

# APPENDICES

## C-663A Pre-Construction Traffic Study for the Scudder Falls Bridge Replacement Project

### APPENDIX K

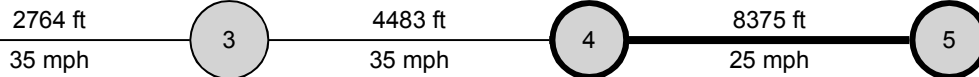
#### CAPACITY ANALYSIS WORKSHEETS

#### (URBAN STREETS)



# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 AM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Edgewood Road & Yardley Morr	Afton Avenue & Yardley Morrisville Road		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	25	35	1	1	8375	8375	46	38	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never					
4	Base Free-Flow Speed, mph	36.46			41.16		
4	Running Time, s	159.51			141.67		
4	Running Speed, mph	35.80			40.31		
4	Through Delay, s/veh	15.82			14.30		
4	Travel Time, s	175.34			155.97		
4	Travel Speed, mph	32.57			36.61		
4	Stop Rate, stops/veh	0.44			0.49		
4	Spatial Stop Rate, stops/mi	0.28			0.31		
4	Through vol/cap Ratio	0.28			0.43		
4	Percent of Base FFS	89.32			88.95		
4	Level of Service	A			A		
4	Auto Traveler Perception Score	2.18			2.19		

## Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.43	C	3.35	C
4	Bicycle Segment LOS Score / LOS	3.43	C	3.44	C
4	Transit Segment LOS Score / LOS	0.53	A	0.34	A

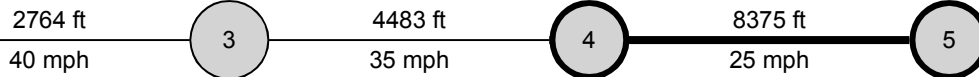
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		382.65		347.44	
Facility Travel Speed, mph		29.82		32.85	
Facility Base Free Flow Speed, mph		38.88		41.77	
Facility Percent of Base FFS		76.72		78.64	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.34		2.29	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.42	C	3.18	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		0.43	A	0.46	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 PM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Edgewood Road & Yardley Morr	Afton Avenue & Yardley Morrisville Road		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	25	35	1	1	8375	8375	46	38	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never					
4	Base Free-Flow Speed, mph	36.46			41.16		
4	Running Time, s	160.06			142.66		
4	Running Speed, mph	35.68			40.03		
4	Through Delay, s/veh	6.43			15.46		
4	Travel Time, s	166.48			158.11		
4	Travel Speed, mph	34.30			36.11		
4	Stop Rate, stops/veh	0.29			0.50		
4	Spatial Stop Rate, stops/mi	0.19			0.32		
4	Through vol/cap Ratio	0.24			0.52		
4	Percent of Base FFS	94.07			87.74		
4	Level of Service	A			A		
4	Auto Traveler Perception Score	2.17			2.19		

## Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.47	C	2.74	B
4	Bicycle Segment LOS Score / LOS	3.43	C	3.46	C
4	Transit Segment LOS Score / LOS	0.55	A	0.39	A

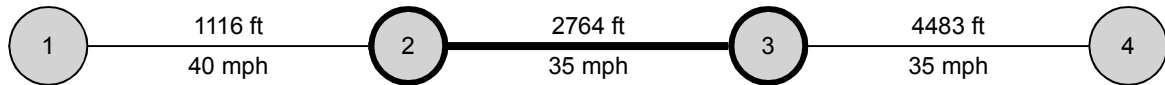
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		362.54		342.91	
Facility Travel Speed, mph		31.48		33.28	
Facility Base Free Flow Speed, mph		39.20		42.39	
Facility Percent of Base FFS		80.30		78.51	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.33		2.29	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.29	C	2.92	C
Bicycle Facility LOS Score / LOS		3.45	C	3.47	C
Transit Facility LOS Score / LOS		0.46	A	0.51	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 AM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Big Oak Rd & Pine Grove Rd	Yardley Morrisville Rd & Pine Grove Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	35	40	1	1	2764	2764	44	44	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	41.44			43.79		
2	Running Time, s	47.59			45.03		
2	Running Speed, mph	39.60			41.85		
2	Through Delay, s/veh	20.56			26.30		
2	Travel Time, s	68.15			71.33		
2	Travel Speed, mph	27.65			26.42		
2	Stop Rate, stops/veh	0.60			0.73		
2	Spatial Stop Rate, stops/mi	1.14			1.40		
2	Through vol/cap Ratio	0.41			0.58		
2	Percent of Base FFS	66.72			60.33		
2	Level of Service	C			C		
2	Auto Traveler Perception Score	2.53			2.35		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.51	D	3.48	C
2	Bicycle Segment LOS Score / LOS	3.41	C	3.41	C
2	Transit Segment LOS Score / LOS	0.31	A	0.20	A

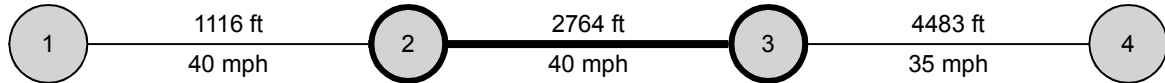
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		382.65		347.44	
Facility Travel Speed, mph		29.82		32.85	
Facility Base Free Flow Speed, mph		38.88		41.77	
Facility Percent of Base FFS		76.72		78.64	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.34		2.29	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.42	C	3.18	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		0.43	A	0.46	A

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Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 PM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Big Oak Rd & Pine Grove Rd	Yardley Morrisville Rd & Pine Grove Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	40	40	1	1	2764	2764	44	44	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	43.79			43.79		
2	Running Time, s	45.36			45.51		
2	Running Speed, mph	41.55			41.41		
2	Through Delay, s/veh	19.94			13.10		
2	Travel Time, s	65.29			58.61		
2	Travel Speed, mph	28.86			32.15		
2	Stop Rate, stops/veh	0.48			0.57		
2	Spatial Stop Rate, stops/mi	0.92			1.08		
2	Through vol/cap Ratio	0.46			0.54		
2	Percent of Base FFS	65.91			73.42		
2	Level of Service	C			B		
2	Auto Traveler Perception Score	2.49			2.30		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	2.42	B	3.64	D
2	Bicycle Segment LOS Score / LOS	3.45	C	3.46	C
2	Transit Segment LOS Score / LOS	0.26	A	0.29	A

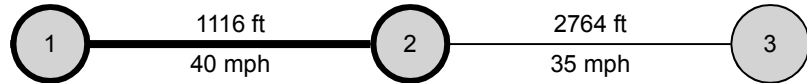
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		362.54		342.91	
Facility Travel Speed, mph		31.48		33.28	
Facility Base Free Flow Speed, mph		39.20		42.39	
Facility Percent of Base FFS		80.30		78.51	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.33		2.29	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.29	C	2.92	C
Bicycle Facility LOS Score / LOS		3.45	C	3.47	C
Transit Facility LOS Score / LOS		0.46	A	0.51	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 AM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Pine Grove Rd & Trenton Ave	Big Oak Rd & Pine Grove Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	40	40	1	1	1116	1116	37	44	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h				never		never
1	Base Free-Flow Speed, mph	44.40			44.40		
1	Running Time, s	20.28			20.66		
1	Running Speed, mph	37.53			36.84		
1	Through Delay, s/veh	28.21			20.09		
1	Travel Time, s	48.48			40.74		
1	Travel Speed, mph	15.69			18.67		
1	Stop Rate, stops/veh	0.78			0.60		
1	Spatial Stop Rate, stops/mi	3.69			2.83		
1	Through vol/cap Ratio	0.73			0.37		
1	Percent of Base FFS	35.35			42.06		
1	Level of Service	E			D		
1	Auto Traveler Perception Score	2.97			2.82		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.52	B	2.71	B
1	Bicycle Segment LOS Score / LOS	3.42	C	3.42	C
1	Transit Segment LOS Score / LOS	0.35	A	1.81	A

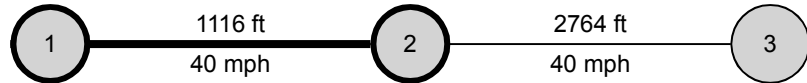
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		382.65		347.44	
Facility Travel Speed, mph		29.82		32.85	
Facility Base Free Flow Speed, mph		38.88		41.77	
Facility Percent of Base FFS		76.72		78.64	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.34		2.29	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.42	C	3.18	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		0.43	A	0.46	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 PM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Pine Grove Rd & Trenton Ave	Big Oak Rd & Pine Grove Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	40	40	1	1	1116	1116	37	44	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never		never	never	
1	Shared Lane Spillback Time, h				never		never
1	Base Free-Flow Speed, mph	44.40			44.40		
1	Running Time, s	20.48			20.50		
1	Running Speed, mph	37.15			37.12		
1	Through Delay, s/veh	14.58			29.51		
1	Travel Time, s	35.06			50.01		
1	Travel Speed, mph	21.70			15.21		
1	Stop Rate, stops/veh	0.65			0.78		
1	Spatial Stop Rate, stops/mi	3.06			3.67		
1	Through vol/cap Ratio	0.65			0.60		
1	Percent of Base FFS	48.88			34.27		
1	Level of Service	D			E		
1	Auto Traveler Perception Score	2.86			2.97		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.49	B	2.57	B
1	Bicycle Segment LOS Score / LOS	3.46	C	3.46	C
1	Transit Segment LOS Score / LOS	0.44	A	2.23	B

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		362.54		342.91	
Facility Travel Speed, mph		31.48		33.28	
Facility Base Free Flow Speed, mph		39.20		42.39	
Facility Percent of Base FFS		80.30		78.51	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.33		2.29	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.29	C	2.92	C
Bicycle Facility LOS Score / LOS		3.45	C	3.47	C
Transit Facility LOS Score / LOS		0.46	A	0.51	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 AM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Yardley Morrisville Rd & Pine Gr	Edgewood Road & Yardley Morrisville Ro		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	35	35	1	1	4483	4483	40	46	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h				never		
3	Base Free-Flow Speed, mph	41.12			41.12		
3	Running Time, s	76.34			77.12		
3	Running Speed, mph	40.04			39.63		
3	Through Delay, s/veh	14.34			2.27		
3	Travel Time, s	90.68			79.39		
3	Travel Speed, mph	33.71			38.50		
3	Stop Rate, stops/veh	0.49			0.02		
3	Spatial Stop Rate, stops/mi	0.58			0.02		
3	Through vol/cap Ratio	0.46			0.17		
3	Percent of Base FFS	81.97			93.63		
3	Level of Service	B			A		
3	Auto Traveler Perception Score	2.44			2.35		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.55	D	2.78	C
3	Bicycle Segment LOS Score / LOS	3.45	C	3.48	C
3	Transit Segment LOS Score / LOS	0.34	A	0.50	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		382.65		347.44	
Facility Travel Speed, mph		29.82		32.85	
Facility Base Free Flow Speed, mph		38.88		41.77	
Facility Percent of Base FFS		76.72		78.64	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.34		2.29	

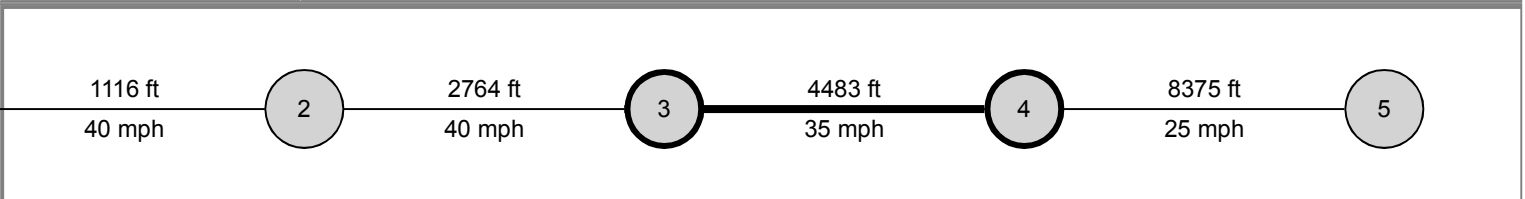
## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.42	C	3.18	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		0.43	A	0.46	A



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Agency	Pennoni			Number of Intersections	5
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	4
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	31 & 33 & 41 & 39 & 29 PM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Yardley Morrisville Rd & Pine Gr	Edgewood Road & Yardley Morrisville Ro		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	35	40	1	1	4483	4483	40	46	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h				never		
3	Base Free-Flow Speed, mph	41.12			43.47		
3	Running Time, s	77.02			73.20		
3	Running Speed, mph	39.69			41.75		
3	Through Delay, s/veh	18.69			2.97		
3	Travel Time, s	95.71			76.17		
3	Travel Speed, mph	31.94			40.13		
3	Stop Rate, stops/veh	0.60			0.02		
3	Spatial Stop Rate, stops/mi	0.70			0.02		
3	Through vol/cap Ratio	0.69			0.30		
3	Percent of Base FFS	77.66			92.30		
3	Level of Service	B			A		
3	Auto Traveler Perception Score	2.46			2.35		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.68	D	2.88	C
3	Bicycle Segment LOS Score / LOS	3.47	C	3.49	C
3	Transit Segment LOS Score / LOS	0.41	A	0.44	A

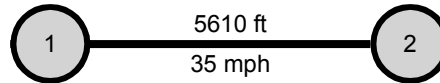
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		362.54		342.91	
Facility Travel Speed, mph		31.48		33.28	
Facility Base Free Flow Speed, mph		39.20		42.39	
Facility Percent of Base FFS		80.30		78.51	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.33		2.29	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.29	C	2.92	C
Bicycle Facility LOS Score / LOS		3.45	C	3.47	C
Transit Facility LOS Score / LOS		0.46	A	0.51	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	2
Analyst	MTD	Analysis Date	10/12/2015	Number of Segments	1
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	42-Edgewood Rd-Oxford Valley	Analysis Year	2015	System Cycle Length, s	120
Intersections	Edgewood Rd & Oxford Valley R	Edgewood Rd. & Makefield Rd.		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	25	1	1	5610	5610	40	32	0	0	0	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	41.31			36.61		
1	Running Time, s	94.55			106.09		
1	Running Speed, mph	40.45			36.05		
1	Through Delay, s/veh	81.69			4.08		
1	Travel Time, s	176.24			110.18		
1	Travel Speed, mph	21.70			34.72		
1	Stop Rate, stops/veh	1.09			0.29		
1	Spatial Stop Rate, stops/mi	1.02			0.27		
1	Through vol/cap Ratio	0.91			0.22		
1	Percent of Base FFS	52.54			94.82		
1	Level of Service	C			A		
1	Auto Traveler Perception Score	2.51			2.39		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.55	D	2.87	C
1	Bicycle Segment LOS Score / LOS	3.43	C	3.39	C
1	Transit Segment LOS Score / LOS	0.32	A	0.49	A

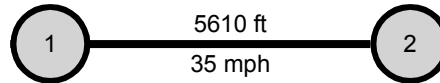
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		176.24		110.18	
Facility Travel Speed, mph		21.70		34.72	
Facility Base Free Flow Speed, mph		41.31		36.61	
Facility Percent of Base FFS		52.54		94.82	
Facility Level of Service		C		A	
Facility Auto Traveler Perception Score		2.51		2.39	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.55	D	2.87	C
Bicycle Facility LOS Score / LOS		3.43	C	3.39	C
Transit Facility LOS Score / LOS		0.32	A	0.49	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	2
Analyst	MTD	Analysis Date	10/12/2015	Number of Segments	1
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	42-Edgewood Rd-Oxford Valley	Analysis Year	2015	System Cycle Length, s	120
Intersections	Edgewood Rd & Oxford Valley R	Edgewood Rd. & Makefield Rd.		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	25	1	1	5610	5610	40	32	0	0	0	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		6.26			never	
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	41.31			36.61		
1	Running Time, s	94.97			106.17		
1	Running Speed, mph	40.28			36.03		
1	Through Delay, s/veh	121.58			4.19		
1	Travel Time, s	216.55			110.36		
1	Travel Speed, mph	17.66			34.66		
1	Stop Rate, stops/veh	1.38			0.28		
1	Spatial Stop Rate, stops/mi	1.30			0.27		
1	Through vol/cap Ratio	1.07			0.23		
1	Percent of Base FFS	42.76			94.67		
1	Level of Service	F			A		
1	Auto Traveler Perception Score	2.55			2.39		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.62	D	2.87	C
1	Bicycle Segment LOS Score / LOS	3.45	C	3.40	C
1	Transit Segment LOS Score / LOS	0.35	A	0.49	A

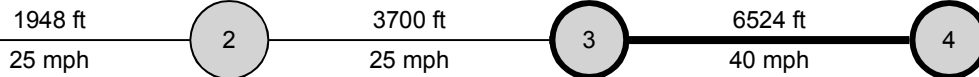
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		216.55		110.36	
Facility Travel Speed, mph		17.66		34.66	
Facility Base Free Flow Speed, mph		41.31		36.61	
Facility Percent of Base FFS		42.76		94.67	
Facility Level of Service		D		A	
Facility Auto Traveler Perception Score		2.55		2.39	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.62	D	2.87	C
Bicycle Facility LOS Score / LOS		3.45	C	3.40	C
Transit Facility LOS Score / LOS		0.35	A	0.49	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	45 47 & 49 AM.xus	Analysis Year	2015	System Cycle Length, s	100
Intersections	Trenton Ave & Pennsylvania Ave	Yardley Morrisville Rd & Pine Grove Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	40	25	1	1	6524	6524	83	49	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph	43.50			36.46		
3	Running Time, s	104.52			124.15		
3	Running Speed, mph	42.56			35.83		
3	Through Delay, s/veh	25.31			17.67		
3	Travel Time, s	129.83			141.82		
3	Travel Speed, mph	34.26			31.37		
3	Stop Rate, stops/veh	0.72			0.70		
3	Spatial Stop Rate, stops/mi	0.58			0.56		
3	Through vol/cap Ratio	0.61			0.40		
3	Percent of Base FFS	78.75			86.03		
3	Level of Service	B			A		
3	Auto Traveler Perception Score	2.44			2.22		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	2.44	B	3.46	C
3	Bicycle Segment LOS Score / LOS	3.45	C	3.40	C
3	Transit Segment LOS Score / LOS	0.25	A	0.51	A

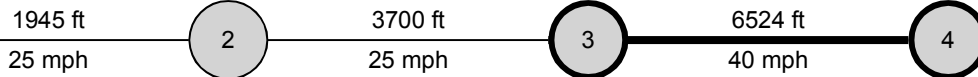
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		262.28		274.66	
Facility Travel Speed, mph		31.64		30.22	
Facility Base Free Flow Speed, mph		39.90		36.79	
Facility Percent of Base FFS		79.30		82.14	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.36		2.30	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.45	C	2.96	C
Bicycle Facility LOS Score / LOS		3.28	C	3.41	C
Transit Facility LOS Score / LOS		0.33	A	0.52	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	45 47 & 49 PM.xus	Analysis Year	2015	System Cycle Length, s	90
Intersections	Trenton Ave & Pennsylvania Ave	Yardley Morrisville Rd & Pine Grove Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	40	25	1	1	6524	6524	83	49	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph	43.50			36.46		
3	Running Time, s	102.98			125.33		
3	Running Speed, mph	43.19			35.49		
3	Through Delay, s/veh	15.70			21.55		
3	Travel Time, s	118.68			146.88		
3	Travel Speed, mph	37.48			30.28		
3	Stop Rate, stops/veh	0.41			0.81		
3	Spatial Stop Rate, stops/mi	0.33			0.66		
3	Through vol/cap Ratio	0.13			0.61		
3	Percent of Base FFS	86.15			83.06		
3	Level of Service	A			B		
3	Auto Traveler Perception Score	2.40			2.24		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	2.22	B	3.58	D
3	Bicycle Segment LOS Score / LOS	3.13	C	3.43	C
3	Transit Segment LOS Score / LOS	0.09	A	0.58	A

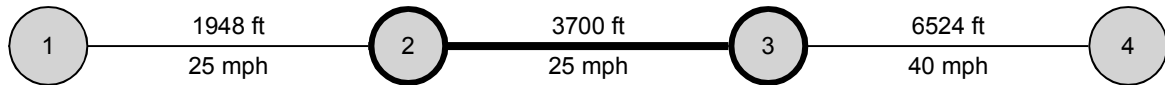
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		249.07		291.57	
Facility Travel Speed, mph		33.31		28.46	
Facility Base Free Flow Speed, mph		39.90		36.79	
Facility Percent of Base FFS		83.48		77.36	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.33		2.33	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.31	C	3.08	C
Bicycle Facility LOS Score / LOS		3.11	C	3.44	C
Transit Facility LOS Score / LOS		0.25	A	0.59	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	45 47 & 49 AM.xus	Analysis Year	2015	System Cycle Length, s	100
Intersections	Bridge St & Pennsylvania Ave	Trenton Ave & Pennsylvania Ave		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	25	25	1	1	3700	3700	60	55	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never			never		
2	Base Free-Flow Speed, mph	36.11			36.11		
2	Running Time, s	70.89			71.41		
2	Running Speed, mph	35.58			35.33		
2	Through Delay, s/veh	15.51			17.57		
2	Travel Time, s	86.40			88.98		
2	Travel Speed, mph	29.20			28.35		
2	Stop Rate, stops/veh	0.64			0.54		
2	Spatial Stop Rate, stops/mi	0.91			0.77		
2	Through vol/cap Ratio	0.22			0.29		
2	Percent of Base FFS	80.87			78.52		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.28			2.47		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	2.36	B	2.35	B
2	Bicycle Segment LOS Score / LOS	3.24	C	3.41	C
2	Transit Segment LOS Score / LOS	0.45	A	0.53	A

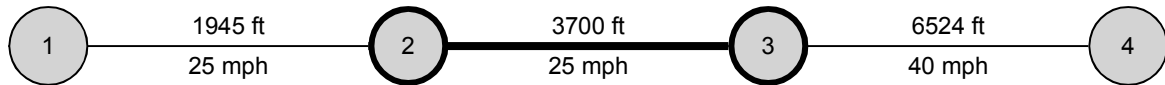
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		260.16		274.66	
Facility Travel Speed, mph		31.90		30.22	
Facility Base Free Flow Speed, mph		39.90		36.79	
Facility Percent of Base FFS		79.95		82.14	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.35		2.30	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.45	C	2.96	C
Bicycle Facility LOS Score / LOS		3.28	C	3.41	C
Transit Facility LOS Score / LOS		0.33	A	0.52	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	45 47 & 49 PM.xus	Analysis Year	2015	System Cycle Length, s	90
Intersections	Bridge St & Pennsylvania Ave	Trenton Ave & Pennsylvania Ave		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	25	25	1	1	3700	3700	60	55	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never			never		
2	Base Free-Flow Speed, mph	36.11			36.11		
2	Running Time, s	70.87			72.42		
2	Running Speed, mph	35.60			34.83		
2	Through Delay, s/veh	14.21			12.48		
2	Travel Time, s	85.08			84.90		
2	Travel Speed, mph	29.65			29.71		
2	Stop Rate, stops/veh	0.59			0.47		
2	Spatial Stop Rate, stops/mi	0.84			0.67		
2	Through vol/cap Ratio	0.10			0.45		
2	Percent of Base FFS	82.13			82.29		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.26			2.45		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	2.53	B	2.45	B
2	Bicycle Segment LOS Score / LOS	3.21	C	3.45	C
2	Transit Segment LOS Score / LOS	0.45	A	0.62	A

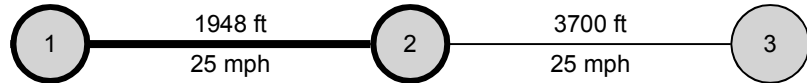
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		249.07		291.57	
Facility Travel Speed, mph		33.31		28.46	
Facility Base Free Flow Speed, mph		39.90		36.79	
Facility Percent of Base FFS		83.48		77.36	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.33		2.33	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.31	C	3.08	C
Bicycle Facility LOS Score / LOS		3.11	C	3.44	C
Transit Facility LOS Score / LOS		0.25	A	0.59	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	45 47 & 49 AM.xus	Analysis Year	2015	System Cycle Length, s	100
Intersections	S Philadelphia Ave & W Philadel	Bridge St & Pennsylvania Ave		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	25	30	1	1	1948	1948	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never					
1	Base Free-Flow Speed, mph	37.02			39.37		
1	Running Time, s	37.50			36.40		
1	Running Speed, mph	35.42			36.49		
1	Through Delay, s/veh	8.55			7.46		
1	Travel Time, s	46.05			43.86		
1	Travel Speed, mph	28.84			30.28		
1	Stop Rate, stops/veh	0.28			0.26		
1	Spatial Stop Rate, stops/mi	0.77			0.71		
1	Through vol/cap Ratio	0.04			0.46		
1	Percent of Base FFS	77.91			76.92		
1	Level of Service	B			B		
1	Auto Traveler Perception Score	2.25			2.25		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.66	B	2.42	B
1	Bicycle Segment LOS Score / LOS	2.82	C	3.44	C
1	Transit Segment LOS Score / LOS	0.38	A	0.51	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		260.16		274.66	
Facility Travel Speed, mph		31.90		30.22	
Facility Base Free Flow Speed, mph		39.90		36.79	
Facility Percent of Base FFS		79.95		82.14	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.35		2.30	

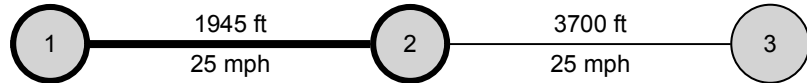
## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.45	C	2.96	C
Bicycle Facility LOS Score / LOS		3.28	C	3.41	C
Transit Facility LOS Score / LOS		0.33	A	0.52	A



# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 26, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	45 & 47 PM.xus	Analysis Year	2015	System Cycle Length, s	90
Intersections	S Philadelphia Ave & W Philadel	Bridge St & Pennsylvania Ave		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	25	30	1	1	1945	1945	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never					
1	Base Free-Flow Speed, mph	37.02			39.37		
1	Running Time, s	37.47			36.41		
1	Running Speed, mph	35.39			36.42		
1	Through Delay, s/veh	8.80			20.06		
1	Travel Time, s	46.27			56.47		
1	Travel Speed, mph	28.66			23.48		
1	Stop Rate, stops/veh	0.36			0.63		
1	Spatial Stop Rate, stops/mi	0.97			1.71		
1	Through vol/cap Ratio	0.04			0.59		
1	Percent of Base FFS	77.42			59.65		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.28			2.40		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.25	B	2.63	B
1	Bicycle Segment LOS Score / LOS	2.88	C	3.45	C
1	Transit Segment LOS Score / LOS	0.38	A	0.58	A

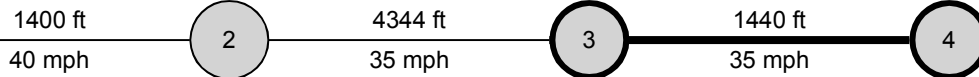
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		250.02		288.26	
Facility Travel Speed, mph		33.19		28.78	
Facility Base Free Flow Speed, mph		39.90		36.79	
Facility Percent of Base FFS					
Facility Level of Service					
Facility Auto Traveler Perception Score					

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS					
Bicycle Facility LOS Score / LOS					
Transit Facility LOS Score / LOS					

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	50 & 51 & 53 AM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Pennsylvania Ave & Trenton Ave	Rt. 32 & Trenton Ave		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	35	35	1	1	1440	1440	69	70	0	0	0	0	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h			never	never		
3	Base Free-Flow Speed, mph	41.45			41.45		
3	Running Time, s	27.32			26.38		
3	Running Speed, mph	35.94			37.22		
3	Through Delay, s/veh	17.48			9.61		
3	Travel Time, s	44.80			35.99		
3	Travel Speed, mph	21.91			27.28		
3	Stop Rate, stops/veh	0.45			0.45		
3	Spatial Stop Rate, stops/mi	1.66			1.64		
3	Through vol/cap Ratio	0.90			0.25		
3	Percent of Base FFS	52.87			65.82		
3	Level of Service	C			C		
3	Auto Traveler Perception Score	2.62			2.61		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	2.61	B	2.34	B
3	Bicycle Segment LOS Score / LOS	3.55	D	3.42	C
3	Transit Segment LOS Score / LOS	0.65	A	0.40	A

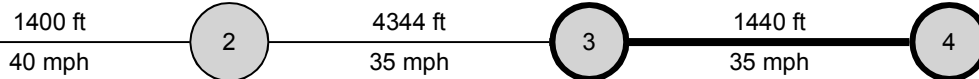
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		300.32		150.09	
Facility Travel Speed, mph		16.31		32.64	
Facility Base Free Flow Speed, mph		41.69		43.18	
Facility Percent of Base FFS		39.12		75.58	
Facility Level of Service		E		B	
Facility Auto Traveler Perception Score		2.55		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	2.67	C	2.38	C
Bicycle Facility LOS Score / LOS	3.52	D	3.41	C
Transit Facility LOS Score / LOS	0.55	A	0.46	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	50 & 51 & 53 PM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Trenton Ave & Pennsylvania Ave	Trenton Ave & Rt. 32		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	35	35	1	1	1440	1440	69	70	0	0	0	0	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never		never	never	
3	Shared Lane Spillback Time, h			never	never		
3	Base Free-Flow Speed, mph	41.45			41.45		
3	Running Time, s	26.67			27.19		
3	Running Speed, mph	36.81			36.11		
3	Through Delay, s/veh	6.37			15.41		
3	Travel Time, s	33.04			42.60		
3	Travel Speed, mph	29.72			23.05		
3	Stop Rate, stops/veh	0.42			0.63		
3	Spatial Stop Rate, stops/mi	1.54			2.32		
3	Through vol/cap Ratio	0.48			0.75		
3	Percent of Base FFS	71.70			55.61		
3	Level of Service	B			C		
3	Auto Traveler Perception Score	2.59			2.73		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	2.41	B	2.57	B
3	Bicycle Segment LOS Score / LOS	3.46	C	3.51	D
3	Transit Segment LOS Score / LOS	0.48	A	0.62	A

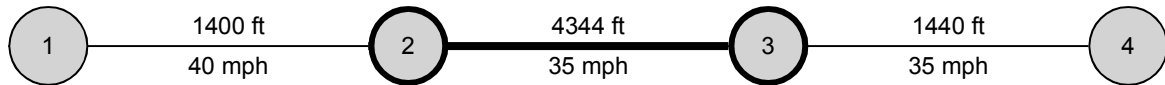
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		333.82		173.52	
Facility Travel Speed, mph		14.67		28.23	
Facility Base Free Flow Speed, mph		41.69		43.18	
Facility Percent of Base FFS		35.19		65.37	
Facility Level of Service		E		C	
Facility Auto Traveler Perception Score		2.58		2.40	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	2.63	C	2.65	C
Bicycle Facility LOS Score / LOS	3.50	C	3.53	D
Transit Facility LOS Score / LOS	0.52	A	0.78	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	50 & 51 & 53 AM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Trenton Ave & Big Oak Rd	Pennsylvania Ave & Trenton Ave		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	35	40	1	1	4344	4344	38	67	0	0	0	0	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h	never	1.16			never	
2	Shared Lane Spillback Time, h	never					
2	Base Free-Flow Speed, mph	41.00			43.34		
2	Running Time, s	76.33			70.06		
2	Running Speed, mph	38.80			42.27		
2	Through Delay, s/veh	148.07			4.67		
2	Travel Time, s	224.40			74.73		
2	Travel Speed, mph	13.20			39.63		
2	Stop Rate, stops/veh	1.99			0.33		
2	Spatial Stop Rate, stops/mi	2.42			0.40		
2	Through vol/cap Ratio	1.26			0.26		
2	Percent of Base FFS	32.19			91.45		
2	Level of Service	F			A		
2	Auto Traveler Perception Score	2.52			2.20		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	2.64	B	2.37	B
2	Bicycle Segment LOS Score / LOS	3.51	D	3.43	C
2	Transit Segment LOS Score / LOS	0.54	A	0.21	A

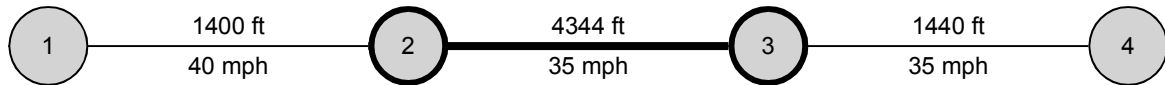
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		300.32		150.09	
Facility Travel Speed, mph		16.31		32.64	
Facility Base Free Flow Speed, mph		41.69		43.18	
Facility Percent of Base FFS		39.12		75.58	
Facility Level of Service		E		B	
Facility Auto Traveler Perception Score		2.55		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.67	C	2.38	C
Bicycle Facility LOS Score / LOS		3.52	D	3.41	C
Transit Facility LOS Score / LOS		0.55	A	0.46	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	50 & 51 & 53 PM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Trenton Ave & Big Oak Rd	Trenton Ave & Pennsylvania Ave		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	35	40	1	1	4344	4344	38	67	0	0	0	0	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h	never	1.07			never	
2	Shared Lane Spillback Time, h	never					
2	Base Free-Flow Speed, mph	41.00			43.34		
2	Running Time, s	76.34			72.73		
2	Running Speed, mph	38.80			40.73		
2	Through Delay, s/veh	193.60			7.30		
2	Travel Time, s	269.94			80.02		
2	Travel Speed, mph	10.97			37.01		
2	Stop Rate, stops/veh	2.32			0.41		
2	Spatial Stop Rate, stops/mi	2.82			0.50		
2	Through vol/cap Ratio	1.36			0.75		
2	Percent of Base FFS	26.76			85.40		
2	Level of Service	F			A		
2	Auto Traveler Perception Score	2.58			2.21		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	2.65	B	2.71	B
2	Bicycle Segment LOS Score / LOS	3.51	D	3.55	D
2	Transit Segment LOS Score / LOS	0.54	A	0.49	A

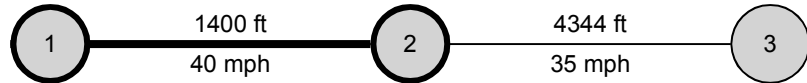
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		333.82		173.52	
Facility Travel Speed, mph		14.67		28.23	
Facility Base Free Flow Speed, mph		41.69		43.18	
Facility Percent of Base FFS		35.19		65.37	
Facility Level of Service		E		C	
Facility Auto Traveler Perception Score		2.58		2.40	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	2.63	C	2.65	C
Bicycle Facility LOS Score / LOS	3.50	C	3.53	D
Transit Facility LOS Score / LOS	0.52	A	0.78	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	AM	Number of Iterations	15
File Name	50 & 51 & 53 AM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Trenton Ave & Pine Grove Rd	Trenton Ave & Big Oak Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	40	40	1	2	1400	1400	77	37	450	450	0	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h		never				
1	Shared Lane Spillback Time, h	never					
1	Base Free-Flow Speed, mph	44.29			44.59		
1	Running Time, s	24.89			24.03		
1	Running Speed, mph	38.35			39.71		
1	Through Delay, s/veh	6.22			15.34		
1	Travel Time, s	31.11			39.37		
1	Travel Speed, mph	30.68			24.24		
1	Stop Rate, stops/veh	0.39			0.50		
1	Spatial Stop Rate, stops/mi	1.45			1.89		
1	Through vol/cap Ratio	0.57			0.23		
1	Percent of Base FFS	69.28			54.37		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.58			2.65		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.83	C	2.45	B
1	Bicycle Segment LOS Score / LOS	3.50	D	3.35	C
1	Transit Segment LOS Score / LOS	0.46	A	1.28	A

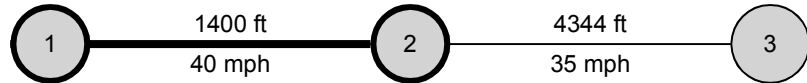
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		300.32		150.09	
Facility Travel Speed, mph		16.31		32.64	
Facility Base Free Flow Speed, mph		41.69		43.18	
Facility Percent of Base FFS		39.12		75.58	
Facility Level of Service		E		B	
Facility Auto Traveler Perception Score		2.55		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.67	C	2.38	C
Bicycle Facility LOS Score / LOS		3.52	D	3.41	C
Transit Facility LOS Score / LOS		0.55	A	0.46	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	4
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	3
Jurisdiction	PennDOT	Time Period	PM	Number of Iterations	15
File Name	50 & 51 & 53 PM.xus	Analysis Year	2015	System Cycle Length, s	80
Intersections	Trenton Ave & Pine Grove Rd	Trenton Ave & Big Oak Rd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	40	40	1	2	1400	1400	77	37	450	450	0	0	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h	never	never				
1	Shared Lane Spillback Time, h	never					
1	Base Free-Flow Speed, mph	44.29			44.59		
1	Running Time, s	24.95			24.39		
1	Running Speed, mph	38.26			39.13		
1	Through Delay, s/veh	5.89			26.50		
1	Travel Time, s	30.84			50.90		
1	Travel Speed, mph	30.95			18.75		
1	Stop Rate, stops/veh	0.38			0.73		
1	Spatial Stop Rate, stops/mi	1.41			2.76		
1	Through vol/cap Ratio	0.61			0.74		
1	Percent of Base FFS	69.88			42.06		
1	Level of Service	B			D		
1	Auto Traveler Perception Score	2.57			2.81		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.81	C	2.56	B
1	Bicycle Segment LOS Score / LOS	3.51	D	3.45	C
1	Transit Segment LOS Score / LOS	0.48	A	1.85	A

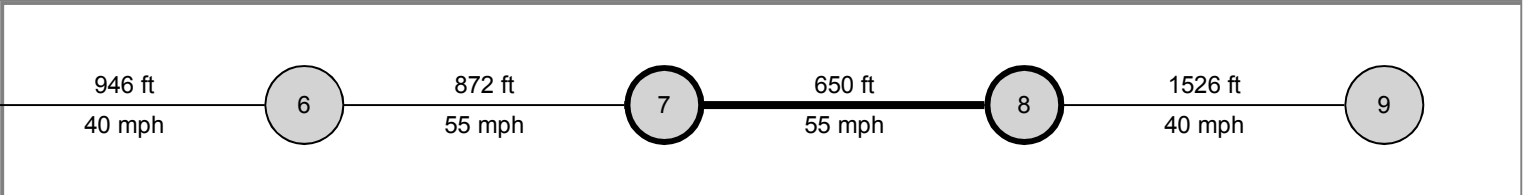
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		333.82		173.52	
Facility Travel Speed, mph		14.67		28.23	
Facility Base Free Flow Speed, mph		41.69		43.18	
Facility Percent of Base FFS		35.19		65.37	
Facility Level of Service		E		C	
Facility Auto Traveler Perception Score		2.58		2.40	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	2.63	C	2.65	C
Bicycle Facility LOS Score / LOS	3.50	C	3.53	D
Transit Facility LOS Score / LOS	0.52	A	0.78	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Oxford Valley & Rt. 1 NB	Oxford Valley & Rt. 1 SB		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
7	55	55	2	2	650	650	80	81	606	606	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2			6	16
7	Bay/Lane Spillback Time, h		never			never	
7	Shared Lane Spillback Time, h						
7	Base Free-Flow Speed, mph	53.04			53.05		
7	Running Time, s	13.18			13.06		
7	Running Speed, mph	33.62			33.93		
7	Through Delay, s/veh	6.43			8.25		
7	Travel Time, s	19.61			21.31		
7	Travel Speed, mph	22.60			20.80		
7	Stop Rate, stops/veh	0.21			0.26		
7	Spatial Stop Rate, stops/mi	1.69			2.15		
7	Through vol/cap Ratio	0.45			0.20		
7	Percent of Base FFS	42.61			39.21		
7	Level of Service	D			E		
7	Auto Traveler Perception Score	2.40			2.70		

## Multimodal Results (Segment)

7	Pedestrian Segment LOS Score / LOS	3.51	D	3.35	C
7	Bicycle Segment LOS Score / LOS	3.48	C	3.41	C
7	Transit Segment LOS Score / LOS	1.50	A	1.59	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

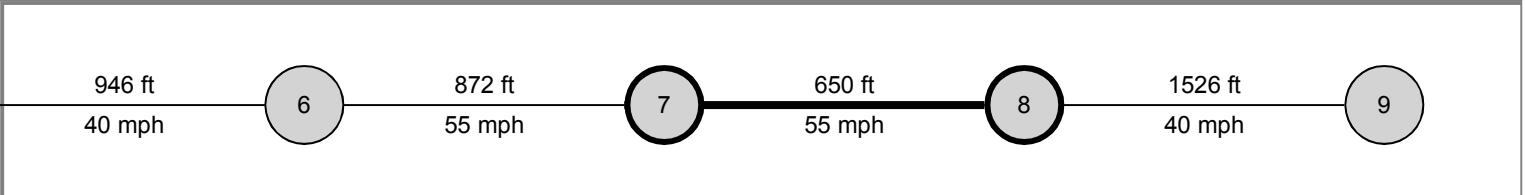
## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.20	C	3.31	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		1.40	A	1.00	A



# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Oxford Valley & Rt. 1 NB	Oxford Valley & Rt. 1 SB		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
7	55	55	2	2	650	650	80	81	606	606	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2			6	16
7	Bay/Lane Spillback Time, h	never	never			never	
7	Shared Lane Spillback Time, h	never					
7	Base Free-Flow Speed, mph	53.04			53.05		
7	Running Time, s	13.30			13.21		
7	Running Speed, mph	33.31			33.56		
7	Through Delay, s/veh	11.99			20.09		
7	Travel Time, s	25.30			33.29		
7	Travel Speed, mph	17.52			13.31		
7	Stop Rate, stops/veh	0.38			0.58		
7	Spatial Stop Rate, stops/mi	3.12			4.71		
7	Through vol/cap Ratio	0.72			0.88		
7	Percent of Base FFS	33.03			25.09		
7	Level of Service	E			F		
7	Auto Traveler Perception Score	2.63			3.17		

## Multimodal Results (Segment)

7	Pedestrian Segment LOS Score / LOS	3.66	D	3.55	D
7	Bicycle Segment LOS Score / LOS	3.57	D	3.48	C
7	Transit Segment LOS Score / LOS	2.03	B	2.44	B

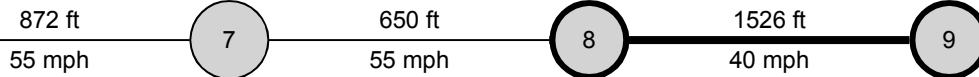
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Oxford Valley & Rt. 1 SB	Oxford Valley & Big Oak		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
8	40	55	1	3	1526	1526	81	75	1526	1526	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h	0.41	never			never	
8	Shared Lane Spillback Time, h	0.54		never			never
8	Base Free-Flow Speed, mph	45.98			53.03		
8	Running Time, s	26.19			22.52		
8	Running Speed, mph	39.73			46.21		
8	Through Delay, s/veh	24.80			12.65		
8	Travel Time, s	50.99			35.16		
8	Travel Speed, mph	20.41			29.59		
8	Stop Rate, stops/veh	0.63			0.38		
8	Spatial Stop Rate, stops/mi	2.19			1.31		
8	Through vol/cap Ratio	0.53			0.32		
8	Percent of Base FFS	44.38			55.80		
8	Level of Service	D			C		
8	Auto Traveler Perception Score	2.48			2.34		

## Multimodal Results (Segment)

8	Pedestrian Segment LOS Score / LOS	4.18	D	3.04	C
8	Bicycle Segment LOS Score / LOS	3.56	D	3.41	C
8	Transit Segment LOS Score / LOS	1.84	A	0.99	A

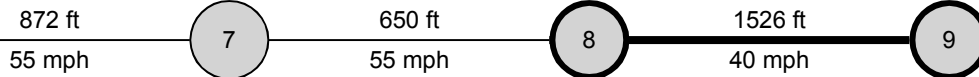
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.20	C	3.31	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		1.40	A	1.00	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Oxford Valley & Rt. 1 SB	Oxford Valley & Big Oak		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
8	40	55	1	3	1526	1526	81	75	1526	1526	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h	never	never	never		never	
8	Shared Lane Spillback Time, h	never		never			never
8	Base Free-Flow Speed, mph	45.98			53.03		
8	Running Time, s	26.91			22.61		
8	Running Speed, mph	38.66			46.01		
8	Through Delay, s/veh	21.49			27.52		
8	Travel Time, s	48.40			50.13		
8	Travel Speed, mph	21.50			20.75		
8	Stop Rate, stops/veh	0.64			0.67		
8	Spatial Stop Rate, stops/mi	2.20			2.33		
8	Through vol/cap Ratio	0.65			0.81		
8	Percent of Base FFS	46.75			39.14		
8	Level of Service	D			E		
8	Auto Traveler Perception Score	2.48			2.50		

## Multimodal Results (Segment)

8	Pedestrian Segment LOS Score / LOS	4.47	E	3.30	C
8	Bicycle Segment LOS Score / LOS	3.58	D	3.44	C
8	Transit Segment LOS Score / LOS	1.86	A	1.69	A

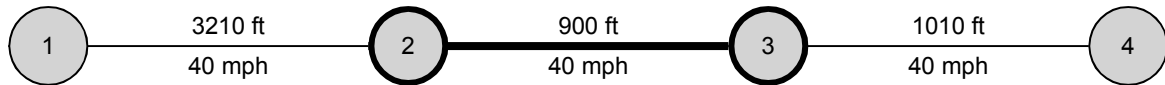
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Bristol Oxford Valley & Lincoln	Oxford Valley Rd & S. Bucks Town Dr		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	40	40	2	2	900	900	80	70	900	900	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.05			46.03		
2	Running Time, s	16.89			16.86		
2	Running Speed, mph	36.32			36.40		
2	Through Delay, s/veh	9.71			14.00		
2	Travel Time, s	26.60			30.86		
2	Travel Speed, mph	23.07			19.88		
2	Stop Rate, stops/veh	0.43			0.40		
2	Spatial Stop Rate, stops/mi	2.54			2.32		
2	Through vol/cap Ratio	0.41			0.20		
2	Percent of Base FFS	50.09			43.20		
2	Level of Service	C			D		
2	Auto Traveler Perception Score	2.54			2.50		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.10	C	3.60	D
2	Bicycle Segment LOS Score / LOS	3.41	C	3.41	C
2	Transit Segment LOS Score / LOS	1.40	A	1.66	A

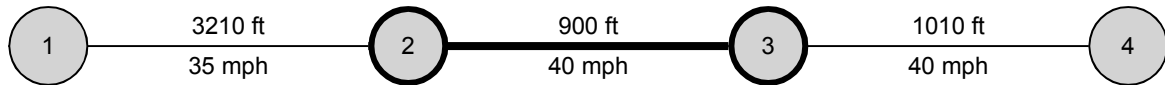
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.20	C	3.31	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		1.40	A	1.00	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Bristol Oxford Valley & Lincoln	Oxford Valley Rd & S. Bucks Town Dr		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	40	35	2	2	900	900	80	70	900	900	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never		never	10.58	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.05			43.68		
2	Running Time, s	16.90			17.93		
2	Running Speed, mph	36.31			34.23		
2	Through Delay, s/veh	23.60			53.26		
2	Travel Time, s	40.51			71.18		
2	Travel Speed, mph	15.15			8.62		
2	Stop Rate, stops/veh	0.58			0.99		
2	Spatial Stop Rate, stops/mi	3.42			5.82		
2	Through vol/cap Ratio	0.50			1.01		
2	Percent of Base FFS	32.90			19.74		
2	Level of Service	E			F		
2	Auto Traveler Perception Score	2.68			3.12		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.24	C	2.84	C
2	Bicycle Segment LOS Score / LOS	3.42	C	3.50	D
2	Transit Segment LOS Score / LOS	2.16	B	3.12	C

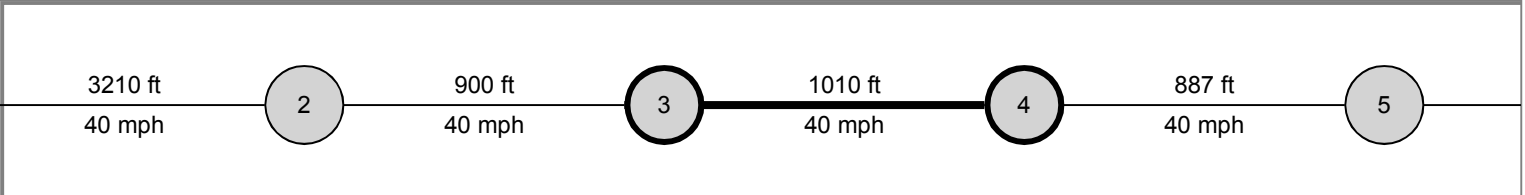
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Oxford Valley Rd & S. Bucks Town Dr	Oxford Valley Rd & N. Bucks Town Dr		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	40	40	2	2	1010	1010	100	65	1010	1010	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	46.06			46.00		
3	Running Time, s	18.29			18.27		
3	Running Speed, mph	37.65			37.69		
3	Through Delay, s/veh	19.14			7.97		
3	Travel Time, s	37.43			26.24		
3	Travel Speed, mph	18.40			26.24		
3	Stop Rate, stops/veh	0.64			0.32		
3	Spatial Stop Rate, stops/mi	3.37			1.66		
3	Through vol/cap Ratio	0.49			0.15		
3	Percent of Base FFS	39.94			57.05		
3	Level of Service	E			C		
3	Auto Traveler Perception Score	2.68			2.39		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.53	D	3.43	C
3	Bicycle Segment LOS Score / LOS	3.42	C	3.40	C
3	Transit Segment LOS Score / LOS	1.83	A	1.14	A

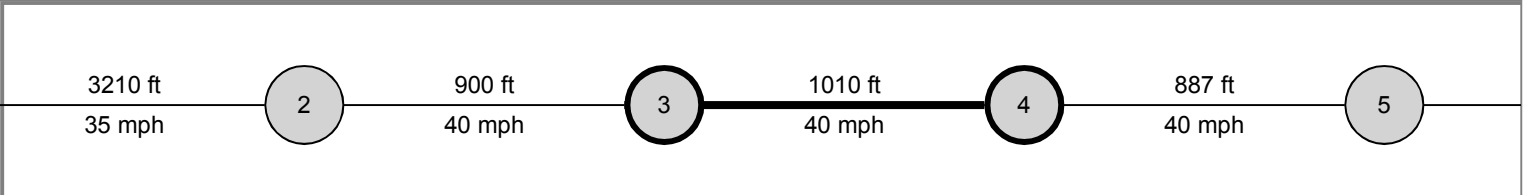
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.20	C	3.31	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		1.40	A	1.00	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Oxford Valley Rd & S. Bucks Tow	Oxford Valley Rd & N. Buckstown Dr		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	40	40	2	2	1010	1010	100	65	1010	1010	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h	0.44	never		never	never	never
3	Shared Lane Spillback Time, h	3.00		never	never		never
3	Base Free-Flow Speed, mph	46.06			46.00		
3	Running Time, s	18.51			18.67		
3	Running Speed, mph	37.20			36.88		
3	Through Delay, s/veh	23.15			35.26		
3	Travel Time, s	41.67			53.94		
3	Travel Speed, mph	16.53			12.77		
3	Stop Rate, stops/veh	0.59			0.79		
3	Spatial Stop Rate, stops/mi	3.07			4.12		
3	Through vol/cap Ratio	0.62			0.98		
3	Percent of Base FFS	35.88			27.75		
3	Level of Service	E			F		
3	Auto Traveler Perception Score	2.62			2.81		

## Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	2.72	B	3.52	D
3	Bicycle Segment LOS Score / LOS	3.48	C	3.50	D
3	Transit Segment LOS Score / LOS	2.09	B	2.56	B

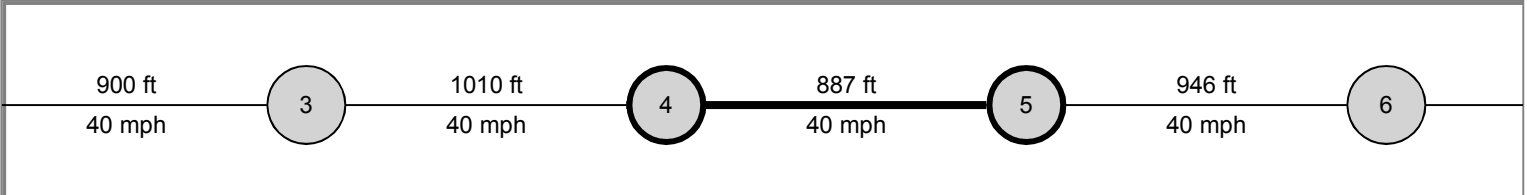
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Oxford Valley Rd & N. Bucks Tow	Oxford Valley Rd & Commerce Blvd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	40	40	2	2	887	887	65	65	887	887	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.02			46.02		
4	Running Time, s	16.72			16.71		
4	Running Speed, mph	36.18			36.19		
4	Through Delay, s/veh	0.89			9.96		
4	Travel Time, s	17.61			26.67		
4	Travel Speed, mph	34.35			22.67		
4	Stop Rate, stops/veh	0.03			0.35		
4	Spatial Stop Rate, stops/mi	0.19			2.09		
4	Through vol/cap Ratio	0.23			0.37		
4	Percent of Base FFS	74.64			49.27		
4	Level of Service	B			D		
4	Auto Traveler Perception Score	2.17			2.46		

## Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.42	C	3.69	D
4	Bicycle Segment LOS Score / LOS	3.41	C	3.40	C
4	Transit Segment LOS Score / LOS	0.61	A	1.42	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

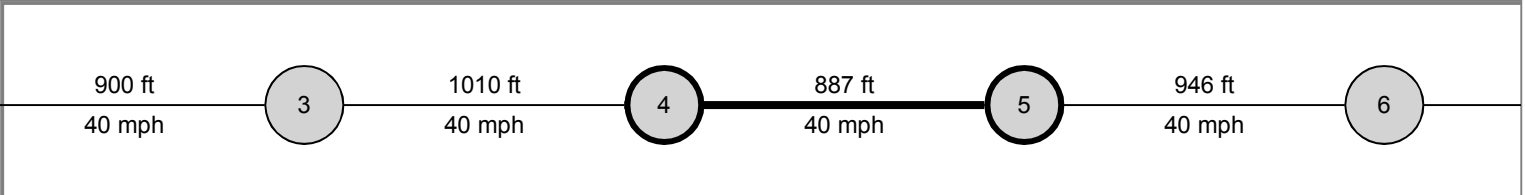
## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.20	C	3.31	C
Bicycle Facility LOS Score / LOS	3.43	C	3.44	C
Transit Facility LOS Score / LOS	1.40	A	1.00	A



# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Oxford Valley Rd & N. Buckstow	Oxford Valley Rd & Commerce Blvd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	40	40	2	2	887	887	65	65	887	887	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never		never	never	never
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.02			46.02		
4	Running Time, s	16.97			16.98		
4	Running Speed, mph	35.63			35.61		
4	Through Delay, s/veh	10.87			45.63		
4	Travel Time, s	27.85			62.61		
4	Travel Speed, mph	21.72			9.66		
4	Stop Rate, stops/veh	0.23			0.91		
4	Spatial Stop Rate, stops/mi	1.38			5.44		
4	Through vol/cap Ratio	0.80			0.92		
4	Percent of Base FFS	47.19			20.99		
4	Level of Service	D			F		
4	Auto Traveler Perception Score	2.35			3.05		

## Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.57	D	3.78	D
4	Bicycle Segment LOS Score / LOS	3.48	C	3.49	C
4	Transit Segment LOS Score / LOS	1.60	A	2.94	C

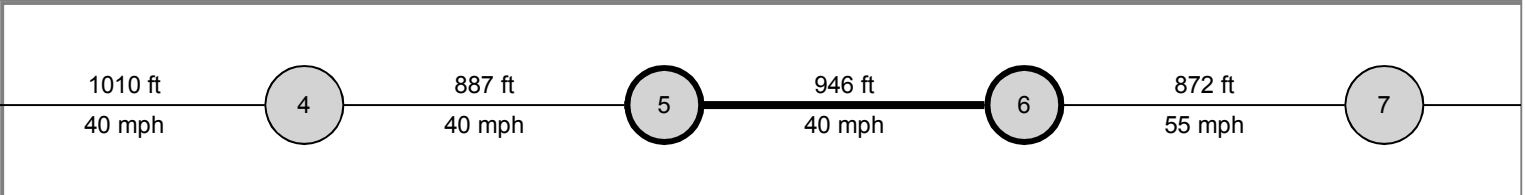
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Oxford Valley Rd & Commerce E	Oxford Valley Rd & Cabot Blvd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	40	40	2	2	946	946	65	85	946	946	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never			never	
5	Shared Lane Spillback Time, h	never			never		
5	Base Free-Flow Speed, mph	46.01			46.05		
5	Running Time, s	17.51			17.51		
5	Running Speed, mph	36.83			36.84		
5	Through Delay, s/veh	19.22			0.39		
5	Travel Time, s	36.74			17.90		
5	Travel Speed, mph	17.56			36.04		
5	Stop Rate, stops/veh	0.53			0.01		
5	Spatial Stop Rate, stops/mi	2.97			0.06		
5	Through vol/cap Ratio	0.40			0.28		
5	Percent of Base FFS	38.16			78.27		
5	Level of Service	E			B		
5	Auto Traveler Perception Score	2.61			2.15		

## Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	3.45	C	3.14	C
5	Bicycle Segment LOS Score / LOS	3.43	C	3.43	C
5	Transit Segment LOS Score / LOS	1.94	A	0.54	A

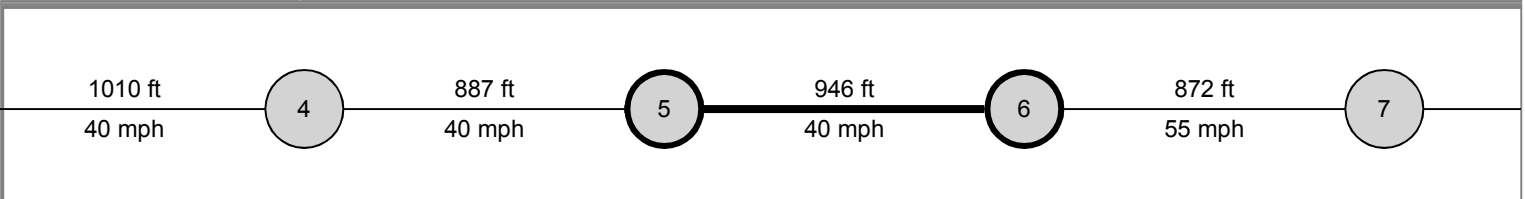
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.20	C	3.31	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		1.40	A	1.00	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Oxford Valley Rd & Commerce E	Oxford Valley Rd & Cabot Blvd		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	40	40	2	2	946	946	65	85	946	946	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never			never	
5	Shared Lane Spillback Time, h	never			never		
5	Base Free-Flow Speed, mph	46.01			46.05		
5	Running Time, s	17.83			17.96		
5	Running Speed, mph	36.17			35.91		
5	Through Delay, s/veh	11.24			0.68		
5	Travel Time, s	29.08			18.64		
5	Travel Speed, mph	22.18			34.60		
5	Stop Rate, stops/veh	0.26			0.00		
5	Spatial Stop Rate, stops/mi	1.44			0.02		
5	Through vol/cap Ratio	0.76			0.39		
5	Percent of Base FFS	48.21			75.13		
5	Level of Service	D			B		
5	Auto Traveler Perception Score	2.36			2.14		

## Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	3.73	D	3.51	D
5	Bicycle Segment LOS Score / LOS	3.50	C	3.56	D
5	Transit Segment LOS Score / LOS	1.74	A	0.77	A

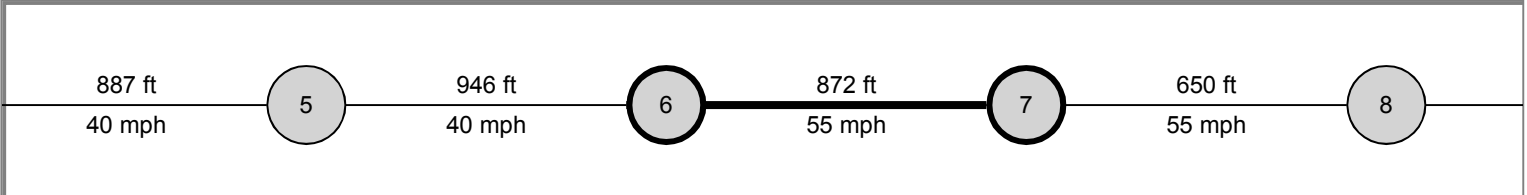
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Oxford Valley Rd & Cabot Blvd	Oxford Valley & Rt. 1 NB		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
6	55	40	3	2	872	872	65	70	0	0	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
6	Bay/Lane Spillback Time, h		never			never	
6	Shared Lane Spillback Time, h			never	never		
6	Base Free-Flow Speed, mph	51.45			44.40		
6	Running Time, s	15.40			17.06		
6	Running Speed, mph	38.61			34.85		
6	Through Delay, s/veh	21.56			19.32		
6	Travel Time, s	36.96			36.38		
6	Travel Speed, mph	16.09			16.34		
6	Stop Rate, stops/veh	0.57			0.55		
6	Spatial Stop Rate, stops/mi	3.42			3.32		
6	Through vol/cap Ratio	0.63			0.55		
6	Percent of Base FFS	31.27			36.81		
6	Level of Service	E			E		
6	Auto Traveler Perception Score	2.93			2.67		

## Multimodal Results (Segment)

6	Pedestrian Segment LOS Score / LOS	3.38	C	3.52	D
6	Bicycle Segment LOS Score / LOS	3.41	C	3.46	C
6	Transit Segment LOS Score / LOS	2.06	B	2.08	B

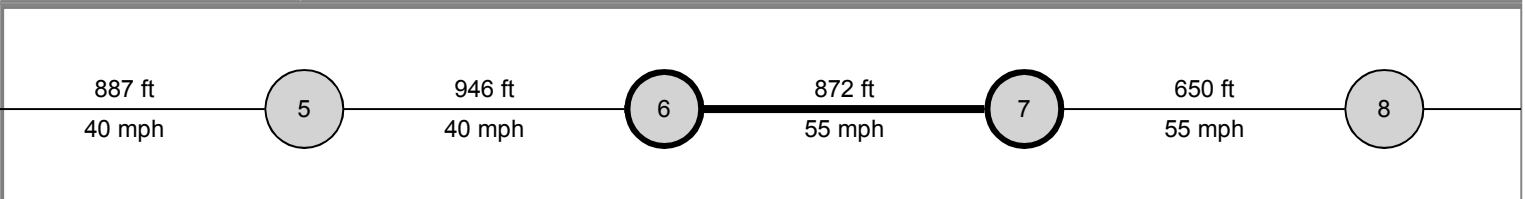
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.20	C	3.31	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		1.40	A	1.00	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Oxford Valley Rd & Cabot Blvd	Oxford Valley & Rt. 1 NB		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
6	55	40	3	2	872	872	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
6	Bay/Lane Spillback Time, h		0.42			never	
6	Shared Lane Spillback Time, h				never		
6	Base Free-Flow Speed, mph	51.12			44.07		
6	Running Time, s	15.63			17.46		
6	Running Speed, mph	38.04			34.06		
6	Through Delay, s/veh	161.91			11.45		
6	Travel Time, s	177.54			28.91		
6	Travel Speed, mph	3.35			20.57		
6	Stop Rate, stops/veh	1.68			0.41		
6	Spatial Stop Rate, stops/mi	10.20			2.47		
6	Through vol/cap Ratio	1.29			0.67		
6	Percent of Base FFS	6.55			46.67		
6	Level of Service	F			D		
6	Auto Traveler Perception Score	4.25			2.52		

## Multimodal Results (Segment)

6	Pedestrian Segment LOS Score / LOS	3.34	C	3.75	D
6	Bicycle Segment LOS Score / LOS	3.47	C	3.54	D
6	Transit Segment LOS Score / LOS	3.95	D	1.77	A

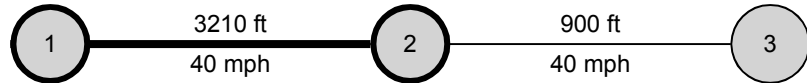
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	AM	Number of Iterations	15
File Name	65 & 68 & 69 AM.xus	Analysis Year	2015	System Cycle Length, s	105
Intersections	Bristol Oxford Valley & Trenton F	Bristol Oxford Valley & Lincoln		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	40	35	2	1	3210	3210	83	78	286	286	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	0.14
1	Shared Lane Spillback Time, h			never	never		2.46
1	Base Free-Flow Speed, mph	44.21			41.53		
1	Running Time, s	51.13			55.22		
1	Running Speed, mph	42.80			39.64		
1	Through Delay, s/veh	23.47			16.80		
1	Travel Time, s	74.60			72.02		
1	Travel Speed, mph	29.34			30.39		
1	Stop Rate, stops/veh	0.59			0.34		
1	Spatial Stop Rate, stops/mi	0.97			0.56		
1	Through vol/cap Ratio	0.26			0.09		
1	Percent of Base FFS	66.36			73.18		
1	Level of Service	C			B		
1	Auto Traveler Perception Score	2.29			2.22		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.42	B	3.21	C
1	Bicycle Segment LOS Score / LOS	3.38	C	3.49	C
1	Transit Segment LOS Score / LOS	0.92	A	0.38	A

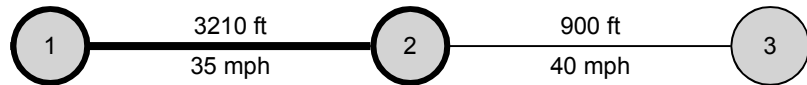
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		300.54		266.54	
Facility Travel Speed, mph		22.69		25.58	
Facility Base Free Flow Speed, mph		46.24		45.61	
Facility Percent of Base FFS		49.07		56.10	
Facility Level of Service		D		C	
Facility Auto Traveler Perception Score		2.44		2.35	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.20	C	3.31	C
Bicycle Facility LOS Score / LOS		3.43	C	3.44	C
Transit Facility LOS Score / LOS		1.40	A	1.00	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	9
Analyst	MTD	Analysis Date	Oct 28, 2015	Number of Segments	8
Jurisdiction	PenndDOT	Time Period	PM	Number of Iterations	15
File Name	65 & 68 & 69 PM.xus	Analysis Year	2015	System Cycle Length, s	110
Intersections	Bristol Oxford Valley & Trenton F	Bristol Oxford Valley & Lincoln		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	35	35	2	1	3210	3210	83	78	286	286	0	0	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	0.01
1	Shared Lane Spillback Time, h			never	never		0.24
1	Base Free-Flow Speed, mph	41.86			41.53		
1	Running Time, s	53.77			58.66		
1	Running Speed, mph	40.70			37.31		
1	Through Delay, s/veh	26.94			17.55		
1	Travel Time, s	80.71			76.21		
1	Travel Speed, mph	27.12			28.72		
1	Stop Rate, stops/veh	0.62			0.35		
1	Spatial Stop Rate, stops/mi	1.02			0.58		
1	Through vol/cap Ratio	0.19			0.25		
1	Percent of Base FFS	64.79			69.15		
1	Level of Service	C			B		
1	Auto Traveler Perception Score	2.29			2.23		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.50	B	3.70	D
1	Bicycle Segment LOS Score / LOS	3.37	C	3.60	D
1	Transit Segment LOS Score / LOS	1.06	A	0.76	A

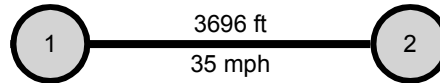
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		471.04		394.91	
Facility Travel Speed, mph		14.48		17.27	
Facility Base Free Flow Speed, mph		45.36		45.36	
Facility Percent of Base FFS		31.92		38.07	
Facility Level of Service		E		E	
Facility Auto Traveler Perception Score		2.52		2.51	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.25	C	3.53	D
Bicycle Facility LOS Score / LOS		3.46	C	3.53	D
Transit Facility LOS Score / LOS		1.81	A	1.69	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	2
Analyst	MTD	Analysis Date	Nov 2, 2015	Number of Segments	1
Jurisdiction	NJDOT	Time Period	AM	Number of Iterations	15
File Name	72-Upper Ferry Rd-Lower Ferry	Analysis Year	2015	System Cycle Length, s	120
Intersections	Upper Ferry Rd & Lower Ferry R	Upper Ferry Rd & Rt. 31		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	35	1	1	3696	3696	69	70	0	0	0	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never		never	never		never
1	Base Free-Flow Speed, mph	41.60			41.60		
1	Running Time, s	62.45			62.98		
1	Running Speed, mph	40.35			40.01		
1	Through Delay, s/veh	29.40			17.06		
1	Travel Time, s	91.86			80.04		
1	Travel Speed, mph	27.43			31.48		
1	Stop Rate, stops/veh	0.72			0.73		
1	Spatial Stop Rate, stops/mi	1.04			1.04		
1	Through vol/cap Ratio	0.39			0.39		
1	Percent of Base FFS	65.95			75.69		
1	Level of Service	C			B		
1	Auto Traveler Perception Score	2.29			2.30		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.45	B	2.45	B
1	Bicycle Segment LOS Score / LOS	3.43	C	3.46	C
1	Transit Segment LOS Score / LOS	1.10	A	0.87	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		91.86		80.04	
Facility Travel Speed, mph		27.43		31.48	
Facility Base Free Flow Speed, mph		41.60		41.60	
Facility Percent of Base FFS		65.95		75.69	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.29		2.30	

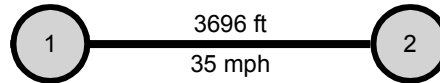
## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.45	C	2.45	C
Bicycle Facility LOS Score / LOS		3.43	C	3.46	C
Transit Facility LOS Score / LOS		1.10	A	0.87	A



# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	2
Analyst	MTD	Analysis Date	Nov 2, 2015	Number of Segments	1
Jurisdiction	NJDOT	Time Period	PM	Number of Iterations	15
File Name	72-Upper Ferry Rd-Lower Ferry	Analysis Year	2015	System Cycle Length, s	120
Intersections	Upper Ferry Rd & Lower Ferry R	Upper Ferry & Rt. 31		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	35	1	1	3696	3696	69	70	0	0	0	0	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h	never	never		never	never	never
1	Shared Lane Spillback Time, h	never		never	never		never
1	Base Free-Flow Speed, mph	41.60			41.60		
1	Running Time, s	63.63			64.31		
1	Running Speed, mph	39.60			39.18		
1	Through Delay, s/veh	34.06			26.99		
1	Travel Time, s	97.69			91.31		
1	Travel Speed, mph	25.79			27.60		
1	Stop Rate, stops/veh	0.86			0.81		
1	Spatial Stop Rate, stops/mi	1.22			1.15		
1	Through vol/cap Ratio	0.83			0.81		
1	Percent of Base FFS	62.01			66.35		
1	Level of Service	C			C		
1	Auto Traveler Perception Score	2.32			2.31		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.62	B	2.64	B
1	Bicycle Segment LOS Score / LOS	3.50	D	3.50	C
1	Transit Segment LOS Score / LOS	1.32	A	1.24	A

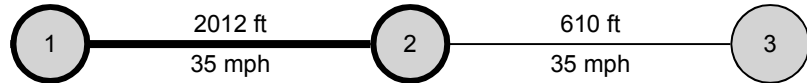
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		97.69		91.31	
Facility Travel Speed, mph		25.79		27.60	
Facility Base Free Flow Speed, mph		41.60		41.60	
Facility Percent of Base FFS		62.01		66.35	
Facility Level of Service		C		C	
Facility Auto Traveler Perception Score		2.32		2.31	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.62	C	2.64	C
Bicycle Facility LOS Score / LOS		3.50	D	3.50	C
Transit Facility LOS Score / LOS		1.32	A	1.24	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	3
Analyst	MTD	Analysis Date	Nov 2, 2015	Number of Segments	2
Jurisdiction	NJDOT	Time Period	AM	Number of Iterations	15
File Name	74-W State St-Calhoun St to Wa	Analysis Year	2015	System Cycle Length, s	60
Intersections	W State St & Calhoun St	W State St & Willow St		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	35	1	1	2012	2012	65	38	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	41.30			41.30		
1	Running Time, s	35.86			35.40		
1	Running Speed, mph	38.26			38.75		
1	Through Delay, s/veh	13.10			17.79		
1	Travel Time, s	48.96			53.20		
1	Travel Speed, mph	28.02			25.79		
1	Stop Rate, stops/veh	0.46			0.70		
1	Spatial Stop Rate, stops/mi	1.19			1.83		
1	Through vol/cap Ratio	0.66			0.28		
1	Percent of Base FFS	67.84			62.43		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.32			2.42		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.40	B	2.34	B
1	Bicycle Segment LOS Score / LOS	3.46	C	3.39	C
1	Transit Segment LOS Score / LOS	0.42	A	1.19	A

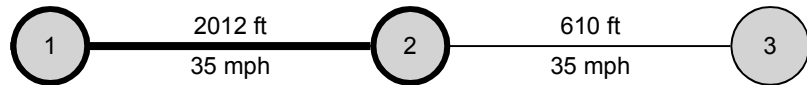
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		79.74		82.67	
Facility Travel Speed, mph		22.42		21.62	
Facility Base Free Flow Speed, mph		41.06		41.06	
Facility Percent of Base FFS		54.61		52.67	
Facility Level of Service		C		C	
Facility Auto Traveler Perception Score		2.50		2.50	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.40	C	2.53	C
Bicycle Facility LOS Score / LOS		3.45	C	3.39	C
Transit Facility LOS Score / LOS		0.87	A	1.10	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	3
Analyst	MTD	Analysis Date	Nov 2, 2015	Number of Segments	2
Jurisdiction	NJDOT	Time Period	PM	Number of Iterations	15
File Name	74-W State St-Calhoun St to Wa	Analysis Year	2015	System Cycle Length, s	60
Intersections	W State St & Calhoun St	W State St & Willow St		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	35	35	1	1	2012	2012	65	38	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h	never	never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	41.30			41.30		
1	Running Time, s	35.44			35.45		
1	Running Speed, mph	38.71			38.70		
1	Through Delay, s/veh	16.68			16.23		
1	Travel Time, s	52.12			51.67		
1	Travel Speed, mph	26.32			26.55		
1	Stop Rate, stops/veh	0.61			0.64		
1	Spatial Stop Rate, stops/mi	1.61			1.69		
1	Through vol/cap Ratio	0.42			0.18		
1	Percent of Base FFS	63.73			64.28		
1	Level of Service	C			C		
1	Auto Traveler Perception Score	2.38			2.40		

## Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	2.29	B	2.35	B
1	Bicycle Segment LOS Score / LOS	3.41	C	3.41	C
1	Transit Segment LOS Score / LOS	0.33	A	1.14	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		80.19		76.84	
Facility Travel Speed, mph		22.29		23.27	
Facility Base Free Flow Speed, mph		41.06		41.06	
Facility Percent of Base FFS		54.30		56.67	
Facility Level of Service		C		C	
Facility Auto Traveler Perception Score		2.53		2.45	

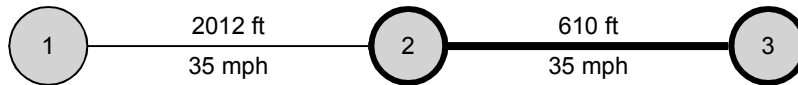
## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.29	C	2.53	C
Bicycle Facility LOS Score / LOS		3.41	C	3.40	C
Transit Facility LOS Score / LOS		0.76	A	1.07	A

# HCS 2010 Urban Street Segment Report

## General Information

Agency	Pennoni			Streets Information	
Analyst	MTD	Analysis Date	Nov 2, 2015	Number of Intersections	3
Jurisdiction	NJDOT	Time Period	AM	Number of Segments	2
File Name	74-W State St-Calhoun St to Wa	Analysis Year	2015	Number of Iterations	15
Intersections	W State St & Willow St	W State St & Warren St		System Cycle Length, s	60
Project Description	Pre-Construction Traffic Study			Analysis Period	1> 7:00



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	35	35	1	1	610	610	38	41	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h			never	never		
2	Base Free-Flow Speed, mph	40.28			40.27		
2	Running Time, s	14.64			14.53		
2	Running Speed, mph	28.41			28.62		
2	Through Delay, s/veh	16.14			14.94		
2	Travel Time, s	30.78			29.48		
2	Travel Speed, mph	13.51			14.11		
2	Stop Rate, stops/veh	0.64			0.50		
2	Spatial Stop Rate, stops/mi	5.54			4.29		
2	Through vol/cap Ratio	0.47			0.57		
2	Percent of Base FFS	33.55			35.03		
2	Level of Service	E			E		
2	Auto Traveler Perception Score	3.33			2.84		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	2.37	B	3.15	C
2	Bicycle Segment LOS Score / LOS	3.42	C	3.39	C
2	Transit Segment LOS Score / LOS	2.37	B	0.82	A

## Facility Output Data

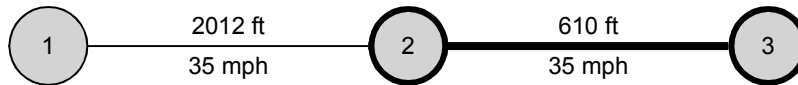
	Eastbound	Westbound
Facility Travel Time, s	79.74	82.67
Facility Travel Speed, mph	22.42	21.62
Facility Base Free Flow Speed, mph	41.06	41.06
Facility Percent of Base FFS	54.61	52.67
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.50	2.50

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	2.40	C	2.53	C
Bicycle Facility LOS Score / LOS	3.45	C	3.39	C
Transit Facility LOS Score / LOS	0.87	A	1.10	A

# HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Pennoni			Number of Intersections	3
Analyst	MTD	Analysis Date	Nov 2, 2015	Number of Segments	2
Jurisdiction	NJDOT	Time Period	PM	Number of Iterations	15
File Name	74-W State St-Calhoun St to Wa	Analysis Year	2015	System Cycle Length, s	60
Intersections	W State St & Willow St	W State St & Warren St		Analysis Period	1> 7:00
Project Description	Pre-Construction Traffic Study				



## Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	35	35	1	1	610	610	38	41	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never	never	never	never	
2	Shared Lane Spillback Time, h			never	never		
2	Base Free-Flow Speed, mph	40.28			40.27		
2	Running Time, s	14.53			14.83		
2	Running Speed, mph	28.62			28.05		
2	Through Delay, s/veh	13.54			10.33		
2	Travel Time, s	28.07			25.16		
2	Travel Speed, mph	14.82			16.53		
2	Stop Rate, stops/veh	0.54			0.38		
2	Spatial Stop Rate, stops/mi	4.68			3.29		
2	Through vol/cap Ratio	0.32			0.41		
2	Percent of Base FFS	36.78			41.04		
2	Level of Service	E			D		
2	Auto Traveler Perception Score	3.16			2.66		

## Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	2.30	B	3.13	C
2	Bicycle Segment LOS Score / LOS	3.39	C	3.38	C
2	Transit Segment LOS Score / LOS	2.18	B	0.85	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		80.19		76.84	
Facility Travel Speed, mph		22.29		23.27	
Facility Base Free Flow Speed, mph		41.06		41.06	
Facility Percent of Base FFS		54.30		56.67	
Facility Level of Service		C		C	
Facility Auto Traveler Perception Score		2.53		2.45	

## Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		2.29	C	2.53	C
Bicycle Facility LOS Score / LOS		3.41	C	3.40	C
Transit Facility LOS Score / LOS		0.76	A	1.07	A