Appendix 16-8

HCS Level of Service Output

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Analy	yst	ВН		Date		06/03/2021
Ager	су	PDE		Analysis Year		2021
Juriso	diction	NYSDOT		Time Period Analy	zed	Existing
Proje	ect Description	CR-125_Morris Tract Ro	k	Unit		United States Customary
		Se	egn	nent 1		
Veh	icle Inputs					
Segn	nent Type	Passing Zone		Length, ft		5280
Lane	Width, ft	10		Shoulder Width, ft	:	0
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	3.0
Der	mand and Capacity					
Direc	tional Demand Flow Rate, veh/h	12		Opposing Demand Flow Rate, veh/h		18
Peak	Hour Factor	0.90		Total Trucks, %		5.00
Segment Capacity, veh/h 17		1700		Demand/Capacity	(D/C)	0.01
Intermediate Results						
Segment Vertical Class		1		Free-Flow Speed,	mi/h	56.4
Speed Slope Coefficient		3.25839		Speed Power Coefficient		0.63001
PF SI	ope Coefficient	-1.14499		PF Power Coefficient		0.82433
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.0
%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 5280 -			-	56.4		
Veh	icle Results					
Average Speed, mi/h		56.4		Percent Followers, %		3.0
Segn	nent Travel Time, minutes	1.06		Followers Density, followers/mi/In		0.0
Vehic	cle LOS	A				
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	HCS7	Two-L	ane	Highway	Report
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	jeet momuton					
Anal	yst	ВН		Date		06/03/2021
Ager	тсу	PDE		Analysis Year		2021
Juris	diction	NYSDOT		Time Period Analy	rzed	Existing
Proje	ect Description	NY-12		Unit		United States Customary
		S	Segr	ment 1		
Veł	nicle Inputs					
Segr	nent Type	Passing Zone		Length, ft		5280
Lane	Width, ft	12		Shoulder Width, ft	t	6
Spee	ed Limit, mi/h	55		Access Point Dens	sity, pts/mi	3.0
Der	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	389	Opposing Demand Flow Rat		d Flow Rate, veh/h	436
Peak Hour Factor 0.9		0.90		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	61.7
Speed Slope Coefficient		3.71648		Speed Power Coet	fficient	0.49123
PF SI	lope Coefficient	-1.24141		PF Power Coefficient		0.80151
In Pa	issing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		2.9
%lm	proved % Followers	0.0		% Improved Avg Speed		0.0
Suk	osegment Data					
#	Segment Type	Length, ft	Ra	dius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-		-	59.6
Veł	nicle Results				•	·
Average Speed, mi/h 59.6		Percent Followers, %		44.1		
Segr	nent Travel Time, minutes	1.01	1.01		followers/mi/ln	2.9
Vehi	cle LOS	В				
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Project Information

Pro	ject mormation					
Anal	yst	ВН		Date		06/03/2021
Ager	су	PDE		Analysis Year		2021
Juris	diction	NYSDOT		Time Period Analy	zed	Existing
Proje	ect Description	NY-12E		Unit		United States Customary
		S	egn	nent 1		
Veh	icle Inputs					
Segn	nent Type	Passing Zone		Length, ft		5280
Lane	Width, ft	12		Shoulder Width, ft	:	6
Spee	d Limit, mi/h	45		Access Point Dens	ity, pts/mi	3.0
Der	mand and Capacity					
Dired	tional Demand Flow Rate, veh/h	418		Opposing Demand Flow Rate, veh/h		418
Peak Hour Factor		0.90		Total Trucks, %		8.00
Segment Capacity, veh/h		1700		Demand/Capacity	(D/C)	0.25
Inte	ermediate Results					
Segment Vertical Class		1		Free-Flow Speed,	mi/h	50.3
Speed Slope Coefficient		3.09595		Speed Power Coefficient		0.49398
PF SI	ope Coefficient	-1.28713		PF Power Coefficient		0.76899
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		4.2
%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 5280 -			-	48.5		
Veh	icle Results					
Average Speed, mi/h 48.5		48.5	48.5		%	48.2
Segn	nent Travel Time, minutes	1.24		Followers Density, followers/mi/ln		4.2
Vehi	cle LOS	В				
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Project Information

Project Information						
Anal	yst	ВН		Date		06/03/2021
Ager	су	PDE		Analysis Year		2021
Juris	diction	NYSDOT		Time Period Analy	zed	Existing
Proje	ect Description	NY-180		Unit		United States Customary
		S	egn	nent 1		
Veł	icle Inputs					
Segr	nent Type	Passing Zone		Length, ft		5280
Lane	Width, ft	12		Shoulder Width, f	t	5
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	3.0
Der	mand and Capacity					
Dire	ctional Demand Flow Rate, veh/h	41		Opposing Demand Flow Rate, veh/h		44
Peak	Hour Factor	0.90		Total Trucks, %		15.00
Segment Capacity, veh/h 1700		1700		Demand/Capacity	(D/C)	0.02
Inte	ermediate Results					
Segment Vertical Class		1		Free-Flow Speed,	mi/h	60.8
Speed Slope Coefficient		3.52048		Speed Power Coefficient		0.60540
PF SI	ope Coefficient	-1.14919	-1.14919		ent	0.83253
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.1
%Improved % 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	5280 -			-	60.8
Veł	icle Results					
Average Speed, mi/h		60.8		Percent Followers, %		7.7
Segr	nent Travel Time, minutes	0.99		Followers Density, followers/mi/ln		0.1
Vehi	cle LOS	A				
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Project Information

Project Information						
Anal	yst	ВН		Date		06/03/2021
Ager	су	PDE		Analysis Year		2021
Juris	diction	NYSDOT		Time Period Analy	zed	Existing
Proje	ect Description	CR-159		Unit		United States Customary
		Se	egn	nent 1		
Veh	icle Inputs					
Segn	nent Type	Passing Zone		Length, ft		5280
Lane	Width, ft	10		Shoulder Width, ft	:	4
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	3.0
Der	mand and Capacity					
Dired	ctional Demand Flow Rate, veh/h	18		Opposing Demand Flow Rate, veh/h		18
Peak	Hour Factor	0.90		Total Trucks, %		6.00
Segment Capacity, veh/h 1700			Demand/Capacity	(D/C)	0.01	
Inte	ermediate Results					
Segment Vertical Class 1		1		Free-Flow Speed,	mi/h	59.2
Speed Slope Coefficient		3.40835		Speed Power Coefficient		0.63001
PF Slope Coefficient -1.13535		-1.13535	PF Powe		ent	0.83295
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.0
%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	5280 -			-	59.2
Veh	icle Results					
Average Speed, mi/h 59		59.2		Percent Followers, %		3.9
Segn	nent Travel Time, minutes	1.01		Followers Density, followers/mi/ln		0.0
Vehi	cle LOS	A				
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HCS7 Two-Lane	Highway Report
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Anal	yst	ВН		Date		06/03/2021		
Ager	су	PDE		Analysis Year		2021		
Juris	diction	NYSDOT		Time Period Analy	zed	Existing		
Proje	ect Description	Vaadi Rd		Unit		United States Customary		
	Segment 1							
Veh	icle Inputs							
Segn	nent Type	Passing Zone		Length, ft		5280		
Lane	Width, ft	10		Shoulder Width, ft	:	0		
Spee	d Limit, mi/h	45		Access Point Dens	ity, pts/mi	3.0		
Der	mand and Capacity							
Direc	tional Demand Flow Rate, veh/h	24		Opposing Demand Flow Rate, veh/h		24		
Peak	Hour Factor	0.90		Total Trucks, %		6.00		
Segment Capacity, veh/h 170		1700		Demand/Capacity (D/C)		0.01		
Inte	ermediate Results							
Segn	nent Vertical Class	1		Free-Flow Speed, I	mi/h	45.0		
Spee	d Slope Coefficient	2.64625		Speed Power Coefficient		0.62255		
PF SI	ope Coefficient	-1.16606		PF Power Coefficient		0.78506		
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.0		
%lm	proved % Followers	0.0		% Improved Avg Speed		0.0		
Sub	osegment Data							
#	Segment Type	Length, ft	Radi	ius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	5280	-		-	45.0		
Veh	icle Results							
Average Speed, mi/h 45.0		45.0	Percent Followers		%	6.1		
Segn	nent Travel Time, minutes	1.33		Followers Density, followers/mi/ln		0.0		
Vehio	cle LOS	А						
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HCS7	Two-Lane	e Highway	Report

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Anal	/st	ВН		Date		06/03/2021
Ager	су	PDE		Analysis Year		2021
Juris	diction	NYSDOT		Time Period Analy	zed	Proposed
Proje	ect Description	CR-125_Morris Tract R	d	Unit		United States Customary
		So	egn	nent 1		
Veh	icle Inputs					
Segn	nent Type	Passing Zone		Length, ft		5280
Lane	Width, ft	10		Shoulder Width, ft	:	0
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	3.0
Der	mand and Capacity					
Direc	tional Demand Flow Rate, veh/h	12		Opposing Demand Flow Rate, veh/h		18
Peak	Hour Factor	0.90		Total Trucks, %		5.00
Segment Capacity, veh/h 1700		1700	Demand/Capacity (D/C)		0.01	
Inte	ermediate Results					
Segment Vertical Class 1		1	1		mi/h	56.4
Speed Slope Coefficient		3.25839		Speed Power Coefficient		0.63001
PF Slope Coefficient		-1.14499		PF Power Coefficient		0.82433
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.0
%Improved % Followers 0.		0.0		% Improved Avg Speed		0.0
Sub	osegment Data					
#	Segment Type	Length, ft Rac		dius, ft Superelevation, %		Average Speed, mi/h
1	Tangent	5280 -			-	56.4
Veh	icle Results					
Average Speed, mi/h 56.		56.4		Percent Followers, %		3.0
Segn	nent Travel Time, minutes	1.06		Followers Density, followers/mi/ln		0.0
Vehi	cle LOS	A				
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HCS7	Two-L	ane	Highw	ay	Report
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Anal	nalyst BH		Date		06/03/2021			
Ager	су	PDE		Analysis Year		2021		
Juris	Jurisdiction NYSDOT		Time Period Analyzed		Proposed			
Proje	ect Description	NY-12		Unit		United States Customary		
	Segment 1							
Veh	Vehicle Inputs							
Segn	nent Type	Passing Zone		Length, ft		5280		
Lane	Width, ft	12		Shoulder Width, ft	:	6		
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	3.0		
Der	mand and Capacity							
Direc	tional Demand Flow Rate, veh/h	389		Opposing Demand Flow Rate, veh/h		436		
Peak	Hour Factor	0.90		Total Trucks, %		9.00		
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.23		
Inte	Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed,	mi/h	61.7		
Spee	d Slope Coefficient	3.71648		Speed Power Coefficient		0.49123		
PF SI	ope Coefficient	-1.24141		PF Power Coefficient		0.80151		
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		2.9		
%lm	proved % Followers	0.0		% Improved Avg Speed		0.0		
Subsegment Data								
#	Segment Type	Length, ft	Rad	ius, ft Superelevation, %		Average Speed, mi/h		
1	Tangent	5280	-		-	59.6		
Veh	Vehicle Results							
Average Speed, mi/h		59.6	59.6		%	44.1		
Segment Travel Time, minutes		1.01		Followers Density, followers/mi/ln		2.9		
Vehicle LOS		В						
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Project Information

Project mormation									
Anal	yst	ВН		Date		06/03/2021			
Ager	псу	PDE		Analysis Year		2021			
Juris	diction	NYSDOT		Time Period Analy	zed	Proposed			
Proje	ect Description	NY-12E		Unit		United States Customary			
	Segment 1								
Veł	Vehicle Inputs								
Segr	nent Type	Passing Zone		Length, ft		5280			
Lane	Width, ft	12		Shoulder Width, ft	t	6			
Spee	d Limit, mi/h	45		Access Point Dens	ity, pts/mi	3.0			
Dei	mand and Capacity								
Dire	ctional Demand Flow Rate, veh/h	528		Opposing Demand Flow Rate, veh/h		418			
Peak	Hour Factor	0.90		Total Trucks, %		9.96			
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.31			
Inte	ermediate Results								
Segment Vertical Class		1		Free-Flow Speed, mi/h		50.2			
Spee	d Slope Coefficient	3.09241		Speed Power Coefficient		0.49398			
PF Slope Coefficient		-1.28705		PF Power Coefficient		0.76907			
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		6.0			
%lm	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	5280	-		-	48.2			
Veł	Vehicle Results								
Average Speed, mi/h		48.2	48.2		%	54.5			
Segment Travel Time, minutes		1.25	1.25		followers/mi/ln	6.0			
Vehicle LOS		С							
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Project Information

Anal	lyst BH		Date		06/03/2021			
Ager	ncy PDE		Analysis Year		2021			
Juris	sdiction NYSDOT		Time Period Analyzed		Proposed			
Proje	ect Description	NY-180		Unit		United States Customary		
	Segment 1							
Vehicle Inputs								
Segn	nent Type	Passing Zone Length, ft		Length, ft		5280		
Lane	Width, ft	12		Shoulder Width, ft	:	5		
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	3.0		
Der	Demand and Capacity							
Dired	tional Demand Flow Rate, veh/h	41		Opposing Demand Flow Rate, veh/h		44		
Peak	Hour Factor	0.90		Total Trucks, %		15.00		
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.02		
Inte	ermediate Results							
Segment Vertical Class		1		Free-Flow Speed,	mi/h	60.8		
Spee	d Slope Coefficient	3.52048		Speed Power Coefficient		0.60540		
PF SI	ope Coefficient	-1.14919		PF Power Coefficient		0.83253		
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.1		
%lm	proved % Followers	0.0		% Improved Avg Speed		0.0		
Subsegment Data								
#	Segment Type	Length, ft	Radi	ius, ft	Superelevation, %	Average Speed, mi/h		
1	Tangent	5280	-		-	60.8		
Vehicle Results								
Average Speed, mi/h		60.8		Percent Followers, %		7.7		
Segment Travel Time, minutes		0.99	0.99		followers/mi/ln	0.1		
Vehicle LOS		A						
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Project Information

Project Information								
Anal	Analyst BH		Date		06/03/2021			
Ager	Agency PDE		Analysis Year		2021			
Juris	diction	iction NYSDOT		Time Period Analy	zed	Proposed		
Proje	ect Description	CR-159		Unit		United States Customary		
	Segment 1							
Veh	Vehicle Inputs							
Segn	nent Type	Passing Zone Ler		Length, ft		5280		
Lane	Width, ft	10		Shoulder Width, ft	t	4		
Spee	d Limit, mi/h	55		Access Point Dens	ity, pts/mi	3.0		
Der	mand and Capacity							
Dired	ctional Demand Flow Rate, veh/h	18		Opposing Demand Flow Rate, veh/h		18		
Peak	Hour Factor	0.90		Total Trucks, %		6.00		
Segment Capacity, veh/h		1700		Demand/Capacity (D/C)		0.01		
Inte	Intermediate Results							
Segment Vertical Class		1		Free-Flow Speed,	mi/h	59.2		
Spee	d Slope Coefficient	3.40835		Speed Power Coefficient		0.63001		
PF SI	ope Coefficient	-1.13535		PF Power Coefficient		0.83295		
In Pa	ssing Lane Effective Length?	No		Total Segment Density, veh/mi/ln		0.0		
%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	5280	-		-	59.2		
Veh	Vehicle Results							
Average Speed, mi/h		59.2		Percent Followers, %		3.9		
Segment Travel Time, minutes		1.01		Followers Density, followers/mi/In		0.0		
Vehicle LOS		A						
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HCS7 Two-Lane I	Highway	Report
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	Jeee								
Analyst BH		ВН		Date		06/03/2021			
Ager	псу	PDE		Analysis Year		2021			
Juris	risdiction NYSDOT		Time Period Analy	zed	Proposed				
Proje	ect Description	Vaadi Rd		Unit		United States Customary			
	Segment 1								
Ver	nicle Inputs								
Segr	nent Type	Passing Zone		Length, ft		5280			
Lane	Width, ft	10		Shoulder Width, f	t	0			
Spee	ed Limit, mi/h	45		Access Point Dens	sity, pts/mi	3.0			
Der	mand and Capacity								
Dire	ctional Demand Flow Rate, veh/h	24		Opposing Deman	d Flow Rate, veh/h	24			
Peak	Hour Factor	0.90		Total Trucks, %		6.00			
Segment Capacity, veh/h		1700		Demand/Capacity	r (D/C)	0.01			
Inte	ermediate Results								
Segr	nent Vertical Class	1		Free-Flow Speed,	mi/h	45.0			
Speed Slope Coefficient		2.64625		Speed Power Coe	fficient	0.62255			
PF S	lope Coefficient	-1.16606		PF Power Coefficie	ent	0.78506			
In Pa	issing Lane Effective Length?	No		Total Segment De	nsity, veh/mi/ln	0.0			
%Improved % Followers		0.0		% Improved Avg S	Speed	0.0			
Sub	osegment Data								
# Segment Type Length, ft Rac		adius, ft	Superelevation, %	Average Speed, mi/h					
1	Tangent	5280	-		-	45.0			
Veł	nicle Results	-			-				
Average Speed, mi/h		45.0		Percent Followers,	, %	6.1			
Segr	nent Travel Time, minutes	1.33		Followers Density,	followers/mi/ln	0.0			
Vehi	cle LOS	А							
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