SH 83 Safety and Operations Analysis: Bayou Gulch to El Paso County Line MP 30.20 – MP 53.88 Project Code 23008

Appendix E – HCS Analysis and Synchro Evaluation Results

Prepared for:





Prepared by:

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HCS7 Two-Lane Highway Report

Project Information

Analyst	CONSOR/Apex	Date	1/11/2022
Agency	CDOT Region 1	Analysis Year	2020
Jurisdiction	Douglas County	Time Period Analyzed	AM Peak
Project Description	SH 83 Safety and Operation Analysis - NB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5335
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	65	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	251	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	4.90
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	69.8
Speed Slope Coefficient	4.34586	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.20426	PF Power Coefficient	0.78662
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2955	-	-	67.9
2	Horizontal Curve	2380	960	8	64.2

Vehicle Results

Average Speed, mi/h	66.2	Percent Followers, %	33.4
Segment Travel Time, minutes	0.92	Followers Density, followers/mi/ln	1.3
Vehicle LOS	А		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	251	Bicycle Effective Width, ft	15
Bicycle LOS Score	5.18	Bicycle Effective Speed Factor	5.07
Bicycle LOS	E		

Segment 2

Ve	hicle Inputs					
Segment Type Passing Zone		Length, ft		1635		
Lane	e Width, ft	dth, ft 12		Shoulder Width, ft	:	2
Spe	Speed Limit, mi/h 65		Access Point Dens	ity, pts/mi	8.0	
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	251		Opposing Demand	d Flow Rate, veh/h	115
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.15
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	69.0
Spe	ed Slope Coefficient	3.96399		Speed Power Coef	fficient	0.56787
PF S	lope Coefficient	-1.20621		PF Power Coefficie	ent	0.81947
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.2
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1635	-		-	67.6
Ve	hicle Results					
Ave	rage Speed, mi/h	67.6		Percent Followers,	%	32.2
Seg	ment Travel Time, minutes	0.27		Followers Density,	followers/mi/ln	1.2
Veh	icle LOS	A				
Bic	ycle Results					-
Perc	ent Occupied Parking	0		Pavement Condition	on Rating	4
Flow	v Rate Outside Lane, veh/h	251		Bicycle Effective W	/idth, ft	14
Bicy	cle LOS Score	6.81		Bicycle Effective Speed Factor		5.07
Bicy	cle LOS	F				
		S	egn	nent 3		
Ve	hicle Inputs					
Seg	ment Type	Passing Constrained		Length, ft		5860
Lane	e Width, ft	12		Shoulder Width, ft	:	1
Spe	ed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
De	mand and Capacity					
Directional Demand Flow Rate, veh/h 271		Opposing Demand	d Flow Rate, veh/h	-		
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.16
Int	ermediate Results					
Seg	Segment Vertical Class 2			⁴ Free-Flow Speed, mi/h		66.9

Speed Slope Coefficient 6.45386		6.45386		Speed Power Coefficient		0.51255
PF S	ope Coefficient	-1.27762		PF Power Coefficient		0.76399
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.6
%Im	%Improved % Followers 0.0		% Improved Avg	Speed	0.0	
Sub	osegment Data			- -		
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3360	-		-	64.3
2	Horizontal Curve	2500	960	D	8	64.0
Vel	nicle Results					
Aver	Average Speed, mi/h 64.2			Percent Followers	s, %	37.6
Segr	nent Travel Time, minutes	1.04		Followers Density	, followers/mi/ln	1.6
Vehi	cle LOS	A				
Bic	ycle Results					
Percent Occupied Parking 0			Pavement Condit	ion Rating	4	
Flow	Rate Outside Lane, veh/h	271		Bicycle Effective V	Vidth, ft	13
Bicy	cle LOS Score	6.99		Bicycle Effective Speed Factor		5.07
Bicycle LOS F		F	F			
			Segn	nent 4		
Vel	nicle Inputs					
Segr	nent Type	Passing Zone		Length, ft		1100
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	ed Limit, mi/h	65		Access Point Den	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	280		Opposing Demand Flow Rate, veh/h		128
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.16
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed, mi/h		68.3
Spee	ed Slope Coefficient	3.92625		Speed Power Coe	fficient	0.56282
PF S	ope Coefficient	-1.23055		PF Power Coeffici	ent	0.80949
In Passing Lane Effective Length? No		Total Segment Density, veh/mi/ln		1.5		
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1915	-		-	66.8
Vel	nicle Results					
Aver	age Speed, mi/h	66.8		5 Percent Followers	, %	35.5

Segment Travel Time, minutes	0.19	0.19		, followers/mi/ln	1.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	280		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score	7.01		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segr	nent 5		
Vehicle Inputs					
Segment Type	Passing Constrain	ned	Length, ft		5335
Lane Width, ft	12	12		t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh,	/h 280		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h 1700		Demand/Capacity (D/C)		0.16	
Intermediate Results					
Segment Vertical Class 1		Free-Flow Speed,	mi/h	68.3	
Speed Slope Coefficient	4.26258		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.21926		PF Power Coefficient		0.78318
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	1.5
%Improved % Followers	0.0		% Improved Avg Speed		0.0
Subsegment Data					
# Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	5335	-	-		66.2
Vehicle Results					
Average Speed, mi/h	66.2		Percent Followers, %		36.2
Segment Travel Time, minutes	0.92		Followers Density, followers/mi/ln		1.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h	280	280		Vidth, ft	13
Bicycle LOS Score	7.01		Bicycle Effective Speed Factor		5.07
Bicycle LOS	F				
		Segr	ment 6		
Vehicle Inputs					
Segment Type	Passing Zone		6 Length, ft		1265

Lane Width, ft	12		Shoulder Width, ft		1
Speed Limit, mi/h 65		Access Point Density, pts/mi		8.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h 278		Opposing Deman	d Flow Rate, veh/h	128	
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.16
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	3.92625		Speed Power Coe	fficient	0.56282
PF Slope Coefficient	-1.23055		PF Power Coeffici	ent	0.80949
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	1.5
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1925	-		-	66.8
Vehicle Results					
Average Speed, mi/h	66.8		Percent Followers	;, %	35.3
Segment Travel Time, minutes	0.22		Followers Density, followers/mi/ln		1.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condit	ion Rating	4
Flow Rate Outside Lane, veh/h	278		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score	7.00		Bicycle Effective Speed Factor		5.07
Bicycle LOS	F				
		Segr	nent 7		
Vehicle Inputs					
Segment Type	Passing Constrai	ined	Length, ft		4225
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	278		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.16
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.25120		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.22936 -		PF Power Coefficient		0.78276

In Passing Lane Effective Length?		No		Total Segment De	nsity, veh/mi/ln	1.5
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4225	-		-	66.2
Vel	nicle Results	·				
Aver	age Speed, mi/h	66.2		Percent Followers	, %	36.3
Segr	nent Travel Time, minutes	0.72		Followers Density,	followers/mi/ln	1.5
Vehi	cle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	278		Bicycle Effective W	/idth, ft	13
Bicy	cle LOS Score	7.00		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	F				
			Segn	nent 8		
Vel	nicle Inputs					
Segment Type Passing Zone		Length, ft		1740		
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	278		Opposing Deman	d Flow Rate, veh/h	128
Peak	Hour Factor	0.94	Total Trucks, %			9.00
Segr	nent Capacity, veh/h	1700	Demand/Capacity ((D/C)	0.16
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	3.93387		Speed Power Coe	fficient	0.56282
PF S	lope Coefficient	-1.21071		PF Power Coefficie	ent	0.81840
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.5
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	660	-		-	66.8
2	Horizontal Curve	730	960)	8	64.0
3	Tangent	350	-		-	66.8
Vel	nicle Results					
Aver	age Speed, mi/h	65.6		Percent Followers	, %	34.6
Seament Travel Time, minutes		0.30		Followers Density	followers/mi/ln	1.5

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Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition	on Rating	4
Flow Rate Outside Lane, veh/h	278		Bicycle Effective Width, ft		13
Bicycle LOS Score	7.00		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	egn	nent 9		
Vehicle Inputs					
Segment Type	Passing Constrained		Length, ft		3540
Lane Width, ft	12		Shoulder Width, ft	t	1
Speed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
Demand and Capacity			-		-
Directional Demand Flow Rate, veh/h	278		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.16
Intermediate Results			•		
Segment Vertical Class 1			Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient 4.24340		Speed Power Coe	fficient	0.41674	
PF Slope Coefficient -1.23939		PF Power Coefficie	ent	0.78054	
In Passing Lane Effective Length?	In Passing Lane Effective Length? No		Total Segment De	nsity, veh/mi/ln	1.5
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data			-		
# Segment Type	Length, ft	Rad	lius, ft Superelevation, %		Average Speed, mi/h
1 Tangent	3540	-		-	66.2
Vehicle Results	-			1	-
Average Speed, mi/h	66.2		Percent Followers,	%	36.6
Segment Travel Time, minutes	0.61		Followers Density,	followers/mi/ln	1.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition	on Rating	4
Flow Rate Outside Lane, veh/h	278		Bicycle Effective W	/idth, ft	13
Bicycle LOS Score	7.00		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	gm	ent 10		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1900
Lane Width, ft	12	ç	9 Shoulder Width, ft	t	1

Speed Limit, mi/h		65		Access Point Dens	ity, pts/mi	8.0	
Demand and C	apacity			-		•	
Directional Demand I	Flow Rate, veh/h	278		Opposing Demand	d Flow Rate, veh/h	128	
Peak Hour Factor		0.94		Total Trucks, %		9.00	
Segment Capacity, ve	eh/h	1700		Demand/Capacity	(D/C)	0.16	
Intermediate R	esults						
Segment Vertical Clas	SS	1		Free-Flow Speed,	mi/h	68.3	
Speed Slope Coefficie	ent	3.93652		Speed Power Coef	fficient	0.56282	
PF Slope Coefficient		-1.20442		PF Power Coefficie	ent	0.82119	
In Passing Lane Effect	tive Length?	No		Total Segment De	nsity, veh/mi/ln	1.4	
%Improved % Follow	vers	0.0		% Improved Avg S	Speed	0.0	
Subsegment D	ata						
# Segment Type		Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h	
1 Tangent		795	-		-	66.8	
Vehicle Results	;						
Average Speed, mi/h		66.8		Percent Followers,	%	34.3	
Segment Travel Time, minutes		0.32		Followers Density, followers/mi/ln		1.4	
Vehicle LOS		A					
Bicycle Results							
Percent Occupied Par	rking	0		Pavement Condition	on Rating	4	
Flow Rate Outside La	ne, veh/h	278		Bicycle Effective W	/idth, ft	13	
Bicycle LOS Score		7.00		Bicycle Effective Speed Factor		5.07	
Bicycle LOS		F					
		Se	gm	ent 11			
Vehicle Inputs							
Segment Type		Passing Constrained		Length, ft		475	
Lane Width, ft		12		Shoulder Width, ft	:	1	
Speed Limit, mi/h		65		Access Point Dens	ity, pts/mi	8.0	
Demand and C	apacity						
Directional Demand I	Flow Rate, veh/h	278		Opposing Demand	d Flow Rate, veh/h	-	
Peak Hour Factor 0.94		Total Trucks, %		9.00			
Segment Capacity, veh/h 1700		Demand/Capacity	(D/C)	0.16			
Intermediate R	esults						
Segment Vertical Cla	SS	1		Free-Flow Speed,	mi/h	68.3	
Speed Slope Coefficie	ent	4.21060		Speed Power Coef	fficient	0.41674	
PF Slope Coefficient		-1.31148		PF Power Coefficie	ent	0.75510	
In Passing Lane Effect	tive Length?	No	1	Total Segment De	Total Segment Density, veh/mi/ln 1.6		

%Improved % Followers		0.0		% Improved Avg S	Speed	0.0		
Su	bsegment Data							
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	600	-		-	66.3		
Ve	hicle Results							
Ave	rage Speed, mi/h	66.3		Percent Followers,	, %	39.2		
Seg	ment Travel Time, minutes	0.08		Followers Density,	followers/mi/ln	1.6		
Veh	icle LOS	A						
Bic	cycle Results							
Perc	cent Occupied Parking	0		Pavement Conditi	on Rating	4		
Flov	v Rate Outside Lane, veh/h	278		Bicycle Effective W	/idth, ft	13		
Bicy	cle LOS Score	7.00		Bicycle Effective S	peed Factor	5.07		
Bicy	cle LOS	F						
	Segment 12							
Ve	hicle Inputs							
Seg	ment Type	Passing Zone		Length, ft		1740		
Lane Width, ft		12		Shoulder Width, ft	t	1		
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0		
De	mand and Capacity							
Dire	ectional Demand Flow Rate, veh/h	284		Opposing Deman	d Flow Rate, veh/h	130		
Pea	k Hour Factor	0.94		Total Trucks, %		9.00		
Seg	ment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.17		
Int	ermediate Results							
Seg	ment Vertical Class	1		Free-Flow Speed, mi/h		68.3		
Spe	ed Slope Coefficient	3.93484		Speed Power Coe	fficient	0.56201		
PF S	lope Coefficient	-1.21139		PF Power Coefficie	ent	0.81819		
In P	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.5		
%Im	nproved % Followers	0.0		% Improved Avg S	Speed	0.0		
Su	bsegment Data							
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	2010	-		-	66.8		
Ve	hicle Results							
Average Speed, mi/h 66.8			Percent Followers,	, %	35.1			
Segment Travel Time, minutes 0.3		0.30		Followers Density,	followers/mi/ln	1.5		
Veh	icle LOS	A						
Bic	cycle Results							
Perc	cent Occupied Parking	¹ Pavement Conditi	Pavement Condition Rating 4					

Flow Rate Outside Lane, veh/h		284		Bicycle Effective \	Vidth, ft	13
Bicy	cle LOS Score	7.01		Bicycle Effective S	Speed Factor	5.07
Bicy	cle LOS	F				
			Segm	ent 13		
Vel	nicle Inputs					
Segr	nent Type	Passing Constra	ined	Length, ft		8130
Lane	e Width, ft	12		Shoulder Width, 1	ft	1
Spee	ed Limit, mi/h	65		Access Point Den	sity, pts/mi	8.0
Dei	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	284		Opposing Demar	nd Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.17
Inte	ermediate Results					
Segr	nent Vertical Class	2		Free-Flow Speed,	mi/h	66.8
Spee	ed Slope Coefficient	6.91269		Speed Power Coe	efficient	0.52093
PF Slope Coefficient		-1.27840		PF Power Coeffici	ent	0.75675
In Passing Lane Effective Length?		No		Total Segment De	ensity, veh/mi/ln	1.7
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2960	-		-	64.0
2	Horizontal Curve	795	960		8	64.0
3	Tangent	4375	-	-		64.0
Vel	nicle Results					
Aver	age Speed, mi/h	64.0		Percent Followers, %		38.9
Segr	nent Travel Time, minutes	1.44		Followers Density	r, followers/mi/ln	1.7
Vehi	cle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Condit	ion Rating	4
Flow	Rate Outside Lane, veh/h	284		Bicycle Effective \	Vidth, ft	13
Bicy	cle LOS Score	7.01		Bicycle Effective S	Speed Factor	5.07
Bicycle LOS F		F				
			Segm	ent 14		
Vel	nicle Inputs					
Segr	nent Type	Passing Zone		Length, ft		1100
Lane	Width, ft	12		Shoulder Width, 1	ft	1
Spee	ed Limit, mi/h	65	1	Access Point Den	sity, pts/mi	8.0

Demand and Capacity					
Directional Demand Flow Rate, veh/h	304		Opposing Deman	d Flow Rate, veh/h	139
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.18
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	3.93150		Speed Power Coe	fficient	0.55848
PF Slope Coefficient	-1.23424		PF Power Coefficie	ent	0.80840
In Passing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.7
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	2340	-		-	66.7
Vehicle Results					
Average Speed, mi/h	66.7		Percent Followers,	, %	37.6
Segment Travel Time, minutes	0.19		Followers Density, followers/mi/ln		1.7
Vehicle LOS	Α				
Bicycle Results					
Percent Occupied Parking 0			Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	304		Bicycle Effective Width, ft		13
Bicycle LOS Score	7.05		Bicycle Effective Speed Factor		5.07
Bicycle LOS	F				
		Segm	ient 15		
Vehicle Inputs					
Segment Type	Passing Constrained	d	Length, ft		2110
Lane Width, ft	12		Shoulder Width, ft	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	304		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor 0.94		Total Trucks, %		9.00	
Segment Capacity, veh/h 1700		Demand/Capacity	(D/C)	0.18	
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.22420		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.27547		PF Power Coefficie	ent	0.76866
In Passing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.8
%Improved % Followers 0.0		1	18% Improved Avg S	Speed	0.0

Su	bsegment Data								
#	Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h			
1	Tangent	600	-		-	66.1			
Ve	hicle Results								
Ave	rage Speed, mi/h	66.1		Percent Followers	, %	40.0			
Seg	ment Travel Time, minutes	0.36		Followers Density	, followers/mi/ln	1.8			
Veh	icle LOS	A							
Bic	ycle Results			- -					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4			
Flov	/ Rate Outside Lane, veh/h	304		Bicycle Effective V	Vidth, ft	13			
Bicy	cle LOS Score	7.05		Bicycle Effective S	peed Factor	5.07			
Bicy	cle LOS	F							
	Segment 16								
Ve	hicle Inputs								
Seg	ment Type	Passing Zone		Length, ft		1585			
Lane	e Width, ft	12		Shoulder Width, f	t	1			
Speed Limit, mi/h		65		Access Point Dens	sity, pts/mi	8.0			
De	mand and Capacity								
Dire	ctional Demand Flow Rate, veh/h	310		Opposing Deman	d Flow Rate, veh/h	141			
Pea	K Hour Factor	0.94		Total Trucks, %		9.00			
Seg	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.18			
Int	ermediate Results								
Seg	ment Vertical Class	1		Free-Flow Speed, mi/h		68.3			
Spe	ed Slope Coefficient	3.93736		Speed Power Coe	fficient	0.55771			
PF S	lope Coefficient	-1.22170		PF Power Coeffici	ent	0.81409			
In P	assing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	1.7			
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0			
Su	bsegment Data								
#	Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h			
1	Tangent	7050	-		-	66.7			
Ve	hicle Results				-				
Average Speed, mi/h 66.7			Percent Followers	, %	37.5				
Seg	ment Travel Time, minutes	0.27		Followers Density	, followers/mi/In	1.7			
Veh	icle LOS	A							
Bic	ycle Results								
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4			
Flow Rate Outside Lane, veh/h		310		¹⁴ Bicycle Effective V	Vidth, ft	13			

Bicycle LOS Score 7.06		Bicycle Effective Speed Factor		5.07		
Bicyc	le LOS	F				
		Se	gm	ent 17		
Veh	icle Inputs					
Segn	nent Type	Passing Constrained		Length, ft		845
Lane	Width, ft	12		Shoulder Width, f	t	6
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	0.0
Den	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	310		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segn	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.18
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	73.8
Spee	d Slope Coefficient	4.50870		Speed Power Coe	fficient	0.41674
PF Slo	ope Coefficient	-1.24980		PF Power Coefficient		0.76717
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.7
%Improved % Followers 0.0		0.0		% Improved Avg Speed		0.0
Sub	segment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-		71.4
Veh	iicle Results					
Avera	age Speed, mi/h	71.4		Percent Followers	, %	39.9
Segn	nent Travel Time, minutes	0.13		Followers Density,	followers/mi/ln	1.7
Vehic	cle LOS	A				
Bicy	cle Results			-		
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	310		Bicycle Effective W	/idth, ft	24
Bicyc	le LOS Score	5.02		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	E				
		Se	gm	ent 18		
Veh	icle Inputs					
Segm	nent Type	Passing Zone		Length, ft		2430
Lane	Width, ft	12		Shoulder Width, f	t	6
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	0.0
Den	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	310		Opposing Deman	d Flow Rate, veh/h	141
Peak	Hour Factor	0.94	1	⁵ Total Trucks, %		9.00

Segment Capacity, veh/h		1700		Demand/Capacity	(D/C)	0.18		
Intermediate	Results							
Segment Vertical C	lass	1		Free-Flow Speed,	mi/h	73.8		
Speed Slope Coefficient 4.24889		Speed Power Coet	fficient	0.55771				
PF Slope Coefficien	t	-1.15236		PF Power Coefficie	ent	0.84152		
In Passing Lane Effe	ective Length?	No		Total Segment De	nsity, veh/mi/ln	1.5		
%Improved % Follo	owers	0.0		% Improved Avg Speed 0.0				
Subsegment I	Data							
# Segment Typ	e	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h		
1 Tangent		5280 -			-	72.0		
Vehicle Result	ts							
Average Speed, mi	/h	72.0		Percent Followers,	Percent Followers, % 34.9			
Segment Travel Tim	ne, minutes	0.38		Followers Density,	followers/mi/In	1.5		
Vehicle LOS		A						
Bicycle Result	S							
Percent Occupied P	Parking	0		Pavement Condition	on Rating	4		
Flow Rate Outside I	Lane, veh/h	310		Bicycle Effective Width, ft		24		
Bicycle LOS Score 5.02		5.02		Bicycle Effective S	peed Factor	5.07		
Bicycle LOS		E						
		Se	gm	ent 19				
Vehicle Input	s							
Segment Type		Passing Constrained		Length, ft		900		
Lane Width, ft		12		Shoulder Width, ft		6		
Speed Limit, mi/h		65		Access Point Density, pts/mi		0.0		
Demand and	Capacity							
Directional Demand	d Flow Rate, veh/h	310		Opposing Deman	d Flow Rate, veh/h	-		
Peak Hour Factor		0.94		Total Trucks, %		9.00		
Segment Capacity,	veh/h	1700		Demand/Capacity	(D/C)	0.18		
Intermediate	Results							
Segment Vertical C	lass	1		Free-Flow Speed,	mi/h	73.8		
Speed Slope Coefficient 4.50870		Speed Power Coet	fficient	0.41674				
PF Slope Coefficien	t	-1.24980		PF Power Coefficie	ent	0.76717		
In Passing Lane Effe	ective Length?	No		Total Segment De	nsity, veh/mi/ln	1.7		
%Improved % Follo	owers	0.0		% Improved Avg S	Speed	0.0		
Subsegment I	Data							
# Segment Typ	e	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h		
1 Tangent		5280	- 1	6	-	71.4		

Vehicle Results					
Average Speed, mi/h	71.4		Percent Followers	, %	39.9
Segment Travel Time, minutes	0.14		Followers Density,	followers/mi/ln	1.7
Vehicle LOS	A				
Bicycle Results			-		
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	310		Bicycle Effective W	/idth, ft	24
Bicycle LOS Score	5.02		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	E				
		Segn	nent 20		-
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1425
Lane Width, ft	12		Shoulder Width, f	t	6
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	0.0
Demand and Capacity			·		·
Directional Demand Flow Rate, veh/h	310		Opposing Demand Flow Rate, veh/h		141
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.18
Intermediate Results			<u>.</u>		·
Segment Vertical Class	1		Free-Flow Speed, mi/h		73.8
Speed Slope Coefficient	4.23254		Speed Power Coe	fficient	0.55771
PF Slope Coefficient	-1.18897		PF Power Coefficie	ent	0.82410
In Passing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.6
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	5280	-		-	72.0
Vehicle Results					
Average Speed, mi/h	72.0		Percent Followers	, %	36.4
Segment Travel Time, minutes	0.22		Followers Density,	followers/mi/ln	1.6
Vehicle LOS A					
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	310		Bicycle Effective W	/idth, ft	24
Bicycle LOS Score	5.02		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	E				
		Segn	nent 21		

Veł	nicle Inputs					
Segr	nent Type	Passing Constrained		Length, ft		4435
Lane	Width, ft	12		Shoulder Width, ft		1
Speed Limit, mi/h 65		Access Point Dens	sity, pts/mi	8.0		
Der	nand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	356		Opposing Demand Flow Rate, veh/h		-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.21
Inte	ermediate Results			-		
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.25345		Speed Power Coe	fficient	0.41674
PF SI	ope Coefficient	-1.22693		PF Power Coefficient		0.78311
In Pa	issing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	2.3
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	segment Data			-		
#	Segment Type	Length, ft	Length, ft Rad		Superelevation, %	Average Speed, mi/h
1	Tangent	1540	-		-	65.9
2	Horizontal Curve	2095	960)	8	63.8
3	Tangent	800	-		-	65.9
Veł	nicle Results				•	
Aver	age Speed, mi/h	64.9		Percent Followers	, %	42.1
Segr	nent Travel Time, minutes	0.78		Followers Density, followers/mi/ln		2.3
Vehi	cle LOS	В				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	356		Bicycle Effective V	Vidth, ft	13
Bicyc	le LOS Score	7.13		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	F				
		Se	egm	ent 22		
Veł	nicle Inputs					
Segment Type Passing Zone		Length, ft		1215		
Lane Width, ft 12		Shoulder Width, f	t	1		
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Der	nand and Capacity			-		
Dire	ctional Demand Flow Rate, veh/h	356		Opposing Deman	d Flow Rate, veh/h	163
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h 1700		Demand/Capacity (D/C) 0.21				

Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	d Slope Coefficient	3.94137		Speed Power Coe	fficient	0.55048
PF SI	PF Slope Coefficient -1.24099		PF Power Coefficie	ent	0.80637	
In Pa	ssing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	2.2
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data						
#	Segment Type	Length, ft	Length, ft Radi		Superelevation, %	Average Speed, mi/h
1	Tangent	1215	-		-	66.4
Veł	nicle Results					
Aver	age Speed, mi/h	66.4		Percent Followers	, %	41.7
Segr	nent Travel Time, minutes	0.21		Followers Density,	, followers/mi/ln	2.2
Vehi	cle LOS	В				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	356		Bicycle Effective Width, ft		13
Bicyc	Bicycle LOS Score 7.13		Bicycle Effective S	peed Factor	5.07	
Bicyc	le LOS	F				
			Segn	nent 23		
Veł	nicle Inputs					
Segr	nent Type	Passing Constrain	ed	Length, ft		1160
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	d Limit, mi/h	65		Access Point Density, pts/mi		8.0
Der	mand and Capacity					
Dire	tional Demand Flow Rate, veh/h	356		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.21
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	d Slope Coefficient	4.21060		Speed Power Coe	fficient	0.41674
PF Slope Coefficient -1.31148			PF Power Coefficie	ent	0.75510	
In Passing Lane Effective Length? No		Total Segment De	ensity, veh/mi/ln	2.4		
%Improved % Followers 0.0		% Improved Avg S	Speed	0.0		
Sub	osegment Data					
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1160	-		-	65.9
Vehicle Results 19						

Ave	rage Speed, mi/h	65.9		Percent Follower	rs, %	45.2
Seg	ment Travel Time, minutes	0.20		Followers Densit	y, followers/mi/ln	2.4
Veh	icle LOS	В				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Condi	tion Rating	4
Flow	/ Rate Outside Lane, veh/h	356		Bicycle Effective	Width, ft	13
Bicy	cle LOS Score	7.13		Bicycle Effective	Speed Factor	5.07
Bicy	cle LOS	F				
			Segr	ment 24		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1265
Lane	e Width, ft	12		Shoulder Width,	ft	1
Spe	ed Limit, mi/h	65		Access Point Der	nsity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	356		Opposing Dema	nd Flow Rate, veh/h	163
Peal	K Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capaci	ty (D/C)	0.21
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed	l, mi/h	68.3
Spe	ed Slope Coefficient	3.94137		Speed Power Co	efficient	0.55048
PF S	lope Coefficient	-1.24099		PF Power Coeffic	cient	0.80637
In Pa	assing Lane Effective Length?	No		Total Segment D	ensity, veh/mi/ln	2.2
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	R	adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1265	-		-	66.4
Ve	hicle Results					
Ave	rage Speed, mi/h	66.4		Percent Follower	rs, %	41.7
Seg	ment Travel Time, minutes	0.22		Followers Densit	y, followers/mi/ln	2.2
Veh	icle LOS	В				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Condi	tion Rating	4
Flow	/ Rate Outside Lane, veh/h	356		Bicycle Effective	Width, ft	13
Bicy	cle LOS Score	7.13		Bicycle Effective	Speed Factor	5.07
Bicy	cle LOS	F				
			Segr	ment 25		

Vehicle Inputs

Segi	ment Type	Passing Constrained		Length, ft		4330
Lane	e Width, ft	12		Shoulder Width, ft		1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	356		Opposing Deman	d Flow Rate, veh/h	-
Peak	k Hour Factor	0.94		Total Trucks, %		9.00
Segi	ment Capacity, veh/h	1700		Demand/Capacity	′ (D/C)	0.21
Int	ermediate Results					
Segi	ment Vertical Class	3		Free-Flow Speed,	mi/h	66.1
Spee	ed Slope Coefficient	9.51713		Speed Power Coe	fficient	0.67702
PF S	lope Coefficient	-1.32607		PF Power Coefficie	ent	0.77005
In Pa	assing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	2.6
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2165	-		-	62.4
2	Horizontal Curve	1880	960)	8	62.4
3	Tangent	285	-		-	62.4
Vel	hicle Results					
Avei	rage Speed, mi/h	62.4		Percent Followers	, %	45.1
Segi	ment Travel Time, minutes	0.79		Followers Density	, followers/mi/ln	2.6
Vehi	icle LOS	В				
Bic	cycle Results					
Perc	ent Occupied Parking	0		Pavement Condition Rating		4
Flow	v Rate Outside Lane, veh/h	356		Bicycle Effective Width, ft		13
Bicy	cle LOS Score	7.13		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	F				
		Se	egm	nent 26		
Vel	hicle Inputs					
Segi	ment Type	Passing Zone		Length, ft		3590
Lane	e Width, ft	12		Shoulder Width, f	t	1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					·
Dire	ctional Demand Flow Rate, veh/h	173		Opposing Deman	d Flow Rate, veh/h	80
Peak	k Hour Factor	0.94		Total Trucks, %		5.60
Segi	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.10
Int	ermediate Results					

Segr	nent Vertical Class	1		Free-Flow Speed, mi/h		68.4
Spee	ed Slope Coefficient	3.94125		Speed Power Coe	fficient	0.58392
PF S	ope Coefficient	-1.14513		PF Power Coefficie	ent	0.84374
In Pa	issing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.6
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3590	-		-	67.6
Veł	nicle Results					
Aver	age Speed, mi/h	67.6		Percent Followers	, %	23.0
Segr	nent Travel Time, minutes	0.60		Followers Density	, followers/mi/In	0.6
Vehi	cle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	173		Bicycle Effective V	Vidth, ft	13
Bicyo	le LOS Score	5.50		Bicycle Effective Speed Factor		5.07
Bicyo	le LOS	E				
			Segm	nent 27		
Veł	nicle Inputs					
Segr	nent Type	Passing Constrai	ned	Length, ft		3800
Lane	Width, ft	12		Shoulder Width, ft		1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	0.0
Dei	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	173		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segr	nent Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.10
Inte	ermediate Results					
Segr	nent Vertical Class	2		Free-Flow Speed, mi/h		69.6
Spee	ed Slope Coefficient	5.98172		Speed Power Coe	fficient	0.51180
PF S	ope Coefficient	-1.28343		PF Power Coefficie	ent	0.76591
In Passing Lane Effective Length?		No		Total Segment De	ensity, veh/mi/ln	0.7
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3800	-		-	68.0
Veł	nicle Results					
Aver	age Speed, mi/h	68.0	2	Percent Followers	, %	28.5

Segment Travel Time, minutes	0.64	Follow	ers Density	, followers/mi/ln	0.7
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0	Pavem	ent Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	173	Bicycle	e Effective V	Vidth, ft	13
Bicycle LOS Score	5.50	Bicycle	Effective S	peed Factor	5.07
Bicycle LOS	E				
	Se	egment 2	.8		
Vehicle Inputs					
Segment Type	Passing Zone	Length	n, ft		1635
Lane Width, ft	12	Should	ler Width, f	t	1
Speed Limit, mi/h	65	Access	Point Den	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	173	Oppos	ing Deman	d Flow Rate, veh/h	80
Peak Hour Factor	0.94	Total T	Total Trucks, %		5.60
Segment Capacity, veh/h	1700	Demar	Demand/Capacity (D/C)		0.10
Intermediate Results					
Segment Vertical Class	1	Free-F	low Speed,	mi/h	68.4
Speed Slope Coefficient 3.91367		Speed	Power Coe	fficient	0.58392
PF Slope Coefficient	-1.19690	PF Pov	PF Power Coefficient		0.82158
In Passing Lane Effective Length? No		Total S	Segment De	ensity, veh/mi/ln	0.6
%Improved % Followers	0.0	% Imp	roved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Radius, ft		Superelevation, %	Average Speed, mi/h
1 Tangent	1635	-		-	67.6
Vehicle Results					
Average Speed, mi/h	67.6	Percer	t Followers	, %	24.7
Segment Travel Time, minutes	0.28	Follow	Followers Density, followers/mi/ln		0.6
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0	Pavem	ent Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	173	Bicycle	e Effective V	Vidth, ft	13
Bicycle LOS Score	5.50	Bicycle	Effective S	peed Factor	5.07
Bicycle LOS	E				
	Se	egment 2	:9		
Vehicle Inputs					
Segment Type	Passing Constrained	28 Length	n, ft		1585

Lane Width, ft	12		Shoulder Width, f	t	3
Speed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	173		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.10
Intermediate Results					
Segment Vertical Class	2		Free-Flow Speed,	mi/h	69.0
Speed Slope Coefficient	4.93420		Speed Power Coe	fficient	0.49995
PF Slope Coefficient	-1.38553		PF Power Coefficie	ent	0.74477
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.8
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1585	-		-	67.7
Vehicle Results					
Average Speed, mi/h	67.7	67.7		, %	31.3
Segment Travel Time, minutes	0.27		Followers Density,	, followers/mi/ln	0.8
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	173		Bicycle Effective V	Vidth, ft	15
Bicycle LOS Score	5.22		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	E				
		Segm	ent 30		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1635
Lane Width, ft	12		Shoulder Width, f	t	3
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	173		Opposing Deman	d Flow Rate, veh/h	80
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.10
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	69.8
Speed Slope Coefficient	3.98955		Speed Power Coe	fficient	0.58392
PF Slope Coefficient	-1.18757	2	PF Power Coefficie	ent	0.82517

In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		0.6
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1635	-		-	68.9
Vel	nicle Results	-			<u></u>	
Aver	age Speed, mi/h	68.9		Percent Followers,	%	24.4
Segr	nent Travel Time, minutes	0.27		Followers Density,	followers/mi/ln	0.6
Vehi	cle LOS	A				
Bic	ycle Results			- -		
Perc	ent Occupied Parking	0		Pavement Condition	on Rating	4
Flow	Rate Outside Lane, veh/h	173		Bicycle Effective W	/idth, ft	15
Bicy	cle LOS Score	5.22		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	E				
		Se	gm	ent 31		
Vel	nicle Inputs					
Segr	Segment Type Passing Constrained		Length, ft		7340	
Lane	Width, ft	12		Shoulder Width, ft		6
Spee	ed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	186		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segr	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.11
Inte	ermediate Results					
Segr	nent Vertical Class	4		Free-Flow Speed, mi/h		69.2
Spee	ed Slope Coefficient	13.17671		Speed Power Coefficient		0.54012
PF S	lope Coefficient	-1.73651		PF Power Coefficie	ent	0.76881
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.1
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Suł	osegment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	12175	-		-	65.7
2	Horizontal Curve	3125	960)	8	64.3
Vel	nicle Results					
Aver	age Speed, mi/h	65.4		Percent Followers,	%	37.9
Segr	nent Travel Time, minutes	1.28		Followers Density,	followers/mi/ln	1.1
Vehi	cle LOS	A				

Bio	cycle Results					
Per	cent Occupied Parking	0		Pavement Conditi	on Rating	4
Flov	v Rate Outside Lane, veh/h	186		Bicycle Effective V	Vidth, ft	24
Bicy	cle LOS Score	3.51		Bicycle Effective S	peed Factor	5.07
Bicy	rcle LOS	D				
			Segm	ent 32		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		2270
Lan	e Width, ft	12		Shoulder Width, f	t	6
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	0.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	186		Opposing Deman	d Flow Rate, veh/h	85
Pea	k Hour Factor	0.94		Total Trucks, %		5.60
Seg	ment Capacity, veh/h	1700		Demand/Capacity	и (D/C)	0.11
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	73.9
Spe	Speed Slope Coefficient 4.22501		Speed Power Coe	fficient	0.58124	
PF S	Slope Coefficient	-1.13838		PF Power Coefficie	ent	0.84590
In P	assing Lane Effective Length?	ve Length? No		Total Segment De	ensity, veh/mi/ln	0.6
%In	proved % Followers	0.0		% Improved Avg	Speed	0.0
Su	bsegment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2270	-		-	72.9
Ve	hicle Results				-	
Ave	rage Speed, mi/h	72.9		Percent Followers	, %	24.0
Seg	ment Travel Time, minutes	0.35		Followers Density,	, followers/mi/ln	0.6
Ver	icle LOS	A				
Bic	cycle Results					
Per	cent Occupied Parking	0		Pavement Conditi	on Rating	4
Flov	v Rate Outside Lane, veh/h	186		Bicycle Effective V	Vidth, ft	24
Bicy	cle LOS Score	3.51		Bicycle Effective S	peed Factor	5.07
Bicy	rcle LOS	D				
			Segm	ent 33		
Ve	hicle Inputs					
Seg	ment Type	Passing Constrain	ned	Length, ft		13465
Lan	e Width, ft	12		Shoulder Width, f	t	1
Spe	ed Limit, mi/h	65	2	Access Point Dens	sity, pts/mi	8.0

De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	186		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segi	ment Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.11
Int	ermediate Results	-				
Segi	ment Vertical Class	5		Free-Flow Speed,	mi/h	62.5
Spee	ed Slope Coefficient	21.20406		Speed Power Coe	fficient	0.30590
PF S	lope Coefficient	-2.36857		PF Power Coeffici	ent	0.80122
In Pa	assing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	1.6
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	3125	960)	8	52.5
2	Tangent	5415	-		-	52.5
3	Horizontal Curve	2290	960)	8	52.5
4	Tangent	2635	-		-	52.5
Ve	hicle Results					
Avei	rage Speed, mi/h	52.5		Percent Followers	, %	46.0
Segment Travel Time, minutes		2.92	2.92		, followers/mi/ln	1.6
Vehi	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	/ Rate Outside Lane, veh/h	186		Bicycle Effective V	Vidth, ft	13
Bicy	cle LOS Score	5.54		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	F				
		S	egm	ent 34		
Vel	hicle Inputs					
Segi	ment Type	Passing Zone		Length, ft		2430
Lane	e Width, ft	12		Shoulder Width, f	t	5
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	202		Opposing Deman	d Flow Rate, veh/h	93
Peal	Hour Factor	0.94		Total Trucks, %		5.60
Segi	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.12
Int	ermediate Results					
Segi	ment Vertical Class	2		Free-Flow Speed,	mi/h	70.5
Spee	ed Slope Coefficient	4.91942	2	Speed Power Coe	fficient	0.70520

PF Slope Coefficient -1.14351 F		PF Power Coefficient		0.83802		
In Passing Lane Effective Length? No			Total Segment Density, veh/mi/ln		0.8	
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	ius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2265	-		-	69.5
Veł	nicle Results					
Aver	age Speed, mi/h	69.5		Percent Followers,	%	25.9
Segn	nent Travel Time, minutes	0.40		Followers Density,	followers/mi/ln	0.8
Vehi	cle LOS	A				
Bic	ycle Results					
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	202		Bicycle Effective W	/idth, ft	22
Bicyc	le LOS Score	4.01		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	D				
		Se	gm	ent 35		
Veł	nicle Inputs					
Segn	nent Type	Passing Constrained		Length, ft		4540
Lane	Width, ft	12		Shoulder Width, ft		2
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	8.0
Der	mand and Capacity					
Direc	tional Demand Flow Rate, veh/h	410		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segn	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.24
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed, mi/h		57.7
Spee	d Slope Coefficient	3.68076		Speed Power Coefficient		0.41674
PF SI	ope Coefficient	-1.32246		PF Power Coefficient		0.75555
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	3.6
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	ius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3770	-		-	55.5
Veł	nicle Results					
Aver	age Speed, mi/h	55.5		Percent Followers,	%	49.0
Segn	nent Travel Time, minutes	0.93		Followers Density,	followers/mi/ln	3.6
Vehi		В	2			

Bicycle Results								
Percent Occupied Parking	0	Pavement Condition Rating	4					
Flow Rate Outside Lane, veh/h	410	Bicycle Effective Width, ft	14					
Bicycle LOS Score	5.67	Bicycle Effective Speed Factor	4.79					
Bicycle LOS	F							





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HCS7 Two-Lane Highway Report

Project Information

Analyst	CONSOR/Apex	Date	7/16/2021					
Agency	CDOT Region 1	Analysis Year	2020					
Jurisdiction	Douglas County	Time Period Analyzed	AM Peak					
Project Description	SH 83 Safety and Operation Analysis - SB	Unit	United States Customary					
Segment 1								

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6125
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	187	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	5.60
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	46.3
Speed Slope Coefficient	3.07829	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.37840	PF Power Coefficient	0.71945
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6125	-	-	45.2

Vehicle Results

Average Speed, mi/h	45.2	Percent Followers, %	33.8			
Segment Travel Time, minutes	1.54	Followers Density, followers/mi/In	1.4			
Vehicle LOS	A					

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4		
Flow Rate Outside Lane, veh/h	187	Bicycle Effective Width, ft	14		
Bicycle LOS Score	5.08	Bicycle Effective Speed Factor	4.42		
Bicycle LOS	E				
Segment 2					

Vehicle Inputs

Seg	ment Type	Passing Zone		Length, ft		1690
Lan	e Width, ft	12		Shoulder Width, ff	t	6
Speed Limit, mi/h 65		Access Point Dens	sity, pts/mi	8.0		
De	mand and Capacity					
Dire	ectional Demand Flow Rate, veh/h	93		Opposing Deman	d Flow Rate, veh/h	202
Pea	k Hour Factor	0.94		Total Trucks, %		5.60
Seg	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.05
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	71.9
Spe	ed Slope Coefficient	4.15910		Speed Power Coe	fficient	0.53865
PF S	Slope Coefficient	-1.20651		PF Power Coefficie	ent	0.81938
In P	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.2
%In	nproved % Followers	0.0		% Improved Avg S	Speed	0.0
Su	bsegment Data					
#	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-		-	71.9
Ve	hicle Results					
Ave	rage Speed, mi/h	71.9		Percent Followers,	, %	15.8
Seg	Segment Travel Time, minutes 0.27		Followers Density,	followers/mi/ln	0.2	
Veh	icle LOS	A				
Bic	cycle Results					
Pero	cent Occupied Parking	0		Pavement Conditi	on Rating	4
Flov	w Rate Outside Lane, veh/h	93		Bicycle Effective Width, ft		34
Bicy	cle LOS Score	0.25		Bicycle Effective Speed Factor		5.07
Bicy	cle LOS	A				
		S	egn	nent 3		
Ve	hicle Inputs					
Seg	ment Type	Passing Constrained		Length, ft		11880
Lan	e Width, ft	12		Shoulder Width, ft	t	1
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ectional Demand Flow Rate, veh/h	93		Opposing Deman	d Flow Rate, veh/h	-
Pea	k Hour Factor	0.94		Total Trucks, %		5.60
Seg	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.05
Int	ermediate Results					
Seg	ment Vertical Class	4		Free-Flow Speed,	mi/h	65.7
Spe	ed Slope Coefficient	13.20663	3	Speed Power Coe	fficient	0.40914

PF SI	PE Slope Coefficient -1 97178		PE Power Coefficient		0.75086	
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.4
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Sub	segment Data			1		_
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8660	-		-	65.7
2	Horizontal Curve	3220	960	1	8	65.7
Veh	icle Results	_				-
Avera	age Speed, mi/h	65.7		Percent Followers,	. %	28.1
Segn	nent Travel Time, minutes	2.06		Followers Density,	followers/mi/ln	0.4
Vehi	cle LOS	A				
Bicy	cle Results	·				
Perce	ent Occupied Parking	0	_	Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	93		Bicycle Effective W	/idth, ft	20
Bicyc	le LOS Score	4.03		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	D				
		S	egn	nent 4		
Veł	nicle Inputs					
Segn	nent Type	Passing Zone		Length, ft		1585
Lane	Width, ft	12		Shoulder Width, ft		1
Spee	d Limit, mi/h	65		Access Point Density, pts/mi		8.0
Der	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	93		Opposing Deman	d Flow Rate, veh/h	202
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segn	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.05
Inte	ermediate Results					
Segn	nent Vertical Class	2		Free-Flow Speed, mi/h		67.7
Spee	d Slope Coefficient	4.17044		Speed Power Coefficient		0.63813
PF SI	ope Coefficient	-1.24398		PF Power Coefficient		0.80310
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.2
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft Rad		lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1585	-		-	67.7
Veh	icle Results					
Avera	age Speed, mi/h	67.7		Percent Followers,	%	16.8
Segn	nent Travel Time, minutes	0.27 .39		Followers Density, followers/mi/ln		0.2

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Vehicle LOS	А				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	93		Bicycle Effective W	Vidth, ft	20
Bicycle LOS Score	4.03		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	D				
	S	egn	nent 5		
Vehicle Inputs					
Segment Type	Passing Constrained	Passing Constrained			315
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	93		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.05
Intermediate Results					
Segment Vertical Class	t Vertical Class 1		Free-Flow Speed, mi/h		68.4
Speed Slope Coefficient	4.21673		Speed Power Coefficient		0.41674
PF Slope Coefficient	-1.31065		PF Power Coefficie	ent	0.75485
In Passing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.3
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	315	-		-	68.4
Vehicle Results	•			•	·
Average Speed, mi/h	68.4		Percent Followers, %		19.5
Segment Travel Time, minutes	0.05		Followers Density, followers/mi/ln		0.3
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h	93		Bicycle Effective W	Vidth, ft	20
Bicycle LOS Score	4.03		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	D				
	S	egn	nent 6		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		2005
Lane Width, ft	12	3	Shoulder Width, f	t	1

Speed	d Limit, mi/h	65	Access Point Density, pts/mi		8.0			
Den	Demand and Capacity							
Directional Demand Flow Rate, veh/h 93				Opposing Demand Flow Rate, veh/h		202		
Peak	Hour Factor	0.94		Total Trucks, %		5.60		
Segm	ent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.05		
Intermediate Results								
Segm	ent Vertical Class	2		Free-Flow Speed,	mi/h	67.7		
Speed	d Slope Coefficient	4.35768		Speed Power Coef	ficient	0.63970		
PF Slo	ope Coefficient	-1.21888		PF Power Coefficie	ent	0.81076		
In Pas	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.2		
%Imp	proved % Followers	0.0		% Improved Avg S	peed	0.0		
Sub	segment Data							
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	2005	-		-	67.7		
Veh	icle Results							
Avera	ige Speed, mi/h	67.7		Percent Followers,	%	16.2		
Segm	ent Travel Time, minutes	0.34		Followers Density, followers/mi/In		0.2		
Vehic	le LOS	A						
Bicy	cle Results							
Perce	nt Occupied Parking	0		Pavement Condition	on Rating	4		
Flow	Rate Outside Lane, veh/h	93		Bicycle Effective W	/idth, ft	20		
Bicycl	le LOS Score	4.03		Bicycle Effective Speed Factor		5.07		
Bicycl	le LOS	D						
		Se	egn	nent 7				
Veh	icle Inputs							
Segm	ient Type	Passing Constrained		Length, ft		10295		
Lane	Width, ft	12		Shoulder Width, ft	:	1		
Speed	d Limit, mi/h	65		Access Point Density, pts/mi		8.0		
Den	nand and Capacity							
Direct	tional Demand Flow Rate, veh/h	80		Opposing Demand	d Flow Rate, veh/h	-		
Peak	Hour Factor	0.94		Total Trucks, %		5.60		
Segm	ent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.05		
Inte	rmediate Results							
Segm	ent Vertical Class	4		Free-Flow Speed,	mi/h	65.7		
Speed	d Slope Coefficient	12.70234		Speed Power Coef	ficient	0.44834		
PF Slo	ope Coefficient	-1.88856		PF Power Coefficient		0.76212		
In Pas	n Passing Lane Effective Length? No 3		Total Segment De	nsity, veh/mi/ln	0.3			

%Improved % Followers 0.0		% Improved Avg Speed		0.0				
Sub	osegment Data	·				÷		
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	685	-		-	65.7		
2	Horizontal Curve	2204	960	I	8	65.7		
3	Tangent	7406	-		-	65.7		
Veł	nicle Results							
Aver	age Speed, mi/h	65.7		Percent Followers	, %	24.0		
Segn	nent Travel Time, minutes	1.78		Followers Density,	followers/mi/ln	0.3		
Vehi	cle LOS	A						
Bic	ycle Results							
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4		
Flow	Rate Outside Lane, veh/h	80		Bicycle Effective V	Vidth, ft	21		
Bicyc	le LOS Score	3.75		Bicycle Effective S	peed Factor	5.07		
Bicyc	le LOS	D						
	Segment 8							
Veł	nicle Inputs							
Segn	nent Type	Passing Zone		Length, ft		3060		
Lane	Width, ft	12		Shoulder Width, ft		1		
Spee	d Limit, mi/h	65		Access Point Density, pts/mi		8.0		
Der	mand and Capacity							
Direc	tional Demand Flow Rate, veh/h	80		Opposing Demand Flow Rate, veh/h		173		
Peak	Hour Factor	0.94		Total Trucks, %		5.60		
Segn	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.05		
Inte	ermediate Results							
Segn	nent Vertical Class	1		Free-Flow Speed, mi/h		68.4		
Spee	d Slope Coefficient	3.97865		Speed Power Coe	fficient	0.54710		
PF SI	ope Coefficient	-1.18421		PF Power Coefficient		0.83003		
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.2		
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0		
Sub	osegment Data							
#	Segment Type	Length, ft Rad		lius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	3060	-		-	68.4		
Veł	nicle Results							
Aver	age Speed, mi/h	68.4		Percent Followers	, %	13.5		
Segn	nent Travel Time, minutes	0.51		Followers Density,	followers/mi/ln	0.2		
Vehi	cle LOS	A 3						

Bic	vcle Results					
Perc	rent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	/ Rate Outside Lane, veh/h	80		Bicycle Effective Width, ft		21
Bicv	cle LOS Score	3.75		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	D				
				nomt 0		
		3	egn			
Ve	hicle Inputs					
Seg	ment Type	Passing Constrained		Length, ft		2430
Lane	e Width, ft	12		Shoulder Width, f	t	1
Spe	ed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	80		Opposing Deman	d Flow Rate, veh/h	-
Peal	K Hour Factor	0.94		Total Trucks, %		5.60
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.05
Int	ermediate Results					
Segment Vertical Class 1		Free-Flow Speed, mi/h		68.4		
Spe	ed Slope Coefficient	4.23509		Speed Power Coe	fficient	0.41674
PF S	lope Coefficient	-1.26418		PF Power Coefficient		0.77219
In Pa	assing Lane Effective Length? No		Total Segment De	nsity, veh/mi/ln	0.2	
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2430	-	-		68.4
Ve	hicle Results					
Ave	rage Speed, mi/h	68.4		Percent Followers, % 16.4		16.4
Seg	ment Travel Time, minutes	0.40		Followers Density, followers/mi/ln		0.2
Veh	icle LOS	A				
Bic	ycle Results			•		
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	/ Rate Outside Lane, veh/h	80		Bicycle Effective W	/idth, ft	21
Bicy	cle LOS Score	3.75		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	D				
		Se	egm	ent 10		•
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length. ft		3645
Lane	e Width, ft	12		Shoulder Width, ft	i	1
Spe	ed Limit, mi/h	65	3	6 Access Point Density, pts/mi		8.0
Demand and Capacity						
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Directional Demand Flow Rate, veh/h	80		Opposing Deman	d Flow Rate, veh/h	173	
Peak Hour Factor	0.94		Total Trucks, %		5.60	
Segment Capacity, veh/h	1700		Demand/Capacity	′ (D/C)	0.05	
Intermediate Results			<u>.</u>			
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.4	
Speed Slope Coefficient	3.98581		Speed Power Coe	fficient	0.54710	
PF Slope Coefficient	-1.17368		PF Power Coefficie	ent	0.83357	
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.2	
%Improved % Followers	0.0		% Improved Avg	Speed	0.0	
Subsegment Data						
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h	
1 Tangent	3645	-		-	68.4	
Vehicle Results						
Average Speed, mi/h	68.4		Percent Followers	, %	13.3	
Segment Travel Time, minutes	0.61		Followers Density,	, followers/mi/ln	0.2	
Vehicle LOS A						
Bicycle Results						
Percent Occupied Parking 0		Pavement Conditi	on Rating	4		
Flow Rate Outside Lane, veh/h	80		Bicycle Effective V	Vidth, ft	21	
Bicycle LOS Score	3.75		Bicycle Effective S	peed Factor	5.07	
Bicycle LOS	D					
		Segm	nent 11			
Vehicle Inputs						
Segment Type	Passing Constrai	ned	Length, ft		4120	
Lane Width, ft	12		Shoulder Width, f	t	1	
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0	
Demand and Capacity						
Directional Demand Flow Rate, veh/h	163		Opposing Deman	d Flow Rate, veh/h	-	
Peak Hour Factor	0.94		Total Trucks, %		9.00	
Segment Capacity, veh/h 1700		Demand/Capacity	r (D/C)	0.10		
Intermediate Results						
Segment Vertical Class	3		Free-Flow Speed,	mi/h	66.1	
Speed Slope Coefficient	9.40946		Speed Power Coe	fficient	0.67475	
PF Slope Coefficient	-1.32676		PF Power Coefficie	ent	0.77062	
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.7	
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0	

Su	bsegment Data					
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	4120	4120 960		8	64.3
Ve	hicle Results					1
Ave	rage Speed, mi/h	64.3		Percent Followers	., %	27.9
Seg	ment Travel Time, minutes	0.73		Followers Density	, followers/mi/ln	0.7
Veh	icle LOS	A		-		
Bic	ycle Results					1
Perc	ent Occupied Parking	0		Pavement Conditi	ion Rating	4
Flov	v Rate Outside Lane, veh/h	163		Bicycle Effective V	Vidth, ft	16
Bicy	cle LOS Score	6.30		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	F				
			Segn	nent 12		·
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1110
Lan	e Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h 65			Access Point Den	sity, pts/mi	8.0	
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	163		Opposing Deman	d Flow Rate, veh/h	356
Pea	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.10
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spe	ed Slope Coefficient	4.00482		Speed Power Coefficient		0.50431
PF S	lope Coefficient	-1.27794		PF Power Coefficient		0.79391
In P	assing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.6
%In	proved % Followers	0.0		% Improved Avg	Speed	0.0
Su	bsegment Data					
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1110	-		-	67.3
Ve	hicle Results					
Average Speed, mi/h 67.3		Percent Followers	s, %	26.1		
Seg	ment Travel Time, minutes	0.19		Followers Density	, followers/mi/ln	0.6
Veh	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	ion Rating	4
Flow Rate Outside Lane, veh/h 163 38 B		⁸ Bicycle Effective Width, ft		16		

Bicyc	le LOS Score	6.30		Bicycle Effective Speed Factor		5.07	
Bicyc	le LOS	F					
		Se	gm	ent 13			
Veł	nicle Inputs						
Segn	nent Type	Passing Constrained		Length, ft		1320	
Lane	Width, ft	12		Shoulder Width, f	t	1	
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0	
Der	mand and Capacity						
Direc	tional Demand Flow Rate, veh/h	163		Opposing Deman	d Flow Rate, veh/h	-	
Peak	Hour Factor	0.94		Total Trucks, %		9.00	
Segn	nent Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.10	
Inte	ermediate Results						
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3	
Spee	d Slope Coefficient	4.21060		Speed Power Coe	fficient	0.41674	
PF SI	ope Coefficient	-1.31148		PF Power Coefficie	ent	0.75510	
In Pa	In Passing Lane Effective Length? No		Total Segment Density, veh/mi/ln		0.7		
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0	
Sub	Subsegment Data						
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	1320	-	-		67.0	
Veł	nicle Results						
Aver	age Speed, mi/h	67.0		Percent Followers	, %	28.3	
Segn	nent Travel Time, minutes	0.22		Followers Density, followers/mi/ln		0.7	
Vehi	cle LOS	A					
Bicy	ycle Results						
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4	
Flow	Rate Outside Lane, veh/h	163		Bicycle Effective W	Vidth, ft	16	
Bicyc	le LOS Score	6.30		Bicycle Effective S	peed Factor	5.07	
Bicyc	le LOS	F					
		Se	gm	ent 14			
Veł	nicle Inputs						
Segn	nent Type	Passing Zone		Length, ft		1210	
Lane	Width, ft	12		Shoulder Width, f	t	1	
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0	
Der	nand and Capacity						
Direc	tional Demand Flow Rate, veh/h	163		Opposing Deman	d Flow Rate, veh/h	356	
Peak	Hour Factor	0.94	3	9 Total Trucks, %		9.00	

Segment Capacity, veh/h 1700		Demand/Capacity (D/C)		0.10	
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.00482		Speed Power Coef	fficient	0.50431
PF Slope Coefficient	-1.27794		PF Power Coefficie	ent	0.79391
In Passing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.6
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Length, ft Rad		Superelevation, %	Average Speed, mi/h
1 Tangent	1210	-		-	67.3
Vehicle Results					
Average Speed, mi/h	67.3		Percent Followers,	%	26.1
Segment Travel Time, minutes	0.20		Followers Density,	followers/mi/ln	0.6
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	ercent Occupied Parking 0		Pavement Condition	on Rating	4
Flow Rate Outside Lane, veh/h	163	163		/idth, ft	16
Bicycle LOS Score	6.30		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	gm	ent 15		
Vehicle Inputs					
Segment Type	Passing Constrained		Length, ft		6760
Lane Width, ft	12		Shoulder Width, ft		1
Speed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	141		Opposing Demand	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.08
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.27558		Speed Power Coef	fficient	0.41674
PF Slope Coefficient	-1.21419		PF Power Coefficie	ent	0.77950
In Passing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.5
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	3280	- 4	10	-	67.2

2 Horizontal Curve	3480	960		8	64.4
Vehicle Results					
Average Speed, mi/h	65.8		Percent Followers, %		23.2
Segment Travel Time, minutes	1.17		Followers Density,	followers/mi/ln	0.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	141	141		/idth, ft	17
Bicycle LOS Score	6.06		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segm	ent 16		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		2060
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65	65		sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	141	141		d Flow Rate, veh/h	310
Peak Hour Factor	0.94	0.94			9.00
Segment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.08
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.00434		Speed Power Coefficient		0.51324
PF Slope Coefficient	-1.23805		PF Power Coefficient		0.80997
In Passing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.5
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Radi	ius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	2060	-		-	67.5
Vehicle Results					
Average Speed, mi/h	67.5		Percent Followers	, %	22.4
Segment Travel Time, minutes	0.35		Followers Density,	followers/mi/ln	0.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	141		Bicycle Effective V	/idth, ft	17
Bicycle LOS Score	6.06		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F	4	1		

		Segm	nent 17		
Vehicle Inputs					
Segment Type	Passing Constrair	ned	Length, ft		1320
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Den	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	139		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.08
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.21060		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.31148		PF Power Coeffici	ent	0.75510
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.5
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1320	-		-	67.2
Vehicle Results					
Average Speed, mi/h	67.2		Percent Followers	, %	25.6
Segment Travel Time, minutes	0.22		Followers Density, followers/mi/ln		0.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	ion Rating	4
Flow Rate Outside Lane, veh/h	139		Bicycle Effective V	Vidth, ft	17
Bicycle LOS Score	6.05		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segm	nent 18		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1265
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Den	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	139		Opposing Deman	d Flow Rate, veh/h	304
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.08

Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	3.98994		Speed Power Coe	fficient	0.51433
PF S	ope Coefficient	-1.27031		PF Power Coefficie	ent	0.79676
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.5
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft Rad		adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1265	-		-	67.5
Vel	nicle Results					
Aver	age Speed, mi/h	67.5		Percent Followers	, %	23.2
Segr	nent Travel Time, minutes	0.21		Followers Density,	followers/mi/ln	0.5
Vehi	cle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	139		Bicycle Effective W	/idth, ft	17
Bicyo	cle LOS Score	6.05		Bicycle Effective S	peed Factor	5.07
Bicyo	cle LOS	F				
			Segn	nent 19		
Veł	nicle Inputs					
Segr	nent Type	Passing Constrai	ned	Length, ft		2480
Lane	Width, ft	12		Shoulder Width, ft		1
Spee	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Dei	mand and Capacity	·				
Dire	ctional Demand Flow Rate, veh/h	139		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.08
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.22967		Speed Power Coe	fficient	0.41674
PF S	ope Coefficient	-1.26349		PF Power Coefficie	ent	0.77294
In Passing Lane Effective Length? No		Total Segment De	nsity, veh/mi/ln	0.5		
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2480	-		-	67.2
Veł	nicle Results			43	-	

Ave	rage Speed, mi/h	67.2		Percent Followe	rs, %	24.1
Seg	ment Travel Time, minutes	0.42	0.42		ty, followers/mi/ln	0.5
Veh	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Cond	ition Rating	4
Flow	v Rate Outside Lane, veh/h	139		Bicycle Effective	Width, ft	17
Bicy	cle LOS Score	6.05		Bicycle Effective	Speed Factor	5.07
Bicy	cle LOS	F				
			Segn	nent 20		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1160
Lane	e Width, ft	12		Shoulder Width,	ft	1
Spe	ed Limit, mi/h	65		Access Point De	nsity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	130		Opposing Dema	ind Flow Rate, veh/h	284
Peal	k Hour Factor	0.94	0.94			9.00
Seg	ment Capacity, veh/h	1700		Demand/Capaci	ty (D/C)	0.08
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed	d, mi/h	68.3
Spe	ed Slope Coefficient	3.98383		Speed Power Co	pefficient	0.51858
PF S	lope Coefficient	-1.26698		PF Power Coeffi	cient	0.79794
In Pa	assing Lane Effective Length?	No		Total Segment	Density, veh/mi/ln	0.4
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Su	bsegment Data					
#	Segment Type	Length, ft	Ra	idius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1160	-		-	67.7
Ve	hicle Results					
Ave	rage Speed, mi/h	67.7		Percent Followe	rs, %	22.0
Seg	ment Travel Time, minutes	0.19		Followers Density, followers/mi/ln		0.4
Veh	icle LOS	A				
Bic	cycle Results					
Perc	ent Occupied Parking	0		Pavement Cond	ition Rating	4
Flow	v Rate Outside Lane, veh/h	130		Bicycle Effective	Width, ft	18
Bicy	cle LOS Score	5.84		Bicycle Effective	Speed Factor	5.07
Bicy	cle LOS	F				
			Segn	nent 21		

Vehicle Inputs

Seg	ment Type	Passing Constrained		Length, ft		7815
Lane	e Width, ft	12	Shoulder Width, ft		t	1
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	130		Opposing Deman	d Flow Rate, veh/h	-
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.08
Int	ermediate Results					
Seg	ment Vertical Class	2		Free-Flow Speed,	mi/h	66.8
Spe	ed Slope Coefficient	6.85373		Speed Power Coe	fficient	0.51976
PF S	lope Coefficient	-1.27695		PF Power Coefficie	ent	0.75819
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.5
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Length, ft Radi		Superelevation, %	Average Speed, mi/h
1	Tangent	6485	6485 -		-	65.7
2	Horizontal Curve	1330	960	8		64.5
Ve	hicle Results					
Ave	rage Speed, mi/h	65.5		Percent Followers,	, %	23.8
Seg	ment Travel Time, minutes	1.36		Followers Density,	followers/mi/ln	0.5
Veh	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	v Rate Outside Lane, veh/h	130		Bicycle Effective Width, ft		18
Bicy	cle LOS Score	5.84		Bicycle Effective Speed Factor		5.07
Bicy	cle LOS	F				
		Se	egm	ent 22		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		2640
Lane	e Width, ft	12		Shoulder Width, ft	t	1
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	130		Opposing Deman	d Flow Rate, veh/h	284
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.08
Int	ermediate Results					
Seg	ment Vertical Class	1	4	Free-Flow Speed,	mi/h	68.3

Spee	d Slope Coefficient	4.00514		Speed Power Coefficient		0.51858		
PF SI	ope Coefficient	-1.21636		PF Power Coefficient		0.81840		
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.4		
%Imp	proved % Followers	0.0		% Improved Avg S	peed	0.0		
Sub	segment Data							
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	2640	-		-	67.7		
Veh	icle Results							
Avera	age Speed, mi/h	67.7		Percent Followers,	%	20.4		
Segn	nent Travel Time, minutes	0.44		Followers Density,	followers/mi/ln	0.4		
Vehic	le LOS	A						
Bicy	cle Results							
Perce	ent Occupied Parking	0		Pavement Condition	on Rating	4		
Flow	Rate Outside Lane, veh/h	130		Bicycle Effective W	/idth, ft	18		
Bicyc	le LOS Score	5.84		Bicycle Effective Sp	peed Factor	5.07		
Bicyc	le LOS	F						
	Segment 23							
Veh	icle Inputs							
Segn	nent Type	Passing Constrained		Length, ft		315		
Lane	Width, ft	12		Shoulder Width, ft		1		
Spee	d Limit, mi/h	65		Access Point Density, pts/mi		0.0		
Der	nand and Capacity							
Direc	tional Demand Flow Rate, veh/h	130		Opposing Demand	d Flow Rate, veh/h	-		
Peak	Hour Factor	0.94		Total Trucks, %		9.00		
Segn	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.08		
Inte	ermediate Results							
Segn	nent Vertical Class	1		Free-Flow Speed, I	mi/h	70.3		
Spee	d Slope Coefficient	4.31900		Speed Power Coefficient		0.41674		
PF SI	ope Coefficient	-1.28943		PF Power Coefficie	ent	0.75941		
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.4		
%Imp	proved % Followers	0.0		% Improved Avg S	peed	0.0		
Sub	segment Data							
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	315	-		-	69.3		
Veh	icle Results							
Avera	age Speed, mi/h	69.3		Percent Followers,	%	23.9		
Segn	nent Travel Time, minutes	0.05	4	Followers Density, followers/mi/ln		0.4		

Vehicle LOS	A					
Bicycle Results						
Percent Occupied Parking	8		Pavement Conditi	on Rating	4	
Flow Rate Outside Lane, veh/h	130		Bicycle Effective W	Vidth, ft	18	
Bicycle LOS Score	5.84		Bicycle Effective S	peed Factor	5.07	
Bicycle LOS	F					
	·	Segn	nent 24		- -	
Vehicle Inputs						
Segment Type	Passing Zone		Length, ft		1265	
Lane Width, ft	12	12		t	1	
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0	
Demand and Capacity			-		•	
Directional Demand Flow Rate, veh/h	148		Opposing Deman	d Flow Rate, veh/h	322	
Peak Hour Factor	0.94		Total Trucks, %		9.00	
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.09	
Intermediate Results						
Segment Vertical Class 1		Free-Flow Speed,	mi/h	68.3		
Speed Slope Coefficient	Slope Coefficient 3.99523		Speed Power Coe	fficient	0.51070	
PF Slope Coefficient	ient -1.27310		PF Power Coefficie	ent	0.79574	
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.5	
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0	
Subsegment Data			-			
# Segment Type	Length, ft	Ra	lius, ft Superelevation, %		Average Speed, mi/h	
1 Tangent	1265	-		-	67.5	
Vehicle Results				-		
Average Speed, mi/h	67.5		Percent Followers	, %	24.3	
Segment Travel Time, minutes	0.21		Followers Density,	, followers/mi/In	0.5	
Vehicle LOS	A					
Bicycle Results						
Percent Occupied Parking	0		Pavement Conditi	on Rating	4	
Flow Rate Outside Lane, veh/h	148	148		Vidth, ft	17	
Bicycle LOS Score	6.08		Bicycle Effective S	peed Factor	5.07	
Bicycle LOS	F					
		Segn	nent 25			
Vehicle Inputs						
Segment Type	Passing Constrain	ned	Length, ft		3430	
Lane Width, ft	12	4	Shoulder Width, ft		1	

Speed I	Limit, mi/h	65	A	Access Point Densi	ity, pts/mi	8.0
Dema	and and Capacity					-
Directio	onal Demand Flow Rate, veh/h	148	С	Opposing Demand	d Flow Rate, veh/h	-
Peak H	our Factor	0.94	Т	otal Trucks, %		9.00
Segmei	nt Capacity, veh/h	1700	D	Demand/Capacity	(D/C)	0.09
Inter	mediate Results					
Segmei	nt Vertical Class	1		ree-Flow Speed, r	ni/h	68.3
Speed S	Slope Coefficient	4.24208	S	peed Power Coef	ficient	0.41674
PF Slop	e Coefficient	-1.24135	Р	PF Power Coefficie	nt	0.78001
In Passi	ing Lane Effective Length?	No	T	otal Segment Dei	nsity, veh/mi/ln	0.5
%Impro	oved % Followers	0.0	%	6 Improved Avg S	peed	0.0
Subse	egment Data					
# S	egment Type	Length, ft	Radius	s, ft	Superelevation, %	Average Speed, mi/h
1 T	angent	3430	-		-	67.1
Vehic	le Results					
Average	e Speed, mi/h	67.1	P	Percent Followers, %		24.4
Segment Travel Time, minutes 0.58		F	ollowers Density,	followers/mi/ln	0.5	
Vehicle LOS A						
Bicyc	le Results					
Percent	t Occupied Parking	0	P	Pavement Condition	on Rating	4
Flow Ra	ate Outside Lane, veh/h	148	В	Bicycle Effective W	/idth, ft	17
Bicycle	LOS Score	6.08	В	Bicycle Effective Speed Factor		5.07
Bicycle	LOS	F				
		Se	gmei	nt 26		
Vehic	le Inputs					
Segmei	nt Type	Passing Zone	Le	.ength, ft		1585
Lane W	/idth, ft	12	S	ihoulder Width, ft		1
Speed I	Limit, mi/h	65	A	Access Point Dens	ity, pts/mi	8.0
Dema	and and Capacity					
Directio	onal Demand Flow Rate, veh/h	148	C	Opposing Demand	d Flow Rate, veh/h	322
Peak H	our Factor	0.94		otal Trucks, %		9.00
Segmer	nt Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.09
Inter	mediate Results					-
Segme	nt Vertical Class	1	F	ree-Flow Speed, r	mi/h	68.3
Speed S	Slope Coefficient	4.00016	S	peed Power Coef	ficient	0.51070
PF Slop	e Coefficient	-1.25942	Р	PF Power Coefficie	nt	0.80136
In Passi	ng Lane Effective Length?	No	48 ^T	Total Segment Density, veh/mi/ln		0.5

%Improved % Followers 0.0		% Improved Avg		Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1585	-		-	67.5
Vehicle Results					
Average Speed, mi/h	67.5		Percent Follower	s, %	23.8
Segment Travel Time, minutes	0.27		Followers Densit	y, followers/mi/ln	0.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condi	tion Rating	4
Flow Rate Outside Lane, veh/h	148		Bicycle Effective	Width, ft	17
Bicycle LOS Score	6.08		Bicycle Effective	Speed Factor	5.07
Bicycle LOS	F				
		Segm	nent 27		
Vehicle Inputs					
Segment Type	Passing Constra	ined	Length, ft		4595
Lane Width, ft	12		Shoulder Width, ft		1
Speed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	148		Opposing Dema	nd Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacit	y (D/C)	0.09
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed	, mi/h	68.3
Speed Slope Coefficient	4.25514		Speed Power Coefficient		0.41674
PF Slope Coefficient	-1.22525		PF Power Coefficient		0.78329
In Passing Lane Effective Length?	No		Total Segment D	ensity, veh/mi/ln	0.5
%Improved % Followers	0.0		% Improved Avg Speed		0.0
Subsegment Data					
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	4035	-		-	67.1
2 Horizontal Curve	560	960)	8	64.4
Vehicle Results					
Average Speed, mi/h	66.8		Percent Follower	s, %	24.0
Segment Travel Time, minutes	0.78		Followers Density	y, followers/mi/ln	0.5
Vehicle LOS	A				
Bicycle Results		4	19		

Percen	t Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Ra	ate Outside Lane, veh/h	148		Bicycle Effective Width, ft		17
Bicycle	LOS Score	6.08		Bicycle Effective Speed Factor		5.07
Bicycle	LOS	F				
			Segm	nent 28		
Vehi	cle Inputs					
Segme	nt Type	Passing Zone		Length, ft		1110
Lane W	/idth, ft	12		Shoulder Width, f	t	1
Speed	Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Dem	and and Capacity					
Directio	onal Demand Flow Rate, veh/h	148		Opposing Deman	d Flow Rate, veh/h	322
Peak H	our Factor	0.94		Total Trucks, %		9.00
Segme	nt Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.09
Inter	mediate Results					
Segme	nt Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed	Slope Coefficient	3.99523		Speed Power Coefficient		0.51070
PF Slop	pe Coefficient	-1.27310		PF Power Coefficient		0.79574
In Pass	ing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.5
%Impro	oved % Followers	0.0		% Improved Avg	Speed	0.0
Subs	egment Data					
# S	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1 T	angent	1110	-		-	67.5
Vehi	cle Results					
Averag	e Speed, mi/h	67.5		Percent Followers, %		24.3
Segme	nt Travel Time, minutes	0.19		Followers Density, followers/mi/ln		0.5
Vehicle	e LOS	A				
Bicyc	le Results					
Percen	t Occupied Parking	0		Pavement Condition Rating		4
Flow Ra	ate Outside Lane, veh/h	148		Bicycle Effective Width, ft		17
Bicycle	LOS Score	6.08		Bicycle Effective Speed Factor		5.07
Bicycle LOS F						
			Segm	nent 29		
Vehi	cle Inputs					
Segme	nt Type	Passing Constrain	ned	Length, ft		5385
Lane W	/idth, ft	12		Shoulder Width, f	t	1
Speed	Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
			ŗ	50		

Directional Demand Flow Rate, veh/h	148		Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700	1700 Den		r (D/C)	0.09
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.26307		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.21895		PF Power Coeffici	ent	0.78313
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.5
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	5385	-		-	67.1
Vehicle Results					
Average Speed, mi/h	67.1		Percent Followers	, %	23.9
Segment Travel Time, minutes	0.91		Followers Density	, followers/mi/ln	0.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h	148	148		Vidth, ft	17
Bicycle LOS Score	6.08		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F	F			
		Segm	nent 30		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1265
Lane Width, ft	12		Shoulder Width, ft		1
Speed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	128		Opposing Deman	d Flow Rate, veh/h	280
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.08
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	3.98252		Speed Power Coe	fficient	0.51951
PF Slope Coefficient	-1.26626		PF Power Coeffici	ent	0.79819
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.4
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					

#	Segment Type	Length, ft	Ra	idius, ft	Superelevation, %	Average Speed, mi/h			
1	Tangent	1265	-		-	67.7			
Vel	Vehicle Results								
Aver	age Speed, mi/h	67.7		Percent Followers,	, %	21.7			
Segr	nent Travel Time, minutes	0.21		Followers Density,	followers/mi/ln	0.4			
Vehi	cle LOS	A							
Bic	ycle Results								
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4			
Flow	Rate Outside Lane, veh/h	128		Bicycle Effective W	/idth, ft	18			
Bicy	cle LOS Score	5.83		Bicycle Effective S	peed Factor	5.07			
Bicy	cle LOS	F							
			Segn	nent 31					
Vel	nicle Inputs								
Segr	nent Type	Passing Constrain	ed	Length, ft		5755			
Lane	Width, ft	12		Shoulder Width, ft	t	1			
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0			
De	mand and Capacity	·		·		•			
Dire	ctional Demand Flow Rate, veh/h	124	124		d Flow Rate, veh/h	-			
Peak	Hour Factor	0.94	0.94			9.00			
Segr	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.07			
Inte	ermediate Results								
Segr	nent Vertical Class	3		Free-Flow Speed,	mi/h	66.1			
Spee	ed Slope Coefficient	10.18748		Speed Power Coe	fficient	0.69240			
PF S	ope Coefficient	-1.33484		PF Power Coefficient		0.76328			
In Pa	issing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.5			
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0			
Sul	osegment Data								
#	Segment Type	Length, ft	Ra	idius, ft	Superelevation, %	Average Speed, mi/h			
1	Tangent	3430	-		-	65.4			
2	Horizontal Curve	2325	96	0	8	64.5			
Vel	nicle Results								
Average Speed, mi/h 65.0		65.0		Percent Followers,	, %	23.8			
Segr	nent Travel Time, minutes	1.01		Followers Density,	followers/mi/ln	0.5			
Vehi	cle LOS	A							
Bic	ycle Results								
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4			
Flow Rate Outside Lane, veh/h 124		Bicycle Effective Width, ft		18					

Bicyc	le LOS Score	5.82 B		Bicycle Effective Speed Factor		5.07	
Bicyc	le LOS	F					
	Segment 32						
Veh	icle Inputs						
Segn	nent Type	Passing Zone		Length, ft		1530	
Lane	Width, ft	12		Shoulder Width, f	t	1	
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0	
Den	nand and Capacity						
Direc	tional Demand Flow Rate, veh/h	115		Opposing Deman	d Flow Rate, veh/h	251	
Peak	Hour Factor	0.94		Total Trucks, %		9.00	
Segn	nent Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.07	
Inte	ermediate Results						
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3	
Spee	d Slope Coefficient	3.97732		Speed Power Coe	fficient	0.52606	
PF Slo	ope Coefficient	-1.25014		PF Power Coefficie	ent	0.80458	
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.3	
%Imp	proved % Followers	0.0		% Improved Avg Speed		0.0	
Subsegment Data							
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	1530	-		-	67.9	
Veh	iicle Results						
Avera	age Speed, mi/h	67.9		Percent Followers	, %	19.7	
Segn	nent Travel Time, minutes	0.26		Followers Density, followers/mi/ln		0.3	
Vehic	cle LOS	A					
Bicy	cle Results			-			
Perce	ent Occupied Parking	0		Pavement Condition Rating		4	
Flow	Rate Outside Lane, veh/h	115		Bicycle Effective Width, ft		19	
Bicyc	le LOS Score	5.59		Bicycle Effective Speed Factor		5.07	
Bicyc	le LOS	F					
		Se	gm	ent 33			
Veh	icle Inputs						
Segm	nent Type	Passing Constrained		Length, ft		3645	
Lane	Width, ft	12		Shoulder Width, f	t	1	
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0	
Den	nand and Capacity						
Direc	tional Demand Flow Rate, veh/h	115		Opposing Deman	d Flow Rate, veh/h	-	
Peak	Hour Factor	0.94	5	⁸ Total Trucks, %		9.00	

Segment Capacity, veh/h 1700		Demand/Capacity (D/C)		0.07		
Int	ermediate Results					
Segr	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.24464		Speed Power Coe	fficient	0.41674
PF S	lope Coefficient	-1.23762		PF Power Coefficie	ent	0.78099
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.4
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	945	-		-	67.6
2	Horizontal Curve	2700	960)	8	64.6
Vel	hicle Results					
Aver	age Speed, mi/h	65.4		Percent Followers,	%	20.4
Segr	ment Travel Time, minutes	0.63		Followers Density,	followers/mi/ln	0.4
Vehi	cle LOS	A				
Bic	ycle Results			-		
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	v Rate Outside Lane, veh/h	115		Bicycle Effective W	/idth, ft	19
Bicy	cle LOS Score	5.59		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	F				
		Se	gm	nent 34		
Vel	hicle Inputs					
Segr	nent Type	Passing Zone		Length, ft		1110
Lane	e Width, ft	12	12		t	1
Spee	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	115		Opposing Demand Flow Rate, veh/h		251
Peak	Hour Factor	0.94		Total Trucks, %		4.90
Segr	ment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.07
Int	ermediate Results					
Segment Vertical Class 1		Free-Flow Speed,	mi/h	68.4		
Speed Slope Coefficient 3.98077		Speed Power Coefficient		0.52606		
PF S	lope Coefficient	-1.26051		PF Power Coefficie	ent	0.79969
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.3
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	Rag	gjus, ft	Superelevation, %	Average Speed, mi/h

1	Horizontal Curve	548	960		8	64.7			
2	Tangent	562	-		-	68.0			
Veł	Vehicle Results								
Average Speed, mi/h 66.4				Percent Followers,	, %	20.0			
Segn	nent Travel Time, minutes	0.19		Followers Density,	followers/mi/ln	0.3			
Vehi	cle LOS	A							
Bicy	Bicycle Results								
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4			
Flow	Rate Outside Lane, veh/h	115		Bicycle Effective W	/idth, ft	19			
Bicyc	le LOS Score	4.11		Bicycle Effective S	peed Factor	5.07			
Bicyc	le LOS	D							





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HCS™ Two-Lane Version 7.8.5 HCS_SB SH 83 Analysis AM Existing 2022.xuf

HCS7 Two-Lane Highway Report

Project Information

Analyst	CONSOR/Apex	Date	7/14/2021				
Agency	CDOT Region 1	Analysis Year	2020				
Jurisdiction	Douglas County	Time Period Analyzed	PM Peak				
Project Description	SH 83 Safety and Operation Analysis - NB	Unit	United States Customary				
Segment 1							

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5335
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	65	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	213	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	4.90
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	69.8
Speed Slope Coefficient	4.34586	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.20426	PF Power Coefficient	0.78662
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2955	-	-	68.1
2	Horizontal Curve	2380	960	8	64.3

Vehicle Results

Average Speed, mi/h	66.4	Percent Followers, %	30.0
Segment Travel Time, minutes	0.91	Followers Density, followers/mi/ln	1.0
Vehicle LOS	A		

Segment 2

Vehicle InputsSegment TypePassing ZoneLength, ft1635Lane Width, ft12Shoulder Width, ft2Speed Limit, mi/h65Access Point Density, pts/mi8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	213		Opposing Demand Flow Rate, veh/h		278
Peak Hour Factor	0.94	0.94			9.00
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.13
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	69.0
Speed Slope Coefficient	4.02561	4.02561 S		fficient	0.51998
PF Slope Coefficient	-1.24481	-1.24481 F		ent	0.80661
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	0.9
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Length, ft Radiu		Superelevation, %	Average Speed, mi/h
1 Tangent	1635	-		-	67.7
Vehicle Results					
Average Speed, mi/h	67.7		Percent Followers	, %	30.0
Segment Travel Time, minutes	0.27		Followers Density	, followers/mi/ln	0.9
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	213	213		Vidth, ft	14
Bicycle LOS Score	6.73		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segn	nent 3		
Vehicle Inputs					
Segment Type	Passing Constraine	ed	Length, ft		5860
Lane Width, ft	12		Shoulder Width, ft		1
Speed Limit, mi/h	65		Access Point Den	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	230		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.14
Intermediate Results					
Segment Vertical Class	2		Free-Flow Speed,	mi/h	66.9
Speed Slope Coefficient	6.45386		Speed Power Coe	fficient	0.51255
PF Slope Coefficient	-1.27762		PF Power Coeffici	ent	0.76399
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	1.2
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data			7		

#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3360	-		-	64.6
2	Horizontal Curve	2500	960		8	64.1
Veh	icle Results					
Avera	ige Speed, mi/h	64.4		Percent Followers,	%	34.0
Segm	ent Travel Time, minutes	1.03		Followers Density,	followers/mi/ln	1.2
Vehic	le LOS	A				
Bicy	cle Results					
Perce	nt Occupied Parking	0		Pavement Condition	on Rating	4
Flow	Rate Outside Lane, veh/h	230		Bicycle Effective W	/idth, ft	13
Bicyc	le LOS Score	6.91		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	F				
	Segment 4					
Veh	icle Inputs					
Segm	ient Type	Passing Zone		Length, ft		1100
Lane	Width, ft	12		Shoulder Width, ft		1
Speed	d Limit, mi/h	65		Access Point Density, pts/mi		8.0
Den	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	236		Opposing Deman	d Flow Rate, veh/h	310
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segm	ent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.14
Inte	rmediate Results					
Segm	ent Vertical Class	1		Free-Flow Speed, mi/h		68.3
Speed	d Slope Coefficient	3.99151		Speed Power Coefficient		0.51324
PF Slo	ope Coefficient	-1.27114		PF Power Coefficie	ent	0.79645
In Pas	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.2
%Imp	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	segment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1100	-		-	66.9
Veh	icle Results				<u>^</u>	
Average Speed, mi/h 66.9		Percent Followers,	%	33.1		
Segment Travel Time, minutes 0.19		Followers Density,	followers/mi/ln	1.2		
Vehicle LOS A						
Bicy	cle Results					
Perce	nt Occupied Parking	0		Pavement Condition	on Rating	4
Flow	Rate Outside Lane, veh/h	236	5	Bicycle Effective W	Bicycle Effective Width, ft 13	

Bicyc	le LOS Score	6.92	Bi		peed Factor	5.07
Bicyc	le LOS	F				
		Se	egn	nent 5		
Veł	nicle Inputs					
Segn	nent Type	Passing Constrained	Passing Constrained			5335
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Der	mand and Capacity					
Direc	tional Demand Flow Rate, veh/h	236		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segn	nent Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.14
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	d Slope Coefficient	4.26258		Speed Power Coe	fficient	0.41674
PF SI	ope Coefficient	-1.21926		PF Power Coefficie	ent	0.78318
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.2
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5335	-	-		66.4
Veł	nicle Results					
Aver	age Speed, mi/h	66.4		Percent Followers	, %	32.5
Segn	nent Travel Time, minutes	0.91		Followers Density, followers/mi/ln		1.2
Vehi	cle LOS	A				
Bic	ycle Results			-		
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	236		Bicycle Effective W	Vidth, ft	13
Bicyc	le LOS Score	6.92		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	F				
		Se	egn	nent 6		
Veł	nicle Inputs					
Segn	egment Type Passing Zone		Length, ft		1265	
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Der	nand and Capacity	·		•		
Direc	tional Demand Flow Rate, veh/h	236		Opposing Deman	d Flow Rate, veh/h	310
Peak	Hour Factor	0.94	5	Total Trucks, %		9.00

Segment Capacity, veh/h 1700		Demand/Capacity (D/C)		0.14		
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	3.99151		Speed Power Coe	fficient	0.51324
PF SI	ope Coefficient	-1.27114		PF Power Coefficie	ent	0.79645
In Pa	issing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.2
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft Radi		lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1265	1265 -		-	66.9
Veł	nicle Results					
Aver	age Speed, mi/h	66.9		Percent Followers,	%	33.1
Segr	nent Travel Time, minutes	0.21		Followers Density,	followers/mi/ln	1.2
Vehi	cle LOS	A				
Bic	ycle Results					
Percent Occupied Parking 0		Pavement Condition Rating		4		
Flow	Rate Outside Lane, veh/h	236		Bicycle Effective W	/idth, ft	13
Bicyc	cle LOS Score	6.92		Bicycle Effective S	peed Factor	5.07
Bicyc	cle LOS	F				
		Se	egn	nent 7		
Veł	nicle Inputs					
Segr	nent Type	Passing Constrained		Length, ft		4225
Lane	Width, ft	12		Shoulder Width, ft		1
Spee	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Der	mand and Capacity			-		
Dire	ctional Demand Flow Rate, veh/h	235		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity	0.14	
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient 4.25120		Speed Power Coe	fficient	0.41674		
PF Slope Coefficient -1.22936		PF Power Coefficie	ent	0.78276		
In Passing Lane Effective Length? No		Total Segment De	nsity, veh/mi/ln	1.2		
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4225	4225 - 60		-	66.5

Vel	hicle Results					
Avei	rage Speed, mi/h	66.5		Percent Followers	, %	32.7
Segi	ment Travel Time, minutes	0.72		Followers Density,	followers/mi/ln	1.2
Vehi	icle LOS	A				
Bic	ycle Results	-				·
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	r Rate Outside Lane, veh/h	235	235		Vidth, ft	13
Bicy	cle LOS Score	6.92	6.92		peed Factor	5.07
Bicy	cle LOS	F				
			Segn	nent 8		
Vel	hicle Inputs					
Segi	ment Type	Passing Zone		Length, ft		1740
Lane	e Width, ft	12		Shoulder Width, f	t	1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	235		Opposing Deman	d Flow Rate, veh/h	309
Peal	Peak Hour Factor 0.94		Total Trucks, %		9.00	
Segi	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.14
Int	ermediate Results					
Segi	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	3.99882		Speed Power Coe	fficient	0.51346
PF S	lope Coefficient	-1.25037		PF Power Coefficient		0.80500
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.2
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Sul	osegment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	660	-		-	66.9
2	Horizontal Curve	730	960)	8	64.1
3	Tangent	350	-		-	66.9
Vel	hicle Results					
Average Speed, mi/h 65.7		Percent Followers	, %	32.3		
Segment Travel Time, minutes 0.30		Followers Density,	followers/mi/ln	1.2		
Vehicle LOS A						
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	v Rate Outside Lane, veh/h	235		Bicycle Effective W	Vidth, ft	13
Bicy	cle LOS Score	6.92	6	Bicycle Effective Speed Factor		5.07

Bicy	cle LOS	F				
		S	egn	ment 9		
Vel	hicle Inputs					
Segr	ment Type	Passing Constrained	Passing Constrained			3540
Lane	e Width, ft	12	12		t	1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	235		Opposing Deman	d Flow Rate, veh/h	-
Peak	K Hour Factor	0.94		Total Trucks, %		9.00
Segr	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.14
Inte	ermediate Results					
Segr	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.24340		Speed Power Coe	fficient	0.41674
PF S	lope Coefficient	-1.23939		PF Power Coefficie	ent	0.78054
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.2
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	bsegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3540	-	-		66.5
Vel	hicle Results				-	
Aver	rage Speed, mi/h	66.5		Percent Followers	, %	33.0
Segr	ment Travel Time, minutes	0.61		Followers Density,	followers/mi/ln	1.2
Vehi	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Condition Rating 4		
Flow	/ Rate Outside Lane, veh/h	235		Bicycle Effective V	Vidth, ft	13
Bicy	cle LOS Score	6.92		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	F				
		S	egm	nent 10		
Vel	hicle Inputs					
Segr	ment Type	Passing Zone		Length, ft		1900
Lane	e Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h 65		Access Point Dens	sity, pts/mi	8.0		
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	235		Opposing Deman	d Flow Rate, veh/h	309
Peak	< Hour Factor	0.94		Total Trucks, %		9.00
Segr	ment Capacity, veh/h	1700	E	Demand/Capacity	r (D/C)	0.14

Inte	ermediate Results						
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3	
Spee	ed Slope Coefficient	4.00148		Speed Power Coe	fficient	0.51346	
PF S	lope Coefficient	-1.24384		PF Power Coefficie	ent	0.80765	
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.1	
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0	
Sub	osegment Data						
#	Segment Type	Length, ft Radi		adius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	1900	-		-	66.9	
Veł	nicle Results						
Aver	age Speed, mi/h	66.9		Percent Followers,	, %	32.0	
Segr	nent Travel Time, minutes	0.32		Followers Density,	followers/mi/ln	1.1	
Vehi	cle LOS	A					
Bic	ycle Results						
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4	
Flow	Rate Outside Lane, veh/h	235		Bicycle Effective Width, ft		13	
Bicyo	cle LOS Score	6.92		Bicycle Effective S	peed Factor	5.07	
Bicyo	cle LOS	F					
			Segn	nent 11			
Veł	nicle Inputs						
Segr	nent Type	Passing Constrain	ned	Length, ft		475	
Lane	Width, ft	12		Shoulder Width, ft		1	
Spee	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0	
Dei	mand and Capacity						
Dire	ctional Demand Flow Rate, veh/h	240		Opposing Deman	d Flow Rate, veh/h	-	
Peak	Hour Factor	0.94		Total Trucks, %		9.00	
Segr	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.14	
Inte	ermediate Results						
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3	
Speed Slope Coefficient 4.21060		Speed Power Coe	fficient	0.41674			
PF Slope Coefficient -1.31148		PF Power Coefficie	ent	0.75510			
In Passing Lane Effective Length? No		Total Segment De	nsity, veh/mi/ln	1.3			
%Improved % Followers 0.0		% Improved Avg S	Speed	0.0			
Sub	osegment Data						
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	475	-		-	66.4	
Veł	nicle Results	63					

Ave	rage Speed, mi/h	66.4		Percent Follower	rs, %	36.0
Seg	ment Travel Time, minutes	0.08		Followers Densit	y, followers/mi/ln	1.3
Veh	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Condi	tion Rating	4
Flow	v Rate Outside Lane, veh/h	240		Bicycle Effective	Width, ft	13
Bicy	cle LOS Score	6.93	6.93		Speed Factor	5.07
Bicy	cle LOS	F				
			Seg	ment 12		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1740
Lane	e Width, ft	12		Shoulder Width,	ft	1
Spe	ed Limit, mi/h	65		Access Point Der	nsity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	240		Opposing Dema	nd Flow Rate, veh/h	315
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h 1700		Demand/Capaci	ty (D/C)	0.14		
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed	l, mi/h	68.3
Spe	ed Slope Coefficient	4.00069		Speed Power Co	efficient	0.51218
PF S	ilope Coefficient	-1.25134		PF Power Coeffic	cient	0.80463
In Pa	assing Lane Effective Length?	No		Total Segment D	ensity, veh/mi/ln	1.2
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Su	bsegment Data					
#	Segment Type	Length, ft	R	adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1740	-		-	66.8
Ve	hicle Results					
Ave	rage Speed, mi/h	66.8		Percent Follower	rs, %	32.8
Seg	ment Travel Time, minutes	0.30		Followers Densit	y, followers/mi/ln	1.2
Veh	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Condi	tion Rating	4
Flow	Flow Rate Outside Lane, veh/h 240			Bicycle Effective	Width, ft	13
Bicy	cle LOS Score	6.93		Bicycle Effective	Speed Factor	5.07
Bicy	cle LOS	F				
			Seg	ment 13		

Vehicle Inputs

Seg	ment Type	Passing Constrained	Passing Constrained			8130
Lane	e Width, ft	12		Shoulder Width, ft		1
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	257		Opposing Deman	d Flow Rate, veh/h	-
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	′ (D/C)	0.15
Int	ermediate Results					
Seg	ment Vertical Class	2		Free-Flow Speed,	mi/h	66.8
Spe	ed Slope Coefficient	6.91269		Speed Power Coe	fficient	0.52093
PF S	lope Coefficient	-1.27840		PF Power Coefficie	ent	0.75675
In Pa	assing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	1.5
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Length, ft Radiu		Superelevation, %	Average Speed, mi/h
1	Tangent	2960	-		-	64.2
2	Horizontal Curve	795	960	0	8	64.0
3	Tangent	4375	-		-	64.2
Ve	hicle Results					
Ave	rage Speed, mi/h	64.2		Percent Followers	, %	36.7
Seg	ment Travel Time, minutes	1.44		Followers Density,	, followers/mi/ln	1.5
Veh	icle LOS	A				
Bic	cycle Results					
Perc	ent Occupied Parking	0		Pavement Condition Rating		4
Flow	v Rate Outside Lane, veh/h	257		Bicycle Effective Width, ft		13
Bicy	cle LOS Score	6.96		Bicycle Effective S	peed Factor	5.07
Bicy	cle LOS	F				
		S	egm	nent 14		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1100
Lane Width, ft 12		Shoulder Width, f	t	1		
Speed Limit, mi/h 65		Access Point Dens	sity, pts/mi	8.0		
De	mand and Capacity	-		-		•
Dire	ctional Demand Flow Rate, veh/h	257		Opposing Deman	d Flow Rate, veh/h	337
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.15
Int	ermediate Results					

Segment Vertical Class 1		Free-Flow Speed, mi/h		68.3		
Spee	eed Slope Coefficient 3.99949		Speed Power Coe	fficient	0.50784	
PF SI	ope Coefficient	-1.27528		PF Power Coefficie	ent	0.79492
In Pa	issing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	1.4
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Length, ft Radiu		Superelevation, %	Average Speed, mi/h
1	Tangent	1100	- 1100		-	66.7
Veł	nicle Results					
Average Speed, mi/h 66.7		Percent Followers	i, %	35.2		
Segr	nent Travel Time, minutes	0.19		Followers Density	, followers/mi/In	1.4
Vehi	cle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	ion Rating	4
Flow	Rate Outside Lane, veh/h	257		Bicycle Effective V	Vidth, ft	13
Bicyc	le LOS Score	6.96		Bicycle Effective Speed Factor		5.07
Bicycle LOS F						
	Segment 15					
Veł	nicle Inputs					
Segr	nent Type	Passing Constrai	ned	Length, ft		2110
Lane	Width, ft	12		Shoulder Width, ft		1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Der	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	257		Opposing Demand Flow Rate, veh/h		-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.15
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.22420		Speed Power Coe	fficient	0.41674
PF SI	ope Coefficient	-1.27547		PF Power Coefficie	ent	0.76866
In Passing Lane Effective Length? No		Total Segment De	ensity, veh/mi/ln	1.4		
%Improved % Followers 0.0			% Improved Avg	Speed	0.0	
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2110	-		-	66.3
Veł	nicle Results					
Average Speed, mi/h 66.3				Percent Followers, % 36.2		

Segment Travel Time, minutes	0.36	Fol	Followers Density, followers/mi/In		1.4
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0	Pav	vement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	257	Bic	Bicycle Effective Width, ft		13
Bicycle LOS Score	6.96		cycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	egmen	t 16		
Vehicle Inputs					
Segment Type	Passing Zone	Ler	ngth, ft		1585
Lane Width, ft	12	Sho	oulder Width, fi	t	1
Speed Limit, mi/h	65	Ac	cess Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	263	Ор	posing Deman	d Flow Rate, veh/h	337
Peak Hour Factor	0.94	Tot	Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.15
Intermediate Results					
Segment Vertical Class	1	Fre	e-Flow Speed,	mi/h	68.3
Speed Slope Coefficient 4.00441		Sp	eed Power Coe	fficient	0.50784
PF Slope Coefficient	-1.26157	PF	Power Coefficie	ent	0.80053
In Passing Lane Effective Length?	No	Tot	tal Segment De	nsity, veh/mi/ln	1.4
%Improved % Followers	0.0	%]	Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Radius,	ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1585	-		-	66.7
Vehicle Results					
Average Speed, mi/h	66.7	Pei	rcent Followers,	, %	35.1
Segment Travel Time, minutes	0.27	Fol	llowers Density,	followers/mi/ln	1.4
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking 0		Pav	vement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	263		ycle Effective W	/idth, ft	13
Bicycle LOS Score 6.97		Bic	ycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	egmen	t 17		
Vehicle Inputs					
Segment Type	Passing Constrained	67 Ler	ngth, ft		845

Lane Width, ft		12		Shoulder Width, ft		1
Speed Limit, mi/h		65		Access Point Density, pts/mi		8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	263		Opposing Deman	d Flow Rate, veh/h	-
Peak	K Hour Factor	0.94		Total Trucks, %		9.00
Segi	ment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.15
Int	ermediate Results					
Segi	ment Vertical Class	1		Free-Flow Speed, mi/h		68.3
Spee	ed Slope Coefficient	4.21060		Speed Power Coefficient		0.41674
PF S	lope Coefficient	-1.31148		PF Power Coefficient		0.75510
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.5
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	401	960)	8	64.0
2	Tangent	444 -		-		66.3
Vel	hicle Results					
Avei	rage Speed, mi/h	65.2		Percent Followers, %		38.0
Segment Travel Time, minutes		0.15		Followers Density, followers/mi/ln		1.5
Vehicle LOS		A				
Bic	ycle Results					
Percent Occupied Parking		0	0		on Rating	4
Flow	/ Rate Outside Lane, veh/h	263		Bicycle Effective Width, ft		13
Bicycle LOS Score		6.97		Bicycle Effective Speed Factor		5.07
Bicycle LOS		F				
		S	egm	ent 18		
Ve	hicle Inputs					
Segment Type		Passing Zone		Length, ft		2430
Lane Width, ft		12		Shoulder Width, ft		1
Speed Limit, mi/h		65		Access Point Density, pts/mi		8.0
De	mand and Capacity	·				·
Directional Demand Flow Rate, veh/h		263		Opposing Demand Flow Rate, veh/h		337
Peak Hour Factor		0.94		Total Trucks, %		9.00
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.15
Int	ermediate Results	·				
Segi	ment Vertical Class	1	1		mi/h	68.3
Speed Slope Coefficient		4.01784		Speed Power Coefficient		0.50784

PF Slope Coefficient		-1.23009		PF Power Coefficient		0.81300			
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.3			
%Improved % Followers		0.0		% Improved Avg Speed		0.0			
Sub	osegment Data								
#	Segment Type	Length, ft Rad		lius, ft	Superelevation, %	Average Speed, mi/h			
1	Tangent	2430	2430 -		-	66.7			
Veł	nicle Results								
Average Speed, mi/h		66.7		Percent Followers, %		34.0			
Segr	nent Travel Time, minutes	0.41	0.41		, followers/mi/ln	1.3			
Vehi	cle LOS	A							
Bic	ycle Results								
Perc	ent Occupied Parking	0		Pavement Condition Rating		4			
Flow	Rate Outside Lane, veh/h	263		Bicycle Effective Width, ft		13			
Bicyc	cle LOS Score	6.97	6.97		peed Factor	5.07			
Bicyc	cle LOS	F							
	Segment 19								
Veł	nicle Inputs								
Segment Type		Passing Constrained		Length, ft		900			
Lane Width, ft		12	12		t	3			
Speed Limit, mi/h		65	65		sity, pts/mi	8.0			
Dei	mand and Capacity								
Directional Demand Flow Rate, veh/h		302	302		d Flow Rate, veh/h	-			
Peak Hour Factor		0.94		Total Trucks, %		9.00			
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.18			
Inte	ermediate Results								
Segment Vertical Class		1		Free-Flow Speed, mi/h		69.7			
Spee	ed Slope Coefficient	4.28648		Speed Power Coefficient		0.41674			
PF SI	lope Coefficient	-1.29610		PF Power Coefficient		0.75811			
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.8			
%Improved % Followers		0.0		% Improved Avg Speed		0.0			
Sub	osegment Data								
# Segment Type		Length, ft Rad		lius, ft	Superelevation, %	Average Speed, mi/h			
1 Tangent		900	-		-	67.5			
Veł	nicle Results								
Average Speed, mi/h		67.5	67.5		, %	40.7			
Segr	nent Travel Time, minutes	0.15	0.15		followers/mi/ln	1.8			
Vehicle LOS		A							

Bic	ycle Results					
Percent Occupied Parking 0		Pavement Condition Rating		4		
Flov	Flow Rate Outside Lane, veh/h 302		Bicycle Effective Width, ft		15	
Bicy	Bicycle LOS Score 6.76			Bicycle Effective Speed Factor		5.07
Bicy	cle LOS	F				
		S	egm	ent 20		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1425
Lane	e Width, ft	12		Shoulder Width, ft		1
Spe	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	302		Opposing Demand Flow Rate, veh/h		395
Pea	k Hour Factor	0.94	0.94			9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.18
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed, mi/h		68.3
Speed Slope Coefficient		4.01707		Speed Power Coefficient		0.49770
PF Slope Coefficient		-1.27704		PF Power Coefficient		0.79428
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.8
%Improved % Followers		0.0		% Improved Avg Speed		0.0
Su	bsegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1425	-	-		66.5
Ve	hicle Results					
Ave	rage Speed, mi/h	66.5		Percent Followers, %		39.0
Seg	ment Travel Time, minutes	0.24		Followers Density, followers/mi/ln		1.8
Veh	icle LOS	A				
Bic	ycle Results					•
Percent Occupied Parking 0		0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h		302		Bicycle Effective Width, ft		13
Bicycle LOS Score		7.04		Bicycle Effective Speed Factor		5.07
Bicycle LOS F		F				
		S	egm	ent 21		
Ve	hicle Inputs					
Seg	ment Type	Passing Constrained		Length, ft		4435
Lane Width, ft 12			Shoulder Width, ft		1	
Speed Limit, mi/h 65		65	65 70		sity, pts/mi	8.0

De	mand and Capacity					
Directional Demand Flow Rate, veh/h		302		Opposing Demand Flow Rate, veh/h		-
Peak Hour Factor		0.94		Total Trucks, %		9.00
Segment Capacity, veh/h		1700		Demand/Capacity	r (D/C)	0.18
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed, mi/h		68.3
Spe	ed Slope Coefficient	4.25345		Speed Power Coefficient		0.41674
PF S	lope Coefficient	-1.22693		PF Power Coefficient		0.78311
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.8
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1540	-		-	66.1
2	Horizontal Curve	2095	960)	8	63.9
3	Tangent	800 -			-	66.1
Ve	hicle Results					
Ave	rage Speed, mi/h	65.1		Percent Followers, %		38.2
Segment Travel Time, minutes		0.77		Followers Density, followers/mi/ln		1.8
Vehicle LOS		A				
Bic	ycle Results					
Percent Occupied Parking		0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h		302		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score		7.04		Bicycle Effective Speed Factor		5.07
Bicycle LOS		F				
		9	Segm	ent 22		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1215
Lane	e Width, ft	12		Shoulder Width, ft		1
Speed Limit, mi/h		65		Access Point Density, pts/mi		8.0
De	mand and Capacity					
Directional Demand Flow Rate, veh/h		302		Opposing Demand Flow Rate, veh/h		395
Peak Hour Factor		0.94		Total Trucks, %		9.00
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.18
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient		4.01506		Speed Power Coefficient		0.49770
PF Slope Coefficient		-1.28281 7		PF Power Coefficient		0.79196

In Passing Lane Effective Length?	No	No		ensity, veh/mi/ln	1.8	
%Improved % Followers	0.0	0.0		Speed	0.0	
Subsegment Data						
# Segment Type	Length, ft	Length, ft Rac		Superelevation, %	Average Speed, mi/h	
1 Tangent	1215	-		-	66.5	
Vehicle Results						
Average Speed, mi/h	66.5	66.5		, %	39.2	
Segment Travel Time, minutes	0.21	0.21		, followers/mi/ln	1.8	
Vehicle LOS	A	A				
Bicycle Results						
Percent Occupied Parking	0	0		on Rating	4	
Flow Rate Outside Lane, veh/h	302	302		Vidth, ft	13	
Bicycle LOS Score	7.04		Bicycle Effective Speed Factor		5.07	
Bicycle LOS	F	F				
		Segm	nent 23			
Vehicle Inputs						
Segment Type	Passing Constrair	Passing Constrained			1160	
Lane Width, ft	12	12		t	1	
Speed Limit, mi/h	65	65		sity, pts/mi	8.0	
Demand and Capacity						
Directional Demand Flow Rate, veh,	/h 302	302		d Flow Rate, veh/h	-	
Peak Hour Factor	0.94	0.94			9.00	
Segment Capacity, veh/h	1700	1700		′ (D/C)	0.18	
Intermediate Results						
Segment Vertical Class	1	1		mi/h	68.3	
Speed Slope Coefficient	4.21060	4.21060		fficient	0.41674	
PF Slope Coefficient	-1.31148	-1.31148		ent	0.75510	
In Passing Lane Effective Length?	No	No		ensity, veh/mi/ln	1.9	
%Improved % Followers	0.0	0.0		Speed	0.0	
Subsegment Data						
# Segment Type Length, ft		Rad	dius, ft	Superelevation, %	Average Speed, mi/h	
1 Tangent 1160 -			-	66.1		
Vehicle Results						
Average Speed, mi/h	66.1	66.1		, %	41.2	
Segment Travel Time, minutes	0.20	0.20		, followers/mi/ln	1.9	
Vehicle LOS	A	A				
Bicycle Results		7	72			
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4
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Flow	Rate Outside Lane, veh/h	302		Bicycle Effective V	Vidth, ft	13
Bicyc	cle LOS Score	7.04		Bicycle Effective S	peed Factor	5.07
Bicyc	cle LOS	F				
			Segm	nent 24		
Veł	nicle Inputs					
Segn	nent Type	Passing Zone		Length, ft		1265
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Der	mand and Capacity					
Direc	ctional Demand Flow Rate, veh/h	302		Opposing Deman	d Flow Rate, veh/h	395
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segn	nent Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.18
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.01506		Speed Power Coe	fficient	0.49770
PF SI	ope Coefficient	-1.28281		PF Power Coefficie	ent	0.79196
In Passing Lane Effective Length? No		Total Segment De	ensity, veh/mi/ln	1.8		
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Suk	osegment Data					
#	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1265	-		-	66.5
Veł	nicle Results					
Aver	age Speed, mi/h	66.5		Percent Followers	, %	39.2
Segn	nent Travel Time, minutes	0.22		Followers Density,	, followers/mi/ln	1.8
Vehi	cle LOS	A				
Bic	ycle Results					
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	302		Bicycle Effective V	Vidth, ft	13
Bicyc	cle LOS Score	7.04		Bicycle Effective S	peed Factor	5.07
Bicyc	cle LOS	F				
			Segm	nent 25		
Veł	nicle Inputs					
Segn	nent Type	Passing Constrain	ned	Length, ft		4330
		40			t	1
Lane	Width, ft	12		Shoulder Width, f	L	-
Lane Spee	Width, ft ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0

9.00 0.18 66.1 0.67702 0.77005 2.0 0.0
0.18 66.1 0.67702 0.77005 2.0 0.0
 66.1 0.67702 0.77005 2.0 0.0
66.1 0.67702 0.77005 2.0 0.0
0.67702 0.77005 2.0 0.0
0.77005 2.0 0.0
2.0 0.0
0.0
Average Speed, mi/h
62.9
62.9
62.9
41.0
2.0
4
13
5.07
3590
1
8.0
193
5.60
0.09
67.7
0.64894
0.82863
0.82863

Su	bsegment Data					
#	Segment Type	Length, ft	R	adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3590	-		-	67.0
Ve	hicle Results	1				
Ave	rage Speed, mi/h	67.0		Percent Follow	ers, %	21.1
Seg	ment Travel Time, minutes	0.61		Followers Dens	ity, followers/mi/ln	0.5
Veh	icle LOS	A				
Bic	ycle Results			-		-
Perc	ent Occupied Parking	0		Pavement Con	dition Rating	4
Flow Rate Outside Lane, veh/h 147 B		Bicycle Effectiv	e Width, ft	17		
Bicy	cle LOS Score	4.82		Bicycle Effectiv	e Speed Factor	5.07
Bicy	cle LOS	E				
			Segi	ment 27		
Ve	hicle Inputs					
Seg	ment Type	Passing Constrair	ned	Length, ft		3800
Lane Width, ft 12			Shoulder Widt	n, ft	1	
Speed Limit, mi/h 65		65		Access Point D	ensity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	147		Opposing Dem	and Flow Rate, veh/h	-
Peak Hour Factor 0.94			Total Trucks, %		5.60	
Segment Capacity, veh/h 1700		Demand/Capa	city (D/C)	0.09		
Int	ermediate Results					
Seg	ment Vertical Class	2		Free-Flow Spee	ed, mi/h	67.6
Spe	ed Slope Coefficient	5.54297		Speed Power C	oefficient	0.49998
PF S	lope Coefficient	-1.30197		PF Power Coef	ficient	0.76108
In Pa	assing Lane Effective Length?	No		Total Segment	Density, veh/mi/ln	0.6
%Im	proved % Followers	0.0		% Improved Av	/g Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	R	adius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3800	-		-	66.4
Ve	hicle Results					
Ave	rage Speed, mi/h	66.4		Percent Follow	ers, %	26.1
Seg	ment Travel Time, minutes	0.65		Followers Dens	ity, followers/mi/ln	0.6
Veh	icle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Con	dition Rating	4
Flow	v Rate Outside Lane, veh/h	147		75 Bicycle Effectiv	e Width, ft	17

Bicyc	le LOS Score	4.82		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	E				
		Se	gm	ent 28		
Veh	icle Inputs					
Segn	nent Type	Passing Zone		Length, ft		1635
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	d Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Den	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	147		Opposing Deman	d Flow Rate, veh/h	193
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segn	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.09
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed, mi/h		68.4
Speed Slope Coefficient 3.96492		Speed Power Coefficient		0.54137		
PF Slo	ope Coefficient	-1.23253		PF Power Coefficient		0.81055
In Pa	ing Lane Effective Length? No		Total Segment Density, veh/mi/ln		0.5	
%Imp	%Improved % Followers 0.0		% Improved Avg Speed		0.0	
Sub	segment Data					
#	Segment Type	Length, ft	Radi	ius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1635	-		-	67.7
Veh	iicle Results					
Avera	age Speed, mi/h	67.7		Percent Followers	, %	22.9
Segment Travel Time, minutes		0.27		Followers Density, followers/mi/ln		0.5
Vehic	cle LOS	A				
Bicy	cle Results	·				
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	147	Bicycle Effective		Vidth, ft	17
Bicyc	le LOS Score	4.82		Bicycle Effective Speed Factor		5.07
Bicyc	le LOS	E				
		Se	gm	ent 29		
Veh	icle Inputs					
Segm	nent Type	Passing Constrained		Length, ft		1585
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	d Limit, mi/h	65	_	Access Point Dens	sity, pts/mi	0.0
Den	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	147		Opposing Deman	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94	76	⁶ Total Trucks, %		5.60

Segr	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.09
Inte	ermediate Results					
Segr	nent Vertical Class	2		Free-Flow Speed,	mi/h	69.6
Spee	d Slope Coefficient	5.02173		Speed Power Coe	fficient	0.50350
PF SI	ope Coefficient	-1.37937		PF Power Coefficie	ent	0.74595
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.6
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Suk	osegment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1585	-		-	68.5
Veł	nicle Results					
Aver	age Speed, mi/h	68.5		Percent Followers,	, %	28.1
Segr	nent Travel Time, minutes	0.26		Followers Density,	followers/mi/ln	0.6
Vehi	cle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Flow Rate Outside Lane, veh/h 147			Bicycle Effective W	/idth, ft	17
Bicyc	le LOS Score	4.82		Bicycle Effective S	peed Factor	5.07
Bicyc	le LOS	E				
		Se	egm	ent 30		
Veł	nicle Inputs					
Segr	nent Type	Passing Zone		Length, ft		1635
Lane	Width, ft	12		Shoulder Width, ft		1
Spee	d Limit, mi/h	65		Access Point Density, pts/mi		8.0
Dei	mand and Capacity					
Direo	tional Demand Flow Rate, veh/h	147		Opposing Deman	d Flow Rate, veh/h	193
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segr	Segment Capacity, veh/h 1700		Demand/Capacity (D/C)		0.09	
Inte	ermediate Results					
Segr	nent Vertical Class	1		Free-Flow Speed, mi/h		68.4
Spee	d Slope Coefficient	3.96492		Speed Power Coefficient		0.54137
PF SI	ope Coefficient	-1.23253		PF Power Coefficie	ent	0.81055
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.5
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1635	- 7	7	-	67.7

Vehicle Results					
Average Speed, mi/h	67.7		Percent Followers	, %	22.9
Segment Travel Time, minutes	0.27		Followers Density,	, followers/mi/ln	0.5
Vehicle LOS	A				
Bicycle Results	·				•
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	147		Bicycle Effective V	Vidth, ft	17
Bicycle LOS Score	4.82		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	E				
		Segm	nent 31		
Vehicle Inputs					
Segment Type	Passing Constra	ined	Length, ft		7340
Lane Width, ft	12		Shoulder Width, f	t	3
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	147		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	' (D/C)	0.09
Intermediate Results					·
Segment Vertical Class	4		Free-Flow Speed,	mi/h	67.1
Speed Slope Coefficient	12.25551		Speed Power Coe	fficient	0.52891
PF Slope Coefficient	-1.74397		PF Power Coefficie	ent	0.76962
In Passing Lane Effective Length?	No	o Total Segment Density, veh/mi/ln		0.7	
%Improved % Followers	0.0		% Improved Avg Speed		0.0
Subsegment Data					
# Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	7340	-		-	64.7
Vehicle Results				-	
Average Speed, mi/h	64.7		Percent Followers	, %	32.9
Segment Travel Time, minutes	1.29		Followers Density,	, followers/mi/ln	0.7
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	147		Bicycle Effective V	Vidth, ft	20
Bicycle LOS Score	4.27		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	D				
		Segn	ient 32		

Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		2270
Lane Width, ft	12		Shoulder Width, ft		3
Speed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	147		Opposing Deman	d Flow Rate, veh/h	193
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.09
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	69.8
Speed Slope Coefficient 4.05100 S		Speed Power Coefficient		0.54137	
PF Slope Coefficient	-1.19905		PF Power Coefficie	ent	0.82410
In Passing Lane Effective Length?	_ength? No		Total Segment De	nsity, veh/mi/ln	0.5
%Improved % Followers	0.0	0.0		speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Ra	idius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	2270	-		-	69.0
Vehicle Results					
Average Speed, mi/h	69.0		Percent Followers,	%	21.9
Segment Travel Time, minutes	0.37		Followers Density,	followers/mi/ln	0.5
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition	on Rating	4
Flow Rate Outside Lane, veh/h	147		Bicycle Effective W	/idth, ft	20
Bicycle LOS Score	4.27		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	D				
		Segn	nent 33		
Vehicle Inputs					
Segment Type	Passing Constrai	ined	Length, ft		13465
Lane Width, ft	12		Shoulder Width, ft	:	6
Speed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	157		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.09
Intermediate Results					
Segment Vertical Class	5		79 Free-Flow Speed,	mi/h	66.0

Spee	Speed Slope Coefficient 23.92578		Speed Power Coefficient		0.30590	
PF S	ope Coefficient	-2.29869		PF Power Coefficie	ent	0.77976
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.2
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Ra	idius, ft	Superelevation, %	Average Speed, mi/h
1	Horizontal Curve	3125	96	0	8	56.0
2	Tangent	5415	-		-	56.0
3	Horizontal Curve	2290	96	0	8	56.0
4	Tangent	2635	-		-	56.0
Veł	nicle Results					
Aver	age Speed, mi/h	56.0		Percent Followers,	%	41.9
Segr	nent Travel Time, minutes	2.73		Followers Density,	followers/mi/ln	1.2
Vehi	cle LOS	A				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h		157	157		/idth, ft	29
Bicycle LOS Score		2.09	2.09		peed Factor	5.07
Bicycle LOS		В	В			
			Segn	nent 34		
Veł	nicle Inputs					
Segr	nent Type	Passing Zone		Length, ft		2430
Lane	Width, ft	12		Shoulder Width, ft	t	1
Spee	ed Limit, mi/h	55		Access Point Dens	ity, pts/mi	8.0
Dei	mand and Capacity			·		
Dire	ctional Demand Flow Rate, veh/h	347		Opposing Deman	d Flow Rate, veh/h	454
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segr	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.20
Inte	ermediate Results					
Segr	nent Vertical Class	4		Free-Flow Speed,	mi/h	55.8
Spee	ed Slope Coefficient	5.21788		Speed Power Coe	fficient	0.69318
PF S	ope Coefficient	-1.35669		PF Power Coefficie	ent	0.76130
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	2.9
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Ra	idius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2430	-		-	53.9

Vehicle Results					
Average Speed, mi/h	53.9		Percent Followers	, %	45.4
Segment Travel Time, minutes	0.51		Followers Density,	, followers/mi/ln	2.9
Vehicle LOS	В				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	347		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score	5.72		Bicycle Effective S	peed Factor	4.79
Bicycle LOS	F				
		Segn	nent 35		
Vehicle Inputs					
Segment Type	Passing Constra	ined	Length, ft		4540
Lane Width, ft	12	12		t	1
Speed Limit, mi/h	65		Access Point Density, pts/mi		8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	347		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700	1700		r (D/C)	0.20
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.4
Speed Slope Coefficient	4.26070		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.22506		PF Power Coefficient		0.78302
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	2.2
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1 Horizontal Curve	2111	96	0	8	63.9
2 Tangent	2429	-		-	66.0
Vehicle Results					
Average Speed, mi/h	65.1		Percent Followers	, %	41.4
Segment Travel Time, minutes	0.79		Followers Density,	, followers/mi/ln	2.2
Vehicle LOS	В				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	347		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score	5.86		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F		81		





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HCS7 Two-Lane Highway Report

Project Information

Segment 1						
Project Description	SH 83 Safety and Operation Analysis - SB	Unit	United States Customary			
Jurisdiction	Douglas County	Time Period Analyzed	PM Peak			
Agency	CDOT Region 1	Analysis Year	2020			
Analyst	CONSOR/Apex	Date	7/16/2021			

Vehicle Inputs

Lane Width, ft 12 Shoulder Width, ft 2	Segment Type	Passing Constrained	Length, ft	6125
	Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h45Access Point Density, pts/mi8.0	Speed Limit, mi/h	45	Access Point Density, pts/mi	8.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	454	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	5.60
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	46.3
Speed Slope Coefficient	3.07829	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.37840	PF Power Coefficient	0.71945
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6125	-	-	44.3

Vehicle Results

Average Speed, mi/h	44.3	Percent Followers, %	54.2
Segment Travel Time, minutes	1.57	Followers Density, followers/mi/ln	5.6
Vehicle LOS	с		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4				
Flow Rate Outside Lane, veh/h	454	Bicycle Effective Width, ft	14				
Bicycle LOS Score	5.53	Bicycle Effective Speed Factor	4.42				
Bicycle LOS	F						
Segment 2							

Vehicle Inputs

Seg	ment Type	Passing Zone		Length, ft		1690
Lan	e Width, ft	12		Shoulder Width, ft		6
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ectional Demand Flow Rate, veh/h	224		Opposing Deman	d Flow Rate, veh/h	171
Pea	k Hour Factor	0.94		Total Trucks, %		5.60
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.13
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	71.9
Spe	ed Slope Coefficient	4.14739		Speed Power Coe	fficient	0.54776
PF S	Slope Coefficient	-1.19953		PF Power Coefficie	ent	0.82191
In P	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.9
%In	nproved % Followers	0.0		% Improved Avg S	Speed	0.0
Su	bsegment Data					
#	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-		-	70.6
Ve	hicle Results					
Ave	rage Speed, mi/h	70.6		Percent Followers,	, %	29.6
Seg	ment Travel Time, minutes	0.27		Followers Density,	followers/mi/ln	0.9
Veh	icle LOS	A				
Bic	cycle Results					
Pero	cent Occupied Parking	0		Pavement Conditi	on Rating	4
Flov	w Rate Outside Lane, veh/h	224		Bicycle Effective Width, ft		24
Bicy	cle LOS Score	3.60		Bicycle Effective Speed Factor		5.07
Bicy	cle LOS	D				
		S	egn	nent 3		
Ve	hicle Inputs					
Seg	ment Type	Passing Constrained		Length, ft		11880
Lan	e Width, ft	12		Shoulder Width, ft	t	1
Spe	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
De	mand and Capacity					
Dire	ectional Demand Flow Rate, veh/h	224		Opposing Deman	d Flow Rate, veh/h	-
Pea	k Hour Factor	0.94		Total Trucks, %		5.60
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.13
Int	ermediate Results					
Seg	ment Vertical Class	4		Free-Flow Speed,	mi/h	65.7
Spe	ed Slope Coefficient	13.20663	8	Speed Power Coe	fficient	0.40914

PF SI	ope Coefficient	-1.97178		PF Power Coefficient		0.75086			
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.8			
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0			
Subsegment Data									
#	Segment Type	Length, ft	Rad	ius, ft	Superelevation, %	Average Speed, mi/h			
1	Tangent	8660	-		-	60.0			
2	Horizontal Curve	3220	960		8	60.0			
Veł	iicle Results								
Avera	age Speed, mi/h	60.0		Percent Followers,	%	47.4			
Segn	nent Travel Time, minutes	2.25		Followers Density,	followers/mi/ln	1.8			
Vehi	cle LOS	A							
Bicy	cle Results								
Perce	ent Occupied Parking	0		Pavement Conditi	on Rating	4			
Flow	Rate Outside Lane, veh/h	224		Bicycle Effective W	/idth, ft	13			
Bicyc	le LOS Score	5.63		Bicycle Effective S	peed Factor	5.07			
Bicyc	le LOS	F							
	Segment 4								
Veh	icle Inputs								
Segn	nent Type	Passing Zone		Length, ft		1585			
Lane	Width, ft	12		Shoulder Width, ft		1			
Spee	d Limit, mi/h	65		Access Point Density, pts/mi		8.0			
Der	nand and Capacity								
Direc	tional Demand Flow Rate, veh/h	224		Opposing Deman	d Flow Rate, veh/h	171			
Peak	Hour Factor	0.94		Total Trucks, %		5.60			
Segn	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.13			
Inte	ermediate Results								
Segn	nent Vertical Class	2		Free-Flow Speed, mi/h		67.7			
Spee	d Slope Coefficient	4.14433		Speed Power Coefficient		0.64919			
PF SI	ope Coefficient	-1.23450		PF Power Coefficient		0.80582			
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.0			
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0			
Sub	osegment Data								
#	Segment Type	Length, ft Rad		ius, ft	Superelevation, %	Average Speed, mi/h			
1	Tangent	1585	-		-	66.6			
Veh	icle Results								
Avera	age Speed, mi/h	66.6		Percent Followers,	%	31.0			
Segn	nent Travel Time, minutes	t Travel Time, minutes 0.27 8		Followers Density,	followers/mi/ln	1.0			

Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	224		Bicycle Effective W	Vidth, ft	13
Bicycle LOS Score	5.63		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	:	Segn	nent 5		
Vehicle Inputs					
Segment Type	Passing Constrained		Length, ft		315
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity			- -		- -
Directional Demand Flow Rate, veh/h	193		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.11
Intermediate Results					
Segment Vertical Class 1		Free-Flow Speed,	mi/h	68.4	
Speed Slope Coefficient	4.21673		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.31065		PF Power Coefficie	ent	0.75485
In Passing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.9
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rad	lius, ft Superelevation, %		Average Speed, mi/h
1 Tangent	315	-		-	66.8
Vehicle Results				-	
Average Speed, mi/h	66.8		Percent Followers	, %	31.5
Segment Travel Time, minutes	0.05		Followers Density,	followers/mi/ln	0.9
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	193		Bicycle Effective W	Vidth, ft	13
Bicycle LOS Score	5.56		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segr	nent 6		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		2005
Lane Width, ft	12	8	⁸⁶ Shoulder Width, fi	t	6

Spee	d Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
Der	nand and Capacity					
Directional Demand Flow Rate, veh/h 193		Opposing Demand Flow Rate, veh/h		147		
Peak	Hour Factor	0.94		Total Trucks, %		5.60
Segn	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.11
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	71.9
Spee	d Slope Coefficient	4.14252		Speed Power Coef	ficient	0.55584
PF SI	ope Coefficient	-1.18124		PF Power Coefficie	ent	0.82965
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.7
%Imp	proved % Followers	0.0		% Improved Avg S	peed	0.0
Sub	segment Data					
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2005	-		-	70.8
Veh	iicle Results					
Avera	age Speed, mi/h	70.8		Percent Followers,	%	26.0
Segn	nent Travel Time, minutes	0.32		Followers Density, followers/mi/ln		0.7
Vehio	cle LOS	A				
Bicy	cle Results					
Perce	ent Occupied Parking	0		Pavement Condition	on Rating	4
Flow	Rate Outside Lane, veh/h	193		Bicycle Effective W	/idth, ft	24
Bicyc	le LOS Score	3.52		Bicycle Effective Speed Factor		5.07
Bicyc	le LOS	D				
		Se	egn	nent 7		
Veh	iicle Inputs					
Segn	nent Type	Passing Constrained		Length, ft		10295
Lane	Width, ft	12		Shoulder Width, ft	:	6
Spee	d Limit, mi/h	50		Access Point Density, pts/mi		0.0
Der	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	0		Opposing Demand	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		0.00
Segn	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.00
Inte	ermediate Results					
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	57.0
Spee	d Slope Coefficient	3.69036		Speed Power Coef	ficient	0.41674
PF SI	ope Coefficient	-1.32795		PF Power Coefficie	ent	0.72660
In Pa	ssing Lane Effective Length?	No	8	Total Segment Density, veh/mi/ln		0.0

%Improved % Followers 0.0		0.0	0.0		Speed	0.0	
Subsegment Data							
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	10295	-		-	57.0	
Ve	hicle Results						
Ave	rage Speed, mi/h	57.0		Percent Followers,	%	0.0	
Seg	ment Travel Time, minutes	2.05		Followers Density,	followers/mi/ln	0.0	
Veh	icle LOS	A					
Bic	ycle Results						
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4	
Flov	v Rate Outside Lane, veh/h	0		Bicycle Effective W	/idth, ft	42	
Bicy	cle LOS Score	0.00		Bicycle Effective S	peed Factor	4.62	
Bicy	cle LOS	A					
Segment 8							
Ve	hicle Inputs						
Seg	ment Type	Passing Zone		Length, ft		3060	
Lane	e Width, ft	12	12		t	1	
Spe	ed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0	
De	mand and Capacity						
Dire	ctional Demand Flow Rate, veh/h	193		Opposing Deman	d Flow Rate, veh/h	147	
Pea	k Hour Factor	0.94		Total Trucks, %		5.60	
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.11	
Int	ermediate Results						
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.4	
Spe	ed Slope Coefficient	3.96775		Speed Power Coe	fficient	0.55584	
PF S	lope Coefficient	-1.17728		PF Power Coefficie	ent	0.83250	
In P	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.7	
%Im	proved % Followers	0.0		% Improved Avg S	% Improved Avg Speed 0.0		
Su	bsegment Data						
#	Segment Type	Length, ft	Ra	adius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	3060	-		-	67.4	
Ve	hicle Results						
Average Speed, mi/h 67.4		Percent Followers,	%	25.8			
Segment Travel Time, minutes 0.52		Followers Density,	followers/mi/ln	0.7			
Veh	icle LOS	A					
Bic	ycle Results						
Percent Occupied Parking 0 8			⁸⁸ Pavement Condition	on Rating	4		

Flow Rate Outside Lane, veh/h	193		Bicycle Effective Width, ft		13
Bicycle LOS Score	5.56		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	S	egn	nent 9		
Vehicle Inputs					
Segment Type	Passing Constrained		Length, ft		2430
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	193		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		5.60
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.11
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.4
Speed Slope Coefficient	4.23509		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.26418		PF Power Coefficie	ent	0.77219
In Passing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.9
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	2430	-		-	66.8
Vehicle Results					
Average Speed, mi/h	66.8		Percent Followers, %		29.8
Segment Travel Time, minutes	0.41		Followers Density, followers/mi/ln		0.9
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h	193		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score	5.56		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	egm	ent 10		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		3645
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	193	8	9 Opposing Deman	d Flow Rate, veh/h	147

Peak Hour Factor 0.94		Total Trucks, %		5.60		
Segment Capacity, veh/h 1700		Demand/Capacit	y (D/C)	0.11		
Int	ermediate Results					
Segi	ment Vertical Class	1	1		, mi/h	68.4
Spee	ed Slope Coefficient	3.97491		Speed Power Co	efficient	0.55584
PF S	lope Coefficient	-1.16682		PF Power Coeffic	ient	0.83608
In Pa	assing Lane Effective Length?	No		Total Segment D	ensity, veh/mi/ln	0.7
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	1	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3645		-	-	67.4
Vel	hicle Results	•			- -	
Ave	rage Speed, mi/h	67.4		Percent Follower	s, %	25.5
Segi	ment Travel Time, minutes	0.61		Followers Densit	y, followers/mi/ln	0.7
Vehi	icle LOS	A				
Bic	ycle Results					-
Perc	ent Occupied Parking	0		Pavement Condi	tion Rating	4
Flow	/ Rate Outside Lane, veh/h	193		Bicycle Effective	Width, ft	13
Bicy	cle LOS Score	5.56		Bicycle Effective	Speed Factor	5.07
Bicy	cle LOS	F				
			Seg	ment 11		
Vel	hicle Inputs					
Segi	ment Type	Passing Constrai	ned	Length, ft		4120
Lane	e Width, ft	12		Shoulder Width,	ft	1
Spee	ed Limit, mi/h	65		Access Point Der	nsity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	395		Opposing Dema	nd Flow Rate, veh/h	-
Peal	Hour Factor	0.94		Total Trucks, %		9.00
Segi	ment Capacity, veh/h	1700		Demand/Capacit	y (D/C)	0.23
Int	ermediate Results					- -
Segment Vertical Class 3			Free-Flow Speed	, mi/h	66.1	
Speed Slope Coefficient 9.40946		Speed Power Co	efficient	0.67475		
PF Slope Coefficient -1.32676		PF Power Coeffic	ient	0.77062		
In Passing Lane Effective Length? No			Total Segment D	ensity, veh/mi/ln	3.0	
%Im	proved % Followers	0.0		% Improved Avg	Speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	1	Ragijus, ft	Superelevation, %	Average Speed, mi/h

1 Horizontal Curve	4120	960		8	62.0
Vehicle Results					
Average Speed, mi/h	62.0		Percent Followers, %		47.7
Segment Travel Time, minutes	0.75		Followers Density,	followers/mi/ln	3.0
Vehicle LOS	В				
Bicycle Results					
Percent Occupied Parking	0	0 1		on Rating	4
Flow Rate Outside Lane, veh/h	395		Bicycle Effective W	/idth, ft	13
Bicycle LOS Score	7.18		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segmo	ent 12		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1110
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	395		Opposing Demand Flow Rate, veh/h		302
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.23
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	3.98931		Speed Power Coefficient		0.51476
PF Slope Coefficient	-1.26997		PF Power Coefficient		0.79688
In Passing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		2.7
%Improved % Followers	0.0		% Improved Avg Speed		0.0
Subsegment Data					
# Segment Type	Length, ft	Radi	ius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1110	-		-	66.2
Vehicle Results					
Average Speed, mi/h	66.2		Percent Followers,	, %	45.4
Segment Travel Time, minutes	0.19		Followers Density,	followers/mi/ln	2.7
Vehicle LOS	В				
Bicycle Results					·
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	395		Bicycle Effective W	/idth, ft	13
Bicycle LOS Score	7.18		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F	91			

		Segm	nent 13		
Vehicle Inputs					
Segment Type	Passing Constra	ained	Length, ft		1320
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Den	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	395		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94	0.94			9.00
Segment Capacity, veh/h	1700		Demand/Capacity	/ (D/C)	0.23
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	4.21060		Speed Power Coe	fficient	0.41674
PF Slope Coefficient	-1.31148		PF Power Coeffici	ent	0.75510
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	2.9
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1320	-		-	65.8
Vehicle Results				•	
Average Speed, mi/h	65.8		Percent Followers	, %	47.8
Segment Travel Time, minutes	0.23		Followers Density, followers/mi/ln		2.9
Vehicle LOS	В				
Bicycle Results					
Percent Occupied Parking	0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h	395		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score	7.18		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segm	nent 14		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1210
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Den	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	395		Opposing Deman	d Flow Rate, veh/h	302
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.23

Inte	ermediate Results						
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3	
Speed Slope Coefficient 3.98931		Speed Power Coefficient		0.51476			
PF S	lope Coefficient	-1.26997		PF Power Coefficie	ent	0.79688	
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	2.7	
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0	
Subsegment Data							
#	Segment Type	Length, ft Radi		dius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	1210	-		-	66.2	
Veł	nicle Results	·					
Aver	age Speed, mi/h	66.2		Percent Followers	, %	45.4	
Segr	nent Travel Time, minutes	0.21		Followers Density,	followers/mi/ln	2.7	
Vehi	cle LOS	В					
Bic	ycle Results						
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4	
Flow	Rate Outside Lane, veh/h	395		Bicycle Effective Width, ft		13	
Bicyo	cle LOS Score	7.18		Bicycle Effective S	peed Factor	5.07	
Bicyo	cle LOS	F					
	Segment 15						
Veł	nicle Inputs						
Segr	nent Type	Passing Constrained		Length, ft		6760	
Lane	Width, ft	12		Shoulder Width, ft		1	
Spee	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0	
Dei	mand and Capacity						
Dire	ctional Demand Flow Rate, veh/h	344		Opposing Demand Flow Rate, veh/h		-	
Peak	Hour Factor	0.94		Total Trucks, %		9.00	
Segr	nent Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.20	
Inte	ermediate Results	·				•	
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3	
Spee	ed Slope Coefficient	4.27558		Speed Power Coe	fficient	0.41674	
PF Slope Coefficient -1.21419			PF Power Coefficie	ent	0.77950		
In Passing Lane Effective Length? No			Total Segment De	nsity, veh/mi/ln	2.2		
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0	
Sub	osegment Data						
#	Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	3280	-		-	65.9	
2	Horizontal Curve	3480	969	3	8	63.8	

Vehicle Results					
Average Speed, mi/h	64.8		Percent Followers	, %	41.0
Segment Travel Time, minutes	1.18		Followers Density,	, followers/mi/ln	2.2
Vehicle LOS	В				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	344		Bicycle Effective V	- Vidth, ft	13
Bicycle LOS Score	7.11		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segn	nent 16		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		2060
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h 65		Access Point Dens	sity, pts/mi	8.0	
Demand and Capacity					
Directional Demand Flow Rate, veh/h 344		Opposing Deman	d Flow Rate, veh/h	263	
Peak Hour Factor	Hour Factor 0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700	1700		' (D/C)	0.20
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	3.98998		Speed Power Coe	fficient	0.52333
PF Slope Coefficient	-1.23038		PF Power Coefficient		0.81289
In Passing Lane Effective Length?	No	No		ensity, veh/mi/ln	2.1
%Improved % Followers	0.0		% Improved Avg	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	2060	-		-	66.4
Vehicle Results					
Average Speed, mi/h	66.4		Percent Followers	, %	40.3
Segment Travel Time, minutes	0.35		Followers Density,	, followers/mi/ln	2.1
Vehicle LOS	ehicle LOS B				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	344		Bicycle Effective V	Vidth, ft	13
Bicycle LOS Score	7.11		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
		Segn	fent 17		

Ve	hicle Inputs					
Seg	ment Type	Passing Constrained		Length, ft		1320
Lane	e Width, ft	12		Shoulder Width, ft		1
Spe	ed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
De	mand and Capacity					
Dire	Directional Demand Flow Rate, veh/h 337		Opposing Deman	d Flow Rate, veh/h	-	
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.20
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spe	ed Slope Coefficient	4.21060		Speed Power Coet	fficient	0.41674
PF S	lope Coefficient	-1.31148		PF Power Coefficie	ent	0.75510
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	2.2
%Im	nproved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1320	-		-	66.0
Ve	hicle Results				<u>^</u>	
Average Speed, mi/h 66.0		Percent Followers,	%	43.9		
Seg	ment Travel Time, minutes	0.23		Followers Density,	followers/mi/ln	2.2
Veh	icle LOS	В				
Bic	cycle Results					
Perc	cent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	v Rate Outside Lane, veh/h	337		Bicycle Effective Width, ft		13
Bicy	cle LOS Score	7.10		Bicycle Effective Speed Factor		5.07
Bicy	cle LOS	F				
		S	egm	nent 18		
Ve	hicle Inputs					
Seg	ment Type	Passing Zone		Length, ft		1265
Lane	e Width, ft	12		Shoulder Width, ft	t	1
Spe	ed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
De	mand and Capacity					
Dire	ectional Demand Flow Rate, veh/h	337		Opposing Deman	d Flow Rate, veh/h	257
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.20
Int	ermediate Results					
Seg	ment Vertical Class	1	ę	⁹⁵ Free-Flow Speed,	mi/h	68.3

Spee	d Slope Coefficient	3.97545		Speed Power Coefficient		0.52456	
PF SI	ope Coefficient	-1.26225	-1.26225		ent	0.79957	
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		2.1	
%Imp	proved % Followers	0.0		% Improved Avg S	peed	0.0	
Sub	segment Data						
#	Segment Type	Length, ft	Length, ft Radi		Superelevation, %	Average Speed, mi/h	
1	Tangent	1265	-		-	66.4	
Vehicle Results							
Avera	age Speed, mi/h	66.4		Percent Followers,	%	41.1	
Segn	nent Travel Time, minutes	0.22		Followers Density,	followers/mi/ln	2.1	
Vehic	le LOS	В					
Bicy	cle Results						
Perce	ent Occupied Parking	0		Pavement Condition	on Rating	4	
Flow	Rate Outside Lane, veh/h	337		Bicycle Effective W	/idth, ft	13	
Bicyc	le LOS Score	7.10		Bicycle Effective S	peed Factor	5.07	
Bicyc	le LOS	F					
	Segment 19						
Veh	icle Inputs						
Segn	nent Type	Passing Constrained		Length, ft		2480	
Lane	Width, ft	12		Shoulder Width, ft	:	1	
Spee	d Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0	
Der	nand and Capacity						
Direc	tional Demand Flow Rate, veh/h	337		Opposing Demand	d Flow Rate, veh/h	-	
Peak	Hour Factor	0.94		Total Trucks, %		9.00	
Segn	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.20	
Inte	ermediate Results						
Segn	nent Vertical Class	1		Free-Flow Speed, mi/h		68.3	
Spee	d Slope Coefficient	4.22967		Speed Power Coefficient		0.41674	
PF SI	ope Coefficient	-1.26349		PF Power Coefficient		0.77294	
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	2.1	
%Improved % Followers 0.0			% Improved Avg S	peed	0.0		
Sub	segment Data						
#	Segment Type	Length, ft Ra		ius, ft	Superelevation, %	Average Speed, mi/h	
1	Tangent	2480	-		-	66.0	
Veh	icle Results						
Avera	age Speed, mi/h	66.0		Percent Followers,	%	42.0	
Segn	nent Travel Time, minutes	0.43	9	Followers Density,	followers/mi/ln	2.1	

Vehicle LOS	В				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	337		Bicycle Effective Width, ft		13
Bicycle LOS Score	7.10		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	gm	ent 20		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1160
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	315		Opposing Deman	d Flow Rate, veh/h	240
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.19
Intermediate Results					
Segment Vertical Class 1		Free-Flow Speed,	mi/h	68.3	
Speed Slope Coefficient	ent 3.96986		Speed Power Coe	fficient	0.52863
PF Slope Coefficient	-1.25898		PF Power Coefficie	ent	0.80067
In Passing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	1.9
%Improved % Followers	0.0		% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rad	lius, ft Superelevation, %		Average Speed, mi/h
1 Horizontal Curve	1160	960)	8	63.9
Vehicle Results					
Average Speed, mi/h	63.9		Percent Followers	, %	39.3
Segment Travel Time, minutes	0.21		Followers Density,	followers/mi/ln	1.9
Vehicle LOS	A				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h 315		Bicycle Effective W	Vidth, ft	13	
Bicycle LOS Score	7.06		Bicycle Effective S	peed Factor	5.07
Bicycle LOS F					
	Se	gm	ent 21		
Vehicle Inputs					
Segment Type	Passing Constrained		Length, ft		7815
Lane Width, ft	12	9	Shoulder Width, ft		1

Spee	d Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
Der	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	315		Opposing Demand	d Flow Rate, veh/h	-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segn	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.19
Inte	ermediate Results					
Segn	nent Vertical Class	2		Free-Flow Speed,	mi/h	66.8
Spee	d Slope Coefficient	6.85373		Speed Power Coef	fficient	0.51976
PF SI	ope Coefficient	-1.27695		PF Power Coefficie	ent	0.75819
In Pa	ssing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	2.0
%Imp	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rad	ius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	7815	-		-	63.8
Veh	icle Results					
Average Speed, mi/h 63.8			Percent Followers, %		41.2	
Segment Travel Time, minutes 1.39			Followers Density,	followers/mi/ln	2.0	
Vehicle LOS B						
Bicy	vcle Results					
Perce	ent Occupied Parking	0		Pavement Condition	on Rating	4
Flow	Rate Outside Lane, veh/h	315		Bicycle Effective W	/idth, ft	13
Bicyc	le LOS Score	7.06		Bicycle Effective Speed Factor		5.07
Bicyc	le LOS	F				
		Se	gm	ent 22		
Veh	iicle Inputs					
Segn	nent Type	Passing Zone		Length, ft		2640
Lane	Width, ft	12		Shoulder Width, ft	:	1
Spee	d Limit, mi/h	65		Access Point Density, pts/mi		8.0
Der	nand and Capacity					
Direc	tional Demand Flow Rate, veh/h	315		Opposing Demand	d Flow Rate, veh/h	240
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segn	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.19
Intermediate Results						
Segn	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	d Slope Coefficient	3.99117		Speed Power Coef	fficient	0.52863
PF SI	ope Coefficient	-1.20873		PF Power Coefficie	ent	0.82134
In Pa	ssing Lane Effective Length?	No	98	Total Segment Density, veh/mi/ln		1.8

%Improved % Followers 0.0 % Improved Avg Speed		Speed	0.0			
Su	bsegment Data					
#	Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2640	-		-	66.5
Ve	hicle Results					
Ave	rage Speed, mi/h	66.5		Percent Followers	, %	37.4
Segment Travel Time, minutes 0.45		Followers Density	, followers/mi/ln	1.8		
Veh	icle LOS	A				
Bio	cycle Results			-		
Per	cent Occupied Parking	0		Pavement Conditi	on Rating	4
Flov	v Rate Outside Lane, veh/h	315		Bicycle Effective V	Vidth, ft	13
Bicy	rcle LOS Score	7.06		Bicycle Effective S	peed Factor	5.07
Bicy	rcle LOS	F				
	Segment 23					
Ve	hicle Inputs					
Segment Type Passing Constrained		Length, ft		315		
Lane Width, ft 12		Shoulder Width, f	t	1		
Spe	ed Limit, mi/h	65		Access Point Den	sity, pts/mi	0.0
De	mand and Capacity	·				·
Dire	ectional Demand Flow Rate, veh/h	315		Opposing Deman	d Flow Rate, veh/h	-
Pea	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700	1700 Demand		/ (D/C)	0.19
Int	ermediate Results					·
Seg	ment Vertical Class	1		Free-Flow Speed, mi/h		70.3
Spe	ed Slope Coefficient	4.31900		Speed Power Coe	fficient	0.41674
PF S	Slope Coefficient	-1.28943		PF Power Coeffici	ent	0.75941
In P	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.9
%In	nproved % Followers	0.0		% Improved Avg	Speed	0.0
Su	bsegment Data					
#	Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	315	-		-	68.0
Ve	hicle Results	•				
Average Speed, mi/h 68.0			Percent Followers	, %	41.5	
Seg	ment Travel Time, minutes	0.05		Followers Density	, followers/mi/ln	1.9
Veh	icle LOS	A				
Bio	cycle Results					
Percent Occupied Parking 8			⁹⁹ Pavement Condition Rating		4	

Flow Rate Outside Lane, veh/h	315		Bicycle Effective W	Vidth, ft	13
Bicycle LOS Score	7.06		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	egm	ent 24		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1265
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	357		Opposing Deman	d Flow Rate, veh/h	273
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700		Demand/Capacity	r (D/C)	0.21
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	3.98053		Speed Power Coe	fficient	0.52092
PF Slope Coefficient -1.26514		PF Power Coefficient		0.79858	
In Passing Lane Effective Length? No		Total Segment De	nsity, veh/mi/ln	2.3	
%Improved % Followers 0.0			% Improved Avg S	Speed	0.0
Subsegment Data					
# Segment Type	Length, ft	Rad	lius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1265	-		-	66.3
Vehicle Results					
Average Speed, mi/h	66.3		Percent Followers, %		42.7
Segment Travel Time, minutes	0.22		Followers Density, followers/mi/ln		2.3
Vehicle LOS	В				
Bicycle Results					
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	357		Bicycle Effective W	Vidth, ft	13
Bicycle LOS Score	7.13		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	Se	egm	ent 25		
Vehicle Inputs					
Segment Type Passing Constrained			Length, ft		3430
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	357	10	Opposing Deman	d Flow Rate, veh/h	-

Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segi	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.21
Int	ermediate Results					
Segi	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.24208		Speed Power Coet	fficient	0.41674
PF S	lope Coefficient	-1.24135		PF Power Coefficie	ent	0.78001
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	2.3
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	Length, ft Radiu		Superelevation, %	Average Speed, mi/h
1	Tangent	3430	-		-	65.9
Vel	nicle Results	• •				·
Aver	age Speed, mi/h	65.9		Percent Followers,	%	42.7
Segi	nent Travel Time, minutes	0.59		Followers Density,	followers/mi/ln	2.3
Vehi	cle LOS	В				
Bic	ycle Results					
Percent Occupied Parking		0		Pavement Condition	on Rating	4
Flow	Rate Outside Lane, veh/h	357		Bicycle Effective W	/idth, ft	13
Bicycle LOS Score 7.13			Bicycle Effective S	peed Factor	5.07	
Bicycle LOS F		F				
		Se	egm	nent 26		
Vel	nicle Inputs					
Segi	nent Type	Passing Zone		Length, ft		1585
Lane	e Width, ft	12	12		:	1
Spee	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	357		Opposing Deman	d Flow Rate, veh/h	273
Peal	Hour Factor	0.94		Total Trucks, %		9.00
Segi	nent Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.21
Int	ermediate Results	·				• •
Segi	nent Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient 3.9		3.98546		Speed Power Coet	fficient	0.52092
PF S	lope Coefficient	-1.25157		PF Power Coefficie	ent	0.80425
In Pa	assing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	2.3
%Im	proved % Followers	0.0		% Improved Avg S	speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	Rap	djµs, ft	Superelevation, %	Average Speed, mi/h

1	Tangent	1585	-		-	66.3
Ve	hicle Results					
Avei	age Speed, mi/h	66.3		Percent Followers,	, %	42.1
Segi	ment Travel Time, minutes	0.27		Followers Density,	followers/mi/ln	2.3
Vehi	cle LOS	В				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	v Rate Outside Lane, veh/h	357	357		/idth, ft	13
Bicy	cle LOS Score	7.13	7.13		peed Factor	5.07
Bicy	cle LOS	F				
		Se	egm	ent 27		
Vel	hicle Inputs					
Segi	nent Type	Passing Constrained		Length, ft		4595
Lane	e Width, ft	12		Shoulder Width, ft	t	1
Spee	ed Limit, mi/h	65		Access Point Density, pts/mi		8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	357		Opposing Deman	d Flow Rate, veh/h	-
Peal	Hour Factor	0.94	0.94			9.00
Segi	ment Capacity, veh/h	1700		Demand/Capacity	(D/C)	0.21
Int	ermediate Results					
Segi	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spee	ed Slope Coefficient	4.25514		Speed Power Coefficient		0.41674
PF S	lope Coefficient	-1.22525		PF Power Coefficient		0.78329
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		2.3
%Im	proved % Followers	0.0		% Improved Avg S	Speed	0.0
Sul	osegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4035	-		-	65.9
2	Horizontal Curve	560	960)	8	63.8
Ve	hicle Results					
Average Speed, mi/h 65.6		Percent Followers,	, %	42.2		
Segi	ment Travel Time, minutes	0.80		Followers Density,	followers/mi/ln	2.3
Vehi	cle LOS	В				
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	357		Bicycle Effective W	/idth, ft	13
Bicy	cle LOS Score	7.13	1(Bicycle Effective S	peed Factor	5.07

Bicycle LOS	F				
	S	Segm	nent 28		
Vehicle Inputs					
Segment Type	Passing Zone		Length, ft		1110
Lane Width, ft	12		Shoulder Width, f	t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity					
Directional Demand Flow Rate, veh/h	357		Opposing Deman	d Flow Rate, veh/h	273
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700	1700		r (D/C)	0.21
Intermediate Results					
Segment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Speed Slope Coefficient	3.98053		Speed Power Coe	fficient	0.52092
PF Slope Coefficient	-1.26514		PF Power Coefficie	ent	0.79858
In Passing Lane Effective Length?	No		Total Segment De	ensity, veh/mi/ln	2.3
%Improved % Followers 0.0		% Improved Avg	Speed	0.0	
Subsegment Data					
# Segment Type	Length, ft	Rad	dius, ft	Superelevation, %	Average Speed, mi/h
1 Tangent	1110	-		-	66.3
Vehicle Results				2	
Average Speed, mi/h	66.3		Percent Followers	, %	42.7
Segment Travel Time, minutes	0.19		Followers Density,	, followers/mi/ln	2.3
Vehicle LOS	В				
Bicycle Results	•				
Percent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow Rate Outside Lane, veh/h	357		Bicycle Effective Width, ft		13
Bicycle LOS Score	7.13		Bicycle Effective S	peed Factor	5.07
Bicycle LOS	F				
	S	Segm	nent 29		
Vehicle Inputs					
Segment Type	Passing Constrained		Length, ft		5385
Lane Width, ft	12	12		t	1
Speed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Demand and Capacity	-				
Directional Demand Flow Rate, veh/h	357		Opposing Deman	d Flow Rate, veh/h	-
Peak Hour Factor	0.94		Total Trucks, %		9.00
Segment Capacity, veh/h	1700	1	03 Demand/Capacity	' (D/C)	0.21

Intermediat	te Results						
Segment Vertical Class		1		Free-Flow Speed, mi/h		68.3	
Speed Slope Coefficient		4.26307		Speed Power Coe	fficient	0.41674	
PF Slope Coefficient		-1.21895		PF Power Coeffici	ent	0.78313	
In Passing Lane Effective Length?		No		Total Segment De	ensity, veh/mi/ln	2.3	
%Improved % Fo	ollowers	0.0		% Improved Avg	Speed	0.0	
Subsegment Data							
# Segment T	Гуре	Length, ft Rad		dius, ft	Superelevation, %	Average Speed, mi/h	
1 Tangent		5385	-		-	65.9	
Vehicle Res	ults						
Average Speed,	mi/h	65.9		Percent Followers, %		42.0	
Segment Travel	Time, minutes	0.93		Followers Density, followers/mi/ln		2.3	
Vehicle LOS		В					
Bicycle Res	ults			- -			
Percent Occupie	ed Parking	0		Pavement Condition Rating		4	
Flow Rate Outsic	de Lane, veh/h	357		Bicycle Effective Width, ft		13	
Bicycle LOS Score		7.13		Bicycle Effective Speed Factor		5.07	
Bicycle LOS		F					
			Segm	nent 30			
Vehicle Inp	uts						
Segment Type		Passing Zone		Length, ft		1265	
Lane Width, ft		12		Shoulder Width, f	t	1	
Speed Limit, mi/h		65		Access Point Density, pts/mi		8.0	
Demand an	d Capacity			-		•	
Directional Demand Flow Rate, veh/h		310		Opposing Deman	d Flow Rate, veh/h	236	
Peak Hour Factor		0.94		Total Trucks, %		9.00	
Segment Capaci	ty, veh/h	1700		Demand/Capacity (D/C)		0.18	
Intermediat	te Results			-			
Segment Vertical Class		1		Free-Flow Speed, mi/h		68.3	
Speed Slope Coefficient		3.96843		Speed Power Coefficient		0.52969	
PF Slope Coefficient		-1.25814		PF Power Coefficient		0.80095	
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.8	
%Improved % Followers		0.0		% Improved Avg Speed		0.0	
Subsegmen	Subsegment Data						
# Segment Type		Length, ft Rad		dius, ft	Superelevation, %	Average Speed, mi/h	
1 Tangent 1		1265	-		-	66.6	
Vehicle Res	Vehicle Results 104						

Aver	age Speed, mi/h	speed, mi/h 66.6		Percent Followers, %		38.9
Segr	nent Travel Time, minutes	0.22		Followers Density, followers/mi/In		1.8
Vehi	Vehicle LOS A					
Bic	ycle Results					
Perc	ent Occupied Parking	0		Pavement Conditi	on Rating	4
Flow	Rate Outside Lane, veh/h	310		Bicycle Effective V	Vidth, ft	13
Bicyc	cle LOS Score	7.06		Bicycle Effective S	peed Factor	5.07
Bicyc	cle LOS	F				
		Se	egm	ent 31		
Veł	nicle Inputs					
Segr	nent Type	Passing Constrained		Length, ft		5755
Lane	Width, ft	12		Shoulder Width, f	t	1
Spee	ed Limit, mi/h	65		Access Point Dens	sity, pts/mi	8.0
Der	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	301		Opposing Demand Flow Rate, veh/h		-
Peak	Hour Factor	0.94		Total Trucks, %		9.00
Segr	nent Capacity, veh/h	1700		Demand/Capacity (D/C)		0.18
Inte	ermediate Results					
Segment Vertical Class		3		Free-Flow Speed, mi/h		66.1
Speed Slope Coefficient		10.18748		Speed Power Coefficient		0.69240
PF Slope Coefficient		-1.33484	-1.33484		ent	0.76328
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		2.0
%Improved % Followers		0.0		% Improved Avg Speed		0.0
Sub	osegment Data					
#	Segment Type	Length, ft	Rac	lius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3430	-	-		62.8
2	Horizontal Curve	2325 960		8		62.8
Veł	nicle Results					
Aver	age Speed, mi/h	62.8		Percent Followers, %		41.4
Segment Travel Time, minutes		1.04		Followers Density, followers/mi/ln		2.0
Vehicle LOS		A				
Bic	ycle Results					
Percent Occupied Parking		0		Pavement Condition Rating		4
Flow Rate Outside Lane, veh/h		301		Bicycle Effective Width, ft		13
Bicyc	cle LOS Score	7.04		Bicycle Effective Speed Factor		5.07
Bicyc	cle LOS	F				
		Se	egm	ent 32		

Ve	hicle Inputs					
Segment Type		Passing Zone		Length, ft		1530
Lane Width, ft		12		Shoulder Width, ft	:	1
Spe	ed Limit, mi/h	65		Access Point Dens	ity, pts/mi	8.0
De	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	278		Opposing Demand	d Flow Rate, veh/h	213
Peal	k Hour Factor	0.94		Total Trucks, %		9.00
Seg	ment Capacity, veh/h	1700		Demand/Capacity (D/C)		0.16
Int	ermediate Results					
Seg	ment Vertical Class	1		Free-Flow Speed,	mi/h	68.3
Spe	ed Slope Coefficient	3.96427		Speed Power Coef	fficient	0.53574
PF S	lope Coefficient	-1.24238		PF Power Coefficie	ent	0.80720
In Pa	assing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		1.5
%Im	proved % Followers	0.0		% Improved Avg Speed		0.0
Sul	bsegment Data					
#	Segment Type	Length, ft	Rac	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1530	-	-		66.7
Ve	hicle Results					
Average Speed, mi/h		66.7		Percent Followers, %		35.7
Segment Travel Time, minutes		0.26		Followers Density, followers/mi/ln		1.5
Vehicle LOS		A				
Bic	ycle Results			-		- -
Percent Occupied Parking 0				Pavement Condition	on Rating	4
Flow Rate Outside Lane, veh/h		278		Bicycle Effective Width, ft		13
Bicycle LOS Score		7.00		Bicycle Effective Speed Factor		5.07
Bicy	cle LOS	F				
		Se	egm	nent 33		
Ve	hicle Inputs					
Segment Type Passing		Passing Constrained	assing Constrained			3645
Lane Width, ft 12		12		Shoulder Width, ft		1
Speed Limit, mi/h		65		Access Point Density, pts/mi		8.0
De	mand and Capacity					
Directional Demand Flow Rate, veh/h 278		Opposing Demand Flow Rate, veh/h		-		
Peak Hour Factor 0.94		0.94	0.94			9.00
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.16
Int	ermediate Results					
Seg	ment Vertical Class	1 10		⁰⁶ Free-Flow Speed,	mi/h	68.3

Speed Slope Coefficient		4.24464		Speed Power Coefficient		0.41674			
PF Slope Coefficient		-1.23762		PF Power Coefficient		0.78099			
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.6			
%Improved % Followers		0.0	0.0		Speed	0.0			
Subsegment Data									
#	E Segment Type Length, ft		Radius, ft		Superelevation, %	Average Speed, mi/h			
1	Tangent	945	945 -		-	66.2			
2 Horizontal Curve 2700		2700	960		8	64.0			
Veł	Vehicle Results								
Average Speed, mi/h		64.6		Percent Followers, %		36.6			
Segment Travel Time, minutes		0.64		Followers Density, followers/mi/ln		1.6			
Vehi	cle LOS	A							
Bic	ycle Results								
Perc	ent Occupied Parking	0	0		ion Rating	4			
Flow	Rate Outside Lane, veh/h	278		Bicycle Effective Width, ft		13			
Bicycle LOS Score		7.00		Bicycle Effective Speed Factor		5.07			
Bicyc	le LOS	F							
Segment 34									
Veł	nicle Inputs								
Segment Type Passing Zone				Length, ft		1110			
Lane Width, ft		12	12		ť	1			
Speed Limit, mi/h		65		Access Point Density, pts/mi		8.0			
Der	mand and Capacity								
Directional Demand Flow Rate, veh/h		278		Opposing Demand Flow Rate, veh/h		213			
Peak Hour Factor		0.94		Total Trucks, %		4.90			
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.16			
Inte	ermediate Results								
Segr	nent Vertical Class	1		Free-Flow Speed, mi/h		68.4			
Spee	d Slope Coefficient	3.96773		Speed Power Coefficient		0.53574			
PF Slope Coefficient		-1.25269		PF Power Coefficient		0.80226			
In Passing Lane Effective Length?		No		Total Segment Density, veh/mi/ln		1.5			
%Improved % Followers		0.0		% Improved Avg Speed		0.0			
Suk	osegment Data								
# Segment Type		Length, ft Rad		dius, ft	Superelevation, %	Average Speed, mi/h			
1 Tangent		1110 -		-		66.9			
Veł	nicle Results								
Aver	age Speed, mi/h	66.9	1	07Percent Followers	, %	36.1			

Segment Travel Time, minutes	0.19	Followers Density, followers/mi/ln	1.5				
Vehicle LOS	А						
Bicycle Results							
Percent Occupied Parking	0	Pavement Condition Rating	4				
Flow Rate Outside Lane, veh/h	278	Bicycle Effective Width, ft	13				
Bicycle LOS Score	5.52	Bicycle Effective Speed Factor	5.07				
Bicycle LOS	F						





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HCS™ Two-Lane Version 7.8.5 HCS_SB SH 83 Analysis PM Existing 2022.xuf

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AUTHORIZED SPEED LIMITS

AUTHORIZED SPEED LIMITS AND RECOMMENDED TRAFFIC CONTROL DEVICES

42.95 36W1-10L/REM 24W13-1P(55) 42.63 36W1-10L*/RET 24W13-1P(55)* 42.58 REM RET REM 36W2-2R 42.50 60 36W1-8(5) bk-bk at MP 42.28, .36, .37, .39, .42









Colorado Department of Transportation

AUTHORIZED SPEED LIMITS AND RECOMMENDED TRAFFIC CONTROL DEVICES

CDOT



SH 83 Safety and Operations Study 2020 Existing Conditions Synchro HCS Arterial Summary

				our		PM Peak Ho	our	
		Speed		Approach	Speed		Approach	
Direction	Approach	(mph)	LOS	95 ^{th% Queue¹}	(mph)	LOS	95 ^{°°} % Queue ⁺	Notes
	SH 86	18.0	E	424	18.0	E	423	
	Castle Oaks	49.0	А	267	49.0	А	316	Colit times for all 8 an wars outended to most
Northbound	Bayou Gulch	48.0	А	226	46.0	А	280	split times for \$4 & \$6 were extended to meet
								pedestrian crossing minimums.
	Corridor	43.0	В		42.0	В		
	Bayou Gulch	34.0	С	140	30.0	С	375	
	Castle Oaks	49.0	А	295	46.0	А	559	
Southbound	SH 86	44.0	В	312	44.0	В	466	
	Corridor	44.0	В		40.0	В		

1. # indicates 95th% queue exceeds capacity, queue may be longer; "m" indicates volume for queue is metered by upstream signal

SH 83 Safety and Operations Study 2020 Existing Conditions Synchro HCS Summary

			AM Peak Ho	our		PM Peak Ho	our	
Intersection	Approach	Delay	LOS	95 th % Queue ¹	Delay	LOS	95 th % Queue ¹	Notes
	Eastbound	58.7	E	34	51.1	D	56	
CH 93 8 Review Culab	Westbound	69.4	E	42	66.9	E	55	Split times for all 9 all wars outended to most
SH 65 & Bayou Guich	Northbound	10.2	В	226	21.9	С	280	split times for \$4 & \$6 were extended to meet
Road	Southbound	16.6	В	140	26.2	С	375	pedestrian crossing minimums.
	Intersection	18.3	В		31.4	С		
	Eastbound	21.8	С	105	27.9	С	132	
Ch 92 9 Castla Oaks Drive	Northbound	6.4	А	267	6.8	А	316	
Sil 65 & Castle Oaks Drive	Southbound	10.6	В	295	12.2	В	559	
	Intersection	9.8	А		11.7	В		
	Eastbound	27.8	С	152	33.1	С	486	
	Westbound	30.5	С	339	34.2	С	321	
SH 83 & SH 86	Northbound	25.8	С	424	28.4	С	423	
	Southbound	20.4	С	312	20.7	С	466	
	Intersection	25.5	С		27.5	С		

1. # indicates 95th% queue exceeds capacity, queue may be longer; "m" indicates volume for queue is metered by upstream signal

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲.	•	1	1	†	*	۲	^	1	ሻሻ	^	1
Traffic Volume (vph)	18	14	32	18	16	79	15	758	25	116	580	20
Future Volume (vph)	18	14	32	18	16	79	15	758	25	116	580	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	190		0	550		285	875		0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.652			0.744			0.950			0.950		
Satd. Flow (perm)	1215	1863	1583	1386	1863	1583	1770	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			150			150			134			95
Link Speed (mph)		40			45			55			55	
Link Distance (ft)		784			1819			1432			1968	
Travel Time (s)		13.4			27.6			17.8			24.4	
Peak Hour Factor	0.67	0.67	0.67	0.88	0.88	0.88	0.90	0.90	0.90	0.96	0.96	0.96
Adj. Flow (vph)	27	21	48	20	18	90	17	842	28	121	604	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	21	48	20	18	90	17	842	28	121	604	21
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	49.0	49.0	10.0	52.0	52.0	10.0	22.0	22.0	10.0	38.0	38.0
Total Split (s)	13.0	54.0	54.0	11.0	52.0	52.0	13.0	36.0	36.0	37.0	60.0	60.0
Total Split (%)	9.4%	39.1%	39.1%	8.0%	37.7%	37.7%	9.4%	26.1%	26.1%	26.8%	43.5%	43.5%
Maximum Green (s)	8.0	49.0	49.0	6.0	47.0	47.0	8.0	29.0	29.0	32.0	53.0	53.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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 Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0					7.0	7.0
Flash Dont Walk (s)		37.0	37.0		40.0	40.0					24.0	24.0
Pedestrian Calls (#/hr)		0	0		0	0					0	0
Act Effct Green (s)	12.8	8.0	8.0	10.7	7.0	7.0	6.9	96.1	96.1	10.2	106.0	106.0
Actuated g/C Ratio	0.09	0.06	0.06	0.08	0.05	0.05	0.05	0.70	0.70	0.07	0.77	0.77
v/c Ratio	0.19	0.20	0.21	0.16	0.19	0.41	0.19	0.34	0.02	0.48	0.22	0.02
Control Delay	55.2	65.1	2.0	54.6	66.9	5.7	67.3	9.9	0.0	67.1	6.2	0.1
Queue Delay	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 Delay	55.2	65.1	2.0	54.6	66.9	5.7	67.3	9.9	0.0	67.1	6.2	0.1

Weekday AM Peak SH 83 Safety & Operational Analysis 4:20 pm 06/29/2021 2020 Existing CONSOR/Apex

Weekday AM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	E	А	D	E	А	E	А	А	E	А	A
Approach Delay		30.8			21.9			10.7			15.9	
Approach LOS		С			С			В			В	
Intersection Summary												
Area Type:	Other											
Cycle Length: 138												
Actuated Cycle Length: 13	8											
Offset: 52 (38%), Reference	ed to phase	2:NBT ar	nd 6:SBT,	Start of	Yellow							
Natural Cycle: 110												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.48												
Intersection Signal Delay:	14.6			In	tersectior	ILOS: B						
Intersection Capacity Utiliz	ation 47.0%			IC	U Level o	of Service	А					
Analysis Period (min) 15												

Splits and Phases: 3: SH 83 & Bayou Gulch Rd

₩ _{Ø1}	Ø2 (R)	√ ø3	↓ _{Ø4}
37 s	36 s	11 s	54 s
▲ Ø5 🕴 Ø6 (R)	•	▶ 07	◆ ▼ Ø8
13 s 60 s		13 s	52 s

	≯	\rightarrow	1	†	↓ I	-
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	5	1	7	*	*	1
Traffic Volume (vph)	108	25	12	689	545	65
Future Volume (vph)	108	25	12	689	545	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	215	650	1700	1700	375
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			•
Lane I Itil Factor	1 00	1 00	1 00	1 00	1 00	1 00
Earle Ottil. Factor	1.00	0.850	1.00	1.00	1.00	0.850
Flt Drotoctod	0.050	0.050	0.050			0.050
Satd Elow (prot)	1770	1502	1770	1062	1062	1502
Salu. Flow (plut)	0.050	1003	0.255	1003	1003	1000
Fit Permitted	0.950	100	0.255	10/0	10/0	100
Salu. Flow (perm)	1770	1583	4/5	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		28				/9
Link Speed (mph)	40			55	55	
Link Distance (ft)	1069			1386	825	
Travel Time (s)	18.2			17.2	10.2	
Peak Hour Factor	0.88	0.88	0.97	0.97	0.82	0.82
Adj. Flow (vph)	123	28	12	710	665	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	28	12	710	665	79
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2	_		6
Detector Phase	4	4	5	2	6	6
Switch Phase				-	5	
Minimum Initial (s)	5.0	5.0	3.0	15.0	15.0	15.0
Minimum Snlit (s)	22.0	23 D	0.5	2/1 0	2/1 0	2/1 0
Total Split (s)	23.0	23.0	7.0 10.0	70.0	24.0 60.0	24.0 60.0
Total Split (S)	23.0	23.0	10.0	70.0	64 50/	64 50/
Tuidi Spili (%)	24.1%	24.1%	10.8%	10.3%	04.5%	04.5%
Wallow Time (a)	17.0	17.0	5.0	03.0	53.0	53.0
reliow Lime (S)	3.0	3.0	3.0	5.0	5.0	5.0
All-Red Time (s)	3.0	3.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	7.0	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	Min	Min	Min
Act Effct Green (s)	9.7	9.7	33.9	33.7	32.5	32.5
Actuated g/C Ratio	0.19	0.19	0.65	0.65	0.62	0.62
v/c Ratio	0.37	0.09	0.03	0.59	0.57	0.08
Control Delay	25.4	11 3	4 5	10.0	11 7	2.5
	20.4	0.0		0.0	0.0	2.5
Total Dolay	25.4	11 2	1.5	10.0	11 7	0.0 2 F
	20.4	н.э П	4.0	10.0	н./ П	2.0
LUJ Approach Delay		В	А	В	10 7	А
Approach Delay	22.8			9.9	10.7	
Approach LOS	С			A	В	

Weekday AM Peak SH 83 Safety & Operational Analysis 4:20 pm 06/29/2021 2020 Existing CONSOR/Apex

Intersection Summary											
Area Type: Other											
Cycle Length: 93											
Actuated Cycle Length: 52											
Natural Cycle: 65											
Control Type: Actuated-Uno	coordinated										
Maximum v/c Ratio: 0.59											
Intersection Signal Delay: 1	1.5	Intersection LOS: B									
Intersection Capacity Utiliza	ation 53.1%	ICU Level of Service A									
Analysis Period (min) 15											

Splits and Phases: 8: SH 83 & Castle Oaks Dr



Lanes, Volumes, Timings 10: SH 83 & SH 86

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	†	1	ኘ	1	1	<u>۲</u>	†	1	۲	1	1
Traffic Volume (vph)	147	149	47	29	273	233	86	331	21	154	262	128
Future Volume (vph)	147	149	47	29	273	233	86	331	21	154	262	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	125		375	225		320	175		600
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.443			0.217		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	825	1863	1583	404	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116			262			116			149
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1542			1664			2352			692	
Travel Time (s)		30.0			32.4			45.8			13.5	
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	155	157	49	33	307	262	100	385	24	179	305	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	155	157	49	33	307	262	100	385	24	179	305	149
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	10.0	33.0	33.0	10.0	34.0	34.0	10.0	32.0	32.0	10.0	34.0	34.0
Total Split (s)	32.0	48.0	48.0	15.0	50.0	50.0	40.0	42.0	42.0	24.0	47.0	47.0
Total Split (%)	18.9%	28.4%	28.4%	8.9%	29.6%	29.6%	23.7%	24.9%	24.9%	14.2%	27.8%	27.8%
Maximum Green (s)	27.0	42.0	42.0	10.0	44.0	44.0	35.0	36.0	36.0	19.0	41.0	41.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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 Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	Min	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		20.0	20.0		21.0	21.0		19.0	19.0		21.0	21.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	15.8	38.8	38.8	7.8	25.0	25.0	39.2	27.9	27.9	45.2	31.0	31.0
Actuated g/C Ratio	0.15	0.37	0.37	0.07	0.24	0.24	0.37	0.27	0.27	0.43	0.29	0.29
v/c Ratio	0.58	0.23	0.07	0.25	0.69	0.46	0.25	0.78	0.05	0.52	0.56	0.26
Control Delay	54.8	27.6	0.2	59.0	47.7	7.2	21.0	49.8	0.2	25.1	37.5	6.6
Queue Delay	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 Delay	54.8	27.6	0.2	59.0	47.7	7.2	21.0	49.8	0.2	25.1	37.5	6.6

Weekday AM Peak SH 83 Safety & Operational Analysis 4:20 pm 06/29/2021 2020 Existing CONSOR/Apex

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	С	А	E	D	А	С	D	А	С	D	A
Approach Delay		35.6			30.7			41.8			26.7	
Approach LOS		D			С			D			С	
Intersection Summary												
Area Type:	Other											
Cycle Length: 169												
Actuated Cycle Length: 10)5.1											
Natural Cycle: 90												
Control Type: Actuated-Ur	ncoordinated											
Maximum v/c Ratio: 0.78												
Intersection Signal Delay:	33.0			In	tersectior	n LOS: C						
Intersection Capacity Utiliz	zation 66.8%			IC	CU Level o	of Service	С					
Analysis Period (min) 15												

Splits and Phases: 10: SH 83 & SH 86

Ø1	↓ _{Ø2}	4	Ø3 • Ø4
24 s	42 s	15 s	48 s
Ø 5	↓ Ø6	الحر	Ø7 Ø8
40 s	47 s	32 s	50 s

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u>۲</u>	•	1	<u>۲</u>	•	1	<u>۲</u>	^	1	ሻሻ	^	1
Traffic Volume (vph)	35	24	28	48	26	184	31	722	32	194	981	34
Future Volume (vph)	35	24	28	48	26	184	31	722	32	194	981	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	190		0	550		285	875		0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.732			0.553			0.950			0.950		
Satd. Flow (perm)	1364	1863	1583	1030	1863	1583	1770	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd, Flow (RTOR)			173			271			159			123
Link Speed (mph)		40			45			55			55	
Link Distance (ft)		784			1819			1432			1968	
Travel Time (s)		13.4			27.6			17.8			24.4	
Peak Hour Factor	0.81	0.81	0.81	0.68	0.68	0.68	0.93	0.93	0.93	0.91	0.91	0.91
Adi, Flow (vph)	43	30	35	71	38	271	33	776	34	213	1078	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	30	35	71	38	271	33	776	34	213	1078	37
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	49.0	49.0	10.0	52.0	52.0	10.0	22.0	22.0	10.0	38.0	38.0
Total Split (s)	13.0	49.0	49.0	19.0	52.0	52.0	15.0	60.0	60.0	23.0	68.0	68.0
Total Split (%)	8.6%	32.5%	32.5%	12.6%	34.4%	34.4%	9.9%	39.7%	39.7%	15.2%	45.0%	45.0%
Maximum Green (s)	8.0	44.0	44.0	14.0	47.0	47.0	10.0	53.0	53.0	18.0	61.0	61.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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 Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0					7.0	7.0
Flash Dont Walk (s)		37.0	37.0		40.0	40.0					24.0	24.0
Pedestrian Calls (#/hr)		0	0		0	0					0	0
Act Effct Green (s)	16.4	8.9	8.9	19.1	10.4	10.4	8.3	97.5	97.5	14.7	106.0	106.0
Actuated g/C Ratio	0.11	0.06	0.06	0.13	0.07	0.07	0.05	0.65	0.65	0.10	0.70	0.70
v/c Ratio	0 25	0.28	0.14	0.40	0.30	0.75	0.34	0.34	0.03	0.64	0.43	0.03
Control Delay	0.20	0.20										
	56.1	72.5	1.1	60.9	71.2	20.4	77.4	14.2	0.1	74.3	12.3	0.1
Queue Delay	56.1 0.0	72.5	1.1 0.0	60.9 0.0	71.2 0.0	20.4 0.0	77.4 0.0	14.2 0.0	0.1 0.0	74.3 0.0	12.3 0.0	0.1 0.0

Weekday PM Peak SH 83 Safety & Operational Analysis 3:40 pm 08/26/2021 2020 Existing CONSOR/Apex

Weekday PM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	E	А	E	E	С	E	В	Α	E	В	A
Approach Delay		42.9			33.0			16.1			21.9	
Approach LOS		D			С			В			С	
Intersection Summary												
Area Type:	Other											
Cycle Length: 151												
Actuated Cycle Length: 15	1											
Offset: 0 (0%), Referenced	to phase 2:I	VBT and	6:SBT, S	tart of Ye	llow							
Natural Cycle: 110												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.75												
Intersection Signal Delay: 2	2.5			In	tersectior	n LOS: C						
Intersection Capacity Utilization	ation 54.8%			IC	U Level o	of Service	А					
Analysis Period (min) 15												

Splits and Phases: 3: SH 83 & Bayou Gulch Rd

Ø1	Ø2 (R)	Ø3		₩ Ø4
23 s	60 s	19 s		49 s
▲ ø5 🔹 ø	06 (R)	<u>ه</u> ر	1	Ø8
15 s 68 s		13 s	52 s	

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	*	1	3	*	*	1
Traffic Volume (vph)	131	29	24	685	832	180
Future Volume (vph)	131	27	24	685	832	180
Ideal Flow (vnhnl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	215	650	1700	1700	375
Storage Lanes	1	215	1			1
Taper Length (ft)	25		25			
Lane I Itil Factor	1.00	1.00	1 00	1.00	1 00	1.00
Eand Util. Factor	1.00	0.050	1.00	1.00	1.00	0.050
Elt Drotoctod		0.000				0.000
Sata Elow (prot)	0.900	1E00	0.900	1040	1040	1502
Salu. FIOW (pf0l)	1770	1283	1//0	1803	1803	1283
Fit Permitted	0.950	1500	0.138	10/0	10/0	1500
Satd. Flow (perm)	1770	1583	257	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		37				186
Link Speed (mph)	40			55	55	
Link Distance (ft)	1069			1386	825	
Travel Time (s)	18.2			17.2	10.2	
Peak Hour Factor	0.78	0.78	0.90	0.90	0.97	0.97
Adj. Flow (vph)	168	37	27	761	858	186
Shared Lane Traffic (%)						
Lane Group Flow (vph)	168	37	27	761	858	186
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases	r	4	2	L	- 0	6
Detector Phase	Δ	-7	5	2	6	6
Switch Phase	+	т	5	2	0	0
Minimum Initial (c)	5.0	5.0	3.0	15.0	15.0	15 O
Minimum Split (s)	2.0 22 0	22.0	3.U 0 E	24.0	24.0	24.0
Total Split (s)	23.U	23.U	9.0 10.0	24.0	24.U	24.U
Total Split (S)	23.0	23.0	10.0	70.0	00.0	
Total Split (%)	24.7%	24.7%	10.8%	/5.3%	64.5%	64.5%
Maximum Green (s)	1/.0	17.0	5.0	63.0	53.0	53.0
Yellow Lime (s)	3.0	3.0	3.0	5.0	5.0	5.0
All-Red Time (s)	3.0	3.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	7.0	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	Min	Min	Min
Act Effct Green (s)	12.4	12.4	45.4	43.2	40.2	40.2
Actuated a/C Ratio	η <u>2</u> .4	Λ 1Q	-J.4 0.65	 Π 62	10.2 0 5 Q	ት 0.2 በ 5 ዩ
v/c Ratio	0.10	0.10	0.00	0.02	0.00	0.00
Vic Raliu Control Dolay	0.03	0.1Z	0.10	11 /	0.00	0.19
Curllion Delay	30.0	12.4	5.0	11.4	19.7	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.0	12.4	5.0	11.4	19.7	2.0
LUS	D	В	A	В	В	А
Approach Delay	31.7			11.2	16.5	
Approach LOS	С			В	В	

Weekday PM Peak SH 83 Safety & Operational Analysis 3:40 pm 08/26/2021 2020 Existing CONSOR/Apex

Intersection Summary								
Area Type: Other								
Cycle Length: 93								
Actuated Cycle Length: 69.6	Actuated Cycle Length: 69.6							
Natural Cycle: 80								
Control Type: Actuated-Uncoordin	Control Type: Actuated-Uncoordinated							
Maximum v/c Ratio: 0.80								
Intersection Signal Delay: 16.0 Intersection LOS: B								
Intersection Capacity Utilization 61.9% ICU Level of Service B								
Analysis Period (min) 15								

Splits and Phases: 8: SH 83 & Castle Oaks Dr



Lanes, Volumes, Timings 10: SH 83 & SH 86

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	•	1	ሻ	•	1	۲.	•	1	ሻ	^	1
Traffic Volume (vph)	155	378	86	34	216	174	72	329	18	304	430	245
Future Volume (vph)	155	378	86	34	216	174	72	329	18	304	430	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	125		375	225		320	175		600
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.369			0.204		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	687	1863	1583	380	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			88			189			121			261
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1542			1664			2352			692	
Travel Time (s)		30.0			32.4			45.8			13.5	
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92	0.83	0.83	0.83	0.94	0.94	0.94
Adi, Flow (vph)	161	394	90	37	235	189	87	396	22	323	457	261
Shared Lane Traffic (%)							-					
Lane Group Flow (vph)	161	394	90	37	235	189	87	396	22	323	457	261
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	10.0	33.0	33.0	10.0	34.0	34.0	10.0	32.0	32.0	10.0	34.0	34.0
Total Split (s)	32.0	48.0	48.0	15.0	35.0	35.0	40.0	55.0	55.0	40.0	47.0	47.0
Total Split (%)	19.8%	29.6%	29.6%	9.3%	21.6%	21.6%	24.7%	34.0%	34.0%	24.7%	29.0%	29.0%
Maximum Green (s)	27.0	42.0	42.0	10.0	29.0	29.0	35.0	49.0	49.0	35.0	41.0	41.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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 Lost Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	Min	Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		20.0	20.0		21.0	21.0		19.0	19.0		21.0	21.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	16.8	35.7	35.7	8.1	20.9	20.9	41.4	31.0	31.0	57.0	41.3	41.3
Actuated g/C Ratio	0.15	0.32	0.32	0.07	0.19	0.19	0.37	0.28	0.28	0.51	0.37	0.37
v/c Ratio	0.61	0.66	0.16	0.29	0.68	0.42	0.25	0.77	0.04	0.74	0.66	0.35
Control Delay	59.4	43.7	8.8	65.0	56.5	9.8	19.0	49.7	0.2	29.7	35.4	4.4
Queue Delay	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 Delay	59.4	43.7	8.8	65.0	56.5	9.8	19.0	49.7	0.2	29.7	35.4	4.4

Weekday PM Peak SH 83 Safety & Operational Analysis 3:40 pm 08/26/2021 2020 Existing CONSOR/Apex

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	А	E	E	А	В	D	А	С	D	A
Approach Delay		42.7			38.0			42.2			25.9	
Approach LOS		D			D			D			С	
Intersection Summary												
Area Type:	Other											
Cycle Length: 162												
Actuated Cycle Length: 11	1.8											
Natural Cycle: 90												
Control Type: Actuated-Ur	ncoordinated											
Maximum v/c Ratio: 0.77												
Intersection Signal Delay:	35.2			In	tersectior	n LOS: D						
Intersection Capacity Utiliz	ation 76.6%			IC	U Level o	of Service	D					
Analysis Period (min) 15												

Splits and Phases: 10: SH 83 & SH 86

Ø1	Mø2	Ø3	™ Ø4
40 s	55 s	15 s	48 s
▲ Ø5	Ø6		Ø8
40 s	47 s	32 s	35 s