speed." Only ten collisions involved trucks (about 27 percent) which is less than the overall prevalence of trucks on theses roadways (about 30 to 40 percent, based on the traffic counts).

For each study location, the collision rate for all vehicles is compared to statewide collision rates for intersections and roadways with similar characteristics. The analysis finds that the rates of collision at study locations typically are below statewide averages, except for the segments (1) Shore Road near Lake Road, (2) Fairview Road at Lone Tree Road, and (3) Fairview Road at Santa Ana Road. While accident rates are relatively high along these three roadway segments,

¹. AM – morning peak hour (between 7:30 a.m. and 9:30 a.m.), PM – evening peak hour (between 3:00 p.m. and 5:00 p.m.)

². Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections.

³. LOS – Level of Service calculations conducted using the Traffix Software level of service analysis software package, which applies the methodology described in the 2000 HCM.

¹⁰ For additional information about traffic modelling see **Attachment B**.

the data indicate that the presence of heavyweight trucks is not the dominant factor affecting safety, with only about $1/6^{th}$ to $1/3^{rd}$ of collisions involving trucks.

Figure 9 Intersection Collision Analysis

#	Study Intersections	Total #of All Collisions (2013-16)	Intersectio n Collision Rate (RSE) for all Vehicles	Total # of Truck Collisions (2013-16)	Intersection Truck Collision Rate (RSE)	Statewide Average Collision Rate	Intersection Collision Rate > Statewide Average Collision Rate?
1	Fairview Road and John Smith Road	0	0.00	0	0.00	0.16	No
2	Fairview Road and Sunnyslope Road	0	0.00	0	0.00	0.50	No
3	Fairview Road and Santa Ana Road	1	0.07	0	0.00	0.24	No
4	Pacheco Pass Highway (State Route 156) and Fairview Road	2	0.11	1	0.30	0.50	No
5	San Felipe Road and Shore Road-Fairview Road	0	0.00	0	0.00	0.60	No

Notes: ICR = 1000000*A / (365*T*ADT)

ICR= Observed collision rate; Number of accidents/vehicles miles traveled

A = Number of collisions over study period

T = Total number of years over which intersection accidents were collected; January 2013 to December 2016 = 4 years

ADT = Average Daily Traffic

Source: TJKM

Figure 10 Road Segment Collision Analysis

Primary Road	Secondary Road	Total #of All Collisions (2013-16)	Segment Collision Rate (RSE) for all Vehicles	Total # of Truck Collisions (2013-16)	Collision Rate	Statewide Collision Rate	Collision Rate >Statewide Standard
Route 25	Shore Road	12	0.11	1	0.01	0.38	No
Shore Road	Lake Road	3	0.58	1	0.19	0.38	Yes
SR 156	Fairview Road (Eastbound)	6	0.19	2	0.06	0.38	No
SR 156	Fairview Road (Westbound)	3	0.12	3	0.12	0.38	No
Fairview Road	Lone Tree Road	4	0.88	1	0.22	0.38	Yes
Fairview Road	Santa Ana Road	6	1.32	1	0.22	0.38	Yes

Source: TJKM

Potential Safety Improvements

The overall finding of the collision analysis is that truck volumes and truck speeds do not significantly impact safety on the roadway segments and at the study intersections. However, suggested improvements that could benefit safety include speed limit signage and warning signs/signals on John Smith Road:

- Speed limit sign for eastbound vehicles at the entrance to John Smith Road;
- Speed limit sign for westbound vehicles near the landfill;
- Winding road sign for eastbound vehicles, located east of Heatherwood Drive;
- Winding road sign for westbound vehicles, located west of the John Smith Landfill;
- Side road signs for eastbound vehicles, located 1,000 feet and 300 feet west of the landfill entrance; and
- Flashing warning lights located 300 feet west of the landfill entrance.

The cost of signs, equipment, and installation of the recommended improvements is about \$28,000, including signage (\$3,000) and the warning lights (\$25,000).

In addition to signage and warning lights, a planned roadway reconfiguration at the intersection of Fairview Road and John Smith Road could be beneficial to safety. This \$2.7 million project, included in the County's 2040 Regional Transportation Plan, would realign John Smith Road to intersect Fairview Road at Saint Benedict Way, and add left and right turn lanes into John Smith Road. Currently, at the intersection of Fairview Road and John Smith Road, the roadway is narrow and there is no left turn pocket eastbound onto John Smith Road. Vehicles turning onto John Smith road have been observed forming a small queue waiting to turn. The consultant team supports the concept of improving the intersection, particularly adding a southbound left turn lane on Fairview Road at John Smith Road.

ATTACHMENT A Pavement Analysis Detail



December 26, 2017

Project No. 170178-01

Mr. Benjamin C. Sigman Economic & Planning Systems, Inc. One Kaiser Plaza, Suite 1410 Oakland, CA 94612

Subject: San Benito County Waste Impact Study

Dear Ben:

PEI has performed an analysis of the impact to the pavement along the haul route from outof-county trucks importing waste to the County landfill located on John Smith Road.

INTRODUCTION AND BACKGROUND

The County of San Benito entered into a contract in December of 2010 to allow for expansion of tonnage into the County's landfill located on John Smith Road. The County is interested in establishing the cost impact of the trucks hauling the waste on the County's roads and pavement. The designated out-of-county truck haul route includes Shore Road from Highway 25 to San Felipe Road, Fairview Road from San Felipe Road to John Smith Road and John Smith Road from Fairview Road to the landfill.

The study has five main goals including 1) Documenting the current condition of the pavement; 2) Providing a historical summary of the waste transport from 2014 through 2016; 3) Calculating the cost to improve the roads to handle the out-of-county waste; 4) Estimating the proportionate cost distribution between out-of-county and in-county vehicles and 5) Looking forward to quantify the future impact and maintenance costs based on the projected waste import. As part of this study, PEI also recommended a prioritized order in which the repair work should be conducted. This information is summarized in 6) Recommended Capital Improvement Projects (CIP).

This impact study looks at each of these six areas as part of the analysis and is dived into six sections to facilitate readability. Various tables and back up data have been provided in the report or included in appendices for the reader's reference.

To further assist the reader's understanding of the study and report, PEI has included a short primer that addresses some of the basic principles of asphalt concrete pavement design and deterioration that are utilized in this study.

PAVEMENT DESIGN AND DETERIORATION (A PRIMER)

Pavement Design

Pavements are a structural support system generally considered to act like a beam. But unlike beams in buildings, which generally have static loads, the pavement structure is flexed many times from traffic loading. Cars and light trucks have minor impact on the pavement structure. Larger/Heavier trucks have very significant impacts on the pavement due to the high axle weights. The impact of trucks is measured in equivalent single 18,000-pound axle loads (ESAL). The total ESALs are converted into a design Traffic Index (TI). As an example, a design TI of 5.0 is equal to 7,160 ESALs. A Design TI of 8.0 is equal to 372,000 ESALs. Therefore, the design TI is the total number of ESALs that the pavement will support before it begins to fail, regardless of the passage of time. Normally for a new pavement, the ESALs over a 20-year period are used. For rehabilitation procedures such as overlays, 10 years is generally used.

The other element of pavement design is the support of the beam. The support is provided by the sub-grade soils. The support value is designated by the R-value test.

Using the design TI and R-value, the pavement designer chooses various materials to construct the structural section. The most common pavement section is a layer of asphalt concrete over aggregate base(s). Many options are available depending on specific project requirements and conditions.

Pavement Deterioration

Asphalt pavement deteriorates from two processes; *fatigue* and *aging*. These processes occur simultaneously. In a well-designed and constructed pavement, the two processes result in the need to rehabilitate the pavement at approximately the same time. This is called the design life. The design life for most new pavements is 20 years. Each deterioration process has its own set of pavement defects that are related to the process.

Fatique

Fatigue results from repetitive axle loading. As the pavement structure flexes or bends from axle loads, the asphalt concrete layer's ability to flex is consumed. With sufficient bending, the asphalt concrete layer begins to break at the bottom. This cracking progresses upward until it reaches the surface and appears as alligator cracking.

As the pavement structure, its supporting soils, and the precise loading from wheel loads vary, so does the time it takes for alligator cracking to appear. As alligator cracking appears, the pavement can be repaired with digouts, which involve removing and replacing asphalt concrete in the affected areas. When the total cumulative quantity of digouts reaches



approximately 10 to 15 percent of the total area, the pavement is considered to have reached its design life and requires major rehabilitation.

<u>Aging</u>

Asphalt concrete is composed of aggregates and asphalt binder. The aggregates used generally are of fair quality and do experience some breakdown over time. To a minor extent, aggregate base layer can age if contaminated by fine aggregate (fines) that are transported from the subsoil into the aggregate base. Aggregate aging problems need to be addressed with maintenance procedures.

The asphalt concrete binder ages as well. As the asphalt binder ages, it loses volume through the evaporation of volatile components in the asphalt. As the volume decreases, the pavement will progressively crack from the resulting tensile strain in the layer. These cracks normally show up first as transverse and longitudinal cracks. They also show up at weak areas, such as paving joints. These cracks widen and increase over time until the pavement has a checkerboard appearance.

The aging process also causes the pavement to become more brittle. The increased stiffness results in additional cracking from loaded vehicles. Load-induced cracking, from asphalt concrete that has become brittle, is very similar in appearance to fatigue cracking.

The major agents for deterioration of asphalt concrete binder is oxygen and water. The carrier of the oxygen is water. Water enters the pavement either from the surface or as water vapor from underneath. In addition, the water has a stripping effect causing the binder to peal away from the aggregate.

SECTION 1 - EXISTING PAVEMENT CONDITIONS

This section documents the existing pavement conditions. To properly evaluate the impact of the out-of-county trucks in the pavement, it is important to know the current condition of the pavement.

Two approaches were used to establish the existing pavement condition. The first approach was to reference the PCI (Pavement Condition Index) and the second approach was to physically measure the existing structural section and subgrade, and establish the amount of loading the pavement can support.

PCI (Pavement Condition Index)

In 2016, PEI was contracted by the County to perform field inspections and visually rate each of the County's roads. PEI measured the following distress types as part of our review: alligator cracking (fatigue), block cracking, distortions, longitudinal & transverse cracking,



patching & utility cut patching, rutting / depressions, weathering and raveling. The quantified distresses were used to compute the PCI for each segment. The PCI ranges from 100, indicating a pavement with no distresses, to 0, meaning that the pavement is in a failed mode. All the work was performed in conformance with ASTM D6433. The following table shows the calculated PCI of each segment from the study.

Table 1 – Pavement Condition Index for Each Road Segment Along Haul Route

Road Segment	From	То	PCI
Shore Road	Highway 25	1 Mile East of Highway 25	60
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	47
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	35
Shore Road	3 Miles East of Highway 25	San Felipe Road	54
Fairview Road	San Felipe Road	Ludis Lane	67
Fairview Road	Ludis Lane	Highway 156	51
Fairview Road	Highway 156	Los Vivoras	39
Fairview Road	Los Vivoras	Acquistapace Road	45
Fairview Road	Acquistapace Road	Spring Grove Road	28
Fairview Road	Spring Grove Road	Fallon Road	40
Fairview Road	Fallon Road	Rosa Moranda Road	49
Fairview Road	Rosa Moranda Road	Dixie Drive	37
Fairview Road	Dixie Drive	McClosky Road	34
Fairview Road	McClosky Road	Santa Ana Road	26
Fairview Road	Santa Ana Road	Hillcrest Road	25
Fairview Road	Hillcrest Road	Sunnyslope Road	55
Fairview Road	Sunnyslope Road	John Smith Road	35
John Smith Road	Fairview Road	Change of Pavement	49
John Smith Road	Change of Pavement	Best Road	89
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	87

The PCI only provides an indication of the visual condition of the pavement. To truly understand the impact of the loaded out-of-county trucks on the existing pavement, we need to understand how the road is actually constructed.



Determine the Existing Structural Adequacy of Each Segment

PEI cored the pavement at 500 foot intervals along the haul route to measure the existing structural section (AC & AB) of the pavement and collect a sample of native soil every 1.000 feet to determine the R-value (CT 301). Our coring measurements are summarized in Appendix A and all the R-value test results are included in Appendix B.

Referencing Section 633.1 of the California Highway Design Manual, the existing thicknesses of the measured asphalt concrete, aggregate base and aggregate sub-base were converted into a gravel equivalent (GE) using the following equation:

GE = Thickness (t) x Gf, where Gf is the gravel factor for each material type from Table 633.1 of the Highway Design Manual.

All the gravel equivalents were added together for each material type in each section and the total gravel equivalent and the roadway's minimum R-value were used to calculate the Traffic Index (TI) using the following equation and solving for TI:

$$GE = 0.0032(TI)(100 - R)$$

Once the TI is determined, we can use the following equation and solve for ESAL, where ESALs will be the total Equivalent Single Axle Loads that the pavement will support before it begins to fail.

$$TI = 9.0x(ESALs/10^6)^0.119$$

The calculation summary sheets are included in Appendix C. Our calculated TIs and ESALs are summarized in Table 2 below.

It should be noted that since the gravel factor for HMA is a function of the TI (see Table 633.1 of the California Highway Design Manual) an iterative approach was used to calculate the TI and accompanying ESALs.



Table 2 – Calculated Traffic Index(TI) and ESALs (Equivalent Single Axle Load) for Each Road Segment Along Haul Route

Road Segment	From	То	Calculated Traffic Index (TI)	Calculated ESALs
Shore Road	Highway 25	1 Mile East of Highway 25	7.42	196,413
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	7.57	232,768
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	7.54	225,493
Shore Road	3 Miles East of Highway 25	San Felipe Road	8.76	795,827
Fairview Road	San Felipe Road	Ludis Lane	7.61	243,875
Fairview Road	Ludis Lane	Highway 156	7.41	195,567
Fairview Road	Highway 156	Los Vivoras	6.70	83,436
Fairview Road	Los Vivoras	Acquistapace Road	9.54	1,634,816
Fairview Road	Acquistapace Road	Spring Grove Road	7.98	362,152
Fairview Road	Spring Grove Road	Fallon Road	8.00	371,025
Fairview Road	Fallon Road	Rosa Moranda Road	7.84	313,336
Fairview Road	Rosa Moranda Road	Dixie Drive	7.19	151,801
Fairview Road	Dixie Drive	McClosky Road	6.78	92,724
Fairview Road	McClosky Road	Santa Ana Road	6.50	64,926
Fairview Road	Santa Ana Road	Hillcrest Road	6.62	75,925
Fairview Road	Hillcrest Road	Sunnyslope Road	8.22	468,958
Fairview Road	Sunnyslope Road	John Smith Road	6.21	44,284
John Smith Road	Fairview Road	Change of Pavement	4.20	1,666
John Smith Road	Change of Pavement	Best Road	5.53	16,724
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	5.19	9,871

This information quantifies the existing pavement conditions including the thickness of the pavement along each road segment throughout the haul route. The coring information was used to calculate the traffic index and associated ESALs for each road segment thus revealing the structural adequacy of the pavement section. This establishes the baseline of the pavement structure and we will be able to compare the impacts of the out-of-county trucks to this baseline.



SECTION 2- HISTORICAL SUMMARY OF OUT-OF-COUNTY WASTE TRANSPORT FROM 2014 THROUGH 2016

This section provides a historical summary of the out-of-county trucks have had on the existing pavement structure since the contract was established. It should be noted that while the contract with the landfill was established at the end of 2010, the volume of the out-of-county trucks did not ramp up until 2014. Therefore, this analysis focused on the impact of out-of-county trucks since 2014 through 2016.

The landfill has tracked the amount of tonnage the out-of-county trucks has hauled into the landfill. In addition, the landfill has tracked the weight and number of axles of each truck coming into the landfill. Knowing the weight and number of axles of each truck, we can compute the ESALs of each truck. PEI used the 2016 database provided by the County and found that the 268,606 tons of waste imported into the landfill represented 43,288 ESALs.

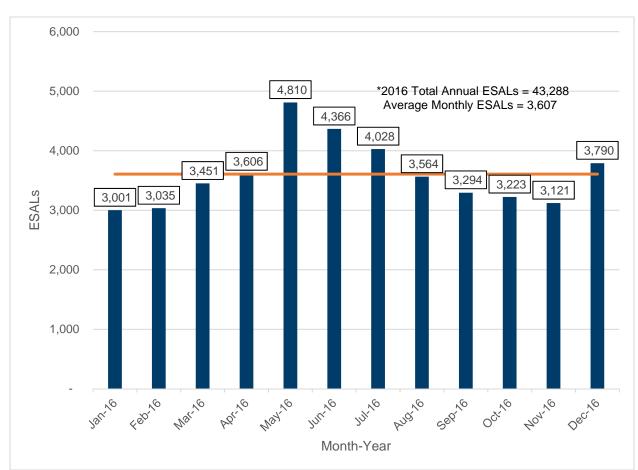


Table 3 – Out-of-County ESALs (Jan 2016 / Dec 2016)

The total tonnage of imported waste and the calculated ESALs for each of the years 2014 through 2016 are shown in Table 4 below:

Table 4 – Tonnage of Imported Waste vs. ESALs

	Year			
	2014	2015	2016	
In-County Tonnage Totals:	55,689	63,523	72,879	
Out-of-County Tonnage Totals:	152,353	221,018	268,606	
Out-of-County ESAL Totals:	24,553*	35,619*	43,288	

*Note: Out of County ESAL totals are prorated based off 2016 data

To calculate the out-of-county ESAL totals for 2014 and 2015, PEI assumed that the types and weights of the trucks transporting the waste into the dump was similar in the number of axles and weight carried as the data that was reduced from the 2016 database provided by the county landfill. The total number of ESALs from the out-of-county trucks between 2014 through 2016 is estimated at 103,460. This value will play a role further in future calculations and impacts as the report progresses.

SECTION 3 - COST TO IMPROVE THE ROADS TO HANDLE THE INCREASED WEIGHT

This section establishes the cost to improve the pavement along the haul route and bring it to a serviceable level that will support the increased weight of the out-of-county trucks.

In order to design the needed pavement section(s) that will address the increased loading from the out-of-county trucks as well as the other traffic that utilizes the haul route, we needed to know the design traffic index of the road segments going forward. To accomplish this task, PEI utilized traffic count data generated by TJKM for this study. TJKM collected traffic count data on August 23, 2017. The data was collected in five locations over 24-hours. Their information is summarized below in Table 6.



Table 6 - San Benito County Traffic Count Data

#	Roadway	Segment	Direction	Passenger Cars	2- Axle	3- Axle	4- Axle	5 or more axle
A Shore Road east of SR 25	Shore Road between Bolsa	Eastbound	767	890	14	9	239	
	east of SR 25	Road and Frazier Lake Road	Westbound	1214	531	22	10	221
B Fairview Road west of SR 156	Fairview Road between Highway	Northbound	2286	1187	27	8	160	
	west of SR 156	156 and Ludis Lane	Southbound	2002	1107	15	7	176
Fairview Road south of Fallon Road		Fairview Road between Rosa Morada and Fallon Road	Northbound	2121	1126	45	5	73
	_		Southbound	2206	1473	5	9	68
D	north of the hetwee	Fairview Road between St.	Northbound	1528	854	24	0	59
D	John Smith Road	Benedict Way and Sunnyslope Road	Southbound	1422	884	26	3	44
E John Smit	John Smith Land	Consider Land Will Endowners	Eastbound (Entrance)	101	36	25	15	37
E John Smith Landfill Entra		iiii Entrance	Westbound (Exit)	90	32	22	7	40

To convert basic truck counts to Equivalent Single Axle Loads (ESALs), application of truck constants are necessary. Truck constants were used from Asphalt Institute MS-1 Manual. In order to approximate the total ESALs more accurately, PEI applied a two step process. The first step was to subtract the known number of out-of-county trucks (all 5-axle) from TJKM's ADT counts and calculate the ESALs using the truck constants. The second step was to calculate the total ESALs from the 40 out-of-county trucks, convert them from a 24 hour count to a 20 year total ESAL count and add the value to the ESALs from step one.

From this data, the 20-year design TIs, shown in Table 7, were developed. It should be noted that the design TIs are slightly different that the calculated TIs. The TIs were rounded up to the nearest 0.5 TI for design purposes according to industry design practice. The calculation sheets computing the TI are in Appendix E.



Table 7 – 20 Year Traffic Index Based on 24 hour Truck Counts

#	Roadway	Segment	Calculated 20 year Traffic Index	Design 20 year Traffic Index	
А	Shore Road east of SR 25	Shore Road between Bolsa Road and Frazier Lake Road	10.6	11.0	
В	Fairview Road west of SR 156	Fairview Road between Highway 156 and Ludis Lane	10.5	10.5	
С	Fairview Road south of Fallon Road	Fairview Road between Rosa Morada and Fallon Road	10.2	10.5	
D	Fairview Road north of the John Smith Road	Fairview Road between St. Benedict Way and Sunnyslope Road	10.0	10.0	
E	John Smith Landf	ill Entrance	9.4	9.5	

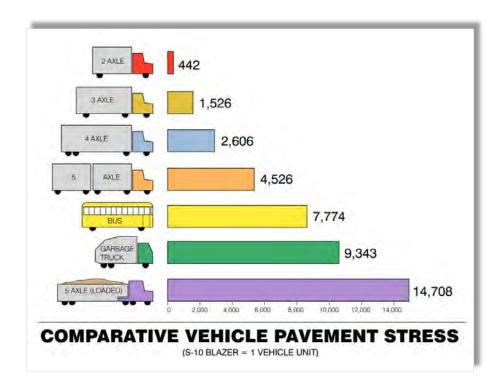
The equation used to convert each vehicle's axle into an ESAL from Caltrans "Flexible Pavement Structural Section Design Guide for California Cities and Counties" is:

 $ESAL = (Average Axle load / 18,000) ^ 4.2$

To compute the total ESALs for a vehicle, each axle's ESAL is added together. It should be noted that the loading impact of passenger vehicles is negligible. To illustrate, one fully loaded 5-axle truck carrying 80,000 pounds will convert into 4.03 ESALs. One 5,000 pound passenger car will convert into 0.0005 ESALs. Therefore, the passenger vehicles are ignored from the ADT.

To further demonstrate how much more impact trucks have then passenger cars, PEI weighed the axle weights of a small, 2-axle, SUV (4,330 pounds) then compared it to different trucks using ESALs. The result is illustrated below.





To illustrate how traffic loading consumes the pavement life, we recommend that the reader think of the pavement as a bank account and the designer determines the amount of loading the pavement will see over it's design life. The total loading is expressed in ESALs and can be thought of as the initial bank account balance. As the traffic drives over the pavement it withdraws ESALs from the ESAL bank account equal to the amount of that particular vehicle. As the ESALs in the bank account are used up, the pavement shows signs of fatigue failure. When the ESALs are all used up, and the bank account is zero, then the pavement failures accelerate. Therefore, calculating the impact as a percentage of the used up ESALs compared to the calculated ESALs determined from the existing structural section of the pavement is a reasonable and fair assumption.

Comparing the Calculated TIs from Table 2 to the 20-year Design TIs in Table 7 above, reveals a large discrepancy. This discrepancy or structural deficiency can be expressed in inches of Hot Mix Asphalt (HMA) that is needed to make up the structural deficiency. The TIs are compared and the structural deficiencies are summarized in the Table 8, Appendix D.

Because the existing pavement sections are structurally deficient, the pavement needs to be reconstructed in order to increase the structural integrity of the road. Also, because the roads are existing, PEI is recommending that the existing pavement section be recycled in-place (Full Depth Reclamation). This is a more cost-effective approach when compared to complete removal and replacement of the existing road section. It will also be quicker to



construct, therefore minimizing the impact on the driving public.

<u>Full Depth Reclamation (FDR)</u> – Remove the existing AC layer and a portion of the aggregate base layer, cement and/or lime treating the remaining section and subgrade to a specified depth and placing the HMA layer. HMA refers to Hot Mix Asphalt, which is the new term for asphalt concrete material. Recycling the existing aggregate base and subgrade is called Full Depth Reclamation (FDR). It should be noted that the HMA and FDR section layer will vary depending on the design TI and R-values. AC refers to Asphalt Concrete and refers to existing asphalt concrete material.

Design Traffic Index (TI-20 years)	HMA Layer Thickness (inches)	FDR Layer Thickness (inches)
11.0	10.5	18
10.5	9.25	18
10.0	9	18
9.5	8.5	17

Estimated construction costs for the FDR were developed based on recent bid prices.

Table 8, Appendix D summarizes the total cost to reconstruct each road segment using the FDR option for each of the design TIs and the total adjusted cost after the impact percentage, from Table 9 below, has been applied.

We see from the information generated in this section that the pavements along the haul route are for the most part structurally inadequate based on the anticipated loading over the next 20 years. We also learn that the pavement sections need to be reconstructed to address the needed structural deficiencies. The estimated cost to reconstruct the pavements to the calculated design TIs is significant totaling \$39,000,000. The adjusted cost attributable to just the out-of-county trucks is estimated at \$15,400,000.

As stated in Section 2, the Out-of-County trucks were hauling waste from 2014 through 2016. As part of our report, PEI is providing the calculated past due cost these trucks would have had on the pavements along the haul route if the roads would have been reconstructed to handle the increased loading.

Starting with the design TIs, calculated earlier in this Section, we are able to compute the number of ESALs the reconstructed roads would provide along the haul route. The design ESALs can be divided into the historical ESALs computed in Section 2. This ratio shows the amount of life the out-of-county trucks would have consumed from the reconstructed



pavement. This information is shown in Table 14, Appendix D.

We see from Table 14 that the impact, or past due cost, that the out-of-county trucks would have had, if the pavement would have been reconstructed, totals to \$1,191,761. It should be noted that the out-of-county trucks will continue to consume pavement life each year they import waste along the haul route.

SECTION 4 - COST DISTRIBUTION

This section is intended to provide a way to estimate a fair distribution of the costs based on how much impact the out-of-county trucks are contributing to the deterioration of the pavement along the haul route.

It is important to recognize that not all of the impact and resulting pavement damage is the result of the out-of-county trucks. The haul route is also used by others. To assess the impact of the out of county vehicles, we need to know what the total loading or total ESALs is and then compare this value to just the projected out-of-county ESALs.

To accomplish this comparison, PEI utilized data generated from TJKM's ADT study from August 23, 2017, shown in Table 6, and the calculated 20 year TIs shown in Table 7. We converted the calculated TIs into ESALs. These values represent the anticipated ESALs that the pavement will see over the next 20 years.

To compute the projected ESALs that will be generated from the out-of-county trucks, PEI started with the calculated ESALs associated with the total tonnage of waste imported into the landfill during 2016. Referencing Table 4, in Section 2 of this report, we see the value is 43,288 ESALs. Multiplying that number by 20 and applying a 20-year growth factor of 1.32, we see that the anticipated total ESALs that are resulting from the out-of-county trucks is 1,142,803. This analysis assumes that the amount of out-of-county trucks was at capacity in 2016 and that they will remain constant for the next 20 years.

A summary of this analysis and the resulting impact percentage is shown in the following table:



Table 9 – Percent Impact of Out-of-County Trucks

#	Roadway	Segment	Calculated 20 year Traffic Index	Calculated 20-year Total ESALs	Calculated 20-year Total ESALs from Out of County Trucks	Percent Impact of Out of County Trucks
Α	Shore Road east of SR 25	Shore Road between Bolsa Road and Frazier Lake Road	10.6	3,940,002	1,142,803	29%
В	Fairview Road west of SR 156	Fairview Road between Highway 156 and Ludis Lane	10.5	3,679,592	1,142,803	31%
С	Fairview Road south of Fallon Road	Fairview Road between Rosa Morada and Fallon Road	10.2	2,944,880	1,142,803	39%
D	Fairview Road north of the John Smith Road	Fairview Road between St. Benedict Way and Sunnyslope Road	10.0	2,399,562	1,142,803	48%
E	John Smith Landfill Entrance		9.4	1,389,498	1,142,803	82%

The fairest approach to establishing the distribution of the costs attributable to the out-of-county trucks is to look at the ESALs that the trucks create and compare them to the overall ESALs along the haul route. It is interesting to note that the study shows that the impact on the out-of-county trucks increases as they get closer to the landfill. This is due to the fact that there are fewer heavy vehicles that are sharing the route.

SECTION 5 - FUTURE MAINTENANCE COSTS

This section calculates the costs to maintain the pavement and keep it operational and safe after it has been rehabilitated. The costs and associated treatments are projected over the next 30 years.



Assumptions

For the purposes of our analysis, we have assumed a pavement section along the entire length of the haul route has been reconstructed as needed to be structurally adequate to accommodate use of the roadway by the out-of-county trucks, pursuant to Caltrans standards for a local truck route and applying a best practices approach to maintaining the pavement. This includes employing the right treatment at the right time during the pavement deterioration cycle.

Pavement Maintenance Procedures

Pavement maintenance procedures are designed to slow the pavement aging process. Mainly, the procedures are designed to protect the pavement from the adverse effects of water and to some extent vehicle traffic.

Maintenance procedures that protect the pavement from aging are crack sealing, digouts, seal coats, and slurry seals. When pavements have extensive cracking and are beyond their design life, interim holding measures, including skin patches and thin overlays, are used as a stop gap prior to major rehabilitation.

Crack Sealing

As the pavement ages, shrinkage cracks begin to form. Crack sealing prevents surface water from getting beneath the asphalt concrete layer into the aggregate bases. Crack sealing generally is performed using hot rubberized crack sealing material. The procedure includes routing small cracks, cleaning and sealing.

Digouts

Digouts are small areas of deteriorated pavement, in the form of alligatored areas, that are removed and replaced with new asphalt concrete. Pavement removal is accomplished by cold planing or saw cutting and excavation. New asphalt is installed in at least two lifts. The digout depth is determined by the street type and construction.

Surface Seals

Slurry seals are used to protect the pavement surface. There are several different types of sealing materials and applications.

Slurry seals consist of a combination of fine aggregate and emulsified oil. Slurry seals are used when the existing pavement surface is weathered and raveled. These seals provide a



protective layer from the oxidizing effects of the sun and water as well as gives a new wearing surface.

Cape seals are a combination of a chip seal followed by a slurry seal. This is an effective treatment when the pavement exhibits excessive cracks. The cape seal will uniformly coat the pavement from edge to edge sealing all the cracks. The slurry seal helps hold the chip aggregates in place and helps smooth out the surface.

Pavement Rehabilitation Procedures

Pavement rehabilitation consists of procedures used to restore the existing pavement quality or to add additional structural support to the pavement. Rehabilitation procedures include conventional overlays, pulverization and resurfacing, asphalt concrete removal and replacement, and reconstruction.

The following table summarizes the unit costs used in this study. PEI used typical costs from 2017 bid prices to develop the costs:

Unit Cost of Treatments Treatment Estimated Cost Unit LF Crack Seal \$ 1.25 SF Digout \$ 7.00 Slurry Seal (Type II) SF \$ 0.35 Cape Seal SF \$ 1.00 Cold Plane and Replace SF \$ 6.50

TABLE 10: Maintenance Unit Costs

Cost Analysis

Projecting over the next thirty years, we have applied the following maintenance approach: a crack seal every three years and a Type II slurry seal every six years with each slurry seal assuming some localized repairs. The pattern repeats until the eighteenth year when the surface treatment is upgraded to a cape seal. It is assumed that in the twenty-second year, the pavement will need to be rehabilitated. If the pavement has been properly designed and constructed, then we anticipate a mill and fill approach to restoring the pavement to a safe and serviceable level. After the rehabilitation, we anticipate following the crack seal and slurry seal pattern on a two and four year cycle to maintain the pavement through the thirtieth year.



The results of this analysis are shown in the following table:

TABLE 11: 30 YEAR MAINTENANCE PLAN AND COSTS

	Projected Maintenance Costs San Benito County Waste Impact Study Out-of-County Haul Route			
Year	Anticipated Treatment	Estimated Cost Impact		
2018	Start	\$ 0		
2021	Crack Seal	\$ 145,481		
2024	Microsurface (Type II), Crack Seal and 0% Digouts	\$ 1,032,912		
2027	Crack Seal	\$ 290,961		
2030	Microsurface (Type II), Crack Seal and 5% Digouts	\$ 1,847,604		
2033	Crack Seal	\$ 436,442		
2036	Cape Seal and 10% Digouts	\$ 3,957,073		
2039	Crack Seal	\$ 436,442		
2042	Cold Plane and Replace with 10% Digouts	\$ 16,759,368		
2044	Crack Seal	\$ 290,961		
2046	Microsurface (Type II), Crack Seal and 5% Digouts	\$ 1,251,133		
	30 Year Maintenance Cost:	\$ 26,448,378		

Applying the computed percent impact of the out-of-county trucks to each of the segment costs (as shown in Table 12, Appendix D), the total estimated maintenance cost attributable to the out-of-county trucks is \$14,053,911. Our cost analysis uses recent prices from similar projects. We have not applied any inflation to the study. All prices are in 2017 dollars. Maintaining the pavement is critical to the on-going performance and extended service life of the pavement. The information generated in this section shows that the cost to maintain the pavement is significant and should not be ignored.



SECTION 6 – RECOMMENDED CAPITAL IMPROVEMENT PROJECTS (CIP)

As part of the study, PEI visually reviewed the existing pavement conditions and compared the observations to the PCIs and structural data collected to establish a recommended priority of when the reconstruction work should occur. Since the existing pavement conditions vary, it is not necessary to complete all the work at one time. The work can be staggered. Given the condition of the pavements and the calculated structural deficiencies, we recommend the work be accomplished over five years. Our recommendations are outlined in Table 13 in Appendix 4.

LIMITATIONS

This report has been prepared on the basis of the indicated field testing and application of our knowledge of pavement technology. The repair strategies in this report are based upon industry standards.

The report contains projections of future life. These are given to provide a broad outline for pavement maintenance budgeting. They should not be interpreted as providing definitive predictions of future pavement performance.

The treatment costs used in this report are based on bid prices collected from 2017 bid results. Actual costs will vary depending on the size and scope of the project. The costs for this report assumed that only one segment would be constructed at a time.

Our professional services were performed, findings obtained, and recommendations prepared in accordance with generally accepted engineering principles and practices. No warranty is either expressed or implied

SUMMARY

Pavement Engineering Inc has evaluated the impact of the out-of-county trucks importing waste along the haul route to the County's landfill on John Smith Road. As part of the study, we documented the pavement's existing conditions; established the impact of the out-of-county trucks on the pavement since the contract was signed; calculated the cost of reconstructing the roads to meet the increased loading; presented a way to fairly proportion the costs; created a 30 year maintenance plan with treatments and costs, and provided a priority matrix showing when the recommended repairs should occur.



This report is based on the data provided. Any changes to the haul route, amount of imported waste or volume of traffic would trigger the need to re-evaluate the findings of this report.

Very truly yours,

PAVEMENT ENGINEERING INC.

Joseph L. Ririe, P.E. Senior Principal Engineer

Attachments: Appendix A – Coring Data

Appendix B – R-values

Appendix C – TI calculations based on Existing Pavement Section

C52735 Exp. 12-31-18

Appendix D – Table 5, Table 8, Table 12 and Table 13

Appendix E – TI Calculations (20 year)

pc: C File

170178-01





San Benito County Waste Impact Study APPENDIX A Coring Data

Fairview Road

Project No. 170178

Client: San Benito County

Acquistapace Rd to Los Viboras

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Acquistapace Rd	4-1/2	17-1/2	
WB2	1250' North of Acquistapace Rd	7-1/2	16-1/2	
WB3	2250' North of Acquistapace Rd	7	3-1/2	
EB1	500' South of Los Viboras	7	7	
EB2	1500' South of Los Viboras	7	7	

Fairview Road Dixie Dr to Rosa Morada Rd

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Dixie Dr	5	14	
WB2	1250' North of Dixie Dr	5	18	
WB3	2250' North of Dixie Dr	5-1/2	16-1/2	
WB4	3250' North of Dixie Dr	5	9	
WB5	4250' North of Dixie Dr	4-1/2	9	
WB6	5250' North of Dixie Dr	5-1/2	9	
EB1	1000' South of Rosa Morada Rd	4-1/2	16	
EB2	2000' South of Rosa Morada Rd	4	14	
EB3	3000' South of Rosa Morada Rd	4-1/2	15	
EB4	4000' South of Rosa Morada Rd	4-1/2	14	
EB5	5000' South of Rosa Morada Rd	4	14	
EB6	6000' South of Rosa Morada Rd	4	15	

Project No. 170178

Client: San Benito County

<u>Fairview Road</u> Fallon Rd to Spring Grove Rd

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Fallon Rd	11	14	
WB2	1250' North of Fallon Rd	7	14	
WB3	2250' North of Fallon Rd	6-1/2	10-1/2	
WB4	3250' North of Fallon Rd	9	11	
EB1	500' South of Spring Grove Rd	6-1/2	10	
EB2	1500' South of Spring Grove Rd	7-1/2	12	
EB3	2500' South of Spring Grove Rd	7	9	
EB4	3500' South of Spring Grove Rd	7-1/2	12	

<u>Fairview Road</u> Hillcrest Rd to Santa Ana Rd

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	500' North of Hillcrest Rd	5-1/2	4-1/2	
WB2	1500' North of Hillcrest Rd	4	4-1/2	
WB3	2500' North of Hillcrest Rd	7	5	
EB1	500' South of Santa Ana Rd	5	16	
EB2	1500' South of Santa Ana Rd	4-1/2	14	
EB3	2500' South of Santa Ana Rd	6	14	

Fairview Road Hwy 156 to Ludis Ln

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Hwy 156	7-1/2	10	
WB2	1250' North of Hwy 156	7-1/2	10	
EB1	500' South of Ludis Ln	7-1/2	12	
EB2	1500' South of Ludis Ln	4-1/2	9	

Project No. 170178

Client: San Benito County

<u>Fairview Road</u>

John Smith Rd to Sunnyslope Rd

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	ASB Layer (Inches)	R-Value
WB1	250' North of John Smith Rd	6	4		
WB2	1250' North of John Smith Rd	5-1/4	4		
		11 11 11 11 11 11 11 11 11 11 11 11 11			
EB1	500' South of Sunnyslope Rd	5	3	8	
EB2	1500' South of Sunnyslope Rd	5	2-1/2	9	

Fairview Road Los Viboras to Hwy 156

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Los Viboras	8	5	
WB2	1250' North of Los Viboras	6-1/2	5	
WB3	2250' North of Los Viboras	7	6	
WB4	3250' North of Los Viboras	6-1/2	6	
EB1	500' South of Hwy 156	4	14	
EB2	1500' South of Hwy 156	7	11	
EB3	2500' South of Hwy 156	6-1/2	8	
EB4	3500' South of Hwy 156	7	7	

Fairview Road

Project No. 170178

Client: San Benito County

Ludis Ln to San Felipe Rd

Core No.	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	ASB Layer (Inches)	R-Value
WB1	250' North of Ludis Ln	7	11		
WB2	1250' North of Ludis Ln	7-1/2	12		
WB3	2250' North of Ludis Ln	4-3/4		12-1/2	
WB4	3250' North of Ludis Ln	4-1/2		12-1/2	
WB5	4250' North of Ludis Ln	6-1/2	11		
EB1	500' South of San Felipe	7	12		
EB2	1500' South of San Felipe	6-1/2	13		
EB3	2500' South of San Felipe	7	12		
EB4	3500' South of San Felipe	7	15		
EB5	4500' South of San Felipe	7	12		

Fairview Road McClosky Rd to Dixie Dr

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of McClosky Rd	7-1/2	7	
WB2	1250' North of McClosky Rd	7-1/2	7	
WB3	2250' North of McClosky Rd	8	7	
WB4	3250' North of McClosky Rd	5	7	
EB1	500' South of Dixie Dr	4-1/2	8	
EB2	1500' South of Dixie Dr	8	4	
EB3	2500' South of Dixie Dr	8	5	

Fairview Road Rosa Morada Rd to Fallon Rd

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Rosa Morada Rd	5-1/2	14	
WB2	1250' North of Rosa Morada Rd	5	14-1/2	
WB3	2250' North of Rosa Morada Rd	5	14	
EB1	250' South of Fallon Rd	4	16	
EB2	1250' South of Fallon Rd	3-1/2	17	
EB3	2250' South of Fallon Rd	4	16	

Fairview Road Santa Ana Rd to McClosky Rd

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Santa Ana Rd	7-1/2	6	
WB2	1250' North of Santa Ana Rd	7	6	
WB3	2250' North of Santa Ana Rd	7-3/4	7	
WB4	3250' North of Santa Ana Rd	5	9	
WB5	4250' North of Santa Ana Rd	7-1/2	7	
EB1	500' South of McClosky Rd	5	9	
EB2	1500' South of McClosky Rd	7	9	
EB3	2500' South of McClosky Rd	7	8	
EB4	3500' South of McClosky Rd	6	8	
EB5	4500' South of McClosky Rd	7	5	

Fairview Road

Project No. 170178

Client: San Benito County

Spring Grove Rd to Acquistapace Rd

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' North of Spring Grove Rd	7-1/2	14	
WB2	1250' North of Spring Grove Rd	6-1/2	14	
WB3	2250' North of Spring Grove Rd	7	14	
WB4	3250' North of Spring Grove Rd	6-1/2	14	
EB1	500' South of Acquistapace Rd	7-1/2	12	
EB2	1500' South of Acquistapace Rd	7	8	
EB3	2500' South of Acquistapace Rd	7-1/2	11	

Fairview Road

Sunnyslope Rd to Hillcrest Rd

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	LTB Layer (Inches)	R-Value
WB1	250' North of Sunnyslope Rd	4-1/2			
WB2	1250' North of Sunnyslope Rd	6-1/2	16		
WB3	2250' North of Sunnyslope Rd	7	15		
EB1	500' South of Hillcrest Rd	7-1/2	14-1/2		
EB2	1500' South of Hillcrest Rd	9	11		
EB3	2500' South of Hillcrest Rd	9	11		

John Smith Road

Project No. 170178

Client: San Benito County

Best Rd to Cop

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' West of Best Rd	3-1/2	7	
WB2	1250' West of Best Rd	6	6-1/2	
WB3	2250' West of Best Rd	3-1/2	8-1/2	
WB4	3250' West of Best Rd	3	7	
WB5	4250' West of Best Rd	3-1/2	7	
WB6	5000' West of Best Rd	3-1/2	7	
EB1	500' East of Cop	3-1/2	14	
EB2	1500' East of Cop	3-1/4	14	
EB3	2500' East of Cop	4	9-1/2	
EB4	3500' East of Cop	3-1/2	13-1/2	
EB5	4500' East of Cop	3	14	

John Smith Road

Project No. 170178

Client: San Benito County

Cop E/O Landfill Entrance to Best Rd

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	800' West of Cop E/O Landfill	5-1/2	6	
WB2	1800' West of Cop E/O Landfill	3-1/2	6	
WB3	2800' West of Cop E/O Landfill	3-1/2	9	
WB4	3800' West of Cop E/O Landfill	3-1/2	8	
		1		
EB1	500' East of Best Rd	2-3/4	10-1/4	
EB2	1500' East of Best Rd	3	10	
EB3	2500' East of Best Rd	3-1/2	9-1/2	
EB4	3500' East of Best Rd	2-3/4	10	

John Smith Road

Project No. 170178

Client: San Benito County

Cop to Fairview Rd

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' West of Cop	1/2	15-1/2	
WB2	1250' West of Cop	1/2	15	
EB1	500' East of Fairview Rd	1-1/2	5-1/2	
EB2	1500' East of Fairview Rd	1/2	12-1/2	
EB3	2500' East of Fairview Rd	1/2	8	

Project No. 170178

Client: San Benito County

Shore Road

1 Mile East of Hwy 25 to Hwy 25

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	ASB Layer (Inches)	R-Value
WB1	250' West of 1 Mi E of Hwy 25	7	3	6	
WB2	1250' West of 1 Mi E of Hwy 25	8	1-1/2	7	
WB3	2250' West of 1 Mi E of Hwy 25	7	1-1/2	6	
WB4	3250' West of 1 Mi E of Hwy 25	7-1/2	1-1/2	7-1/2	
WB5	4250' West of 1 Mi E of Hwy 25	7-1/2	4-1/2	5-1/2	
EB1	500' East of Hwy 25	7	4	10	
EB2	1500' East of Hwy 25	7	4	10	
EB3	2500' East of Hwy 25	7-1/2	3-1/2	9	
EB4	3500' East of Hwy 25	8	3	8	
EB5	4500' East of Hwy 25	8	2-1/2	6	

Shore Road 2 Miles East of Hwy 25 to 1 Mi East of Hwy 25

Project No. 170178

Client: San Benito County

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	ASB Layer (Inches)	R-Value
WB1	250' West of 2 Mi E of Hwy 25	8	2-1/2	5	
WB2	1250' West of 2 Mi E of Hwy 25	8	2-1/2	4-1/2	
WB3	2250' West of 2 Mi E of Hwy 25	7-1/2	2-1/2	6	
WB4	3250' West of 2 Mi E of Hwy 25	7	2-1/2	6-1/2	
WB5	4250' West of 2 Mi E of Hwy 25	7-1/2	2-1/2	4	
EB1	500' East of 1 Mi E of Hwy 25	7-1/2	4	6-1/2	
EB2	1500' East of 1 Mi E of Hwy 25	7-1/2	2-1/2	4	
EB3	2500' East of 1 Mi E of Hwy 25	11	1-1/2	6	
EB4	3500' East of 1 Mi E of Hwy 25	7	3-1/2	4	
EB5	4500' East of 1 Mi E of Hwy 25	8	4	4	

Project No. 170178

Client: San Benito County

Shore Road
3 Miles East of Hwy 25 to 2 Mi East of Hwy 25

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	ASB Layer (Inches)	R-Value
WB1	250' West of 3 Mi E of Hwy 25	7	12		
WB2	1250' West of 3 Mi E of Hwy 25	6-1/2	13		
WB3	2250' West of 3 Mi E of Hwy 25	4	15		
WB4	3250' West of 3 Mi E of Hwy 25	8-1/2	14		
WB5	4250' West of 3 Mi E of Hwy 25	7	12		
EB1	500' East of 2 Mi E of Hwy 25	7-1/2	5	3-1/2	
EB2	1500' East of 2 Mi E of Hwy 25	7	4	4-1/2	
EB3	2500' East of 2 Mi E of Hwy 25	8	9		
EB4	3500' East of 2 Mi E of Hwy 25	7	12		
EB5	4500' East of 2 Mi E of Hwy 25	7	11		

Project No. 170178

Client: San Benito County

San Felipe Rd to 3 Miles East of Hwy 25

Core <u>No.</u>	<u>Location</u>	HMA Layer (Inches)	AB Layer (Inches)	R-Value
WB1	250' West of San Felipe	6-1/2	14	
WB2	1250' West of San Felipe	7	14	
WB3	2250' West of San Felipe	7	15	
WB4	3250' West of San Felipe	6-1/2	13	
EB1	500' East of 3 Mi E of Hwy 25	7	9	
EB2	1500' East of 3 Mi E of Hwy 25	7-1/2	7	
EB3	2500' East of 3 Mi E of Hwy 25	7	14	
EB4	3500' East of 3 Mi E of Hwy 25	7	13	



San Benito County Waste Impact Study APPENDIX B

R-values



 Laboratory No.:
 L171227

 Project No.:
 170178

 Sample Date:
 August 8, 2017

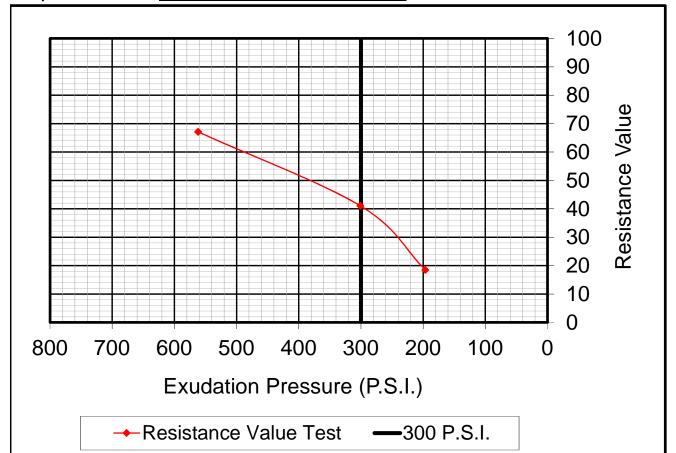
 Report Date:
 August 14, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #1, EB Fairview Rd. 500' south of Hillcrest



Specimen No.	1	2	3
Moisture Content (%)	8.1	9.2	9.7
Dry Density (PCF)	136.2	135.4	134.1
Resistance Value (R)	67	41	19
Exudation Pressure (PSI)	562	301	196
Expansion Pressure	0	0	0
As Received Moisture Content (%)	8.1		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

41

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171366

 Project No.:
 170178

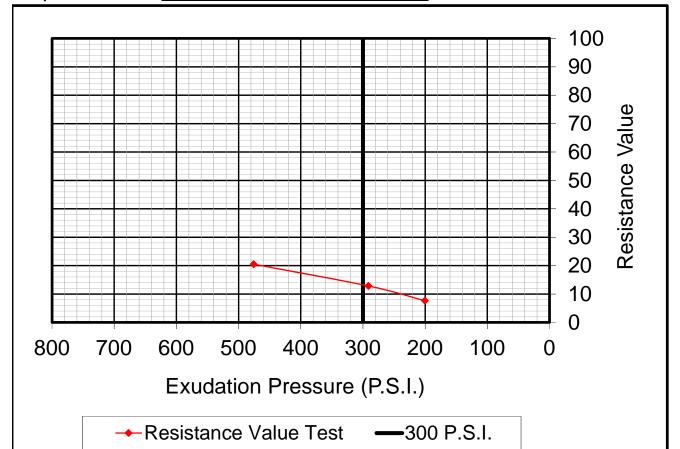
Sample Date:August 8, 2017Report Date:September 5, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #1, EB John Smith Rd. 500' from Fairview Rd



Specimen No.	1	2	3
Moisture Content (%)	9.7	10.8	11.4
Dry Density (PCF)	130.6	129.2	128.1
Resistance Value (R)	21	13	8
Exudation Pressure (PSI)	476	291	200
Expansion Pressure	65	35	17
As Received Moisture Content (%)	9.7		

RESISTANCE VALUE AT 300 P.S.I. 13

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171326

 Project No.:
 170178

 Sample Date:
 August 7

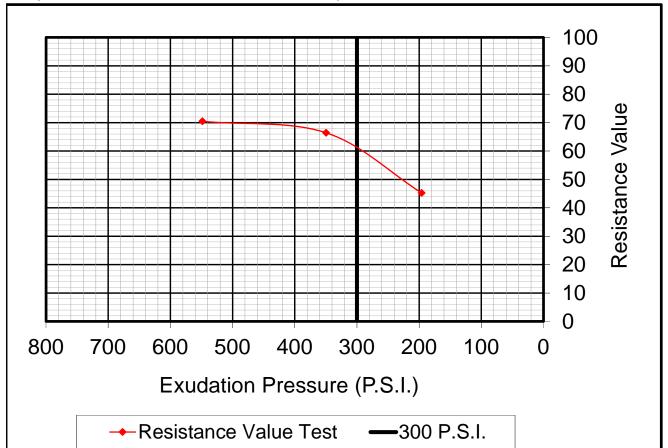
 Sample Date:
 August 7, 2017

 Report Date:
 August 25, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel
Sample Location: #1,EB Shore Rd. 500' from Hwy 25



Specimen No.	10	11	12
Moisture Content (%)	8.6	9.7	9.2
Dry Density (PCF)	140.0	138.0	138.8
Resistance Value (R)	70	45	66
Exudation Pressure (PSI)	549	196	350
Expansion Pressure	0	0	0
As Received Moisture Content (%)	8.6		

RESISTANCE VALUE AT 300 P.S.I. 61



Reviewed By:

Brandon Rodebaugh Materials Engineer



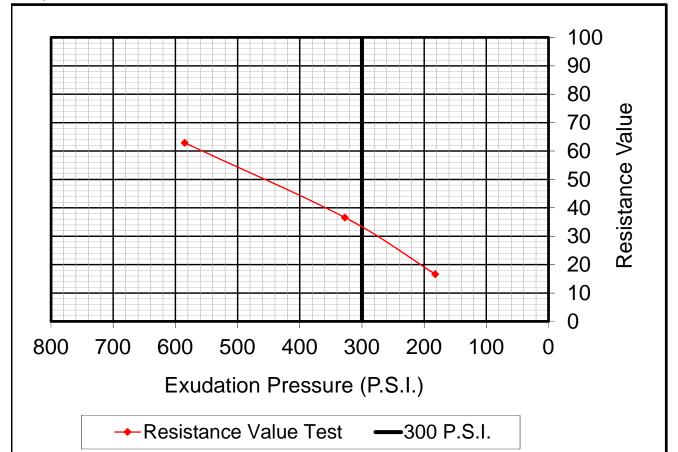
Laboratory No.: L171227 Project No.: 170178

Sample Date: August 8, 2017 **Report Date:** August 14, 2017

Client: Economic & Planning Systems, Inc. **Project Name:** San Benito County Waste Impact Study

Sample Description: **Brown Clayey Sand with Gravel**

Sample Location: #2, EB fairview Rd. 1500' from Hillcrest



Specimen No.	7	8	9
Moisture Content (%)	8.6	10.0	10.5
Dry Density (PCF)	133.5	133.0	132.5
Resistance Value (R)	63	37	17
Exudation Pressure (PSI)	585	327	182
Expansion Pressure	13	0	0
As Received Moisture Content (%)	8.6		

RESISTANCE VALUE AT 300 P.S.I. 33

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171366

 Project No.:
 170178

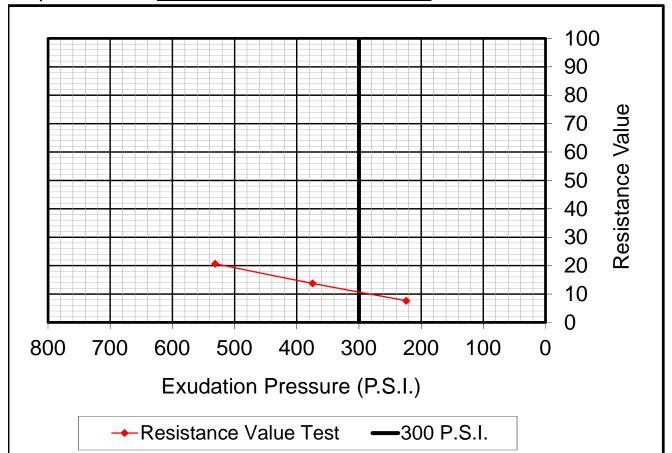
Sample Date: August 8, 2017
Report Date: September 1, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clay

Sample Location: #2, EB John Smith Rd. 1500' from Fairview Rd



Specimen No.	7	8	9
Moisture Content (%)	11.7	13.1	13.8
Dry Density (PCF)	127.7	125.8	124.0
Resistance Value (R)	21	14	8
Exudation Pressure (PSI)	531	375	224
Expansion Pressure	26	0	0
As Received Moisture Content (%)	11.7		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

11

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171267

 Project No.:
 170178

 Sample Date:
 August 7,

 Sample Date:
 August 7, 2017

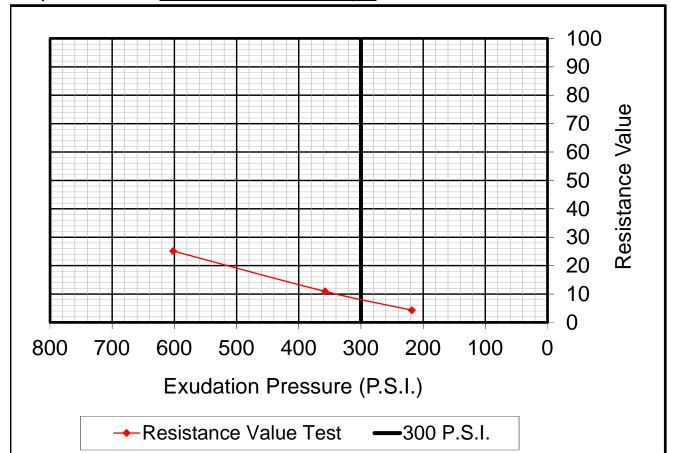
 Report Date:
 August 16, 2017

Client: <u>Economic & Planning Systems, Inc.</u>

Project Name: <u>San Benito County Waste Impact Study</u>

Sample Description: Brown Clay

Sample Location: #2, EB Shore Rd. 1500' from Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	22.6	24.3	21.9
Dry Density (PCF)	105.7	103.7	107.0
Resistance Value (R)	11	4	25
Exudation Pressure (PSI)	358	218	602
Expansion Pressure	143	87	212
As Received Moisture Content (%)	22.6		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

8

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171366

 Project No.:
 170178

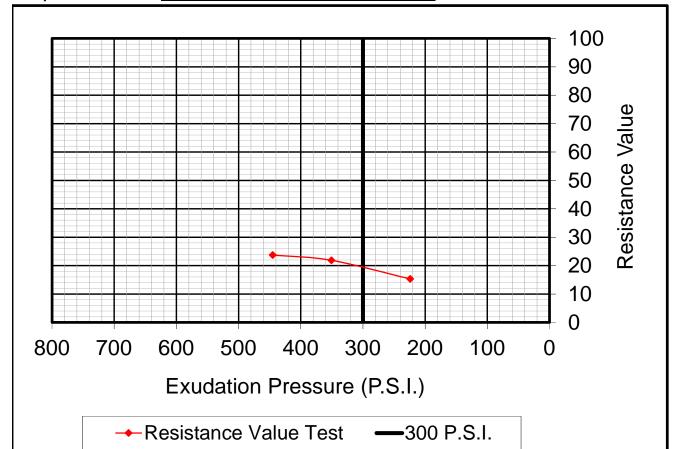
Sample Date:August 8, 2017Report Date:September 1, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #3, EB John Smith Rd. 2500' from Fairview Rd



Specimen No.	1	2	3
Moisture Content (%)	11.3	12.4	12.0
Dry Density (PCF)	130.1	128.3	128.8
Resistance Value (R)	24	15	22
Exudation Pressure (PSI)	445	224	351
Expansion Pressure	35	0	13
As Received Moisture Content (%)	11.3		

RESISTANCE VALUE AT 300 P.S.I. _____19

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171227

 Project No.:
 170178

 Sample Pater
 Average 7

 Sample Date:
 August 7, 2017

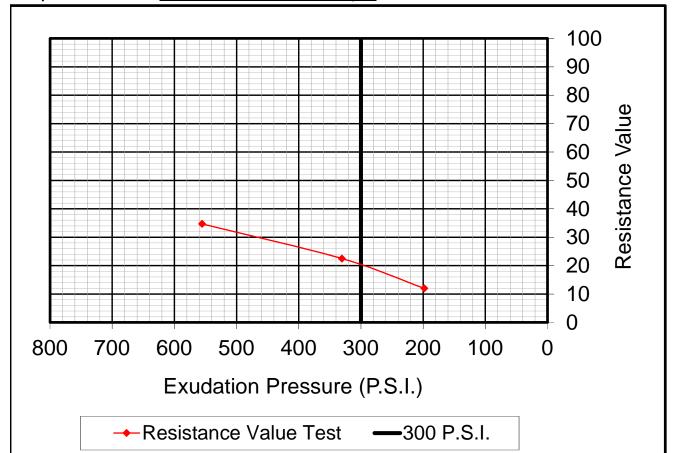
 Report Date:
 August 16, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Dark Brown Clayey Silt

Sample Location: #3, EB Shore Rd. 2500' from Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	10.9	12.0	12.6
Dry Density (PCF)	129.3	127.8	126.0
Resistance Value (R)	35	23	12
Exudation Pressure (PSI)	556	331	198
Expansion Pressure	61	26	17
As Received Moisture Content (%)	10.9		

RESISTANCE VALUE AT 300 P.S.I. 21

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171227

 Project No.:
 170178

 Sample Date:
 August 8, 2017

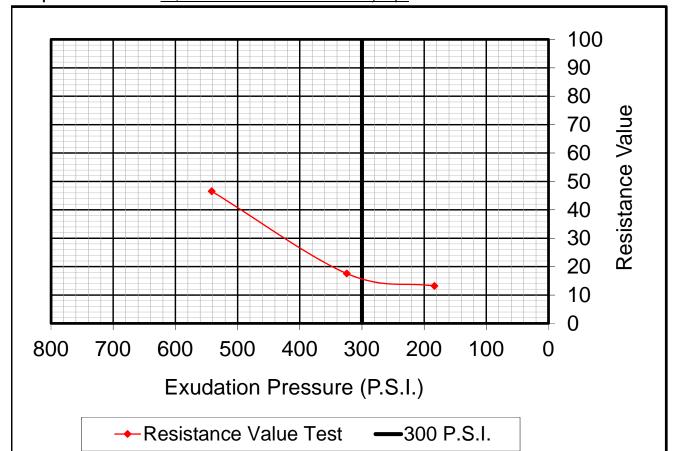
 Report Date:
 August 14, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #4, EB Fairview Rd. 500' from Sunnyslope



Specimen No.	10	11	12
Moisture Content (%)	8.8	10.2	10.7
Dry Density (PCF)	135.0	132.8	131.2
Resistance Value (R)	47	18	13
Exudation Pressure (PSI)	541	324	183
Expansion Pressure	13	0	0
As Received Moisture Content (%)	8.8		

RESISTANCE VALUE AT 300 P.S.I. 16

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171382

 Project No.:
 170178

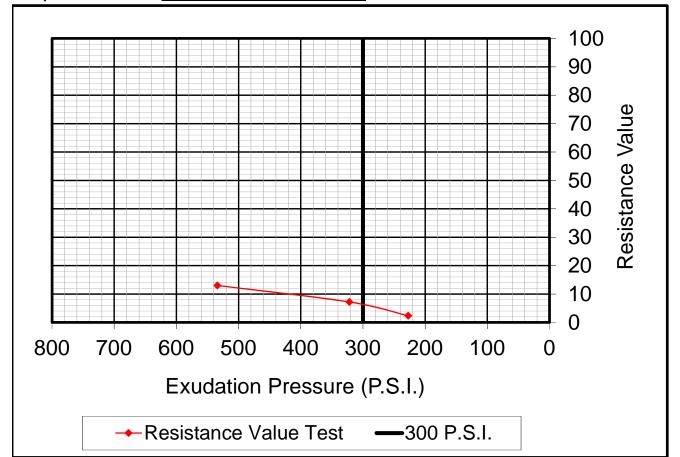
Sample Date:August 8, 2017Report Date:September 1, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #4, John Smith Rd. 500' from COP



Specimen No.	1	2	3
Moisture Content (%)	19.3	20.8	21.6
Dry Density (PCF)	117.2	113.6	112.0
Resistance Value (R)	13	7	2
Exudation Pressure (PSI)	534	322	227
Expansion Pressure	26	0	0
As Received Moisture Content (%)	19.3		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

6

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171321

 Project No.:
 170178

 Sample Date:
 August 7,

 Sample Date:
 August 7, 2017

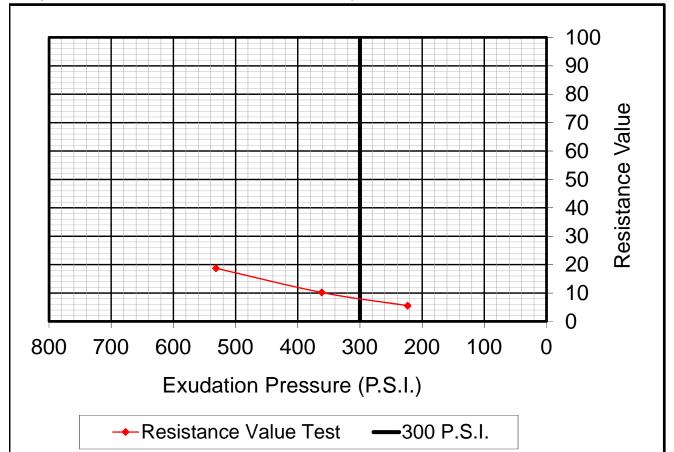
 Report Date:
 August 25, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clay with Gravel

Sample Location: #4, EB Shore Rd. 3500' from Hwy 25



Specimen No.	7	8	9
Moisture Content (%)	18.1	19.7	20.3
Dry Density (PCF)	115.7	113.6	113.2
Resistance Value (R)	19	10	6
Exudation Pressure (PSI)	532	361	223
Expansion Pressure	69	17	0
As Received Moisture Content (%)	18.1		

RESISTANCE VALUE AT 300 P.S.I. 8

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171227

 Project No.:
 170178

 Sample Date:
 August 9, 2017

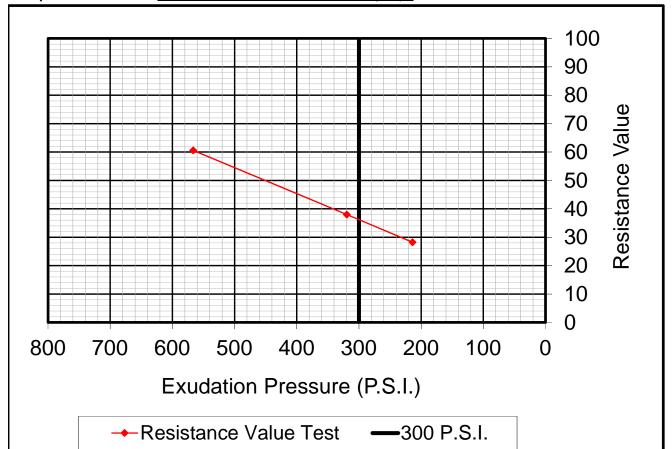
 Report Date:
 August 15, 2017

Client: <u>Economic & Planning Systems, Inc.</u>

Project Name: <u>San Benito County Waste Impact Study</u>

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #5, EB Fairview Rd. 1500' from Sunnyslope



Specimen No.	10	11	12
Moisture Content (%)	10.0	11.0	11.5
Dry Density (PCF)	134.8	133.9	132.7
Resistance Value (R)	61	38	28
Exudation Pressure (PSI)	567	320	214
Expansion Pressure	17	0	0
As Received Moisture Content (%)	10.0		

RESISTANCE VALUE AT 300 P.S.I. _____36

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171366

 Project No.:
 170178

 Sample Date:
 August 8

 Sample Date:
 August 8, 2017

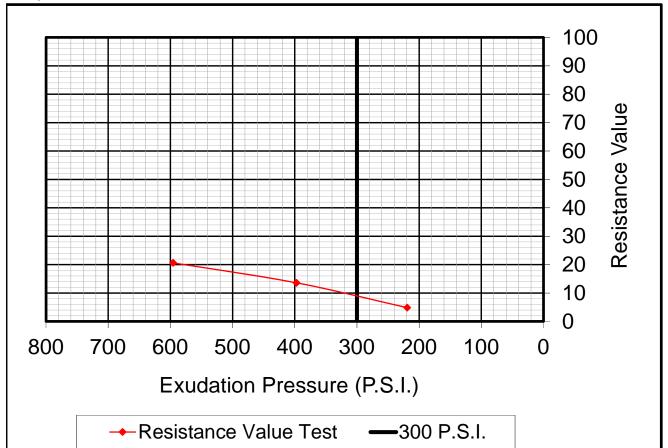
 Report Date:
 August 30, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clay with Gravel

Sample Location: #5, EB John Smith Rd. 1500' From COP



Specimen No.	10	11	12
Moisture Content (%)	14.3	15.8	13.8
Dry Density (PCF)	120.6	118.5	122.4
Resistance Value (R)	14	5	21
Exudation Pressure (PSI)	397	219	596
Expansion Pressure	43	30	69
As Received Moisture Content (%)	14 3		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171321

 Project No.:
 170178

 Sample Date:
 August 9

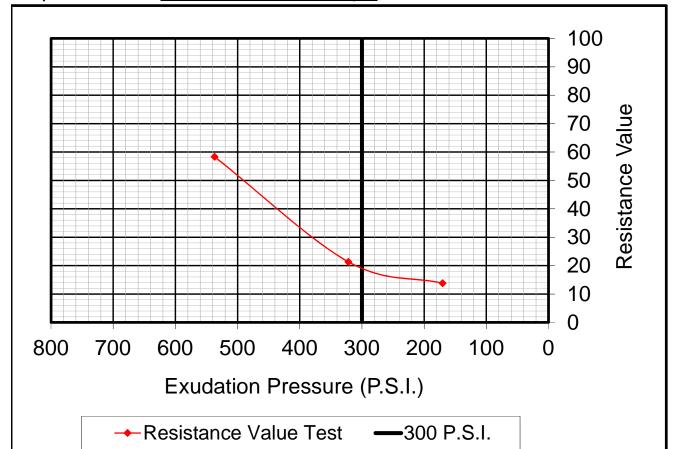
 Sample Date:
 August 9, 2017

 Report Date:
 August 15, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel
#5, EB Shore Rd. 4500' from Hwy 25



Specimen No.	4	5	6
Moisture Content (%)	9.8	10.9	9.2
Dry Density (PCF)	127.5	126.2	129.9
Resistance Value (R)	21	14	58
Exudation Pressure (PSI)	322	170	537
Expansion Pressure	0	0	9
As Received Moisture Content (%)	9.8		

RESISTANCE VALUE AT 300 P.S.I. _____19

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171227

 Project No.:
 170178

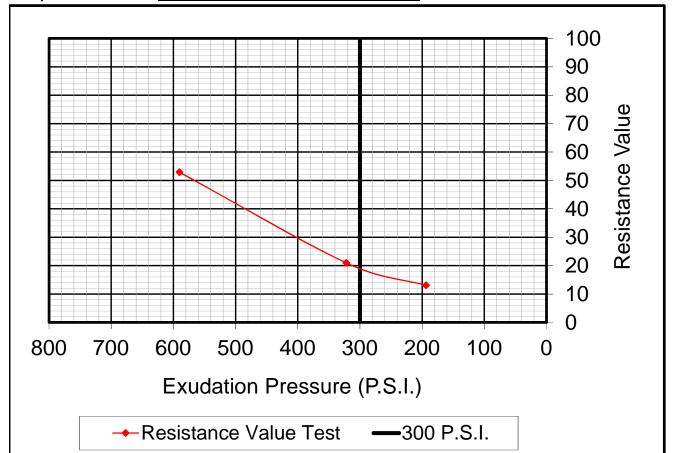
Sample Date: August 9, 2017
Report Date: August 13, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay with Gravel

Sample Location: #6, EB Fairview Rd. 500' south of Santa Ana



Specimen No.	4	5	6
Moisture Content (%)	12.4	13.5	11.7
Dry Density (PCF)	126.4	123.9	126.7
Resistance Value (R)	21	13	53
Exudation Pressure (PSI)	322	194	590
Expansion Pressure	35	17	65
As Received Moisture Content (%)	12.4		

RESISTANCE VALUE AT 300 P.S.I. _____19

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171382

 Project No.:
 170178

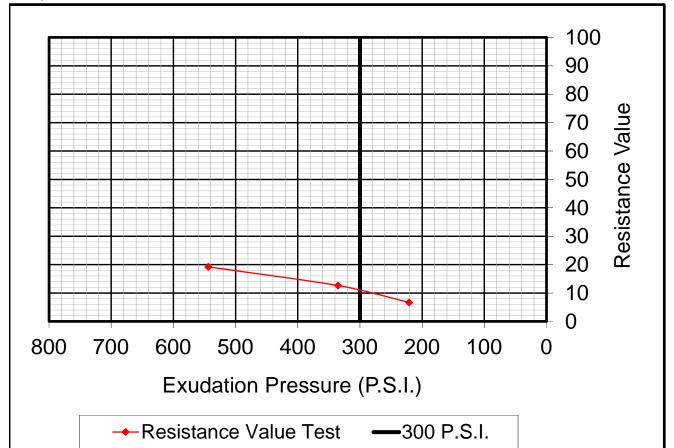
Sample Date:August 8, 2017Report Date:September 1, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #6, EB John Smith Rd. 2500' from COP



Specimen No.	10	11	12
Moisture Content (%)	11.0	12.4	13.0
Dry Density (PCF)	128.2	125.0	124.2
Resistance Value (R)	19	13	7
Exudation Pressure (PSI)	544	335	221
Expansion Pressure	52	9	0
As Received Moisture Content (%)	11.0		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

11

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171250

 Project No.:
 170178

 Completed States
 170178

 Sample Date:
 August 7, 2017

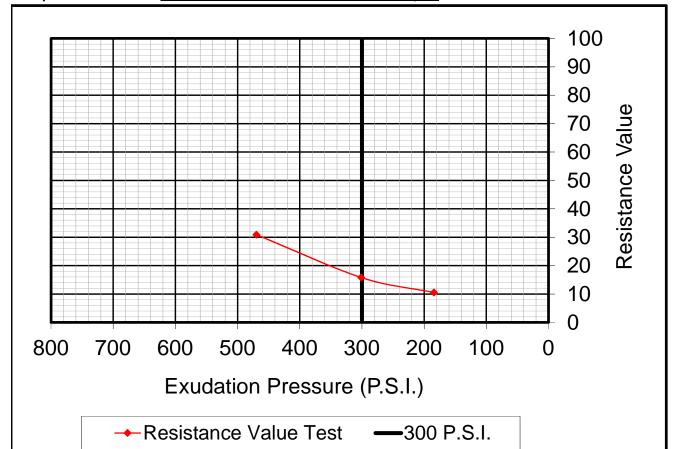
 Report Date:
 August 16, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #6, EB Shore Rd. 500' from one mile of Hwy 25



Specimen No.	10	11	12
Moisture Content (%)	11.1	12.2	12.8
Dry Density (PCF)	125.6	123.7	122.2
Resistance Value (R)	31	16	11
Exudation Pressure (PSI)	470	301	184
Expansion Pressure	35	0	0
As Received Moisture Content (%)	11 1		

RESISTANCE VALUE AT 300 P.S.I. _____16

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171267

 Project No.:
 170178

 Sample Date:
 August 9, 2017

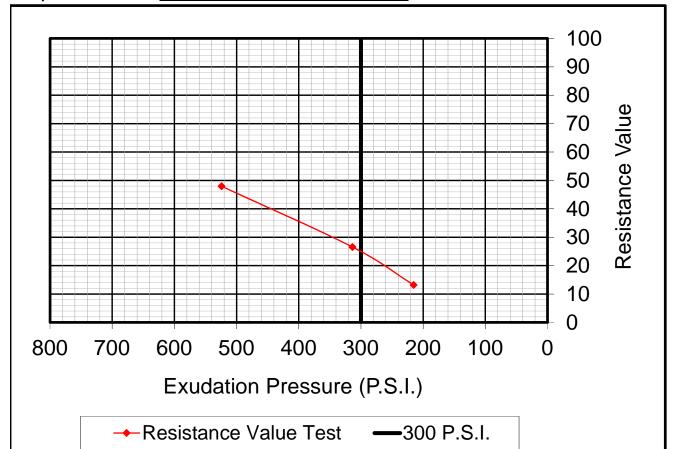
 Report Date:
 August 16, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #7, EB Fairview Rd. 1500' from Santa Ana



Specimen No.	4	5	6
Moisture Content (%)	10.5	11.6	12.2
Dry Density (PCF)	134.0	129.9	128.9
Resistance Value (R)	48	27	13
Exudation Pressure (PSI)	524	314	215
Expansion Pressure	26	9	0
As Received Moisture Content (%)	5.8		

RESISTANCE VALUE AT 300 P.S.I. _____25

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171382

 Project No.:
 170178

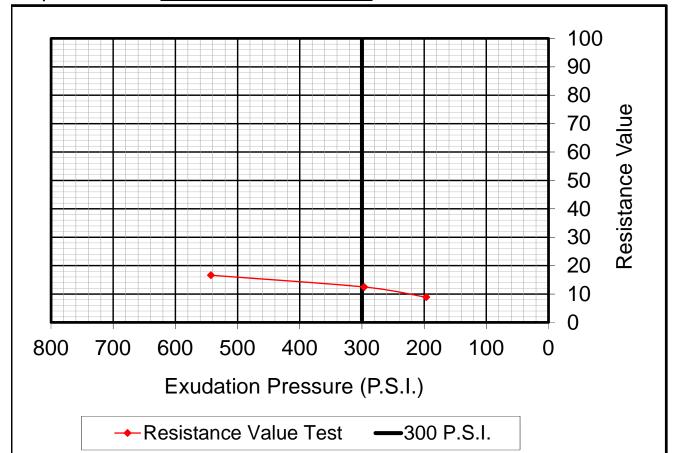
Sample Date:August 8, 2017Report Date:September 1, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #7, John Smith Rd. 3500' from COP



Specimen No.	4	5	6
Moisture Content (%)	10.2	11.3	11.9
Dry Density (PCF)	130.3	127.5	126.7
Resistance Value (R)	17	12	9
Exudation Pressure (PSI)	543	296	197
Expansion Pressure	26	0	0
As Received Moisture Content (%)	10.2		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

13

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171355

 Project No.:
 170178

 Sample Date:
 August 7, 2017

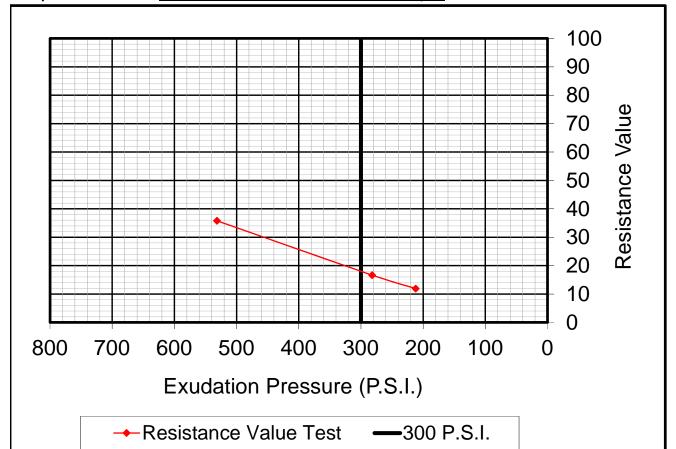
 Report Date:
 August 30, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #7, EB Shore Rd. 1500' from one mile of Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	9.0	10.1	10.6
Dry Density (PCF)	132.0	130.5	129.4
Resistance Value (R)	36	17	12
Exudation Pressure (PSI)	532	282	212
Expansion Pressure	30	4	0
As Received Moisture Content (%)	9.0		

RESISTANCE VALUE AT 300 P.S.I. 18



Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171326

 Project No.:
 170178

 Completed Services
 170178

 Sample Date:
 August 9, 2017

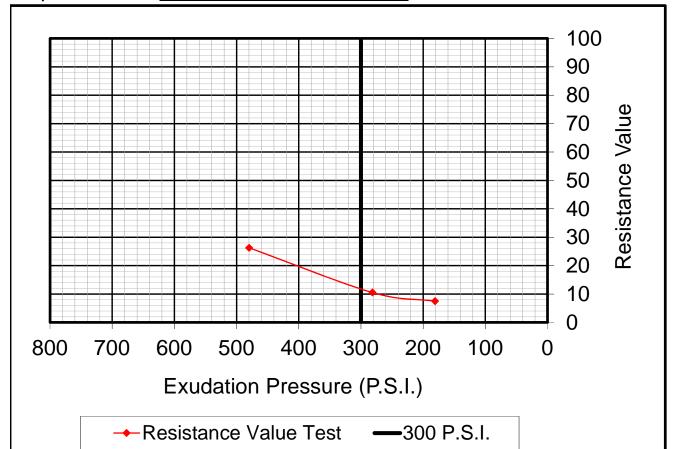
 Report Date:
 August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #8, EB Fairview Rd. 2500' from Santa Ana



Specimen No.	4	5	6
Moisture Content (%)	10.0	11.1	11.6
Dry Density (PCF)	131.3	129.3	128.2
Resistance Value (R)	26	11	8
Exudation Pressure (PSI)	480	282	181
Expansion Pressure	17	0	0
As Received Moisture Content (%)	10.0		

RESISTANCE VALUE AT 300 P.S.I. 12

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171390

 Project No.:
 170178

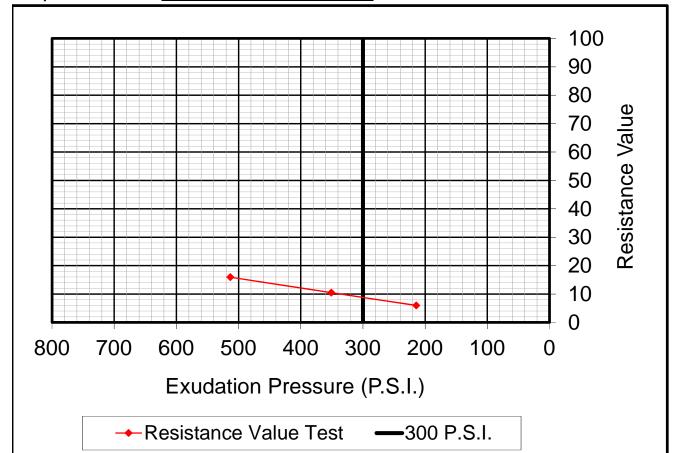
Sample Date:August 8, 2017Report Date:September 5, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #8, John Smith Rd. 4500' from COP



Specimen No.	1	2	3
Moisture Content (%)	13.3	14.5	15.1
Dry Density (PCF)	123.3	121.3	120.4
Resistance Value (R)	16	10	6
Exudation Pressure (PSI)	513	351	214
Expansion Pressure	22	0	0
As Received Moisture Content (%)	13.3		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171330

 Project No.:
 170178

 Sample Date:
 August 7,

 Sample Date:
 August 7, 2017

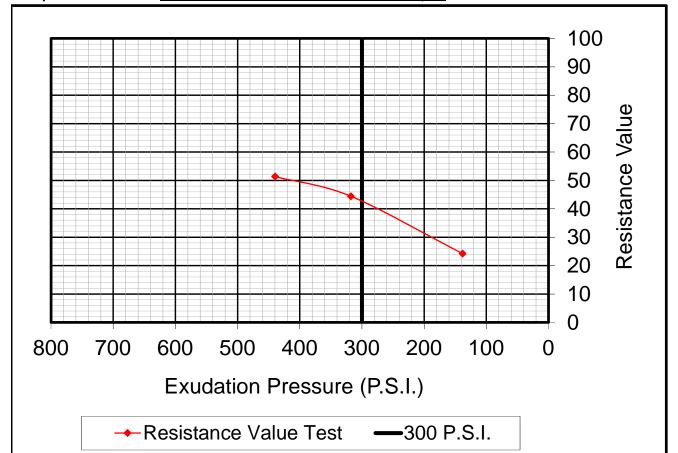
 Report Date:
 August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #8, EB Shore Rd. 2500' from one mile of Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	7.9	8.9	8.5
Dry Density (PCF)	138.8	136.9	138.0
Resistance Value (R)	51	24	44
Exudation Pressure (PSI)	440	138	318
Expansion Pressure	17	0	0
As Received Moisture Content (%)	7 9		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

43

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171338

 Project No.:
 170178

 Sample Pate:
 August 0

 Sample Date:
 August 9, 2017

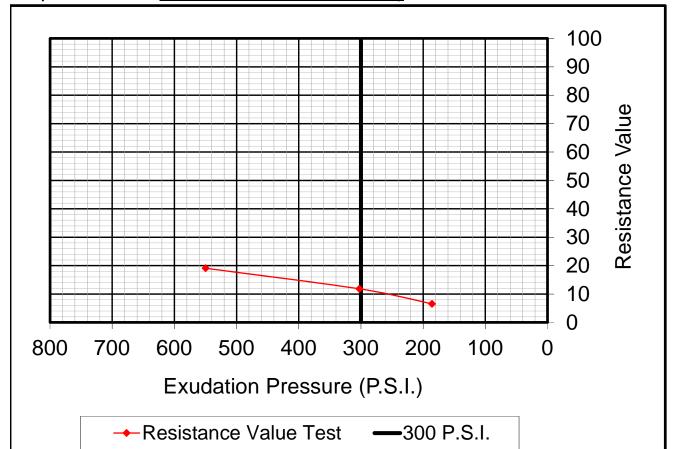
 Report Date:
 August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clay with Gravel

Sample Location: #9, EB Fairview Rd. 500' from McCloskey



Specimen No.	7	8	9
Moisture Content (%)	15.0	16.1	14.3
Dry Density (PCF)	124.3	122.1	125.8
Resistance Value (R)	12	7	19
Exudation Pressure (PSI)	303	186	550
Expansion Pressure	43	26	95
As Received Moisture Content (%)	15.0		

RESISTANCE VALUE AT 300 P.S.I. 12

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171390

 Project No.:
 170178

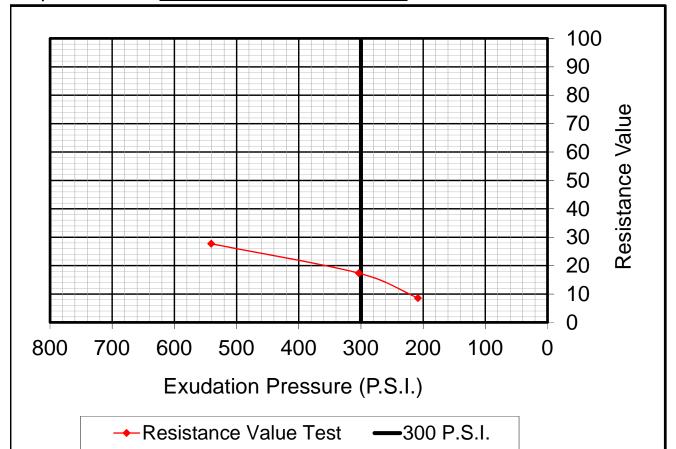
Sample Date:August 8, 2017Report Date:September 5, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #9, EB John Smith Rd. 500' from Best Rd.



Specimen No.	4	5	6
Moisture Content (%)	13.8	15.0	13.3
Dry Density (PCF)	123.0	121.7	125.8
Resistance Value (R)	17	9	28
Exudation Pressure (PSI)	303	208	541
Expansion Pressure	0	0	0
As Received Moisture Content (%)	13.8		

RESISTANCE VALUE AT 300 P.S.I. _____17

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171355

 Project No.:
 170178

 Sample Pater
 Average 7

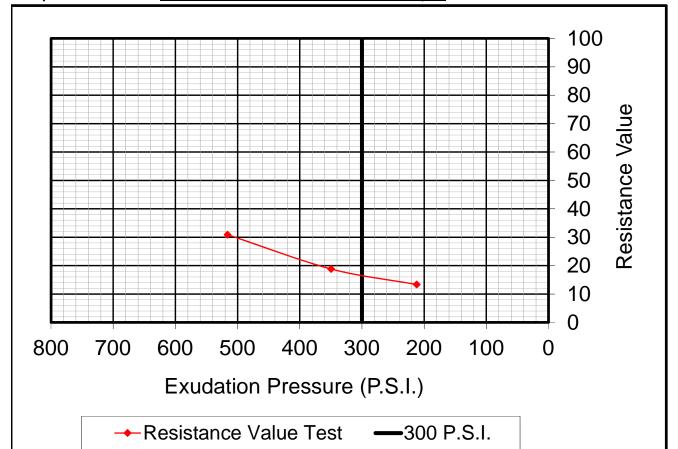
Sample Date:August 7, 2017Report Date:August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #9, EB Shore Rd. 3500' from one mile of Hwy 25



Specimen No.	7	8	9
Moisture Content (%)	9.3	10.4	11.1
Dry Density (PCF)	130.8	129.5	127.9
Resistance Value (R)	31	19	13
Exudation Pressure (PSI)	516	350	212
Expansion Pressure	0	0	0
As Received Moisture Content (%)	9.3		

RESISTANCE VALUE AT 300 P.S.I. _____16



Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171250

 Project No.:
 170178

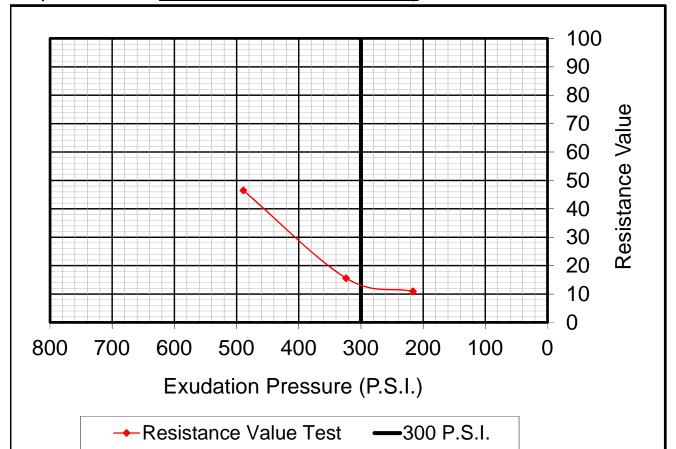
Sample Date: August 9, 2017
Report Date: August 16, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #10, EB Fairview Rd. 1500' from McCloskey



Specimen No.	4	5	6
Moisture Content (%)	8.6	9.7	10.2
Dry Density (PCF)	135.4	133.6	131.9
Resistance Value (R)	46	16	11
Exudation Pressure (PSI)	489	324	216
Expansion Pressure	35	22	0
As Received Moisture Content (%)	8.6		

RESISTANCE VALUE AT 300 P.S.I. 13

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171390

 Project No.:
 170178

 Completed Services
 170178

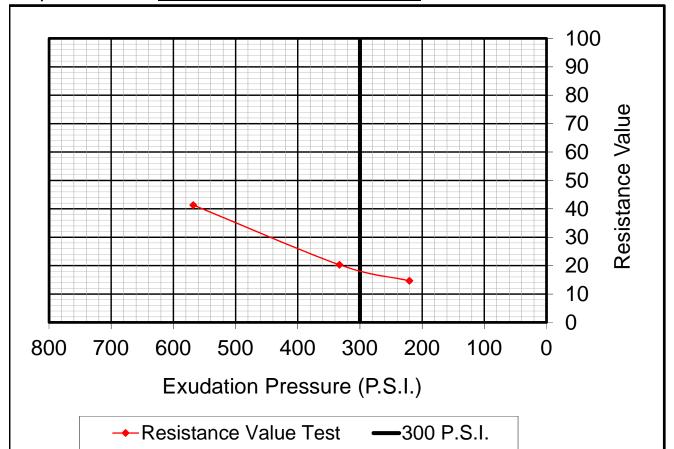
Sample Date:August 8, 2017Report Date:September 5, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #10, EB John Smith Rd. 1500' from Best Rd.



Specimen No.	7	8	9
Moisture Content (%)	8.4	9.7	10.3
Dry Density (PCF)	135.4	133.7	132.6
Resistance Value (R)	41	20	15
Exudation Pressure (PSI)	568	333	220
Expansion Pressure	17	0	0
As Received Moisture Content (%)	8.4		

RESISTANCE VALUE AT 300 P.S.I. _____18



Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171338

 Project No.:
 170178

 Sample Date:
 August 7,

 Sample Date:
 August 7, 2017

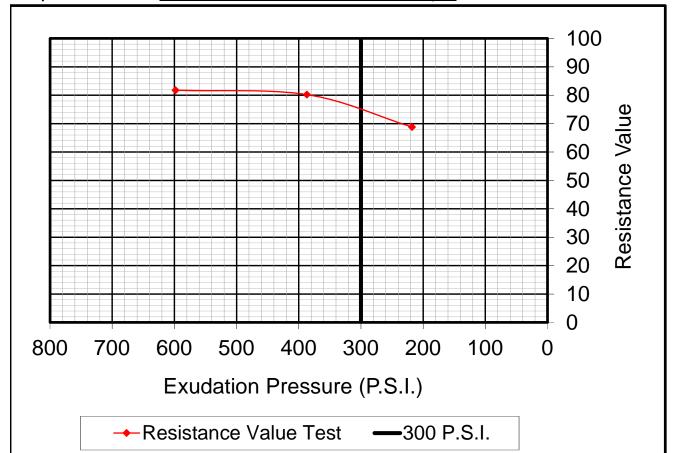
 Report Date:
 August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #10, EB Shore Rd. 4500' from one mile of Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	7.9	9.0	9.5
Dry Density (PCF)	134.2	133.9	132.8
Resistance Value (R)	82	80	69
Exudation Pressure (PSI)	598	387	218
Expansion Pressure	0	0	0
As Received Moisture Content (%)	7 9		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

75

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171348

 Project No.:
 170178

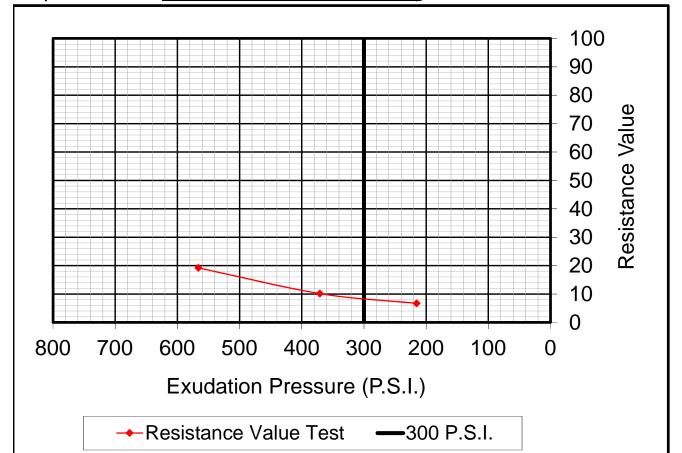
Sample Date: August 9, 2017
Report Date: August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #11, EB Fairview Rd. 2500' from McCloskey



Specimen No.	7	8	9
Moisture Content (%)	14.5	16.0	16.6
Dry Density (PCF)	126.1	119.5	119.1
Resistance Value (R)	19	10	7
Exudation Pressure (PSI)	566	371	215
Expansion Pressure	13	0	0
As Received Moisture Content (%)	14.5		

RESISTANCE VALUE AT 300 P.S.I. 8

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171382

 Project No.:
 170178

 Completed Services
 170178

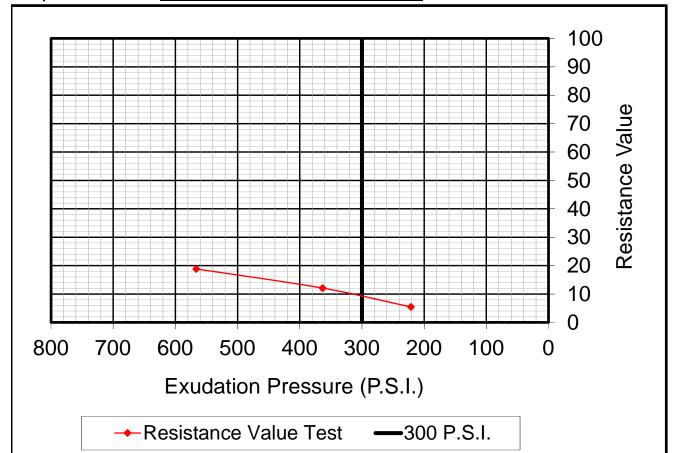
Sample Date:August 8, 2017Report Date:September 1, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #11, EB John Smith Rd. 2500' from Best Rd.



Specimen No.	7	8	9
Moisture Content (%)	12.4	13.6	11.8
Dry Density (PCF)	125.7	124.2	126.5
Resistance Value (R)	12	5	19
Exudation Pressure (PSI)	363	221	567
Expansion Pressure	43	17	91
As Received Moisture Content (%)	12.4		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171330

 Project No.:
 170178

 Sample Pate:
 August 7

 Sample Date:
 August 7, 2017

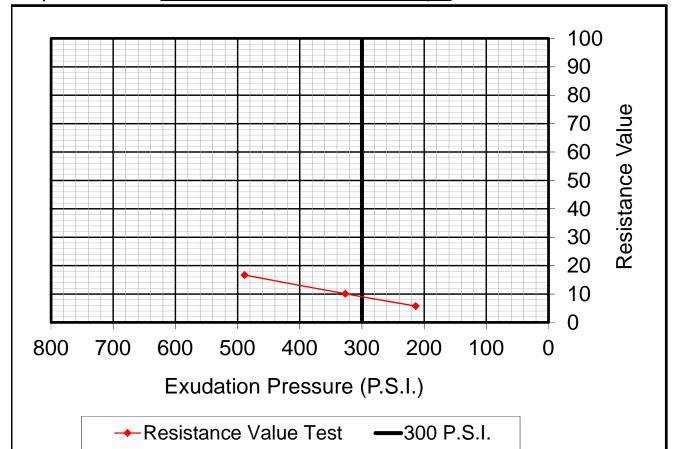
 Report Date:
 August 26, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #11, EB Shore Rd. 500' from two miles of Hwy 25



Specimen No.	4	5	6
Moisture Content (%)	14.3	15.8	16.4
Dry Density (PCF)	125.3	122.5	121.7
Resistance Value (R)	17	10	6
Exudation Pressure (PSI)	489	327	213
Expansion Pressure	78	30	13
As Received Moisture Content (%)	14.3		

RESISTANCE VALUE AT 300 P.S.I.

Reviewed By:

Brandon Rodebaugh Materials Engineer





 Laboratory No.:
 L171267

 Project No.:
 170178

 Sample Date:
 August 9, 2017

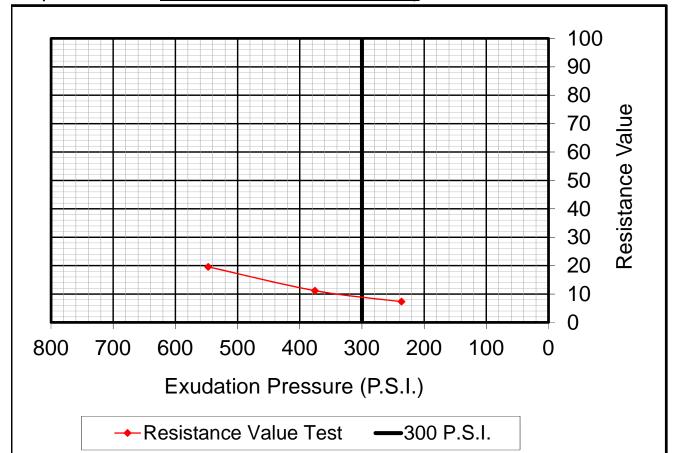
 Report Date:
 August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clay

Sample Location: #12, EB Fairview Rd. 3500' from McCloskey



Specimen No.	10	11	12
Moisture Content (%)	16.9	18.5	19.2
Dry Density (PCF)	116.9	115.0	114.1
Resistance Value (R)	20	11	7
Exudation Pressure (PSI)	547	376	236
Expansion Pressure	95	26	17
As Received Moisture Content (%)	16.9		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171390

 Project No.:
 170178

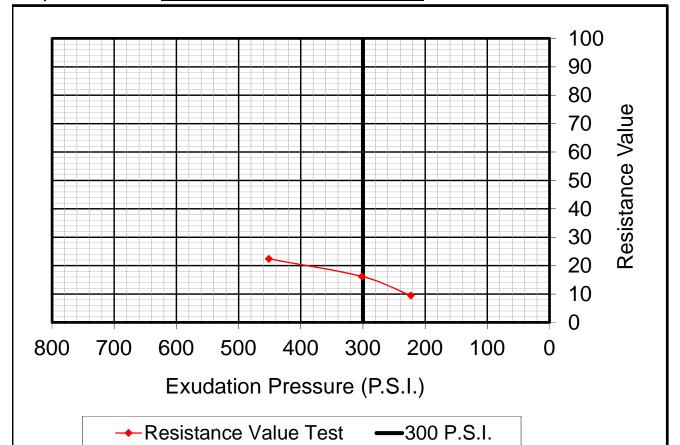
Sample Date:August 8, 2017Report Date:September 5, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #12, EB John Smith Rd. 3500' from Best Rd.



Specimen No.	10	11	12
Moisture Content (%)	12.7	13.9	14.5
Dry Density (PCF)	123.3	120.9	119.8
Resistance Value (R)	22	16	9
Exudation Pressure (PSI)	451	302	223
Expansion Pressure	0	0	0
As Received Moisture Content (%)	12 7		

RESISTANCE VALUE AT 300 P.S.I. 16

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171366

 Project No.:
 170178

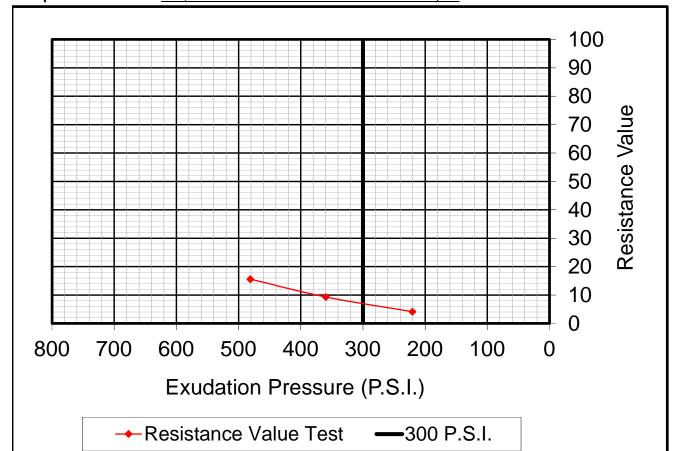
Sample Date:August 7, 2017Report Date:September 1, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #12, EB Shore Rd. 1500' from two miles of Hwy 25



Specimen No.	4	5	6
Moisture Content (%)	8.6	9.7	10.4
Dry Density (PCF)	134.9	132.9	131.7
Resistance Value (R)	16	9	4
Exudation Pressure (PSI)	481	360	220
Expansion Pressure	69	26	0
As Received Moisture Content (%)	8.6		

RESISTANCE VALUE AT 300 P.S.I.

Reviewed By:

Brandon Rodebaugh Materials Engineer





 Laboratory No.:
 L171267

 Project No.:
 170178

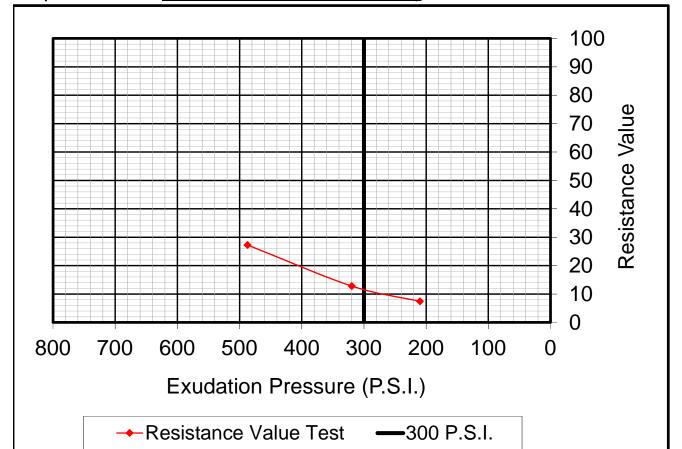
Sample Date: August 9, 2017
Report Date: August 16, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #13, EB Fairview Rd. 4500' from McCloskey



Specimen No.	7	8	9
Moisture Content (%)	9.6	10.6	11.2
Dry Density (PCF)	132.2	130.4	129.4
Resistance Value (R)	27	13	7
Exudation Pressure (PSI)	487	319	210
Expansion Pressure	13	0	0
As Received Moisture Content (%)	9.6		

RESISTANCE VALUE AT 300 P.S.I. 12

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171314

 Project No.:
 170178

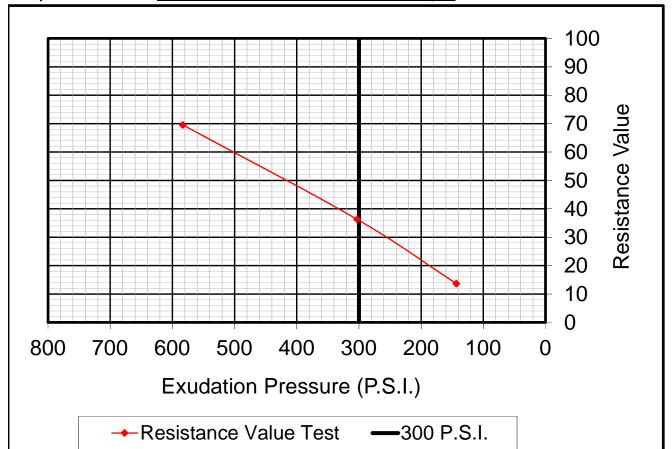
Sample Date: August 15, 2017
Report Date: August 25, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #13, EB Shore Rd. 2500' from two miles of Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	8.2	9.1	7.6
Dry Density (PCF)	136.4	135.5	137.1
Resistance Value (R)	36	14	70
Exudation Pressure (PSI)	303	143	583
Expansion Pressure	9	0	30
As Received Moisture Content (%)	8.2		

RESISTANCE VALUE AT 300 P.S.I. 36

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171338

 Project No.:
 170178

 Sample Pate:
 August 0

 Sample Date:
 August 9, 2017

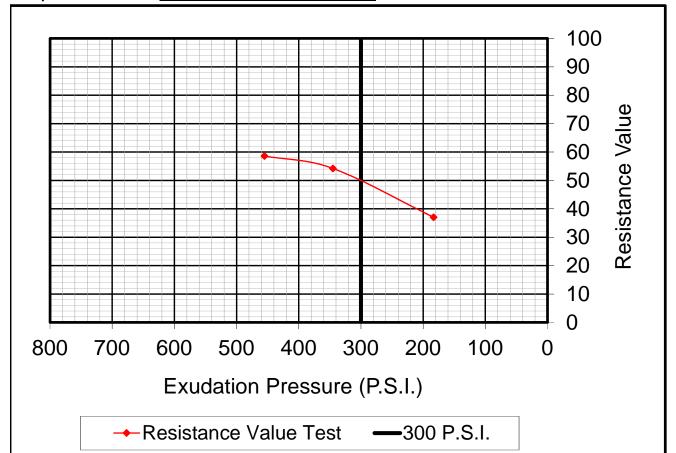
 Report Date:
 August 27, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #14, EB Fairview Rd. 500' from Dixie



	1		
Specimen No.	10	11	12
Moisture Content (%)	8.8	9.9	9.4
Dry Density (PCF)	134.1	132.4	132.9
Resistance Value (R)	59	37	54
Exudation Pressure (PSI)	455	183	345
Expansion Pressure	0	0	0
As Received Moisture Content (%)	8.8		

RESISTANCE VALUE AT 300 P.S.I. 50

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171289

 Project No.:
 170178

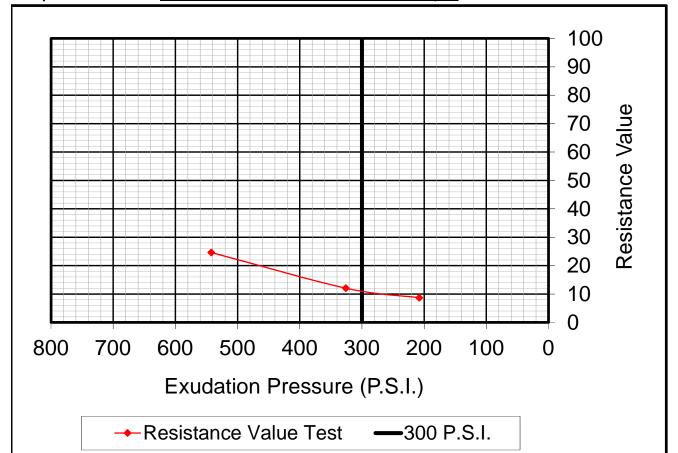
Sample Date: August 15, 2017
Report Date: August 21, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #14, EB Shore Rd. 3500' from two miles of Hwy 25



Specimen No.	4	5	6
Moisture Content (%)	7.6	8.6	9.2
Dry Density (PCF)	136.9	134.0	133.2
Resistance Value (R)	25	12	9
Exudation Pressure (PSI)	542	326	208
Expansion Pressure	0	0	0
As Received Moisture Content (%)	7.6		

RESISTANCE VALUE AT 300 P.S.I. 11

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171320

 Project No.:
 170178

 Sample Pater
 August 0

 Sample Date:
 August 9, 2017

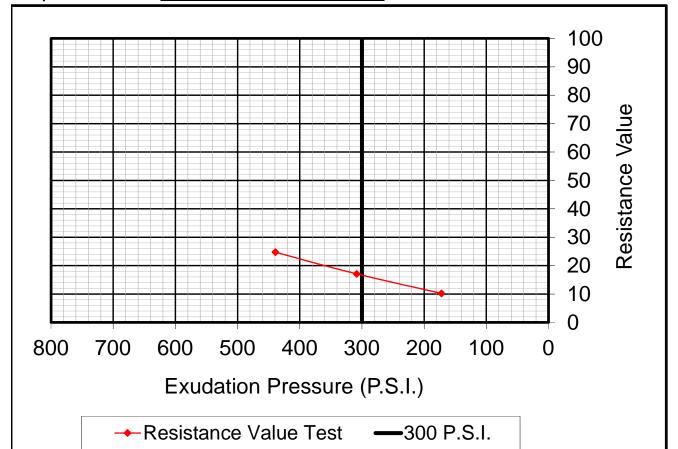
 Report Date:
 August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown sandy Clay

Sample Location: #15, EB Fairview Rd. 1500' from Dixie



Specimen No.	1	2	3
Moisture Content (%)	9.9	11.1	11.6
Dry Density (PCF)	130.2	128.8	126.5
Resistance Value (R)	25	17	10
Exudation Pressure (PSI)	439	308	172
Expansion Pressure	52	17	13
As Received Moisture Content (%)	9.9		

RESISTANCE VALUE AT 300 P.S.I. 17

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171276

 Project No.:
 170178

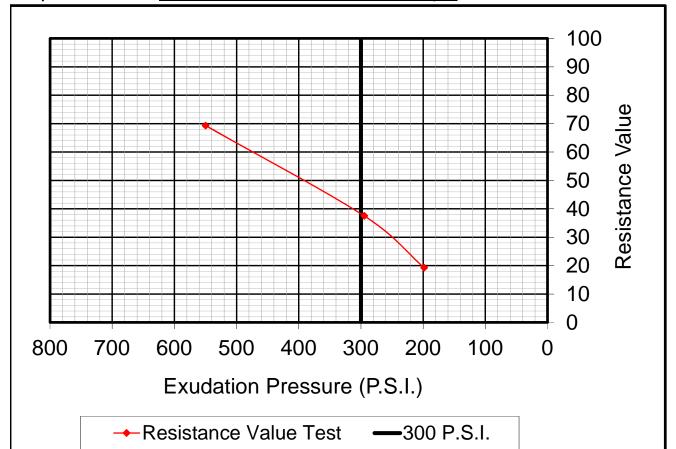
Sample Date: August 15, 2017
Report Date: August 17, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Silt

Sample Location: #15, EB Shore Rd. 4500' from two miles of Hwy 25



Specimen No.	7	8	9
Moisture Content (%)	13.8	15.1	13.2
Dry Density (PCF)	119.3	118.5	120.6
Resistance Value (R)	38	19	69
Exudation Pressure (PSI)	295	198	550
Expansion Pressure	30	13	78
As Received Moisture Content (%)	13.8		

RESISTANCE VALUE AT 300 P.S.I. _____38

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171227

 Project No.:
 170178

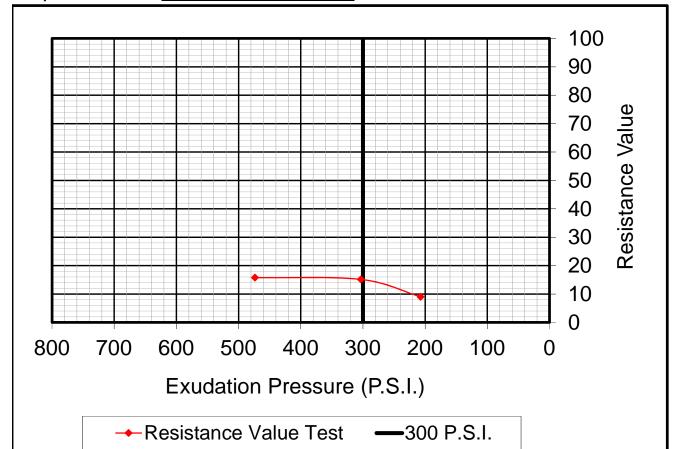
Sample Date: August 10, 2017
Report Date: August 14, 2017

Client: <u>Economic & Planning Systems, Inc.</u>

Project Name: <u>San Benito County Waste Impact Study</u>

Sample Description: Brown Clay

Sample Location: #16, EB Fairview Rd. 2500' Dixie



Specimen No.	10	11	12
Moisture Content (%)	14.6	15.9	16.5
Dry Density (PCF)	118.5	117.2	115.8
Resistance Value (R)	16	15	9
Exudation Pressure (PSI)	474	303	207
Expansion Pressure	87	26	0
As Received Moisture Content (%)	14.6		

RESISTANCE VALUE AT 300 P.S.I. 15

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171289

 Project No.:
 171289

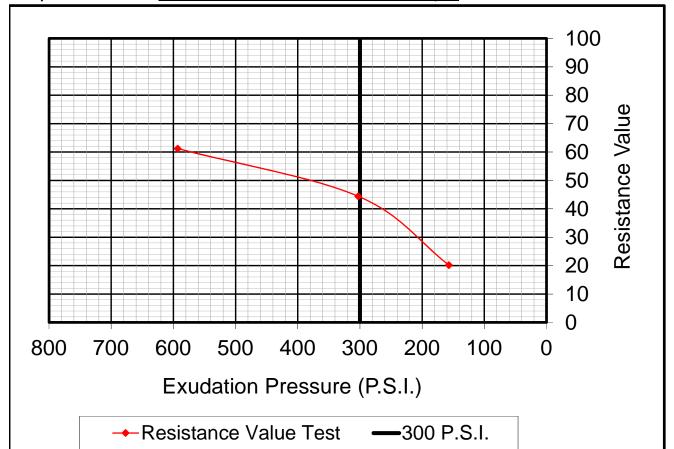
Sample Date: August 15, 2017
Report Date: August 21, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Silt

Sample Location: #16, EB Shore Rd. 500' from three miles of Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	9.7	10.8	9.1
Dry Density (PCF)	129.5	128.1	130.3
Resistance Value (R)	44	20	61
Exudation Pressure (PSI)	303	157	593
Expansion Pressure	13	0	35
As Received Moisture Content (%)	9.7		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

44

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171250

 Project No.:
 170178

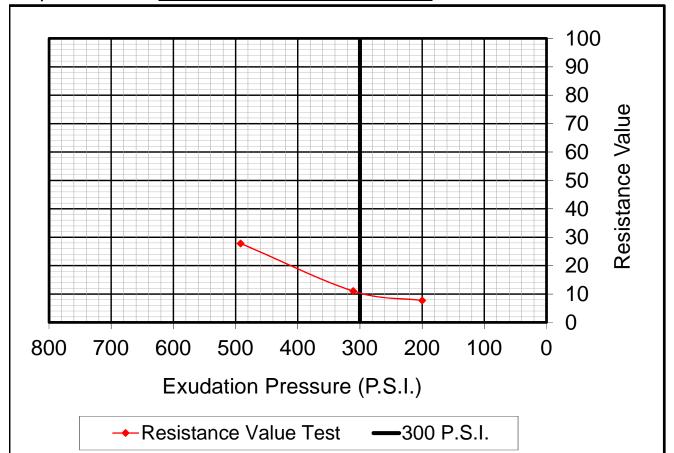
Sample Date: August 10, 2017
Report Date: August 16, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #17, EB Fairview Rd. 1000' from Rosa Morada



Specimen No.	7	8	9
Moisture Content (%)	9.1	10.2	10.7
Dry Density (PCF)	134.1	131.3	130.9
Resistance Value (R)	28	11	8
Exudation Pressure (PSI)	492	311	200
Expansion Pressure	0	0	0
As Received Moisture Content (%)	9.1		

RESISTANCE VALUE AT 300 P.S.I. 10

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171276

 Project No.:
 170178

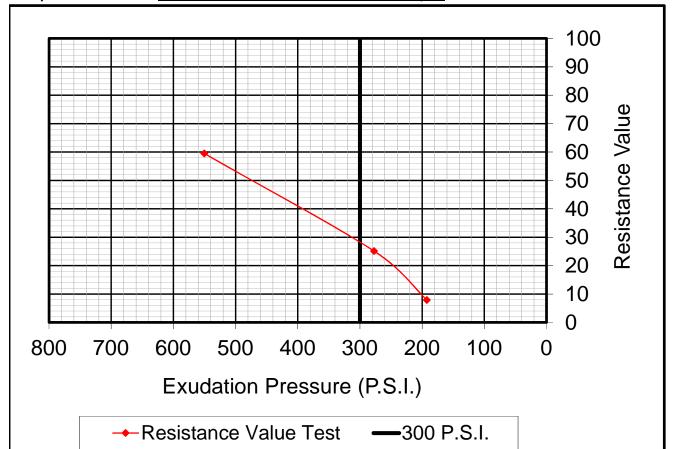
Sample Date: August 15, 2017
Report Date: August 17, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Silt with Gravel

Sample Location: #17, Shore Rd. 1500' from three miles of Hwy 25



Specimen No.	1	2	3
Moisture Content (%)	8.8	9.9	8.1
Dry Density (PCF)	133.3	132.3	136.1
Resistance Value (R)	25	8	59
Exudation Pressure (PSI)	277	192	550
Expansion Pressure	30	13	87
As Received Moisture Content (%)	8.8		

RESISTANCE VALUE AT 300 P.S.I. _____28

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171321

 Project No.:
 170178

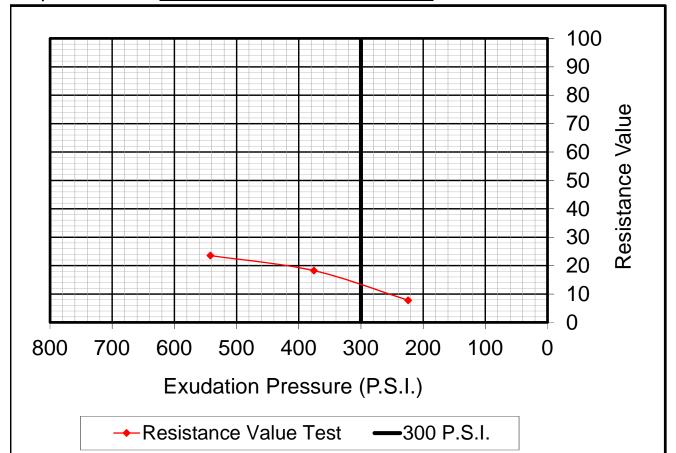
Sample Date: August 10, 2017
Report Date: August 25, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #18, EB Fairview Rd. 2000' from Rosa Morada



Specimen No.	10	11	12
Moisture Content (%)	11.1	12.3	11.8
Dry Density (PCF)	126.0	123.9	124.2
Resistance Value (R)	24	8	18
Exudation Pressure (PSI)	542	224	376
Expansion Pressure	30	0	0
As Received Moisture Content (%)	11 1		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

13

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171299

 Project No.:
 170178

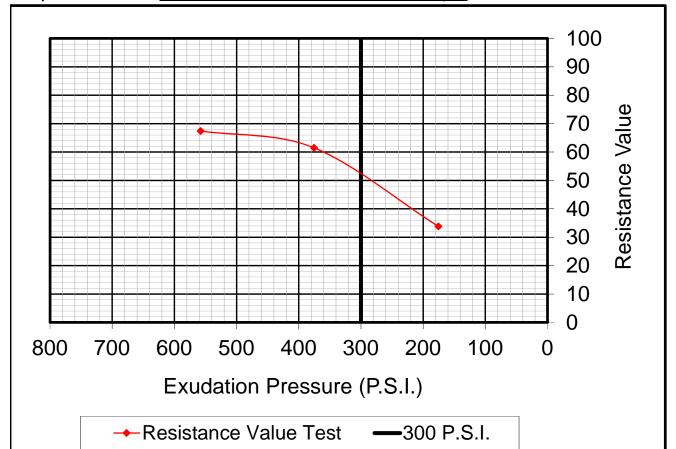
Sample Date: August 15, 2017
Report Date: August 19, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #18, EB Shore Rd. 2500' from three miles of Hwy 25



Specimen No.	4	5	6
Moisture Content (%)	9.1	10.2	9.7
Dry Density (PCF)	134.7	134.1	134.3
Resistance Value (R)	67	34	61
Exudation Pressure (PSI)	558	175	375
Expansion Pressure	0	0	0
As Received Moisture Content (%)	9.1		

RESISTANCE VALUE AT 300 P.S.I. 53

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171338

 Project No.:
 170178

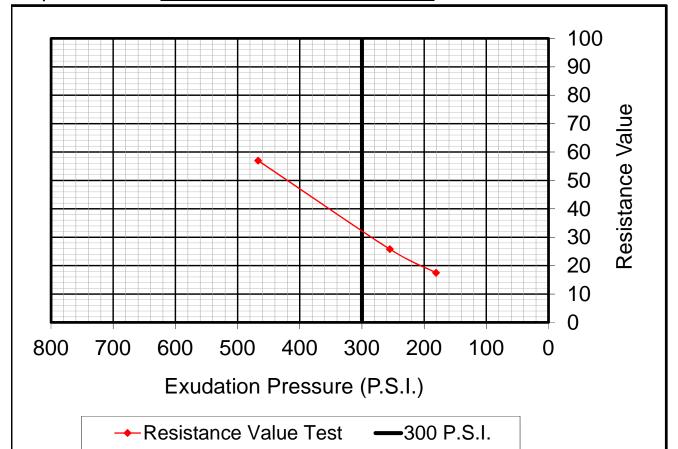
Sample Date: August 10, 2017
Report Date: August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #19, EB Fairview Rd. 3000' from Rosa Marada



Specimen No.	4	5	6
Moisture Content (%)	8.4	9.5	10.1
Dry Density (PCF)	132.8	132.1	130.8
Resistance Value (R)	57	26	18
Exudation Pressure (PSI)	467	255	181
Expansion Pressure	17	0	0
As Received Moisture Content (%)	8.4		

RESISTANCE VALUE AT 300 P.S.I. 32

Reviewed By:

Brandon Rodebaugh Materials Engineer

AASHIO RIS



 Laboratory No.:
 L171289

 Project No.:
 170178

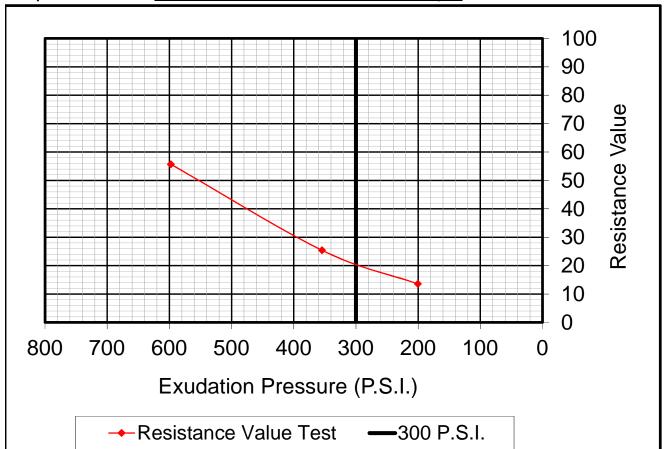
Sample Date:August 15, 2017Report Date:August 21, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #19, EB Shore Rd. 3500' from three miles of Hwy 25



Specimen No.	7	8	9
Moisture Content (%)	9.8	10.9	9.3
Dry Density (PCF)	131.8	130.7	132.3
Resistance Value (R)	25	14	56
Exudation Pressure (PSI)	354	200	598
Expansion Pressure	9	0	69
As Received Moisture Content (%)	9.8		

RESISTANCE VALUE AT 300 P.S.I. 20



Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171355

 Project No.:
 170178

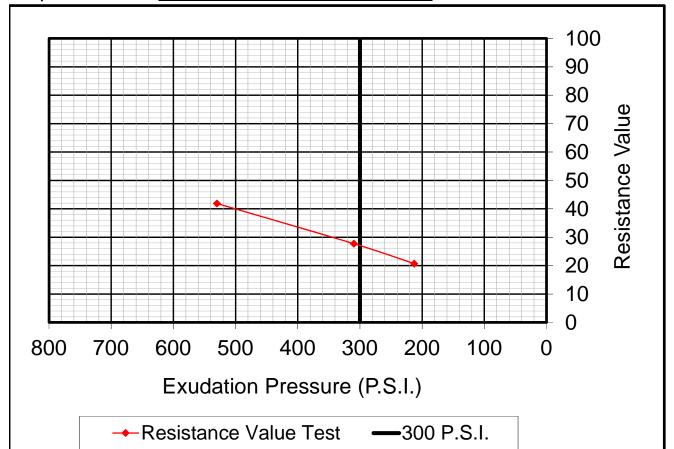
Sample Date: August 10, 2017
Report Date: August 30, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #20, EB Fairview Rd. 4000' from Rosa Morada



Specimen No.	4	5	6
Moisture Content (%)	9.1	10.1	10.7
Dry Density (PCF)	132.8	131.0	129.9
Resistance Value (R)	42	28	21
Exudation Pressure (PSI)	530	310	213
Expansion Pressure	13	0	0
As Received Moisture Content (%)	9.1		

RESISTANCE VALUE AT 300 P.S.I. 27

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171355

 Project No.:
 170178

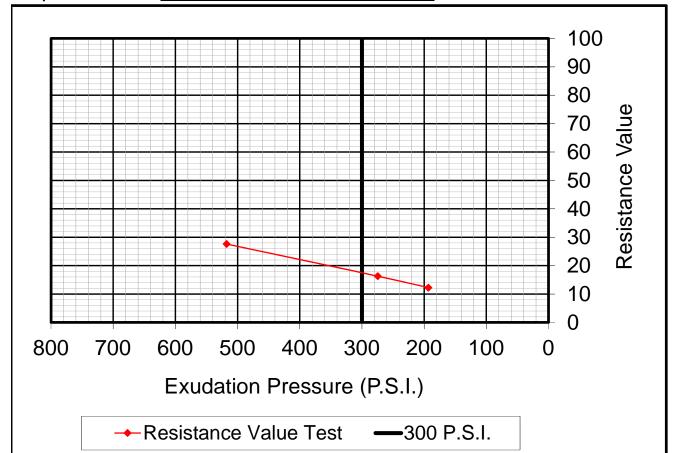
Sample Date: August 10, 2017
Report Date: August 30, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #21, EB Fairview Rd. 5000' from Rosa Morada



Specimen No.	10	11	12
Moisture Content (%)	10.1	11.4	12.0
Dry Density (PCF)	130.9	128.2	127.3
Resistance Value (R)	28	16	12
Exudation Pressure (PSI)	518	275	193
Expansion Pressure	17	0	0
As Received Moisture Content (%)	10 1		

RESISTANCE VALUE AT 300 P.S.I. _____18

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171326

 Project No.:
 170178

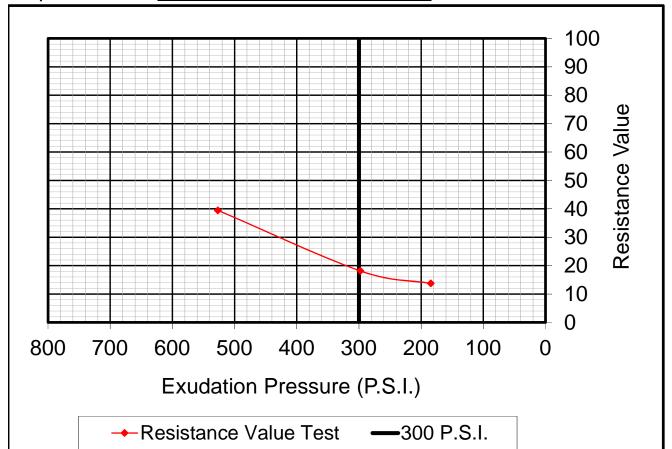
Sample Date: August 10, 2017
Report Date: August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #22, EB Fairview Rd. 6000' from Rosa Morada



Specimen No.	7	8	9
Moisture Content (%)	8.7	9.8	10.3
Dry Density (PCF)	133.0	131.5	129.9
Resistance Value (R)	39	18	14
Exudation Pressure (PSI)	527	298	184
Expansion Pressure	52	17	9
As Received Moisture Content (%)	8.7		

RESISTANCE VALUE AT 300 P.S.I. 18

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171227

 Project No.:
 170178

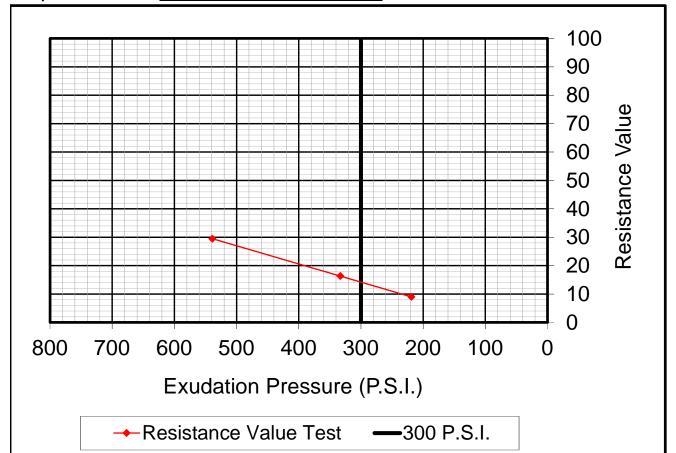
Sample Date: August 10, 2017
Report Date: August 14, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Dark Brown Clayey Silt

Sample Location: #23, EB Fairview Rd. 250' from Fallon



Specimen No.	7	8	9
Moisture Content (%)	9.6	10.7	11.2
Dry Density (PCF)	131.1	129.3	128.2
Resistance Value (R)	30	16	9
Exudation Pressure (PSI)	539	333	219
Expansion Pressure	13	0	0
As Received Moisture Content (%)	9.6		

RESISTANCE VALUE AT 300 P.S.I. 14



Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171330

 Project No.:
 170178

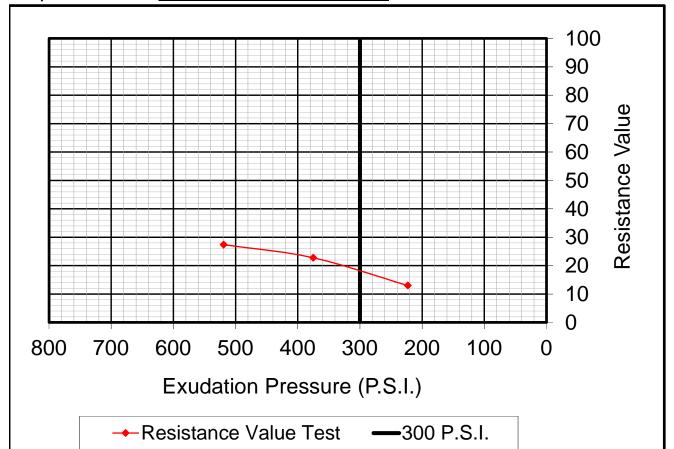
Sample Date: August 10, 2017
Report Date: August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #24, EB Fairview Rd. 1250' from Fallon



Specimen No.	7	8	9
Moisture Content (%)	9.6	10.7	10.2
Dry Density (PCF)	132.7	130.9	131.6
Resistance Value (R)	27	13	23
Exudation Pressure (PSI)	519	223	375
Expansion Pressure	0	0	0
As Received Moisture Content (%)	9.6		

RESISTANCE VALUE AT 300 P.S.I. 18

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171348

 Project No.:
 170178

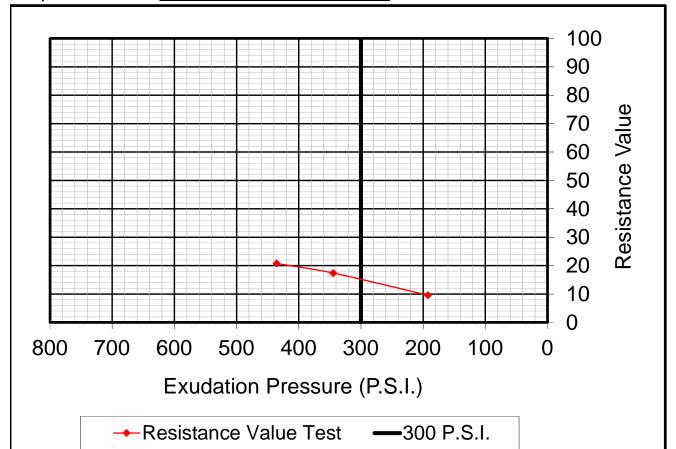
Sample Date: August 10, 2017
Report Date: August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #25, EB Fairview Rd. 2250' from Fallon



Specimen No.	4	5	6
Moisture Content (%)	14.1	15.3	14.8
Dry Density (PCF)	118.3	116.6	116.8
Resistance Value (R)	21	10	17
Exudation Pressure (PSI)	436	192	344
Expansion Pressure	61	26	35
As Received Moisture Content (%)	14.1		

RESISTANCE VALUE AT 300 P.S.I. 15



Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171295

 Project No.:
 170178

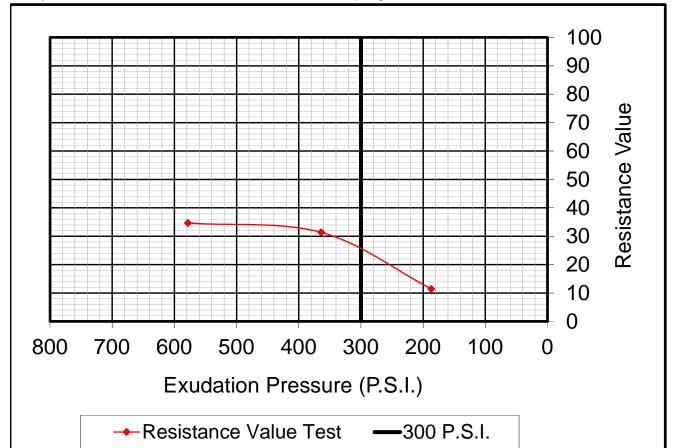
Sample Date: August 14, 2017
Report Date: August 21, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Dark Brown Clayey Sand

Sample Location: #26, EB Fairview Rd. 500' from Spring Grove



Specimen No.	7	8	9
Moisture Content (%)	8.5	9.8	9.2
Dry Density (PCF)	136.4	134.4	135.7
Resistance Value (R)	35	11	31
Exudation Pressure (PSI)	578	187	364
Expansion Pressure	13	0	0
As Received Moisture Content (%)	8.5		

RESISTANCE VALUE AT 300 P.S.I. _____26

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171348

 Project No.:
 170178

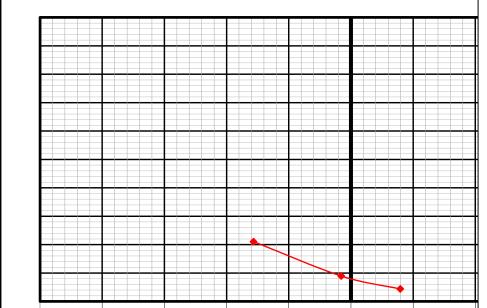
Sample Date: August 10, 2017
Report Date: August 28, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #27, EB Fairview Rd. 1500' from Spring Grove



800 700 600 500 400 300 200 100 0

Exudation Pressure (P.S.I.)

→ Resistance Value Test —300 P.S.I.

Specimen No.	10	11	12
Moisture Content (%)	10.4	11.5	12.1
Dry Density (PCF)	129.1	127.4	126.8
Resistance Value (R)	21	9	4
Exudation Pressure (PSI)	457	316	221
Expansion Pressure	0	0	0
As Received Moisture Content (%)	10.4		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

8

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171393

 Project No.:
 170178

Sample Date: August 10, 2017

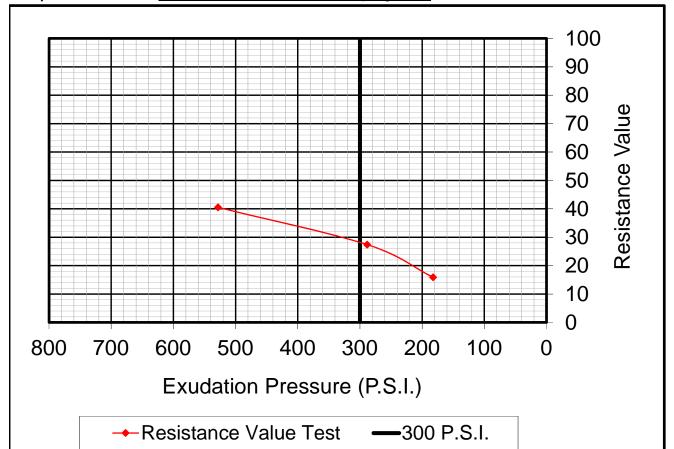
Report Date: September 5, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #28, EB Fairview Rd. 2500' from Spring Grove



Specimen No.	7	8	9
Moisture Content (%)	7.9	9.0	9.5
Dry Density (PCF)	139.2	137.4	136.8
Resistance Value (R)	41	27	16
Exudation Pressure (PSI)	528	288	182
Expansion Pressure	17	0	0
As Received Moisture Content (%)	7 9		

RESISTANCE VALUE AT 300 P.S.I. _____28

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171393

 Project No.:
 170178

Sample Date: August 10, 2017

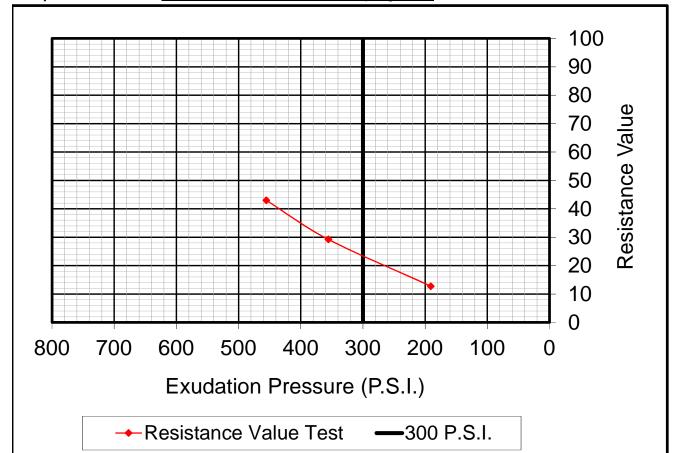
Report Date: September 5, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #29, EB Fairview Rd. 3500' from Spring Grove



Specimen No.	4	5	6
Moisture Content (%)	10.7	10.0	10.3
Dry Density (PCF)	132.0	133.0	133.1
Resistance Value (R)	13	43	29
Exudation Pressure (PSI)	191	455	356
Expansion Pressure	4	17	9
As Received Moisture Content (%)	10.7		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

24

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171299

 Project No.:
 170178

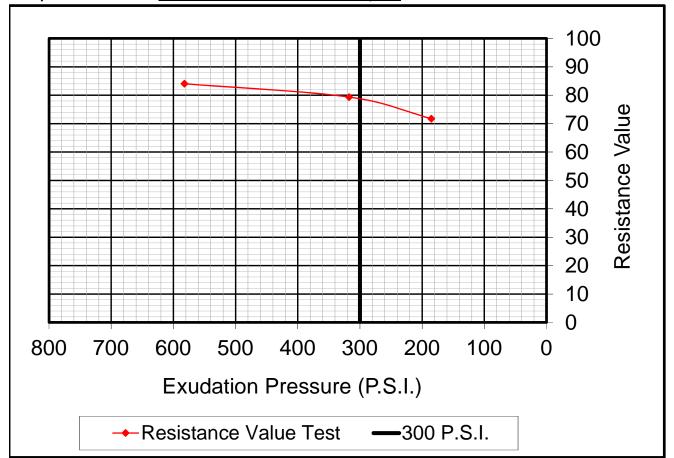
Sample Date: August 14, 2017
Report Date: August 17, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Grayish Clayey Sand with Gravel

Sample Location: #30, EB Fairview Rd. 500' From Hwy 156



Specimen No.	1	2	3
Moisture Content (%)	8.1	9.1	8.7
Dry Density (PCF)	139.1	139.3	139.7
Resistance Value (R)	84	72	79
Exudation Pressure (PSI)	582	185	317
Expansion Pressure	0	0	0
As Received Moisture Content (%)	8.1		

RESISTANCE VALUE AT 300 P.S.I. 79

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171289

 Project No.:
 170178

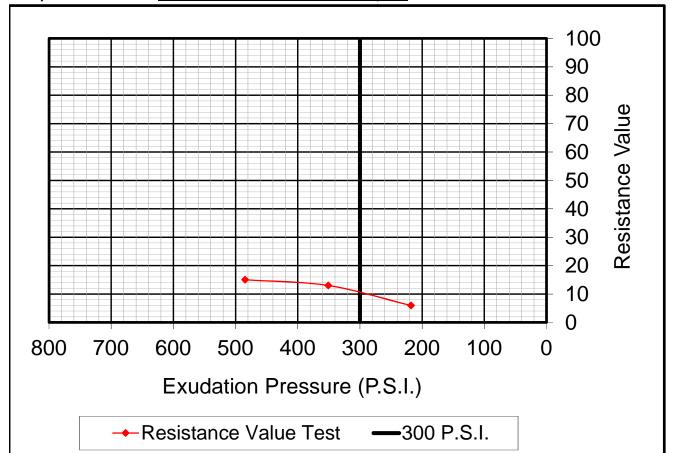
Sample Date: August 14, 2017
Report Date: August 17, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay with Gravel

Sample Location: #31, EB Fairview Rd. 1500' From Hwy 156



Specimen No.	10	11	12
Moisture Content (%)	13.8	15.0	14.5
Dry Density (PCF)	121.4	119.4	120.2
Resistance Value (R)	15	6	13
Exudation Pressure (PSI)	485	218	351
Expansion Pressure	13	0	0
As Received Moisture Content (%)	13.8		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

11

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171295

 Project No.:
 170178

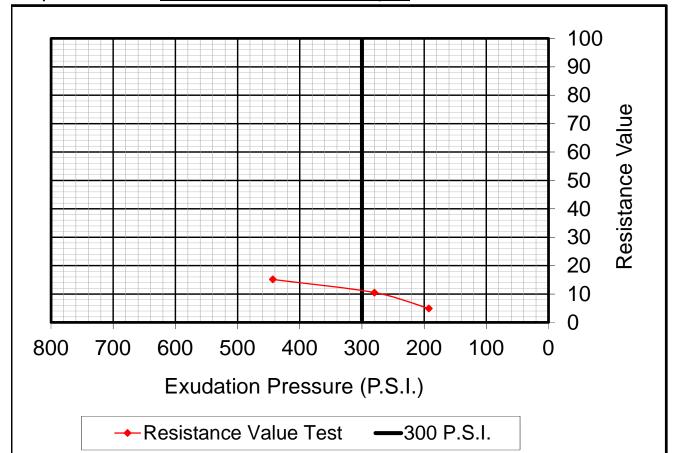
Sample Date: August 14, 2017
Report Date: August 21, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay with Gravel

Sample Location: #32, EB Fairview Rd. 2500' From Hwy 156



Specimen No.	4	5	6
Moisture Content (%)	11.0	12.1	12.7
Dry Density (PCF)	127.8	125.4	124.8
Resistance Value (R)	15	11	5
Exudation Pressure (PSI)	443	280	192
Expansion Pressure	95	26	17
As Received Moisture Content (%)	11.0		

RESISTANCE VALUE AT 300 P.S.I.

Reviewed By:

11

Brandon Rodebaugh Materials Engineer

AASHIO RIS



 Laboratory No.:
 L171276

 Project No.:
 170178

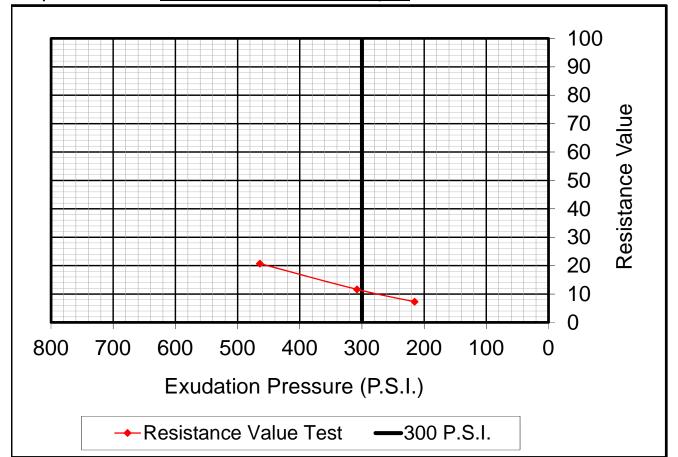
Sample Date: August 14, 2017
Report Date: August 17, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay with Gravel

Sample Location: #33, EB Fairview Rd. 3500' From Hwy 156



Specimen No.	10	11	12
Moisture Content (%)	11.1	12.3	12.8
Dry Density (PCF)	129.0	126.2	125.3
Resistance Value (R)	21	12	7
Exudation Pressure (PSI)	464	308	215
Expansion Pressure	13	0	0
As Received Moisture Content (%)	11.1		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

11

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171295

 Project No.:
 170178

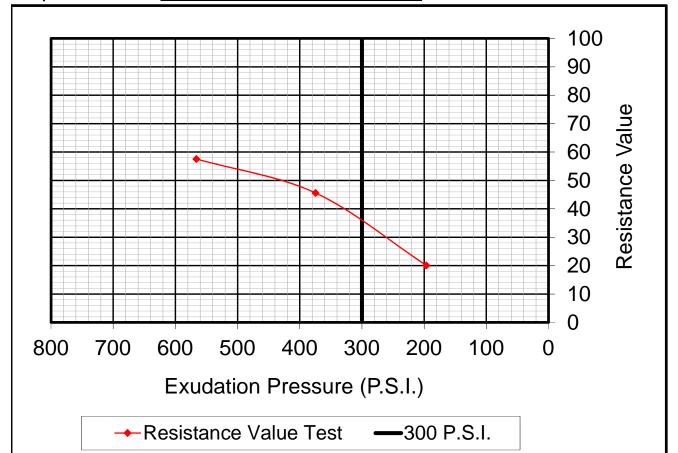
Sample Date: August 14, 2017
Report Date: August 21, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #34, EB Fairview Rd. 500' From Los Viboras



Specimen No.	10	11	12
Moisture Content (%)	9.5	10.8	10.2
Dry Density (PCF)	136.7	134.9	135.6
Resistance Value (R)	58	20	46
Exudation Pressure (PSI)	566	196	375
Expansion Pressure	0	0	0
As Received Moisture Content (%)	9.5		

RESISTANCE VALUE AT 300 P.S.I. _____36

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171308

 Project No.:
 170178

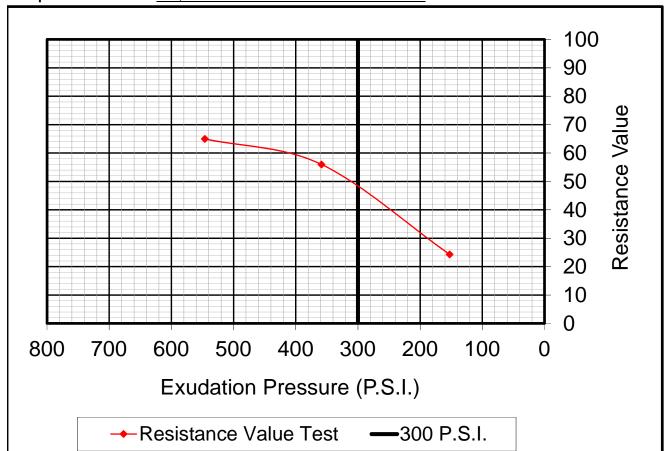
Sample Date: August 14, 2017
Report Date: August 21, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #35, EB Fairview Rd. 1500' From Los Viboras



Specimen No.	4	5	6
Moisture Content (%)	8.2	9.3	8.8
Dry Density (PCF)	135.3	134.8	136.0
Resistance Value (R)	65	24	56
Exudation Pressure (PSI)	546	153	359
Expansion Pressure	0	0	0
As Received Moisture Content (%)	8.2		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

48

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171276

 Project No.:
 170178

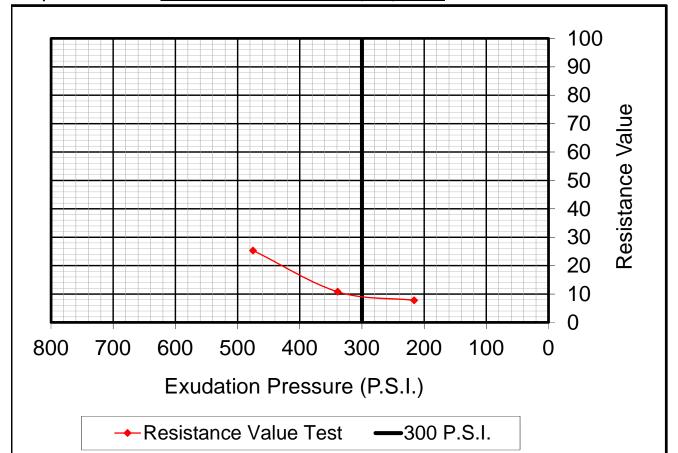
Sample Date: August 14, 2017
Report Date: August 17, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay

Sample Location: #36, EB Fairview Rd. 500' from Aquistapace Rd.



Specimen No.	4	5	6
Moisture Content (%)	11.0	12.2	12.7
Dry Density (PCF)	127.2	125.4	124.1
Resistance Value (R)	25	11	8
Exudation Pressure (PSI)	475	339	216
Expansion Pressure	43	17	0
As Received Moisture Content (%)	11.0		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171308

 Project No.:
 170178

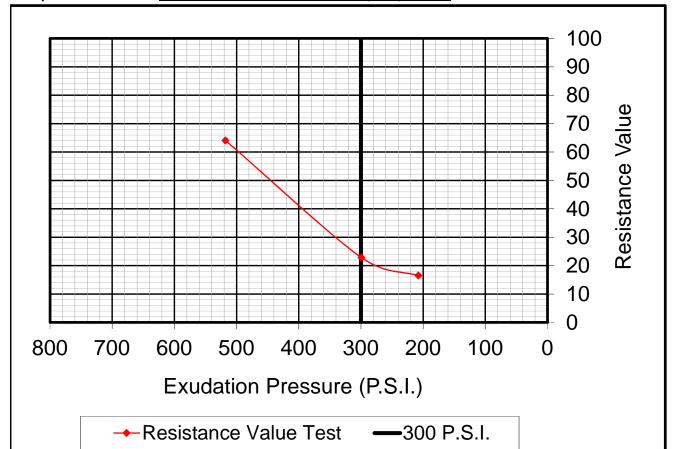
Sample Date: August 14, 2017
Report Date: August 22, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Clayey Sand

Sample Location: #37, EB Fairview Rd. 1500' from Aquistapace Rd.



Specimen No.	7	8	9
Moisture Content (%)	8.7	9.8	10.3
Dry Density (PCF)	137.2	134.2	133.1
Resistance Value (R)	64	23	17
Exudation Pressure (PSI)	518	299	208
Expansion Pressure	0	0	0
As Received Moisture Content (%)	8.7		

RESISTANCE VALUE AT 300 P.S.I. 23

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171314

 Project No.:
 170178

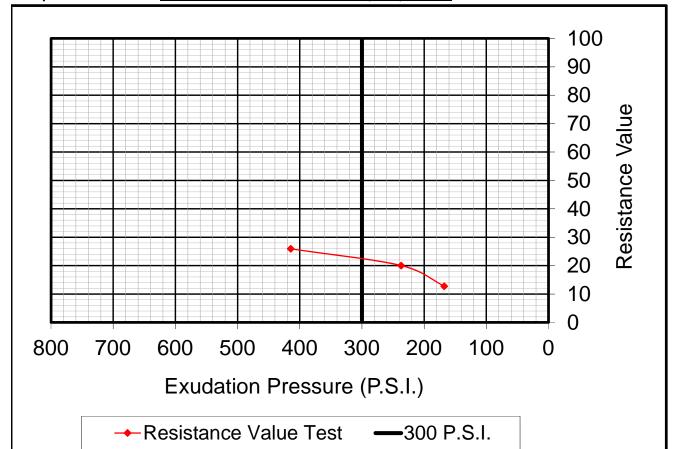
Sample Date: August 14, 2017
Report Date: August 25, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #38, EB Fairview Rd. 2500' from Aquistapace Rd.



Specimen No.	10	11	12
Moisture Content (%)	9.7	10.8	11.3
Dry Density (PCF)	131.9	130.4	129.6
Resistance Value (R)	26	20	13
Exudation Pressure (PSI)	414	237	168
Expansion Pressure	0	0	0
As Received Moisture Content (%)	9.7		

RESISTANCE VALUE AT 300 P.S.I. 22

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171321

 Project No.:
 170178

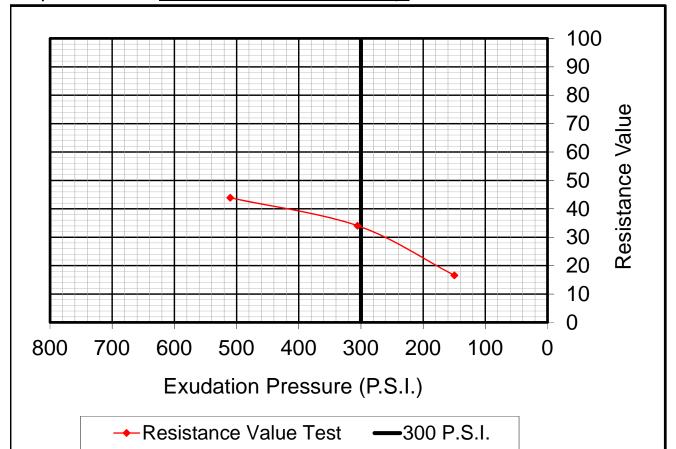
Sample Date: August 15, 2017
Report Date: August 24, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay

Sample Location: #39, EB Fairview Rd. 500' from San Felipe



Specimen No.	1	2	3
Moisture Content (%)	7.9	9.0	8.6
Dry Density (PCF)	136.8	134.6	136.3
Resistance Value (R)	44	17	34
Exudation Pressure (PSI)	510	150	306
Expansion Pressure	52	9	17
As Received Moisture Content (%)	7 9		

RESISTANCE VALUE AT 300 P.S.I. _____34

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171314

 Project No.:
 170178

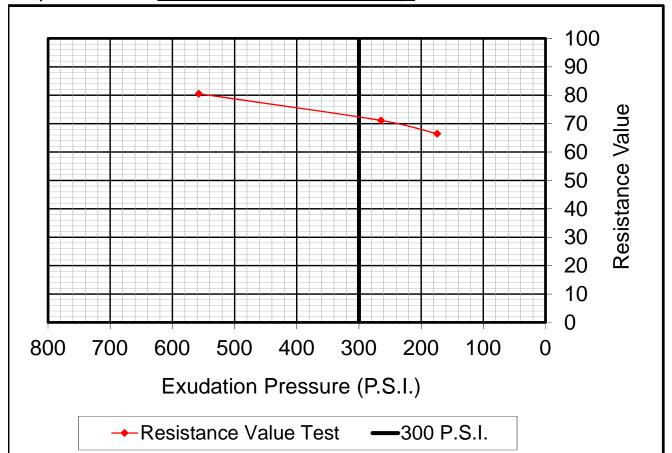
Sample Date: August 14, 2017
Report Date: August 17, 2017

Client: <u>Economic & Planning Systems, Inc.</u>

Project Name: <u>San Benito County Waste Impact Study</u>

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #40, EB Fairview Rd. 1500' from San Felipe



Specimen No.	4	5	6
Moisture Content (%)	7.7	8.8	9.3
Dry Density (PCF)	135.4	134.5	133.7
Resistance Value (R)	81	71	66
Exudation Pressure (PSI)	558	265	174
Expansion Pressure	0	0	0
As Received Moisture Content (%)	7.7		

RESISTANCE VALUE AT 300 P.S.I. 72



Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171348

 Project No.:
 170178

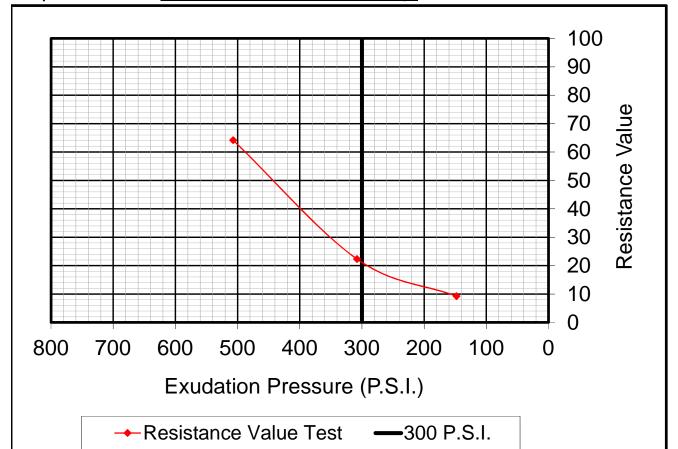
Sample Date: August 14, 2017
Report Date: August 29, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Silty Clay with Gravel

Sample Location: #41, EB Fairview Rd. 2500' from San Felipe



Specimen No.	1	2	3
Moisture Content (%)	9.7	10.8	9.2
Dry Density (PCF)	129.5	128.0	130.8
Resistance Value (R)	22	9	64
Exudation Pressure (PSI)	308	148	507
Expansion Pressure	52	22	95
As Received Moisture Content (%)	9.7		

RESISTANCE VALUE AT 300 P.S.I. 21

AASHTO R18

Reviewed By:

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171308

 Project No.:
 170178

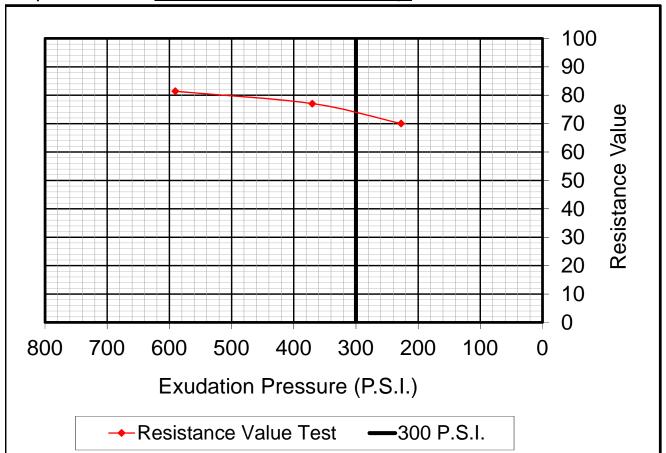
Sample Date: August 14, 2017
Report Date: August 22, 2017

Client: <u>Economic & Planning Systems, Inc.</u>

Project Name: <u>San Benito County Waste Impact Study</u>

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #42, EB Fairview Rd. 3500' from San Felipe



Specimen No.	1	2	3
Moisture Content (%)	8.4	9.4	10.0
Dry Density (PCF)	136.9	136.6	135.4
Resistance Value (R)	81	77	70
Exudation Pressure (PSI)	590	370	227
Expansion Pressure	0	0	0
As Received Moisture Content (%)	8.4		

RESISTANCE VALUE AT 300 P.S.I.

74

Reviewed By:

Brandon Rodebaugh Materials Engineer

AASHIO RIS



 Laboratory No.:
 L171295

 Project No.:
 170178

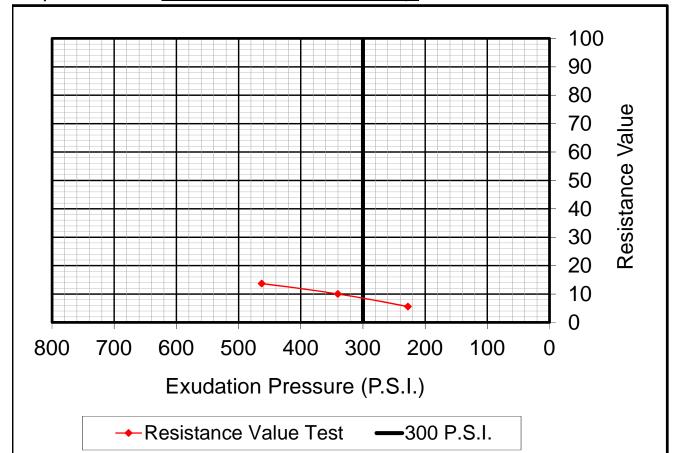
Sample Date: August 14, 2017
Report Date: August 17, 2017

Client: Economic & Planning Systems, Inc.

Project Name: San Benito County Waste Impact Study

Sample Description: Brown Sandy Clay with Gravel

Sample Location: #43, EB Fairview Rd. 4500' from San Felipe



Specimen No.	1	2	3
Moisture Content (%)	12.8	14.0	13.5
Dry Density (PCF)	123.8	122.2	123.0
Resistance Value (R)	14	6	10
Exudation Pressure (PSI)	463	228	340
Expansion Pressure	61	9	26
As Received Moisture Content (%)	12.8		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

Brandon Rodebaugh
Materials Engineer



 Laboratory No.:
 L171308

 Project No.:
 170178

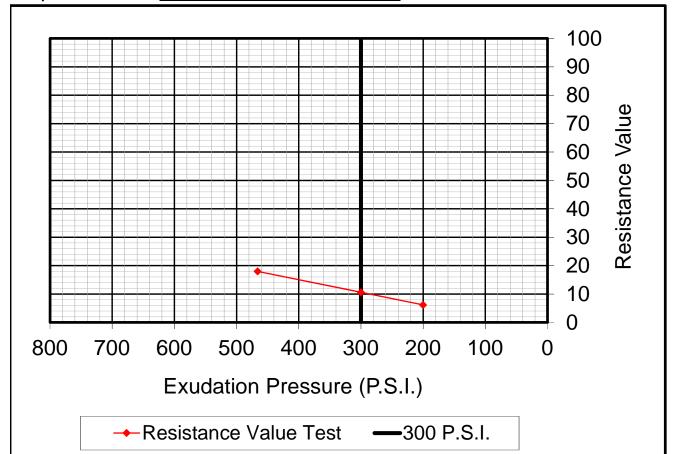
Sample Date: August 14, 2017
Report Date: August 22, 2017

Client: <u>Economic & Planning Systems, Inc.</u>

Project Name: <u>San Benito County Waste Impact Study</u>

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #44, EB Fairview Rd. 500' from Ludis Ln.



Specimen No.	10	11	12
Moisture Content (%)	10.9	12.0	12.6
Dry Density (PCF)	129.6	127.3	126.5
Resistance Value (R)	18	11	6
Exudation Pressure (PSI)	466	300	200
Expansion Pressure	52	0	0
As Received Moisture Content (%)	6.3		

RESISTANCE VALUE AT 300 P.S.I.

AASHTO R18

Reviewed By:

11

Brandon Rodebaugh Materials Engineer



 Laboratory No.:
 L171314

 Project No.:
 170178

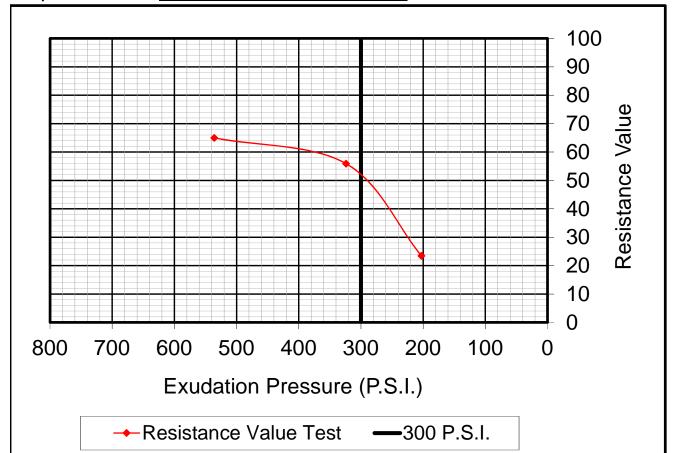
Sample Date: August 14, 2017
Report Date: August 25, 2017

Client: <u>Economic & Planning Systems, Inc.</u>

Project Name: <u>San Benito County Waste Impact Study</u>

Sample Description: Brown Clayey Sand with Gravel

Sample Location: #45, EB Fairview Rd. 1500' from Ludis Ln.



Specimen No.	7	8	9
Moisture Content (%)	9.8	8.9	9.3
Dry Density (PCF)	135.4	137.1	136.5
Resistance Value (R)	23	65	56
Exudation Pressure (PSI)	203	536	324
Expansion Pressure	26	100	61
As Received Moisture Content (%)	9.8		

RESISTANCE VALUE AT 300 P.S.I.

Reviewed By:

52

Brandon Rodebaugh Materials Engineer

AASHTO RIS



San Benito County Waste Impact Study APPENDIX C

Traffic Index (TI) Calculations Based on Existing Pavement Sections

STREET NAME: SHORE ROAD STREET NAME: SHORE R SEGMENT FROM: HWY 25

SEGMENT TO: 1 MILE EAST OF HWY 25

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	7	3	6		
WB2	8	1.5	7		
WB3	7	1.5	6		
WB4	7.5	1.5	7.5		
WB5	7.5	4.5	5.5		
EB1	7	4	10	61	
EB2	7	4	10	8	
EB3	7.5	3.5	9	21	
EB4	8	3	8	8	
EB5	8	2.5	6	19	
AVERAGE	7.45	2.90	7.50	8.00	(MIN)

AVERAGE		7.45	2.90	7.50	8.00	(MIN)
EQUA <i>TIO</i>	N 1: T	$=\frac{G_E}{G_f}$				
EQUA <i>TION</i>	Ι 1 Δ· G-	$-T \times G$	FOLIAT	TION 1 D. TI —	G_E	
			EQUAI	$TION \ 1B: \ TI = \frac{1}{(0.0)}$	032)(1	00-R
Gravel Equivale	ent= Thickr	ness * Gravel Factor				
GE_AC		1.247875		ASSUMED TI=	7.5	5
GE_AB		0.265833333		HMA G _f =	2.01	L
GE _{ASB}		0.625		AB G _f =	1.1	L
GE _{TOTAL}		2.138708333		AS G _f =	1	L
	TI=	7.26				
GE _{AC}		1.30602415		ASSUMED TI=	7.26	i
GE_AB		0.265833333		HMA G _f =	2.103663	3
GE_{ASB}		0.625		AB G _f =	1.1	L
GE _{TOTAL}		2.196857483		AS G _f =	1	L
	TI=	7.46				
GE _{AC}		1.288623498		ASSUMED TI=	7.46	i
GE_AB		0.265833333		HMA G _f =	2.075635	;
GE _{ASB}		0.625		AB G _f =	1.1	L
GE _{TOTAL}		2.179456832		AS G _f =	1	L
	TI=	7.40				
GE _{AC}		1.293757417		ASSUMED TI=	7.40)
GE_AB		0.265833333		HMA G _f =	2.083905	j
GE _{ASB}		0.625		AB G _f =	1.1	L
GE _{TOTAL}		2.184590751		AS G _f =	1	L
	TI=	7.42				
GE _{AC}		1.29223632		ASSUMED TI=	7.42	2
GE_AB		0.265833333		HMA G _f =	2.081454	l
GE _{ASB}		0.625		AB G _f =	1.1	Ĺ
GE _{TOTAL}		2.183069653		AS G _f =	1	L
Calculated	d TI=	7.42	50114710115	$E: TI = 9.0 \times \left(\frac{ESALs}{s}\right)$	0.119	
			I EQUATION 2	$: 11 = 9.0 \times 1$)	

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{TI}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$ Calculated ESALs= 196,413

EQUATION 2: TI = $9.0 \times$

STREET NAME: SHORE ROAD

SEGMENT FROM: 1 MILE EAST OF HWY 25 SEGMENT TO: 2 MILES EAST OF HWY 25

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	8	2.5	5		
WB2	8	2.5	4.5		
WB3	7.5	2.5	6		
WB4	7	2.5	6.5		
WB5	7.5	2.5	4		
EB1	7.5	4	6.5	16	
EB2	7.5	2.5	4	18	
EB3	11	1.5	6	43	
EB4	7	3.5	4	16	
EB5	8	4	4	75	
AVERAGE	7.90	2.80	5.05	16.00	(MIN)

AVERA	(GE	7.90	2.80	5.05	16.00	(MIN)
EQUA7	TION 1: T	$= \frac{G_E}{G_f}$				
ΕΩΠΑΤΙ	ON 1A: G _I		FOLIATIO	$ON\ 1B:\ TI = \frac{1}{CO}$	G_{I}	₹
			EQUALIC	$JN ID. II = \frac{1}{(0)}$.0032)(100 - 1
Gravel Equi	ivalent= Thick	ness * Gravel Factor				
GE _{AC}		1.32325		ASSUMED TI=	7.5	
GE _{AB}		0.256666667		HMA G _f =	2.01	
GE _{ASB}		0.420833333		AB G _f =	1.1	
GE _{TOTAL}		2.00075		AS G _f =	1	
	TI=	7.44				
GE _{AC}		1.368192242		ASSUMED TI=	7.44	
GE _{AB}		0.256666667		HMA G _f =	2.078267	
GE _{ASB}		0.420833333		AB G _f =	1.1	
GE _{TOTAL}		2.045692242		AS G _f =	1	
	TI=	7.61				
GE _{AC}		1.353079727		ASSUMED TI=	7.61	
GE _{AB}		0.256666667		HMA G _f =	2.055311	
GE _{ASB}		0.420833333		AB G _f =	1.1	
GE _{TOTAL}		2.030579727		AS G _f =	1	
	TI=	7.55				
GE _{AC}		1.358105517		ASSUMED TI=	7.55	
GE _{AB}		0.256666667		HMA G _f =	2.062945	
GE _{ASB}		0.420833333		AB G _f =	1.1	
GE _{TOTAL}		2.035605517		AS G _f =	1	
	TI=	7.57				
GE _{AC}		1.35642794		ASSUMED TI=	7.57	
GE _{AB}		0.256666667		HMA G _f =	2.060397	
GE _{ASB}		0.420833333		AB G _f =	1.1	
GE _{TOTAL}		2.03392794		AS G _f =	1	
Calculat	red TI=	7.57		c (ESALS)	0.119	

Calculated TI= 7.57 EQUATION 2: TI = $9.0 \times \left(\frac{ESALS}{1 \times 10^6}\right)^{0.119}$

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

STREET NAME: SHORE ROAD

SEGMENT FROM: 2 MILES EAST OF HWY 25 SEGMENT TO: 3 MILES EAST OF HWY 25

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	7	12	0		
WB2	6.5	13	0		
WB3	4	15	0		
WB4	8.5	14	0		
WB5	7	12	0		
EB1	7.5	5	3.5	9	
EB2	7	4	4.5	7	
EB3	8	9	0	36	
EB4	7	12	0	11	
EB5	7	11	0	38	_
AVERAGE	6.95	10.70	0.80	7.00	(MIN)

EQUATION 1: 7	$T = \frac{G_E}{G_f}$

EQUATION 1A:
$$G_E = T \times G_f$$

EQUATION 1B:
$$TI = \frac{G_E}{(0.0032)(100 - R)}$$

				-	
Gravel Equ	ivalent= Thickr	ness * Gravel Factor			
GE_AC		1.164125	ASSUMED TI=	7.5	
GE_AB		0.980833333	HMA G_f =	2.01	
GE_{ASB}		0.066666667	AB G _f =	1.1	
GE_TOTAL		2.211625	AS G _f =	1	
	TI=	7.43			
GE_AC		1.204612417	ASSUMED TI=	7.43	
GE_AB		0.980833333	HMA G _f =	2.079906	
GE _{ASB}		0.066666667	AB G _f =	1.1	
GE _{TOTAL}		2.252112417	AS G _f =	1	
	TI=	7.57			
GE_AC		1.193735332	ASSUMED TI=	7.57	
GE_AB		0.980833333	HMA G _f =	2.061126	
GE _{ASB}		0.066666667	AB G _f =	1.1	
GE _{TOTAL}		2.241235332	AS G_f =	1	
	TI=	7.53			
GE_AC		1.196628523	ASSUMED TI=	7.53	
GE_AB		0.980833333	HMA G _f =	2.066121	
GE _{ASB}		0.066666667	AB G _f =	1.1	
GE _{TOTAL}		2.244128523	AS G_f =	1	
	TI=	7.54			
GE_AC		1.195856912	ASSUMED TI=	7.54	
GE_AB		0.980833333	HMA G _f =	2.064789	
GE _{ASB}		0.066666667	AB G _f =	1.1	

Calculated TI=	7.54

2.243356912

GE_{TOTAL}

EQUATION 2: TI =
$$9.0 \times \left(\frac{ESALs}{1 \times 10^6}\right)^{0.119}$$

alculated ESALs= 225,493

EQUATION 2A:
$$ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$$

AS G_f=

1

STREET NAME: SHORE ROAD

SEGMENT FROM: 3 MILES EAST OF HWY 25

SEGMENT TO: San Felipe Road

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	6.5	14	0		
WB2	7	14	0		
WB3	7	15	0		
WB4	6.5	13	0		
EB1	7	9	0	44	
EB2	7.5	7	0	28	
EB3	7	14	0	53	
EB4	7	13	0	20	
					_
AVERAGE	6.94	12.38	0.00	20.00	(MIN)

EQUATION 1: $T = \frac{G_E}{G_f}$

EQUATION 1A: $G_E = T \times G_f$

EQUATION 1B: $TI = \frac{G_E}{(0.0032)(100 - R)}$

Gravel Equivalent= Thickness * Gravel Factor

GE _{AC}	1.16203125	ASSUMED TI=	7.5
GE _{AB}	1.134375	HMA G _f =	2.01
GE _{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	2.29640625	AS G _f =	1

TI= 8.97

GE _{AC}	1.094461355	ASSUMED TI=	8.97
GE_AB	1.134375	HMA G _f =	1.893122
GE _{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	2.228836355	AS G_f =	1

TI= 8.71

GE _{AC}	1.110927456	ASSUMED TI=	8.71
GE_AB	1.134375	HMA G _f =	1.921604
GE_{ASB}	0	AB G _f =	1.1
GETOTAL	2.245302456	AS G_f =	1

TI= 8.77

GE_AC	1.106846423	ASSUMED TI=	8.77
GE_AB	1.134375	HMA G _f =	1.914545
GE_{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	2.241221423	AS G _f =	1

TI= 8.75

GE_AC	1.107853691	ASSUMED TI=	8.75
GE_AB	1.134375	HMA G _f =	1.916287
GE_{ASB}	0	AB G_f =	1.1
GE _{TOTAL}	2.242228691	AS G_f =	1

Calculated TI= 8.76

EQUATION 2: TI = $9.0 \times \left(\frac{ESALS}{1 \times 10^{6}}\right)^{0.119}$

alculated ESALs= 795,827

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: San Felipe Road
SEGMENT TO: Ludis Lane

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	7	11	0		
WB2	7.5	12	0		
WB3	4.75	0	12.5		
WB4	4.5	0	12.5		
WB5	6.5	11	0		
EB1	7	12	0	34	
EB2	6.5	13	0	72	
EB3	7	12	0	21	
EB4	7	15	0	74	
EB5	7	12	0	9	_
AVERAGE	6.48	9.80	2.50	9.00	(MIN)

AVER	AGE	6.48	9.80	2.50	9.00	(MIN)
EQUA	TION 1: T	$= \frac{G_E}{G_f}$				
FOLIATI	ION 1 4. C	- T × C	EOHAT	ION 1 D. TI _	G_E	
	$ON 1A: G_{I}$		EQUAL	$ION \ 1B: \ TI = \frac{1}{(0.1)^n}$	0032)(10	00-R
Gravel Equ	uivalent= Thick	ness * Gravel Factor				
GE_AC		1.0845625		ASSUMED TI=	7.5	
GE_AB		0.898333333		HMA G _f =	2.01	
GE_{ASB}		0.208333333		AB G _f =	1.1	
GE_TOTAL		2.191229167		AS G _f =	1	
	TI=	7.52				
GE _{AC}		1.115304285		ASSUMED TI=	7.52	
GE _{AB}		0.898333333		HMA G _f =	2.066973	
GE_{ASB}		0.208333333		AB G _f =	1.1	
GE _{TOTAL}		2.221970952		AS G _f =	1	
	TI=	7.63				
GE _{AC}		1.107562091		ASSUMED TI=	7.63	
GE_{AB}		0.898333333		HMA G _f =	2.052625	
GE _{ASB}		0.208333333		AB G _f =	1.1	
GE_TOTAL		2.214228757		AS G _f =	1	
	TI=	7.60				
GE_AC		1.109496732		ASSUMED TI=	7.60	
GE_AB		0.898333333		HMA G _f =	2.05621	
GE _{ASB}		0.208333333		AB G _f =	1.1	
GE_TOTAL		2.216163399		AS G _f =	1	
	TI=	7.61				
GE_AC		1.109012349		ASSUMED TI=	7.61	
GE_AB		0.898333333		HMA G _f =	2.055312	
GE _{ASB}		0.208333333		AB G _f =	1.1	
GE_TOTAL	_	2.215679015		AS G _f =	1	
Carlanda	tod TI	7.61			0.119	

Calculated TI=	7.61	
		ιEΟι

EQUATION 2: TI = $9.0 \times \left(\frac{ESALs}{1 \times 10^6}\right)^{0.119}$

alculated ESALs= 243,875

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: Ludis Lane
SEGMENT TO: Highway 156

SEGMENT TO:	Highway 156				
CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	7.5	10	0		
WB2	7.5	10	0		
EB1	7.5	12	0	11	
EB2	4.5	9	0	52	
AVERAGE	6.75	10.25	0.00	11.00 (MIN)
EQUATIO.	$N 1: T = \frac{G_E}{G_f}$				
	/ u _f				
EQUATION	$1A: G_E = T \times G_f$	EOUAT	TION 1B: $TI = \frac{1}{60}$	G_E	
	nt= Thickness * Gravel Facto		(0.	.0032)(100 -	-R)
Graver Equivale	iii - iiickiiess Giavei Facto				
GE _{AC}	1.13062	5	ASSUMED TI=	7.5	
GE _{AB}	0.93958333	3	HMA G _f =	2.01	
GE_{ASB}	()	AB G _f =	1.1	
GE _{TOTAL}	2.07020833	- 3	AS G _f =	1	
	TI= 7.2	7			
		_			
GE _{AC}	1.18295589		ASSUMED TI=	7.27	
GE _{AB}	0.93958333		•	2.103033	
GE _{ASB}) -	AB G _f =	1.1	
GE _{TOTAL}	2.12253922	5	AS G _f =	1	
	TI= 7.4	5			
GE_AC	1.16828208	1	ASSUMED TI=	7.45	
GE_{AB}	0.93958333	3	HMA G _f =	2.076946	
GE_{ASB}	()	AB G _f =	1.1	
GE _{TOTAL}	2.10786541	1	AS G _f =	1	
	TI= 7.4)			
GE	1 172244	=	ACCUMAED TO	7.40	
GE _{AC} GE _{AB}	1.172341 0.93958333		ASSUMED TI=	7.40 2.084163	
GE _{ASB})	AB G _f =	1.1	
	2.11192483	-	AS G_f =	1.1	
GE _{TOTAL}	2.11192403	+	A3 G _f -	1	
	TI= 7.4	2			
GE_AC	1.17121425	5	ASSUMED TI=	7.42	
GE_AB	0.93958333	3	•	2.082159	
GE _{ASB}		<u> </u>	AB G _f =	1.1	
GE _{TOTAL}	2.11079758	3	AS G _f =	1	
		-			
Calculated 1	TI= 7.41	U EQUATION 2.	$TI = 9.0 \times \left(\frac{ESALs}{1 \times 10^6}\right)$	0.119	
			1×10 ⁶		
Iculated ESAL	s= 195,567	1	$(ln(\frac{TI}{2}))$	\	
200000000000000000000000000000000000000		EQUATION 2A	$a: ESALs = e^{\left(\frac{ln\left(\frac{TI}{9}\right)}{0.119}\right)}$	$^{()} \times (1 \times 10^6)$	
			- -	` = =	

STREET NAME: FAIRVIEW ROAD SEGMENT FROM: Highway 156 SEGMENT TO: Los Viboras

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	8	5	0		
WB2	6.5	5	0		
WB3	7	6	0		
WB4	6.5	6	0		
EB1	4	14	0	79	
EB2	7	11	0	11	
EB3	6.5	8	0	11	
EB4	7	7	0	11	
AVERAGE	6.56	7.75	0.00	11.00	(MIN)

EQUATION 1: $T = \frac{G_E}{C}$

EQUATION 1:	$T = \frac{G_f}{G_f}$		
EQUA <i>TION 1A</i> :	$G_{\rm F} = T \times G_{\rm C}$	EQUATION 1B: $TI = \frac{1}{100}$	G_E
		(0.	0032)(10
aravei Equivalent= 1	hickness * Gravel Factor		
GE _{AC}	1.09921875	ASSUMED TI=	7.5
GE _{AB}	0.710416667	HMA G _f =	2.01
GE _{ASB}	0	AB G_f =	1.1
SE _{TOTAL}	1.809635417	AS G _f =	1
TI=	6.35		
SE _{AC}	1.230114614	ASSUMED TI=	6.35
iE _{AB}	0.710416667	HMA G _f =	2.249352
GE _{ASB}	0	AB G_f =	1.1
SE _{TOTAL}	1.940531281	AS G _f =	1
TI=	6.81		
iE _{AC}	1.187902504	ASSUMED TI=	6.81
iE _{AB}	0.710416667	HMA G_f =	2.172165
E _{ASB}	0	AB G _f =	1.1
E _{TOTAL}	1.898319171	AS G _f =	1
TI=	6.67		
E _{AC}	1.201037327	ASSUMED TI=	6.67
E _{AB}	0.710416667	HMA G_f =	2.196183
E _{ASB}	0	AB G_f =	1.1
E _{TOTAL}	1.911453993	AS G _f =	1
TI=	6.71		
iE _{AC}	1.196903665	ASSUMED TI=	6.71
iE _{AB}	0.710416667	HMA G_f =	2.188624
iE _{ASB}	0	AB G _f =	1.1
E _{TOTAL}	1.907320332	AS G _f =	1
Calculated TI=	6.70	EQUATION 2: TI = $9.0 \times \left(\frac{ESALS}{1\times10^6}\right)$)0.119

 $\left(\frac{1\times10^{6}}{1}\right)$

ılculated ESALs= 83,436 EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{TI}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: Los Viboras
SEGMENT TO: Acquistapace Road

CORE NO. WB1 WB2 WB3	HMA LAYER (INCHES) 4.5 7.5 7	AB LAYER (INCHES) 17.5 16.5 3.5	ASB LAYER (INCHES) 0 0 0	R-VALUE
EB1	7	7	0	36
EB2	7	7	0	48

AVERAGE	6.60	10.30	0.00	30.00 (IVIIIV)
	- Gr. /				

EQUATION 1: $T = \frac{G_E}{G_f}$

EQUATION 1A: $G_E = T \times G_f$

TI=

Gravel Equivalent= Thickness * Gravel Factor

EQUATION 1B:
$$TI = \frac{G_E}{(0.0032)(100 - R)}$$

GE_AC	1.1055	ASSUMED TI=	7.5
GE_AB	0.944166667	HMA G _f =	2.01
GE_{ASB}	0	AB G _f =	1.1
GE_TOTAL	2.049666667	AS G _f =	1

	TI= 10.01		
GE _{AC}	0.985755265	ASSUMED TI=	10.01
GE_AB	0.944166667	HMA G_f =	1.792282
GE_{ASB}	0	AB G _f =	1.1
GE_TOTAL	1.929921932	AS G _f =	1

GE_AC	1.015876359	ASSUMED TI=	9.42
GE_AB	0.944166667	HMA G _f =	1.847048
GE_{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.960043026	AS G _f =	1

9.42

	TI=	9.57	
GE_AC		1.008040363	ASSUMED TI= 9.57
GE_AB		0.944166667	HMA G _f = 1.832801
GE_{ASB}		0	AB G_f = 1.1
GE _{TOTAL}		1.95220703	$ASG_f=$ 1
	TI=	9.53	

GE _{AC}	1.010061432	ASSUMED TI=	9.53
GE_AB	0.944166667	HMA G _f =	1.836475
GE_{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.954228099	AS G _f =	1

Calculated TI=	9.54	EQUATION 2: TI = $9.0 \times \left(\frac{ESALs}{1 \times 100}\right)^{0.119}$
		EQUATION 2: $\Pi = 9.0 \times \left(\frac{1 \times 10^6}{1 \times 10^6}\right)$

EQUATION 2A:
$$ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$$

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: Acquistapace Road
SEGMENT TO: Spring Grove Road

CORE NO. WB1	HMA LAYER (INCHES) 7.5	AB LAYER (INCHES) 14	ASB LAYER (INCHES)	R-VALUE
WB2	6.5	14	0	
WB3	7	14	0	
WB4	6.5	14		
EB1	7.5	12	0	9
EB2	7	8	0	23
EB3	7.5	11	0	22

AVERAGE 7.07 12.43 0.00 9.00 (MIN)		7.07		0.00	9.00	(MIN)
------------------------------------	--	------	--	------	------	-------

EQUATION 1: $T = \frac{G_E}{G_f}$

EQUATION 1A: $G_E = T \times G_f$

Gravel Equivalent= Thickness * Gravel Factor

EOUATION 1B: TI =	G_E
EQUALION 1D. II —	(0.0032)(100 - R)

GE _{AC}		1.184464286	ASSUMED TI=	7.5
GE _{AB}		1.139285714	HMA G _f =	2.01
GE _{ASB}		0	AB G _f =	1.1
GE _{TOTAL}		2.32375	AS G _f =	1
	TI=	7.98		
GE _{AC}		1.182796296	ASSUMED TI=	7.98
E _{AB}		1.139285714	HMA G _f =	2.007169471
E _{ASB}		0	AB G _f =	1.1
E _{TOTAL}		2.32208201	AS G _f =	1
	TI=	7.97		
GE _{AC}		1.18322103	ASSUMED TI=	7.97
GE _{AB}		1.139285714	HMA G _f =	2.007890234
		_	AD C	

GE _{ASB}		0	AB G _f =	1.1
GE _{TOTAL}		2.322506745	AS G _f =	1
	TI=	7.98		
GE _{AC}		1.183112833	ASSUMED TI=	7.98
GE_AB		1.139285714	HMA G_f =	2.007706626
GE _{ASB}		0	AB G _f =	1.1

GE_{TOTAL}		2.322398547	AS G _f =	1
	TI=	7.98		
GE_AC		1.183140393	ASSUMED TI=	7.98
GE_AB		1.139285714	HMA G _f =	2.007753393
GE_{ASB}		0	AB G _f =	1.1
GE _{TOTAL}		2.322426107	AS G_f =	1

Calculated TI=	7.98	FOLIATION 2. TI. O.O.	$(ESALs)^{0.119}$
		EQUATION 2: TI = $9.0 \times$	$\left(\frac{1\times10^6}{1}\right)$

EQUATION 2A:
$$ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$$

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: Spring Grove Road
SEGMENT TO: Fallon Road

AVERAGE	7.75	11.56	0.00	8.00	(MIN)
EB4	7.5	12	0	24	
EB3	7	9	0	28	
EB2	7.5	12	0	8	
EB1	6.5	10	0	26	
WB4	9	11			
WB3	6.5	10.5	0		
WB2	7	14	0		
WB1	11	14	0		
CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	

7.75	11.56	0.00	8.00	(MIN)
$T = \frac{G_E}{G_f}$				
$G_{-} = T \times G_{-}$	FOLIAT	$ION \ 1R \cdot TI = $		
	EQUITI	0.0111 - (0.00)	0032)(10	00 - R
ickness * Gravel Factor				
1.298125		ASSUMED TI=	7.5	
1.059895833		HMA G _f =	2.01	
0		AB G _f =	1.1	
2.358020833		AS G _f =	1	
8.01				
1.293893703		ASSUMED TI=	8.01	
1.059895833		HMA G _f =	2.003448	
0		AB G _f =	1.1	
2.353789536		AS G _f =	1	
8.00				
1.295056167		ASSUMED TI=	8.00	
1.059895833		HMA G _f =	2.005248	
0		AB G _f =	1.1	
2.354952		AS G _f =	1	
8.00				
	$T = \frac{G_E}{G_f}$ $G_E = T \times G_f$ ickness * Gravel Factor 1.298125 1.059895833 0 2.358020833 8.01 1.293893703 1.059895833 0 2.353789536 8.00 1.295056167 1.059895833 0 2.354952	$T = \frac{G_E}{G_f}$ $G_E = T \times G_f$ ickness * Gravel Factor 1.298125 1.059895833 0 2.358020833 8.01 1.293893703 1.059895833 0 2.353789536 8.00 1.295056167 1.059895833 0 2.354952	$T = \frac{G_E}{G_F}$ $G_E = T \times G_f$ ickness * Gravel Factor 1.298125 1.059895833 0 2.358020833 8.01 1.293893703 1.059895833 1.059895833 1.059895833 $ASSUMED TI=$ 0 2.353789536 $ASSUMED TI=$ $AB G_F$ $AS G_F$ $AS G_F$ $AS G_F$ $AS G_F$ $AS G_F$ $ASSUMED TI=$ $AS G_F$	$T = \frac{G_E}{G_F}$ $G_E = T \times G_f$ ickness * Gravel Factor 1.298125 1.059895833 0 2.358020833 8.01 1.293893703 1.059895833 0 2.353789536 0 1.29353789536 0 1.295056167 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 1.059895833 0 0 0 1.059895833 0 0 1.059895833 0 0 0 1.059895833 0 0 0 0 0 0 0 0 0 0

GE_{AC}		1.294736491	ASSUMED TI=	8.00
GE_AB		1.059895833	HMA G _f =	2.004753
GE_ASB		0	AB G_f =	1.1
GE _{TOTAL}		2.354632324	AS G _f =	1
	TI=	8.00		
GE _{AC}		1.294824378	ASSUMED TI=	8.00
GE _{AC}		1.294824378 1.059895833		8.00 2.004889

Calculated TI=	8.00	EQUATION 2: TI = $9.0 \times \left(\frac{ESALs}{1\times100}\right)^{0.11}$
	_	EQUATION 2. II = 9.0 $\times \left(\frac{1}{1 \times 10^6}\right)$

alculated ESALs=	371,025	$\left(ln\left(\frac{TI}{9}\right)\right)$]
		EQUATION 2A: $ESALs = e^{\left(\frac{\sqrt{3}}{0.119}\right)} \times (1 \times 10^6)$	

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: Fallon Road
SEGMENT TO: Rosa Moranda Road

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE
WB1	5.5	14	0	
WB2	5	14.5	0	
WB3	5	14	0	
EB1	4	16	0	14
EB2	3.5	17	0	18
EB3	4	16	0	15
EB4				
AVERAGE	4.50	15.25	0.00	14.00 (MIN)
AVERAGE	4.50	15.25	0.00	14.00 (171111)

EQUATION 1: $T = \frac{G_E}{G_f}$

EQUATION 1A: $G_E = T \times G_f$ Gravel Equivalent= Thickness * Gravel Factor

TI=

EQUATION 1B: $TI = \frac{G_E}{(0.0032)(100 - R)}$

GE _{AC}	0.75375
GE _{AB}	1.397916667
GE _{ASB}	0

GE_{TOTAL} 2.151666667

 $\begin{array}{lll} \mbox{ASSUMED TI=} & 7.5 \\ \mbox{HMA } \mbox{G}_f = & 2.01 \\ \mbox{AB } \mbox{G}_f = & 1.1 \\ \mbox{AS } \mbox{G}_f = & 1 \end{array}$

 GEAC
 0.760415648

 GEAB
 1.397916667

 GEASB
 0

 GETOTAL
 2.158332315

 $\begin{array}{ccc} \text{ASSUMED TI=} & 7.82 \\ \text{HMA G}_{f}\text{=} & 2.027775 \\ \text{AB G}_{f}\text{=} & 1.1 \end{array}$

AS G_f=

TI= 7.84

7.82

 GEAC
 0.759240532

 GEAB
 1.397916667

 GEASB
 0

 GETOTAL
 2.157157199

ASSUMED TI= 7.84HMA G_f= 2.024641

 $\begin{array}{ll} \text{AB G}_{\text{f}}\text{=} & 1.1 \\ \text{AS G}_{\text{f}}\text{=} & 1 \end{array}$

TI= 7.84

 $\begin{array}{ccc} GE_{AC} & 0.759447303 \\ GE_{AB} & 1.397916667 \\ GE_{ASB} & 0 \\ \hline GE_{TOTAL} & 2.15736397 \end{array}$

ASSUMED TI= 7.84HMA G_f = 2.025193

 $\begin{array}{lll} \text{AB } G_f = & 1.1 \\ \text{AS } G_f = & 1 \end{array}$

TI= 7.84

 GEAC
 0.759410908

 GEAB
 1.397916667

 GEASB
 0

 GETOTAL
 2.157327574

 $\begin{array}{ccc} \text{ASSUMED TI=} & 7.84 \\ \text{HMA G}_{\text{f}}\text{=} & 2.025096 \\ \text{AB G}_{\text{f}}\text{=} & 1.1 \end{array}$

1

AS G_f =

Calculated TI= 7.84

EQUATION 2: TI = $9.0 \times \left(\frac{ESALs}{1 \times 10^6}\right)^{0.119}$

alculated ESALs= 313,336

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

STREET NAME: FAIRVIEW ROAD SEGMENT FROM: Rosa Moranda Road

SEGMENT TO: Dixie Drive

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	5	14	0		
WB2	5	18	0		
WB3	5.5	16.5	0		
WB4	5	9	0		
WB5	4.5	9	0		
WB6	5.5	9	0		
EB1	4.5	16	0	10	
EB2	4	14	0	13	
EB3	4.5	15	0	32	
EB4	4.5	14	0	27	
EB5	4	14	0	18	
EB6	4	15	0	18	
AVERAGE	4.67	13.63	0.00	10.00	(MIN)

AVERA	AGE	4.67	13.63	0.00	10.00	(MIN)
EQUA?	TION 1: T	$= \frac{G_E}{G_f}$				
EQUA <i>TI</i>	$ON 1A: G_E$	$T = T \times G_f$		EQUATION 1B: TI =	G_E	0 0
					(0.0032)(10	0 – R
05		0.70466667		40001455 71		
GE _{AC} GE _{AB}		0.781666667		ASSUMED TI=	7.5	
GE _{ASB}		1.248958333 0		HMA G _f = AB G _f =	2.01 1.1	
GE _{TOTAL}		2.030625		AS G _f =	1.1	
101/12				•		
	TI=	7.05				
GE _{AC}		0.830405034		ASSUMED TI=	7.05	
GE _{AB}		1.248958333		HMA G _f =	2.135327231	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		2.079363368		AS G _f =	1	
	TI=	7.22				
GE _{AC}		0.820615363		ASSUMED TI=	7.22	
GE _{AB}		1.248958333		HMA G _f =	2.110153791	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		2.069573696		AS G _f =	1	
	TI=	7.19				
GE _{AC}		0.822553945		ASSUMED TI=	7.19	
GE _{AB}		1.248958333		HMA G _f =	2.115138716	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		2.071512278		AS G _f =	1	
	TI=	7.19				
GE _{AC}		0.82216897		ASSUMED TI=	7.19	
GE _{AB}		1.248958333		HMA G _f =	2.11414878	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		2.071127303		AS G _f =	1	
Calcula	ted TI=	7.19	EQUATIO	on 2: TI = $9.0 \times \left(\frac{ESALs}{1 \times 10^6}\right)$	0.119	
		L	•	\1×106/		

alculated ESALs= 151,801

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{TI}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: Dixie Drive
SEGMENT TO: McClosky Road

CORE NO. WB1 WB2 WB3 WB4	HMA LAYER (INCHES) 7.5 7.5 8 5	AB LAYER (INCHES) 7 7 7 7 7	ASB LAYER (INCHES) 0 0 0 0 0	R-VALUE
EB1	4.5	8	0	50
EB2	8	4	0	17
EB3	8	5	0	15

AVERAGE	6.93	6.43	0.00	15.00	(MIN)
EQUATION 1:	$T = \frac{G_E}{G_f}$				

EQUATION 1A: $G_E = T \times G_f$

TI=

Gravel Equivalent= Thickness * Gravel Factor

EQUATION 1B:
$$TI = \frac{G_E}{(0.0032)(100 - R)}$$

GE_AC	1.160535714	ASSUMED TI=	7.5
GE_AB	0.589285714	HMA G _f =	2.01
GE_{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.749821429	AS G _f =	1

GE _{AC}	1.290723146	ASSUMED TI=	6.43
GE_AB	0.589285714	HMA G _f =	2.235479263
GE_{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.88000886	AS G _f =	1

6.43

	TI= 6.91		
GE _{AC}	1.245231262	ASSUMED TI=	6.91
GE_{AB}	0.589285714	HMA G _f =	2.156689197
GE_{ASB}	(AB G _f =	1.1
GE _{TOTAL}	1.834516977	AS G _f =	1

	TI=	6.74	
GE _{AC}		1.260576179	ASSUMED TI=
GE _{AB}		0.589285714	HMA G _f =
SE _{ASB}		0	AB G _f =
GE _{TOTAL}		1.849861893	AS G _f =

	TI=	6.80		
GE_AC		1.255336945	ASSUMED TI=	6.80
GE_AB		0.589285714	HMA G _f = 2	.174191822
GE_{ASB}		0	AB G _f =	1.1
GE _{TOTAL}		1.844622659	AS G _f =	1

| EQUATION 2A:
$$ESALs = e^{\left(\frac{ln\left(\frac{TI}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$$

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: McClosky Road
SEGMENT TO: Santa Ana Road

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	7.5	6	0		
WB2	7	6	0		
WB3	7.75	7	0		
WB4	5	9	0		
WB5	7.5	7	0		
EB1	5	9	0	12	
EB2	7	9	0	13	
EB3	7	8	0	8	
EB4	6	8	0	9	
EB5	7	5	0	12	_
AVERAGE	6.68	7.40	0.00	8.00	(MIN)

EB5		/	5	Ü	12	_
AVERAGE		6.68	7.40	0.00	8.00	(MIN)
EQUA <i>TIC</i>	ON 1: T =	$= \frac{G_E}{C}$				
		7 9)			G_{i}	
EQUA <i>TION</i>	I 1 A : G_E	$= T \times G_f$	EQUA?	$TION \ 1B: \ TI = \frac{1}{(0)}$	0032)(100 —
Gravel Equival	ent= Thickn	ess * Gravel Factor		(100
GE _{AC}		1.1180625		ASSUMED TI=	7.5	
GE _{AB}		0.678333333		HMA G _f =	2.01	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.796395833		AS G _f =	1	
	TI=	6.10				
GE _{AC}		1.276794391		ASSUMED TI=	6.10	
GE _{AB}		0.678333333		HMA G _f =	2.295361	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.955127724		AS G _f =	1	
	TI=	6.64				
GE _{AC}		1.223867546		ASSUMED TI=	6.64	
GE _{AB}		0.678333333		HMA G _f =	2.200211	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.90220088		AS G _f =	1	
	TI=	6.46				
GE _{AC}		1.240777178		ASSUMED TI=	6.46	
GE_AB		0.678333333		HMA G _f =	2.230611	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.919110511		AS G _f =	1	
	TI=	6.52				
GE_AC		1.235298726		ASSUMED TI=	6.52	
GE _{AB}		0.678333333		HMA G _f =	2.220762	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.91363206		AS G _f =	1	
Calculated	TI=	6.50	EQUATION 2:	$TI = 9.0 \times \left(\frac{ESALs}{1\times10^6}\right)$	0.119	
				(1X10°,	<u>′</u>	
alculated ECA	I C-	64 026	1	/, /II\\\		

alculated ESALs=	64,926	$\left(ln\left(\frac{TI}{\Omega}\right)\right)$]
		EQUATION 2A: $ESALs = e^{\left(\frac{\sqrt{3}}{0.119}\right)} \times (1 \times 10^6)$	

STREET NAME: **FAIRVIEW ROAD** SEGMENT FROM: Santa Ana Road SEGMENT TO: Hillcrest Road

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE
WB1	5.5	4.5	0	
WB2	4	4.5	0	
WB3	7	5	0	
EB1	5	16	0	19
EB2	4.5	14	0	25
EB3	6	14	0	12

AVERAGE 5.33 9.67 0.00 12.00 (MIN)

EQUATION 1: $T = \frac{G_E}{G_f}$

EQUATION 1A: $G_E = T \times G_f$

TI=

 $\overline{G_E}$ EQUATION 1B: $TI = \frac{1}{(0.0032)(100 - R)}$

1.1

Gravel Equivalent= Thickness * Gravel Factor

GE _{AC}	0.893333333	ASSUMED TI=	7.5
GE_AB	0.886111111	HMA G _f =	2.01
GE _{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.779444444	AS G _f =	1

 $\mathsf{GE}_{\mathsf{AC}}$ 1.002477535 ASSUMED TI= 6.32 $\mathsf{GE}_{\mathsf{AB}}$ 0.886111111 HMA G_f= 2.255574455 GE_{ASB} 0 AB G_f= GE_{TOTAL} AS G_f= 1.888588646

6.32

TI= 6.71

ASSUMED TI= $\mathsf{GE}_{\mathsf{AC}}$ 0.973079176 6.71 GE_AB 0.886111111 HMA G_f= 2.189428146 $\mathsf{GE}_{\mathsf{ASB}}$ AB G_f= 1.1 GE_{TOTAL} 1.859190287 AS G_f= 1

TI= 6.60 $\mathsf{GE}_{\mathsf{AC}}$ 0.980742386 ASSUMED TI= 6.60 GE_AB 0.886111111 HMA G_f= 2.206670368 AB G_f= 1.1 0

 $\mathsf{GE}_{\mathsf{ASB}}$ $\mathsf{GE}_\mathsf{TOTAL}$ 1.866853497 AS G_f= 1 TI= 6.63

0.978727401 GE_AC ASSUMED TI= 0.886111111 $\mathsf{GE}_{\mathsf{AB}}$ HMA G_f= 2.202136652 $\mathsf{GE}_{\mathsf{ASB}}$ AB G_f = 1.1 1.864838512 AS G_f= $\mathsf{GE}_\mathsf{TOTAL}$ 1

 $(ESALs)^{0.119}$ Calculated TI= 6.62 EQUATION 2: TI = $9.0 \times$

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{TI}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$ alculated ESALs= 75,925

STREET NAME: FAIRVIEW ROAD
SEGMENT FROM: Hillcrest Road
SEGMENT TO: Sunnyslope Road

VALUE
41
33

AVERAGE 5.58 9.20 0.00 33.00 (MIN)

EQUATION 1: $T = \frac{G_E}{G_f}$

EQUATION 1A: $G_E = T \times G_f$

TI=

EQUATION 1B: $TI = \frac{G_E}{(0.0032)(100 - R)}$

Gravel Equivalent= Thickness * Gravel Factor

GE _{AC}	0.935208333	ASSUMED TI=	7.5
GE_AB	0.843333333	HMA G _f =	2.01
GE_{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.778541667	AS G _f =	1

8.30

 GEAC
 0.915958375

 GEAB
 0.843333333

 GEASB
 0

 GETOTAL
 1.759291708

TI= 8.21

GE _{AC}	0.920955895	ASSUMED TI=	8.21
GE_AB	0.843333333	HMA G _f =	1.979367893
GE_{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.764289228	AS G_f =	1

TI= 8.23

GE_AC	0.919650622	ASSUMED TI=	8.23
GE_AB	0.843333333	HMA G _f =	1.97656253
GE _{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.762983955	AS G_f =	1

TI= 8.22

GE _{AC}	0.919991003	ASSUMED TI=	8.22
GE_AB	0.843333333	HMA G _f =	1.977294096
GE _{ASB}	0	AB G _f =	1.1
GE _{TOTAL}	1.763324336	AS G_f =	1

Calculated TI= 8.22

EQUATION 2: TI = $9.0 \times \left(\frac{ESALs}{1 \times 10^6}\right)^{0.119}$

alculated ESALs= 468,958

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

STREET NAME: **FAIRVIEW ROAD** SEGMENT FROM: Sunnyslope Road SEGMENT TO: John Smith Road

CORE NO. WB1 WB2	HMA LAYER (INCHES) 6 5.25	AB LAYER (INCHES) 4 4	ASB LAYER (INCHES) 0 0	R-VALUE
EB1	5	3	8	16
EB2	5	2.5	9	36

|--|

EQUATION 1: $T = \frac{G_E}{G_f}$ EQUATION 1A: $G_E = T \times G_f$ Gravel Equivalent= Thickness * Gravel Factor

EQUATION 1B: $TI = \frac{C_E}{(0.0032)(100 - R)}$ G_E

> 7.5 2.01 1.1 1

GE_AC	0.88984375	ASSUMED TI=
GE_AB	0.309375	HMA G _f =
GE_ASB	0.354166667	AB G _f =
GE _{TOTAL}	1.553385417	AS G _f =

	TI= 5.78		
GE_AC	1.044180975	ASSUMED TI=	5.78
GE_AB	0.309375	HMA G _f =	2.358621
GE_{ASB}	0.354166667	AB G _f =	1.1
GE _{TOTAL}	1.707722642	AS G _f =	1

	TI= 6.35		
GE _{AC}	0.995879333	ASSUMED TI=	6.35
GE_AB	0.309375	HMA G _f =	2.249516
GE_{ASB}	0.354166667	AB G_f =	1.1
GE _{TOTAL}	1.659421	AS G _f =	1

	TI=	6.17		
GE_AC		1.010269164	ASSUMED TI=	6.17
GE_AB		0.309375	HMA G _f =	2.28202
GE_{ASB}		0.354166667	AB G _f =	1.1
GE _{TOTAL}		1.67381083	AS G_f =	1
	TI=	6.23		

GE_AC	1.005917124	ASSUMED TI=	6.23
GE_AB	0.309375	HMA G _f =	2.272189
GE _{ASB}	0.354166667	AB G _f =	1.1
GE _{TOTAL}	1.669458791	AS G_f =	1

Calculated TI=	6.21	EQUATION 2: TI = $9.0 \times \left(\frac{ESALs}{4\times100}\right)^{0.119}$
		EQUATION 2: $\Pi = 9.0 \times \left(\frac{1}{1 \times 10^6}\right)$

EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$ alculated ESALs= 44,284

STREET NAME: John Smith Road
SEGMENT FROM: Fairview Road
SEGMENT TO: Change of Pavement

SEGMENT TO:	Change of Pavement			
CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE
WB1	0.5	15.5	0	
WB2	0.5	15	0	
EB1	1.5	5.5		13
EB2	0.5	12.5		11
EB3	0.5	8		19
AVERAGE	0.70	11.30	0.00	11.00 (MIN)
EQUATION 1	$1: T = \frac{G_E}{G_f}$			
EQUA <i>TION</i> 1A	$A: G_E = T \times G_f$	EQUA	$ATION 1B: TI = \frac{1}{7}$	G_E (0.0032)(100 –
	Thickness * Gravel Factor		(0.0032)(100 –
GE _{AC}	0.11725		ASSUMED TI=	7.5
GE _{AB}	1.035833333		HMA G _f =	2.01
GE _{ASB}	0		AB G _f =	1.1
GE _{TOTAL}	1.153083333		AS G _f =	1
TI=	4.05			
GE _{AC}	0.164376413		ASSUMED TI=	
GE _{AB}	1.035833333			2.817881
GE _{ASB}	0		AB G _f =	
GE _{TOTAL}	1.200209746		AS G _f =	1
TI=	4.21			
GE _{AC}	0.161116964		ASSUMED TI=	4.21
GE _{AB}	1.035833333		HMA G _f =	2.762005
GE _{ASB}	0		AB G _f =	1.1
GE _{TOTAL}	1.196950298		AS G _f =	1
TI=	4.20			
GE _{AC}	0.161336186		ASSUMED TI=	4.20
GE _{AB}	1.035833333		HMA G _f =	2.765763
GE _{ASB}	0		AB G _f =	1.1
GE _{TOTAL}	1.19716952		AS G _f =	1
TI=	4.20			
GE _{AC}	0.161321414		ASSUMED TI=	4.20
GE _{AB}	1.035833333		HMA G _f =	2.76551
GE _{ASB}	0		AB G _f =	1.1
GE _{TOTAL}	1.197154747		AS G _f =	1
Calculated TI=	4.20	EQUATION 2:	$TI = 9.0 \times \left(\frac{ESALs}{1 \times 10^6}\right)$	$)^{0.119}$
alculated ESALs=	1,666		$\left(\frac{ln\left(\frac{TI}{9}\right)}{}\right)$)
		EQUATION 2A		$^{\prime}$ × (1×10^6)

STREET NAME: **John Smith Road**SEGMENT FROM: *Change of Pavement*

SEGMENT TO: Best Road

CORE NO.	HMA LAYER (INCHES)	AB LAYER (INCHES)	ASB LAYER (INCHES)	R-VALUE	
WB1	3.5	7	0		
WB2	6	6.5	0		
WB3	3.5	8.5	0		
WB4	3	7	0		
WB5	3.5	7	0		
WB6	3.5	7	0		
ED4	2.5	1.4	0	6	
EB1	3.5	14	-		
EB2	3.25	14	0	9	
EB3	4	9.5	0	11	
EB4	3.5	13.5	0	13	
EB5	3	14	0	9	
AVEDAGE	2 69	10 10	0.00	6.00	_ / N /

AVERAGE	3.68	10.10	0.00	6.00 (MI	N)
EQUATION 1: 7	$G = \frac{G_E}{G_f}$				
				G_E	
EQUA <i>TION</i> 1 <i>A</i> : <i>G</i>	$G_E = T \times G_f$	EQUA	$ATION \ 1B: \ TI = \frac{1}{(}$	0.0032)(10	0 –
Gravel Equivalent= Thic	kness * Gravel Factor				
GE _{AC}	0.6155625		ASSUMED TI=	7.5	
GE _{AB}	0.925833333		HMA G _f =	2.01	
GE _{ASB}	0		AB G _f =	1.1	
GE _{TOTAL}	1.541395833		AS G _f =	1	
TI=	5.12				
GE _{AC}	0.767080569		ASSUMED TI=	5.12	
GE _{AB}	0.925833333		HMA G _f =	2.504753	
GE _{ASB}	0		AB G _f =	1.1	
GE _{TOTAL}	1.692913903		AS G _f =	1	
TI=	5.63				
GE _{AC}	0.731948688		ASSUMED TI=	5.63	
GE _{AB}	0.925833333		HMA G _f =	2.390037	
GE _{ASB}	0		AB G _f =	1.1	
GE _{TOTAL}	1.657782021		AS G _f =	1	
TI=	5.51				
GE _{AC}	0.739663792		ASSUMED TI=	5.51	
GE _{AB}	0.925833333		HMA G _f =	2.415229	
GE _{ASB}	0		AB G _f =	1.1	
GE _{TOTAL}	1.665497125		AS G _f =	1	
TI=	5.54				
GE _{AC}	0.737948626		ASSUMED TI=	5.54	
GE _{AB}	0.925833333		HMA G _f =	2.409628	
GE _{ASB}	0		AB G _f =	1.1	
GE _{TOTAL}	1.663781959		AS G _f =	1	
Calculated TI=	5.53	EQUATION 2:	TI - O O × (ESALs)	0.119	

alculated ESALs= 16,724

EQUATION 2A:
$$ESALs = e^{\left(\frac{ln\left(\frac{Tl}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$$

STREET NAME: **John Smith Road** SEGMENT FROM: *Best Road*

SEGMENT TO: COP East of Landfill Entrance

CORE NO. WB1 WB2 WB3 WB4	HMA LAYER (INCHES) 5.5 3.5 3.5 3.5	AB LAYER (INCHES) 6 6 9 8	ASB LAYER (INCHES) 0 0 0 0	R-VALUE	
EB1	2.75	10.25	0	17	
EB2	3	10	0	18	
EB3	3.5	9.5	0	9	
EB4	2.75	10	0	16	
AVERAGE	3.50	8.59	0.00	9.00 (MIN)	
	0 /				

AVERAG	GE	3.50	8.59	0.00	9.00	(MIN)
EQUAT	ION 1: T	$= \frac{G_E}{G_f}$				
EOHA <i>TI</i>	ON 1 4. C		FOIL	$ATION \ 1B: TI = \frac{1}{2}$	- (G_E
		$E = T \times G_f$	EQU.	ATTON 1B. $TT = \frac{1}{T}$	0.0032)	(100 - I)
Gravel Equiv	/alent= Thick	ness * Gravel Factor				
GE _{AC}		0.58625		ASSUMED TI=	7.5	
GE _{AB}		0.787760417		HMA G _f =	2.01	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.374010417		AS G _f =	1	
	TI=	4.72				
GE _{AC}		0.761325769		ASSUMED TI=	4.72	
GE _{AB}		0.787760417		HMA G _f =	2.61026	i
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.549086186		AS G _f =	1	
	TI=	5.32				
GE _{AC}		0.717014192		ASSUMED TI=	5.32	
GE _{AB}		0.787760417		HMA G _f =	2.458334	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.504774609		AS G _f =	1	
	TI=	5.17				
GE _{AC}		0.727494669		ASSUMED TI=	5.17	
GE _{AB}		0.787760417		HMA G _f =	2.494267	
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.515255086		AS G _f =	1	
	TI=	5.20				
GE _{AC}		0.724974394		ASSUMED TI=	5.20	J
GE _{AB}		0.787760417		HMA G _f =	2.485626	i
GE _{ASB}		0		AB G _f =	1.1	
GE _{TOTAL}		1.51273481		AS G _f =	1	
Calculate	ed TI=	5.19	50114 T 10:: 5	$TI = 9.0 \times \left(\frac{ESALs}{}\right)$	0.119	
			FOUATION 2	· II = 9 () X (———	1	

Calculated TI= 5.19 EQUATION 2: TI = $9.0 \times \left(\frac{ESALS}{1 \times 10^6}\right)$

| EQUATION 2A: $ESALs = e^{\left(\frac{ln\left(\frac{TI}{9}\right)}{0.119}\right)} \times (1 \times 10^6)$

San Benito County Waste Impact Study APPENDIX D

Tables

Table 5 – Calculated Impact from 2011 through 2016

Table 8 – Summary of Calculated Data and Treatment Costs

Table 12 – Estimated 30 Year Maintenance Plan

Table 13 – Recommended Capital Improvement Projects (CIP)

Table 14 – Summary of Past Due Impact and Costs from 2014 through 2016

San Bentio County Out of County Truck Waste Impact Study Table 5 - Historical Summary of Out-of-County Trucks on Existing Pavement from Trips 2014 through 2016

Road Segment	From	То	Pavement Area (SF)	PCI	Calculated Traffic Index (TI)	Calculated ESALs From Coring Data	
Shore Road	Highway 25	1 Mile East of Highway 25	158,400	60	7.42	196,413	103,460
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	158,400	47	7.57	232,768	103,460
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	158,400	35	7.54	225,493	103,460
Shore Road	3 Miles East of Highway 25	San Felipe Road	127,500	54	8.76	795,827	103,460
Fairview Road	San Felipe Road	Ludis Lane	150,510	67	7.61	243,875	103,460
Fairview Road	Ludis Lane	Highway 156	56,840	51	7.41	195,567	103,460
Fairview Road	Highway 156	Los Vivoras	151,626	39	6.70	83,436	103,460
Fairview Road	Los Vivoras	Acquistapace Road	62,750	45	9.54	1,634,816	103,460
Fairview Road	Acquistapace Road	Spring Grove Road	126,252	28	7.98	362,152	103,460
Fairview Road	Spring Grove Road	Fallon Road	99,260	40	8.00	371,025	103,460
Fairview Road	Fallon Road	Rosa Moranda Road	76,750	49	7.84	313,336	103,460
Fairview Road	Rosa Moranda Road	Dixie Drive	159,600	37	7.19	151,801	103,460
Fairview Road	Dixie Drive	McClosky Road	103,500	34	6.78	92,724	103,460
Fairview Road	McClosky Road	Santa Ana Road	133,700	26	6.50	64,926	103,460
Fairview Road	Santa Ana Road	Hillcrest Road	93,450	25	6.62	75,925	103,460
Fairview Road	Hillcrest Road	Sunnyslope Road	114,724	55	8.22	468,958	103,460
Fairview Road	Sunnyslope Road	John Smith Road	98,028	35	6.21	44,284	103,460
John Smith Road	Fairview Road	Change of Pavement	61,250	49	4.20	1,666	103,460
John Smith Road	Change of Pavement	Best Road	130,750	89	5.53	16,724	103,460
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	106,000	87	5.19	9,871	103,460



San Bentio County Out of County Truck Waste Impact Study Table 8 - Summary of Calculated Data and Treatment Costs

														Total Construction Cost		Co	otal Adjusted st for Out-of- ounty Trucks
Road Segment	From	То	Calculated Traffic Index (TI)	Calculated ESALs	PCI	Pavement Area (SF)	Design Traffic Index (TI-20 years)	Design R-Value	Existing GE	Design GE	Structural Deficiency in HMA (inches)	HMA Layer Thickness (inches)	AB Layer Thickness (inches)	Treatment Cost Full Depth Reclaimation (FDR)	Impact of Out-of- County Trucks	I	eatment Cost Full Depth aimation (FDR)
Shore Road	Highway 25	1 Mile East of Highway 25	7.42	196,413	60	158,400	11.0	8	2.1387	3.2384	-7.72	7	24.4	\$ 2,857,883.00	29%	\$	828,786.07
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	7.57	232,768	47	158,400	11.0	16	2.0008	2.9568	-6.71	7	21.4	\$ 2,857,883.00	29%	\$	828,786.07
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	7.54	225,493	35	158,400	11.0	7	2.2116	3.2736	-7.45	7	24.8	\$ 2,857,883.00	29%	\$	828,786.07
Shore Road	3 Miles East of Highway 25	San Felipe Road	8.76	795,827	54	127,500	11.0	20	2.2964	2.8160	-3.65	7	19.8	\$ 2,300,379.00	29%	\$	667,109.91
Fairview Road	San Felipe Road	Ludis Lane	7.61	243,875	67	150,510	11.0	9	2.1912	3.2032	-7.10	7	24.1	\$ 2,715,530.00	29%	\$	787,503.70
Fairview Road	Ludis Lane	Highway 156	7.41	195,567	51	56,840	10.5	11	2.0702	2.9904	-6.46	6.75	22.1	\$ 926,270.00	31%	\$	287,143.70
Fairview Road	Highway 156	Los Vivoras	6.70	83,436	39	151,626	10.5	11	1.8096	2.9904	-8.29	6.75	22.1	\$ 2,470,912.00	31%	\$	765,982.72
Fairview Road	Los Vivoras	Acquistapace Road	9.54	1,634,816	45	62,750	10.5	36	2.0497	2.1504	-0.71	6.75	13.0	\$ 1,022,580.00	31%	\$	316,999.80
Fairview Road	Acquistapace Road	Spring Grove Road	7.98	362,152	28	126,252	10.5	9	2.3238	3.0576	-5.15	6.75	22.9	\$ 2,057,414.00	31%	\$	637,798.34
Fairview Road	Spring Grove Road	Fallon Road	8.00	371,025	40	99,260	10.5	8	2.3580	3.0912	-5.15	6.75	23.2	\$ 1,617,550.00	31%	\$	501,440.50
Fairview Road	Fallon Road	Rosa Moranda Road	7.84	313,336	49	76,750	10.5	14	2.1517	2.8896	-5.18	6.75	20.5	\$ 1,250,725.00	39%	\$	487,782.75
Fairview Road	Rosa Moranda Road	Dixie Drive	7.19	151,801	37	159,600	10.5	10	2.0306	3.0240	-6.97	6.75	22.0	\$ 2,600,857.00	39%	\$	1,014,334.23
Fairview Road	Dixie Drive	McClosky Road	6.78	92,724	34	103,500	10.5	15	1.7498	2.8560	-7.76	6.75	20.2	\$ 1,686,646.00	39%	\$	657,791.94
Fairview Road	McClosky Road	Santa Ana Road	6.50	64,926	26	133,700	10.5	8	1.7964	3.0912	-9.09	6.75	22.7	\$ 2,178,788.00	39%	\$	849,727.32
Fairview Road	Santa Ana Road	Hillcrest Road	6.62	75,925	25	93,450	10.5	12	1.7794	2.9568	-8.26	6.75	21.3	\$ 1,522,870.00	39%	\$	593,919.30
Fairview Road	Hillcrest Road	Sunnyslope Road	8.22	468,958	55	114,724	10.0	33	1.7785	2.1440	-2.45	6.5	12.8	\$ 1,829,489.00	48%	\$	878,154.72
Fairview Road	Sunnyslope Road	John Smith Road	6.21	44,284	35	98,028	10.0	16	1.5534	2.6880	-7.61	6.5	18.7	\$ 1,563,240.00	48%	\$	750,355.20
John Smith Road	Fairview Road	Change of Pavement	4.20	1,666	49	61,250	9.5	11	1.1531	2.7056	-10.41	6	19.8	\$ 924,779.00	82%	\$	758,318.78
John Smith Road	Change of Pavement	Best Road	5.53	16,724	89	130,750	9.5	6	1.5414	2.8576	-8.82	6	21.4	\$ 1,974,121.00	82%	\$	1,618,779.22
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	5.19	9,871	87	106,000	9.5	9	1.3740	2.7664	-9.33	6	20.4	\$ 1,600,434.00	82%	\$	1,312,355.88
														\$ 38,816,233.00		\$	15,371,856.22

San Bentio County Out of County Truck Waste Impact Study Table 12 -Estimated 30 Year Maintenance Plan (Assumes New / Structurally Adequate Pavement at Start)

Year

## Processor 160 Exact of Hydroxy 25 160																		
Part					2018	2021	2024	2027	2030	2033	2036	2039	2042	2044	2046			
Strone Notes	Road Segment	From	То		Start	Crack Seal	(Type II) & Crack Seal -	Crack Seal	(Type II) & Crack Seal -	Crack Seal		Crack Seal	and Replace -	Crack Seal	(Type II) Crack Seal -	Estimated Maintenance	Impact of Out- of-County	Total Adjusted Estimated Maintenance Cost for Out- of-County Trucks
Strone Road 2 Miles Enard of Highway 25 3 Miles Enard of Highway 25 Sun Faipe Road 127,500	Shore Road	Highway 25	1 Mile East of Highway 25	158,400		\$9,900	\$70,290	\$19,800	\$125,730	\$29,700	\$269,280	\$29,700	\$1,140,480	\$19,800	\$85,140	\$1,799,820	37%	\$665,933
Shore Road 3 Miles Feat of Highway 25 San Felipo Road 127,000	Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	158,400		\$9,900	\$70,290	\$19,800	\$125,730	\$29,700	\$269,280	\$29,700	\$1,140,480	\$19,800	\$85,140	\$1,799,820	37%	\$665,933
Fairview Road San Felipe Road Lude Lane 150,510 \$8,407 \$86,769 \$18,814 \$119,467 \$28,221 \$255,867 \$28,221 \$1,083,872 \$18,814 \$590,899 \$1,710,170 \$37% \$1,000 \$1,	Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	158,400		\$9,900	\$70,290	\$19,800	\$125,730	\$29,700	\$269,280	\$29,700	\$1,140,480	\$19,800	\$85,140	\$1,799,820	37%	\$665,933
Fairview Road Lustis Lane Highway 156 56,840 \$3,553 \$25,233 \$7,105 \$45,517 \$10,656 \$469,246 \$7,105 \$30,652 \$545,845 40% Fairview Road Highway 156 Los Vivoras 151,626 \$3,477 \$67,244 \$18,953 \$12,033 \$28,430 \$227,764 \$28,430 \$1,001,707 \$18,953 \$31,409 \$1,722,850 40% Fairview Road Los Vivoras Acquistigacie Road 62,750 \$3,922 \$27,845 \$7,844 \$48,806 \$11,766 \$106,675 \$11,766 \$451,800 \$7,844 \$33,725 \$712,997 40% Fairview Road Acquistigacie Road \$2,750 \$3,922 \$27,845 \$7,844 \$48,806 \$11,766 \$106,675 \$11,766 \$451,800 \$7,844 \$33,725 \$712,997 40% Fairview Road Spring Grove Road \$16,022 \$7,891 \$56,024 \$16,782 \$100,213 \$23,672 \$214,828 \$22,672 \$200,014 \$16,722 \$37,800 \$1,434,338 40% Fairview Road Failon Road \$90,280 \$4,797 \$34,068 \$59,944 \$60,900 \$14,391 \$193,0475 \$14,391 \$552,000 \$30,944 \$41,023 \$87,072 \$546,646 \$44,046 Fairview Road Roas Moranda Road \$0,000 \$3,975 \$70,823 \$10,000 \$126,083 \$29,025 \$27,1320 \$29,025 \$11,149,120 \$19,990 \$36,785 \$18,134,446 \$44,046 \$1,000 \$16,000 \$126,083 \$20,025 \$27,1320 \$20,025 \$11,491,120 \$19,990 \$36,075 \$1,176,191 \$44,046 \$44,04	Shore Road	3 Miles East of Highway 25	San Felipe Road	127,500		\$7,969	\$56,578	\$15,938	\$101,203	\$23,906	\$216,750	\$23,906	\$918,000	\$15,938	\$68,531	\$1,448,719	37%	\$536,026
Fairview Road Highway 1999 Los Vivoras 151,626	Fairview Road	San Felipe Road	Ludis Lane	150,510		\$9,407	\$66,789	\$18,814	\$119,467	\$28,221	\$255,867	\$28,221	\$1,083,672	\$18,814	\$80,899	\$1,710,170	37%	\$632,763
Fair-lew Road Los Vivorias Acquisispace Road 62,750 \$3,922 \$27,845 \$7,844 \$49,006 \$11,766 \$106,675 \$11,766 \$451,800 \$7,844 \$33,728 \$77,2997 40%	Fairview Road	Ludis Lane	Highway 156	56,840		\$3,553	\$25,223	\$7,105	\$45,117	\$10,658	\$96,628	\$10,658	\$409,248	\$7,105	\$30,552	\$645,845	40%	\$258,338
Paintew Road Acquistapace Road Spring Grove Road 126,252 \$7,891 \$86,024 \$15,782 \$10,213 \$23,672 \$214,628 \$23,672 \$909,014 \$15,782 \$67,860 \$1,344,538 40%	Fairview Road	Highway 156	Los Vivoras	151,626		\$9,477	\$67,284	\$18,953	\$120,353	\$28,430	\$257,764	\$28,430	\$1,091,707	\$18,953	\$81,499	\$1,722,850	40%	\$689,140
Fairview Road Spring Grove Road Fallon Road 99,260 \$6,204 \$44,047 \$12,408 \$78,788 \$18,611 \$188,742 \$18,611 \$714,672 \$12,408 \$53,352 \$1,127,842 40% \$18,600 \$1,4	Fairview Road	Los Vivoras	Acquistapace Road	62,750		\$3,922	\$27,845	\$7,844	\$49,808	\$11,766	\$106,675	\$11,766	\$451,800	\$7,844	\$33,728	\$712,997	40%	\$285,199
Fairview Road Fallon Road Rosa Moranda Road 76,750 \$4,797 \$34,058 \$9,594 \$60,920 \$14,391 \$130,475 \$14,391 \$552,600 \$9,594 \$41,253 \$872,072 54% Fairview Road Rosa Moranda Road Dixie Drive 159,600 \$9,975 \$70,823 \$19,950 \$126,683 \$29,925 \$271,320 \$29,925 \$1,149,120 \$19,950 \$85,785 \$1,813,455 54% Fairview Road Dixie Drive McClosky Road 103,500 \$6,469 \$45,928 \$12,938 \$82,153 \$19,406 \$175,950 \$19,406 \$745,200 \$12,938 \$55,631 \$1,176,019 54% \$164,000 \$10	Fairview Road	Acquistapace Road	Spring Grove Road	126,252		\$7,891	\$56,024	\$15,782	\$100,213	\$23,672	\$214,628	\$23,672	\$909,014	\$15,782	\$67,860	\$1,434,538	40%	\$573,815
Fairview Road Rosa Moranda Road Dixie Drive 159,600 \$9,975 \$70,823 \$19,950 \$126,683 \$29,925 \$271,320 \$29,925 \$1,149,120 \$19,950 \$85,785 \$1,813,455 54% Fairview Road Dixie Drive McClosky Road 103,500 \$6,469 \$45,828 \$12,938 \$82,153 \$19,406 \$175,950 \$19,406 \$745,200 \$12,938 \$55,631 \$1,176,019 54% Fairview Road McClosky Road Santa Ana Road 133,700 \$8,356 \$59,329 \$16,713 \$106,124 \$25,069 \$227,290 \$25,069 \$862,640 \$16,713 \$71,864 \$1,519,166 54% Fairview Road Santa Ana Road Hillcrest Road 93,450 \$5,841 \$41,468 \$11,681 \$74,176 \$17,522 \$158,865 \$17,522 \$672,840 \$11,681 \$50,229 \$1,061,826 54% Fairview Road Hillcrest Road Sunnyslope Road 114,724 \$7,170 \$50,909 \$14,341 \$91,062 \$21,511 \$195,031 \$21,511 \$826,013 \$14,341 \$61,664 \$1,303,551 73% Fairview Road Sunnyslope Road John Smith Road 98,028 \$6,127 \$43,500 \$12,254 \$77,810 \$18,380 \$166,648 \$18,380 \$705,802 \$12,254 \$52,690 \$1,113,843 73% John Smith Road Fairview Road Change of Pavement 61,250 \$3,828 \$27,180 \$7,666 \$48,617 \$11,484 \$104,125 \$11,484 \$441,000 \$7,666 \$32,922 \$695,953 \$100% John Smith Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,000 \$19,875 \$763,000 \$13,250 \$56,975 \$1,204,425 \$100% John Smith Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,000 \$19,875 \$763,200 \$13,250 \$56,975 \$1,204,425 \$100% John Smith Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,000 \$19,875 \$763,200 \$13,250 \$56,975 \$1,204,425 \$100% John Smith Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,000 \$19,875 \$763,200 \$13,250 \$56,975 \$1,204,425 \$100% John Smith Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,000 \$19,875 \$763,200 \$13,250 \$56,975 \$1,204,425 \$100% John Smith Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,1	Fairview Road	Spring Grove Road	Fallon Road	99,260		\$6,204	\$44,047	\$12,408	\$78,788	\$18,611	\$168,742	\$18,611	\$714,672	\$12,408	\$53,352	\$1,127,842	40%	\$451,137
Fairview Road Dixie Drive McClosky Road 103,500	Fairview Road	Fallon Road	Rosa Moranda Road	76,750		\$4,797	\$34,058	\$9,594	\$60,920	\$14,391	\$130,475	\$14,391	\$552,600	\$9,594	\$41,253	\$872,072	54%	\$470,919
Fairview Road McClosky Road Santa Ana Road 133,700 \$8,356 \$59,329 \$16,713 \$106,124 \$25,069 \$227,290 \$25,069 \$962,640 \$16,713 \$71,864 \$1,519,166 54% Fairview Road Santa Ana Road Hillcrest Road 93,450 \$5,841 \$41,468 \$11,681 \$74,176 \$17,522 \$672,840 \$11,681 \$50,229 \$1,061,826 54% Fairview Road Hillcrest Road Sunnyslope Road 114,724 \$7,170 \$50,909 \$14,341 \$91,062 \$21,511 \$195,031 \$14,341 \$61,664 \$1,303,551 73% Fairview Road Sunnyslope Road John Smith Road 98,028 \$6,127 \$43,500 \$12,254 \$77,810 \$18,380 \$166,648 \$18,380 \$705,802 \$12,254 \$62,690 \$1,113,843 73% John Smith Road Change of Pavement 61,250 \$3,828 \$27,180 \$7,656 \$48,617 \$11,484 \$104,125 \$11,484	Fairview Road	Rosa Moranda Road	Dixie Drive	159,600		\$9,975	\$70,823	\$19,950	\$126,683	\$29,925	\$271,320	\$29,925	\$1,149,120	\$19,950	\$85,785	\$1,813,455	54%	\$979,266
Fairview Road Santa Ana Road Hillcrest Road 93,450 \$5,841 \$41,468 \$11,681 \$74,176 \$17,522 \$158,865 \$17,522 \$672,840 \$11,681 \$50,229 \$1,061,826 54% Fairview Road Hillcrest Road Sunnyslope Road 114,724 \$7,170 \$50,909 \$14,341 \$91,062 \$21,511 \$195,031 \$21,511 \$826,013 \$14,341 \$61,664 \$1,303,551 73% Fairview Road Sunnyslope Road John Smith Road 98,028 \$6,127 \$43,500 \$12,254 \$77,810 \$18,380 \$166,648 \$18,380 \$705,802 \$12,254 \$52,690 \$1,113,843 73% John Smith Road Fairview Road Change of Pavement 61,250 \$3,828 \$27,180 \$7,656 \$48,617 \$11,484 \$104,125 \$11,484 \$441,000 \$7,656 \$32,922 \$695,953 100% John Smith Road Change of Pavement Best Road 130,750 \$8,172 \$58,020	Fairview Road	Dixie Drive	McClosky Road	103,500		\$6,469	\$45,928	\$12,938	\$82,153	\$19,406	\$175,950	\$19,406	\$745,200	\$12,938	\$55,631	\$1,176,019	54%	\$635,050
Fairview Road Hillcrest Road Sunnyslope Road 114,724	Fairview Road	McClosky Road	Santa Ana Road	133,700		\$8,356	\$59,329	\$16,713	\$106,124	\$25,069	\$227,290	\$25,069	\$962,640	\$16,713	\$71,864	\$1,519,166	54%	\$820,350
Fairview Road Sunnyslope Road John Smith Road 98,028 \$6,127 \$43,500 \$12,254 \$77,810 \$18,380 \$166,648 \$18,380 \$705,802 \$12,254 \$52,690 \$1,113,843 73% John Smith Road Fairview Road Change of Pavement 61,250 \$3,828 \$27,180 \$7,656 \$48,617 \$11,484 \$104,125 \$11,484 \$441,000 \$7,656 \$32,922 \$695,953 100% John Smith Road Change of Pavement Best Road 130,750 \$8,172 \$58,020 \$16,344 \$103,783 \$24,516 \$222,275 \$24,516 \$941,400 \$16,344 \$70,278 \$1,485,647 100% John Smith Road Best Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,200 \$13,250 \$56,975 \$1,204,425 100%	Fairview Road	Santa Ana Road	Hillcrest Road	93,450		\$5,841	\$41,468	\$11,681	\$74,176	\$17,522	\$158,865	\$17,522	\$672,840	\$11,681	\$50,229	\$1,061,826	54%	\$573,386
John Smith Road Fairview Road Change of Pavement 61,250 \$3,828 \$27,180 \$7,656 \$48,617 \$11,484 \$104,125 \$11,484 \$441,000 \$7,656 \$32,922 \$695,953 100% John Smith Road Change of Pavement Best Road 130,750 \$8,172 \$58,020 \$16,344 \$103,783 \$24,516 \$222,275 \$24,516 \$941,400 \$16,344 \$70,278 \$1,485,647 100% John Smith Road Best Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,200 \$13,250 \$56,975 \$1,204,425 100%	Fairview Road	Hillcrest Road	Sunnyslope Road	114,724		\$7,170	\$50,909	\$14,341	\$91,062	\$21,511	\$195,031	\$21,511	\$826,013	\$14,341	\$61,664	\$1,303,551	73%	\$951,593
John Smith Road Change of Pavement Best Road 130,750 \$8,172 \$58,020 \$16,344 \$103,783 \$24,516 \$222,275 \$24,516 \$941,400 \$16,344 \$70,278 \$1,485,647 100% John Smith Road Best Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,200 \$13,250 \$56,975 \$1,204,425 100%	Fairview Road	Sunnyslope Road	John Smith Road	98,028		\$6,127	\$43,500	\$12,254	\$77,810	\$18,380	\$166,648	\$18,380	\$705,802	\$12,254	\$52,690	\$1,113,843	73%	\$813,106
John Smith Road Best Road Change of Pavement East of Landfill Entrance 106,000 \$6,625 \$47,038 \$13,250 \$84,138 \$19,875 \$180,200 \$13,250 \$56,975 \$1,204,425 100%	John Smith Road	Fairview Road	Change of Pavement	61,250		\$3,828	\$27,180	\$7,656	\$48,617	\$11,484	\$104,125	\$11,484	\$441,000	\$7,656	\$32,922	\$695,953	100%	\$695,953
	John Smith Road	Change of Pavement	Best Road	130,750		\$8,172	\$58,020	\$16,344	\$103,783	\$24,516	\$222,275	\$24,516	\$941,400	\$16,344	\$70,278	\$1,485,647	100%	\$1,485,647
	John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	106,000		\$6,625	\$47,038	\$13,250	\$84,138	\$19,875	\$180,200	\$19,875	\$763,200	\$13,250	\$56,975	\$1,204,425	100%	\$1,204,425
Totals: \$145,481 \$1,032,912 \$290,961 \$1,847,604 \$436,442 \$3,957,073 \$436,442 \$16,759,368 \$290,961 \$1,251,133 \$26,448,378					Totals:	\$145,481	\$1,032,912	\$290,961	\$1,847,604	\$436,442	\$3,957,073	\$436,442	\$16,759,368	\$290,961	\$1,251,133	\$26,448,378		\$14,053,911

San Bentio County Out of County Truck Waste Impact Study Table 13 - Recommended Capital Improvement Projects (CIP)

					Recommended Year to Perform Work								
Road Segment	From	То	PCI	Pavement Area (SF)	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22				
Shore Road	Highway 25	1 Mile East of Highway 25	60	158,400				х					
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	47	158,400			х						
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	35	158,400		х							
Shore Road	3 Miles East of Highway 25	San Felipe Road	54	127,500			Х						
Fairview Road	San Felipe Road	Ludis Lane	67	150,510				х					
Fairview Road	Ludis Lane	Highway 156	51	56,840			X						
Fairview Road	Highway 156	Los Vivoras	39	151,626	X								
Fairview Road	Los Vivoras	Acquistapace Road	45	62,750	X								
Fairview Road	Acquistapace Road	Spring Grove Road	28	126,252	X								
Fairview Road	Spring Grove Road	Fallon Road	40	99,260	x								
Fairview Road	Fallon Road	Rosa Moranda Road	49	76,750	X								
Fairview Road	Rosa Moranda Road	Dixie Drive	37	159,600	х								
Fairview Road	Dixie Drive	McClosky Road	34	103,500		х							
Fairview Road	McClosky Road	Santa Ana Road	26	133,700	X								
Fairview Road	Santa Ana Road	Hillcrest Road	25	93,450	X								
Fairview Road	Hillcrest Road	Sunnyslope Road	55	114,724			х						
Fairview Road	Sunnyslope Road	John Smith Road	35	98,028	х								
John Smith Road	Fairview Road	Change of Pavement	49	61,250	х								
John Smith Road	Change of Pavement	Best Road	89	130,750					х				
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	87	106,000					х				



San Bentio County Out of County Truck Waste Impact Study Table 14 - Summary of Past Due Impact and Costs from 2014 through 2016

Road Segment	From	То	Design Traffic Index (TI-20 years)	ESALs for TI-20 years (Column A)	Calculated Out-of- County Trucks ESALs from 2014 - 2016 (Column B)	Treatment Cost Full Depth Reclaimation (FDR)	Past Due Impact of Out-of- County Trucks from 2014- 2016 (Column B / Column A)	Past Due Cost of Out-of-County Trucks from 2014- 2016
Shore Road	Highway 25	1 Mile East of Highway 25	11.0	5,399,511	103,460	\$ 2,857,883	2%	\$ 54,760
Shore Road	1 Mile East of Highway 25	2 Miles East of Highway 25	11.0	5,399,511	103,460	\$ 2,857,883	2%	\$ 54,760
Shore Road	2 Miles East of Highway 25	3 Miles East of Highway 25	11.0	5,399,511	103,460	\$ 2,857,883	2%	\$ 54,760
Shore Road	3 Miles East of Highway 25	San Felipe Road	11.0	5,399,511	103,460	\$ 2,300,379	2%	\$ 44,078
Fairview Road	San Felipe Road	Ludis Lane	11.0	5,399,511	103,460	\$ 2,715,530	2%	\$ 52,032
Fairview Road	Ludis Lane	Highway 156	10.5	3,652,398	103,460	\$ 926,270	3%	\$ 26,238
Fairview Road	Highway 156	Los Vivoras	10.5	3,652,398	103,460	\$ 2,470,912	3%	\$ 69,993
Fairview Road	Los Vivoras	Acquistapace Road	10.5	3,652,398	103,460	\$ 1,022,580	3%	\$ 28,966
Fairview Road	Acquistapace Road	Spring Grove Road	10.5	3,652,398	103,460	\$ 2,057,414	3%	\$ 58,280
Fairview Road	Spring Grove Road	Fallon Road	10.5	3,652,398	103,460	\$ 1,617,550	3%	\$ 45,820
Fairview Road	Fallon Road	Rosa Moranda Road	10.5	3,652,398	103,460	\$ 1,250,725	3%	\$ 35,429
Fairview Road	Rosa Moranda Road	Dixie Drive	10.5	3,652,398	103,460	\$ 2,600,857	3%	\$ 73,673
Fairview Road	Dixie Drive	McClosky Road	10.5	3,652,398	103,460	\$ 1,686,646	3%	\$ 47,777
Fairview Road	McClosky Road	Santa Ana Road	10.5	3,652,398	103,460	\$ 2,178,788	3%	\$ 61,718
Fairview Road	Santa Ana Road	Hillcrest Road	10.5	3,652,398	103,460	\$ 1,522,870	3%	\$ 43,138
Fairview Road	Hillcrest Road	Sunnyslope Road	10.0	2,423,911	103,460	\$ 1,829,489	4%	\$ 78,088
Fairview Road	Sunnyslope Road	John Smith Road	10.0	2,423,911	103,460	\$ 1,563,240	4%	\$ 66,724
John Smith Road	Fairview Road	Change of Pavement	9.5	1,575,144	103,460	\$ 924,779	7%	\$ 60,742
John Smith Road	Change of Pavement	Best Road	9.5	1,575,144	103,460	\$ 1,974,121	7%	\$ 129,666
John Smith Road	Best Road	Change of Pavement East of Landfill Entrance	9.5	1,575,144	103,460	\$ 1,600,434	7%	\$ 105,121
						\$ 38,816,233		\$ 1,191,761



San Benito County Waste Impact Study APPENDIX E

Traffic Index (TI) Calculations (20 year)

San Benito County Out of County Truck Waste Impact Study Project No. 170178-01 Fairview Road west of SR25 between Hwy 156 and Ludis Lane

Northbound No. 1						
C	ne -Way ADT	Т				
Axles	6 hr	24 hr	EAL	Annual		
Type	Total	Total	Constant	EALs		
	2	1187	44	52228		
;	3	27	150	4050		
	4	8	234	1872		
:	5	160	312	49920		
Buses		0	597	0		
Garbage Trucks		0	450	0		
_				108070		

Southbound No. 1

ooutiibouiiu i	One -Way AD	ГТ		
Axles	6 hr	24 hr	EAL	Annual
Туре	Total	Total	Constant	EALs
	2	1107	44	48708
	3	15	150	2250
	4	7	234	1638
	5	176	312	54912
Buses		0	597	0
Garbage Truck	KS	0	450	0
				107508
Average Annu	al EALs			107789
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			1271910	2845630
Traffic Index			9.3	10.2
Greatest Annu	al EALs			108070
_				
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			1275226	2853048
Traffic Index			9.3	10.2

San Benito County Out of County Truck Waste Impact Study **Project No. 170178-01** Fairview Road south of Fallon Road between Rosa Morada and Fallon Road

Northbound No. 1 One -Way ADTT						
Axles	6 hr	24 hr	EAL	Annual		
Type	Total	Total	Constant	EALs		
	2	1126	44	49544		
	3	45	150	6750		
	4	5	234	1170		
	5	73	312	22776		
Buses		0	597	0		
Garbage Trucks	S	0	450	0		
				80240		

Southbound No. 1

Southbound	NO. I			
	One -Way AD	TT		
Axles	6 hr	24 hr	EAL	Annual
Type	Total	Total	Constant	EALs
	2	1473	44	64812
	3	5	150	750
	4	9	234	2106
	5	68	312	21216
Buses		0	597	0
Garbage Truc	ks	0	450	0
				88884
Average Annu	ıal EALs			84562
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			997832	2232437
Traffic Index			9.0	9.9
Greatest Annu	ual EALs			80240
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			946832	2118336
Traffic Index			8.9	9.8

San Benito County Out of County Truck Waste Impact Study Project No. 170178-01 Fairview Road north of St. Benedict Way and Sunnyslope Road

Northbound No. 1 One -Way ADTT						
Axles	6 hr	24 hr	EAL	Annual		
Туре	Total	Total	Constant	EALs		
	2	854	44	37576		
	3	24	150	3600		
	4	0	234	0		
	5	59	312	18408		
Buses		0	597	0		
Garbage Trucks		0	450	0		
-				59584		

Southbound No. 1

	One -Way ADT	Т		
Axles	6 hr	24 hr	EAL	Annual
Туре	Total	Total	Constant	EALs
	2	884	44	38896
	3	26	150	3900
	4	3	234	702
	5	44	312	13728
Buses		0	597	0
Garbage Truck	(S	0	450	0
				57226
Average Annua	al EALs			58405
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			689179	1541892
Traffic Index			8.6	9.5
Greatest Annu	al EALs			59584
		·		
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			703091	1573018
Traffic Index			8.6	9.5

San Benito County Out of County Truck Waste Impact Study Project No. 170178-01 John Smith Road Landfill Entrance

Eastbound No. 1 (Entrance)

Axles	6 hr	24 hr	EAL	Annual
Type	Total	Total	Constant	EALs
	2	36	44	1584
	3	25	150	3750
	4	15	234	3510
	5	37	312	11544
Buses		0	597	0
Garbage Truc	ks	0	450	0
				20388

Westbound No. 1 (Exit)

Westbould No. 1 (Exit)					
	One -Way ADT	ГТ			
Axles	6 hr	24 hr	EAL	Annual	
Type	Total	Total	Constant	EALs	
	2	32	44	1408	
	3	22	150	3300	
	4	7	234	1638	
	5	40	312	12480	
Buses		0	597	0	
Garbage Truc	ks	0	450	0	
_				18826	
Average Annu	ual EALs			19607	
Factors			10 yr	20 yr	
Growth			1.18	1.32	
Years			10	20	
Total EALs			231363	517625	
Traffic Index			7.6	8.3	
Greatest Anni	ual EALs			20388	
Factors			10 yr	20 yr	
Growth			1.18	1.32	
Years			10	20	
Total EALs			240578	538243	
Traffic Index			7.6	8.4	
				.	

San Benito County Out of County Truck Waste Impact Study Project No. 170178-01 Shore Road east of SR25 between Bolsa Road and Frazier Lake Road

Eastbound No. 1

Axles	6 hr	24 hr	EAL	Annual
Туре	Total	Total	Constant	EALs
	2	890	44	39160
	3	14	150	2100
	4	9	234	2106
	5	239	312	74568
Buses		0	597	0
Garbage Truck	ks	0	450	0
				117934

Westbound No. 1

	One -Way ADT	Τ		
Axles	6 hr	24 hr	EAL	Annual
Type	Total	Total	Constant	EALs
	2	531	44	23364
	3	22	150	3300
	4	10	234	2340
	5	221	312	68952
Buses		0	597	0
Garbage Truck	(S	0	450	0
				97956
Average Annua	al EALs			107945
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			1273751	2849748
Traffic Index			9.3	10.2
Greatest Annu	al EALs			117934
Factors			10 yr	20 yr
Growth			1.18	1.32
Years			10	20
Total EALs			1391621	3113458
Traffic Index			9.4	10.3

ATTACHMENT B Traffic and Safety Analysis Detail



TECHNICAL MEMORANDUM

Date: December 22, 2017

To: Benjamin C. Sigman

Economic and Planning Systems, Inc.

Email: bsigman@epsys.com

From: Chris D. Kinzel, T.E., P.E. Jurisdiction: San Benito County

Vice President

Janice Spuller Project Manager

Subject: San Benito County Waste Impact Traffic Study

As part of the project deliverable, TJKM performed a traffic analysis of the project truck route between State Route 25 and Shore Road to the John Smith Road Landfill (Landfill) located at 2650 John Smith Road in San Benito County. The purpose of the analysis is to assist in determining how the amount of Out-of-County truck trips to the landfill contribute to roadway deterioration along the project route. This technical memorandum summarizes the following:

- Existing Traffic Conditions
- Field Observations
- Collision History
- Out-of-County Waste Transport

The project vicinity map and truck route to the landfill is shown in Figure 1.

As information, the weekday operating hours are Mondays through Fridays 8:00 a.m. to 4:00 p.m. On Saturdays and Sundays, operating hours are 9:00 a.m. to 3:00 p.m. The landfill is closed on four holidays: New Year's Day, Easter, Thanksgiving, and Christmas.

EXISTING TRAFFIC CONDITIONS

Existing Setting and Roadway System

The truck routes described are a part of the analysis:

State Route (SR) 25 is a two-lane highway that carries regional traffic between Gilroy and Hollister. SR 25 is a state route running generally in a north-south direction. SR 25 begins at its junction with Highway 101 in Gilroy and extends south through Hollister towards Paicines.

SR 156 is a two-lane highway that carries regional traffic between Highway 101 and Highway 152. SR 156 is a major roadway for trucks traveling between Highway 101 and Interstate 5. Between Hollister

and San Juan Bautista, SR 156 is a two-lane highway. Between San Juan Bautista and US 101, SR 156 is a four-lane divided highway.

Fairview Road is a two-lane north-south arterial roadway that is situated on the east edge of Hollister. Fairview Road provides access to Airline Highway to the south and to SR 25 and SR 156 to the north. Fairview Road forms the western boundary of the project site. Access to the project site would be provided by John Smith Road, adjacent to Fairview Road. The posted speed limit is 50 mph.

Sunnyslope Road is an east-west arterial roadway that extends from Fairview Road to Airline Highway, where it changes designation to Tres Pinos Road. Between Fairview Road and El Toro Drive, Sunnyslope Road is a two-lane roadway, and between El Toro Drive and Airline Highway it is a four-lane roadway. The posted speed limit is 35 mph.

Santa Ana Road is an east-west collector roadway that extends from Fairview Road to San Felipe Road. Santa Ana Road has two lanes in the vicinity of the project site. It provides access to the local residential areas in the immediate vicinity of the project. The posted speed limit is 40 mph.

John Smith Road is a two-lane rural county road without shoulders. The road is designated as a minor collector. John Smith Road provides direct access to the project site. As an unposted rural road in California, the speed limit is automatically 55 mph.

San Felipe Road is a north-south two-lane arterial roadway that extends from SR 152 to Santa Ana Road where it changes designation to San Benito Street. Between SR 156 and Santa Ana Road, San Felipe Road is a four-lane roadway, and between SR 156 and SR 152, it is a two-lane roadway. The posted speed limit along San Felipe Road is 45 mph.

Shore Road is a two-lane, east-west arterial roadway that extends between SR 25 and San Felipe Road. The posted speed limit along Shore Road is 50 mph.

Data Collection

TJKM collected the following data in the field under existing conditions:

- Manual turning movement counts and lane geometry for each study intersection for the weekday a.m., and p.m. peak periods along Fairview Road. These counts include passenger vehicles, trucks, pedestrians, and bicyclists (See **Appendix A**).
- 24-hour Daily Traffic counts at five locations within the study corridors (See Appendix A).

San Benito County - John Smith Landfill Vicinity Map & Truck Route

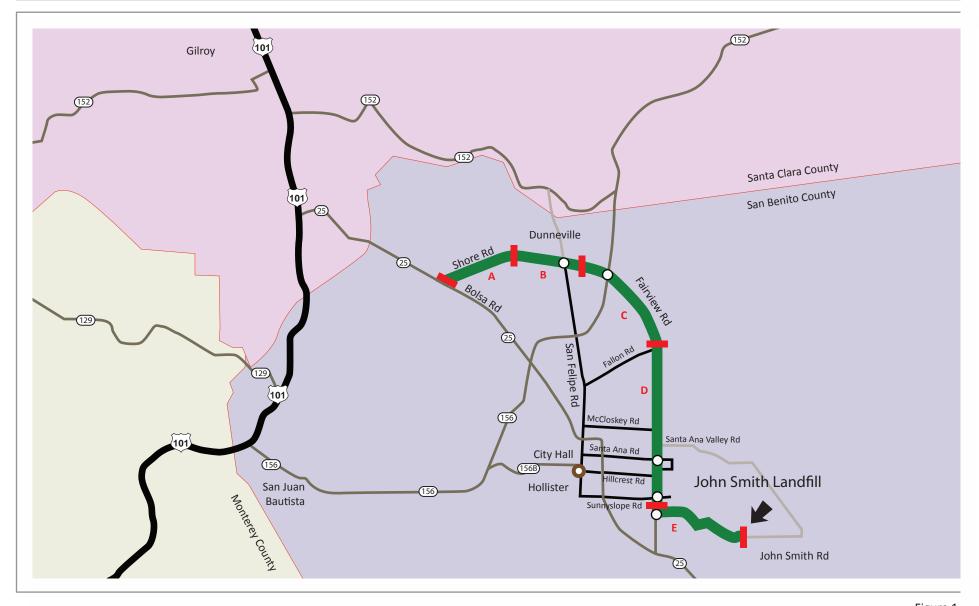


Figure 1







Peak Hour Turning Movement Counts

The following study intersections were analyzed:

- 1. Fairview Road and John Smith Road (unsignalized)
- 2. Fairview Road and Sunnyslope Road (signalized)
- 3. Fairview Road and Santa Ana Road (signalized)
- 4. Pacheco Pass Highway (State Route 156) and Fairview Road (signalized)
- 5. San Felipe Road and Shore Road-Fairview Road (all way stop controlled)

Data were collected between 7:30 a.m. to 9:30 am and 3:00 p.m. to 5:00 p.m., which reflects the peak time of truck activity based on field observations. The data collection period overlaps with the commute a.m. peak hour of 7:00 a.m. to 9:00 a.m. and p.m. peak hour of 4:00 p.m. to 6:00 p.m. The information collected included separate counts of autos, trucks, bicyclists and pedestrians, summarized by 15-minute intervals. Buses are considered as two-axle trucks. The data includes summations of right, through and left turning movements for all traffic entering the intersection being studied, enabling a subsequent calculation of intersection level of service.

Daily Count Volume

TJKM collected 24-hour bi-directional traffic volumes, including vehicle classification and speed at the following locations:

- 1. Shore Road east of SR 25
- 2. Fairview Road west of SR 156
- 3. Fairview Road south of Fallon Road
- 4. Fairview Road north of the John Smith Road
- 5. John Smith Landfill Entrance, 2650 John Smith Road.

At all the locations, one-day 24-hour count data was collected, except the John Smith Road Landfill, which was conducted over a seven-day period, Friday August 19-Thursday August 24, 2017. Data is collected via the Metro Count tube boxes, consisting on two hoses to collect vehicle classification and speed. These boxes are laid across the roadway and nailed down. At the John Smith Road Landfill entrance, technicians were on site during the hours of operations, performing field observations.

Turning movement counts and daily counts were conducted on the same day, Wednesday August 23, 2017. The collection date was chosen based on the out of county tonnage log, July 2016 to June 2017, provided by the landfill operator. TJKM reviewed daily and monthly averages and found during this timeframe, July had the largest number of out of county trucks, and Tuesday and Wednesday had the largest number of out of county trucks by day. The collection of 24-hour traffic volumes is common for traffic analysis studies. It is understood that traffic volumes vary by season or time of year. Also, from the landfill operator data, August had the second largest number of out of county trucks by month. This data is further detailed later in this memorandum. Traffic engineers typically rely on traffic counts for a single day as representative of typical or average conditions. This is because studies and observations have shown that traffic does not vary significantly from day to day, particularly in the middle of the week including Tuesdays, Wednesdays and Thursdays. Consequently, the one-day traffic counts and



observations on a Wednesday used for a portion of this study adequately depicts typical midweek conditions in the month of August.

The counts provided a breakdown of vehicle classification. **Table 1** shows the daily traffic for Existing Conditions at the five roadway segments. At the John Smith Road Landfill entrance, the vehicles moved at a slower pace over the road tubes and may not have been accurately classified by axle type. However, TJKM compared the data with the video taken during hours of operation (8.00 a.m. to 4:00 p.m.) to confirm the vehicle classification. We suspect that some westbound exiting trucks may have left the landfill after formal closing hours, which affected the balance of inbound vs. outbound trucks. **Figure 2** illustrates the daily truck traffic volumes along the project route.

San Benito County - Existing Daily Truck Traffic (4 axle or more)

LEGEND

O Study Intersection

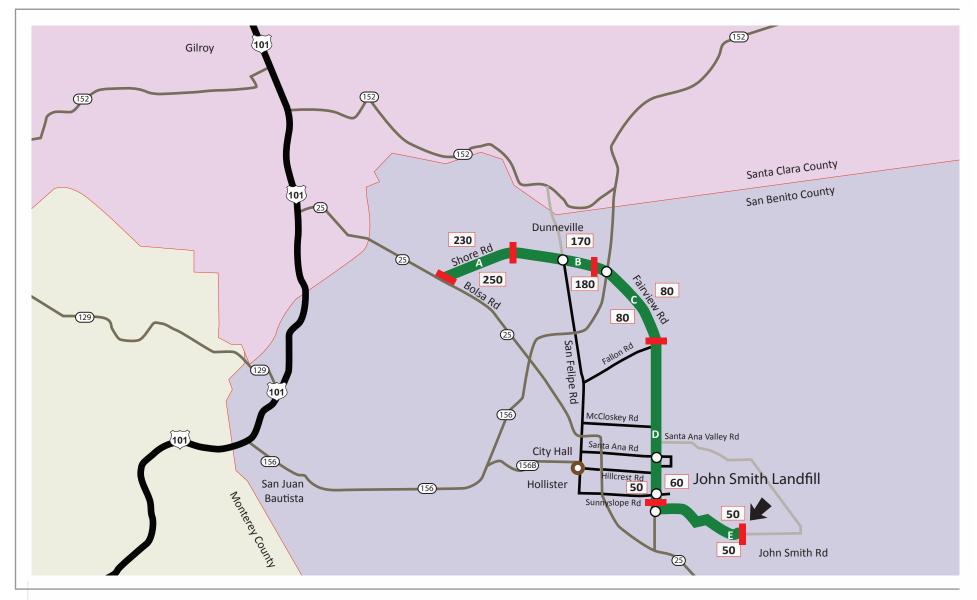


Figure 2



Table 1: Existing Daily Traffic

#	Roadway	Segment	Direction	Passenger Cars	2-Axle	3-Axle	4 or more Axle
Α	Shore Road east of	Shore Road between Bolsa Road and Frazier	Eastbound	767	890	14	248
^	SR 25	Lake Road	Westbound	1214	531	22	231
В	Fairview Road west	Fairview Road between Highway 156 and Ludis Lane	Northbound	2286	1187	27	168
В	of SR 156		Southbound	2002	1107	15	183
	c Fairview Road south of Fallon Road	Rosa Morada and	Northbound	2121	1126	45	78
			Southbound	2206	1473	5	77
D	Fairview Road north	Fairview Road between	Northbound	1528	854	24	59
	Road	St. Benedict Way and Sunnyslope Road	Southbound	1422	884	26	47
E	E Labo Covida Lau d'Ell Entance		Eastbound (Entrance)	101	36	25	52
E John Smith Landfill Ent		i di i Ce	Westbound (Exit)	90	32	22	47

According to the count data, around 30-40 percent of the traffic is comprised of trucks at all the locations. The remaining percentage of traffic is attributable to motorcycles and passenger cars. **Table 2** shows the daily truck traffic at the following five roadway segments.

Table 2: Daily Truck Traffic

	Roadway	Percentage of Trucks			
#		2-Axle	3-Axle	4 or more Axle	
Α	Shore Road east of SR 25	36.3%	0.9%	12.2%	
В	Fairview Road west of SR 156	32.9%	0.6%	5.0%	
С	Fairview Road south of Fallon Road	36.4%	0.7%	2.2%	
D	Fairview Road north of the John Smith Road	35.9%	1.0%	2.2%	
E	John Smith Landfill Entrance	16.8%	11.6%	24.4%	

Twenty-four hour vehicle speed data was collected along four of the five roadway segments. Segment E, John Smith Landfill Entrance, is not included due to the slow volume entering and exiting the landfill. Twenty-four-hour vehicle speed data was collected at the same four locations identified above. The speed limit for each is 55 mph. The 85th percentile is considered to be the prevailing speed, the speed at

which vehicles generally travel under optimum pavement, weather, visibility and traffic volume, regardless of vehicle type. **Table 3** summarizes vehicular speed along Shore Road/Fairview Road. Based on the collected data, the 85th percentile speed of vehicles traveling along Shore Road/Fairview Road at the four count locations ranges between 41 mph and 67 mph.

Table 3: Daily Average and 85th Percentile Speeds

#	Roadway	Speed Limit	Direction	Average Speed	85 th Percentile Speed
Α	Shore Road east of SR 25	55 mph	EB	58	68
A			WB	51	62
В	Fairview Road west of SR 156	55 mph	NB	43	49
			SB	41	47
С	Fairview Road south of Fallon Road	55 mph	NB	56	62
			SB	56	62
D	Fairview Road north of the John Smith Road	55 mph	NB	52	60
			SB	51	51

At Shore Road, the average 85th percentile speed is 63 mph. This can be attributed to minimal driveway access along the predominantly rural/agricultural environment and this roadway feeds into SR 25 to Highway 101.

In some portions of Fairview Road, south of Fallon Road and near John Smith Road, the 85th percentile speed of vehicles is above the posted speed limit. Thus, data indicates that the majority of vehicles traveling along each of the roadways are traveling faster than the 55 mph speed limit.

Speed limits can be reduced based on an engineering traffic study which includes 85th percentile speed, accidents, at conditions not readily apparent to motorists. The existence of trucks would also be a factor in the study.

Level of Service Analysis Methodology

Level of Service (LOS) is a qualitative index of the performance of an element of the transportation system. It is a rating scale running from A to F, with LOS A indicating no congestion, and LOS F indicating unacceptable congestion and delays. LOS in this study describes the operating conditions for unsignalized and signalized intersections.

The average control delay for signalized and unsignalized intersections was calculated using TRAFFIX 8.0 analysis software, a comprehensive traffic impact analysis tool. Trip generation, distribution and

assignment of traffic development and multiple scenario management are measured. TRAFFIX calculates delay based on critical movements and determines any impacts based on an accumulation of delays. The standard measure of heavy vehicle composition is two percent, however the actual percentage at each location was factored into the analysis based on existing truck volumes.

Signalized Intersections

The study intersections under traffic signal control were analyzed using the 2000 Highway Capacity Manual (HCM) Operations Methodology for signalized intersections described in Chapter 16 (HCM 2000). This methodology determines LOS based on average control delay per vehicle for the overall intersection during peak hour intersection operating conditions. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections is shown in **Table 4**.

Table 4: Signalized Intersection Level of Service Definitions based on Average Control Delay

Level of Service	Description	Average Control Delay
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Up to 10.0
В	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
С	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high volume to capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Highway Capacity Manual 2000

Unsignalized Intersections

The study intersections under stop control (unsignalized) were analyzed using the 2000 HCM Operations Methodology for signalized intersections described in Chapter 17 (HCM 2000). LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At the side street, controlled intersections or two-way stop sign intersections, the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The weighted average delay for

the entire intersections is presented for all-way stop controlled intersections. LOS designation is shown in **Table 5**.

Table 5: Unsignalized Intersection Level of Service Definitions based on Control Delay

Level of Service	Description	Average Control Delay
Α	Operations with very low delay occurring with favorable progression.	Up to 10.0
В	Operations with low delay occurring with good progression.	10.1 to 15.0
С	Operations with average delays resulting from fair progression.	15.1 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios.	25.1 to 35.0
E	Operations with high delay values indicating poor progression and high V/C ratios. This is considered to be the limit of acceptable delay.	35.1 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation and poor progression.	Greater than 50.0

Source: Highway Capacity Manual 2000

Existing Intersection Volumes and Lane Configurations

The existing operations of the study intersections were evaluated for the highest one-hour volume during the weekday morning and evening peak periods. Turning movement counts for vehicles, trucks, bicycles, and pedestrians were collected during typical weekday a.m. and p.m. peak periods (7:30 a.m. to 9:30 a.m. and 3:00 p.m. to 5:00 p.m., respectively) at the study intersections in August 2017. Data sheets for the collected vehicle, trucks, bicycle and pedestrian counts were included in **Appendix A**. **Figure 3** illustrates the existing lane geometry, traffic control, and peak hour traffic volumes at all the study intersections.

Existing Truck Routes

San Benito County experiences a higher than average amount of truck traffic in and around San Juan Bautista and Hollister. While this traffic is largely confined to state highways, it also impacts local streets and rural roads not designed to handle large heavy trucks, creating conflicts with local traffic and adding to congestion. State Highways 25, 101, 129 and 156 carry the highest highway traffic in loads in the county and serve as major truck routes for the area.

Intersection Level of Service Analysis – Existing Conditions

Existing intersection lane configurations and peak hour turning movement volumes were used to calculate the levels of service for the study intersections during each peak hour. The peak hour factor and heavy vehicle composition based on the counts was used to all study intersections for the existing conditions analysis. Heavy vehicle composition averaged 10 percent during the a.m. peak hour and eight percent during the p.m. peak hour and was specifically accounted for in the LOS calculations.

The study intersections were analyzed using the 2000 Highway Capacity Manual (HCM 2000) methodology by using Traffix analysis software. The results of the LOS analysis using Traffix analysis software for Existing Conditions are summarized in **Table 6**. **Appendix B** contains the corresponding calculation sheets. Under this scenario, all the study intersections operate within the County of San Benito standards of LOS C or better during the a.m. and p.m. peak hours. It can be concluded that current operations of the landfill, based on vehicle volume, are not impacting the study intersections.

Table 6: Intersection Level of Service Analysis – Existing Conditions

#	Study Intersections	r Control	Peak Hour ¹	Existi	ng
#	Study Intersections	Control	Peak Hour	Delay ²	LOS³
1	Fairview Road and John Smith Road	One-Way Stop	AM	10.7	В
_	railview Road and John Smith Road	One-way Stop	PM	10.0	В
2	Fairview Road and Sunnyslope Road	Signalized	AM	27.7	С
	raiiview koau anu Suimysiope koau	Signalized	PM	23.9	С
3	Fairview Road and Santa Ana Road	Signalized	AM	11.6	В
3	railview Road alld Salid Alla Road	Signalized	PM	10.5	В
4	Pacheco Pass Highway (SR 156) and Fairview	Signalized	AM	21.8	С
4	Road	Signalized	PM	27.7	С
5	Can Foling Boad and Shore Boad Fairvious Boad	All May Stop	AM	11.8	В
3	San Felipe Road and Shore Road - Fairview Road	All-Way Stop	PM	24.3	С

Notes:

Level of Service Added Volume Analysis

As requested, TJKM reviewed the traffic analysis of the study intersections to see at what volume of added vehicles would create a Level of Service (LOS) deficiency requiring mitigation. The San Benito County General Plan Transportation has the following policy:

"A level of service of C shall be used for the accepted minimum standard of operation for intersections and roadways."

TJKM reviewed the signalized study intersections #2 (Fairview Road and Sunnyslope Road) and #4 (Pacheco Pass Highway and Fairview Road) to determine how many added vehicles traveling along the route would require mitigation. The method including reviewing the TRAFFIX software program and adding vehicle volumes until the LOS degraded to D, with an average delay of 35.0 seconds or more. Volumes were added to the direction the vehicles to the landfill would travel through the intersection. For the Fairview Road and Sunnyslope Road intersection, trucks would travel north and south. For the Pacheco Pass Highway (SR 156) and Fairview Road, trucks would travel east and west. Added volumes by peak hour are shown in **Appendix B.**

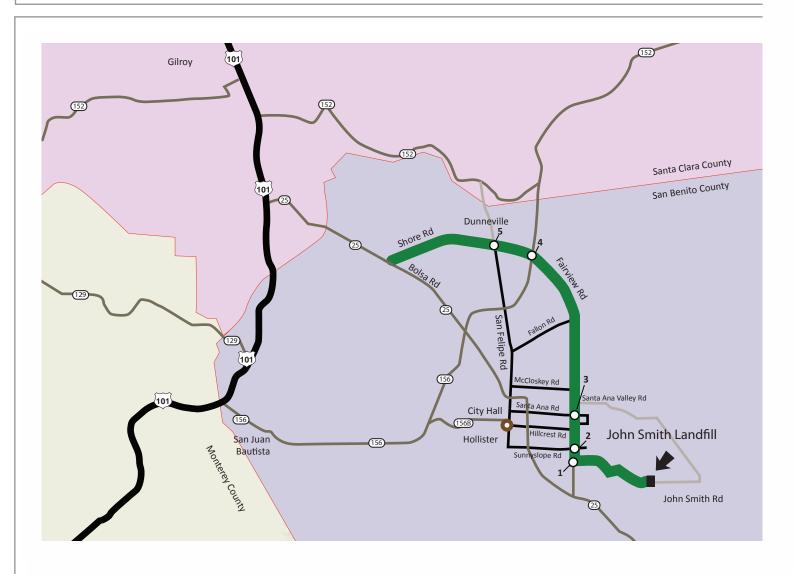
^{1.} AM – morning peak hour (between 7:30 a.m. and 9:30 a.m.), PM – evening peak hour (between 3:00 p.m. and 5:00 p.m.)

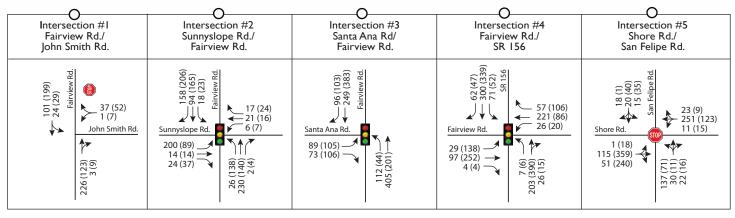
². Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections.

³. LOS – Level of Service calculations conducted using the Traffix Software level of service analysis software package, which applies the methodology described in the 2000 HCM.



Per the analysis, the volumes would have to increase three to seven times in order to degrade to LOS D at the intersection of Fairview Road and Sunnyslope Road. At the intersection of Pacheco Pass Highway and Fairview Road, vehicle volumes would have to increase two to three times in order to degrade to LOS D. **Appendix B** contains the corresponding calculation sheets.





LEGEND

Study Intersection



Stop Sign

XX AM Peak Hour Volumes

(XX) PM Peak Hour Volumes





FIELD OBSERVATIONS

TJKM performed field observations along the project route, study intersections and at the John Smith Road Landfill during the a.m. and p.m. peak hour (7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 5:00 p.m.) and hours of operation, 8:00 a.m. to 4:00 p.m.

The intersections appear to operate at the level of service depicted in the Existing Conditions. The intersection of Pacheco Pass Highway/SR 156 and Fairview Road, is repaved and in the process of being restriped.

Along the project route, the pavement conditions, which will be discuss in a separate report, are average to poor. The roadway is primarily rural until south of Fallon Road towards Hollister where residential neighborhoods appear. Vehicles tend to travel at 55 mph and are predominately passenger vehicles and trucks, with limited speed limit signage. There are slight curvature and dips on the roadway, with signage to aid navigation of the turns.



Intersection of Fairview Road and John Smith Road

The turning pocket lengths at the signalized study intersections tend to be about 200 feet long and

the queues at the intersections are not long and pass through the intersection in one cycle.

At the intersection of Fairview Road and John Smith Road, the roadway is narrow and there is no left turn pocket eastbound onto John Smith Road. Trucks turning onto John Smith Road created a small queue of vehicles as the truck waited for the opportunity to turn left. The three-legged intersection is narrow along Fairview Road. John Smith Road, at this intersection, is wide and angled towards northbound Fairview Road. From existing data collected, the majority of the movement from John Smith Road is the northbound right turn. Along Fairview, the through movement is predominant with the northbound volumes higher in the a.m. peak



John Smith Road Landfill Entrance

hour and southbound volumes higher in the p.m. peak hour.



Data collected at the intersection also showed approximately 37 percent of heavy vehicles traversed along John Smith Road in the a.m. peak hour and approximately 22 percent in the p.m. peak hour. John Smith Road lacks speed limit signage and is a two lane rural road. There are limited shoulders, roadway curvature and slopes. Vehicles tend to travel at the speed limit of 55 mph. The predominant destination on John Smith Road is to and from the landfill.

At the entrance to the Landfill there is a left turn pocket approximately 125 feet long. During the observation, there was a small queue waiting to enter the landfill in the morning prior to opening. Once inside the landfill, all vehicles weigh in and proceed to the unloading area. The site has one entrance and exit and has adequate access.

Many commercial trucks entered/exited the site. TJKM identified a few trucks that appeared to be out-of-county trucks but verified the information with the landfill operator. Waste transport is discussed in a later section.

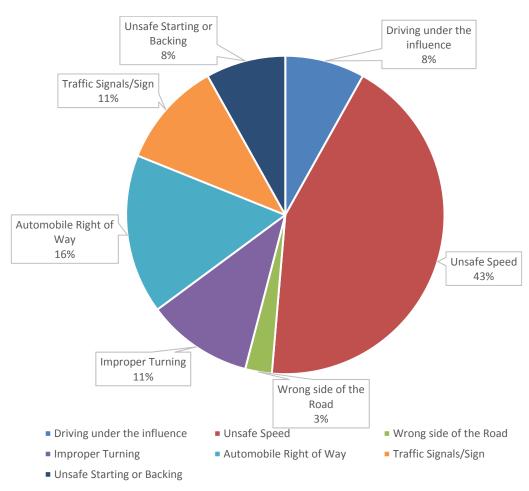
COLLISION HISTORY

TJKM obtained collision data from the California Statewide Integrated Traffic Records System (SWITRS) for four years, 2013 to 2016. There were 37 total collisions along the truck route. There were 10 truck-involved collisions during the same time. A breakdown of the type of collision violations is shown in the **Table 7** and **Figure 4** below.

Table 7: Collision Violation Type

Driving Under the Influence	Unsafe Speed	Wrong Side of the Road	Improper Turning	Automobile Right of Way	Traffic Signals/ Sign	Unsafe Starting or Backing	Total Collisions
3	16	1	4	6	4	3	37

Figure 4 Collision Type by Percentage



Intersection Collision Analysis

A review of collisions helps to determine if some of the collisions that occur at the intersections are attributable to signal timings at signalized intersections. For example, a higher number of rear-end collision can sometimes occur due to insufficient yellow change intervals at the intersections. Similarly, right-angle collisions can occur due to poor visibility of signal indications or insufficient red clearance intervals. **Table 8** summarizes the number of collisions, total collisions and those involving trucks that were reported at the study intersections during the four-year analysis period. The collision rates at the intersections along study corridors were compared with the statewide average collision rates for roadways and intersections with similar characteristics (Collision Data on California State Highways). The statewide average compares similar roadways, vehicle classification and volumes. **Appendix C** contains the complete dataset used to conduct the collision analysis, including collision reports.

Table 8: Intersection Collision Summary

#	Study Intersections	Total #of All Collisions (2013-16)	Intersectio n Collision Rate (RSE) for all Vehicles	Total # of Truck Collisions (2013-16)	Intersection Truck Collision Rate (RSE)	Statewide Average Collision Rate	Intersection Collision Rate > Statewide Average Collision Rate?
1	Fairview Road and John Smith Road	0	0.00	0	0.00	0.16	No
2	Fairview Road and Sunnyslope Road	0	0.00	0	0.00	0.50	No
3	Fairview Road and Santa Ana Road	1	0.07	0	0.00	0.24	No
4	Pacheco Pass Highway (State Route 156) and Fairview Road	2	0.11	1	0.30	0.50	No
5	San Felipe Road and Shore Road-Fairview Road	0	0.00	0	0.00	0.60	No

Notes: ICR = 1000000*A / (365*T*ADT)

ICR= Observed collision rate; Number of accidents/vehicles miles traveled

ADT = Average Daily Traffic

Roadway Segment Collision Analysis

Table 9 summarizes the number of collisions that were reported at the study segments during the four-year analysis period. The collision rates at the study segments were compared with the statewide mean collision rates for roadways with similar characteristics, rural roads with two and three lanes.

Of the 37 total collisions, nine truck-related collisions occurred along study segments, one occurred at one study intersection, and two occurred at non-study intersections. Based on the analysis, the statewide average except at the segments of Shore Road near Lake Road, Fairview Road at Lone Tree Road and Fairview Road at Santa Ana Road.

A = Number of collisions over study period

T = Total number of years over which intersection accidents were collected; January 2013 to December 2016 = 4 years

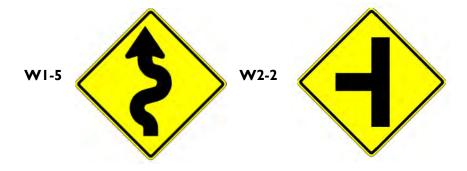
Table 9: Roadway Segment Collision Summary

Primary Road	Secondary Road	Total #of All Collisions (2013-16)	Segment Collision Rate (RSE) for all Vehicles	Total # of Truck Collisions (2013-16)	Collision Rate	Statewide Collision Rate	Collision Rate >Statewide Standard
Route 25	Shore Road	12	0.11	1	0.01	0.38	No
Shore Road	Lake Road	3	0.58	1	0.19	0.38	Yes
SR 156	Fairview Road (Eastbound)	6	0.19	2	0.06	0.38	No
SR 156	Fairview Road (Westbound)	3	0.12	3	0.12	0.38	No
Fairview Road	Lone Tree Road	4	0.88	1	0.22	0.38	Yes
Fairview Road	Santa Ana Road	6	1.32	1	0.22	0.38	Yes

SAFETY

Based on the field observations and collision data, truck volumes and speed do not significantly impact the roadways segments and study intersections. The speed limit on John Smith Road is 55 mph. Though there are no recorded collisions on the segment between Fairview Road and the landfill, safety enhancements can be considered. The topography of the roadway leaves limited shoulders, if any, and twelve-foot travel lanes at most. The County Board of Supervisors could consider a reduction of speed.

Additional suggested recommendations would be to include sign additions along John Smith Road such as a speed limit signage, R2-1 (55 mph), and warning signs such as the W1-5 for winding road and W2-2 for side road to alert the driver of the roadway conditions. Advanced warning signage of the John Smith Road Landfill is also recommended.



Speed limit signs are recommended at the eastbound entrance to John Smith Road from Fairview Road, and westbound near the exit of the landfill on John Smith Road. Two winding road signs, located eastbound, east of Heatherwood Drive on John Smith Road and west of the John Smith Landfill in the westbound direction are recommended. Two side road signs, W2-2 are recommended in the eastbound direction towards the landfill at approximately 1,000 and 300 feet in advance of the landfill entrance. Sign locations are based on the standards set forth in the California Manual on Uniform Traffic Control Devices (CAMUTCD). Signs and posts cost approximately \$500.00, for a total cost of \$3,000.00. The consideration of advance flashing warning lights located 300 feet west of the landfill (at the same location as the second W2-2 sign) would allow for visibility during fog or other adverse weather conditions. The approximate cost of the installation and equipment for a flashing warning sign is \$25,000 considering the limited power source along the rural roadway.

There are some instances throughout the year, where the landfill offers Household Hazardous Waste events for residents only. These occur the third Saturday of the month. The event is limited to residents, however, commercial use is still open for service, which may cause a mix of traffic onto John Smith Road with heavy vehicles/trucks and standard residential vehicles. From data collected on a Saturday, there are limited vehicles with four or more axles, approximately 1.5 percent. During the week, there is no experience of spillover or excessive queuing of the left turn lane into the landfill as a result of the trucks entering the landfill. Since the truck impact is minor, no mitigations are recommended.

Fairview Road and John Smith Road Intersection Analysis

An assessment was made of the need for signalization at the intersection of Fairview Road/John Smith Road. This assessment was based on the Peak-Hour Volume Signal Warrant (Section 4C.04) described in the CAMUTCD This method makes no evaluation of intersection levels of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Additional analysis may include unsignalized level of service analysis and/or operational analysis such as evaluating vehicle queuing and delay. Other types of traffic control devices, signage, or geometric changes may be preferable based on existing field conditions. Based on the analysis, a traffic signal does not meet the criteria at this intersection. The detail for the traffic signal warrant is provided in **Appendix D**.

However, as part of the San Benito County John Smith Road Landfill Expansion Project Draft Initial Study/Mitigated Negative Declaration dated June 2012, future roadway configurations assumes left turn lanes will be provided at this intersection. Recently, the County of San Benito County Governments programed the realignment of John Smith Road at Fairview as part of their 2040 Regional Transportation Plan. This project will realign John Smith Road to intersect Fairview Road at St. Benedict Way and add left and right turn lanes into John Smith Road. TJKM supports the concept of improving the intersection, particularly adding a southbound left turn lane on Fairview Road at John Smith Road.

OUT-OF-COUNTY WASTE TRANSPORT

To determine the amount of out-of-county truck volumes and weight contributes to the San Benito County roadways, TJKM reviewed the following items:

- Annual Out-of-County Tonnage (Gross Vehicle Weight) The data provided included daily truck loads (truck trips) and weight between July 2016 and June 2017.
- Weekly Trip Log from data collected August 19 to August 24, 2017
- Daily Trip Log from data collected Wednesday, August 23, 2017

Data was provided by the landfill operator and is included in Appendix E.

Annual Out-of-County Data

TJKM reviewed the John Smith Road Landfill Out-of-County tonnage in gross vehicle weight for July 2016 through June 2017. Based on the annual data, the monthly average of commercial trucks is 1,100. July had the largest amount with a total of 1,266 commercial trucks. **Figure 5** illustrates the number of commercial trucks per month.

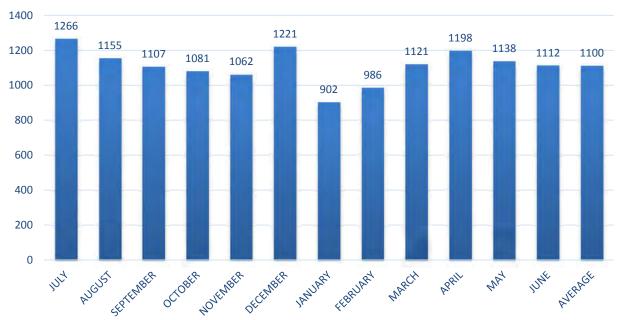


Figure 5 Annual Out-of-County Truck Loads by Month

TJKM also reviewed the data to determine the average number of commercial trucks by day as shown in **Figure 6.** On average, 37 Out-of-County trucks visit the landfill on a daily basis. Tuesdays and Wednesdays average 45 commercial trucks each. The least number of trucks occurs on Sundays.

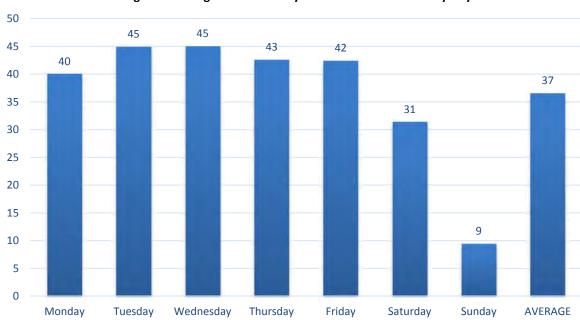


Figure 6 Average Out-of-County Number of Truck Loads by Day

Weekly Truck Load Volumes

In-County and Out-of-County data was provided for the period Friday August 18, 2017 to Thursday, August 24, 2017. This data, provided by the landfill operator, shown in **Table 10**, is concurrent with the seven-day, 24-hour tube count data collected by TJKM at the entrance of the John Smith Landfill. The data provided by the landfill operator provides a snapshot of the total loads and weight by In-County and Out-County trucks. To note, this total includes cash customers which could be residential, small commercial and landscaping businesses. In addition, Out-of-County can include the counties of Santa Clara and Monterey.

Table 10: Daily Truck Loads and Weight

Date	In-C	County	Out-o	f-County	Total			
	Loads	Tons	Loads	Tons	Loads	Tons		
8/18/2017	131	227.95	36	739.83	167	967.78		
8/19/2017	155	112.6	20	393.93	175	506.53		
8/20/2017	213	86.47	23	474	236	560.47		
8/21/2017	118	222.78	33	644.02	151	866.8		
8/22/2017	106	260.83	33	638.31	139	899.14		
8/23/2017	133	295.58	34	660.06	167	955.64		
8/24/2017	99	216.75	37	721.89	136	938.64		
Weekly Totals	955	1422.96	216	4272.04	1171	5695		
Daily Average	136	203	31	610	167	814		

The percentages of Truck Loads and Weight in Tons by In-County and Out-of-County are depicted in the following graphs, **Figures 7** and **8.**

Figure 7 Truck Load Percentage by County

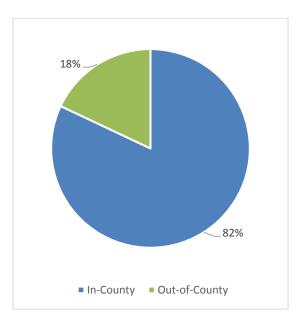
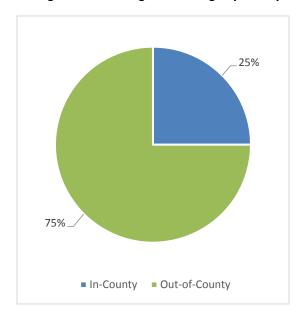


Figure 8 Total Weight Percentage by County



During the week, the In-county loads were 82 percent and the Out-of-County loads were 18 percent. This includes the cash customers such as residents or small businesses that take their waste on an as needed basis. Though there were more loads taken to the landfill within the County, the weight the Out-of-County loads were 75 percent of the in-take to the landfill compared to 25 percent within the County. It can be summarized that most of the Out-of-County loads taken to the landfill were existing customers and brought in via commercial trucks with 5-axles or more.

Daily Truck Volumes

Based on the annual data discussed earlier in this section, TJKM chose Wednesday, August 23, 2017 to collect operational data for the entrance and exit to the John Smith Road Landfill. Wednesday represents one of the peak days for the landfill. TJKM data included the 24-hour tube count data and a service technician to perform field observations of the type of trucks entering the landfill. The landfill operator provided the customer daily log for the customer loads and weight brought that day. Data is divided into three locations: 1) In-county, 2) Out-of-County-Santa Clara County (SCC), 3) Out-of-County-Monterey County.

The a.m. and p.m. peak hour data provides the directional volumes of heavy vehicles passing through the intersections. This does not account for turning movements, but the general direction of the heavy vehicle. It can be inferred that a percentage of the vehicles passing could be a truck headed to and from the landfill in the northbound and southbound direction along Fairview Road at the intersection of John

Smith Road. From John Smith Road, it is highly likely that all vehicles entering the intersection are from the landfill. During the a.m. peak hour, 7:30 a.m. to 8:30 a.m., 11 heavy vehicles were driving in the southbound direction, 6 in the northbound direction and 14 in the westbound direction at this intersection. During the p.m. peak hour, 3:15 p.m. to 4:15 p.m., 10 vehicles were driving in the southbound direction, 8 vehicles in the northbound direction and 13 in the westbound direction at the intersection of Fairview Road and John Smith Road

Table 11 reflects the total In-County and Out-of-County truck loads and weight for the day. **Figures 9** and **10** represents the percentage of loads and total weight by County. The data utilized is provided by the landfill operator.

Table 11: Truck Loads and Tons by Day

Location	Number of Loads	Tons
In-County	37	226.12
Out-of-County-Santa Clara Co.	32	648.08
Out-of-County-Monterey Co.	2	11.98
Total	71	886.18

Figure 9 Percentage of Customer Truck Loads by County

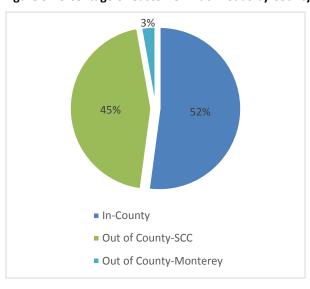
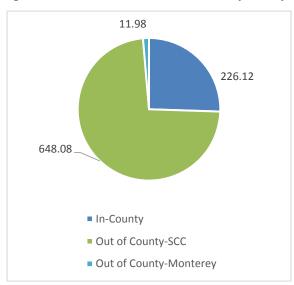


Figure 10 Customer Truck Tons Received by County



From the daily data provided, TJKM assumes that 45 percent of the truck trips to the landfill are from Santa Clara County. Based on the daily tonnage received, Santa Clara County trucks accounted for 73 percent of the total refuse, In-County trucks accounted for 26 percent, and Monterey County 1 percent.



FINDINGS

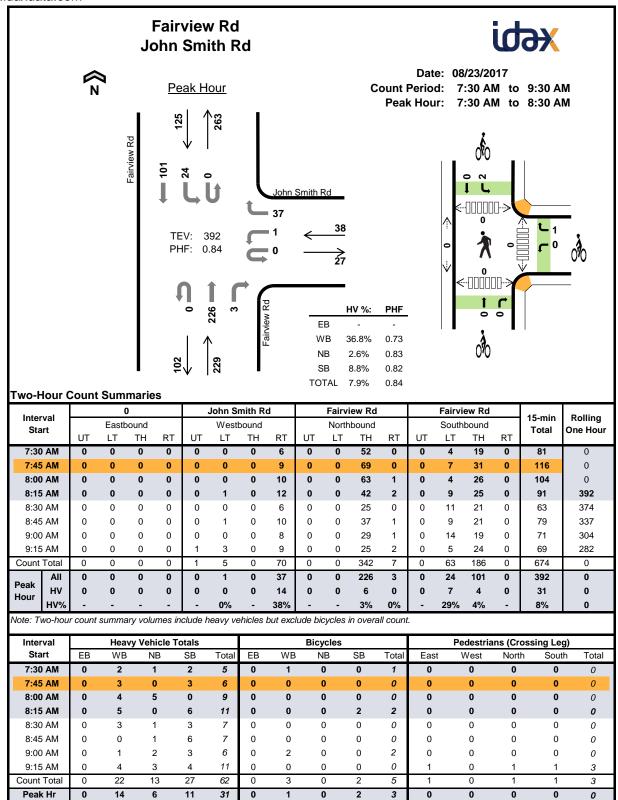
This technical memorandum summarizes the vehicle volumes along the roadway segment between Shore Road and SR 25 to the John Smith Landfill. Based on existing conditions data collected and field observations, the out-of-county trucks using the designated route to the John Smith Landfill do not provide a significant impact to the capacity of the roadway segments or study intersections. Collision data also shows that there are limited truck-related collisions along the route. Future roadway improvements at the intersection of Fairview Road and John Smith Road are documented in the San Benito County 2040 Reginal Transportation Plan which includes realignment of the intersection to connect with St. Benedict's Way north of the existing intersection.

From the landfill operator, 45 percent of the truck loads, or truck trips, and 73 percent of the truck tonnage on a daily basis are contributed from out-of-county, namely Santa Clara County.

TJKM recommends signage, including a speed limit sign, and advanced warning signs, would contribute to safer travel along the rural roadway on John Smith Road to the landfill.



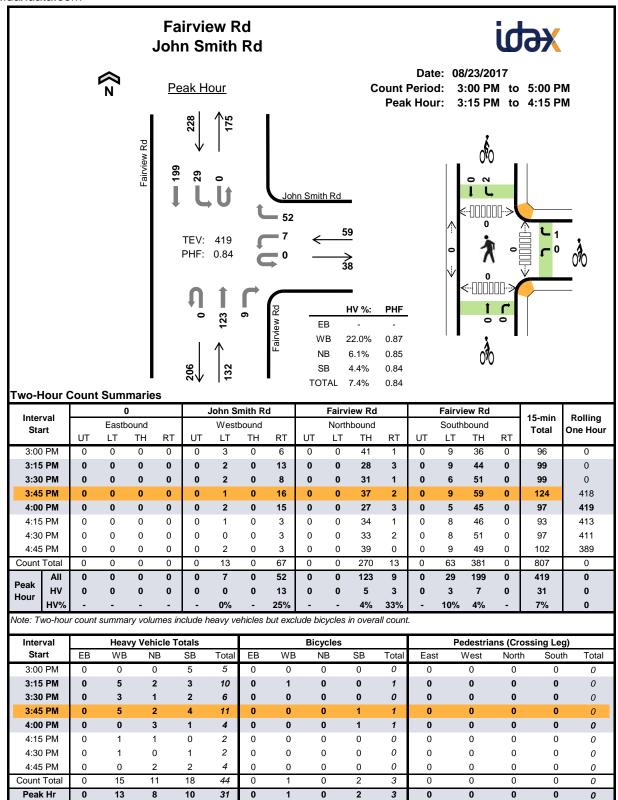
Appendix A Traffic Data Collection



Two-Hour (Count	Sum	marie	s - He	eavy \	/ehic	les											
Interval		(0			John S	mith R	d		Fairvi	ew Rd			Fairvi	ew Rd		4E min	Delling
Interval Start		Eastb	ound	•		West	bound			North	bound	•		South	bound	•	15-min Total	Rolling One Hour
Clart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	· otai	Ono rioui
7:30 AM	0	0	0	0	0	0	0	2	0	0	1	0	0	2	0	0	5	0
7:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	2	1	0	6	0
8:00 AM	0	0	0	0	0	0	0	4	0	0	5	0	0	0	0	0	9	0
8:15 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	3	3	0	11	31
8:30 AM	0	0	0	0	0	0	0	3	0	0	1	0	0	3	0	0	7	33
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	4	2	0	7	34
9:00 AM	0	0	0	0	0	0	0	1	0	0	2	0	0	3	0	0	6	31
9:15 AM	0	0	0	0	0	1	0	3	0	0	3	0	0	3	1	0	11	31
Count Total	0	0	0	0	0	1	0	21	0	0	12	1	0	20	7	0	62	0
Peak Hour	0	0	0	0	0	0	0	14	0	0	6	0	0	7	4	0	31	0

Internal		0		Jol	hn Smith	Rd	F	airview F	₹d	F	airview F	₹d	45	D. III
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
O.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	2	4
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	3	0	0	0	2	0	0	5	0
Peak Hour	0	0	0	0	0	1	0	0	0	2	0	0	3	0

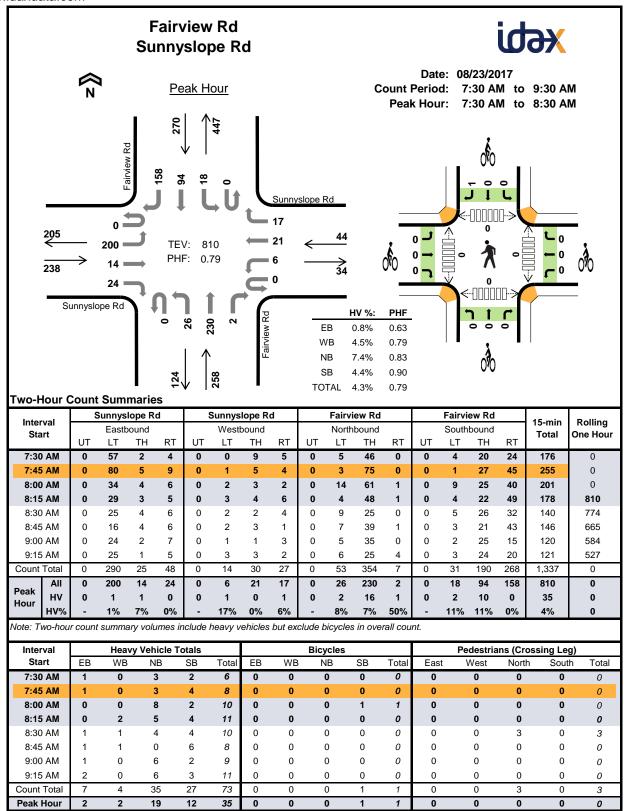
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Two-Hour (Count	Sum	marie	s - He	eavy \	/ehic	les											
Interval		()			John S	mith R	d		Fairvi	ew Rd			Fairvi	ew Rd		45	Delling
Interval Start		Eastb	ound	<u> </u>		West	bound			North	bound	<u> </u>		South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One near
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5	0
3:15 PM	0	0	0	0	0	0	0	5	0	0	1	1	0	2	1	0	10	0
3:30 PM	0	0	0	0	0	0	0	3	0	0	1	0	0	0	2	0	6	0
3:45 PM	0	0	0	0	0	0	0	5	0	0	1	1	0	1	3	0	11	32
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	4	31
4:15 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	23
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	19
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	12
Count Total	0	0	0	0	0	1	0	14	0	0	8	3	0	7	11	0	44	0
Peak Hour	0	0	0	0	0	0	0	13	0	0	5	3	0	3	7	0	31	0

last a moral		0		Jol	nn Smith	Rd	F	airview F	₹d	Fa	airview F	₹d	45	D. III
Interval Start		Eastboun	d	V	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
o.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	2
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	1	0	0	0	2	0	0	3	0
Peak Hour	0	0	0	0	0	1	0	0	0	2	0	0	3	0

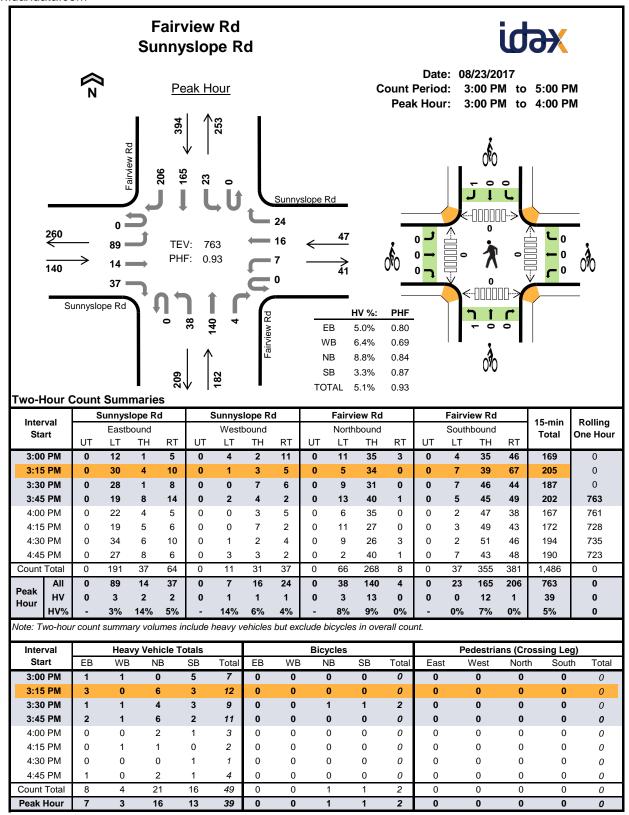
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



lmtam.al	S	unnys	lope R	d	8	Sunnys	lope R	d		Fairview Rd				Fairvi	ew Rd		45	Dalling
Interval Start		Eastb	ound			West	bound			Northbound				Southbound			15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:30 AM	0	1	0	0	0	0	0	0	0	0	3	0	0	0	2	0	6	0
7:45 AM	0	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	8	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	6	1	0	0	2	0	10	0
8:15 AM	0	0	0	0	0	1	0	1	0	1	4	0	0	1	3	0	11	35
8:30 AM	0	1	0	0	0	0	0	1	0	0	4	0	0	0	3	1	10	39
8:45 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	5	1	8	39
9:00 AM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	2	0	9	38
9:15 AM	0	1	0	1	0	0	0	0	0	3	3	0	0	0	3	0	11	38
Count Total	0	3	2	2	0	1	1	2	0	5	29	1	0	2	23	2	73	0
Peak Hour	0	1	1	0	0	1	0	1	0	2	16	1	0	2	10	0	35	0

Interval	Sur	nnyslope	Rd	Sur	nnyslope	Rd	F	airview l	Rd	Fa	airview F	₹d	45	Dalling
Interval Start	E	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	Ono mour
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	1	1	0

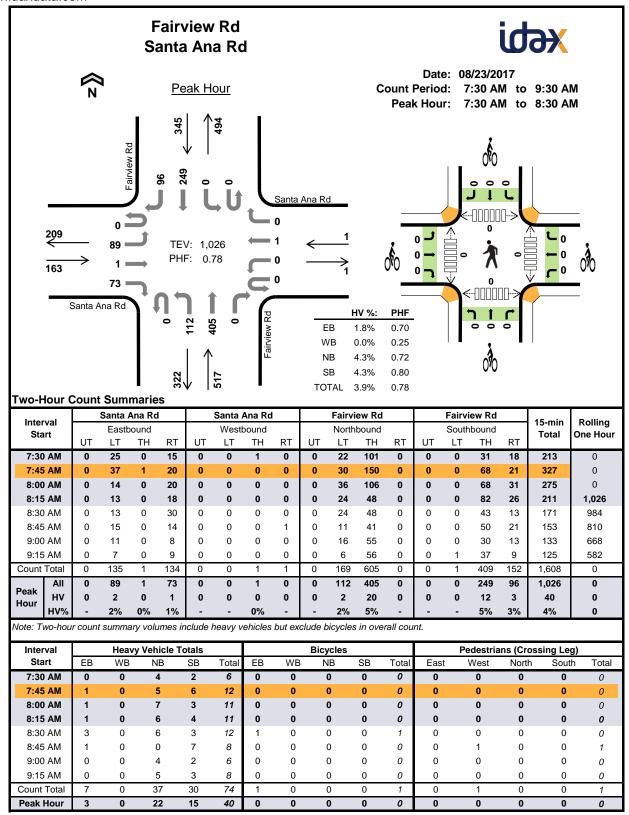
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval	S	unnys	lope R	d	9	Sunnys	lope R	d		Fairvi	ew Rd			Fairvi	ew Rd		15-min	Dallina
Start		Eastb	ound			West	bound			North	bound			South	bound		Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
3:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	5	0	7	0
3:15 PM	0	1	0	2	0	0	0	0	0	2	4	0	0	0	2	1	12	0
3:30 PM	0	1	0	0	0	0	1	0	0	1	3	0	0	0	3	0	9	0
3:45 PM	0	0	2	0	0	1	0	0	0	0	6	0	0	0	2	0	11	39
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	35
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	25
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	17
4:45 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0	4	10
Count Total	0	4	2	2	0	1	1	2	0	3	18	0	0	0	15	1	49	0
Peak Hour	0	3	2	2	0	1	1	1	0	3	13	0	0	0	12	1	39	0

Interval	Sur	nnyslope	Rd	Sur	nnyslope	Rd	F	airview F	₹d	F	airview F	₹d	15-min	Dalling
Start	Е	Eastboun	d	٧	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	Rolling One Hour
O.a t	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • • •	0.101.104.1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	1	2	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	1	0	0	0	0	1	2	0
Peak Hour	0	0	0	0	0	0	1	0	0	0	0	1	2	0

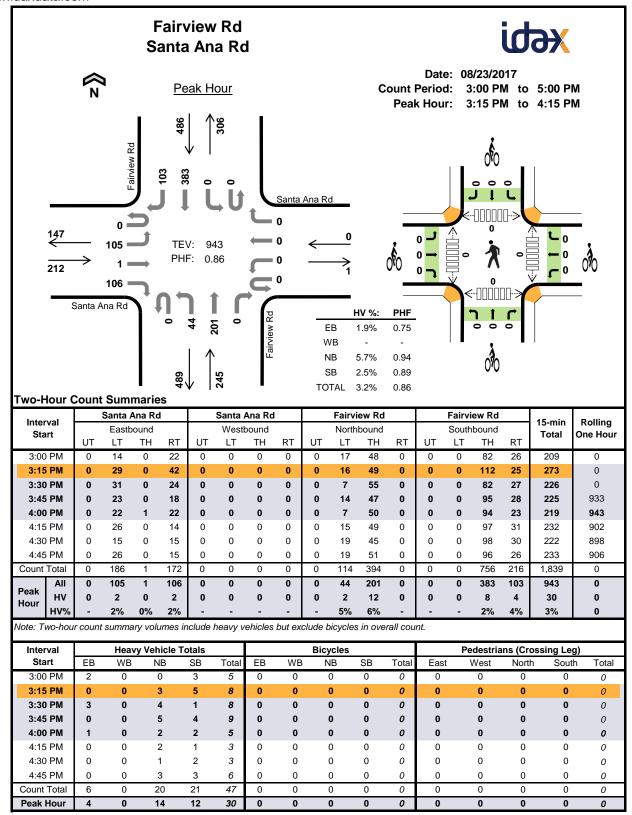
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval		Santa A	Ana Rd			Santa	Ana Ro	l		Fairvi	ew Rd			Fairvi	ew Rd		45	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	1	6	0
7:45 AM	0	1	0	0	0	0	0	0	0	1	4	0	0	0	5	1	12	0
8:00 AM	0	0	0	1	0	0	0	0	0	1	6	0	0	0	2	1	11	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	6	0	0	0	4	0	11	40
8:30 AM	0	2	0	1	0	0	0	0	0	1	5	0	0	0	3	0	12	46
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	3	8	42
9:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	1	6	37
9:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	8	34
Count Total	0	5	0	2	0	0	0	0	0	3	34	0	0	0	23	7	74	0
Peak Hour	0	2	0	1	0	0	0	0	0	2	20	0	0	0	12	3	40	0

Interval	Sa	nta Ana	Rd	Sa	nta Ana	Rd	F	airview F	₹d	F	airview F	₹d	15-min	Dalling
Interval Start	E	astboun	d	٧	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	Total	Rolling One Hour
Otare	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One riou
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

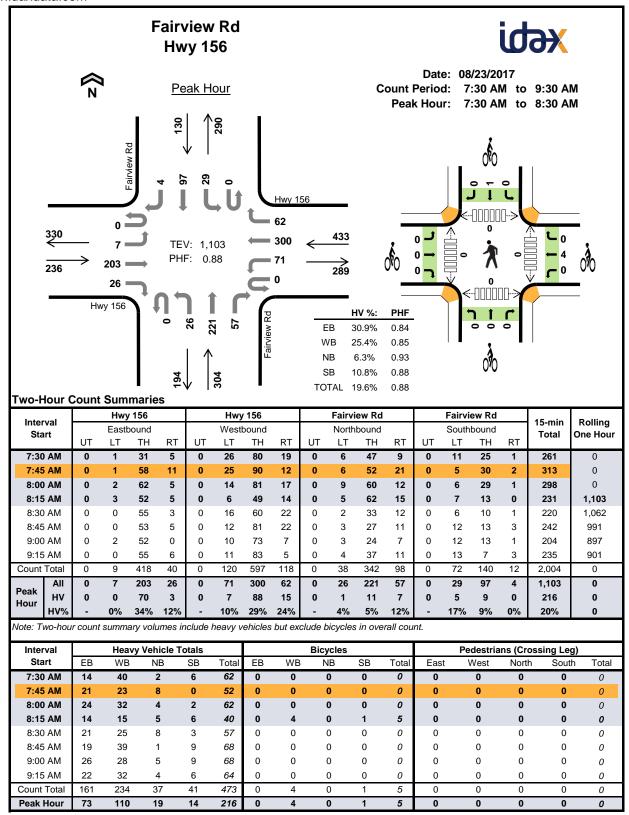
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval		Santa A	Ana Rd			Santa	Ana Ro	I		Fairvi	ew Rd			Fairvi	ew Rd		15 min	Dalling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One mean
3:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0	5	0
3:15 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	4	1	8	0
3:30 PM	0	2	0	1	0	0	0	0	0	1	3	0	0	0	1	0	8	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	3	9	30
4:00 PM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	2	0	5	30
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	25
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3	20
4:45 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	2	1	6	17
Count Total	0	3	0	3	0	0	0	0	0	4	16	0	0	0	16	5	47	0
Peak Hour	0	2	0	2	0	0	0	0	0	2	12	0	0	0	8	4	30	0

Intonial	Sa	nta Ana	Rd	Sa	ınta Ana	Rd	F	airview F	₹d	F	airview F	₹d	45	Dalling
Interval Start	E	astboun	d	V	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
J.a.i.	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • •	0.10 1.10
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

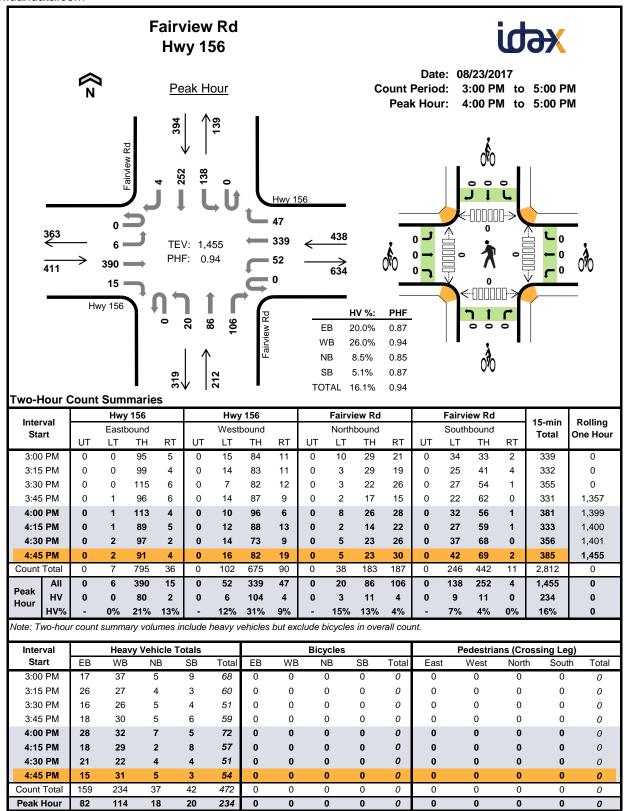
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Two-Hour (Count	Sum	marie	s - He	eavy \	Vehic	les											
luta musi		Hwy	156			Hwy	/ 156			Fairvi	ew Rd			Fairvi	ew Rd		45	D - III
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Clart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	· Stai	Ono rioui
7:30 AM	0	0	11	3	0	3	30	7	0	0	2	0	0	2	4	0	62	0
7:45 AM	0	0	21	0	0	2	20	1	0	1	3	4	0	0	0	0	52	0
8:00 AM	0	0	24	0	0	2	26	4	0	0	3	1	0	0	2	0	62	0
8:15 AM	0	0	14	0	0	0	12	3	0	0	3	2	0	3	3	0	40	216
8:30 AM	0	0	21	0	0	2	17	6	0	0	5	3	0	2	1	0	57	211
8:45 AM	0	0	19	0	0	2	35	2	0	0	0	1	0	5	4	0	68	227
9:00 AM	0	0	26	0	0	2	22	4	0	1	3	1	0	8	1	0	68	233
9:15 AM	0	0	22	0	0	1	31	0	0	1	1	2	0	5	1	0	64	257
Count Total	0	0	158	3	0	14	193	27	0	3	20	14	0	25	16	0	473	0
Peak Hour	0	0	70	3	0	7	88	15	0	1	11	7	0	5	9	0	216	0

Interval		Hwy 156	i		Hwy 156	;	F	airview l	Rd	F	airview F	₹d	45	Dalling
Interval Start	Е	astboun	d	V	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Juli	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • •	0.101.104.1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	4	0	0	0	0	0	1	0	5	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	4	0	0	0	0	0	1	0	5	0
Peak Hour	0	0	0	0	4	0	0	0	0	0	1	0	5	0

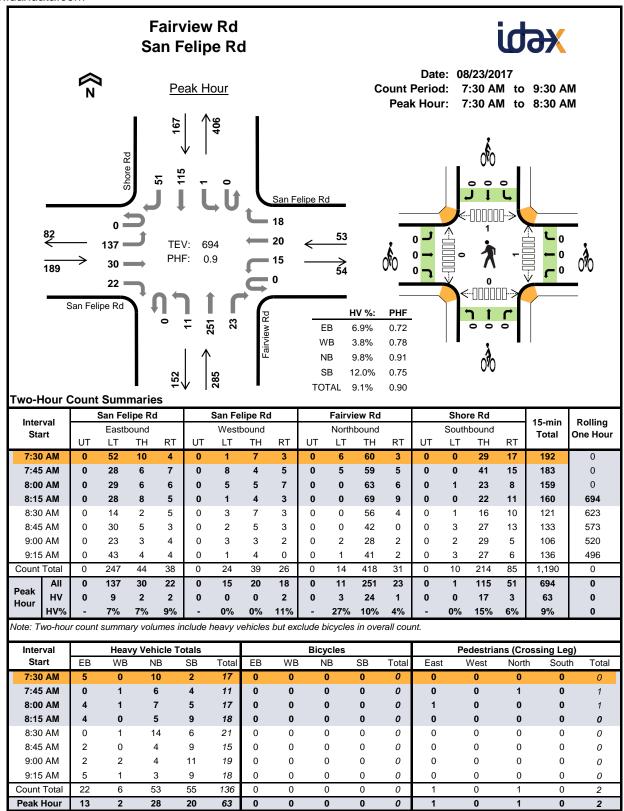
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval		Hwy	156			Hwy	/ 156			Fairvi	ew Rd			Fairvi	ew Rd		15 min	Palling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One near
3:00 PM	0	0	16	1	0	2	34	1	0	1	3	1	0	6	2	1	68	0
3:15 PM	0	0	26	0	0	0	26	1	0	1	2	1	0	2	0	1	60	0
3:30 PM	0	0	15	1	0	1	22	3	0	0	3	2	0	1	3	0	51	0
3:45 PM	0	0	17	1	0	1	26	3	0	0	4	1	0	3	3	0	59	238
4:00 PM	0	0	26	2	0	1	30	1	0	0	5	2	0	2	3	0	72	242
4:15 PM	0	0	18	0	0	1	25	3	0	0	1	1	0	3	5	0	57	239
4:30 PM	0	0	21	0	0	0	22	0	0	2	1	1	0	2	2	0	51	239
4:45 PM	0	0	15	0	0	4	27	0	0	1	4	0	0	2	1	0	54	234
Count Total	0	0	154	5	0	10	212	12	0	5	23	9	0	21	19	2	472	0
Peak Hour	0	0	80	2	0	6	104	4	0	3	11	4	0	9	11	0	234	0

Interval		Hwy 156	;		Hwy 156	3	F	airview F	₹d	Fa	airview F	₹d	15-min	Rolling
Interval Start	E	Eastboun	d	٧	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
Otari	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One rieur
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

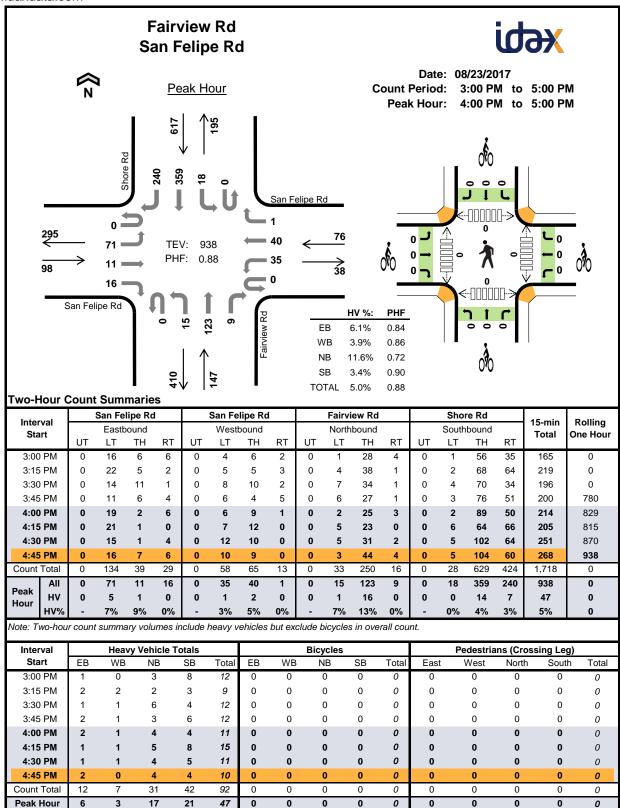
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Two-Hour (Count	Sum	marie	s - He	eavy \	Vehic	les											
I4		San Fe	lipe Rd			San Fe	lipe Ro	t		Fairvi	ew Rd			Sho	re Rd		45	D-III
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
7:30 AM	0	4	0	1	0	0	0	0	0	1	9	0	0	0	2	0	17	0
7:45 AM	0	0	0	0	0	0	0	1	0	2	4	0	0	0	4	0	11	0
8:00 AM	0	2	1	1	0	0	0	1	0	0	6	1	0	0	4	1	17	0
8:15 AM	0	3	1	0	0	0	0	0	0	0	5	0	0	0	7	2	18	63
8:30 AM	0	0	0	0	0	1	0	0	0	0	13	1	0	0	4	2	21	67
8:45 AM	0	1	1	0	0	0	0	0	0	0	4	0	0	1	7	1	15	71
9:00 AM	0	2	0	0	0	2	0	0	0	0	4	0	0	1	10	0	19	73
9:15 AM	0	5	0	0	0	0	1	0	0	0	3	0	0	0	8	1	18	73
Count Total	0	17	3	2	0	3	1	2	0	3	48	2	0	2	46	7	136	0
Peak Hour	0	9	2	2	0	0	0	2	0	3	24	1	0	0	17	3	63	0

Interval Start	San Felipe Rd Eastbound			San Felipe Rd Westbound			F	airview F	₹d	;	Shore Ro	15-min Total	Rolling One Hour	
							١	lorthbour	nd	S	outhbour			
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. Stai	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval Start	San Felipe Rd Eastbound				San Felipe Rd			Fairview Rd Northbound				Shore Rd Southbound				15-min Total	Rolling One Hour	
					Westbound													
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Iotai	One riour
3:00 PM	0	1	0	0	0	0	0	0	0	0	2	1	0	0	8	0	12	0
3:15 PM	0	2	0	0	0	1	0	1	0	0	2	0	0	0	3	0	9	0
3:30 PM	0	0	0	1	0	0	1	0	0	1	5	0	0	0	3	1	12	0
3:45 PM	0	1	0	1	0	1	0	0	0	0	3	0	0	0	5	1	12	45
4:00 PM	0	1	1	0	0	0	1	0	0	0	4	0	0	0	3	1	11	44
4:15 PM	0	1	0	0	0	0	1	0	0	1	4	0	0	0	5	3	15	50
4:30 PM	0	1	0	0	0	1	0	0	0	0	4	0	0	0	3	2	11	49
4:45 PM	0	2	0	0	0	0	0	0	0	0	4	0	0	0	3	1	10	47
Count Total	0	9	1	2	0	3	3	1	0	2	28	1	0	0	33	9	92	0
Peak Hour	0	5	1	0	0	1	2	0	0	1	16	0	0	0	14	7	47	0

Interval Start	San Felipe Rd			San Felipe Rd			F	airview l	Rd	Shore Rd			15-min	Rolling
	Eastbound			Westbound			Northbound			Southbound			Total	One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	· Ctui	
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Vehicle Classification Report Summary



Location: Fairview Rd between St. Benedict Way and Sunnyslope Rd

Count Direction: Northbound / Southbound

Date Range: 8/23/2017 to 8/23/2017

						FHWA V	hicle Clas	sification						Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
						Study	Total							
Northbound	15	1,513	627	12	215	24	0	0	46	2	10	0	1	2,465
Percent	0.6%	61.4%	25.4%	0.5%	8.7%	1.0%	0.0%	0.0%	1.9%	0.1%	0.4%	0.0%	0.0%	100%
Southbound	11	1,411	654	13	217	26	0	3	40	1	5	0	1	2,382
Percent	0.5%	59.2%	27.5%	0.5%	9.1%	1.1%	0.0%	0.1%	1.7%	0.0%	0.2%	0.0%	0.0%	100%
Total	26	2,924	1,281	25	432	50	0	3	86	3	15	0	2	4,847
Percent	0.5%	60.3%	26.4%	0.5%	8.9%	1.0%	0.0%	0.1%	1.8%	0.1%	0.3%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



Wednesday, August 23, 2017 Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	5	3	0	0	0	0	0	0	0	0	0	0	8
5:00 AM	0	22	12	0	6	0	0	0	0	0	0	0	0	40
6:00 AM	0	40	13	1	4	1	0	0	2	0	1	0	0	62
7:00 AM	0	56	27	1	9	2	0	0	9	0	0	0	1	105
8:00 AM	0	68	48	1	10	2	0	0	6	0	0	0	0	135
9:00 AM	2	41	38	3	13	2	0	0	1	0	1	0	0	101
10:00 AM	0	57	37	2	19	4	0	1	3	0	0	0	0	123
11:00 AM	3	70	42	1	11	0	0	0	6	0	0	0	0	133
12:00 PM	0	82	50	2	9	2	0	1	3	0	1	0	0	150
1:00 PM	0	76	39	1	12	3	0	0	3	0	0	0	0	134
2:00 PM	1	96	53	1	18	3	0	0	2	0	2	0	0	176
3:00 PM	1	131	66	0	16	3	0	1	4	0	0	0	0	222
4:00 PM	1	137	56	0	30	0	0	0	1	1	0	0	0	226
5:00 PM	1	147	55	0	24	3	0	0	0	0	0	0	0	230
6:00 PM	2	132	40	0	13	0	0	0	0	0	0	0	0	187
7:00 PM	0	85	29	0	8	0	0	0	0	0	0	0	0	122
8:00 PM	0	59	20	0	7	1	0	0	0	0	0	0	0	87
9:00 PM	0	40	13	0	5	0	0	0	0	0	0	0	0	58
10:00 PM	0	35	9	0	2	0	0	0	0	0	0	0	0	46
11:00 PM	0	16	1	0	1	0	0	0	0	0	0	0	0	18
Total	11	1,411	654	13	217	26	0	3	40	1	5	0	1	2,382
Percent	0.5%	59.2%	27.5%	0.5%	9.1%	1.1%	0.0%	0.1%	1.7%	0.0%	0.2%	0.0%	0.0%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



Total Study Average Northbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	6
1:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	7	1	0	0	1	0	0	0	0	0	0	0	9
4:00 AM	1	26	19	0	5	0	0	0	2	0	3	0	0	56
5:00 AM	1	49	33	0	12	0	0	0	0	0	0	0	0	95
6:00 AM	1	81	23	0	20	1	0	0	0	0	0	0	0	126
7:00 AM	2	146	48	1	15	1	0	0	5	0	1	0	0	219
8:00 AM	0	123	50	3	18	3	0	0	7	1	2	0	0	207
9:00 AM	0	97	54	3	13	4	0	0	6	0	1	0	0	178
10:00 AM	0	88	33	1	14	1	0	0	2	0	1	0	0	140
11:00 AM	0	79	52	0	11	1	0	0	3	0	0	0	0	146
12:00 PM	2	92	32	2	18	1	0	0	6	0	0	0	0	153
1:00 PM	0	82	42	1	13	2	0	0	7	1	0	0	1	149
2:00 PM	1	81	39	1	11	2	0	0	2	0	1	0	0	138
3:00 PM	2	92	53	0	21	7	0	0	4	0	0	0	0	179
4:00 PM	1	93	51	0	15	0	0	0	1	0	1	0	0	162
5:00 PM	1	112	34	0	10	0	0	0	1	0	0	0	0	158
6:00 PM	1	79	28	0	4	0	0	0	0	0	0	0	0	112
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	61	12	0	6	0	0	0	0	0	0	0	0	79
9:00 PM	0	28	3	0	2	0	0	0	0	0	0	0	0	33
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	11
Total	13	1,440	610	12	208	24	0	0	46	2	10	0	1	2,366
Percent	0.5%	60.9%	25.8%	0.5%	8.8%	1.0%	0.0%	0.0%	1.9%	0.1%	0.4%	0.0%	0.0%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



Total Study Average Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	5	3	0	0	0	0	0	0	0	0	0	0	8
5:00 AM	0	22	12	0	6	0	0	0	0	0	0	0	0	40
6:00 AM	0	40	13	1	4	1	0	0	2	0	1	0	0	62
7:00 AM	0	56	27	1	9	2	0	0	9	0	0	0	1	105
8:00 AM	0	68	48	1	10	2	0	0	6	0	0	0	0	135
9:00 AM	2	41	38	3	13	2	0	0	1	0	1	0	0	101
10:00 AM	0	57	37	2	19	4	0	1	3	0	0	0	0	123
11:00 AM	3	70	42	1	11	0	0	0	6	0	0	0	0	133
12:00 PM	0	82	50	2	9	2	0	1	3	0	1	0	0	150
1:00 PM	0	76	39	1	12	3	0	0	3	0	0	0	0	134
2:00 PM	1	96	53	1	18	3	0	0	2	0	2	0	0	176
3:00 PM	1	131	66	0	16	3	0	1	4	0	0	0	0	222
4:00 PM	1	137	56	0	30	0	0	0	1	1	0	0	0	226
5:00 PM	1	147	55	0	24	3	0	0	0	0	0	0	0	230
6:00 PM	2	132	40	0	13	0	0	0	0	0	0	0	0	187
7:00 PM	0	85	29	0	8	0	0	0	0	0	0	0	0	122
8:00 PM	0	59	20	0	7	1	0	0	0	0	0	0	0	87
9:00 PM	0	40	13	0	5	0	0	0	0	0	0	0	0	58
10:00 PM	0	35	9	0	2	0	0	0	0	0	0	0	0	46
11:00 PM	0	16	1	0	1	0	0	0	0	0	0	0	0	18
Total	11	1,411	654	13	217	26	0	3	40	1	5	0	1	2,382
Percent	0.5%	59.2%	27.5%	0.5%	9.1%	1.1%	0.0%	0.1%	1.7%	0.0%	0.2%	0.0%	0.0%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



3-Day (Tuesday - Thursday) Average Northbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	6
1:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	7	1	0	0	1	0	0	0	0	0	0	0	9
4:00 AM	1	26	19	0	5	0	0	0	2	0	3	0	0	56
5:00 AM	1	49	33	0	12	0	0	0	0	0	0	0	0	95
6:00 AM	1	81	23	0	20	1	0	0	0	0	0	0	0	126
7:00 AM	2	146	48	1	15	1	0	0	5	0	1	0	0	219
8:00 AM	0	123	50	3	18	3	0	0	7	1	2	0	0	207
9:00 AM	0	97	54	3	13	4	0	0	6	0	1	0	0	178
10:00 AM	0	88	33	1	14	1	0	0	2	0	1	0	0	140
11:00 AM	0	79	52	0	11	1	0	0	3	0	0	0	0	146
12:00 PM	2	92	32	2	18	1	0	0	6	0	0	0	0	153
1:00 PM	0	82	42	1	13	2	0	0	7	1	0	0	1	149
2:00 PM	1	81	39	1	11	2	0	0	2	0	1	0	0	138
3:00 PM	2	92	53	0	21	7	0	0	4	0	0	0	0	179
4:00 PM	1	93	51	0	15	0	0	0	1	0	1	0	0	162
5:00 PM	1	112	34	0	10	0	0	0	1	0	0	0	0	158
6:00 PM	1	79	28	0	4	0	0	0	0	0	0	0	0	112
7:00 PM	2	54	13	0	6	0	0	0	0	0	0	0	0	75
8:00 PM	0	61	12	0	6	0	0	0	0	0	0	0	0	79
9:00 PM	0	28	3	0	2	0	0	0	0	0	0	0	0	33
10:00 PM	0	19	4	0	1	0	0	0	0	0	0	0	0	24
11:00 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	11
Total	15	1,513	627	12	215	24	0	0	46	2	10	0	1	2,465
Percent	0.6%	61.4%	25.4%	0.5%	8.7%	1.0%	0.0%	0.0%	1.9%	0.1%	0.4%	0.0%	0.0%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



3-Day (Tuesday - Thursday) Average Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	5
2:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	5	3	0	0	0	0	0	0	0	0	0	0	8
5:00 AM	0	22	12	0	6	0	0	0	0	0	0	0	0	40
6:00 AM	0	40	13	1	4	1	0	0	2	0	1	0	0	62
7:00 AM	0	56	27	1	9	2	0	0	9	0	0	0	1	105
8:00 AM	0	68	48	1	10	2	0	0	6	0	0	0	0	135
9:00 AM	2	41	38	3	13	2	0	0	1	0	1	0	0	101
10:00 AM	0	57	37	2	19	4	0	1	3	0	0	0	0	123
11:00 AM	3	70	42	1	11	0	0	0	6	0	0	0	0	133
12:00 PM	0	82	50	2	9	2	0	1	3	0	1	0	0	150
1:00 PM	0	76	39	1	12	3	0	0	3	0	0	0	0	134
2:00 PM	1	96	53	1	18	3	0	0	2	0	2	0	0	176
3:00 PM	1	131	66	0	16	3	0	1	4	0	0	0	0	222
4:00 PM	1	137	56	0	30	0	0	0	1	1	0	0	0	226
5:00 PM	1	147	55	0	24	3	0	0	0	0	0	0	0	230
6:00 PM	2	132	40	0	13	0	0	0	0	0	0	0	0	187
7:00 PM	0	85	29	0	8	0	0	0	0	0	0	0	0	122
8:00 PM	0	59	20	0	7	1	0	0	0	0	0	0	0	87
9:00 PM	0	40	13	0	5	0	0	0	0	0	0	0	0	58
10:00 PM	0	35	9	0	2	0	0	0	0	0	0	0	0	46
11:00 PM	0	16	1	0	1	0	0	0	0	0	0	0	0	18
Total	11	1,411	654	13	217	26	0	3	40	1	5	0	1	2,382
Percent	0.5%	59.2%	27.5%	0.5%	9.1%	1.1%	0.0%	0.1%	1.7%	0.0%	0.2%	0.0%	0.0%	

Vehicle Speed Report Summary



Location: Fairview Rd between St. Benedict Way and Sunnyslope Rd

Count Direction: Northbound / Southbound

Date Range: 8/23/2017 to 8/23/2017

								Speed	d Range	mph)								Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
								Stud	y Total									
Northbound	0	1	3	1	8	33	71	242	504	716	543	238	80	14	8	2	1	2,465
Percent	0.0%	0.0%	0.1%	0.0%	0.3%	1.3%	2.9%	9.8%	20.4%	29.0%	22.0%	9.7%	3.2%	0.6%	0.3%	0.1%	0.0%	100%
Southbound	0	5	1	0	10	51	135	273	628	624	438	149	53	8	5	2	0	2,382
Percent	0.0%	0.2%	0.0%	0.0%	0.4%	2.1%	5.7%	11.5%	26.4%	26.2%	18.4%	6.3%	2.2%	0.3%	0.2%	0.1%	0.0%	100%
Total	0	6	4	1	18	84	206	515	1,132	1,340	981	387	133	22	13	4	1	4,847
Percent	0.0%	0.1%	0.1%	0.0%	0.4%	1.7%	4.3%	10.6%	23.4%	27.6%	20.2%	8.0%	2.7%	0.5%	0.3%	0.1%	0.0%	100%

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
Northbound			Northbound		
50th Percentile (Median)	52.3	mph	Mean (Average) Speed	52.4	mph
85th Percentile	59.6	mph	10 mph Pace	47.0 - 57.0	mph
95th Percentile	64.3	mph	Percent in Pace	53.3	%
Southbound			Southbound		
50th Percentile (Median)	50.7	mph	Mean (Average) Speed	50.6	mph
85th Percentile	57.9	mph	10 mph Pace	46.6 - 56.6	mph
95th Percentile	62.4	mph	Percent in Pace	53.3	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



Wednesday, August 23, 2017

Northbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	1	2	1	1	0	1	0	0	0	0	6
1:00 AM	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	0	7
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	1	1	1	3	2	1	0	0	0	0	9
4:00 AM	0	0	0	0	0	0	0	2	3	11	13	13	10	3	1	0	0	56
5:00 AM	0	0	0	0	1	0	1	3	11	26	26	14	10	1	2	0	0	95
6:00 AM	0	0	0	0	0	0	0	3	24	31	30	28	6	3	0	1	0	126
7:00 AM	0	0	1	0	2	4	5	6	20	71	71	34	4	1	0	0	0	219
8:00 AM	0	0	0	0	3	4	7	30	46	60	35	19	2	1	0	0	0	207
9:00 AM	0	1	0	0	0	7	9	30	50	47	19	11	4	0	0	0	0	178
10:00 AM	0	0	0	0	1	0	3	18	22	49	32	14	1	0	0	0	0	140
11:00 AM	0	0	0	0	0	0	7	17	41	42	29	9	1	0	0	0	0	146
12:00 PM	0	0	0	1	0	2	8	23	42	36	29	12	0	0	0	0	0	153
1:00 PM	0	0	0	0	1	3	6	19	31	45	32	8	4	0	0	0	0	149
2:00 PM	0	0	0	0	0	4	8	16	42	31	29	7	1	0	0	0	0	138
3:00 PM	0	0	1	0	0	5	5	15	35	51	48	12	4	3	0	0	0	179
4:00 PM	0	0	0	0	0	0	1	14	36	56	39	12	4	0	0	0	0	162
5:00 PM	0	0	0	0	0	1	1	10	32	50	37	16	11	0	0	0	0	158
6:00 PM	0	0	0	0	0	0	0	5	14	44	32	12	5	0	0	0	0	112
7:00 PM	0	0	1	0	0	0	3	5	15	19	20	5	4	0	3	0	0	75
8:00 PM	0	0	0	0	0	2	5	15	20	24	4	5	0	1	1	1	1	79
9:00 PM	0	0	0	0	0	0	0	5	9	5	7	3	4	0	0	0	0	33
10:00 PM	0	0	0	0	0	0	1	2	6	7	5	1	1	0	1	0	0	24
11:00 PM	0	0	0	0	0	0	0	1	0	8	1	1	0	0	0	0	0	11
Total	0	1	3	1	8	33	71	242	504	716	543	238	80	14	8	2	1	2,465
Percent	0.0%	0.0%	0.1%	0.0%	0.3%	1.3%	2.9%	9.8%	20.4%	29.0%	22.0%	9.7%	3.2%	0.6%	0.3%	0.1%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	52.3	mph	Mean (Average) Speed	52.4	mph
85th Percentile	59.6	mph	10 mph Pace	47.0 - 57.0	mph
95th Percentile	64.3	mph	Percent in Pace	53.3	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



Wednesday, August 23, 2017 Southbound

								Spee	d Range ((mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	2	1	2	1	0	0	0	0	6
1:00 AM	0	0	0	0	0	0	0	0	2	1	0	1	0	0	0	1	0	5
2:00 AM	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	1	0	6
3:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	0	0	1	2	2	2	0	1	0	0	0	0	8
5:00 AM	0	0	0	0	0	1	0	7	5	13	9	3	2	0	0	0	0	40
6:00 AM	0	0	0	0	0	6	4	8	16	11	7	7	3	0	0	0	0	62
7:00 AM	0	0	0	0	0	6	17	12	23	23	14	6	4	0	0	0	0	105
8:00 AM	0	1	0	0	4	9	8	24	43	24	12	9	1	0	0	0	0	135
9:00 AM	0	1	0	0	0	2	12	14	29	24	13	5	1	0	0	0	0	101
10:00 AM	0	0	1	0	0	4	6	26	32	32	17	5	0	0	0	0	0	123
11:00 AM	0	3	0	0	1	4	5	14	38	32	26	6	3	1	0	0	0	133
12:00 PM	0	0	0	0	0	4	23	15	33	36	31	7	1	0	0	0	0	150
1:00 PM	0	0	0	0	1	4	7	22	40	30	22	5	3	0	0	0	0	134
2:00 PM	0	0	0	0	4	2	12	23	47	40	35	9	2	1	1	0	0	176
3:00 PM	0	0	0	0	0	3	13	41	61	52	42	6	4	0	0	0	0	222
4:00 PM	0	0	0	0	0	1	4	12	86	75	36	9	2	1	0	0	0	226
5:00 PM	0	0	0	0	0	2	12	23	64	60	49	12	7	1	0	0	0	230
6:00 PM	0	0	0	0	0	1	8	8	47	59	34	23	5	0	2	0	0	187
7:00 PM	0	0	0	0	0	0	2	9	18	42	38	11	1	1	0	0	0	122
8:00 PM	0	0	0	0	0	0	2	11	19	30	17	2	4	1	1	0	0	87
9:00 PM	0	0	0	0	0	2	0	1	14	18	14	7	2	0	0	0	0	58
10:00 PM	0	0	0	0	0	0	0	0	7	10	17	6	4	1	1	0	0	46
11:00 PM	0	0	0	0	0	0	0	1	1	6	1	7	1	1	0	0	0	18
Total	0	5	1	0	10	51	135	273	628	624	438	149	53	8	5	2	0	2,382
Percent	0.0%	0.2%	0.0%	0.0%	0.4%	2.1%	5.7%	11.5%	26.4%	26.2%	18.4%	6.3%	2.2%	0.3%	0.2%	0.1%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	50.7	mph	Mean (Average) Speed	50.6	mph
85th Percentile	57.9	mph	10 mph Pace	46.6 - 56.6	mph
95th Percentile	62.4	mph	Percent in Pace	53.3	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



Total Study Average Northbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	1	2	1	1	0	1	0	0	0	0	6
1:00 AM	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	0	7
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	1	1	1	3	2	1	0	0	0	0	9
4:00 AM	0	0	0	0	0	0	0	2	3	11	13	13	10	3	1	0	0	56
5:00 AM	0	0	0	0	1	0	1	3	11	26	26	14	10	1	2	0	0	95
6:00 AM	0	0	0	0	0	0	0	3	24	31	30	28	6	3	0	1	0	126
7:00 AM	0	0	1	0	2	4	5	6	20	71	71	34	4	1	0	0	0	219
8:00 AM	0	0	0	0	3	4	7	30	46	60	35	19	2	1	0	0	0	207
9:00 AM	0	1	0	0	0	7	9	30	50	47	19	11	4	0	0	0	0	178
10:00 AM	0	0	0	0	1	0	3	18	22	49	32	14	1	0	0	0	0	140
11:00 AM	0	0	0	0	0	0	7	17	41	42	29	9	1	0	0	0	0	146
12:00 PM	0	0	0	1	0	2	8	23	42	36	29	12	0	0	0	0	0	153
1:00 PM	0	0	0	0	1	3	6	19	31	45	32	8	4	0	0	0	0	149
2:00 PM	0	0	0	0	0	4	8	16	42	31	29	7	1	0	0	0	0	138
3:00 PM	0	0	1	0	0	5	5	15	35	51	48	12	4	3	0	0	0	179
4:00 PM	0	0	0	0	0	0	1	14	36	56	39	12	4	0	0	0	0	162
5:00 PM	0	0	0	0	0	1	1	10	32	50	37	16	11	0	0	0	0	158
6:00 PM	0	0	0	0	0	0	0	5	14	44	32	12	5	0	0	0	0	112
7:00 PM	0	0	1	0	0	0	3	5	15	19	20	5	4	0	3	0	0	75
8:00 PM	0	0	0	0	0	2	5	15	20	24	4	5	0	1	1	1	1	79
9:00 PM	0	0	0	0	0	0	0	5	9	5	7	3	4	0	0	0	0	33
10:00 PM	0	0	0	0	0	0	1	2	6	7	5	1	1	0	1	0	0	24
11:00 PM	0	0	0	0	0	0	0	1	0	8	1	1	0	0	0	0	0	11
Total	0	1	3	1	8	33	71	242	504	716	543	238	80	14	8	2	1	2,465
Percent	0.0%	0.0%	0.1%	0.0%	0.3%	1.3%	2.9%	9.8%	20.4%	29.0%	22.0%	9.7%	3.2%	0.6%	0.3%	0.1%	0.0%	

Total Study Percentile Spe	ed Summa	ry	Total Study Spee	d Statistics	
50th Percentile (Median)	52.3	mph	Mean (Average) Speed	52.4	mph
85th Percentile	59.6	mph	10 mph Pace	47.0 - 57.0	mph
95th Percentile	64.3	mph	Percent in Pace	53.3	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 01



Total Study Average Southbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	2	1	2	1	0	0	0	0	6
1:00 AM	0	0	0	0	0	0	0	0	2	1	0	1	0	0	0	1	0	5
2:00 AM	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	1	0	6
3:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	0	0	1	2	2	2	0	1	0	0	0	0	8
5:00 AM	0	0	0	0	0	1	0	7	5	13	9	3	2	0	0	0	0	40
6:00 AM	0	0	0	0	0	6	4	8	16	11	7	7	3	0	0	0	0	62
7:00 AM	0	0	0	0	0	6	17	12	23	23	14	6	4	0	0	0	0	105
8:00 AM	0	1	0	0	4	9	8	24	43	24	12	9	1	0	0	0	0	135
9:00 AM	0	1	0	0	0	2	12	14	29	24	13	5	1	0	0	0	0	101
10:00 AM	0	0	1	0	0	4	6	26	32	32	17	5	0	0	0	0	0	123
11:00 AM	0	3	0	0	1	4	5	14	38	32	26	6	3	1	0	0	0	133
12:00 PM	0	0	0	0	0	4	23	15	33	36	31	7	1	0	0	0	0	150
1:00 PM	0	0	0	0	1	4	7	22	40	30	22	5	3	0	0	0	0	134
2:00 PM	0	0	0	0	4	2	12	23	47	40	35	9	2	1	1	0	0	176
3:00 PM	0	0	0	0	0	3	13	41	61	52	42	6	4	0	0	0	0	222
4:00 PM	0	0	0	0	0	1	4	12	86	75	36	9	2	1	0	0	0	226
5:00 PM	0	0	0	0	0	2	12	23	64	60	49	12	7	1	0	0	0	230
6:00 PM	0	0	0	0	0	1	8	8	47	59	34	23	5	0	2	0	0	187
7:00 PM	0	0	0	0	0	0	2	9	18	42	38	11	1	1	0	0	0	122
8:00 PM	0	0	0	0	0	0	2	11	19	30	17	2	4	1	1	0	0	87
9:00 PM	0	0	0	0	0	2	0	1	14	18	14	7	2	0	0	0	0	58
10:00 PM	0	0	0	0	0	0	0	0	7	10	17	6	4	1	1	0	0	46
11:00 PM	0	0	0	0	0	0	0	1	1	6	1	7	1	1	0	0	0	18
Total	0	5	1	0	10	51	135	273	628	624	438	149	53	8	5	2	0	2,382
Percent	0.0%	0.2%	0.0%	0.0%	0.4%	2.1%	5.7%	11.5%	26.4%	26.2%	18.4%	6.3%	2.2%	0.3%	0.2%	0.1%	0.0%	

Total Study Percentile Spe	ed Summa	ry	Total Study Spee	d Statistics	
50th Percentile (Median)	50.7	mph	Mean (Average) Speed	50.6	mph
85th Percentile	57.9	mph	10 mph Pace	46.6 - 56.6	mph
95th Percentile	62.4	mph	Percent in Pace	53.3	%



Location: Fairview Rd between St. Benedict Way and Sunnyslope Rd Date Range: 8/23/2017 - 8/29/2017

	W	ednesd	lay		Thursda	ıy		Friday	1		Saturda	ıy		Sunday	/		Monda	у		Tuesda	у			
		3/23/201	7	;	8/24/201	7	;	8/25/201	17		8/26/201	7	8	3/27/201	7	8	3/28/201	7		8/29/201	7	Mid-W	/eek Av	/erage
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	6	6	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	12
1:00 AM	7	5	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	5	12
2:00 AM	3	6	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	6	9
3:00 AM	9	2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	11
4:00 AM	56	8	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	8	64
5:00 AM	95	40	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95	40	135
6:00 AM	126	62	188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	126	62	188
7:00 AM	219	105	324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219	105	324
8:00 AM	207	135	342	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207	135	342
9:00 AM	178	101	279	-	_	-	-	_	-	-	_	-	-	_	-	-	-	-	_	_	-	178	101	279
10:00 AM	140	123	263	-	-	-	-	_	-	-	_	-	-	-	-	-	-	-	_	_	-	140	123	263
11:00 AM	146	133	279	-	_	-	-	_	-	-	_	-	-	_	-	-	-	-	_	_	-	146	133	279
12:00 PM	153	150	303	-	-	-	-	_	-	-	_	-	-	-	-	-	-	-	_	_	-	153	150	303
1:00 PM	149	134	283	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	149	134	283
2:00 PM	138	176	314	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	138	176	314
3:00 PM	179	222	401	_	_	_	_	-	-	-	_	_	_	_	_	_	-	_	_	-	_	179	222	401
4:00 PM	162	226	388	_	_	_	_	-	-	-	_	_	_	_	_	_	_	_	_	_	_	162	226	388
5:00 PM	158	230	388	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	158	230	388
6:00 PM	112	187	299	-	-	-	-	_	-	_	_	-	_	-	-	-	-	-	_	_	-	112	187	299
7:00 PM	75	122	197	_	_	-	_	-	_	-	_	-	-	_	-	-	-	-	_	-	_	75	122	197
8:00 PM	79	87	166	_	-	_	-	-	-	-	-	_	-	-	_	-	-	_	-	_	_	79	87	166
9:00 PM	33	58	91	_	-	_	-	-	_	_	-	_	-	-	_	-	-	_	_	_	_	33	58	91
10:00 PM	24	46	70	_	_		_	_		_	_	_	_		_	_			_	_		24	46	70
11:00 PM	11	18	29	-	-	-	-	-	-	-	-	_	-	-	_	-	-	_	_	_	-	11	18	29
Total	2,465	2,382	4,847	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,465	2,382	
Percent	51%	49%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51%	49%	-

^{1.} Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary



Location: Fairview Rd between Rosa Morada and Rallon Rd

Count Direction: Northbound / Southbound

Date Range: 8/23/2017 to 8/23/2017

						FHWA Ve	hicle Clas	sification						Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
						Study	Total							
Northbound	16	2,105	851	4	271	45	0	5	44	8	13	3	5	3,370
Percent	0.5%	62.5%	25.3%	0.1%	8.0%	1.3%	0.0%	0.1%	1.3%	0.2%	0.4%	0.1%	0.1%	100%
Southbound	10	2,196	979	5	489	5	0	9	50	3	9	3	3	3,761
Percent	0.3%	58.4%	26.0%	0.1%	13.0%	0.1%	0.0%	0.2%	1.3%	0.1%	0.2%	0.1%	0.1%	100%
Total	26	4,301	1,830	9	760	50	0	14	94	11	22	6	8	7,131
Percent	0.4%	60.3%	25.7%	0.1%	10.7%	0.7%	0.0%	0.2%	1.3%	0.2%	0.3%	0.1%	0.1%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



Wednesday, August 23, 2017 Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	1	0	2	0	0	0	0	0	0	0	0	10
1:00 AM	0	6	2	0	0	0	0	0	0	0	0	0	0	8
2:00 AM	0	9	1	0	1	0	0	0	0	0	0	0	1	12
3:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	7
4:00 AM	0	10	7	0	1	0	0	0	0	0	0	0	0	18
5:00 AM	0	36	19	1	11	0	0	0	1	0	0	0	0	68
6:00 AM	0	59	36	0	17	1	0	1	3	0	2	0	1	120
7:00 AM	0	113	46	1	29	0	0	0	9	1	1	0	0	200
8:00 AM	0	125	79	0	35	0	0	1	5	0	0	2	0	247
9:00 AM	0	55	52	1	22	0	0	0	3	0	1	0	0	134
10:00 AM	0	64	41	0	19	1	0	1	3	1	0	1	0	131
11:00 AM	2	69	49	1	20	2	0	0	5	0	0	0	0	148
12:00 PM	2	100	47	0	37	0	0	0	5	0	1	0	0	192
1:00 PM	0	88	62	0	22	0	0	0	4	0	0	0	0	176
2:00 PM	1	159	74	1	37	0	0	2	2	0	1	0	1	278
3:00 PM	1	241	116	0	44	0	0	1	4	1	1	0	0	409
4:00 PM	1	254	82	0	65	0	0	1	3	0	0	0	0	406
5:00 PM	1	257	82	0	39	1	0	0	0	0	0	0	0	380
6:00 PM	2	183	68	0	42	0	0	1	2	0	0	0	0	298
7:00 PM	0	115	39	0	22	0	0	0	0	0	0	0	0	176
8:00 PM	0	98	39	0	11	0	0	1	0	0	0	0	0	149
9:00 PM	0	81	16	0	6	0	0	0	1	0	1	0	0	105
10:00 PM	0	37	18	0	4	0	0	0	0	0	0	0	0	59
11:00 PM	0	23	3	0	3	0	0	0	0	0	1	0	0	30
Total	10	2,196	979	5	489	5	0	9	50	3	9	3	3	3,761
Percent	0.3%	58.4%	26.0%	0.1%	13.0%	0.1%	0.0%	0.2%	1.3%	0.1%	0.2%	0.1%	0.1%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



Total Study Average Northbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	1	0	1	0	0	0	0	0	0	0	0	9
1:00 AM	0	10	1	0	0	0	0	0	0	0	0	0	0	11
2:00 AM	0	4	0	0	1	0	0	0	2	0	0	0	0	7
3:00 AM	0	18	4	0	2	0	0	0	2	0	0	0	0	26
4:00 AM	1	50	23	0	8	1	0	0	2	0	0	0	0	85
5:00 AM	2	111	54	0	22	0	0	0	1	0	3	0	0	193
6:00 AM	3	141	48	0	21	0	0	0	1	0	0	0	0	214
7:00 AM	0	268	97	1	26	8	0	0	4	0	1	0	0	405
8:00 AM	2	157	56	1	15	6	0	0	5	1	2	0	1	246
9:00 AM	0	95	51	1	15	9	0	0	5	1	1	0	0	178
10:00 AM	2	78	37	0	13	3	0	0	3	0	0	2	0	138
11:00 AM	1	86	57	0	15	1	0	1	3	1	0	1	0	166
12:00 PM	0	83	43	0	16	6	0	0	5	2	0	0	0	155
1:00 PM	2	94	63	0	14	4	0	2	4	1	1	0	0	185
2:00 PM	0	116	59	1	22	3	0	1	2	1	1	0	1	207
3:00 PM	0	133	60	0	28	2	0	1	1	1	0	0	2	228
4:00 PM	0	127	49	0	15	0	0	0	2	0	1	0	1	195
5:00 PM	2	145	54	0	13	1	0	0	2	0	0	0	0	217
6:00 PM	0	113	30	0	8	0	0	0	0	0	0	0	0	151
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	81	22	0	5	0	0	0	0	0	0	0	0	108
9:00 PM	0	41	12	0	1	0	0	0	0	0	1	0	0	55
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	17	3	0	0	0	0	0	0	0	2	0	0	22
Total	15	1,975	824	4	261	44	0	5	44	8	13	3	5	3,201
Percent	0.5%	61.7%	25.7%	0.1%	8.2%	1.4%	0.0%	0.2%	1.4%	0.2%	0.4%	0.1%	0.2%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



Total Study Average Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	1	0	2	0	0	0	0	0	0	0	0	10
1:00 AM	0	6	2	0	0	0	0	0	0	0	0	0	0	8
2:00 AM	0	9	1	0	1	0	0	0	0	0	0	0	1	12
3:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	7
4:00 AM	0	10	7	0	1	0	0	0	0	0	0	0	0	18
5:00 AM	0	36	19	1	11	0	0	0	1	0	0	0	0	68
6:00 AM	0	59	36	0	17	1	0	1	3	0	2	0	1	120
7:00 AM	0	113	46	1	29	0	0	0	9	1	1	0	0	200
8:00 AM	0	125	79	0	35	0	0	1	5	0	0	2	0	247
9:00 AM	0	55	52	1	22	0	0	0	3	0	1	0	0	134
10:00 AM	0	64	41	0	19	1	0	1	3	1	0	1	0	131
11:00 AM	2	69	49	1	20	2	0	0	5	0	0	0	0	148
12:00 PM	2	100	47	0	37	0	0	0	5	0	1	0	0	192
1:00 PM	0	88	62	0	22	0	0	0	4	0	0	0	0	176
2:00 PM	1	159	74	1	37	0	0	2	2	0	1	0	1	278
3:00 PM	1	241	116	0	44	0	0	1	4	1	1	0	0	409
4:00 PM	1	254	82	0	65	0	0	1	3	0	0	0	0	406
5:00 PM	1	257	82	0	39	1	0	0	0	0	0	0	0	380
6:00 PM	2	183	68	0	42	0	0	1	2	0	0	0	0	298
7:00 PM	0	115	39	0	22	0	0	0	0	0	0	0	0	176
8:00 PM	0	98	39	0	11	0	0	1	0	0	0	0	0	149
9:00 PM	0	81	16	0	6	0	0	0	1	0	1	0	0	105
10:00 PM	0	37	18	0	4	0	0	0	0	0	0	0	0	59
11:00 PM	0	23	3	0	3	0	0	0	0	0	1	0	0	30
Total	10	2,196	979	5	489	5	0	9	50	3	9	3	3	3,761
Percent	0.3%	58.4%	26.0%	0.1%	13.0%	0.1%	0.0%	0.2%	1.3%	0.1%	0.2%	0.1%	0.1%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



3-Day (Tuesday - Thursday) Average Northbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	1	0	1	0	0	0	0	0	0	0	0	9
1:00 AM	0	10	1	0	0	0	0	0	0	0	0	0	0	11
2:00 AM	0	4	0	0	1	0	0	0	2	0	0	0	0	7
3:00 AM	0	18	4	0	2	0	0	0	2	0	0	0	0	26
4:00 AM	1	50	23	0	8	1	0	0	2	0	0	0	0	85
5:00 AM	2	111	54	0	22	0	0	0	1	0	3	0	0	193
6:00 AM	3	141	48	0	21	0	0	0	1	0	0	0	0	214
7:00 AM	0	268	97	1	26	8	0	0	4	0	1	0	0	405
8:00 AM	2	157	56	1	15	6	0	0	5	1	2	0	1	246
9:00 AM	0	95	51	1	15	9	0	0	5	1	1	0	0	178
10:00 AM	2	78	37	0	13	3	0	0	3	0	0	2	0	138
11:00 AM	1	86	57	0	15	1	0	1	3	1	0	1	0	166
12:00 PM	0	83	43	0	16	6	0	0	5	2	0	0	0	155
1:00 PM	2	94	63	0	14	4	0	2	4	1	1	0	0	185
2:00 PM	0	116	59	1	22	3	0	1	2	1	1	0	1	207
3:00 PM	0	133	60	0	28	2	0	1	1	1	0	0	2	228
4:00 PM	0	127	49	0	15	0	0	0	2	0	1	0	1	195
5:00 PM	2	145	54	0	13	1	0	0	2	0	0	0	0	217
6:00 PM	0	113	30	0	8	0	0	0	0	0	0	0	0	151
7:00 PM	1	108	23	0	9	1	0	0	0	0	0	0	0	142
8:00 PM	0	81	22	0	5	0	0	0	0	0	0	0	0	108
9:00 PM	0	41	12	0	1	0	0	0	0	0	1	0	0	55
10:00 PM	0	22	4	0	1	0	0	0	0	0	0	0	0	27
11:00 PM	0	17	3	0	0	0	0	0	0	0	2	0	0	22
Total	16	2,105	851	4	271	45	0	5	44	8	13	3	5	3,370
Percent	0.5%	62.5%	25.3%	0.1%	8.0%	1.3%	0.0%	0.1%	1.3%	0.2%	0.4%	0.1%	0.1%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



3-Day (Tuesday - Thursday) Average Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	1	0	2	0	0	0	0	0	0	0	0	10
1:00 AM	0	6	2	0	0	0	0	0	0	0	0	0	0	8
2:00 AM	0	9	1	0	1	0	0	0	0	0	0	0	1	12
3:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	7
4:00 AM	0	10	7	0	1	0	0	0	0	0	0	0	0	18
5:00 AM	0	36	19	1	11	0	0	0	1	0	0	0	0	68
6:00 AM	0	59	36	0	17	1	0	1	3	0	2	0	1	120
7:00 AM	0	113	46	1	29	0	0	0	9	1	1	0	0	200
8:00 AM	0	125	79	0	35	0	0	1	5	0	0	2	0	247
9:00 AM	0	55	52	1	22	0	0	0	3	0	1	0	0	134
10:00 AM	0	64	41	0	19	1	0	1	3	1	0	1	0	131
11:00 AM	2	69	49	1	20	2	0	0	5	0	0	0	0	148
12:00 PM	2	100	47	0	37	0	0	0	5	0	1	0	0	192
1:00 PM	0	88	62	0	22	0	0	0	4	0	0	0	0	176
2:00 PM	1	159	74	1	37	0	0	2	2	0	1	0	1	278
3:00 PM	1	241	116	0	44	0	0	1	4	1	1	0	0	409
4:00 PM	1	254	82	0	65	0	0	1	3	0	0	0	0	406
5:00 PM	1	257	82	0	39	1	0	0	0	0	0	0	0	380
6:00 PM	2	183	68	0	42	0	0	1	2	0	0	0	0	298
7:00 PM	0	115	39	0	22	0	0	0	0	0	0	0	0	176
8:00 PM	0	98	39	0	11	0	0	1	0	0	0	0	0	149
9:00 PM	0	81	16	0	6	0	0	0	1	0	1	0	0	105
10:00 PM	0	37	18	0	4	0	0	0	0	0	0	0	0	59
11:00 PM	0	23	3	0	3	0	0	0	0	0	1	0	0	30
Total	10	2,196	979	5	489	5	0	9	50	3	9	3	3	3,761
Percent	0.3%	58.4%	26.0%	0.1%	13.0%	0.1%	0.0%	0.2%	1.3%	0.1%	0.2%	0.1%	0.1%	

Vehicle Speed Report Summary



Location: Fairview Rd between Rosa Morada and Rallon Rd

Count Direction: Northbound / Southbound

Date Range: 8/23/2017 to 8/23/2017

								Speed	d Range	(mph)								Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
								Stud	y Total									
Northbound	0	0	2	3	9	13	28	116	290	872	1,174	614	174	51	12	8	4	3,370
Percent	0.0%	0.0%	0.1%	0.1%	0.3%	0.4%	0.8%	3.4%	8.6%	25.9%	34.8%	18.2%	5.2%	1.5%	0.4%	0.2%	0.1%	100%
Southbound	0	0	5	7	8	7	29	127	343	957	1,270	701	220	63	15	4	5	3,761
Percent	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	0.8%	3.4%	9.1%	25.4%	33.8%	18.6%	5.8%	1.7%	0.4%	0.1%	0.1%	100%
Total	0	0	7	10	17	20	57	243	633	1,829	2,444	1,315	394	114	27	12	9	7,131
Percent	0.0%	0.0%	0.1%	0.1%	0.2%	0.3%	0.8%	3.4%	8.9%	25.6%	34.3%	18.4%	5.5%	1.6%	0.4%	0.2%	0.1%	100%

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
Northbound			Northbound		
50th Percentile (Median)	56.4	mph	Mean (Average) Speed	56.3	mph
85th Percentile	62.1	mph	10 mph Pace	51.2 - 61.2	mph
95th Percentile	66.6	mph	Percent in Pace	63.2	%
Southbound			Southbound		
50th Percentile (Median)	56.4	mph	Mean (Average) Speed	56.4	mph
85th Percentile	62.5	mph	10 mph Pace	51.8 - 61.8	mph
95th Percentile	67.0	mph	Percent in Pace	61.9	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



Wednesday, August 23, 2017 Northbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	1	1	1	4	1	1	0	0	0	0	9
1:00 AM	0	0	0	0	0	0	1	0	0	3	4	1	2	0	0	0	0	11
2:00 AM	0	0	0	0	0	0	0	3	0	1	1	0	1	1	0	0	0	7
3:00 AM	0	0	0	0	0	0	0	0	2	1	5	10	5	3	0	0	0	26
4:00 AM	0	0	0	0	0	0	0	2	2	7	24	26	13	6	1	4	0	85
5:00 AM	0	0	0	0	0	2	1	5	18	53	68	26	13	3	2	2	0	193
6:00 AM	0	0	0	0	0	0	3	5	9	38	78	52	19	7	2	0	1	214
7:00 AM	0	0	0	0	0	1	0	6	45	118	153	72	7	2	1	0	0	405
8:00 AM	0	0	0	0	0	0	3	20	23	68	87	29	13	2	1	0	0	246
9:00 AM	0	0	0	0	0	0	1	6	14	69	54	27	6	1	0	0	0	178
10:00 AM	0	0	0	0	0	0	1	2	8	42	52	22	6	2	2	1	0	138
11:00 AM	0	0	0	0	1	1	3	9	10	36	68	31	5	2	0	0	0	166
12:00 PM	0	0	0	0	2	1	7	7	12	49	36	25	10	4	1	0	1	155
1:00 PM	0	0	1	2	0	0	1	5	21	52	59	29	15	0	0	0	0	185
2:00 PM	0	0	0	0	0	1	2	8	22	60	67	37	8	1	0	0	1	207
3:00 PM	0	0	0	0	0	2	1	9	33	76	74	25	4	3	0	0	1	228
4:00 PM	0	0	0	0	0	1	0	6	17	45	76	42	6	1	1	0	0	195
5:00 PM	0	0	0	0	2	2	0	3	8	45	77	62	13	5	0	0	0	217
6:00 PM	0	0	0	0	1	0	1	3	7	18	61	43	12	4	1	0	0	151
7:00 PM	0	0	1	1	3	1	0	2	2	36	61	26	7	1	0	1	0	142
8:00 PM	0	0	0	0	0	1	0	9	23	26	33	14	2	0	0	0	0	108
9:00 PM	0	0	0	0	0	0	3	2	6	15	16	9	3	1	0	0	0	55
10:00 PM	0	0	0	0	0	0	0	2	6	7	8	1	3	0	0	0	0	27
11:00 PM	0	0	0	0	0	0	0	1	1	6	8	4	0	2	0	0	0	22
Total	0	0	2	3	9	13	28	116	290	872	1,174	614	174	51	12	8	4	3,370
Percent	0.0%	0.0%	0.1%	0.1%	0.3%	0.4%	0.8%	3.4%	8.6%	25.9%	34.8%	18.2%	5.2%	1.5%	0.4%	0.2%	0.1%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	56.4	mph	Mean (Average) Speed	56.3	mph
85th Percentile	62.1	mph	10 mph Pace	51.2 - 61.2	mph
95th Percentile	66.6	mph	Percent in Pace	63.2	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



Wednesday, August 23, 2017 Southbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	1	1	2	2	1	3	0	0	0	0	10
1:00 AM	0	0	0	0	0	0	0	0	2	1	1	2	0	1	0	0	1	8
2:00 AM	0	0	0	0	0	0	0	1	1	2	2	3	1	2	0	0	0	12
3:00 AM	0	0	0	0	0	0	0	0	1	0	3	2	1	0	0	0	0	7
4:00 AM	0	0	0	0	0	0	1	1	2	3	7	1	1	2	0	0	0	18
5:00 AM	0	0	0	0	0	2	0	5	6	9	26	11	6	1	1	1	0	68
6:00 AM	0	0	0	0	0	0	1	8	11	38	31	20	8	3	0	0	0	120
7:00 AM	0	0	0	0	1	0	0	3	17	56	64	33	18	5	3	0	0	200
8:00 AM	0	0	0	0	1	0	4	10	34	68	74	45	9	2	0	0	0	247
9:00 AM	0	0	2	3	0	0	2	5	13	42	39	21	5	1	0	0	1	134
10:00 AM	0	0	0	0	0	0	2	10	14	24	33	34	10	4	0	0	0	131
11:00 AM	0	0	0	0	0	0	0	10	9	40	50	26	11	1	1	0	0	148
12:00 PM	0	0	0	1	2	1	0	9	17	49	62	31	16	3	1	0	0	192
1:00 PM	0	0	2	2	1	0	6	9	19	53	45	31	7	1	0	0	0	176
2:00 PM	0	0	0	0	0	1	4	17	43	80	88	32	11	1	1	0	0	278
3:00 PM	0	0	0	0	0	0	5	12	37	125	134	73	13	7	2	1	0	409
4:00 PM	0	0	0	0	0	0	0	2	26	102	163	82	27	3	1	0	0	406
5:00 PM	0	0	0	0	1	0	1	8	26	93	151	74	21	3	0	0	2	380
6:00 PM	0	0	0	0	1	2	2	6	16	51	118	71	25	5	0	1	0	298
7:00 PM	0	0	0	0	0	0	0	1	13	25	71	47	11	6	2	0	0	176
8:00 PM	0	0	1	0	1	1	0	5	24	43	42	24	5	2	0	1	0	149
9:00 PM	0	0	0	1	0	0	1	4	9	31	38	15	3	3	0	0	0	105
10:00 PM	0	0	0	0	0	0	0	0	1	17	18	13	5	4	1	0	0	59
11:00 PM	0	0	0	0	0	0	0	0	1	3	8	9	3	3	2	0	1	30
Total	0	0	5	7	8	7	29	127	343	957	1,270	701	220	63	15	4	5	3,761
Percent	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	0.8%	3.4%	9.1%	25.4%	33.8%	18.6%	5.8%	1.7%	0.4%	0.1%	0.1%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	56.4	mph	Mean (Average) Speed	56.4	mph
85th Percentile	62.5	mph	10 mph Pace	51.8 - 61.8	mph
95th Percentile	67.0	mph	Percent in Pace	61.9	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



Total Study Average Northbound

Speed Range (mph) Total Time 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 55 55 - 60 60 - 65 65 - 70 70 - 75 75 - 80 80 - 85 85 + Volume 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM 3,370 Total 1,174 Percent 0.0% 0.0% 0.1% 0.1% 0.3% 0.4% 0.8% 3.4% 8.6% 25.9% 34.8% 18.2% 5.2% 1.5% 0.4% 0.2% 0.1%

Total Study Percentile Spe	ed Summa	ry	Total Study Spee	d Statistics	
50th Percentile (Median)	56.4	mph	Mean (Average) Speed	56.3	mph
85th Percentile	62.1	mph	10 mph Pace	51.2 - 61.2	mph
95th Percentile	66.6	mph	Percent in Pace	63.2	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 02



Total Study Average

Southbound Speed Range (mph) Total Time 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 55 55 - 60 60 - 65 65 - 70 70 - 75 75 - 80 80 - 85 85 + Volume 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM 3,761 Total 1,270 Percent 0.0% 0.0% 0.1% 0.2% 0.2% 0.2% 0.8% 3.4% 9.1% 25.4% 33.8% 18.6% 5.8% 1.7% 0.4% 0.1% 0.1%

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
50th Percentile (Median)	56.4	mph	Mean (Average) Speed	56.4	mph
85th Percentile	62.5	mph	10 mph Pace	51.8 - 61.8	mph
95th Percentile	67.0	mph	Percent in Pace	61.9	%



Location: Fairview Rd between Rosa Morada and Rallon Rd Date Range: 8/23/2017 - 8/29/2017

	w	ednesd	lay	1	Thursda	y		Friday	,	:	Saturda	ıy		Sunday	<u> </u>		Monda	у		Tuesda	у			
	8	3/23/201	7	8	3/24/201	7		8/25/201	17	8	3/26/201	7	8	3/27/201	7	8	3/28/201	7	8	8/29/201	7	Mid-V	/eek A	verage
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	9	10	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	10	19
1:00 AM	11	8	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	8	19
2:00 AM	7	12	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	12	19
3:00 AM	26	7	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	7	33
4:00 AM	85	18	103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	85	18	103
5:00 AM	193	68	261	_	_	-	-	_	-	-	-	-	-	-	-	_	-	-	-	-	-	193	68	261
6:00 AM	214	120	334	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	214	120	334
7:00 AM	405	200	605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	405	200	605
8:00 AM	246	247	493	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	246	247	493
9:00 AM	178	134	312	_	_	-	-	_	-	-	-	-	-	-	-	_	-	-	-	-	-	178	134	312
10:00 AM	138	131	269	_	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	138	131	269
11:00 AM	166	148	314	_	_	-	-	_	-	-	-	-	-	-	-	_	-	-	-	-	-	166	148	314
12:00 PM	155	192	347	_	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	192	347
1:00 PM	185	176	361	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	185	176	361
2:00 PM	207	278	485	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207	278	485
3:00 PM	228	409	637	_	_	-	-	_	-	-	-	-	-	-	-	_	-	-	-	-	-	228	409	637
4:00 PM	195	406	601	_	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	406	601
5:00 PM	217	380	597	_	_	-	-	_	-	-	-	-	-	-	-	_	-	-	-	-	-	217	380	597
6:00 PM	151	298	449	_	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	151	298	449
7:00 PM	142	176	318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	176	318
8:00 PM	108	149	257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108	149	257
9:00 PM	55	105	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	105	160
10:00 PM	27	59	86	_	-	_	-	_	_	_	-	_	-	-	_	_	-	_	_	-	_	27	59	86
11:00 PM	22	30	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	30	52
Total	3,370 47%	3,761 53%	7,131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,370 47%	3,761 53%	7,131

^{1.} Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary



Location: Fairview Rd between Hwy 156 and Ludis Ln

Count Direction: Northbound / Southbound

Date Range: 8/23/2017 to 8/23/2017

						FHWA Ve	hicle Clas	sification						Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
						Study	Total							
Northbound	25	2,261	831	3	353	27	0	8	113	4	33	1	9	3,668
Percent	0.7%	61.6%	22.7%	0.1%	9.6%	0.7%	0.0%	0.2%	3.1%	0.1%	0.9%	0.0%	0.2%	100%
Southbound	15	1,987	727	0	380	15	0	7	117	19	28	6	13	3,314
Percent	0.5%	60.0%	21.9%	0.0%	11.5%	0.5%	0.0%	0.2%	3.5%	0.6%	0.8%	0.2%	0.4%	100%
Total	40	4,248	1,558	3	733	42	0	15	230	23	61	7	22	6,982
Percent	0.6%	60.8%	22.3%	0.0%	10.5%	0.6%	0.0%	0.2%	3.3%	0.3%	0.9%	0.1%	0.3%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03



Wednesday, August 23, 2017 Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	10	2	0	0	0	0	0	2	0	1	0	0	15
1:00 AM	0	10	2	0	0	0	0	0	4	1	0	0	0	17
2:00 AM	0	11	3	0	1	0	0	0	1	1	0	0	0	17
3:00 AM	0	7	6	0	0	0	0	0	8	0	0	0	0	21
4:00 AM	0	13	6	0	1	0	0	0	3	1	0	0	0	24
5:00 AM	0	26	8	0	3	0	0	0	0	0	0	0	0	37
6:00 AM	1	34	13	0	16	0	0	0	4	0	0	0	0	68
7:00 AM	0	61	27	0	15	0	0	1	5	2	3	1	0	115
8:00 AM	0	47	18	0	20	1	0	1	7	2	4	1	2	103
9:00 AM	0	36	27	0	15	0	0	1	10	0	3	0	1	93
10:00 AM	0	59	30	0	21	2	0	0	10	1	1	0	0	124
11:00 AM	3	73	33	0	26	1	0	0	6	1	1	0	2	146
12:00 PM	0	76	34	0	28	0	0	0	9	0	3	2	1	153
1:00 PM	0	100	46	0	29	0	0	0	6	0	3	0	0	184
2:00 PM	1	130	55	0	20	0	0	1	6	0	1	1	5	220
3:00 PM	1	194	70	0	32	0	0	0	7	2	3	0	0	309
4:00 PM	0	272	88	0	40	2	0	1	7	0	3	0	0	413
5:00 PM	2	248	92	0	35	4	0	1	2	1	0	0	0	385
6:00 PM	4	214	63	0	34	2	0	1	7	3	0	0	0	328
7:00 PM	0	107	28	0	17	0	0	0	1	3	0	0	1	157
8:00 PM	1	102	39	0	15	2	0	0	7	0	0	0	1	167
9:00 PM	1	74	19	0	7	1	0	0	2	0	2	1	0	107
10:00 PM	1	44	15	0	3	0	0	0	1	0	0	0	0	64
11:00 PM	0	39	3	0	2	0	0	0	2	1	0	0	0	47
Total	15	1,987	727	0	380	15	0	7	117	19	28	6	13	3,314
Percent	0.5%	60.0%	21.9%	0.0%	11.5%	0.5%	0.0%	0.2%	3.5%	0.6%	0.8%	0.2%	0.4%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03



Total Study Average Northbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	3	3	0	0	0	0	0	3	0	0	0	1	10
1:00 AM	0	14	3	0	1	0	0	0	1	0	0	0	0	19
2:00 AM	0	10	1	0	1	0	0	0	3	0	0	0	1	16
3:00 AM	0	32	5	0	3	0	0	0	2	0	0	0	0	42
4:00 AM	3	129	55	0	22	1	0	0	1	0	1	0	0	212
5:00 AM	4	390	150	0	44	1	0	0	5	0	0	1	3	598
6:00 AM	6	342	112	0	49	3	0	0	8	1	4	0	1	526
7:00 AM	2	172	75	0	36	1	0	2	11	0	4	0	0	303
8:00 AM	3	162	56	1	25	1	0	1	10	0	5	0	0	264
9:00 AM	0	91	38	0	19	1	0	0	6	0	1	0	0	156
10:00 AM	1	92	31	0	19	3	0	0	5	0	2	0	0	153
11:00 AM	1	109	53	0	23	3	0	1	5	0	4	0	0	199
12:00 PM	0	92	41	0	14	1	0	1	12	0	2	0	0	163
1:00 PM	0	71	23	0	14	1	0	0	7	1	5	0	1	123
2:00 PM	1	81	29	1	13	2	0	1	10	0	2	0	1	141
3:00 PM	0	87	25	0	17	3	0	1	8	0	0	0	0	141
4:00 PM	1	86	35	0	15	0	0	1	5	0	1	0	0	144
5:00 PM	2	88	29	0	12	0	0	0	0	2	1	0	0	134
6:00 PM	1	73	23	1	12	1	0	0	2	0	0	0	1	114
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	35	14	0	3	1	0	0	1	0	0	0	0	54
9:00 PM	0	24	10	0	1	1	0	0	5	0	0	0	0	41
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	11	3	0	2	3	0	0	1	0	1	0	0	21
Total	25	2,194	814	3	345	27	0	8	111	4	33	1	9	3,574
Percent	0.7%	61.4%	22.8%	0.1%	9.7%	0.8%	0.0%	0.2%	3.1%	0.1%	0.9%	0.0%	0.3%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03



Total Study Average Southbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	10	2	0	0	0	0	0	2	0	1	0	0	15
1:00 AM	0	10	2	0	0	0	0	0	4	1	0	0	0	17
2:00 AM	0	11	3	0	1	0	0	0	1	1	0	0	0	17
3:00 AM	0	7	6	0	0	0	0	0	8	0	0	0	0	21
4:00 AM	0	13	6	0	1	0	0	0	3	1	0	0	0	24
5:00 AM	0	26	8	0	3	0	0	0	0	0	0	0	0	37
6:00 AM	1	34	13	0	16	0	0	0	4	0	0	0	0	68
7:00 AM	0	61	27	0	15	0	0	1	5	2	3	1	0	115
8:00 AM	0	47	18	0	20	1	0	1	7	2	4	1	2	103
9:00 AM	0	36	27	0	15	0	0	1	10	0	3	0	1	93
10:00 AM	0	59	30	0	21	2	0	0	10	1	1	0	0	124
11:00 AM	3	73	33	0	26	1	0	0	6	1	1	0	2	146
12:00 PM	0	76	34	0	28	0	0	0	9	0	3	2	1	153
1:00 PM	0	100	46	0	29	0	0	0	6	0	3	0	0	184
2:00 PM	1	130	55	0	20	0	0	1	6	0	1	1	5	220
3:00 PM	1	194	70	0	32	0	0	0	7	2	3	0	0	309
4:00 PM	0	272	88	0	40	2	0	1	7	0	3	0	0	413
5:00 PM	2	248	92	0	35	4	0	1	2	1	0	0	0	385
6:00 PM	4	214	63	0	34	2	0	1	7	3	0	0	0	328
7:00 PM	0	107	28	0	17	0	0	0	1	3	0	0	1	157
8:00 PM	1	102	39	0	15	2	0	0	7	0	0	0	1	167
9:00 PM	1	74	19	0	7	1	0	0	2	0	2	1	0	107
10:00 PM	1	44	15	0	3	0	0	0	1	0	0	0	0	64
11:00 PM	0	39	3	0	2	0	0	0	2	1	0	0	0	47
Total	15	1,987	727	0	380	15	0	7	117	19	28	6	13	3,314
Percent	0.5%	60.0%	21.9%	0.0%	11.5%	0.5%	0.0%	0.2%	3.5%	0.6%	0.8%	0.2%	0.4%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03



3-Day (Tuesday - Thursday) Average Northbound

						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	3	3	0	0	0	0	0	3	0	0	0	1	10
1:00 AM	0	14	3	0	1	0	0	0	1	0	0	0	0	19
2:00 AM	0	10	1	0	1	0	0	0	3	0	0	0	1	16
3:00 AM	0	32	5	0	3	0	0	0	2	0	0	0	0	42
4:00 AM	3	129	55	0	22	1	0	0	1	0	1	0	0	212
5:00 AM	4	390	150	0	44	1	0	0	5	0	0	1	3	598
6:00 AM	6	342	112	0	49	3	0	0	8	1	4	0	1	526
7:00 AM	2	172	75	0	36	1	0	2	11	0	4	0	0	303
8:00 AM	3	162	56	1	25	1	0	1	10	0	5	0	0	264
9:00 AM	0	91	38	0	19	1	0	0	6	0	1	0	0	156
10:00 AM	1	92	31	0	19	3	0	0	5	0	2	0	0	153
11:00 AM	1	109	53	0	23	3	0	1	5	0	4	0	0	199
12:00 PM	0	92	41	0	14	1	0	1	12	0	2	0	0	163
1:00 PM	0	71	23	0	14	1	0	0	7	1	5	0	1	123
2:00 PM	1	81	29	1	13	2	0	1	10	0	2	0	1	141
3:00 PM	0	87	25	0	17	3	0	1	8	0	0	0	0	141
4:00 PM	1	86	35	0	15	0	0	1	5	0	1	0	0	144
5:00 PM	2	88	29	0	12	0	0	0	0	2	1	0	0	134
6:00 PM	1	73	23	1	12	1	0	0	2	0	0	0	1	114
7:00 PM	0	52	15	0	4	0	0	0	2	0	0	0	0	73
8:00 PM	0	35	14	0	3	1	0	0	1	0	0	0	0	54
9:00 PM	0	24	10	0	1	1	0	0	5	0	0	0	0	41
10:00 PM	0	15	2	0	4	0	0	0	0	0	0	0	0	21
11:00 PM	0	11	3	0	2	3	0	0	1	0	1	0	0	21
Total	25	2,261	831	3	353	27	0	8	113	4	33	1	9	3,668
Percent	0.7%	61.6%	22.7%	0.1%	9.6%	0.7%	0.0%	0.2%	3.1%	0.1%	0.9%	0.0%	0.2%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03



3-Day (Tuesday - Thursday) Average Southbound

						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	10	2	0	0	0	0	0	2	0	1	0	0	15
1:00 AM	0	10	2	0	0	0	0	0	4	1	0	0	0	17
2:00 AM	0	11	3	0	1	0	0	0	1	1	0	0	0	17
3:00 AM	0	7	6	0	0	0	0	0	8	0	0	0	0	21
4:00 AM	0	13	6	0	1	0	0	0	3	1	0	0	0	24
5:00 AM	0	26	8	0	3	0	0	0	0	0	0	0	0	37
6:00 AM	1	34	13	0	16	0	0	0	4	0	0	0	0	68
7:00 AM	0	61	27	0	15	0	0	1	5	2	3	1	0	115
8:00 AM	0	47	18	0	20	1	0	1	7	2	4	1	2	103
9:00 AM	0	36	27	0	15	0	0	1	10	0	3	0	1	93
10:00 AM	0	59	30	0	21	2	0	0	10	1	1	0	0	124
11:00 AM	3	73	33	0	26	1	0	0	6	1	1	0	2	146
12:00 PM	0	76	34	0	28	0	0	0	9	0	3	2	1	153
1:00 PM	0	100	46	0	29	0	0	0	6	0	3	0	0	184
2:00 PM	1	130	55	0	20	0	0	1	6	0	1	1	5	220
3:00 PM	1	194	70	0	32	0	0	0	7	2	3	0	0	309
4:00 PM	0	272	88	0	40	2	0	1	7	0	3	0	0	413
5:00 PM	2	248	92	0	35	4	0	1	2	1	0	0	0	385
6:00 PM	4	214	63	0	34	2	0	1	7	3	0	0	0	328
7:00 PM	0	107	28	0	17	0	0	0	1	3	0	0	1	157
8:00 PM	1	102	39	0	15	2	0	0	7	0	0	0	1	167
9:00 PM	1	74	19	0	7	1	0	0	2	0	2	1	0	107
10:00 PM	1	44	15	0	3	0	0	0	1	0	0	0	0	64
11:00 PM	0	39	3	0	2	0	0	0	2	1	0	0	0	47
Total	15	1,987	727	0	380	15	0	7	117	19	28	6	13	3,314
Percent	0.5%	60.0%	21.9%	0.0%	11.5%	0.5%	0.0%	0.2%	3.5%	0.6%	0.8%	0.2%	0.4%	

Vehicle Speed Report Summary



Location: Fairview Rd between Hwy 156 and Ludis Ln

Count Direction: Northbound / Southbound

Date Range: 8/23/2017 to 8/23/2017

								Speed	d Range (mph)								Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
								Stud	y Total									
Northbound	2	8	33	46	124	295	573	1,110	1,016	362	73	18	6	2	0	0	0	3,668
Percent	0.1%	0.2%	0.9%	1.3%	3.4%	8.0%	15.6%	30.3%	27.7%	9.9%	2.0%	0.5%	0.2%	0.1%	0.0%	0.0%	0.0%	100%
Southbound	1	2	12	38	129	455	858	1,010	555	190	43	19	0	2	0	0	0	3,314
Percent	0.0%	0.1%	0.4%	1.1%	3.9%	13.7%	25.9%	30.5%	16.7%	5.7%	1.3%	0.6%	0.0%	0.1%	0.0%	0.0%	0.0%	100%
Total	3	10	45	84	253	750	1,431	2,120	1,571	552	116	37	6	4	0	0	0	6,982
Percent	0.0%	0.1%	0.6%	1.2%	3.6%	10.7%	20.5%	30.4%	22.5%	7.9%	1.7%	0.5%	0.1%	0.1%	0.0%	0.0%	0.0%	100%

Total Study Percentile Spee	ed Summa	ry	Total Study Spee	d Statistics	
Northbound			Northbound		
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	42.7	mph
85th Percentile	49.2	mph	10 mph Pace	38.9 - 48.9	mph
95th Percentile	52.9	mph	Percent in Pace	59.1	%
Southbound			Southbound		
50th Percentile (Median)	40.5	mph	Mean (Average) Speed	40.6	mph
85th Percentile	47.2	mph	10 mph Pace	35.8 - 45.8	mph
95th Percentile	51.6	mph	Percent in Pace	57.0	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03



Wednesday, August 23, 2017

Northbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	2	2	0	1	3	1	1	0	0	0	0	0	0	10
1:00 AM	0	0	0	0	0	4	2	8	1	3	1	0	0	0	0	0	0	19
2:00 AM	0	0	0	1	2	2	2	2	6	1	0	0	0	0	0	0	0	16
3:00 AM	0	1	0	0	0	0	4	9	13	8	5	1	1	0	0	0	0	42
4:00 AM	0	0	0	0	1	2	4	52	85	53	11	4	0	0	0	0	0	212
5:00 AM	0	0	2	0	9	23	76	199	200	69	16	2	2	0	0	0	0	598
6:00 AM	0	0	10	10	10	41	84	145	151	56	12	7	0	0	0	0	0	526
7:00 AM	0	0	0	1	13	21	28	93	101	36	7	1	1	1	0	0	0	303
8:00 AM	0	1	0	1	7	25	50	86	67	24	3	0	0	0	0	0	0	264
9:00 AM	0	0	0	0	5	7	26	61	47	9	0	1	0	0	0	0	0	156
10:00 AM	0	0	10	1	4	18	28	42	32	18	0	0	0	0	0	0	0	153
11:00 AM	0	0	4	12	9	31	38	51	41	10	1	0	1	1	0	0	0	199
12:00 PM	0	0	0	7	12	28	30	47	32	5	2	0	0	0	0	0	0	163
1:00 PM	0	0	0	0	9	16	17	34	35	10	1	1	0	0	0	0	0	123
2:00 PM	0	0	0	0	8	18	34	45	25	7	3	0	1	0	0	0	0	141
3:00 PM	0	0	7	8	2	6	28	53	30	6	1	0	0	0	0	0	0	141
4:00 PM	0	6	0	0	2	22	34	41	33	4	1	1	0	0	0	0	0	144
5:00 PM	2	0	0	0	11	11	35	43	21	11	0	0	0	0	0	0	0	134
6:00 PM	0	0	0	0	6	5	19	47	28	9	0	0	0	0	0	0	0	114
7:00 PM	0	0	0	0	4	7	15	16	21	8	2	0	0	0	0	0	0	73
8:00 PM	0	0	0	1	4	4	7	13	16	7	2	0	0	0	0	0	0	54
9:00 PM	0	0	0	4	3	0	5	14	11	1	3	0	0	0	0	0	0	41
10:00 PM	0	0	0	0	0	0	3	3	11	4	0	0	0	0	0	0	0	21
11:00 PM	0	0	0	0	1	2	4	5	6	2	1	0	0	0	0	0	0	21
Total	2	8	33	46	124	295	573	1,110	1,016	362	73	18	6	2	0	0	0	3,668
Percent	0.1%	0.2%	0.9%	1.3%	3.4%	8.0%	15.6%	30.3%	27.7%	9.9%	2.0%	0.5%	0.2%	0.1%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	42.7	mph
85th Percentile	49.2	mph	10 mph Pace	38.9 - 48.9	mph
95th Percentile	52.9	mph	Percent in Pace	59.1	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03

DATA SOLUTIONS

Wednesday, August 23, 2017 Southbound

Speed Range (mph) Total 70 - 75 Time 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 55 55 - 60 60 - 65 65 - 70 75 - 80 80 - 85 85 + Volume 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM 3,314 Total 1,010 Percent 0.0% 0.1% 0.4% 1.1% 3.9% 13.7% 25.9% 30.5% 16.7% 5.7% 1.3% 0.6% 0.0% 0.1% 0.0% 0.0% 0.0%

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	40.5	mph	Mean (Average) Speed	40.6	mph
85th Percentile	47.2	mph	10 mph Pace	35.8 - 45.8	mph
95th Percentile	51.6	mph	Percent in Pace	57	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03

DATA SOLUTIONS

Total Study Average Northbound

								Spee	d Range ((mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	2	2	0	1	3	1	1	0	0	0	0	0	0	10
1:00 AM	0	0	0	0	0	4	2	8	1	3	1	0	0	0	0	0	0	19
2:00 AM	0	0	0	1	2	2	2	2	6	1	0	0	0	0	0	0	0	16
3:00 AM	0	1	0	0	0	0	4	9	13	8	5	1	1	0	0	0	0	42
4:00 AM	0	0	0	0	1	2	4	52	85	53	11	4	0	0	0	0	0	212
5:00 AM	0	0	2	0	9	23	76	199	200	69	16	2	2	0	0	0	0	598
6:00 AM	0	0	10	10	10	41	84	145	151	56	12	7	0	0	0	0	0	526
7:00 AM	0	0	0	1	13	21	28	93	101	36	7	1	1	1	0	0	0	303
8:00 AM	0	1	0	1	7	25	50	86	67	24	3	0	0	0	0	0	0	264
9:00 AM	0	0	0	0	5	7	26	61	47	9	0	1	0	0	0	0	0	156
10:00 AM	0	0	10	1	4	18	28	42	32	18	0	0	0	0	0	0	0	153
11:00 AM	0	0	4	12	9	31	38	51	41	10	1	0	1	1	0	0	0	199
12:00 PM	0	0	0	7	12	28	30	47	32	5	2	0	0	0	0	0	0	163
1:00 PM	0	0	0	0	9	16	17	34	35	10	1	1	0	0	0	0	0	123
2:00 PM	0	0	0	0	8	18	34	45	25	7	3	0	1	0	0	0	0	141
3:00 PM	0	0	7	8	2	6	28	53	30	6	1	0	0	0	0	0	0	141
4:00 PM	0	6	0	0	2	22	34	41	33	4	1	1	0	0	0	0	0	144
5:00 PM	2	0	0	0	11	11	35	43	21	11	0	0	0	0	0	0	0	134
6:00 PM	0	0	0	0	6	5	19	47	28	9	0	0	0	0	0	0	0	114
7:00 PM	0	0	0	0	4	7	15	16	21	8	2	0	0	0	0	0	0	73
8:00 PM	0	0	0	1	4	4	7	13	16	7	2	0	0	0	0	0	0	54
9:00 PM	0	0	0	4	3	0	5	14	11	1	3	0	0	0	0	0	0	41
10:00 PM	0	0	0	0	0	0	3	3	11	4	0	0	0	0	0	0	0	21
11:00 PM	0	0	0	0	1	2	4	5	6	2	1	0	0	0	0	0	0	21
Total	2	8	33	46	124	295	573	1,110	1,016	362	73	18	6	2	0	0	0	3,668
Percent	0.1%	0.2%	0.9%	1.3%	3.4%	8.0%	15.6%	30.3%	27.7%	9.9%	2.0%	0.5%	0.2%	0.1%	0.0%	0.0%	0.0%	

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	42.7	mph
85th Percentile	49.2	mph	10 mph Pace	38.9 - 48.9	mph
95th Percentile	52.9	mph	Percent in Pace	59.1	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 03



Total Study Average

Southbound

Time								Spee	d Range ((mph)								Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	1	4	3	4	2	1	0	0	0	0	0	0	0	15
1:00 AM	0	0	0	0	1	4	6	2	2	2	0	0	0	0	0	0	0	17
2:00 AM	0	0	0	0	0	2	3	6	4	0	1	1	0	0	0	0	0	17
3:00 AM	0	0	0	0	6	3	4	5	2	1	0	0	0	0	0	0	0	21
4:00 AM	0	0	0	0	1	2	9	7	3	1	0	1	0	0	0	0	0	24
5:00 AM	0	0	0	1	0	4	10	12	2	7	0	1	0	0	0	0	0	37
6:00 AM	0	0	0	0	4	10	16	16	16	2	4	0	0	0	0	0	0	68
7:00 AM	0	0	0	0	2	10	31	41	19	6	5	1	0	0	0	0	0	115
8:00 AM	0	0	0	4	5	14	30	30	12	6	1	1	0	0	0	0	0	103
9:00 AM	0	0	1	3	5	12	28	29	14	1	0	0	0	0	0	0	0	93
10:00 AM	0	0	2	2	5	19	41	22	24	9	0	0	0	0	0	0	0	124
11:00 AM	0	0	1	0	3	18	47	47	24	6	0	0	0	0	0	0	0	146
12:00 PM	0	1	1	2	4	29	40	36	28	11	1	0	0	0	0	0	0	153
1:00 PM	0	0	0	1	12	22	49	62	31	6	1	0	0	0	0	0	0	184
2:00 PM	0	0	0	1	6	37	62	65	40	8	1	0	0	0	0	0	0	220
3:00 PM	0	0	2	6	13	62	69	90	40	18	6	3	0	0	0	0	0	309
4:00 PM	0	1	2	8	18	54	114	132	52	22	7	1	0	2	0	0	0	413
5:00 PM	1	0	1	3	5	49	109	126	73	16	1	1	0	0	0	0	0	385
6:00 PM	0	0	0	3	16	34	71	109	62	22	6	5	0	0	0	0	0	328
7:00 PM	0	0	0	0	1	8	24	63	38	15	5	3	0	0	0	0	0	157
8:00 PM	0	0	2	3	12	37	48	34	22	8	1	0	0	0	0	0	0	167
9:00 PM	0	0	0	1	5	8	24	35	24	8	2	0	0	0	0	0	0	107
10:00 PM	0	0	0	0	1	7	14	22	9	9	1	1	0	0	0	0	0	64
11:00 PM	0	0	0	0	3	6	6	15	12	5	0	0	0	0	0	0	0	47
Total	1	2	12	38	129	455	858	1,010	555	190	43	19	0	2	0	0	0	3,314
Percent	0.0%	0.1%	0.4%	1.1%	3.9%	13.7%	25.9%	30.5%	16.7%	5.7%	1.3%	0.6%	0.0%	0.1%	0.0%	0.0%	0.0%	

Total Study Percentile Spe	ed Summa	Total Study Speed Statistics							
50th Percentile (Median)	40.5	mph	Mean (Average) Speed	40.6	mph				
85th Percentile	47.2	mph	10 mph Pace	35.8 - 45.8	mph				
95th Percentile	51.6	mph	Percent in Pace	57.0	%				



Location: Fairview Rd between Hwy 156 and Ludis Ln Date Range: 8/23/2017 - 8/29/2017

	W	Wednesday 8/23/2017			Thursday			Friday			Saturday			Sunday			Monday			Tuesday				
					8/24/2017		8/25/2017			8/26/2017			8/27/2017			8/28/2017			8/29/2017			Mid-Week Average		
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	10	15	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	15	25
1:00 AM	19	17	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	17	36
2:00 AM	16	17	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	17	33
3:00 AM	42	21	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	21	63
4:00 AM	212	24	236	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	212	24	236
5:00 AM	598	37	635	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	598	37	635
6:00 AM	526	68	594	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	526	68	594
7:00 AM	303	115	418	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	303	115	418
8:00 AM	264	103	367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	264	103	367
9:00 AM	156	93	249	-	-	-	_	-	-	-	_	-	_	_	_	-	-	-	_	-	-	156	93	249
10:00 AM	153	124	277	-	-	-	-	-	-	-	_	-	-	_	-	-	-	-	_	-	-	153	124	277
11:00 AM	199	146	345	-	-	-	_	-	-	-	_	-	_	_	_	-	-	-	_	-	-	199	146	345
12:00 PM	163	153	316	-	-	-	-	-	-	-	_	-	-	_	-	-	-	-	_	-	-	163	153	316
1:00 PM	123	184	307	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	123	184	307
2:00 PM	141	220	361	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141	220	361
3:00 PM	141	309	450	_	_	-	-	_	-	-	_	_	_	_	-	_	-	_	_	_	_	141	309	450
4:00 PM	144	413	557	_	_	_	-	_	_	-	_	_	_	_	-	-	_	_	_	_	_	144	413	557
5:00 PM	134	385	519	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	-	134	385	519
6:00 PM	114	328	442	-	-	-	_	_	-	_	_	-	_	_	-	-	-	-	-	-	-	114	328	442
7:00 PM	73	157	230	_	-	_	-	_	_	-	_	-	-	_	-	-	-	_	_	_	-	73	157	230
8:00 PM	54	167	221	-	-	-	-	_	-	-	_	-	-	-	-	-	-	-	-	-	-	54	167	221
9:00 PM	41	107	148	_	-	_	-	_	_	_	_	_	-	_	_	_	-	_	_	_	_	41	107	148
10:00 PM	21	64	85	-	_		_	_		_	_		_		_	-	-	-	-			21	64	85
11:00 PM	21	47	68	_	-	_	-	-	_	-	_	_	-	_	_	_	-	_	_	_	_	21	47	68
Total	3,668	3,314	6,982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,668	3,314	
Percent	53%	47%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53%	47%	-

^{1.} Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary



Location: Shore Rd between Bolsa Rd and Frazier Lake Rd

Count Direction: Eastbound / Westbound

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04

						FHWA Ve	hicle Clas	sification						Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
						Study	Total							
Eastbound	5	767	484	1	405	14	0	9	126	37	44	12	20	1,924
Percent	0.3%	39.9%	25.2%	0.1%	21.0%	0.7%	0.0%	0.5%	6.5%	1.9%	2.3%	0.6%	1.0%	100%
Westbound	10	1,214	389	4	138	22	0	10	149	3	56	8	5	2,008
Percent	0.5%	60.5%	19.4%	0.2%	6.9%	1.1%	0.0%	0.5%	7.4%	0.1%	2.8%	0.4%	0.2%	100%
Total	15	1,981	873	5	543	36	0	19	275	40	100	20	25	3,932
Percent	0.4%	50.4%	22.2%	0.1%	13.8%	0.9%	0.0%	0.5%	7.0%	1.0%	2.5%	0.5%	0.6%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04



Wednesday, August 23, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	5	4	1	1	0	0	0	3	0	0	1	1	16
1:00 AM	0	9	3	0	2	0	0	0	2	0	0	0	0	16
2:00 AM	0	8	2	0	0	1	0	0	4	0	0	0	0	15
3:00 AM	0	23	2	0	2	2	0	0	4	0	0	0	0	33
4:00 AM	0	46	14	0	6	2	0	0	4	0	2	0	0	74
5:00 AM	1	100	22	0	5	2	0	0	8	0	5	3	0	146
6:00 AM	1	103	37	0	6	2	0	2	10	0	4	0	1	166
7:00 AM	2	53	22	0	7	0	0	2	9	0	7	2	0	104
8:00 AM	1	77	21	0	8	2	0	0	14	0	11	0	0	134
9:00 AM	0	35	20	0	12	0	0	0	10	0	1	0	0	78
10:00 AM	0	56	14	0	10	0	0	1	9	1	2	0	0	93
11:00 AM	1	63	30	0	6	0	0	0	12	1	7	0	1	121
12:00 PM	1	50	21	0	10	1	0	2	13	0	4	0	1	103
1:00 PM	0	58	23	0	7	0	0	0	9	0	1	0	0	98
2:00 PM	0	61	19	0	6	0	0	1	12	1	7	0	0	107
3:00 PM	1	75	17	1	10	0	0	1	5	0	2	0	1	113
4:00 PM	0	102	31	0	12	0	0	0	6	0	0	0	0	151
5:00 PM	1	96	20	0	8	0	0	0	1	0	2	0	0	128
6:00 PM	0	50	19	0	7	0	0	0	3	0	0	2	0	81
7:00 PM	0	45	18	0	7	1	0	1	1	0	0	0	0	73
8:00 PM	1	32	13	0	2	1	0	0	3	0	1	0	0	53
9:00 PM	0	36	8	0	2	4	0	0	5	0	0	0	0	55
10:00 PM	0	18	3	2	1	1	0	0	0	0	0	0	0	25
11:00 PM	0	13	6	0	1	3	0	0	2	0	0	0	0	25
Total	10	1,214	389	4	138	22	0	10	149	3	56	8	5	2,008
Percent	0.5%	60.5%	19.4%	0.2%	6.9%	1.1%	0.0%	0.5%	7.4%	0.1%	2.8%	0.4%	0.2%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04



Total Study Average Eastbound

						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	12	4	0	2	0	0	0	1	1	1	0	0	21
1:00 AM	0	8	5	0	0	1	0	0	3	1	0	0	0	18
2:00 AM	0	3	0	0	3	0	0	1	2	1	0	0	0	10
3:00 AM	0	1	2	1	5	0	0	0	7	1	0	0	0	17
4:00 AM	0	15	4	0	4	0	0	0	5	1	0	0	0	29
5:00 AM	0	29	20	0	13	0	0	0	2	1	0	0	2	67
6:00 AM	2	61	29	0	28	1	0	1	3	0	1	0	1	127
7:00 AM	1	78	43	0	29	1	0	1	4	4	3	0	2	166
8:00 AM	0	22	21	0	21	1	0	0	5	2	8	1	3	84
9:00 AM	0	28	26	0	19	0	0	1	12	1	4	1	0	92
10:00 AM	0	29	15	0	14	1	0	1	10	5	5	1	2	83
11:00 AM	0	24	19	0	26	0	0	0	9	4	0	1	2	85
12:00 PM	0	23	27	0	21	0	0	0	10	2	3	2	3	91
1:00 PM	1	37	28	0	26	2	0	0	5	2	5	1	1	108
2:00 PM	0	44	25	0	32	0	0	2	7	2	4	2	1	119
3:00 PM	1	52	33	0	32	2	0	1	5	4	3	0	0	133
4:00 PM	0	71	45	0	32	2	0	0	4	1	2	0	2	159
5:00 PM	0	61	34	0	23	1	0	0	3	1	0	0	0	123
6:00 PM	0	48	31	0	24	2	0	1	10	0	1	1	0	118
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	31	24	0	15	0	0	0	4	1	1	0	1	77
9:00 PM	0	21	13	0	9	0	0	0	4	0	3	1	0	51
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	9	7	0	2	0	0	0	3	1	0	0	0	22
Total	5	707	455	1	380	14	0	9	118	36	44	11	20	1,800
Percent	0.3%	39.3%	25.3%	0.1%	21.1%	0.8%	0.0%	0.5%	6.6%	2.0%	2.4%	0.6%	1.1%	

Note: Average only condsidered on days with 24-hours of data.

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04



Total Study Average Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	5	4	1	1	0	0	0	3	0	0	1	1	16
1:00 AM	0	9	3	0	2	0	0	0	2	0	0	0	0	16
2:00 AM	0	8	2	0	0	1	0	0	4	0	0	0	0	15
3:00 AM	0	23	2	0	2	2	0	0	4	0	0	0	0	33
4:00 AM	0	46	14	0	6	2	0	0	4	0	2	0	0	74
5:00 AM	1	100	22	0	5	2	0	0	8	0	5	3	0	146
6:00 AM	1	103	37	0	6	2	0	2	10	0	4	0	1	166
7:00 AM	2	53	22	0	7	0	0	2	9	0	7	2	0	104
8:00 AM	1	77	21	0	8	2	0	0	14	0	11	0	0	134
9:00 AM	0	35	20	0	12	0	0	0	10	0	1	0	0	78
10:00 AM	0	56	14	0	10	0	0	1	9	1	2	0	0	93
11:00 AM	1	63	30	0	6	0	0	0	12	1	7	0	1	121
12:00 PM	1	50	21	0	10	1	0	2	13	0	4	0	1	103
1:00 PM	0	58	23	0	7	0	0	0	9	0	1	0	0	98
2:00 PM	0	61	19	0	6	0	0	1	12	1	7	0	0	107
3:00 PM	1	75	17	1	10	0	0	1	5	0	2	0	1	113
4:00 PM	0	102	31	0	12	0	0	0	6	0	0	0	0	151
5:00 PM	1	96	20	0	8	0	0	0	1	0	2	0	0	128
6:00 PM	0	50	19	0	7	0	0	0	3	0	0	2	0	81
7:00 PM	0	45	18	0	7	1	0	1	1	0	0	0	0	73
8:00 PM	1	32	13	0	2	1	0	0	3	0	1	0	0	53
9:00 PM	0	36	8	0	2	4	0	0	5	0	0	0	0	55
10:00 PM	0	18	3	2	1	1	0	0	0	0	0	0	0	25
11:00 PM	0	13	6	0	1	3	0	0	2	0	0	0	0	25
Total	10	1,214	389	4	138	22	0	10	149	3	56	8	5	2,008
Percent	0.5%	60.5%	19.4%	0.2%	6.9%	1.1%	0.0%	0.5%	7.4%	0.1%	2.8%	0.4%	0.2%	

Note: Average only condsidered on days with 24-hours of data.

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04



3-Day (Tuesday - Thursday) Average Eastbound

						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	12	4	0	2	0	0	0	1	1	1	0	0	21
1:00 AM	0	8	5	0	0	1	0	0	3	1	0	0	0	18
2:00 AM	0	3	0	0	3	0	0	1	2	1	0	0	0	10
3:00 AM	0	1	2	1	5	0	0	0	7	1	0	0	0	17
4:00 AM	0	15	4	0	4	0	0	0	5	1	0	0	0	29
5:00 AM	0	29	20	0	13	0	0	0	2	1	0	0	2	67
6:00 AM	2	61	29	0	28	1	0	1	3	0	1	0	1	127
7:00 AM	1	78	43	0	29	1	0	1	4	4	3	0	2	166
8:00 AM	0	22	21	0	21	1	0	0	5	2	8	1	3	84
9:00 AM	0	28	26	0	19	0	0	1	12	1	4	1	0	92
10:00 AM	0	29	15	0	14	1	0	1	10	5	5	1	2	83
11:00 AM	0	24	19	0	26	0	0	0	9	4	0	1	2	85
12:00 PM	0	23	27	0	21	0	0	0	10	2	3	2	3	91
1:00 PM	1	37	28	0	26	2	0	0	5	2	5	1	1	108
2:00 PM	0	44	25	0	32	0	0	2	7	2	4	2	1	119
3:00 PM	1	52	33	0	32	2	0	1	5	4	3	0	0	133
4:00 PM	0	71	45	0	32	2	0	0	4	1	2	0	2	159
5:00 PM	0	61	34	0	23	1	0	0	3	1	0	0	0	123
6:00 PM	0	48	31	0	24	2	0	1	10	0	1	1	0	118
7:00 PM	0	39	19	0	18	0	0	0	5	1	0	1	0	83
8:00 PM	0	31	24	0	15	0	0	0	4	1	1	0	1	77
9:00 PM	0	21	13	0	9	0	0	0	4	0	3	1	0	51
10:00 PM	0	21	10	0	7	0	0	0	3	0	0	0	0	41
11:00 PM	0	9	7	0	2	0	0	0	3	1	0	0	0	22
Total	5	767	484	1	405	14	0	9	126	37	44	12	20	1,924
Percent	0.3%	39.9%	25.2%	0.1%	21.0%	0.7%	0.0%	0.5%	6.5%	1.9%	2.3%	0.6%	1.0%	

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04



3-Day (Tuesday - Thursday) Average Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	5	4	1	1	0	0	0	3	0	0	1	1	16
1:00 AM	0	9	3	0	2	0	0	0	2	0	0	0	0	16
2:00 AM	0	8	2	0	0	1	0	0	4	0	0	0	0	15
3:00 AM	0	23	2	0	2	2	0	0	4	0	0	0	0	33
4:00 AM	0	46	14	0	6	2	0	0	4	0	2	0	0	74
5:00 AM	1	100	22	0	5	2	0	0	8	0	5	3	0	146
6:00 AM	1	103	37	0	6	2	0	2	10	0	4	0	1	166
7:00 AM	2	53	22	0	7	0	0	2	9	0	7	2	0	104
8:00 AM	1	77	21	0	8	2	0	0	14	0	11	0	0	134
9:00 AM	0	35	20	0	12	0	0	0	10	0	1	0	0	78
10:00 AM	0	56	14	0	10	0	0	1	9	1	2	0	0	93
11:00 AM	1	63	30	0	6	0	0	0	12	1	7	0	1	121
12:00 PM	1	50	21	0	10	1	0	2	13	0	4	0	1	103
1:00 PM	0	58	23	0	7	0	0	0	9	0	1	0	0	98
2:00 PM	0	61	19	0	6	0	0	1	12	1	7	0	0	107
3:00 PM	1	75	17	1	10	0	0	1	5	0	2	0	1	113
4:00 PM	0	102	31	0	12	0	0	0	6	0	0	0	0	151
5:00 PM	1	96	20	0	8	0	0	0	1	0	2	0	0	128
6:00 PM	0	50	19	0	7	0	0	0	3	0	0	2	0	81
7:00 PM	0	45	18	0	7	1	0	1	1	0	0	0	0	73
8:00 PM	1	32	13	0	2	1	0	0	3	0	1	0	0	53
9:00 PM	0	36	8	0	2	4	0	0	5	0	0	0	0	55
10:00 PM	0	18	3	2	1	1	0	0	0	0	0	0	0	25
11:00 PM	0	13	6	0	1	3	0	0	2	0	0	0	0	25
Total	10	1,214	389	4	138	22	0	10	149	3	56	8	5	2,008
Percent	0.5%	60.5%	19.4%	0.2%	6.9%	1.1%	0.0%	0.5%	7.4%	0.1%	2.8%	0.4%	0.2%	

Vehicle Speed Report Summary



Location: Shore Rd between Bolsa Rd and Frazier Lake Rd

Count Direction: Eastbound / Westbound

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04

								Speed	d Range ((mph)								Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
								Stud	y Total									
Eastbound	0	0	0	1	9	27	57	108	183	313	401	389	235	127	48	17	9	1,924
Percent	0.0%	0.0%	0.0%	0.1%	0.5%	1.4%	3.0%	5.6%	9.5%	16.3%	20.8%	20.2%	12.2%	6.6%	2.5%	0.9%	0.5%	100%
Westbound	0	0	2	6	17	38	83	209	462	626	401	119	28	13	0	2	2	2,008
Percent	0.0%	0.0%	0.1%	0.3%	0.8%	1.9%	4.1%	10.4%	23.0%	31.2%	20.0%	5.9%	1.4%	0.6%	0.0%	0.1%	0.1%	100%
Total	0	0	2	7	26	65	140	317	645	939	802	508	263	140	48	19	11	3,932
Percent	0.0%	0.0%	0.1%	0.2%	0.7%	1.7%	3.6%	8.1%	16.4%	23.9%	20.4%	12.9%	6.7%	3.6%	1.2%	0.5%	0.3%	100%

Total Study Percentile Spe	ed Summa	ry	Total Study Spee	d Statistics	
Eastbound			Eastbound		
50th Percentile (Median)	58.4	mph	Mean (Average) Speed	57.9	mph
85th Percentile	67.6	mph	10 mph Pace	53.4 - 63.4	mph
95th Percentile	73.6	mph	Percent in Pace	41.3	%
Westbound			Westbound		
50th Percentile (Median)	51.4	mph	Mean (Average) Speed	50.9	mph
85th Percentile	57.6	mph	10 mph Pace	47.2 - 57.2	mph
95th Percentile	61.7	mph	Percent in Pace	56.0	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04

DATA SOLUTIONS

Wednesday, August 23, 2017

Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	1	0	3	5	5	3	3	1	0	0	21
1:00 AM	0	0	0	0	0	0	4	0	2	1	5	1	1	2	1	0	1	18
2:00 AM	0	0	0	0	0	0	0	2	0	2	2	1	1	0	1	1	0	10
3:00 AM	0	0	0	0	0	1	0	0	1	3	3	5	3	1	0	0	0	17
4:00 AM	0	0	0	0	0	0	0	1	1	10	7	6	2	1	0	1	0	29
5:00 AM	0	0	0	0	0	0	11	10	14	11	11	5	2	3	0	0	0	67
6:00 AM	0	0	0	0	0	0	1	13	30	37	25	14	3	2	2	0	0	127
7:00 AM	0	0	0	0	0	4	14	14	34	30	27	21	15	6	0	0	1	166
8:00 AM	0	0	0	0	0	0	3	6	5	17	21	19	8	2	1	2	0	84
9:00 AM	0	0	0	0	0	0	0	8	6	17	28	22	10	0	1	0	0	92
10:00 AM	0	0	0	0	2	0	1	6	9	17	25	14	8	1	0	0	0	83
11:00 AM	0	0	0	0	0	2	2	5	14	13	18	19	8	4	0	0	0	85
12:00 PM	0	0	0	0	0	0	2	6	8	12	21	17	16	7	2	0	0	91
1:00 PM	0	0	0	0	4	8	7	7	4	19	15	24	8	7	3	1	1	108
2:00 PM	0	0	0	0	2	7	2	1	3	12	26	22	24	12	7	1	0	119
3:00 PM	0	0	0	0	0	3	5	6	12	14	18	28	25	15	5	1	1	133
4:00 PM	0	0	0	0	0	0	0	5	9	27	24	40	31	12	7	4	0	159
5:00 PM	0	0	0	1	1	1	2	7	11	19	32	23	13	13	0	0	0	123
6:00 PM	0	0	0	0	0	0	1	4	6	14	25	27	16	17	6	1	1	118
7:00 PM	0	0	0	0	0	0	0	0	2	7	16	22	20	8	2	3	3	83
8:00 PM	0	0	0	0	0	0	0	1	5	6	21	28	6	6	3	0	1	77
9:00 PM	0	0	0	0	0	0	0	1	1	10	12	15	6	2	3	1	0	51
10:00 PM	0	0	0	0	0	0	1	3	4	10	9	6	3	2	3	0	0	41
11:00 PM	0	0	0	0	0	1	1	1	2	2	5	5	3	1	0	1	0	22
Total	0	0	0	1	9	27	57	108	183	313	401	389	235	127	48	17	9	1,924
Percent	0.0%	0.0%	0.0%	0.1%	0.5%	1.4%	3.0%	5.6%	9.5%	16.3%	20.8%	20.2%	12.2%	6.6%	2.5%	0.9%	0.5%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	58.4	mph	Mean (Average) Speed	57.9	mph
85th Percentile	67.6	mph	10 mph Pace	53.4 - 63.4	mph
95th Percentile	73.6	mph	Percent in Pace	41.3	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04

DATA SOLUTIONS

Wednesday, August 23, 2017

Westbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	1	1	2	2	0	2	2	4	1	0	1	0	0	0	16
1:00 AM	0	0	0	2	0	1	0	0	2	5	5	1	0	0	0	0	0	16
2:00 AM	0	0	1	0	0	0	0	1	0	3	6	0	1	1	0	1	1	15
3:00 AM	0	0	0	0	0	0	1	3	5	5	8	6	2	2	0	0	1	33
4:00 AM	0	0	0	0	0	1	0	2	2	20	23	21	2	3	0	0	0	74
5:00 AM	0	0	0	0	0	1	0	5	47	52	29	9	2	1	0	0	0	146
6:00 AM	0	0	0	0	0	5	3	15	38	62	37	4	1	1	0	0	0	166
7:00 AM	0	0	0	0	0	3	3	2	27	33	26	7	3	0	0	0	0	104
8:00 AM	0	0	0	0	2	2	4	6	19	55	34	9	2	1	0	0	0	134
9:00 AM	0	0	0	0	1	3	5	5	14	23	24	2	1	0	0	0	0	78
10:00 AM	0	0	0	0	0	5	0	6	13	28	28	12	1	0	0	0	0	93
11:00 AM	0	0	0	0	2	1	3	10	17	44	25	13	5	1	0	0	0	121
12:00 PM	0	0	0	0	2	3	4	11	24	26	25	5	3	0	0	0	0	103
1:00 PM	0	0	0	0	2	2	1	15	21	34	17	4	1	1	0	0	0	98
2:00 PM	0	0	0	0	1	1	3	10	22	45	20	5	0	0	0	0	0	107
3:00 PM	0	0	0	1	1	1	9	21	34	28	15	1	1	0	0	1	0	113
4:00 PM	0	0	0	1	3	3	12	34	44	31	20	2	1	0	0	0	0	151
5:00 PM	0	0	0	0	1	1	7	24	48	38	8	1	0	0	0	0	0	128
6:00 PM	0	0	0	0	0	0	7	8	26	28	7	5	0	0	0	0	0	81
7:00 PM	0	0	0	0	0	0	2	10	17	19	16	8	0	1	0	0	0	73
8:00 PM	0	0	0	0	1	1	4	7	13	18	9	0	0	0	0	0	0	53
9:00 PM	0	0	0	1	0	0	9	9	14	14	5	3	0	0	0	0	0	55
10:00 PM	0	0	0	0	0	1	2	2	3	9	8	0	0	0	0	0	0	25
11:00 PM	0	0	1	0	0	1	2	3	10	4	2	0	2	0	0	0	0	25
Total	0	0	2	6	17	38	83	209	462	626	401	119	28	13	0	2	2	2,008
Percent	0.0%	0.0%	0.1%	0.3%	0.8%	1.9%	4.1%	10.4%	23.0%	31.2%	20.0%	5.9%	1.4%	0.6%	0.0%	0.1%	0.1%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	51.4	mph	Mean (Average) Speed	50.9	mph
85th Percentile	57.6	mph	10 mph Pace	47.2 - 57.2	mph
95th Percentile	61.7	mph	Percent in Pace	56	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04

DATA SOLUTIONS

Total Study Average

Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	1	0	3	5	5	3	3	1	0	0	21
1:00 AM	0	0	0	0	0	0	4	0	2	1	5	1	1	2	1	0	1	18
2:00 AM	0	0	0	0	0	0	0	2	0	2	2	1	1	0	1	1	0	10
3:00 AM	0	0	0	0	0	1	0	0	1	3	3	5	3	1	0	0	0	17
4:00 AM	0	0	0	0	0	0	0	1	1	10	7	6	2	1	0	1	0	29
5:00 AM	0	0	0	0	0	0	11	10	14	11	11	5	2	3	0	0	0	67
6:00 AM	0	0	0	0	0	0	1	13	30	37	25	14	3	2	2	0	0	127
7:00 AM	0	0	0	0	0	4	14	14	34	30	27	21	15	6	0	0	1	166
8:00 AM	0	0	0	0	0	0	3	6	5	17	21	19	8	2	1	2	0	84
9:00 AM	0	0	0	0	0	0	0	8	6	17	28	22	10	0	1	0	0	92
10:00 AM	0	0	0	0	2	0	1	6	9	17	25	14	8	1	0	0	0	83
11:00 AM	0	0	0	0	0	2	2	5	14	13	18	19	8	4	0	0	0	85
12:00 PM	0	0	0	0	0	0	2	6	8	12	21	17	16	7	2	0	0	91
1:00 PM	0	0	0	0	4	8	7	7	4	19	15	24	8	7	3	1	1	108
2:00 PM	0	0	0	0	2	7	2	1	3	12	26	22	24	12	7	1	0	119
3:00 PM	0	0	0	0	0	3	5	6	12	14	18	28	25	15	5	1	1	133
4:00 PM	0	0	0	0	0	0	0	5	9	27	24	40	31	12	7	4	0	159
5:00 PM	0	0	0	1	1	1	2	7	11	19	32	23	13	13	0	0	0	123
6:00 PM	0	0	0	0	0	0	1	4	6	14	25	27	16	17	6	1	1	118
7:00 PM	0	0	0	0	0	0	0	0	2	7	16	22	20	8	2	3	3	83
8:00 PM	0	0	0	0	0	0	0	1	5	6	21	28	6	6	3	0	1	77
9:00 PM	0	0	0	0	0	0	0	1	1	10	12	15	6	2	3	1	0	51
10:00 PM	0	0	0	0	0	0	1	3	4	10	9	6	3	2	3	0	0	41
11:00 PM	0	0	0	0	0	1	1	1	2	2	5	5	3	1	0	1	0	22
Total	0	0	0	1	9	27	57	108	183	313	401	389	235	127	48	17	9	1,924
Percent	0.0%	0.0%	0.0%	0.1%	0.5%	1.4%	3.0%	5.6%	9.5%	16.3%	20.8%	20.2%	12.2%	6.6%	2.5%	0.9%	0.5%	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
50th Percentile (Median)	58.4	mph	Mean (Average) Speed	57.9	mph
85th Percentile	67.6	mph	10 mph Pace	53.4 - 63.4	mph
95th Percentile	73.6	mph	Percent in Pace	41.3	%

Date Range: 8/23/2017 to 8/23/2017

Site Code: 04



Total Study Average Westbound

Speed Range (mph) Total 70 - 75 75 - 80 Time 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 55 55 - 60 60 - 65 65 - 70 80 - 85 85 + Volume 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM 2,008 Total Percent 0.0% 0.0% 0.1% 0.3% 0.8% 1.9% 4.1% 10.4% 23.0% 31.2% 20.0% 5.9% 1.4% 0.6% 0.0% 0.1% 0.1%

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
50th Percentile (Median)	51.4	mph	Mean (Average) Speed	50.9	mph
85th Percentile	57.6	mph	10 mph Pace	47.2 - 57.2	mph
95th Percentile	61.7	mph	Percent in Pace	56.0	%



Location: Shore Rd between Bolsa Rd and Frazier Lake Rd Date Range: 8/23/2017 - 8/29/2017

Site Code: 04

	w	/ednesd	ay		Thursda	ıy		Friday			Saturda	у		Sunday	/		Monday	/		Tuesda	y			
		3/23/201	7	:	8/24/201	7		8/25/201	7	;	8/26/201	7		3/27/201	7	8	3/28/201	7	;	8/29/201	17	Mid-W	eek Av	/erage
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	ЕВ	WB	Total	ЕВ	WB	Total	EB	WB	Total	ЕВ	WB	Total
12:00 AM	21	16	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	16	37
1:00 AM	18	16	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	16	34
2:00 AM	10	15	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	15	25
3:00 AM	17	33	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	33	50
4:00 AM	29	74	103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	74	103
5:00 AM	67	146	213	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67	146	213
6:00 AM	127	166	293	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	127	166	293
7:00 AM	166	104	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166	104	270
8:00 AM	84	134	218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84	134	218
9:00 AM	92	78	170	-	_	-	-	-	-	-	-	-	_	_	-	_	_	-	-	_	-	92	78	170
10:00 AM	83	93	176	-	-	-	-	-	-	-	-	-	-	_	-	_	_	-	-	_	-	83	93	176
11:00 AM	85	121	206	-	_	-	-	-	-	-	-	-	_	_	-	_	_	-	-	_	-	85	121	206
12:00 PM	91	103	194	-	-	-	-	-	-	-	-	-	-	_	-	_	_	-	-	_	-	91	103	194
1:00 PM	108	98	206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108	98	206
2:00 PM	119	107	226	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	119	107	226
3:00 PM	133	113	246	_	_	-	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	133	113	246
4:00 PM	159	151	310	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	159	151	310
5:00 PM	123	128	251	_	_	-	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	123	128	251
6:00 PM	118	81	199	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	118	81	199
7:00 PM	83	73	156	_	_	-	_	_	_	_	_	-	_	_	_	_	_	-	_	-	_	83	73	156
8:00 PM	77	53	130	_	_	-	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	77	53	130
9:00 PM	51	55	106	-	_	-	_	_	_	_	_	_	-	-	_	-	-	-	_	-	_	51	55	106
10:00 PM	41	25	66	-			_	_		-	_		-	_		_	_		-	_		41	25	66
11:00 PM	22	25	47	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22	25	47
Total	1,924	2,008	3,932	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,924	2,008	
Percent	49%	51%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49%	51%	-

^{1.} Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary



Location: Waste Collection Center Driveway

Count Direction: Eastbound / Westbound

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01

						FHWA Ve	hicle Clas	sification						Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
						Study	Total							
Eastbound	275	967	655	22	226	198	0	0	67	11	1	0	10	2,432
Percent	11.3%	39.8%	26.9%	0.9%	9.3%	8.1%	0.0%	0.0%	2.8%	0.5%	0.0%	0.0%	0.4%	100%
Westbound	134	900	686	39	292	162	0	10	105	5	0	0	1	2,334
Percent	5.7%	38.6%	29.4%	1.7%	12.5%	6.9%	0.0%	0.4%	4.5%	0.2%	0.0%	0.0%	0.0%	100%
Total	409	1,867	1,341	61	518	360	0	10	172	16	1	0	11	4,766
Percent	8.6%	39.2%	28.1%	1.3%	10.9%	7.6%	0.0%	0.2%	3.6%	0.3%	0.0%	0.0%	0.2%	100%

Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Saturday, August 19, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	2	2	0	0	0	2	0	0	3	0	0	0	0	9
8:00 AM	1	2	0	2	0	0	0	0	0	0	0	0	0	5
9:00 AM	3	36	19	0	14	4	0	0	1	0	0	0	0	77
10:00 AM	0	40	30	0	9	1	0	0	2	0	0	0	0	82
11:00 AM	0	33	29	1	11	0	0	0	2	0	0	0	0	76
12:00 PM	1	13	17	0	7	2	0	1	3	0	0	0	0	44
1:00 PM	4	18	19	1	9	2	0	1	4	0	0	0	0	58
2:00 PM	0	12	28	0	7	1	0	0	0	0	0	0	0	48
3:00 PM	0	5	12	0	2	0	0	0	0	0	0	0	0	19
4:00 PM	0	3	0	0	1	1	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	11	164	154	4	60	13	0	2	15	0	0	0	0	423
Percent	2.6%	38.8%	36.4%	0.9%	14.2%	3.1%	0.0%	0.5%	3.5%	0.0%	0.0%	0.0%	0.0%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Sunday, August 20, 2017 Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	2	7	1	0	1	2	0	0	0	0	0	0	0	13
7:00 AM	1	2	0	0	0	0	0	0	3	0	0	0	1	7
8:00 AM	1	8	3	1	1	1	0	0	0	0	0	0	0	15
9:00 AM	4	26	33	0	9	0	0	0	2	0	0	0	0	74
10:00 AM	4	21	16	0	2	4	0	0	1	1	0	0	0	49
11:00 AM	6	28	26	0	4	1	0	0	1	0	0	0	0	66
12:00 PM	7	25	26	0	8	1	0	0	0	0	0	0	0	67
1:00 PM	5	21	22	0	4	0	0	0	1	0	0	0	0	53
2:00 PM	2	20	20	0	2	1	0	0	0	0	0	0	0	45
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	32	158	147	1	31	10	0	0	8	1	0	0	1	389
Percent	8.2%	40.6%	37.8%	0.3%	8.0%	2.6%	0.0%	0.0%	2.1%	0.3%	0.0%	0.0%	0.3%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Sunday, August 20, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	2	0	0	0	0	0	0	2	0	0	0	0	4
8:00 AM	4	3	0	1	0	3	0	0	3	0	0	0	0	14
9:00 AM	0	21	16	0	5	0	0	1	1	0	0	0	0	44
10:00 AM	2	16	26	0	16	3	0	0	1	0	0	0	0	64
11:00 AM	6	20	23	0	10	3	0	1	1	0	0	0	0	64
12:00 PM	2	17	27	0	8	2	0	1	1	0	0	0	0	58
1:00 PM	0	20	23	0	14	0	0	1	0	0	0	0	0	58
2:00 PM	2	7	31	0	9	3	0	1	0	0	0	0	0	53
3:00 PM	1	1	10	0	3	0	0	0	0	0	0	0	0	15
4:00 PM	0	2	0	0	1	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	17	109	156	1	66	14	0	5	9	0	0	0	0	377
Percent	4.5%	28.9%	41.4%	0.3%	17.5%	3.7%	0.0%	1.3%	2.4%	0.0%	0.0%	0.0%	0.0%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Monday, August 21, 2017 Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	0	22	1	0	1	1	0	0	0	0	0	0	0	25
7:00 AM	3	0	3	0	0	2	0	0	2	1	0	0	1	12
8:00 AM	4	9	12	1	2	1	0	0	0	2	0	0	0	31
9:00 AM	8	11	14	0	3	4	0	0	1	0	0	0	0	41
10:00 AM	8	11	9	1	6	4	0	0	2	0	0	0	0	41
11:00 AM	4	14	6	0	3	5	0	0	1	1	0	0	0	34
12:00 PM	2	12	6	0	3	4	0	0	0	1	0	0	0	28
1:00 PM	3	10	10	0	3	3	0	0	1	0	0	0	0	30
2:00 PM	10	14	16	0	5	5	0	0	0	0	0	0	0	50
3:00 PM	6	14	11	0	2	3	0	0	0	0	0	0	0	36
4:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	49	120	88	2	28	33	0	0	7	5	0	0	1	333
Percent	14.7%	36.0%	26.4%	0.6%	8.4%	9.9%	0.0%	0.0%	2.1%	1.5%	0.0%	0.0%	0.3%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Monday, August 21, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
7:00 AM	1	0	0	1	0	1	0	0	2	0	0	0	0	5
8:00 AM	4	2	8	2	3	3	0	0	6	0	0	0	0	28
9:00 AM	1	17	10	0	3	1	0	0	1	0	0	0	0	33
10:00 AM	4	7	15	0	3	1	0	0	4	0	0	0	0	34
11:00 AM	4	6	9	0	3	4	0	0	2	0	0	0	0	28
12:00 PM	4	9	10	1	4	7	0	0	1	0	0	0	0	36
1:00 PM	3	3	5	0	8	3	0	0	1	0	0	0	0	23
2:00 PM	0	15	12	0	7	1	0	1	1	0	0	0	0	37
3:00 PM	2	13	15	0	3	5	0	0	3	0	0	0	0	41
4:00 PM	2	7	7	0	2	3	0	0	1	0	0	0	0	22
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	25	85	92	4	36	29	0	1	22	0	0	0	0	294
Percent	8.5%	28.9%	31.3%	1.4%	12.2%	9.9%	0.0%	0.3%	7.5%	0.0%	0.0%	0.0%	0.0%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Tuesday, August 22, 2017 Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:00 AM	0	11	0	1	1	0	0	0	1	0	0	0	0	14
7:00 AM	0	23	3	0	0	2	0	0	3	1	0	0	0	32
8:00 AM	9	4	13	1	5	6	0	0	2	0	0	0	0	40
9:00 AM	8	9	11	0	5	2	0	0	2	0	0	0	0	37
10:00 AM	7	7	6	0	10	2	0	0	2	0	0	0	0	34
11:00 AM	2	4	9	0	5	1	0	0	4	0	0	0	0	25
12:00 PM	1	9	5	1	2	1	0	0	2	0	0	0	0	21
1:00 PM	1	15	7	0	3	2	0	0	0	0	0	0	0	28
2:00 PM	2	8	4	0	5	4	0	0	1	0	0	0	0	24
3:00 PM	5	9	15	0	4	3	0	0	0	0	0	0	0	36
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	35	101	74	3	40	23	0	0	17	1	0	0	0	294
Percent	11.9%	34.4%	25.2%	1.0%	13.6%	7.8%	0.0%	0.0%	5.8%	0.3%	0.0%	0.0%	0.0%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Tuesday, August 22, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	3	3	0	1	0	1	0	0	3	0	0	0	0	11
8:00 AM	5	4	5	0	4	6	0	0	2	0	0	0	0	26
9:00 AM	7	11	11	2	6	5	0	0	3	0	0	0	0	45
10:00 AM	2	11	9	1	10	2	0	0	2	0	0	0	0	37
11:00 AM	3	4	5	0	4	1	0	0	1	0	0	0	0	18
12:00 PM	1	10	9	1	8	3	0	0	1	0	0	0	0	33
1:00 PM	0	3	7	0	5	0	0	0	3	0	0	0	0	18
2:00 PM	1	3	7	1	3	5	0	0	2	0	0	0	0	22
3:00 PM	0	9	9	0	3	3	0	0	1	0	0	0	0	25
4:00 PM	0	2	7	1	3	0	0	0	0	0	0	0	0	13
5:00 PM	0	3	2	0	1	0	0	0	0	0	0	0	0	6
6:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	22	66	71	7	47	26	0	0	18	0	0	0	0	257
Percent	8.6%	25.7%	27.6%	2.7%	18.3%	10.1%	0.0%	0.0%	7.0%	0.0%	0.0%	0.0%	0.0%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Wednesday, August 23, 2017 Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	3
6:00 AM	0	9	0	1	1	1	0	0	0	0	0	0	0	12
7:00 AM	1	19	0	1	0	3	0	0	3	0	0	0	2	29
8:00 AM	8	16	12	0	6	5	0	0	1	0	0	0	0	48
9:00 AM	4	17	7	1	5	4	0	0	0	0	0	0	0	38
10:00 AM	6	14	10	1	4	6	0	0	0	0	0	0	0	41
11:00 AM	4	13	11	0	3	3	0	0	2	0	0	0	0	36
12:00 PM	4	4	7	1	4	4	0	0	1	0	0	0	1	26
1:00 PM	1	11	8	0	1	3	0	0	2	1	1	0	0	28
2:00 PM	2	10	8	0	4	5	0	0	0	0	0	0	0	29
3:00 PM	5	10	8	0	7	5	0	0	0	0	0	0	1	36
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	35	125	71	5	36	39	0	0	9	1	1	0	4	326
Percent	10.7%	38.3%	21.8%	1.5%	11.0%	12.0%	0.0%	0.0%	2.8%	0.3%	0.3%	0.0%	1.2%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Wednesday, August 23, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	1	5	0	0	0	2	0	0	4	0	0	0	0	12
8:00 AM	6	15	5	2	2	5	0	0	2	0	0	0	0	37
9:00 AM	4	10	13	3	7	4	0	0	3	0	0	0	0	44
10:00 AM	5	7	13	0	3	6	0	0	0	0	0	0	0	34
11:00 AM	2	3	12	4	1	2	0	0	0	0	0	0	0	24
12:00 PM	1	10	14	0	3	4	0	0	3	0	0	0	0	35
1:00 PM	1	10	5	2	2	1	0	1	4	0	0	0	0	26
2:00 PM	1	2	10	1	4	3	0	0	1	0	0	0	0	22
3:00 PM	2	4	13	0	6	7	0	0	3	0	0	0	0	35
4:00 PM	0	4	4	0	4	0	0	0	0	0	0	0	0	12
5:00 PM	2	3	1	0	0	0	0	0	0	0	0	0	0	6
6:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	25	76	90	12	32	34	0	1	20	0	0	0	0	290
Percent	8.6%	26.2%	31.0%	4.1%	11.0%	11.7%	0.0%	0.3%	6.9%	0.0%	0.0%	0.0%	0.0%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Thursday, August 24, 2017 Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	1	8	1	1	0	1	0	0	1	0	0	0	1	14
7:00 AM	2	4	1	0	0	4	0	0	3	0	0	0	1	15
8:00 AM	8	4	13	0	3	3	0	0	1	0	0	0	0	32
9:00 AM	9	8	6	0	2	8	0	0	1	0	0	0	0	34
10:00 AM	3	18	7	0	1	2	0	0	1	0	0	0	0	32
11:00 AM	6	9	10	1	6	4	0	0	1	0	0	0	0	37
12:00 PM	4	1	5	0	2	5	0	0	1	0	0	0	0	18
1:00 PM	4	19	8	1	2	4	0	0	1	0	0	0	0	39
2:00 PM	2	5	13	0	2	6	0	0	0	0	0	0	0	28
3:00 PM	4	10	11	0	2	3	0	0	0	0	0	0	0	30
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	43	90	75	3	20	40	0	0	10	0	0	0	2	283
Percent	15.2%	31.8%	26.5%	1.1%	7.1%	14.1%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.7%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Thursday, August 24, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	3	3	0	1	0	3	0	0	4	1	0	0	0	15
8:00 AM	1	1	6	1	2	1	0	0	3	0	0	0	0	15
9:00 AM	2	6	9	0	3	3	0	0	3	0	0	0	0	26
10:00 AM	3	9	8	0	3	5	0	0	2	0	0	0	0	30
11:00 AM	1	9	12	1	2	0	0	0	3	0	0	0	0	28
12:00 PM	5	4	11	0	3	4	0	0	1	0	0	0	0	28
1:00 PM	3	10	10	2	3	3	0	0	2	0	0	0	0	33
2:00 PM	3	10	9	1	3	7	0	0	2	1	0	0	0	36
3:00 PM	0	11	8	1	6	2	0	1	0	0	0	0	0	29
4:00 PM	0	2	7	1	4	0	0	0	0	0	0	0	0	14
5:00 PM	0	0	2	0	0	1	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	21	67	82	8	29	29	0	1	20	2	0	0	0	259
Percent	8.1%	25.9%	31.7%	3.1%	11.2%	11.2%	0.0%	0.4%	7.7%	0.8%	0.0%	0.0%	0.0%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Friday, August 25, 2017 Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
6:00 AM	1	10	0	1	0	0	0	0	1	1	0	0	1	15
7:00 AM	3	9	0	0	1	3	0	0	1	0	0	0	0	17
8:00 AM	6	5	7	1	3	1	0	0	1	0	0	0	0	24
9:00 AM	7	10	12	0	8	5	0	0	0	0	0	0	0	42
10:00 AM	8	9	9	1	4	5	0	0	1	0	0	0	0	37
11:00 AM	6	12	13	0	7	7	0	0	1	1	0	0	0	47
12:00 PM	6	7	12	1	6	8	0	0	2	0	0	0	1	43
1:00 PM	5	9	12	0	7	4	0	0	2	0	0	0	0	39
2:00 PM	3	8	4	0	5	5	0	0	1	1	0	0	0	27
3:00 PM	3	8	10	0	4	1	0	0	0	0	0	0	0	26
4:00 PM	0	1	1	0	1	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	48	94	80	4	46	39	0	0	10	3	0	0	2	326
Percent	14.7%	28.8%	24.5%	1.2%	14.1%	12.0%	0.0%	0.0%	3.1%	0.9%	0.0%	0.0%	0.6%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Friday, August 25, 2017 Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	1	13	3	1	0	1	0	0	1	0	0	0	0	20
8:00 AM	1	21	1	1	0	0	0	0	0	1	0	0	0	25
9:00 AM	4	35	7	0	1	1	0	0	0	1	0	0	0	49
10:00 AM	1	29	3	1	4	3	0	0	0	1	0	0	0	42
11:00 AM	0	47	3	0	4	2	0	0	0	0	0	0	1	57
12:00 PM	2	66	11	0	3	2	0	0	0	0	0	0	0	84
1:00 PM	1	38	2	0	1	1	0	0	0	0	0	0	0	43
2:00 PM	2	37	2	0	3	2	0	0	0	0	0	0	0	46
3:00 PM	1	28	7	0	3	3	0	0	0	0	0	0	0	42
4:00 PM	0	15	0	0	3	2	0	0	0	0	0	0	0	20
5:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	5
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	13	333	41	3	22	17	0	0	1	3	0	0	1	434
Percent	3.0%	76.7%	9.4%	0.7%	5.1%	3.9%	0.0%	0.0%	0.2%	0.7%	0.0%	0.0%	0.2%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Total Study Average Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
6:00 AM	1	12	0	1	1	1	0	0	1	0	0	0	0	17
7:00 AM	1	10	1	0	0	2	0	0	2	0	0	0	1	17
8:00 AM	5	7	9	1	3	3	0	0	1	0	0	0	0	29
9:00 AM	7	20	17	0	5	4	0	0	1	0	0	0	0	54
10:00 AM	6	19	10	0	5	3	0	0	1	0	0	0	0	44
11:00 AM	4	18	13	0	4	3	0	0	2	0	0	0	0	44
12:00 PM	4	12	11	1	4	4	0	0	1	0	0	0	0	37
1:00 PM	4	18	13	0	3	2	0	0	1	0	0	0	0	41
2:00 PM	3	13	11	0	4	4	0	0	0	0	0	0	0	35
3:00 PM	3	7	8	0	3	2	0	0	0	0	0	0	0	23
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	38	138	93	3	32	28	0	0	10	0	0	0	1	343
Percent	11.1%	40.2%	27.1%	0.9%	9.3%	8.2%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.3%	

Note: Average only condsidered on days with 24-hours of data.

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Total Study Average Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	2	4	0	1	0	1	0	0	3	0	0	0	0	11
8:00 AM	3	7	4	1	2	3	0	0	2	0	0	0	0	22
9:00 AM	3	19	12	1	6	3	0	0	2	0	0	0	0	46
10:00 AM	2	17	15	0	7	3	0	0	2	0	0	0	0	46
11:00 AM	2	17	13	1	5	2	0	0	1	0	0	0	0	41
12:00 PM	2	18	14	0	5	3	0	0	1	0	0	0	0	43
1:00 PM	2	15	10	1	6	1	0	0	2	0	0	0	0	37
2:00 PM	1	12	14	0	5	3	0	0	1	0	0	0	0	36
3:00 PM	1	10	11	0	4	3	0	0	1	0	0	0	0	30
4:00 PM	0	5	4	0	3	1	0	0	0	0	0	0	0	13
5:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	18	128	98	5	43	23	0	0	15	0	0	0	0	330
Percent	5.5%	38.8%	29.7%	1.5%	13.0%	7.0%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	

Note: Average only condsidered on days with 24-hours of data.

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



3-Day (Tuesday - Thursday) Average Eastbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
6:00 AM	0	9	0	1	1	1	0	0	1	0	0	0	0	13
7:00 AM	1	15	1	0	0	3	0	0	3	0	0	0	1	25
8:00 AM	8	8	13	0	5	5	0	0	1	0	0	0	0	40
9:00 AM	7	11	8	0	4	5	0	0	1	0	0	0	0	36
10:00 AM	5	13	8	0	5	3	0	0	1	0	0	0	0	36
11:00 AM	4	9	10	0	5	3	0	0	2	0	0	0	0	33
12:00 PM	3	5	6	1	3	3	0	0	1	0	0	0	0	22
1:00 PM	2	15	8	0	2	3	0	0	1	0	0	0	0	32
2:00 PM	2	8	8	0	4	5	0	0	0	0	0	0	0	27
3:00 PM	5	10	11	0	4	4	0	0	0	0	0	0	0	34
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	38	105	73	4	32	34	0	0	12	1	0	0	2	301
Percent	12.5%	35.0%	24.4%	1.2%	10.6%	11.3%	0.0%	0.0%	4.0%	0.2%	0.1%	0.0%	0.7%	

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



3-Day (Tuesday - Thursday) Average Westbound

						FHWA Ve	hicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	2	4	0	1	0	2	0	0	4	0	0	0	0	13
8:00 AM	4	7	5	1	3	4	0	0	2	0	0	0	0	26
9:00 AM	4	9	11	2	5	4	0	0	3	0	0	0	0	38
10:00 AM	3	9	10	0	5	4	0	0	1	0	0	0	0	34
11:00 AM	2	5	10	2	2	1	0	0	1	0	0	0	0	23
12:00 PM	2	8	11	0	5	4	0	0	2	0	0	0	0	32
1:00 PM	1	8	7	1	3	1	0	0	3	0	0	0	0	26
2:00 PM	2	5	9	1	3	5	0	0	2	0	0	0	0	27
3:00 PM	1	8	10	0	5	4	0	0	1	0	0	0	0	30
4:00 PM	0	3	6	1	4	0	0	0	0	0	0	0	0	13
5:00 PM	1	2	2	0	0	0	0	0	0	0	0	0	0	5
6:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	23	70	81	9	36	30	0	1	19	1	0	0	0	269
Percent	8.4%	25.9%	30.1%	3.3%	13.4%	11.0%	0.0%	0.2%	7.2%	0.2%	0.0%	0.0%	0.0%	

Vehicle Speed Report Summary



Location: Waste Collection Center Driveway

Count Direction: Eastbound / Westbound
Date Range: 8/19/2017 to 8/25/2017

Site Code: 01

	Speed Range (mph)												Total					
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
								Stud	y Total									
Eastbound	1,302	948	159	21	2	0	0	0	0	0	0	0	0	0	0	0	0	2,432
Percent	53.5%	39.0%	6.5%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	152	598	1,048	453	77	6	0	0	0	0	0	0	0	0	0	0	0	2,334
Percent	6.5%	25.6%	44.9%	19.4%	3.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	1,454	1,546	1,207	474	79	6	0	0	0	0	0	0	0	0	0	0	0	4,766
Percent	30.5%	32.4%	25.3%	9.9%	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
Eastbound			Eastbound		
50th Percentile (Median)	9.7	mph	Mean (Average) Speed	10.1	mph
85th Percentile	13.0	mph	10 mph Pace	4.9 - 14.9	mph
95th Percentile	16.0	mph	Percent in Pace	89.3	%
Westbound			Westbound		
50th Percentile (Median)	16.8	mph	Mean (Average) Speed	16.9	mph
85th Percentile	21.3	mph	10 mph Pace	12.6 - 22.6	mph
95th Percentile	24.2	mph	Percent in Pace	75.0	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01

DATA SOLUTIONS

Saturday, August 19, 2017 Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	9	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17
7:00 AM	8	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
8:00 AM	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
9:00 AM	82	26	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	112
10:00 AM	39	40	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
11:00 AM	15	49	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
12:00 PM	31	18	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	53
1:00 PM	33	38	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
2:00 PM	15	24	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	44
3:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	243	200	33	5	0	0	0	0	0	0	0	0	0	0	0	0	0	481
Percent	50.5%	41.6%	6.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	9.8	mph	Mean (Average) Speed	10.1	mph
85th Percentile	13.1	mph	10 mph Pace	4.3 - 14.3	mph
95th Percentile	15.5	mph	Percent in Pace	86.5	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Saturday, August 19, 2017 Westbound

Speed Range (mph) Total 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 55 55 - 60 60 - 65 65 - 70 70 - 75 75 - 80 80 - 85 85 + Volume Time 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM Total 5.7% 19.6% 52.2% 17.7% 4.7% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Percent 0.0% 0.0% 0.0%

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	17.4	mph	Mean (Average) Speed	17.5	mph
85th Percentile	21.8	mph	10 mph Pace	12.4 - 22.4	mph
95th Percentile	24.9	mph	Percent in Pace	76.8	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Sunday, August 20, 2017 Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
7:00 AM	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8:00 AM	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
9:00 AM	40	29	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	74
10:00 AM	22	24	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
11:00 AM	28	34	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	66
12:00 PM	31	29	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	67
1:00 PM	30	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
2:00 PM	13	24	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	196	162	27	3	1	0	0	0	0	0	0	0	0	0	0	0	0	389
Percent	50.4%	41.6%	6.9%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	9.8	mph	Mean (Average) Speed	10.4	mph
85th Percentile	13.5	mph	10 mph Pace	5.0 - 15.0	mph
95th Percentile	16.8	mph	Percent in Pace	89.7	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Sunday, August 20, 2017 Westbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	2	3	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14
9:00 AM	1	6	18	16	3	0	0	0	0	0	0	0	0	0	0	0	0	44
10:00 AM	2	10	30	19	3	0	0	0	0	0	0	0	0	0	0	0	0	64
11:00 AM	1	17	31	9	6	0	0	0	0	0	0	0	0	0	0	0	0	64
12:00 PM	0	9	30	16	3	0	0	0	0	0	0	0	0	0	0	0	0	58
1:00 PM	1	16	24	16	1	0	0	0	0	0	0	0	0	0	0	0	0	58
2:00 PM	1	12	23	11	5	1	0	0	0	0	0	0	0	0	0	0	0	53
3:00 PM	0	5	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	15
4:00 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	10	78	174	91	23	1	0	0	0	0	0	0	0	0	0	0	0	377
Percent	2.7%	20.7%	46.2%	24.1%	6.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	18.0	mph	Mean (Average) Speed	18.1	mph
85th Percentile	22.5	mph	10 mph Pace	13.5 - 23.5	mph
95th Percentile	25.9	mph	Percent in Pace	76.1	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Monday, August 21, 2017 Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	6	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
7:00 AM	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
8:00 AM	18	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
9:00 AM	27	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
10:00 AM	23	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
11:00 AM	19	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
12:00 PM	17	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
1:00 PM	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
2:00 PM	23	25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
3:00 PM	24	9	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	36
4:00 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	185	137	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	333
Percent	55.6%	41.1%	3.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	9.4	mph	Mean (Average) Speed	9.7	mph
85th Percentile	12.2	mph	10 mph Pace	4.3 - 14.3	mph
95th Percentile	13.8	mph	Percent in Pace	95.5	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Monday, August 21, 2017

Westbound Speed Range (mph) Total 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 55 55 - 60 60 - 65 65 - 70 70 - 75 75 - 80 80 - 85 85 + Volume Time 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	17.2	mph	Mean (Average) Speed	17	mph
85th Percentile	21.4	mph	10 mph Pace	12.1 - 22.1	mph
95th Percentile	24.2	mph	Percent in Pace	77.2	%

2.0%

0.3%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

20.7%

Total

Percent

6.8%

22.4%

47.6%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Tuesday, August 22, 2017 Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 AM	1	10	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14
7:00 AM	22	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
8:00 AM	24	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
9:00 AM	24	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
10:00 AM	20	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
11:00 AM	17	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
12:00 PM	12	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21
1:00 PM	15	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
2:00 PM	16	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	24
3:00 PM	11	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
4:00 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	164	116	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0	294
Percent	55.8%	39.5%	3.7%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	9.5	mph	Mean (Average) Speed	9.9	mph
85th Percentile	12.6	mph	10 mph Pace	4.7 - 14.7	mph
95th Percentile	14.9	mph	Percent in Pace	93.9	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Tuesday, August 22, 2017 Westbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	1	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
8:00 AM	3	11	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	26
9:00 AM	7	12	16	8	2	0	0	0	0	0	0	0	0	0	0	0	0	45
10:00 AM	2	17	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	37
11:00 AM	1	1	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	18
12:00 PM	4	2	16	10	1	0	0	0	0	0	0	0	0	0	0	0	0	33
1:00 PM	0	3	7	7	1	0	0	0	0	0	0	0	0	0	0	0	0	18
2:00 PM	0	4	11	4	3	0	0	0	0	0	0	0	0	0	0	0	0	22
3:00 PM	0	6	14	3	2	0	0	0	0	0	0	0	0	0	0	0	0	25
4:00 PM	1	1	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13
5:00 PM	0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
6:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	61	119	47	10	0	0	0	0	0	0	0	0	0	0	0	0	257
Percent	7.8%	23.7%	46.3%	18.3%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	16.9	mph	Mean (Average) Speed	16.8	mph
85th Percentile	20.7	mph	10 mph Pace	11.6 - 21.6	mph
95th Percentile	24.4	mph	Percent in Pace	77.4	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01

DATA SOLUTIONS

Wednesday, August 23, 2017

Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
7:00 AM	17	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
8:00 AM	45	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
9:00 AM	21	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	38
10:00 AM	18	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
11:00 AM	26	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
12:00 PM	11	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
1:00 PM	10	13	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
2:00 PM	19	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
3:00 PM	19	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	194	109	22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	326
Percent	59.5%	33.4%	6.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	9.5	mph	Mean (Average) Speed	9.9	mph
85th Percentile	13.2	mph	10 mph Pace	5.0 - 15.0	mph
95th Percentile	16.4	mph	Percent in Pace	90.5	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Wednesday, August 23, 2017 Westbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	4	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
8:00 AM	2	12	17	4	2	0	0	0	0	0	0	0	0	0	0	0	0	37
9:00 AM	6	18	16	3	1	0	0	0	0	0	0	0	0	0	0	0	0	44
10:00 AM	0	11	13	9	1	0	0	0	0	0	0	0	0	0	0	0	0	34
11:00 AM	4	11	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24
12:00 PM	3	15	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	35
1:00 PM	2	9	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	26
2:00 PM	3	5	9	3	2	0	0	0	0	0	0	0	0	0	0	0	0	22
3:00 PM	2	18	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	35
4:00 PM	2	3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12
5:00 PM	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
6:00 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	32	108	107	37	6	0	0	0	0	0	0	0	0	0	0	0	0	290
Percent	11.0%	37.2%	36.9%	12.8%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	15.0	mph	Mean (Average) Speed	15.3	mph
85th Percentile	19.8	mph	10 mph Pace	8.9 - 18.9	mph
95th Percentile	22.8	mph	Percent in Pace	77.2	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Thursday, August 24, 2017 Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
7:00 AM	10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
8:00 AM	18	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
9:00 AM	31	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	34
10:00 AM	12	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
11:00 AM	24	10	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	37
12:00 PM	11	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18
1:00 PM	24	9	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	39
2:00 PM	15	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
3:00 PM	4	20	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	30
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	163	96	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	283
Percent	57.6%	33.9%	6.4%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	9.2	mph	Mean (Average) Speed	10.0	mph
85th Percentile	12.9	mph	10 mph Pace	4.4 - 14.4	mph
95th Percentile	15.7	mph	Percent in Pace	90.1	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Thursday, August 24, 2017 Westbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:00 AM	2	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15
8:00 AM	0	4	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	15
9:00 AM	3	4	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	26
10:00 AM	1	8	12	9	0	0	0	0	0	0	0	0	0	0	0	0	0	30
11:00 AM	1	2	13	10	2	0	0	0	0	0	0	0	0	0	0	0	0	28
12:00 PM	3	9	8	7	1	0	0	0	0	0	0	0	0	0	0	0	0	28
1:00 PM	0	8	11	8	2	4	0	0	0	0	0	0	0	0	0	0	0	33
2:00 PM	1	7	24	4	0	0	0	0	0	0	0	0	0	0	0	0	0	36
3:00 PM	1	6	16	5	1	0	0	0	0	0	0	0	0	0	0	0	0	29
4:00 PM	1	3	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	14
5:00 PM	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	16	56	120	57	6	4	0	0	0	0	0	0	0	0	0	0	0	259
Percent	6.2%	21.6%	46.3%	22.0%	2.3%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	16.9	mph	Mean (Average) Speed	17.2	mph
85th Percentile	21.3	mph	10 mph Pace	11.7 - 21.7	mph
95th Percentile	24.0	mph	Percent in Pace	75.7	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Friday, August 25, 2017 Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
6:00 AM	4	4	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15
7:00 AM	12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
8:00 AM	16	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
9:00 AM	20	20	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	42
10:00 AM	22	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
11:00 AM	19	20	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
12:00 PM	24	16	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	43
1:00 PM	13	18	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
2:00 PM	16	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
3:00 PM	10	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
4:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	157	128	38	3	0	0	0	0	0	0	0	0	0	0	0	0	0	326
Percent	48.2%	39.3%	11.7%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	10.0	mph	Mean (Average) Speed	10.7	mph
85th Percentile	14.4	mph	10 mph Pace	5.4 - 15.4	mph
95th Percentile	17.1	mph	Percent in Pace	85.9	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Friday, August 25, 2017 Westbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	1	8	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	20
8:00 AM	0	3	15	6	1	0	0	0	0	0	0	0	0	0	0	0	0	25
9:00 AM	7	11	27	4	0	0	0	0	0	0	0	0	0	0	0	0	0	49
10:00 AM	1	28	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	42
11:00 AM	0	25	4	26	2	0	0	0	0	0	0	0	0	0	0	0	0	57
12:00 PM	4	23	30	26	1	0	0	0	0	0	0	0	0	0	0	0	0	84
1:00 PM	7	15	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	43
2:00 PM	9	18	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
3:00 PM	0	12	26	4	0	0	0	0	0	0	0	0	0	0	0	0	0	42
4:00 PM	1	3	4	11	1	0	0	0	0	0	0	0	0	0	0	0	0	20
5:00 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	30	146	167	85	6	0	0	0	0	0	0	0	0	0	0	0	0	434
Percent	6.9%	33.6%	38.5%	19.6%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	16.1	mph
85th Percentile	21.3	mph	10 mph Pace	12.6 - 22.6	mph
95th Percentile	22.4	mph	Percent in Pace	77	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Total Study Average Eastbound

								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 AM	7	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16
7:00 AM	12	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
8:00 AM	21	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
9:00 AM	35	16	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	55
10:00 AM	22	21	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
11:00 AM	21	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
12:00 PM	20	14	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	37
1:00 PM	20	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
2:00 PM	17	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
3:00 PM	10	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	187	136	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	348
Percent	53.7%	39.1%	6.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summa	ıry	Total Study Speed	d Statistics	
50th Percentile (Median)	9.7	mph	Mean (Average) Speed	10.1	mph
85th Percentile	13.0	mph	10 mph Pace	4.9 - 14.9	mph
95th Percentile	16.0	mph	Percent in Pace	89.3	%

Date Range: 8/19/2017 to 8/25/2017

Site Code: 01



Total Study Average

Westbound Speed Range (mph) Total 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45 45 - 50 50 - 55 55 - 60 60 - 65 65 - 70 70 - 75 75 - 80 80 - 85 85 + Time Volume 12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 6:00 AM 7:00 AM 8:00 AM 9:00 AM 10:00 AM 11:00 AM 12:00 PM 1:00 PM 2:00 PM 3:00 PM 4:00 PM 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM 11:00 PM

Note: Average only condsidered on days with 24-hours of data.

25.7%

6.9%

Total Study Percentile Spe	ed Summa	ıry	Total Study Spee	d Statistics	
50th Percentile (Median)	16.8	mph	Mean (Average) Speed	16.9	mph
85th Percentile	21.3	mph	10 mph Pace	12.6 - 22.6	mph
95th Percentile	24.2	mph	Percent in Pace	75.0	%

2.7%

0.3%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

19.4%

45.1%

Total

Percent



Location: Waste Collection Center Driveway
Date Range: 8/19/2017 - 8/25/2017
Site Code: 01

	9	Saturda	у		Sunday	,		Monday	/		Tuesda	у	w	ednesd	lay	T	hursda	у		Friday				
	8	3/19/201	7	8	3/20/201	7	8	3/21/201	7	8	3/22/201	7	8	3/23/201	7	8	3/24/201	7	8	3/25/201	7	Mid-V	Veek Av	/erage
Time	EB	WB	Total																					
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	3	0	3	1	0	1	3	0	3	3	0	3	6	0	6	2	0	2
6:00 AM	17	0	17	13	0	13	25	3	28	14	2	16	12	1	13	14	2	16	15	1	16	13	2	15
7:00 AM	14	9	23	7	4	11	12	5	17	32	11	43	29	12	41	15	15	30	17	20	37	25	13	38
8:00 AM	12	5	17	15	14	29	31	28	59	40	26	66	48	37	85	32	15	47	24	25	49	40	26	66
9:00 AM	112	77	189	74	44	118	41	33	74	37	45	82	38	44	82	34	26	60	42	49	91	36	38	75
10:00 AM	80	82	162	49	64	113	41	34	75	34	37	71	41	34	75	32	30	62	37	42	79	36	34	69
11:00 AM	72	76	148	66	64	130	34	28	62	25	18	43	36	24	60	37	28	65	47	57	104	33	23	56
12:00 PM	53	44	97	67	58	125	28	36	64	21	33	54	26	35	61	18	28	46	43	84	127	22	32	54
1:00 PM	76	58	134	53	58	111	30	23	53	28	18	46	28	26	54	39	33	72	39	43	82	32	26	57
2:00 PM	44	48	92	45	53	98	50	37	87	24	22	46	29	22	51	28	36	64	27	46	73	27	27	54
3:00 PM	1	19	20	0	15	15	36	41	77	36	25	61	36	35	71	30	29	59	26	42	68	34	30	64
4:00 PM	0	5	5	0	3	3	2	22	24	2	13	15	0	12	12	1	14	15	3	20	23	1	13	14
5:00 PM	0	0	0	0	0	0	0	1	1	0	6	6	0	6	6	0	3	3	0	5	5	0	5	5
6:00 PM	0	0	0	0	0	0	0	3	3	0	1	1	0	2	2	0	0	0	0	0	0	0	1	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Percent	481 53%	423 47%	904	389 51%	377 49%	766	333 53%	294 47%	627	294 53%	257 47%	551	326 53%	290 47%	616	283 52%	259 48%	542	326 43%	434 57%	760	301 53%	269 47%	570

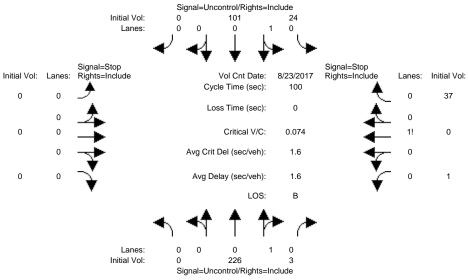
^{1.} Mid-week average includes data between Tuesday and Thursday.



Appendix B Level of Service Calculation Sheets

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Existing AM

Intersection #1: Fairview Road and John Smith Road



			Signal=U	ncontrol/Ri	ghts=Inclu	de						
Street Name:			Fairvie						ohn Sm:	ith Roa	ad	
Approach:	No	rth Bo	ound	Sot	uth Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module	: >>		t Date:			17 << 7	7:30-8	:30 AI	M			·
Base Vol:	0	226	3	24	101	0	0	0	0	1	0	37
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	226	3	24	101	0	0	0	0	1	0	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.82	0.82	0.82	1.00	1.00	1.00	0.73	0.73	0.73
PHF Volume:	0	272	4	29	123	0	0	0	0	1	0	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	272	4	29	123	0	0	0	0	1	0	51
Critical Gap	Modu:	le:										
Critical Gp:x	xxxx	xxxx	XXXXX	4.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.9	6.6
FollowUpTim:x	xxxx	xxxx	XXXXX	2.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.8	4.3	3.6
Capacity Modu	ıle:											
Cnflict Vol:	xxxx	xxxx	XXXXX	276	XXXX	xxxxx	XXXX	xxxx	xxxxx	456	456	274
Potent Cap.:	xxxx	xxxx	XXXXX	1248	xxxx	xxxxx	XXXX	xxxx	xxxxx	503	452	688
Move Cap.:	xxxx	xxxx	XXXXX	1248	xxxx	xxxxx	XXXX	xxxx	xxxxx	494	442	688
Volume/Cap:	xxxx	xxxx	XXXX	0.02	xxxx	XXXX	XXXX	xxxx	XXXX	0.00	0.00	0.07
Level Of Serv	rice D	Module	e:									
2Way95thQ:	XXXX	xxxx	XXXXX	1.8	xxxx	xxxxx	XXXX	xxxx	XXXXX	XXXX	xxxx	XXXXX
Control Del:x		xxxx	XXXXX	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	XXXX	xxxx	XXXXX	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX	XXXX	681	XXXXX
SharedQueue:x	XXXX	xxxx	XXXXX	0.1	xxxx	xxxxx	XXXXX	xxxx	XXXXX	XXXXX	0.2	XXXXX
Shrd ConDel:x	XXXX	xxxx	XXXXX	8.0	XXXX	xxxxx	xxxxx	xxxx	XXXXX	XXXXX	10.7	XXXXX
Shared LOS:	*	*	*	A	*	*	*	*	*	*	В	*
ApproachDel:	X	xxxxx		X	xxxxx		X	xxxxx			10.7	
ApproachLOS:		*			*			*			В	
Note: Queue r	epor	ted is	s the d	istan	ce per	lane	in fe	et.				
			eak Hou		-	_		_				
******	****	****	*****	****	****	*****	*****	****	*****	*****	****	*****
Intersection	#1 Fa	airvi	ew Road	and a	John S	Smith I						

Approach:

L

East Bound

- T - R

-----||-----||------|

South Bound

- T - R

Base Volume Alternative: Peak Hour Warrant NOT Met

North Bound

L - T - R

West Bound

L - T - R

COMPARE Wed Sep 06 09:25:26 2017 Page 3-2

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=38]

FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=392]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Fairview Road and John Smith Road

Base Volume Alternative: Peak Hour Warrant NOT Met

Major Street Volume: 354
Minor Approach Volume: 38
Minor Approach Volume Threshold: 496

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

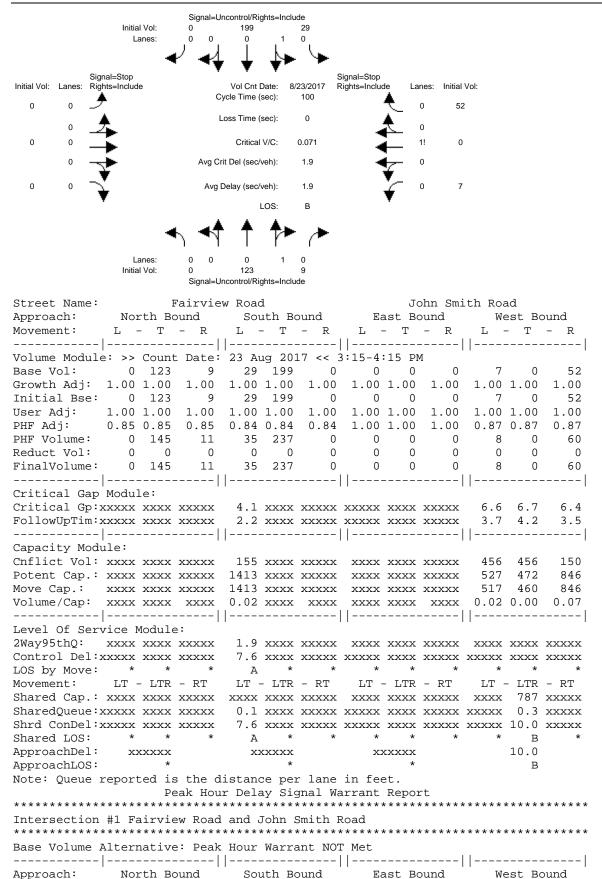
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

COMPARE Wed Sep 06 09:25:26 2017 Page 3-3

Waste Impact Fee Study, San Benito County

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Existing PM

Intersection #1: Fairview Road and John Smith Road



L - T - R

L - T - R L - T - R

L - T - R

Wed Sep 06 09:25:26 2017 Page 3-4

-----| Control: Uncontrolled 0 0 0 1 0 Uncontrolled Stop Sign Stop Sign 0 1 0 0 0 0 0 0 0 0 0 0 1! 0 0 Initial Vol: 0 123 9 29 199 0 0 0 0 7 0
ApproachDel: xxxxxx xxxx xxxxx 10.0 Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=59]

FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=419]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Fairview Road and John Smith Road **************************

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - RControl: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 1! 0 0
Initial Vol: 0 123 9 29 199 0 0 0 0 7 0 52 -----|----||------|

360 Major Street Volume: Minor Approach Volume: 59 Minor Approach Volume Threshold: 492

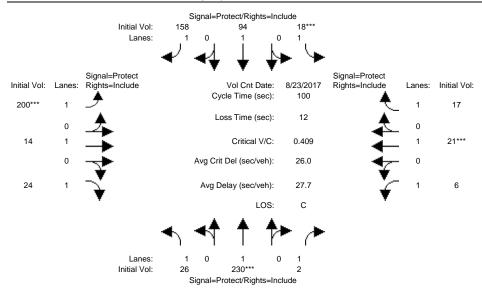
SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing AM

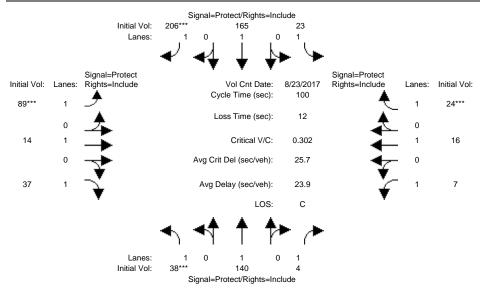
Intersection #2: Fairview Road and Sunnyslope Road



Street Name: Approach:	No	Fa	airvie	w Road	d ith Do	und	T.	Su	nnyslo	pe Roa	ad	nd
Movement:	TNO.	rtn Boi	una	501	ıtıı BO	una	± č	ast BO	una	- We	est BC	ouna
Movement:												
Min. Green:												
Min. Green: Y+R:												
1+R·	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module		Count	Date:	72 71	.a. 201	 7 // 7	.20 0	· 20 7M				
	26			23 A		158			24	6	21	17
Growth Adi:									1.00		1.00	1.00
Initial Bse:						158	200		24	1.00		1.00
User Adj:					1.00				1.00		1.00	1.00
PHF Adj:					0.90				0.63		0.79	
PHF Volume:										0.79		
Reduct Vol:				20		176	317			0		22 0
Reduct Vol:									38	-	-	
PCE Adj:									1.00		1.00	1.00
MLF Adj:					1.00				1.00		1.00	
FinalVolume:												
Saturation F												
Sat/Lane:									1900		1900	
Adjustment:					0.96			0.99	0.84		0.95	0.81
Lanes:					1.00				1.00		1.00	1.00
Final Sat.:					1828				1599		1809	
Capacity Anal												
Vol/Sat:	0.02	0.16							0.02	0.00	0.01	0.01
Crit Moves:							****				****	
Green/Cycle:					0.27			0.33	0.33		0.10	0.10
Volume/Cap:				0.23		0.42		0.04	0.07		0.15	0.14
Delay/Veh:					28.4			23.0	23.3		41.5	41.5
User DelAdj:				1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:								23.0	23.3	35.2	41.5	41.5
LOS by Move:									-	D		D
HCM2kAvgQ:	24	171	1	21	63	118	185	11	20	5	21	18
Note: Queue	report	ted is	the d	istand	ce per	lane	in fee	et.				

Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing PM

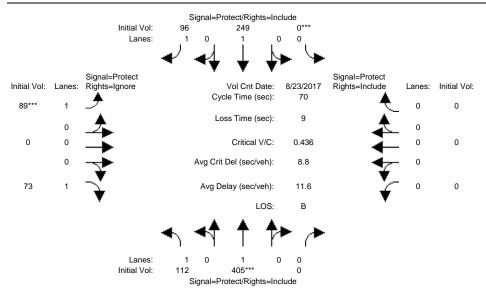
Intersection #2: Fairview Road and Sunnyslope Road



Street Name: Approach:	No	F rth Bo	airvie und	w Road	d uth Bo	und	E	Su ast Bo	nnyslo und	pe Roa We	ad est Bo	und
Movement:	L	– T	- R	Γ .	- T	- R	L	- T	- R	ь.	- T	- R
Min. Green:		10		5	10	10			10			
Y+R:		4.0		4.0	4.0	4.0		4.0				
Volume Module										ı		ı
Base Vol:	38	140	4	23	165	206	89	14	37	7	16	24
Growth Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	140	4	23	165	206	89	14	37	7	16	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			0.84	0.87	0.87	0.87	0.80	0.80	0.80	0.69	0.69	0.69
PHF Volume: Reduct Vol:	45	167	5	26	190	237	111		46	10	23	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	167	5	26	190	237	111	18	46	10	23	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	167		26		237				10	23	35
Saturation F												
Sat/Lane:			1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.78		0.97	0.83			0.81		0.94	0.80
Lanes:			1.00		1.00	1.00			1.00		1.00	1.00
Final Sat.:					1845	1568		1809	1537		1792	1523
	1											
Capacity Ana	_				0 10	0 15	0 0 6	0 01	0 00	0 01	0 01	0 00
Vol/Sat:		0.10	0.00	0.02	0.10		0.06	0.01	0.03	0.01	0.01	0.02
Crit Moves:						****						****
Green/Cycle:					0.48	0.48		0.21	0.21		0.10	0.10
Volume/Cap:			0.01		0.21	0.31		0.05	0.15		0.13	0.23
Uniform Del:			19.2		14.8	15.6		31.9	32.6		41.0	41.4
IncremntDel:			0.0	0.1		0.2	0.5		0.2	0.1		0.8
InitQueuDel:			0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Delay Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Delay/Veh:			19.2	33.3		15.9		31.9	32.8		41.4	42.2
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			19.2	33.3		15.9		31.9	32.8		41.4	42.2
LOS by Move:				С		В	С	_	C	D		D
HCM2kAvgQ:			2	17		111	77		31	8	18	30
Note: Queue	repor	ted is	the d	istan	ce per	lane	in fe	et.				

Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing AM

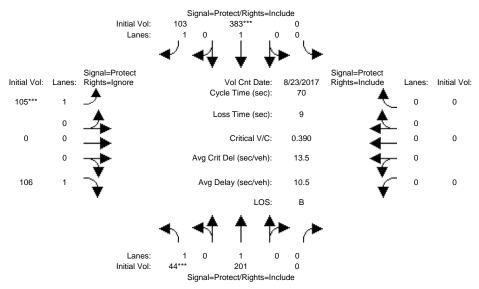
Intersection #3: Fairview Road and Santa Ana Road



Street Name: Approach:		F	airvie	w Road	f			S	anta A	na Roa	ad	
Approach:	No	rth Bo	und	Sou	uth Bo	und	Εa	ast Bo	und	We	est Bo	und
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:												
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	e: >>	Count	Date:	23 Aı	ıg 201	7 << 7	:30-8	:30 AM				
Base Vol:	112	405	0	0	249	96	89	0	73	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:											0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:												
PHF Volume:												
Reduct Vol:												0
Reduced Vol:								0	0	0	0	0
PCE Adj:								1.00				
MLF Adj:												
FinalVolume:												
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:									1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Final Sat.:												
Capacity Ana	lysis	Modul	e:									
Vol/Sat:									0.00	0.00	0.00	0.00
Crit Moves:				****			****					
Green/Cycle:	0.24	0.71	0.00	0.00	0.46	0.46	0.16	0.00	0.00	0.00	0.00	0.00
Volume/Cap:				0.00	0.37	0.17	0.44	0.00	0.00	0.00	0.00	0.00
Delay/Veh:				0.0	12.4	11.1	27.3	0.0	0.0	0.0	0.0	0.0
User DelAdj:						1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:								0.0				0.0
LOS by Move:	С	A	A	A	В	В	C	A	A	A	A	A
HCM2kAvgQ:	77	135	0	0	112	39	74	0	0	0	0	0
Note: Queue	repor	ted is	the d	istand	ce per	lane	in fe	et.				

Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing PM

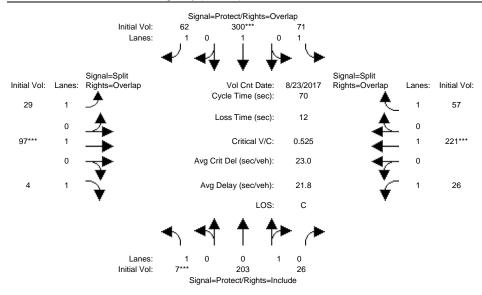
Intersection #3: Fairview Road and Santa Ana Road



Street Name: Approach:	No	Fa rth Bo	airvie	w Road Soi	d uth Bo	und	Ea	S ast Bo	anta A und	na Roa We	ad est Bo	ound
Movement:	L ·	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Min. Green: Y+R:	5 4.0	10 4.0	0 4.0	0 4.0	10 4.0	10	5 4.0	0 4.0	10 4.0	0 4.0	0 4.0	0 4.0
Volume Module												
Base Vol:	44	201	0	0	383	103	105	0	106	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	201	0	0	383	103	105	0	106	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00		1.00	1.00
PHF Adj:			0.94	0.89	0.89	0.89	0.75	0.75	0.00	1.00	1.00	1.00
PHF Volume: Reduct Vol:	47	214	0	0	430	116	140	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	214	0	0	430	116	140	0	0	0	0	0
PCE Adj:	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:			1.00			1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:				0		116	140	0	•	•	0	0
Saturation Fl												
Sat/Lane:	1900		1900			1900		1900	1900		1900	
Adjustment:				1.00		0.83	0.93	1.00	1.00		1.00	1.00
Lanes:				0.00		1.00		0.00	1.00	0.00	0.00	0.00
Final Sat.:	1702	1792		. 0		1568		0		. 0	-	0
Capacity Anal	_											
Vol/Sat:		0.12	0.00	0.00		0.07		0.00	0.00	0.00	0.00	0.00
Crit Moves:					****		****					
Green/Cycle:					0.60	0.60		0.00	0.00		0.00	0.00
Volume/Cap:			0.00		0.39	0.12		0.00	0.00		0.00	0.00
Uniform Del:		4.4	0.0	0.0		6.1	24.2	0.0	0.0	0.0	0.0	0.0
IncremntDel:		0.1	0.0	0.0		0.1	0.7	0.0	0.0	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			0.00		1.00	1.00		0.00	0.00		0.00	0.00
Delay/Veh:			0.0	0.0	7.6	6.2	24.9	0.0	0.0	0.0	0.0	0.0
User DelAdj:			1.00			1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				0.0		6.2	24.9	0.0	0.0	0.0	0.0	0.0
LOS by Move:			A	А		A	C		А	A	A	А
HCM2kAvgQ:			0	0		28	75	0	0	0	0	0
Note: Queue 1	report	ted is	the d	istano	ce per	lane	in fe	et.				

Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing AM

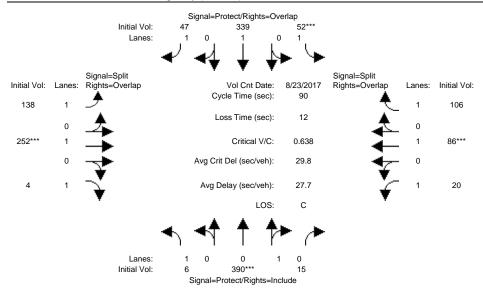
Intersection #4: Pacheco Pass Highway (SR 156) and Fairview Road



Street Name:	Pac	heco Pa	ass Hi	ghway	(SR 1	56)	_	_ F	airvie	w Road	d	,
Approach:	No:	rth Bo	und	Soi	ıth Bo	und	Εā	ast Bo	und	We	est Bo	ound
Movement:												
Min. Green:												
Y+R:									4.0			
Volume Module												
Base Vol:					300				4			
Growth Adj:									1.00			1.00
Initial Bse:					300		29		4		221	57
User Adj:			1.00					1.00	1.00	1.00	1.00	1.00
PHF Adj:			0.84	0.85	0.85	0.85	0.88	0.88	0.88	0.93	0.93	0.93
PHF Volume:	8	242	31	84	353	73	33	110	5	28	238	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	242	31	84	353	73	33	110	5	28	238	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:							1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												61
Saturation Fl				1		'	1		1	1		1
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:									0.77			0.78
Lanes:									1.00			1.00
Final Sat.:					1520				1455			
Capacity Anal				1		'	1		1	1		1
Vol/Sat:				0.06	0.23	0.06	0.02	0.06	0.00	0.02	0.13	0.04
Crit Moves:					***			***			****	
Green/Cycle:				0.13	0.39	0.53	0.14	0.14	0.21	0.22	0.22	0.35
Volume/Cap:				0.46		0.11	0.14	0.45	0.01	0.07	0.59	0.12
Delay/Veh:	30.7	20.7	20.7	30.2	18.5	8.1	26.5	28.8	21.7	21.5	26.7	15.6
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:							26.5		21.7			15.6
LOS by Move:									C			В
HCM2kAvqQ:				58					2			24
Note: Queue r									_	_0		

Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing PM

Intersection #4: Pacheco Pass Highway (SR 156) and Fairview Road



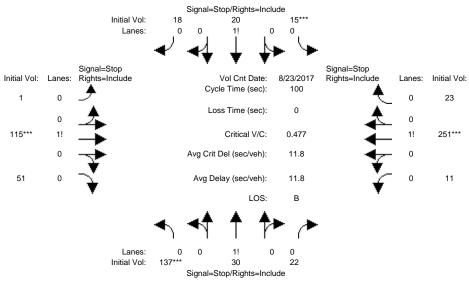
Street Name:												
		rth Bo										und
Movement:	L ·	- T	- R l	L -	- T	- R l	L ·	- T	- R	L -	- T	
		10			10			10		5		10
Y+R:		4.0			4.0			4.0				
Volume Module												
		390	15		339		138		4			106
Growth Adj:			1.00		1.00				1.00		1.00	1.00
Initial Bse:			15	52	339	47	138	252	4	20	86	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.94	0.94	0.94	0.87	0.87	0.87	0.85	0.85	0.85
PHF Volume:	7		17	55		50	159		5	24	101	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	448	17	55	361	50	159	290	5	24	101	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			17	55	361	50	159	290	5	24	101	125
Saturation Fl				1		'	1		1	ı		1
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				0.75		0.67			0.81		0.92	0.78
Lanes:			0.04		1.00	1.00			1.00		1.00	1.00
Final Sat.:			58		1509	1282			1537		1742	1481
Capacity Anal	ļ			1		1	1			1		1
Vol/Sat:	_		0.30	0.04	0.24	0.04	0.09	0.16	0.00	0.01	0.06	0.08
Crit Moves:		****		***				***			****	
Green/Cycle:			0.45	0.06	0.41	0.66	0.24	0.24	0.34	0.11	0.11	0.17
Volume/Cap:			0.65		0.58	0.06	0.38	0.65	0.01		0.52	0.50
Uniform Del:			19.2		20.3	5.4		30.6	19.6		37.7	33.8
IncremntDel:			2.2	17.0		0.0	0.6		0.0	0.3		1.5
InitOueuDel:		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Delay Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Delay/Veh:			21.4		21.6	5.5		34.1	19.6		40.3	35.4
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			21.4			5.5		34.1	19.6		40.3	35.4
LOS by Move:				58.5 E	∠⊥.0	5.5 A	28.9 C		19.6 B	36.4 D		35.4 D
HCM2kAvgQ:		271	271	Е 68		13	97		В 2		ط 85	94
									2	Ι/	85	94
Note: Queue r	epor	tea is	ine a	ıstano	ce per	⊥ane	ın re	≓L.				

COMPARE Wed Sep 06 09:25:26 2017 Page 3-11

Waste Impact Fee Study, San Benito County

Level Of Service Computation Report 2000 HCM 4-Way Stop (Base Volume Alternative) Existing AM

Intersection #5: San Felipe Road and Shore Road - Fairview Road



Street Name: Approach:	No	Sa: rth Bo	n Feli und	pe Roa Soi	ad uth Bo	und	Sho Ea	ore Ro ast Bo	ad - F ound	airvie We	ew Roa est Bo	
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	
Min. Green:	0	0	0	. 0	0	0	. 0	0	0	. 0	0	0
Volume Module												
Base Vol:	137	30	22	15	20	18	1		51	11	251	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	137	30	22	15	20	18	1	115	51	11	251	23
User Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.72	0.72	0.72	0.78	0.78	0.78	0.75	0.75	0.75	0.91	0.91	0.91
PHF Volume:	190	42	31	19	26	23	1	153	68	12	276	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	42	31	19	26	23	1	153	68	12	276	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				19			1		68		276	25
Saturation F	low Mo	odule:										
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.72	0.16	0.12	0.28	0.38	0.34				0.04	0.88	0.08
Final Sat.:								443			578	53
Capacity Anal	lysis	Modul	e:									
Vol/Sat:		0.43	0.43		0.12	0.12	0.35		0.35	0.48	0.48	0.48
Crit Moves:	****			****				****			****	
Delay/Veh:			12.3	9.3	9.3	9.3	10.8	10.8	10.8	12.6	12.6	12.6
Delay Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.3	12.3	12.3	9.3	9.3	9.3	10.8	10.8	10.8	12.6	12.6	12.6
LOS by Move:	В	В	В	A	A	A	В	В	В	В	В	В
ApproachDel:		12.3			9.3			10.8			12.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.3			9.3			10.8			12.6	
LOS by Appr:		В			A			В			В	
AllWayAvgQ:									11.4	19.9	19.9	19.9
Note: Queue	_				_							
						Warran						
*****										****	*****	*****
Intersection			-							****	*****	*****
Base Volume A												
Approach:						und					est Bo	
T# 0.0 0745						000 D ii						TUCAL DI FA

Movement: L - T - R L - T - R L - T - R L - T - R Control: Stop Sign Stop Si

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

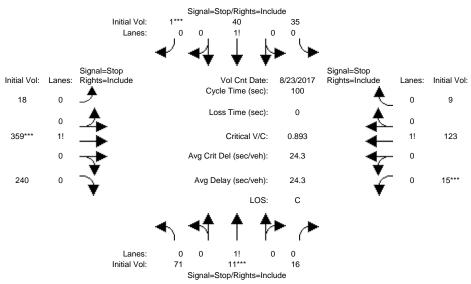
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

COMPARE Wed Sep 06 09:25:26 2017 Page 3-13

Waste Impact Fee Study, San Benito County

Level Of Service Computation Report 2000 HCM 4-Way Stop (Base Volume Alternative) Existing PM

Intersection #5: San Felipe Road and Shore Road - Fairview Road



Street Name:		Sa	n Feli	pe Roa	ad		Sh	ore Ro	ad - F ound	airvie	ew Roa	ıd
Movement:		- T				- R			- R		- T	
Min. Green:	. 0	0	0	. 0	0	0	. 0	0	0	. 0	0	0
Volume Module										1		1
Base Vol:	71	11	16	35	40	1	18	359	240	15	123	9
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		11	16	35	40	1	18	359	240	15	123	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:		0.84	0.84		0.86	0.86		0.90	0.90		0.72	0.72
PHF Volume:	85	13	19	41	47	1	20	399	267	21	171	13
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:		13	19	41	47	1	20	399	267	21	171	13
PCE Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		13	19	41	47	1	20	399	267	21		13
Saturation Fl			ı	I		1	I		I	I		ļ
Adiustment:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:		0.11	0.16		0.53	0.01		0.58	0.39		0.84	0.06
Final Sat.:			88		279	7		447	299	63		38
Capacity Anal				1		'	ı		1	ı		1
Vol/Sat:	_	0.22	0.22	0.17	0.17	0.17	0.89	0.89	0.89	0.33	0.33	0.33
Crit Moves:		***				****		****		***		
Delay/Veh:	10.9	10.9	10.9	10.5	10.5	10.5	32.3	32.3	32.3	11.1	11.1	11.1
-		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:			10.9		10.5	10.5		32.3	32.3		11.1	11.1
LOS by Move:			В	В	В	В	D		D	В	В	В
ApproachDel:	_	10.9	_	_	10.5	_	_	32.3	_	_	11.1	_
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.9			10.5			32.3			11.1	
LOS by Appr:		В			В			D			В	
AllWayAvqO:			6.0	4.3	_	4.3	131		131.2	10 9	10.9	10.9
Note: Queue 1									131.2	10.5	10.5	10.5
Noce gacae i						Warran			irhan l			
*****										****	*****	*****
Intersection	#5 Sa	an Fel	ipe Ro	ad and	d Shor	e Road	- Fa	irview	Road			
*****	****	*****	*****	****	*****	****	****	*****	*****	****	*****	****
Base Volume A										ı		1
7				•								
Approach:	NO:	rtn Bo	una	501	ith Bo	und	E	ast Bo	una	We	est Bo	una

Movement: L - T - R L - T - R L - T - R L - T - R Control: Stop Sign Stop Si

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Intersection added volumes analysis

Intersection Existing Conditions plus Added Vehicle Volumes

#	Intersection	Scenario	EBT/NBT	WBT/SBT	EBT/NBT	WBT/SBT
			AM Pe	ak Hour	PM Pea	ak Hour
		Existing Volume	230	94	140	165
2	Fairview Road and Sunnyslope Road	Added Vehicle Volumes	506	397	836	635
		Total Volume	736	491	976	800
		Existing Volume	97	221	252	86
4	Pacheco Pass Highway (SR 156) and Fairview Road	Added Vehicle Volumes	130	209	134	83
		Total Volume	227	430	386	169

Intersection Level of Service Analysis – Existing Conditions plus Added Vehicle Volumes

ш	Total and a still an	Cautual	Peak	Existir	ng	1	Added Vo	olume	
#	Intersection	Control	Hour	Delay¹	LOS²	Delay ¹	LOS²	Δ in Crit. Delay³	∆ in Crit. V/C⁴
	Fairview Road and		AM	27.7	С	35.0	D	0.799	0.39
2	Sunnyslope Road	Signalized	PM	23.9	С	35.0	D	0.874	0.57 2
4	Pacheco Pass Highway (SR	Signalized	AM	21.8	С	35.0	D	0.781	0.25 6
	156) and Fairview Road	2 9	PM	27.7	С	35.1	D	0.793	0.26 3

Notes:

- 1. Average intersection delay expressed in seconds per vehicle for signalized intersections.
- 2. LOS = Level of Service;
- 3. Change in average critical movement delay between background and background with project conditions.
- 4. Change in critical volume to capacity ratio between background and background with project conditions.
- 5. **Bold** indicates intersections that operate or are projected to operate at a deficient Level of Service.



Appendix C Collision Data

		Y 4 E	1	Λ.	EAID\/IE\A/ DD	RT 25	20 W
1 0 1		Y 9E	i	A	FAIRVIEW RD	RT 25	1056 E
1 0 1		Y 6E	-	A A	SHORE RD		
			•		SHORE RD	SAN FELIPE RD	88 N
		2 C 3 C	С	A	FAIRVIEW RD	SANTA ANA RD	200 N
			С	A	FAIRVIEW RD	SANTA ANA RD	100 N
		12 C	С	A	FAIRVIEW RD	SANTA ANA VALLEY RD	15 N
3 0 2	V	4 C	С	A	FAIRVIEW RD	SANTA ANA VALLEY RD	7 N
3 0 1	Υ	1 C	С	A	FAIRVIEW RD.	SANTA ANA RD.	528 N
3 0 2		6 C	С	Α	RT 156	FAIRVIEW RD	528 W
3 0 1		9 C	С	Α	RT 156	FAIRVIEW RD	350 E
3 0 2	Υ	4 C	С	Α	RT 156	FAIRVIEW RD	528 W
3 0 1		1 C	С	Α	RT 156	FAIRVIEW RD	1584 E
3 0 1		8 E	I	Α	SHORE RD	SAN FELIPE RD	1584 W
3 0 1		9 C	С	Α	SHORE RD	SAN FELIPE RD	1056 W
3 0 1		12 C	С	Α	SHORE RD.	SAN FELIPE RD.	65 W
3 0 1	Υ	7 C	С	Α	SR-156	FAIRVIEW RD	430 E
3 0 1	Υ	7 C	С	Α	SR-156	FAIRVIEW RD.	794 W
3 0 1		8 C	С	Α	SR-156	FAIRVIEW ROAD	50 E
3 0 2		9 C	С	Α	SR-156 W/B	FAIRVIEW RD	170 E
5 0 4		10 D	С	Α	RT 156	FAIRVIEW RD	1584 E
8 0 1		7 E	1	Α	FAIRVIEW RD	RT 156	1056 N
8 0 1		9 E	1	Α	FAIRVIEW RD	SANTA ANA VALLEY RD	862 S
8 0 1		12 E	1	Α	FAIRVIEW RD	SANTA ANA VALLEY RD	247 S
8 1 3		11 E	- 1	Α	RT 156	FAIRVIEW RD	1800 E
9 0 1		1 D	С	Α	FAIRVIEW RD	PACHECO PASS RD	0
9 0 3		3 D	С	Α	FAIRVIEW RD	RT 156	3696 N
9 0 2		5 D	С	Α	FAIRVIEW ROAD	PACHECO ROAD	0
9 0 1		2 D	С	Α	FALLON RD	FAIRVIEW RD	0
9 0 2		3 D	С	Α	FALLON RD	FAIRVIEW RD	0
9 1 2		3 D	С	Α	FALLON RD	FAIRVIEW RD	0
12 0 1		8 D	С	Α	FAIRVIEW RD	COMSTOCK RD	0
12 0 2		7 D	С	Α	RT 156	FAIRVIEW RD	0
12 0 1		8 E	J	Α	SANTA ANA RD	FAIRVIEW RD	0
12 0 2	Y	10 D	C	Α	SR-156	FAIRVIEW RD	0
21 0 1		6 C	C	Α	FAIRVIEW RD	SAN FELIPE RD	16 E
21 0 1		7 D	Č	Α	RT 156	FAIRVIEW RD	125 W
21 0 2		9 B	Ċ	Α	RT 156	FAIRVIEW RD	1500 E
ot Stated		3 2	Ü	,,	111 100	TAIRCTIEW RD	1000 E
nknown							
	ne Influence of Alcohol or Drug						
peding Traffic	ne militarios di Alcondi di Brag						
•							
-							
ron pro	Ife Speed wing Too Closely Ig Side of Road Oper Passing Ife Lane Change	wing Too Closely ng Side of Road oper Passing	wing Too Closely g Side of Road				

13 - Hazardous Parking 14 - Lights

15 - Brakes

16 - Other Equipment

4 08 - Improper Turning 6 09 - Automobile Right of Way 10 - Pedestrian Right of Way 11 - Pedestrian Violation 4 12 - Traffic Signals and Signs

17 - Other Hazardous Violation

18 - Other Than Driver (or Pedestrian)

19 -

20 -

3 21 - Unsafe Starting or Backing

22 - Other Improper Driving
23 - Pedestrian or "Other" Under the Influence of Alcohol or Drug

24 - Fell Asleep

0

INTERSEC	CT_ PROCDATE	JURIS D	DATE_	TIME_	BADGE	JURIDIST SHIFT PO	OP S	SPECIAL	BEATTYPE LA	PDDIV BEATCLAS	BEATNUMB	WEATHER2	STATEHW	/ CALTRANC	CALTRAND STR	DUTE ROU	TESUF PO	OSTPRE POSTMILE
N	8/12/2014	9725	4/20/2013	2058	20099	2	9	0	2	1	52	-	N		0	0		0
N	4/14/2014	9725	9/22/2013	1635	20008	2	9	0	2	1	52	-	Υ		0	0		0
N	3/7/2014	9725	6/24/2013	1935	19828	2	9	0	2	1	52	-	N		0	0		0
N	3/18/2015	9725	2/22/2015	1510	19415	2	9	0	2	1	52	-	N		0	0		0
N	4/14/2015	9725	3/25/2015	1730	19415	2	9	0	2	1	52	-	N		0	0		0
N	5/16/2014	9725	12/12/2013	1713	19215	2	9	0	2	1	52	-	Υ		0	0		0
N	8/7/2014	9725	4/27/2014	1000	20781	1	9	0	2	1	52	-	N		0	0		0
N	2/3/2016	9725	1/26/2016	1250	14585	1	9	0	2	1	52	-	N		0	0		0
N	3/22/2014	9725	6/5/2013	1410	19733	2	9	0	1	2	55	-	Υ	SBT	5	156 -	R	16.44
N	4/10/2014	9725	9/30/2013	620	19838	1	9	0	1	2	55	-	Υ	SBT	5	156 -	R	16.61
N	11/18/2014	9725	4/9/2013	1415	17575	2	9	0	1	2	55	-	Υ	SBT	5	156 -	R	16.44
N	11/18/2014		1/4/2013	1605	19828	2	9	0	1	2	55	-	Υ	SBT	5	156 -	R	16.84
N	3/24/2014		8/10/2013	1630	20008	2	9	0	2	1	52	-	N		0	0		0
N	9/12/2014	9725	9/13/2013	1740	19305	2	9	0	2	1	52	-	N		0	0		0
N	12/18/2015	9725	12/8/2015	1800	20120	2	9	0	2	1	52	-	N		0	0		0
N	7/13/2016	9725	7/8/2016	1510	20742	2	9	0	1	2	55	-	Υ		0	156		0
N	8/11/2016	9725	7/25/2016	1710	20742	2	9	0	1	2	55	-	Υ		0	156		0
N	9/16/2016	9725	8/12/2016	1920	20854	2	9	0	1	2	55	-	Υ		0	156		0
N	10/19/2015	9725	9/4/2015	2010	21056	2	9	0	1	2	55	-	Υ		0	156		0
N	6/21/2016		10/5/2014		19305	2	9	0	1	2	55	-	Υ	SBT	5	156 -	R	16.84
N	3/14/2014	9725	7/12/2013	1110	19733	1	9	0	2	1	52	-	Υ		0	0		0
N			9/14/2016		21067	3	9	0	2	1	52	-	N		0	0		0
N	12/21/2016	9725 1	12/12/2016	2100	19978	2	9	0	2	1	52	-	Υ		0	0		0
N			11/10/2013		17110	1	9	0	1	2	55		Υ	SBT	5	156 -	R	16.88
Υ	1/17/2014		1/19/2013		14585	1	9	0	2	1	52		N		0	0		0
N	3/27/2015		3/16/2015		21005	2	9	0	2	1	52		N		0	0		0
Υ	6/6/2016		5/21/2016	1917	18458	2	9	0	2	1	52		N		0	0		0
Υ	6/28/2014		2/25/2014	745	17575	1	9	0	2	1	52		N		0	0		0
Υ	4/17/2015		3/18/2015		20936	1	9	0	2	1	52	-	N		0	0		0
Υ	4/18/2016		3/23/2016		20754	2	9	0	2	1	52	-	N		0	0		0
Υ	9/1/2016		8/23/2016		20742	2	9	0	2	1	52		N		0	0		0
Υ	3/14/2014		7/20/2013	1040	19733	1	9	0	2	1	52	-	Υ	SBT	5	156 -	R	16.536
Υ	9/10/2014		8/15/2014	700	19838	1	9	0	2	1	52	-	N		0	0		0
Υ	10/10/2016		10/3/2016		20754	2	9	0	1	2	55	-	Υ		0	156		0
N	3/5/2014		6/7/2013		18649	1	9	0	2	1	52		N		0	0		0
N	3/19/2014		7/26/2013		20008	2	9	0	1	2	55		Υ	SBT	5	156 -	R	16.52
N	4/10/2014	9725	9/8/2013	1145	19838	1	9	0	1	2	55	-	Υ	SBT	5	156 -	R	16.82

LOCATYP	PE RAME	SIDEHW	TOWAWAY		VIOLCO			UN ROADSURF		RDCOND2	LIGHT	ING RIGHTWAY	CHPRDTYP NOTPR	IV STFAUL	T CHPFAULT SEV	/INJ OTH	HERINJ C	OP PE	DKILL
			Υ	1 A	-	23152 A	N	Α	Н	-	D	D	0 Y	Α	1	0	1	0	0
			Υ	1 A	-	23152 A	N	Α	Н	-	Α	D	0 Y	Α	1	0	0	1	0
			Υ	1 A	-	23152 A	N	Α	Н	-	Α	Α	0 Y	Α	7	0	0	1	0
			Υ	2 A	-	22350	N	Α	Н	-	Α	D	0 Y	Α	1	0	0	1	0
			N	2 A	-	22350	N	Α	Н	-	Α	D	0 Y	Α	7	0	0	1	0
			N	2 A	-	22350	F	Α	Н	-	С	D	0 Y	-	99	0	0	1	0
			Υ	2 A	-	22350	F	Α	Н	-	Α	D	0 Y	Α	1	1	0	1	0
			Υ	3 A	-	22350	N	Α	Н	-	Α	D	0 Y	Α	1	0	1	0	0
Н	-	E	Υ	4 A	-	22350	N	Α	Н	-	Α	Α	0 Y	D	22	0	0	2	0
H	-	E	N	2 A	-	22350	N	Α	Н	-	Α	D	0 Y	Α	1	0	0	1	0
H	-	W	Υ	2 A	-	22350	N	Α	Н	-	Α	D	0 Y	Α	1	0	0	2	0
H	-	E	Υ	5 A	-	22350	N	Α	Н	-	Α	D	0 Y	D	22	0	0	1	0
			Υ	1 A	-	22350	N	Α	Н	-	Α	D	0 Y	D	22	0	1	0	0
			Υ	4 A	-	22350	N	Α	Н	-	Α	D	0 Y	Α	1	0	1	0	0
			N	2 A	-	22350	N	Α	Н	-	D	D	0 Y	Α	7	0	0	1	0
			Υ	2 A	-	22350	N	Α	Н	-	Α	Α	0 Y	F	26	0	0	1	0
			Υ	5 A	-	22350	N	Α	Н	-	Α	Α	0 Y	G	25	1	0	0	0
			Υ	3 A	-	22350	F	Α	Н	-	Α	D	0 Y	Α	7	0	0	1	0
		W	Υ	2 A	-	22350	N	Α	Н	-	Α	Α	0 Y	Α	1	0	0	2	0
Н	-	E	Υ	2 A	-	21651 A	N	Α	H	-	Α	D	0 Y	D	22	0	1	3	0
			Υ	1 A	-	22107	N	Α	Н	-	Α	D	0 Y	D	22	0	0	1	0
			Υ	1 A	-	22107	N	Α	H	-	С	D	0 Y	Α	1	0	1	0	0
			Υ	1 A	-	22107	N	Α	H	-	D	D	0 Y	Α	1	0	0	1	0
Н	-	W	Υ	1 A	-	22107	N	Α	Н	-	Α	D	0 Y	Α	7	1	1	1	0
			N	2 A	-	21801 A	N	Α	Н	-	Α	D	0 Y	D	22	0	0	1	0
			Υ	2 A	-	21804 A	N	Α	Н	-	Α	D	0 Y	Α	1	1	1	1	0
			Υ	2 A	-	21801 A	N	Α	Н	-	Α	D	0 Y	Α	1	0	0	2	0
			Υ	2 A	-	21802 A	N	Α	Н	-	Α	Α	0 Y	Α	1	0	0	1	0
			Υ	2 A	-	21802 A	N	Α	Н	-	Α	Α	0 Y	D	22	0	0	2	0
			Υ	3 A	-	21802 A	N	Α	Н	-	С	Α	0 Y	Α	1	1	1	0	0
			Υ	2 A	-	22450 A	N	Α	Н	-	Α	Α	0 Y	Α	1	0	0	1	0
		5 W	Υ	2 A	-	21453 A	N	Α	Н	-	Α	Α	0 Y	D	22	0	1	1	0
			Υ	1 A	-	22450 A	N	Α	Н	-	Α	Α	0 Y	Α	8	0	0	1	0
			Υ	2 A	-	21453 A	N	Α	Н	-	С	Α	0 Y	G	25	0	0	2	0
			N	2 A	-	22106	N	A	H	_	Ā	D	0 Y	A	1	0	0	1	0
Н	_	W	Y	2 A	-	22106	N	A	H	_	A	Ā	0 Y	A	1	0	0	1	0
H	_	W	Y Y	2 A	-	22106	N	A	G	_	A	A	0 Y	C	2	2	0	0	0

PEDINJ I	BICKILL	BICINJ	MCKILL	MCINJURE	RAMP1	RAMP2	CITY	COUNTY	STATE	X_CHP	Y_CHP
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.36703	36.81808
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.47195	36.93315
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.41123	36.94066
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.3638	36.85695
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.3638	36.85695
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.3636	36.8555
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.36364	36.86105
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.2149	36.51275
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38871	36.93108
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38806	36.93368
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38847	36.93202
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.6813	37.00392
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.41775	36.93978
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.41721	36.93972
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.41124	36.94084
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38787	36.93436
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38884	36.93087
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38808	36.93336
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38819	36.9336
0	0	0	0			-	UNINCORPORATED	SAN BENITO	CA	-121.38734	36.93624
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.3977	36.9364
0	0	0	0			-	UNINCORPORATED	SAN BENITO	CA	-121.36366	36.85965
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.36363	36.86019
0	0	0	0	0	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38668	36.9385
0	0	0	0	-		-	UNINCORPORATED	SAN BENITO	CA	-121.38858	36.93324
0	0	0	0	-		-	UNINCORPORATED			-121.40049	36.93714
0	0	0	0			-	UNINCORPORATED			-121.38767	36.9328
0	0	0	0	-		-	UNINCORPORATED			-121.36359	
0	0	0	0			-	UNINCORPORATED			-121.36378	36.90217
0	0	0	0			-	UNINCORPORATED			-121.36368	
0	0	0	0			-	UNINCORPORATED			-121.37191	
0	0	0	0	-		-	UNINCORPORATED			-121.38878	36.93319
0	0	0	0	-		-	UNINCORPORATED			-121.36355	
0	0					-	UNINCORPORATED			-121.38825	
0	0					-	UNINCORPORATED			-121.4106	
0	0					-	UNINCORPORATED			-121.38843	
0	0	0	0	2	-	-	UNINCORPORATED	SAN BENITO	CA	-121.38837	36.93304

SWITRS Codebook

SWITRS Collision Raw Data

Item Name	Variable Name	Description	Label	Possible Values
Case Id	CASEID	the unique identifier of the collision report (barcode beginning 2002; 19 digit code prior to 2002)		
X-Coordinate Location	POINT_X	The longitude of the geocoded location; uses the World Geodetic System from 1984 (WGS84).		
Y-Coordinate Location	POINT_Y	The latitude of the geocoded location; uses the World Geodetic System from 1984 (WGS84).		
Collision Year	YEAR_	the year when the collision occurred		
County City Location	LOCATION	the location code of where the collision occurred		Data may appear with no leading zero.
CHP Beat Type	СНРТҮРЕ		0 "Not CHP" 1 "Interstate" 2 "US Highway" 3 "State Route" 4 "County Road Line" 5 "County Road Area" 6 "US Highway" 7 "State Route" 8 "County Road Line" 9 "County Road Area" 10 "Safety Services Program Beats" 11 "Administrative Beats (900's)"	 1 - Interstate 2 - US Highway 3 - State Route 4 - County Road Line 5 - County Road Area A - Safety Services Program Beats S - Administrative Beats (900's) 0 - Not CHP Contract City: 6 - US Highway 7 - State Route 8 - County Road Line 9 - County Road Area
Day of Week	DAYWEEK	the code for the day of the week when the collision occurred		1 - Monday 2 - Tuesday 3 - Wednesday 4 - Thursday 5 - Friday 6 - Saturday 7 - Sunday
Collision Severity	CRASHSEV	the injury level severity of the collision		1 - Fatal 2 - Injury (Severe)

PCF Violation Category	VIOLCAT	(highest level of injury in collision)	3 - Injury (Other Visible) 4 - Injury (Complaint of Pain) 0 - Property Damage Only (PDO) (PDO collisions not included on TIMS) 01 - Driving or Bicycling Under the Influence of Alcohol or Drug 02 - Impeding Traffic 03 - Unsafe Speed 04 - Following Too Closely 05 - Wrong Side of Road 06 - Improper Passing 07 - Unsafe Lane Change 08 - Improper Turning 09 - Automobile Right of Way 10 - Pedestrian Right of Way 11 - Pedestrian Violation 12 - Traffic Signals and Signs 13 - Hazardous Parking 14 - Lights 15 - Brakes 16 - Other Equipment 17 - Other Hazardous Violation 18 - Other Than Driver (or Pedestrian) 19 - 20 - 21 - Unsafe Starting or Backing 22 - Other Improper Driving 23 - Pedestrian or "Other" Under the Influence of Alcohol or Drug
1211 1 1 1	KII I ED		24 - Fell Asleep 00 - Unknown - Not Stated
Killed victims	KILLED	counts victims in the collision with degree of injury of 1	0 to N for each collision
Injured victims	INJURED	counts victims in the collision with degree of injury of 2, 3, or 4	0 to N for each collision
Weather 1	WEATHER1	the weather condition at the time of the collision	A - Clear B - Cloudy C - Raining D - Snowing E - Fog F - Other G - Wind Not Stated
Pedestrian Collision	PEDCOL	indicates whether the collision involved a pedestrian	Y or blank

Bicycle Collision	BICCOL	indicates whether the collision involved a bicycle	Y or blank
Motorcycle Collision	MCCOL	indicates whether the collision involved a motorcycle	Y or blank
Truck Collision	TRUCKCOL	indicates whether the collision involved a big truck	Y or blank
Alcohol Involved	ЕТОН	indicates whether the collision involved a party that had been drinking	Y or blank
Time Category	TIMECAT	the time of the collision aggregated by 3 hour categories	300 - Time >= 0:00 or Time <= 2:59 600 - Time >= 3:00 or Time <= 5:59 900 - Time >= 6:00 or Time <= 8:59 1200 - Time >= 9:00 or Time <= 11:59 1500 - Time >= 12:00 or Time <= 14:59 1800 - Time >= 15:00 or Time <= 17:59 2100 - Time >= 18:00 or Time <= 20:59 2400 - Time >= 21:00 or Time <= 23:59 2500 - Time = 25:00 (Unknown)
Month	MONTH_	The month of the year	1 – January 2 - February 3 – March 4 - April 5 – May 6 – June 7 – July 8 – August 9 – September 10 – October 11 – November 12 - December
Type of Collision	CRASHTYP		A - Head-On B - Sideswipe C - Rear End

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School Bus
to feet
n Intersection
k k c t

Collision Time	TIME_	the time when the collision	Data may appear with no leading
O#: a a a l al	DADOE	occurred (24 hour time)	zero(s).
Officer Id	BADGE		
Reporting District	JURDIST		
CHP Shift	SHIFT		1 - 0600 thru 1359 2 - 1400 thru 2159 3 - 2200 thru 0559 4 - CHP Not Stated 5 - Not CHP
Population	POP		1 - Incorporated (less than 2500) 2 - Incorporated (2500 - 10000) 3 - Incorporated (10000 - 25000) 4 - Incorporated (25000 - 50000) 5 - Incorporated (50000 - 100000) 6 - Incorporated (100000 - 250000) 7 - Incorporated (over 250000) 9 - Unincorporated (Rural) 0 - University (Private Property) - Not Stated
Special Condition	SPECIAL		1 - Schoolbus on Public Roadway (CHP Beat or CHP Adm Beat 901) 2 - State University (Also SFIA) 3 - Schoolbus Not on Public Roadway (CHP Adm Beat 903) 4 - Offroad (Unimproved) (CHP Adm Beat 906, 907) 5 - Vista Point or Rest Area (CHP Adm Beat 903) or Scales or Inspection Facility (CHP Com Beat 860-898) 6 - Other Public Access (Improved) (CHP Adm Beat 903) 0 - Not Above - Not Stated
Beat Type	BEATTYPE		1 - CHP State Highway 2 - CHP County Road Line 3 - CHP County Road Area 4 - Schoolbus on City Roadway (CHP Adm Beat 901) 5 - Schoolbus not on Public Roadway (CHP Adm Beat 903) 6 - Offroad (Unimproved) (CHP Adm Beat 906, 907) 7 - Vista Point or Rest Area (CHP Adm Beat 903) or Scales or

City Division LAPD CHP Beat Class	LAPDDIV BEATCLAS		Inspection Facility (CHP Com Beat 860-898) 8 - Other Public Access (Improved) (CHP Adm Beat 903) 0 - Not CHP Includes blanks and dashes as not stated. 1 - CHP Primary 2 - CHP Other
Do at Niveshau	DEATNUMD		0 - Not CHP
Beat Number	BEATNUMB	the constitue of the time	and a supplied to the supplied
Weather 2	WEATHER2	the weather condition at the time of the collision, if a second description is necessary	same as weather 1 above
State Highway Indicator	STATEHW	Indicates whether a collision occurred on a state highway	Y - State Highway N - Not State Highway Blank - Not stated
Caltrans County	CALTRANC		Includes blanks and nulls
Caltrans District	CALTRAND		
State Route	STROUTE		0 = Not State Highway
Route Suffix	ROUTESUF		
Postmile Prefix	POSTPRE		
Postmile	POSTMILE		
Location Type	LOCATYPE		H - Highway I - Intersection R - Ramp (or Collector) - or blank - Not State Highway
Ramp Intersection	RAMP		1 - Ramp Exit, Last 50 Feet 2 - Mid-Ramp 3 - Ramp Entry, First 50 Feet 4 - Not State Highway, Ramp-related, Within 100 Feet 5 - Intersection 6 - Not State Highway, Intersection-related, Within 250 Feet 7 - Highway 8 - Not State Highway Not Stated
Side Of Highway	SIDEHW	Code provided by Caltrans Coders; applies to divided highway, based on nominal direction of route; for single vehicle is same as nominal direction of travel, overruled by	N - Northbound S - Southbound E - Eastbound W - Westbound Blank - Not stated/not state highway

		impact with second vehicle after	
Tow Away	TOWAWAY	crossing median	Y - Yes
10W Away	IOWAWAT		N - No
Party Count	PARTIES	counts total parties in the collision	1 to N for each collision
Primary Collision Factor	PCF		A - (Vehicle) Code Violation B - Other Improper Driving C - Other Than Driver D - Unknown E - Fell Asleep Not Stated
PCF Violation Code	VIOLCODE		B - Business and Professions C - Vehicle H - City Health and Safety I - City Ordinance O - County Ordinance P - Penal S - Streets and Highways W - Welfare and Institutions Not Stated
PCF Violation	VIOL		Corresponds to violcat categories and described in vehicle code manual - (http://www.dmv.ca.gov/pubs/vctop/vc/vc.htm)
PCF Violation Subsection	VIOLSUB		Blank if no subsection.
Hit And Run	HITRUN		F - Felony M - Misdemeanor N - Not Hit and Run
Road Surface	ROADSURF		A - Dry B - Wet C - Snowy or Icy D - Slippery (Muddy, Oily, etc.) - Not Stated
Road Condition 1	RDCOND1		A - Holes, Deep Ruts B - Loose Material on Roadway C - Obstruction on Roadway D - Construction or Repair Zone E - Reduced Roadway Width F - Flooded G - Other H - No Unusual Condition Not Stated
Road Condition 2	RDCOND2		same as road condition 1 above
Lighting	LIGHTING		A - Daylight B - Dusk - Dawn

			C - Dark - Street Lights
			D - Dark - No Street Lights
			E - Dark - Street Lights Not
			Functioning
			Not Stated
Control Device	RIGHTWAY		A - Functioning
			B - Not Functioning
			C - Obscured
			D - None
			Not Stated
CHP Road Type	CHPRDTYP		May be blank
Not Private	NOTPRIV	indicates whether the collision	Y or blank
Property		occurred on private property	
Statewide Vehicle	STFAULT	indicates the Statewide Vehicle	see Party folder Statewide Vehicle
Type At Fault		Type of the party who is at fault	Type item
CHP Vehicle Type	CHPFAULT	indicates the CHP Vehicle Type	see Party folder CHP Vehicle Type
At Fault		of the party who is at fault	Towing item
Severe Injury	SEVINJ	counts victims in the collision with	0 to N for each collision
count		degree of injury of 2	
Other Visible Injury	OTHERINJ	counts victims in the collision with	0 to N for each collision
count		degree of injury of 3	
Complaint of Pain	СОР	counts victims in the collision with	0 to N for each collision
Injury count		degree of injury of 4	
Pedestrian Killed	PEDKILL	Counts the victims in the collision	0 or 1 for each collision
count		with party type of 2 and degree of	
		injury is 1	
Pedestrian Injured	PEDINJ	Counts the victims in the collision	0 or 1 for each collision
count		with party type of 2 and degree of	
		injury is 2, 3, or 4	
Bicyclist Killed	BICKILL	Counts the victims in the collision	0 to N for each collision
count		with (((victim role of 2 and	
		statewide vehicle type of 'L') or	
		(victim role of 4)) and (victim	
		degree of injury is 1))	
Bicyclist Injured	BICINJ	Counts the victims in the collision	0 to N for each collision
count		with (((victim role of 2 and	
		statewide vehicle type of 'L') or	
		(victim role of 4)) and (victim	
		degree of injury is 2, 3, or 4))	
Motorcyclist Killed	MCKILL	counts victims in the collision with	0 to N for each collision
count		statewide vehicle type of C or O	
		and degree of injury of 1	
Motorcyclist	MCINJURE	counts victims in the collision with	0 to N for each collision
Injured count		statewide vehicle type of C or O	
		and degree of injury of 2, 3, or 4	

Primary Ramp	RAMP1		NO-NB On Ramp, NF-NB Off Ramp, SO-SB On Ramp, SF-SB Off Ramp, EO-EB On Ramp, EF-EB Off Ramp, WO-WB On Ramp, WF-WB Off Ramp, To, From, Transition, Collector, Connector & blank
Secondary Ramp	RAMP2		Same as above
City	CITY		
County	COUNTY		
State	STATE		
CHP generated GPS longitude coordinate	CHP_X	The longitude of the GPS position	
CHP generated GPS latitude coordinate	CHP_Y	The latitude of the GPS position	

SWITRS Party Raw Data

Case Id	caseid	the unique identifier of the collision report (barcode beginning 2002; 19 digit code prior to 2002)	
Party Number	parnum	, , , , , , , , , , , , , , , , , , ,	1 to 999
Party Type	ptype		1 - Driver (including Hit and Run) 2 - Pedestrian 3 - Parked Vehicle 4 - Bicyclist 5 - Other - Not Stated
At Fault	atfault	indicates whether the party was at fault in the collision	Y
Party Sex	psex	the code of the sex of the party	M - Male F - Female - Not Stated
Party Age	page	the age of the party at the time of the collision	0 to 125+ (998=UNKNOWN)
Party Sobriety	psober		A - Had Not Been Drinking B - Had Been Drinking, Under Influence C - Had Been Drinking, Not Under Influence D - Had Been Drinking, Impairment Unknown G - Impairment Unknown H - Not Applicable Not Stated
Party Drug Physical	pdrug		E - Under Drug Influence F - Impairment - Physical H - Not Applicable I - Sleepy/Fatigued Not Stated
Direction Of Travel	pdirect		N - North S - South E - East W - West - Not Stated
Party Safety Equipment 1	psafety1		A - None in Vehicle B - Unknown C - Lap Belt Used D - Lap Belt Not Used E - Shoulder Harness Used F - Shoulder Harness Not Used

			G - Lap/Shoulder Harness Used H - Lap/Shoulder Harness Not Us J - Passive Restraint Used K - Passive Restraint Not Used L - Air Bag Deployed M - Air Bag Not Deployed N - Other P - Not Required Q - Child Restraint in Vehicle Use R - Child Restraint in Vehicle Not Used S - Child Restraint in Vehicle, Use Unknown T - Child Restraint in Vehicle, Improper Use U - No Child Restraint in Vehicle V - Driver, Motorcycle Helmet Not Used W - Driver, Motorcycle Helmet Use X - Passenger, Motorcycle Helmet Not Used
			Y - Passenger, Motorcycle Helme
			Used
Dowt Cofets	manfatus)		- or blank - Not Stated
Party Safety Equipment 2	psafety2		same as Party Safety Equipmen above
Financial	insured		N - No Proof of Insurance Obtaine
Responsibility			Y - Yes, Proof of Insurance Obtai
			O - Not Applicable (used for park
			cars, bicyclists, pedestrians, and
			party type others)
			E - Used if the officer is called aw
			from the scene of the collision pri
			to obtaining the insurance
			information Blank - not stated
Special Information	hazard		A - Hazardous Materials
1	hazard		Not Stated
Special Information	cell	CHP555 was revised July 2003 to	B - Cell Phone in Use (4/1/01)
2	CGII	reflect codes 1,2, & 3. However,	C - Cell Phone Not in Use (4/1/01)
		collision forms prior to July 2003	D - No Cell Phone/Unknown (4/1/
		will continue to be processed after	Not Stated (4/1/01)
		that date.	1 - Cell Phone Handheld in Use
			(7/1/03)
			2 - Cell Phone Hands Free in Use
			(7/1/03)

		3 - Cell Phone Not in Use (7/1/03)
Special Information 3	sbus	E - School Bus Related (1/1/02) Not Stated (1/1/02)
OAF Violation Code	pviolcod	B - Business and Professions C - Vehicle H - City Health and Safety I - City Ordinance O - County Ordinance P - Penal S - Streets and Highways W - Welfare and Institutions Not Stated
OAF Violation Category	pviolcat	01 - Under Influence in Public (647F) 02 - County Ordinance 03 - City Ordinance 05 - Business/Professions Code 06 - Felony Penal Code 08 - Controlled Substances (Felony Health and Safety) 09 - Health/Safety Code (Misdemeanor) 10 - Penal Code (Misdemeanor) 11 - Streets/Highways Code 13 - Welfare/Institutions Code 15 - Manslaughter 16 - Non-Vehicle Code Not Specified Above 17 - Fish & Game Code 18 - Agriculture Code 19 - Hit and Run 20 - Driving or Bicycling Under the Influence of Alcohol or Drug 21 - Improper Lane Change 22 - Impeding Traffic 23 - Failure to Heed Stop Signal 24 - Failure to Heed Stop Signal 24 - Failure to Heed Stop Sign 25 - Unsafe Speed 26 - Reckless Driving 27 - Wrong Side of Road 28 - Unsafe Lane Change 29 - Improper Passing 30 - Following Too Closely 31 - Improper Turning 33 - Automobile Right-of-Way 34 - Pedestrian Right-of-Way

		_	· · · · · · · · · · · · · · · · · · ·	
OAF Violation	pviol		39 - Ligh 40 - Bral 43 - Oth 44 - Oth 46 - Imp 47 - Oth 48 - Exc 49 - Exc 50 - Ove 51 - Ove 52 - Ove 53 - Uns 60 - Off- 61 - Chil 62 - Sea 63 - Sea	kes er Equipment er Hazardous Movement roper Registration er Non-Moving Violation essive Smoke essive Noise erweight ersize er Maximum Speed eafe Starting or Backing Highway Vehicle Violation d Restraint
Section				
OAF Violation Suffix	pviolsuf		Blan	k may appear if no suffix.
Other Associated Factor 1	oaf1		F - Inatte Inattention record for G - Stop H - Ente I - Previon J - Unfar K - Defe L - Unin M - Othe N - None O - Runa Not	n Obscurements ention (beginning 1/1/01; see on Item Name near end of or A-K, P values) and Go Traffic ring/Leaving Ramp ous Collision miliar With Road ctive Vehicle Equipment volved Vehicle er e Apparent away Vehicle Stated
Other Associated Factor 2	oaf2		S	ame as OAF 1 above
Party Number Killed	pkilled	counts victims in the party with degree of injury of 1		0 to N for each party
Party Number Injured	pinjured	counts victims in the party with degree of injury of 2, 3, or 4		0 to N for each party
Movement Preceding Collision	movement		A - Stop B - Proc	ped eeding Straight

			C - Ran Off Road D - Making Right Turn E - Making Left Turn F - Making U-Turn G - Backing H - Slowing/Stopping I - Passing Other Vehicle J - Changing Lanes K - Parking Maneuver L - Entering Traffic M - Other Unsafe Turning N - Crossed Into Opposing Lane O - Parked P - Merging Q - Traveling Wrong Way R - Other Not Stated
Vehicle Year	vehyear	the model year of the party's vehicle	9999 or blank = not stated
Vehicle Make	vehmake	the full description of the make of the party's vehicle	
Statewide Vehicle Type	vehtype		A - Passenger Car/Station Wagon B - Passenger Car with Trailer C - Motorcycle/Scooter D - Pickup or Panel Truck E - Pickup or Panel Truck with Trailer F - Truck or Truck Tractor G - Truck or Truck Tractor with Trailer H - Schoolbus I - Other Bus J - Emergency Vehicle K - Highway Construction Equipment L - Bicycle M - Other Vehicle N - Pedestrian O - Moped - or blank - Not Stated
CHP Vehicle Type Towing	chptype1		01 - Passenger Car, Station Wagon, or Jeep 02 - Motorcycle 03 - Motor-Driven Cycle (< 15 hp) 04 - Bicycle 05 - Motorized Bicycle 06 - All-Terrain Vehicle (ATV)

_		T	
			07 - Sport Utility Vehicle
			08 - Minivan
			09 - Paratransit Bus
			10 - Tour Bus
			11 - Other Commercial Bus
			12 - Non-Commercial Bus
			13 - Schoolbus Without Pupil
			Passengers (prior to 2002)
			13 – Schoolbus Public I (eff. 2002)
			14 - Schoolbus Public I (prior to
			2002)
			14 – Schoolbus Public II (eff. 2002)
			15 - Schoolbus Public II (prior to
			2002)
			15 – Schoolbus Private I (eff. 2002)
			16 - Schoolbus Private I (prior to
			2002)
			16 – Schoolbus Private II (eff. 2002)
			17 - Schoolbus Private II (prior to
			2002)
			17 - Schoolbus Contractual I (eff.
			2002)
			18 - Schoolbus Contractual I (prior to
			2002)
			18 - Schoolbus Contractual II (eff.
			2002)
			19 - Schoolbus Contractual II (prior
			to 2002)
			19 – General Public Paratransit
			Vehicle (eff. 2002)
			20 - Public Transit Authority
			21 - Two-Axle Tank Truck
			22 - Pickup or Panel Truck
			23 - Pickup Truck With Camper
			24 - Three-Axle Tank Truck
			25 - Truck Tractor
			26 - Two-Axle Truck
			27 - Three-Axle Truck
			41 - Ambulance
			42 - Dune Buggy
			43 - Fire Truck (not rescue)
			44 - Forklift
			45 - Highway Construction
			Equipment (only while not in
			construction area)
			46 - Implement of Husbandry
	L	1	1

		I	
			47 - Motor Home (40 ft or less)
			48 - CHP, Police, or Sheriff Car
			(emergency service or not)
			49 - CHP, Police, or Sheriff
			Motorcycle (emergency service or
			not)
			50 - Mobile Equipment
			51 - Farm Labor Vehicle (certified)
			55 - Two-Axle Tow Truck
			56 - Three-Axle Tow Truck
			57 - Farm Labor Vehicle (non-
			certified)
			58 - Farm Labor Transporter
			59 - Motorhome (over 40 ft)
			60 - Pedestrian (includes motorized
			wheelchair)
			61 - School Pupil Activity Bus I (prior
			to 2002)
			62 - School Pupil Activity Bus II (prior
			to 2002
			63 - "Youth" Bus
			64 - School Pupil Activity Bus I (eff.
			2002)
			65 - School Pupil Activity Bus II (eff.
			2002)
			66 – School Bus Without Pupil
			Passengers (eff. 2002)
			71 - Passenger Car - Hazardous
			Materials Only
			72 - Pickups and Panels -
			Hazardous Materials Only
			73 - Pickups and Campers -
			Hazardous Materials Only
			75 - Truck Tractor - Hazardous
			Materials Only
			76 - Two-Axle Truck - Hazardous
			Materials Only
			77 - Three or More Axle Truck -
			Hazardous Materials Only
			78 - Two-Axle Tank Truck -
			Hazardous Materials Only
			79 - Three-Axle Tank Truck -
			Hazardous Materials Only
			81 - Passenger Car - Hazardous
			Waste or Waste/Material Combo
•	•	•	

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			82 - Pickups and Panels -
			Hazardous Waste or Waste/Material
			Combo
			83 - Pickups and Campers -
			Hazardous Waste or Waste/Material
			Combo
			85 - Truck Tractor - Hazardous
			Waste or Waste/Material Combo
			86 - Two-Axle Truck - Hazardous
			Waste or Waste/Material Combo
			87 - Three or More Axle Truck -
			Hazardous Waste or Waste/Material
			Combo
			88 - Two-Axle Tank Truck -
			Hazardous Waste or Waste/Material
			Combo
			89 - Three-Axle Tank Truck -
			Hazardous Waste or Waste/Material
			Combo
			94 - Motorized Transportation Device
			95 - Miscellaneous Non-Motorized
			Vehicle (Ridden Animal, Animal-
			Drawn Conveyance, Train, Or
			Building) With Victim
			96 - Miscellaneous Motorized
			Vehicle (Golf Cart)
			97 - Low Speed Vehicle
			99 or dash - Not Stated or Unknown
			(Hit and Run)
CHP Vehicle Type	chptype2		same as CHP vehicle type towing
Towed	' '		above with the following additions:
			28 - Semi-Tank Trailer
			29 - Pull-Tank Trailer
			30 - Two-Tank Trailer
			31 - Semi-Trailer
			32 - Pull Trailer (includes dolly)
			33 - Two Trailers (or 31 + 32)
			34 - Boat Trailer
			35 - Utility Trailer
			36 - Trailer Coach
			37 - Extralegal Permit Load
			38 - Pole, Pipe, or Logging Dolly
			39 - Three Trailers (or 31 + 33)
			40 - Federally Legal Semi-Trailer
			52 - Federally Legal Double Cargo
			Combo (over 75 ft)
			COITIDO (OVEL 13 IL)

Party Race	prace		53 - Fifth Wheel Trailer 54 - Container Chassis A - Asian O - Other B - Black W - White H - Hispanic Blank - Not stated Eff. 1/1/2002
Inattention	var31 (SAS) inattention (Stata)	The July 2003 form revision separated 'P' Cell Phone into 'A' Handheld and 'B' Hands Free. All other values 'Q' through 'Y' were converted to 'C' through 'K'.	A - Cell Phone Handheld (7/1/03) B - Cell Phone Hands Free (7/1/03) C - Electronic Equip.(1/1/01) D - Radio/CD (1/1/01) E - Smoking (1/1/01) F - Eating (1/1/01) G - Children (1/1/01) H - Animal (1/1/01) I - Personal Hygiene (1/1/01) J - Reading (1/1/01) K - Other (1/1/01) P - Cell Phone (1/1/01, value prior to 7/03 form revision) - Not Stated
Special Information F	var32		F - 75 Ft Motortruck Combo (1/1/03) - Not Stated
Special Information G	var33		G - 32 Ft Trailer Combo (1/1/03) - Not Stated

SWITRS <u>Victim</u> Raw Data

Case Id	caseid	the unique identifier of the collision		
Case Iu	Caseiu	report (barcode beginning 2002;		
		19 digit code prior to 2002)		
Dorty Number		19 digit code prior to 2002)		1 to 999
Party Number	parnum		<u> </u>	
Victim Role	vtype			1 - Driver
				2 - Passenger (includes non-
				operator on bicycle or any victim
				on/in parked vehicle or multiple
				victims on/in non-motor vehicle)
				3 - Pedestrian
				4 - Bicyclist
				5 - Other (single victim on/in non-
				notor vehicle; e.g. ridden animal,
				norse-drawn carriage, train, or
				ouilding)
				6 - Non-Injured Party
Victim Sex	vsex			M - Male
				F - Female
			-	- Not Stated
Victim Age	vage	the age of the victim at the time of		0 - 125+ (998=UNKNOWN)
		the collision		
Victim Degree of	vinjury			1 - Killed
Injury				2 - Severe Injury
				3 - Other Visible Injury
				4 - Complaint of Pain
) - No Injury
Victim Seating	vseat			1 - Driver
Position				2 thru 6 - Passengers
				7 - Station Wagon Rear
				3 - Rear Occupant of Truck or Van
				9 - Position Unknown
) - Other Occupants
				A thru Z - Bus Occupants
	_			- Not Stated
Victim Safety	vsafety1			A - None in Vehicle
Equipment 1				3 - Unknown
				C - Lap Belt Used
				O - Lap Belt Not Used
				E - Shoulder Harness Used
				F - Shoulder Harness Not Used
				G - Lap/Shoulder Harness Used
				H - Lap/Shoulder Harness Not Used
				J - Passive Restraint Used

		K - Passive Restraint Not Used L - Air Bag Deployed M - Air Bag Not Deployed N - Other P - Not Required Q - Child Restraint in Vehicle Used R - Child Restraint in Vehicle Not Used S - Child Restraint in Vehicle, Use Unknown T - Child Restraint in Vehicle, Improper Use U - No Child Restraint in Vehicle V - Driver, Motorcycle Helmet Not Used W - Driver, Motorcycle Helmet Used X - Passenger, Motorcycle Helmet Not Used Y - Passenger, Motorcycle Helmet Used - or blank - Not Stated
Victim Safety Equipment 2	vsafety2	same as Victim Safety Equipment 1 above (eff. Jan 2002)
Victim Ejected	vejected	0 - Not Ejected 1 - Fully Ejected 2 - Partially Ejected 3 - Unknown Not Stated

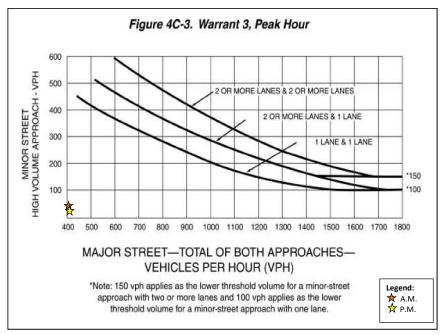


Appendix D Fairview Road and John Smith Road Signal Warrant Analysis

Signal Warrant Analysis Fairview Road and John Smith Road San Benito County

WARRAN	T3 - Peak Hours			PART	A or PART	B SATISFIED	YES	NO	~
PART A (All parts,	1, 2 and 3 below must be satisfied)			SATI	SFIED		YES	NO	~
1.	The total delay experienced for traffic on one minor street approach cor hours for a one-lane approach and five vehicle-hours for a two-lane app			uals or ex	ceeds four	vehicle-	YES	NO	V
2.	The volume on the same minor street approach equals or exceeds 100 ν moving lanes: $\underline{\text{AND}}$	ph for one	moving lane o	f traffic or	150 vph f	or two	YES	NO	~
3.	The total entering volume services during the hour equals or exceeds 80 650 vph for intersections with three approaches.)0 vph for in	itersections wi	ith four or	more app	roaches or	YES	NO	~
	Part A is not met for the A.M. a	ınd P.M. Pe	ak Hours						
PART B					SATISFIE	D	YES	NO	V
	APPROACH LANES Both Approaches - Major Street Highest Approaches - Minor Street	One 1	2 or More	327 59	\$25 322 38	Hour			

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume vehicle minor street approach (one direction only) for one hour (any 4 consecutive 15 minute intervals)



Part B is not met for the A.M. and P.M. Peak Hours



Appendix E John Smith Road Landfill Data

	In Co	ounty	Out County				Total Daily	Total Daily
<u>Date</u>	Loads	Tons		<u>Loads</u>	Tons		<u>Loads</u>	<u>Tons</u>
8/18/2017	131	227.95		36	739.83		167	967.78
8/19/2017	155	112.6		20	393.93		175	506.53
8/20/2017	213	86.47		23	474		236	560.47
8/21/2017	118	222.78		33	644.02		151	866.80
8/22/2017	106	260.83		33	638.31		139	899.14
8/23/2017	133	295.58		34	660.06		167	955.64
8/24/2017	99	216.75		37	721.89		136	938.64
			1171	5695.00				

Print Date: 8/24/201

Start Date: 8/23/201 Stop Date

Stop Date: 8/23/201

CUSTNUM	TICKET COUNT	COUNT	YARDS	TONS	DOLLARS
0	CASH CUSTOMER		0.00	67.70	1 2 1 2 0 0
110	REFUSE	0	0.00	67.70	4,342.98 107.36
111	DEMOLITION	0	0.00	1.76 69.46	4,450.34
	96	0	0.00	09.40	4,430.34
15	BARCO CONSTRUCTION	0	0.00	1.75	109.81
110	REFUSE	0	0.00	1.75	109.81
	1		0.00	1./3	102.01
29	CEDAR VALLEY MANUFACTURING	0	0.00	6.63	416.03
110	REFUSE	0	0.00	6.63	416.03
	1	0	0.00	0.03	410.05
51	FOUR SEASON LANDSCAPING	0	0.00	0.95	59.61
110	REFUSE	0	0.00	0.95	59.61
	1		0.00	0.73	37.01
54	GARDENS OF SANTA TERESA	0	0.00	1.80	112.95
110	REFUSE	0	0.00	1.80	112.95
	1	0	0.00	1.00	112.75
141	Gary Welch Construction & Roof	0	0.00	3.80	238.45
110	REFUSE	0	0.00	3.80	238.45
	1	U	0.00	3.60	236.43
163	SOUTH VALLEY DISPOSAL & RECYCL	0	0.00	14.94	937.49
110	REFUSE	0	0.00	100.58	4,500.94
120	PACKER	0	0.00	115.52	5,438.43
	16		0.00	113.32	3,430.43
182	RJR Environmental Professional	Ď.	0.00	22.66	1,421.92
110	REFUSE	0	0.00	6.30	281.93
120	PACKER	0	0.00	22,62	718.19
130	RESIDUAL SOLID WASTE 9	-0	0.00	51.58	2,422.04
			0.00		assumativity
341	STERICYCLE, INC.	0	0.00	37.85	2,375.09
110	REFUSE	0	0.00	37.85	2,375.09
			9.00		
353	PREMIER RECYCLE COMPANY RESIDUAL SOLID WASTE	0	0.00	221.27	5,651.24
130	RESIDUAL SOLID WASTE	0	0.00	221.27	5,651.24

374 110	GIBSON RESOURCE GROUP, INC. REFUSE	0	0.00	16.98	628.26
110	1	0	0.00	16.98	628.26

380	VALLEY RECYCLING RESIDUAL SOLID WASTE	0	0.00	163.22	3,602.27
130	RESIDUAL SOLID WASTE	0	0.00	163.22	3,602.27
1145	Approximation of the following the first terms of t				
387	PARC-PROF.ASBESTOS REMOVAL COR Non-Friable Asbestos	0	0.00	11.98	613.97
117	Non-Friable Aspestos	0	0.00	11.98	613.97
					/
392	P+J's LAWN SERVICE	0	0.00	0.16	12.00
110	REFUSE 1	0	0.00	0.16	12.00
411 110	San Martin Transfer Station REFUSE	0	0.00	246.61	5,551.21

Print Date: 8/24/201

Start Date: 8/23/201

Stop Date: 8/23/201

CUSTNUM	TICKET	COUNT	COUNT	YARDS	TONS	DOLLARS
		12	0	0.00	246.61	5,551.21
471	RAMSEY LATH & PLASTER INC					THE PARTY OF THE P
110	REFUSE		0	0.00	6.08	381.53
	***************************************	2	0	0.00	6.08	381.53
			0	0.00	955.64	32,063,23