HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	196th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 68 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	8647	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.116	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.570	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	65	**Peak Dir. Hrly. Vol.**	572	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	431	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	79.3	**ATS**	38.9	**% FFS**	77.7
FFS Delay	10.3	**LOS Thresh. Delay**	10.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	330	670	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	220	580	1180	1710	2500
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	5000	10200	14800	21600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 69 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	1859	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.089	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.670	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	111	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	55	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	47.8	**ATS**	46.4	**% FFS**	92.8
FFS Delay	5.0	**LOS Thresh. Delay**	5.0	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	350	750	1100	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	230	530	1120	1650	2120
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	6000	12600	18600	23900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 69 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	1859	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.570	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	114	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	86	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	45.0	**ATS**	46.0	**% FFS**	92.0
FFS Delay	5.6	**LOS Thresh. Delay**	5.6	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	330	670	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	220	580	1180	1710	2500
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	5400	11000	15900	23200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 69 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	2225	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.089	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.621	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	123	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	75	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	48.2	**ATS**	46.1	**% FFS**	92.2
FFS Delay	5.4	**LOS Thresh. Delay**	5.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	340	710	1040	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	550	1150	1680	2290
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2400	6200	13000	18900	25800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 69 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	2225	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.110	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.555	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	136	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	109	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.10	**Density**	N/A	**PTSF**	47.9	**ATS**	45.2	**% FFS**	90.4
FFS Delay	6.9	**LOS Thresh. Delay**	6.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	330	660	940	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	600	1190	1700	2560
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	5500	10900	15500	23300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hague Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	James Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 70 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4602	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.085	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	215	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	176	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	59.6	**ATS**	32.4	**% FFS**	81.0
FFS Delay	10.5	**LOS Thresh. Delay**	19.5	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	430	690	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	790	1260	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3700	9300	14900	30500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hague Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	James Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 70 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4602	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.139	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	326	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	313	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	66.0	**ATS**	31.2	**% FFS**	77.9
FFS Delay	12.7	**LOS Thresh. Delay**	21.7	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	40	150	420	650	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	80	300	830	1280	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	2200	6000	9300	20100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hague Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	James Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 70 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4669	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.086	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.552	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	222	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	180	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	60.4	**ATS**	32.3	**% FFS**	80.9
FFS Delay	10.7	**LOS Thresh. Delay**	19.7	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	430	690	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	780	1260	2580
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3700	9100	14700	30100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hague Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	James Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 70 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4669	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.139	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.512	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	332	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	317	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.24	**Density**	N/A	**PTSF**	66.3	**ATS**	31.1	**% FFS**	77.8
FFS Delay	12.9	**LOS Thresh. Delay**	21.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	150	420	660	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	300	830	1290	2780
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	2200	6000	9300	20000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	James Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 19	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 71 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5381	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.075	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.520	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	81	**Peak Dir. Hrly. Vol.**	210	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	194	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	57.9	**ATS**	32.6	**% FFS**	81.6
FFS Delay	10.2	**LOS Thresh. Delay**	19.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	160	430	670	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	120	310	830	1290	2740
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4200	11100	17200	36600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	James Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 19	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 71 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5381	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.117	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	81	**Peak Dir. Hrly. Vol.**	321	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	308	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	65.0	**ATS**	31.4	**% FFS**	78.5
FFS Delay	12.3	**LOS Thresh. Delay**	21.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	160	430	660	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	120	320	850	1300	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	2800	7300	11200	23900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	James Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 19	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 71 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5987	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.075	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.501	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	81	**Peak Dir. Hrly. Vol.**	225	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	224	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	58.7	**ATS**	32.4	**% FFS**	81.1
FFS Delay	10.5	**LOS Thresh. Delay**	19.5	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	150	420	650	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	300	840	1300	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	4000	11200	17400	37900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	James Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 19	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 71 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5987	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.118	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.507	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	81	**Peak Dir. Hrly. Vol.**	358	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	348	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.25	**Density**	N/A	**PTSF**	67.0	**ATS**	31.0	**% FFS**	77.4
FFS Delay	13.1	**LOS Thresh. Delay**	22.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	160	420	660	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	320	830	1310	2810
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	2800	7100	11200	23900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 72 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2304	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.080	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.880	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	162	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	22	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	59.6	**ATS**	40.9	**% FFS**	90.8
FFS Delay	6.5	**LOS Thresh. Delay**	12.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	480	790	1070	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	550	900	1220	1620
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	6900	11300	15300	20300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 72 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2304	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.149	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.730	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	251	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	93	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	64.8	**ATS**	39.1	**% FFS**	87.0
FFS Delay	9.6	**LOS Thresh. Delay**	16.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	330	600	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	460	830	1330	1950
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3100	5600	9000	13100

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 72 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2336	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.080	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.882	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	165	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	22	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	59.8	**ATS**	40.8	**% FFS**	90.8
FFS Delay	6.5	**LOS Thresh. Delay**	12.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	480	790	1080	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	550	900	1230	1610
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	6900	11300	15400	20200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 72 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2336	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.149	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.727	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	253	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	95	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	64.9	**ATS**	39.1	**% FFS**	86.8
FFS Delay	9.7	**LOS Thresh. Delay**	16.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	330	600	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	460	830	1340	1960
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3100	5600	9000	13200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 73 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	2093	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.084	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	90	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	86	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	39.7	**ATS**	40.8	**% FFS**	90.8
FFS Delay	5.7	**LOS Thresh. Delay**	11.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	510	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	400	1000	1500	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4800	12000	17900	33300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	DA	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 73 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	2093	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.111	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.520	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	121	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	112	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	46.0	**ATS**	39.8	**% FFS**	88.5
FFS Delay	7.3	**LOS Thresh. Delay**	12.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	520	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	390	1000	1490	2740
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3600	9100	13500	24700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 73 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	2093	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.084	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.506	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	89	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	87	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	39.3	**ATS**	40.8	**% FFS**	90.7
FFS Delay	5.7	**LOS Thresh. Delay**	11.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	510	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	400	1010	1490	2810
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4800	12100	17800	33500

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 73 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	2093	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.111	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.517	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	120	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	112	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	45.7	**ATS**	39.8	**% FFS**	88.5
FFS Delay	7.3	**LOS Thresh. Delay**	12.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	520	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	390	1010	1490	2750
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3600	9100	13500	24800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 74 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.021	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.810	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	88	**Peak Dir. Hrly. Vol.**	17	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	4	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	40.8	**ATS**	47.4	**% FFS**	94.7
FFS Delay	3.2	**LOS Thresh. Delay**	3.2	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	460	750	1180	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	570	930	1460	1760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	8600	27200	44300	69600	83900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 74 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.054	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.740	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	88	**Peak Dir. Hrly. Vol.**	40	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	14	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	41.6	**ATS**	47.0	**% FFS**	94.1
FFS Delay	3.6	**LOS Thresh. Delay**	3.6	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	380	740	1140	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	520	1000	1550	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3400	9700	18600	28800	35600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 74 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.023	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.783	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	88	**Peak Dir. Hrly. Vol.**	18	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	5	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	40.1	**ATS**	47.3	**% FFS**	94.7
FFS Delay	3.2	**LOS Thresh. Delay**	3.2	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	430	740	1170	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	550	950	1500	1820
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	7900	24000	41400	65300	79200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	196th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 74 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.063	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.746	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	88	**Peak Dir. Hrly. Vol.**	47	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	16	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	42.8	**ATS**	47.0	**% FFS**	93.9
FFS Delay	3.7	**LOS Thresh. Delay**	3.7	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	390	740	1150	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	530	1000	1550	1910
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	8500	15900	24700	30400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Summer Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 89 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.011	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.640	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	12	**Peak Dir. Hrly. Vol.**	7	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	4	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	17.3	**ATS**	49.7	**% FFS**	99.4
FFS Delay	0.2	**LOS Thresh. Delay**	0.2	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	230	490	810	1110	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	360	770	1270	1740	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	32800	70000	115500	158200	201900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Summer Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 89 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.023	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.570	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	12	**Peak Dir. Hrly. Vol.**	13	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	10	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	16.5	**ATS**	49.6	**% FFS**	99.2
FFS Delay	0.3	**LOS Thresh. Delay**	0.3	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	190	440	730	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	780	1290	1760	2500
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	14800	34000	56100	76600	108700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Summer Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 89 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.021	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.810	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	12	**Peak Dir. Hrly. Vol.**	17	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	4	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	21.1	**ATS**	49.6	**% FFS**	99.2
FFS Delay	0.3	**LOS Thresh. Delay**	0.3	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	340	630	980	1350	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	780	1210	1670	1760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	20000	37200	57700	79600	83900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Summer Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 89 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.026	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.538	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	12	**Peak Dir. Hrly. Vol.**	14	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	12	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	15.4	**ATS**	49.6	**% FFS**	99.1
FFS Delay	0.3	**LOS Thresh. Delay**	0.3	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	420	690	940	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	790	1290	1750	2640
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	12400	30400	49700	67400	101600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 90 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3531	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.103	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	251	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	113	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	64.2	**ATS**	43.5	**% FFS**	87.0
FFS Delay	5.4	**LOS Thresh. Delay**	5.4	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	330	720	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	480	1050	1580	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	4700	10200	15400	20000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 90 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3531	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.133	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	258	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	211	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	63.9	**ATS**	42.0	**% FFS**	83.9
FFS Delay	6.9	**LOS Thresh. Delay**	6.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	280	630	910	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	510	1150	1660	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3900	8700	12500	19500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 90 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	8308	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.103	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.748	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	640	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	216	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.45	**Density**	N/A	**PTSF**	84.1	**ATS**	38.4	**% FFS**	76.8
FFS Delay	10.8	**LOS Thresh. Delay**	10.8	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	390	730	1140	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	530	980	1530	1900
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	5200	9600	14900	18500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 90 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	8308	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.133	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.594	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	656	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	449	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.46	**Density**	N/A	**PTSF**	83.7	**ATS**	37.6	**% FFS**	75.1
FFS Delay	11.9	**LOS Thresh. Delay**	11.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	660	980	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	490	1120	1650	2400
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3700	8500	12500	18100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Allisonville Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 91 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7095	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.066	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.820	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	384	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	84	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.27	**Density**	N/A	**PTSF**	74.1	**ATS**	38.2	**% FFS**	84.8
FFS Delay	7.2	**LOS Thresh. Delay**	11.2	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	420	660	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	520	810	1220	1740
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	7900	12300	18500	26400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Allisonville Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 91 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7095	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.094	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.640	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	427	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	240	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.30	**Density**	N/A	**PTSF**	73.2	**ATS**	35.4	**% FFS**	78.6
FFS Delay	10.9	**LOS Thresh. Delay**	14.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	260	580	910	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	410	910	1430	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4400	9700	15300	23700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Allisonville Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 91 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	13864	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.066	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.737	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	674	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	241	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.47	**Density**	N/A	**PTSF**	85.7	**ATS**	33.1	**% FFS**	73.5
FFS Delay	14.4	**LOS Thresh. Delay**	18.4	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	340	600	980	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	470	820	1330	1930
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	7200	12500	20200	29300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Allisonville Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 91 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	13864	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.122	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.592	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1001	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	690	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.70	**Density**	N/A	**PTSF**	91.1	**ATS**	28.1	**% FFS**	62.5
FFS Delay	24.0	**LOS Thresh. Delay**	28.0	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	220	560	860	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	380	950	1460	2400
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3200	7800	12000	19700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 92 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	14464	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.084	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.800	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	73	**Peak Dir. Hrly. Vol.**	972	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	243	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.68	**Density**	N/A	**PTSF**	85.5	**ATS**	40.5	**% FFS**	73.6
FFS Delay	22.3	**LOS Thresh. Delay**	16.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	180	510	890	1350	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	230	640	1120	1690	1780
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	7700	13400	20200	21200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 92 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	14464	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.118	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.670	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	73	**Peak Dir. Hrly. Vol.**	1144	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	563	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.80	**Density**	N/A	**PTSF**	93.0	**ATS**	37.6	**% FFS**	68.4
FFS Delay	28.7	**LOS Thresh. Delay**	22.5	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	400	830	1220	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	230	600	1240	1830	2120
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2000	5100	10600	15600	18000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 92 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	18746	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.092	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.844	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	1456	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	269	**Adjusted Capacity**	0

LOS Results

v/c Ratio	1.02	**Density**	N/A	**PTSF**	100.0	**ATS**	0.0	**% FFS**	0.0
FFS Delay	Infinity	**LOS Thresh. Delay**	Infinity	**Service Measure**	vcRatio	**LOS**	F		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	550	880	1360	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	660	1050	1620	1690
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2300	7200	11500	17700	18400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 92 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	18746	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.118	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.716	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	1584	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	628	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	1.11	**Density**	N/A	**PTSF**	100.0	**ATS**	0.0	**% FFS**	0.0
FFS Delay	Infinity	**LOS Thresh. Delay**	Infinity	**Service Measure**	vcRatio	**LOS**	F		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	400	840	1270	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	560	1180	1780	1990
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4800	10000	15100	16900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future Mitigated\AM\Fu 92 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	18746	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.092	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.844	**Base Capacity**	2100
Posted Speed	50	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	1456	**Local Adj. Factor**	0.88
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	269	**Adjusted Capacity**	1730

LOS Results

v/c Ratio	0.46	**Density**	17.5	**PTSF**	N/A	**ATS**	55.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	5.5	**Service Measure**	Density	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	830	1410	2000	2530	2800
3	1250	2120	3000	3790	4200
4	1660	2830	4000	5060	5600
Lanes	**Hourly Volume In Both Directions**				
2					
4	990	1680	2370	3000	3320
6	1490	2520	3560	4500	4980
8	1970	3360	4740	6000	6640
Lanes	**Annual Average Daily Traffic**				
2					
4	10800	18300	25800	32700	36100
6	16200	27400	38700	49000	54200
8	21500	36600	51600	65300	72200

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future Mitigated\PM\Fu 92 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	18746	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.118	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.716	**Base Capacity**	2100
Posted Speed	50	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	1584	**Local Adj. Factor**	0.88
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	628	**Adjusted Capacity**	1730

LOS Results

v/c Ratio	0.50	**Density**	19.0	**PTSF**	N/A	**ATS**	55.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	5.5	**Service Measure**	Density	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	830	1410	2000	2530	2800
3	1250	2120	3000	3790	4200
4	1660	2830	4000	5060	5600
Lanes	**Hourly Volume In Both Directions**				
2					
4	1160	1970	2800	3540	3920
6	1750	2970	4190	5300	5870
8	2320	3960	5590	7070	7830
Lanes	**Annual Average Daily Traffic**				
2					
4	9900	16700	23800	30000	33300
6	14900	25200	35600	45000	49800
8	19700	33600	47400	60000	66400

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 93a AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	13838	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.047	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.700	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	455	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	195	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.32	**Density**	N/A	**PTSF**	74.4	**ATS**	40.2	**% FFS**	80.3
FFS Delay	12.3	**LOS Thresh. Delay**	12.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	340	720	1100	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	490	1030	1580	2030
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3900	10500	22000	33700	43200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 93a PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	13838	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.105	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.630	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	915	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	538	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.64	**Density**	N/A	**PTSF**	90.2	**ATS**	34.8	**% FFS**	69.5
FFS Delay	22.1	**LOS Thresh. Delay**	22.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	290	680	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	470	1080	1620	2260
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	4500	10300	15500	21600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 93a AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	16790	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.067	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.744	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	837	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	288	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.59	**Density**	N/A	**PTSF**	92.4	**ATS**	36.5	**% FFS**	73.0
FFS Delay	18.6	**LOS Thresh. Delay**	18.6	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	380	730	1140	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	520	990	1540	1910
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	7800	14800	23000	28600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 93a PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	16790	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.105	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.629	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1109	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	654	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.78	**Density**	N/A	**PTSF**	92.7	**ATS**	32.3	**% FFS**	64.6
FFS Delay	27.6	**LOS Thresh. Delay**	27.6	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	290	680	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	470	1090	1630	2260
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	4500	10400	15600	21600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 93b AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	13838	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.057	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.700	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	552	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	237	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.17	**Density**	6.9	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	2.4	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1130	1930	2730	3490	4050
6	1700	2900	4100	5250	6080
8	2280	3880	5460	6990	8110
Lanes	**Annual Average Daily Traffic**				
2					
4	19900	33900	47900	61300	71100
6	29900	50900	72000	92200	106700
8	40000	68100	95800	122700	142300

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 93b PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	13838	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.105	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.630	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	915	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	538	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.29	**Density**	11.5	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	2.4	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1260	2150	3040	3880	4500
6	1890	3230	4560	5830	6750
8	2530	4310	6070	7770	9000
Lanes	**Annual Average Daily Traffic**				
2					
4	12000	20500	29000	37000	42900
6	18000	30800	43500	55600	64300
8	24100	41100	57900	74000	85800

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 93b AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	16790	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.067	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.744	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	837	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	288	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	10.5	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	2.4	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1070	1820	2570	3280	3810
6	1600	2730	3860	4940	5720
8	2140	3650	5140	6580	7630
Lanes	**Annual Average Daily Traffic**				
2					
4	16000	27200	38400	49000	56900
6	23900	40800	57700	73800	85400
8	32000	54500	76800	98300	113900

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	196th Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Lakeview Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 93b PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	16790	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.105	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.629	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	1109	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	654	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.35	**Density**	13.9	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	2.4	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1260	2150	3040	3880	4500
6	1900	3230	4570	5840	6760
8	2530	4310	6080	7780	9020
Lanes	**Annual Average Daily Traffic**				
2					
4	12000	20500	29000	37000	42900
6	18100	30800	43600	55700	64400
8	24100	41100	58000	74100	86000

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Moontown Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 94 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7010	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.087	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.710	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	433	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	177	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.31	**Density**	N/A	**PTSF**	70.2	**ATS**	46.4	**% FFS**	84.4
FFS Delay	11.5	**LOS Thresh. Delay**	5.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	210	480	890	1300	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	680	1260	1840	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3500	7900	14500	21200	23000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Moontown Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 94 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7010	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.111	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	506	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	272	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.36	**Density**	N/A	**PTSF**	74.7	**ATS**	45.3	**% FFS**	82.4
FFS Delay	13.3	**LOS Thresh. Delay**	7.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	180	460	850	1210	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	710	1310	1870	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	6400	11900	16900	19800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Moontown Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 94 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	9517	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.087	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.687	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	569	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	259	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	77.5	**ATS**	44.8	**% FFS**	81.4
FFS Delay	14.2	**LOS Thresh. Delay**	8.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	190	470	880	1270	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	690	1290	1850	2070
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	8000	14900	21300	23800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Moontown Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 94 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	9517	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.119	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.619	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	701	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	431	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.49	**Density**	N/A	**PTSF**	83.1	**ATS**	42.8	**% FFS**	77.8
FFS Delay	17.7	**LOS Thresh. Delay**	11.5	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	160	440	820	1160	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	720	1330	1880	2300
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	6100	11200	15800	19400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/13/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 95 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	Yes	**AADT**	9463	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.086	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.770	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	627	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	187	**Adjusted Capacity**	0

LOS Results

v/c Ratio	0.20	**Density**	7.9	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	18.0	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1030	1760	2490	3170	3680
6	1550	2640	3730	4770	5520
8	2070	3520	4970	6360	7370
Lanes	**Annual Average Daily Traffic**				
2					
4	12000	20500	29000	36900	42800
6	18100	30700	43400	55500	64200
8	24100	41000	57800	74000	85700

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/13/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 95 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	Yes	**AADT**	9463	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.137	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.570	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	739	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	557	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	9.3	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	18.0	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1390	2370	3360	4290	4970
6	2090	3570	5040	6440	7460
8	2790	4760	6710	8580	9950
Lanes	**Annual Average Daily Traffic**				
2					
4	10200	17300	24600	31400	36300
6	15300	26100	36800	47100	54500
8	20400	34800	49000	62700	72700

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/13/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 95 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	Yes	**AADT**	12756	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.086	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.710	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	779	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	318	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.24	**Density**	9.8	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	18.0	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1120	1910	2700	3440	3990
6	1680	2860	4050	5170	5990
8	2240	3820	5390	6890	7990
Lanes	**Annual Average Daily Traffic**				
2					
4	13100	22300	31400	40000	46400
6	19600	33300	47100	60200	69700
8	26100	44500	62700	80200	93000

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/13/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 95 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	Yes	**AADT**	12756	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.138	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.561	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	988	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	773	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.31	**Density**	12.4	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	18.0	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1410	2410	3410	4350	5050
6	2130	3620	5120	6550	7580
8	2840	4840	6810	8720	10110
Lanes	**Annual Average Daily Traffic**				
2					
4	10300	17500	24800	31600	36600
6	15500	26300	37200	47500	55000
8	20600	35100	49400	63200	73300

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 96 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	1241	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.053	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.760	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	72	**Peak Dir. Hrly. Vol.**	50	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	16	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	43.3	**ATS**	42.4	**% FFS**	94.2
FFS Delay	7.9	**LOS Thresh. Delay**	20.7	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	380	650	1030	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	500	860	1360	1870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3600	9500	16300	25700	35300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 96 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	1241	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.140	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.620	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	72	**Peak Dir. Hrly. Vol.**	108	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	66	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	46.5	**ATS**	41.3	**% FFS**	91.9
FFS Delay	11.3	**LOS Thresh. Delay**	24.1	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	260	600	910	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	420	970	1470	2300
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3000	7000	10500	16500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 96 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	2150	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.069	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.517	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	72	**Peak Dir. Hrly. Vol.**	77	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	72	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	37.0	**ATS**	41.6	**% FFS**	92.4
FFS Delay	10.5	**LOS Thresh. Delay**	23.3	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	240	540	780	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	470	1050	1510	2750
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	6900	15300	21900	39900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 96 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	2150	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.140	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.618	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	72	**Peak Dir. Hrly. Vol.**	186	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	115	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.13	**Density**	N/A	**PTSF**	56.3	**ATS**	39.5	**% FFS**	87.9
FFS Delay	17.7	**LOS Thresh. Delay**	30.5	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	260	600	910	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	430	980	1480	2300
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3100	7000	10600	16500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 97 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	13935	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.061	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.700	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	595	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	255	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	7.5	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	3.6	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1130	1930	2730	3490	4050
6	1700	2900	4100	5250	6080
8	2280	3880	5460	6990	8110
Lanes	**Annual Average Daily Traffic**				
2					
4	18600	31700	44800	57300	66400
6	27900	47600	67300	86100	99700
8	37400	63700	89600	114600	133000

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 97 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	13935	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.099	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	842	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	538	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	10.6	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	3.6	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1300	2220	3140	4000	4640
6	1960	3330	4710	6020	6970
8	2610	4450	6270	8020	9300
Lanes	**Annual Average Daily Traffic**				
2					
4	13200	22500	31800	40500	46900
6	19800	33700	47600	60900	70500
8	26400	45000	63400	81100	94000

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 97 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	16990	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.070	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.736	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	875	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	314	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.27	**Density**	11.0	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	3.6	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1080	1840	2600	3320	3850
6	1620	2760	3900	4990	5780
8	2170	3690	5200	6650	7710
Lanes	**Annual Average Daily Traffic**				
2					
4	15500	26300	37200	47500	55000
6	23200	39500	55800	71300	82600
8	31000	52800	74300	95000	110200

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 97 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	16990	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.099	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.611	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	1028	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	654	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.32	**Density**	12.9	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	3.6	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1300	2210	3130	4000	4640
6	1950	3330	4700	6010	6960
8	2610	4440	6260	8010	9280
Lanes	**Annual Average Daily Traffic**				
2					
4	13200	22400	31700	40500	46900
6	19700	33700	47500	60800	70400
8	26400	44900	63300	81000	93800

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 98 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5949	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.125	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.780	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	580	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	164	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.41	**Density**	N/A	**PTSF**	79.7	**ATS**	29.1	**% FFS**	72.7
FFS Delay	16.9	**LOS Thresh. Delay**	25.9	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	330	520	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	430	670	1060	1830
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	3500	5400	8500	14700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 98 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5949	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.163	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	669	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	301	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.47	**Density**	N/A	**PTSF**	84.1	**ATS**	28.0	**% FFS**	70.1
FFS Delay	19.2	**LOS Thresh. Delay**	28.2	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	690	1160	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	2400	4300	7200	12700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 98 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5975	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.125	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.785	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	586	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	161	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.41	**Density**	N/A	**PTSF**	80.0	**ATS**	29.1	**% FFS**	72.8
FFS Delay	16.8	**LOS Thresh. Delay**	25.8	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	330	530	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	430	680	1050	1810
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	3500	5500	8400	14500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 98 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5975	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.163	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.692	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	674	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	300	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.47	**Density**	N/A	**PTSF**	84.3	**ATS**	28.0	**% FFS**	69.9
FFS Delay	19.3	**LOS Thresh. Delay**	28.3	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	680	1160	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	2400	4200	7200	12700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 99 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	3935	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.082	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.570	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	184	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	139	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.13	**Density**	N/A	**PTSF**	56.9	**ATS**	33.4	**% FFS**	83.6
FFS Delay	10.6	**LOS Thresh. Delay**	21.4	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	180	440	710	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	320	780	1250	2500
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	4000	9600	15300	30500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 99 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	3935	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.088	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	190	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	156	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	57.4	**ATS**	32.9	**% FFS**	82.3
FFS Delay	11.6	**LOS Thresh. Delay**	22.4	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	430	690	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	790	1260	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3600	9000	14400	29500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 99 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	3935	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.082	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.575	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	186	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	137	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.13	**Density**	N/A	**PTSF**	57.2	**ATS**	33.5	**% FFS**	83.7
FFS Delay	10.5	**LOS Thresh. Delay**	21.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	190	450	720	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	790	1260	2470
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	4200	9700	15400	30200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 99 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	3935	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.088	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.552	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	191	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	155	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	57.6	**ATS**	32.9	**% FFS**	82.3
FFS Delay	11.6	**LOS Thresh. Delay**	22.4	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	430	690	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	780	1260	2580
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3600	8900	14400	29400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 100 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	8521	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.105	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	492	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	403	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.35	**Density**	N/A	**PTSF**	76.6	**ATS**	39.3	**% FFS**	78.6
FFS Delay	5.9	**LOS Thresh. Delay**	5.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	280	630	910	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	510	1150	1660	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4900	11000	15900	24700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 100 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	8521	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.103	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	448	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	430	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.32	**Density**	N/A	**PTSF**	73.5	**ATS**	39.6	**% FFS**	79.2
FFS Delay	5.7	**LOS Thresh. Delay**	5.7	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	280	590	850	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	160	550	1160	1670	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5400	11300	16300	27100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 100 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	12819	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.105	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.585	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	787	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	559	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.55	**Density**	N/A	**PTSF**	87.2	**ATS**	35.8	**% FFS**	71.6
FFS Delay	8.6	**LOS Thresh. Delay**	8.6	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	650	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	500	1120	1660	2430
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	4800	10700	15900	23200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 100 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	12819	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.148	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.528	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1002	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	895	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.70	**Density**	N/A	**PTSF**	91.1	**ATS**	31.4	**% FFS**	62.7
FFS Delay	12.8	**LOS Thresh. Delay**	12.8	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	280	610	880	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	540	1160	1670	2690
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3700	7900	11300	18200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 101 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7666	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.086	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.800	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	527	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	132	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.37	**Density**	N/A	**PTSF**	76.6	**ATS**	40.4	**% FFS**	80.9
FFS Delay	16.2	**LOS Thresh. Delay**	16.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	450	740	1170	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	570	930	1470	1780
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	6700	10900	17100	20700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 101 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7666	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.104	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	486	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	311	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.34	**Density**	N/A	**PTSF**	76.6	**ATS**	39.7	**% FFS**	79.4
FFS Delay	17.7	**LOS Thresh. Delay**	17.7	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	670	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	480	1100	1640	2330
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4700	10600	15800	22500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 101 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	8221	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.086	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.796	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	563	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	144	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	78.6	**ATS**	39.8	**% FFS**	79.6
FFS Delay	17.6	**LOS Thresh. Delay**	17.6	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	440	740	1170	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	560	930	1470	1790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	6600	10900	17100	20900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 101 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	8221	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.605	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	537	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	351	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.38	**Density**	N/A	**PTSF**	79.2	**ATS**	39.1	**% FFS**	78.2
FFS Delay	19.0	**LOS Thresh. Delay**	19.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	660	990	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	480	1100	1640	2350
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4500	10200	15200	21800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 102 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3409	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	66	**Peak Dir. Hrly. Vol.**	254	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	114	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	63.1	**ATS**	53.5	**% FFS**	89.1
FFS Delay	3.7	**LOS Thresh. Delay**	0.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	480	960	1390	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	250	700	1400	2020	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2400	6500	13000	18800	19100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 102 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3409	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.112	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.580	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	66	**Peak Dir. Hrly. Vol.**	221	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	160	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	59.0	**ATS**	52.7	**% FFS**	87.8
FFS Delay	4.2	**LOS Thresh. Delay**	0.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	460	850	1190	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	230	800	1470	2060	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	7200	13200	18400	21900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 102 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4852	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.714	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	67	**Peak Dir. Hrly. Vol.**	374	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	150	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	71.3	**ATS**	51.5	**% FFS**	85.8
FFS Delay	5.0	**LOS Thresh. Delay**	0.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	180	490	970	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	690	1360	1990	1990
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	6400	12600	18500	18500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 102 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4852	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.113	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.605	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	67	**Peak Dir. Hrly. Vol.**	332	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	217	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.24	**Density**	N/A	**PTSF**	68.6	**ATS**	51.4	**% FFS**	85.7
FFS Delay	5.0	**LOS Thresh. Delay**	0.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	470	880	1240	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	240	780	1460	2050	2350
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	7000	13000	18200	20800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 103 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	3350	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.092	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.620	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	191	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	117	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	53.6	**ATS**	45.2	**% FFS**	90.4
FFS Delay	2.3	**LOS Thresh. Delay**	2.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	160	400	740	1060	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	650	1200	1710	2300
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	7100	13100	18600	25000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 103 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	3350	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.099	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.640	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	212	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	119	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	56.2	**ATS**	45.0	**% FFS**	89.9
FFS Delay	2.4	**LOS Thresh. Delay**	2.4	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	400	750	1080	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	270	630	1180	1690	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	6400	12000	17100	22500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 103 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4111	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.097	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.651	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	260	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	139	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	60.6	**ATS**	44.0	**% FFS**	88.0
FFS Delay	2.9	**LOS Thresh. Delay**	2.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	180	410	760	1100	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	630	1170	1690	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	6500	12100	17500	22600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	191st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 103 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4111	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.099	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.644	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	262	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	145	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	60.7	**ATS**	43.8	**% FFS**	87.7
FFS Delay	3.0	**LOS Thresh. Delay**	3.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	410	760	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	270	640	1190	1700	2210
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	6500	12100	17200	22400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mallery Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 115 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.022	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	22	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	0	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	7.9	**ATS**	49.6	**% FFS**	99.2
FFS Delay	0.6	**LOS Thresh. Delay**	0.6	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	420	870	1320	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	880	1320	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	19100	40000	60000	64600	64600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mallery Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 115 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	10	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	0	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	6.2	**ATS**	49.7	**% FFS**	99.4
FFS Delay	0.4	**LOS Thresh. Delay**	0.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	420	870	1320	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	880	1320	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	42000	88000	132000	142000	142000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Mallery Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 115 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.102	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.873	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	89	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	13	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	17.4	**ATS**	48.8	**% FFS**	97.7
FFS Delay	1.7	**LOS Thresh. Delay**	1.7	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	370	730	1070	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	430	840	1230	1630	1630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4300	8300	12100	16000	16000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Mallery Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 115 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.128	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.656	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	84	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	44	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	18.5	**ATS**	48.6	**% FFS**	97.2
FFS Delay	2.1	**LOS Thresh. Delay**	2.1	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	240	500	820	1140	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	370	770	1260	1740	2170
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	6100	9900	13600	17000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 116 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5761	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.081	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.640	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	299	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	168	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	68.1	**ATS**	41.6	**% FFS**	83.3
FFS Delay	7.2	**LOS Thresh. Delay**	7.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	290	690	1030	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	460	1080	1610	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2300	5700	13400	19900	27500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 116 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5761	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.117	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.530	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	357	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	317	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.25	**Density**	N/A	**PTSF**	68.1	**ATS**	40.9	**% FFS**	81.8
FFS Delay	8.0	**LOS Thresh. Delay**	8.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	280	610	880	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	530	1160	1670	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4600	10000	14300	23000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 116 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	13513	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.085	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.718	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	825	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	324	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.58	**Density**	N/A	**PTSF**	89.6	**ATS**	36.6	**% FFS**	73.1
FFS Delay	13.2	**LOS Thresh. Delay**	13.2	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	360	720	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	510	1010	1560	1980
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2000	6000	11900	18400	23300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 116 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	13513	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.117	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.582	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	920	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	661	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.65	**Density**	N/A	**PTSF**	89.8	**ATS**	34.0	**% FFS**	68.0
FFS Delay	16.9	**LOS Thresh. Delay**	16.9	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	650	960	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	500	1120	1650	2440
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4300	9600	14200	20900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 117 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	1111	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.063	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	36	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	34	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	32.4	**ATS**	41.9	**% FFS**	93.2
FFS Delay	5.6	**LOS Thresh. Delay**	13.2	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	510	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	400	1000	1500	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2300	6400	15900	23900	44300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 117 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	1111	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.123	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	74	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	63	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	39.0	**ATS**	41.3	**% FFS**	91.8
FFS Delay	6.8	**LOS Thresh. Delay**	14.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	530	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	130	380	990	1490	2630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	3100	8100	12200	21400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 117 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4122	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.071	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.522	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	153	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	140	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	51.9	**ATS**	38.7	**% FFS**	86.0
FFS Delay	12.4	**LOS Thresh. Delay**	20.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	520	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	390	1000	1480	2730
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2000	5500	14100	20900	38500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Promise Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 37	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 117 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4122	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.123	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.606	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	307	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	200	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.22	**Density**	N/A	**PTSF**	69.4	**ATS**	36.5	**% FFS**	81.2
FFS Delay	17.6	**LOS Thresh. Delay**	25.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	230	560	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	380	930	1440	2350
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3100	7600	11800	19200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 118 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	6646	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.076	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.730	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	369	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	136	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	73.4	**ATS**	31.8	**% FFS**	79.5
FFS Delay	6.9	**LOS Thresh. Delay**	12.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	290	470	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	400	650	1110	1950
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	5300	8600	14700	25700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 118 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	6646	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.120	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	518	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	279	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.37	**Density**	N/A	**PTSF**	78.3	**ATS**	29.5	**% FFS**	73.6
FFS Delay	9.7	**LOS Thresh. Delay**	15.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	230	460	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	710	1190	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3000	6000	10000	18300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 118 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	10217	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.084	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.551	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	473	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	385	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.33	**Density**	N/A	**PTSF**	75.7	**ATS**	29.6	**% FFS**	74.0
FFS Delay	9.5	**LOS Thresh. Delay**	14.9	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	430	690	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	790	1260	2580
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3700	9500	15000	30800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	186th Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 118 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	10217	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.120	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.733	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	899	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	327	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.63	**Density**	N/A	**PTSF**	92.6	**ATS**	25.9	**% FFS**	64.7
FFS Delay	14.7	**LOS Thresh. Delay**	20.1	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	290	470	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	400	650	1110	1940
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3400	5500	9300	16200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 119 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4689	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.055	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	178	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	80	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.13	**Density**	N/A	**PTSF**	56.9	**ATS**	35.2	**% FFS**	87.9
FFS Delay	6.2	**LOS Thresh. Delay**	15.2	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	690	1160	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	7000	12600	21100	37500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 119 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4689	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.129	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.710	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	429	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	175	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.30	**Density**	N/A	**PTSF**	73.8	**ATS**	30.4	**% FFS**	76.1
FFS Delay	14.1	**LOS Thresh. Delay**	23.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	270	470	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	390	670	1150	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	3100	5200	9000	15600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 119 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4689	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.055	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.691	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	178	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	80	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.13	**Density**	N/A	**PTSF**	56.9	**ATS**	35.2	**% FFS**	87.9
FFS Delay	6.2	**LOS Thresh. Delay**	15.2	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	690	1160	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	7000	12600	21100	37500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	191st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 119 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4689	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.129	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.710	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	429	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	175	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.30	**Density**	N/A	**PTSF**	73.8	**ATS**	30.4	**% FFS**	76.1
FFS Delay	14.1	**LOS Thresh. Delay**	23.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	270	470	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	390	670	1150	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	3100	5200	9000	15600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 120 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	9038	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.052	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.700	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	329	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	141	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	70.6	**ATS**	32.0	**% FFS**	80.1
FFS Delay	11.2	**LOS Thresh. Delay**	20.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	680	1150	2030
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	7400	13100	22200	39100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 120 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	9038	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.115	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.520	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	540	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	499	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.38	**Density**	N/A	**PTSF**	77.2	**ATS**	28.5	**% FFS**	71.3
FFS Delay	18.1	**LOS Thresh. Delay**	27.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	160	420	660	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	810	1270	2740
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	2700	7100	11100	23900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 120 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	12809	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.064	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.811	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	665	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	155	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.47	**Density**	N/A	**PTSF**	84.1	**ATS**	28.5	**% FFS**	71.4
FFS Delay	18.1	**LOS Thresh. Delay**	27.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	360	570	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	450	710	1030	1760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	7100	11100	16100	27600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 120 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	12809	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.115	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.597	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	879	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	594	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.62	**Density**	N/A	**PTSF**	89.5	**ATS**	24.9	**% FFS**	62.2
FFS Delay	27.4	**LOS Thresh. Delay**	36.4	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	760	1240	2380
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	3000	6700	10800	20700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 121 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	9132	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.051	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.700	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	326	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	140	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	70.4	**ATS**	32.1	**% FFS**	80.3
FFS Delay	6.6	**LOS Thresh. Delay**	12.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	680	1150	2030
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	7500	13400	22600	39900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 121 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	9132	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.116	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	540	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	519	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.38	**Density**	N/A	**PTSF**	77.0	**ATS**	28.4	**% FFS**	71.1
FFS Delay	11.0	**LOS Thresh. Delay**	16.4	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	40	150	420	650	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	80	300	830	1280	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	2600	7200	11100	24100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 121 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	12862	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.064	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.807	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	664	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	159	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.47	**Density**	N/A	**PTSF**	84.4	**ATS**	28.4	**% FFS**	71.1
FFS Delay	11.0	**LOS Thresh. Delay**	16.4	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	350	560	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	440	700	1030	1760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	6900	11000	16100	27600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 121 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	12862	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.116	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.607	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	906	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	586	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.64	**Density**	N/A	**PTSF**	90.1	**ATS**	24.7	**% FFS**	61.7
FFS Delay	16.8	**LOS Thresh. Delay**	22.2	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	750	1220	2340
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	2900	6500	10600	20200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cicero Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 122 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	16225	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.062	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	614	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	392	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.41	**Density**	N/A	**PTSF**	81.5	**ATS**	28.6	**% FFS**	71.5
FFS Delay	14.4	**LOS Thresh. Delay**	21.6	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	220	470	780	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	370	780	1280	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	6000	12600	20700	39600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cicero Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 122 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	16225	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.119	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	985	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	946	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.66	**Density**	N/A	**PTSF**	89.8	**ATS**	21.9	**% FFS**	54.7
FFS Delay	29.8	**LOS Thresh. Delay**	37.0	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	160	440	690	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	320	870	1360	2930
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	2700	7400	11500	24700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cicero Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 122 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	19924	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.069	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.694	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	954	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	421	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.64	**Density**	N/A	**PTSF**	90.5	**ATS**	25.5	**% FFS**	63.8
FFS Delay	20.5	**LOS Thresh. Delay**	27.7	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	270	490	840	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	110	390	710	1220	2150
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5700	10300	17700	31200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Field Drive	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cicero Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 122 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	19924	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.119	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.581	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1378	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	993	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.92	**Density**	N/A	**PTSF**	94.9	**ATS**	18.0	**% FFS**	45.1
FFS Delay	43.8	**LOS Thresh. Delay**	51.0	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	470	760	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	350	810	1310	2570
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	3000	6900	11100	21600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 123 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	No	**AADT**	3823	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.077	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.780	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	230	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	65	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	63.3	**ATS**	44.9	**% FFS**	89.9
FFS Delay	12.1	**LOS Thresh. Delay**	12.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	440	760	1190	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	570	980	1530	1830
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	7500	12800	19900	23800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 123 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	No	**AADT**	3823	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.118	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	244	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	208	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.17	**Density**	N/A	**PTSF**	61.2	**ATS**	42.3	**% FFS**	84.7
FFS Delay	19.6	**LOS Thresh. Delay**	19.6	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	300	630	910	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	560	1170	1690	2630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4800	10000	14400	22300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 123 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	No	**AADT**	5966	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.079	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.781	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	368	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	103	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	72.6	**ATS**	42.9	**% FFS**	85.9
FFS Delay	17.8	**LOS Thresh. Delay**	17.8	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	440	760	1190	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	570	980	1530	1820
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	7300	12500	19400	23100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Moontown Road	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	191st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 123 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.500	**Median**	No	**AADT**	5966	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.118	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.565	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	398	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	306	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.28	**Density**	N/A	**PTSF**	70.2	**ATS**	40.7	**% FFS**	81.5
FFS Delay	24.6	**LOS Thresh. Delay**	24.6	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	300	660	950	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	540	1170	1690	2520
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4600	10000	14400	21400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 124 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	Yes	**AADT**	7730	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.062	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.590	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	283	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	196	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	3.5	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	9.6	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1340	2290	3240	4140	4800
6	2020	3450	4870	6230	7210
8	2700	4600	6480	8290	9620
Lanes	**Annual Average Daily Traffic**				
2					
4	21700	37000	52300	66800	77500
6	32600	55700	78600	100500	116300
8	43600	74200	104600	133800	155200

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 124 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	Yes	**AADT**	7730	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.098	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.660	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	499	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	257	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	6.3	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	9.6	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1200	2050	2900	3700	4290
6	1810	3080	4350	5570	6440
8	2410	4110	5790	7410	8600
Lanes	**Annual Average Daily Traffic**				
2					
4	12300	21000	29700	37900	43900
6	18600	31500	44500	57000	65900
8	24700	42100	59300	75800	88000

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 124 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	Yes	**AADT**	16173	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.089	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.732	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	1054	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	386	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.33	**Density**	13.2	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	9.6	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1080	1850	2610	3340	3870
6	1630	2780	3930	5020	5810
8	2180	3710	5220	6690	7750
Lanes	**Annual Average Daily Traffic**				
2					
4	12200	20800	29400	37600	43500
6	18400	31300	44200	56500	65300
8	24500	41700	58700	75200	87100

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 124 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	Yes	**AADT**	16173	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.098	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.563	**Base Capacity**	2000
Posted Speed	45	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	892	**Local Adj. Factor**	0.88
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	693	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.28	**Density**	11.2	**PTSF**	N/A	**ATS**	50.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	9.6	**Service Measure**	Density	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	790	1350	1910	2440	2830
3	1190	2030	2870	3670	4250
4	1590	2710	3820	4890	5670
Lanes	**Hourly Volume In Both Directions**				
2					
4	1410	2400	3400	4340	5030
6	2120	3610	5100	6520	7550
8	2830	4820	6790	8690	10080
Lanes	**Annual Average Daily Traffic**				
2					
4	14400	24500	34700	44300	51400
6	21700	36900	52100	66600	77100
8	28900	49200	69300	88700	102900

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	River Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 125 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	5033	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.074	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.580	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	216	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	156	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	59.3	**ATS**	33.0	**% FFS**	82.4
FFS Delay	5.8	**LOS Thresh. Delay**	11.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	470	760	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	350	820	1320	2570
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	4800	11100	17900	34800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	River Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 125 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	5033	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.670	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	364	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	179	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.25	**Density**	N/A	**PTSF**	71.4	**ATS**	31.2	**% FFS**	78.0
FFS Delay	7.6	**LOS Thresh. Delay**	13.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	490	820	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	390	740	1230	2230
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3700	6900	11400	20700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	River Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 125 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	5033	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.074	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.575	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	214	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	158	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	59.0	**ATS**	32.9	**% FFS**	82.4
FFS Delay	5.8	**LOS Thresh. Delay**	11.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	470	750	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	350	820	1310	2600
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	4800	11100	17800	35200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	River Avenue	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 125 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	Yes	**AADT**	5033	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.666	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	362	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	182	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.24	**Density**	N/A	**PTSF**	71.3	**ATS**	31.2	**% FFS**	78.0
FFS Delay	7.6	**LOS Thresh. Delay**	13.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	250	490	820	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	380	740	1240	2240
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3600	6900	11500	20800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	N Lakeview Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 126 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	4080	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.111	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	312	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	140	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.22	**Density**	N/A	**PTSF**	69.3	**ATS**	32.2	**% FFS**	80.6
FFS Delay	17.4	**LOS Thresh. Delay**	31.8	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	690	1160	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3500	6300	10500	18600

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	N Lakeview Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 126 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	4080	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.170	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.530	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	368	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	326	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	68.8	**ATS**	30.8	**% FFS**	76.9
FFS Delay	21.6	**LOS Thresh. Delay**	36.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	160	420	670	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	800	1270	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	1900	4800	7500	15800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	N Lakeview Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 126 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	4080	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.111	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.688	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	312	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	141	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.22	**Density**	N/A	**PTSF**	69.3	**ATS**	32.2	**% FFS**	80.5
FFS Delay	17.4	**LOS Thresh. Delay**	31.8	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	260	470	790	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	380	690	1150	2070
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3500	6300	10400	18700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	N Lakeview Drive	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Lakeview Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 126 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	4080	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.200	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.598	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	488	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	328	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.34	**Density**	N/A	**PTSF**	76.6	**ATS**	29.7	**% FFS**	74.2
FFS Delay	25.1	**LOS Thresh. Delay**	39.5	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	760	1240	2380
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	500	1800	3800	6200	12000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 127 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4895	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.107	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.830	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	435	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	89	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.31	**Density**	N/A	**PTSF**	75.8	**ATS**	32.6	**% FFS**	81.4
FFS Delay	10.3	**LOS Thresh. Delay**	19.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	370	600	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	450	730	1000	1720
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	4300	6900	9400	16100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 127 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4895	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.164	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.740	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	594	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	209	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.42	**Density**	N/A	**PTSF**	81.5	**ATS**	28.9	**% FFS**	72.1
FFS Delay	17.4	**LOS Thresh. Delay**	26.4	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	300	470	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	410	640	1100	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	2600	4000	6800	11800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 127 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4895	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.107	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.826	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	433	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	91	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.31	**Density**	N/A	**PTSF**	75.8	**ATS**	32.5	**% FFS**	81.3
FFS Delay	10.4	**LOS Thresh. Delay**	19.4	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	370	590	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	450	720	1010	1720
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	4300	6800	9500	16100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 127 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4895	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.164	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.744	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	597	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	206	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.42	**Density**	N/A	**PTSF**	81.7	**ATS**	28.8	**% FFS**	72.1
FFS Delay	17.4	**LOS Thresh. Delay**	26.4	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	300	470	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	410	640	1110	1910
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	2600	4000	6800	11700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Monument Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 128 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2325	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.076	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.760	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	134	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	42	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.10	**Density**	N/A	**PTSF**	54.5	**ATS**	35.9	**% FFS**	89.8
FFS Delay	5.1	**LOS Thresh. Delay**	14.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	310	500	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	410	660	1080	1870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	5400	8700	14300	24700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Monument Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 128 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2325	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.095	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.630	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	139	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	82	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.10	**Density**	N/A	**PTSF**	51.6	**ATS**	35.5	**% FFS**	88.7
FFS Delay	5.7	**LOS Thresh. Delay**	14.7	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	220	460	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	350	740	1210	2260
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	3700	7800	12800	23800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Monument Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 128 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2329	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.076	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.763	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	135	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	42	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.10	**Density**	N/A	**PTSF**	54.6	**ATS**	35.9	**% FFS**	89.8
FFS Delay	5.1	**LOS Thresh. Delay**	14.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	310	500	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	410	660	1080	1870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	5400	8700	14300	24700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Monument Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 128 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2329	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.095	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.631	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	140	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	82	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.10	**Density**	N/A	**PTSF**	51.7	**ATS**	35.5	**% FFS**	88.7
FFS Delay	5.7	**LOS Thresh. Delay**	14.7	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	220	460	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	350	730	1210	2260
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	3700	7700	12800	23800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 129 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7921	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.068	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	291	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	248	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	65.8	**ATS**	31.6	**% FFS**	79.0
FFS Delay	12.0	**LOS Thresh. Delay**	21.0	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	430	680	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	320	800	1260	2630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4800	11800	18600	38700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 129 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7921	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.094	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	454	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	290	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.32	**Density**	N/A	**PTSF**	75.0	**ATS**	30.0	**% FFS**	75.1
FFS Delay	14.9	**LOS Thresh. Delay**	23.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	210	450	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	350	740	1230	2330
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3800	7900	13100	24800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 129 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7921	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.068	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.536	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	289	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	250	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	65.5	**ATS**	31.6	**% FFS**	79.0
FFS Delay	11.9	**LOS Thresh. Delay**	20.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	430	680	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	320	810	1270	2650
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4800	12000	18700	39000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Field Drive	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 129 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7921	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.094	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.608	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	453	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	292	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.32	**Density**	N/A	**PTSF**	74.9	**ATS**	30.0	**% FFS**	75.1
FFS Delay	14.9	**LOS Thresh. Delay**	23.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	750	1220	2340
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3600	8000	13000	24900

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	181st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 130 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	6730	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.075	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.630	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	318	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	187	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	70.1	**ATS**	41.4	**% FFS**	82.9
FFS Delay	7.4	**LOS Thresh. Delay**	7.4	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	290	680	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	470	1080	1620	2260
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2400	6300	14400	21600	30200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	181st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 130 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	6730	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.114	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.520	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	399	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	368	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.28	**Density**	N/A	**PTSF**	70.9	**ATS**	40.3	**% FFS**	80.6
FFS Delay	8.7	**LOS Thresh. Delay**	8.7	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	280	600	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	160	540	1160	1680	2740
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4800	10200	14800	24100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	181st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 130 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	16921	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.081	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.720	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	987	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	384	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.69	**Density**	N/A	**PTSF**	93.1	**ATS**	34.8	**% FFS**	69.6
FFS Delay	15.7	**LOS Thresh. Delay**	15.7	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	360	720	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	500	1000	1560	1980
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	6200	12400	19300	24500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	181st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	186th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 130 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	16921	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.114	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.575	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1109	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	820	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.78	**Density**	N/A	**PTSF**	92.9	**ATS**	31.0	**% FFS**	62.0
FFS Delay	22.1	**LOS Thresh. Delay**	22.1	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	280	640	950	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	490	1120	1660	2470
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4300	9900	14600	21700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Deshane Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 144 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	10	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	0	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	6.2	**ATS**	49.7	**% FFS**	99.4
FFS Delay	0.5	**LOS Thresh. Delay**	0.5	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	420	870	1320	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	880	1320	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	42000	88000	132000	142000	142000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Deshane Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 144 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.014	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.790	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	11	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	3	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	8.8	**ATS**	49.7	**% FFS**	99.3
FFS Delay	0.5	**LOS Thresh. Delay**	0.5	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	320	600	960	1330	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	410	760	1220	1690	1800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	29300	54300	87200	120800	128600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Deshane Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 144 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	10	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	0	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	6.2	**ATS**	49.7	**% FFS**	99.4
FFS Delay	0.5	**LOS Thresh. Delay**	0.5	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	420	870	1320	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	880	1320	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	42000	88000	132000	142000	142000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Deshane Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mallery Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 144 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.018	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.778	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	14	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	4	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	9.2	**ATS**	49.6	**% FFS**	99.3
FFS Delay	0.6	**LOS Thresh. Delay**	0.6	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	310	590	950	1310	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	400	760	1230	1690	1830
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	22300	42300	68400	93900	101700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 145 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.022	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	22	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	0	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	7.9	**ATS**	49.6	**% FFS**	99.2
FFS Delay	0.3	**LOS Thresh. Delay**	0.3	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	420	870	1320	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	880	1320	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	19100	40000	60000	64600	64600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 145 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.018	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.830	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	15	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	3	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	8.6	**ATS**	49.6	**% FFS**	99.3
FFS Delay	0.3	**LOS Thresh. Delay**	0.3	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	350	660	1010	1380	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	430	800	1220	1670	1720
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	23900	44500	67800	92800	95600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 145 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1313	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.080	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.867	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	91	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	14	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	17.8	**ATS**	48.8	**% FFS**	97.6
FFS Delay	0.9	**LOS Thresh. Delay**	0.9	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	360	720	1050	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	840	1220	1640	1640
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5300	10600	15300	20600	20600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	181st Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Mallery Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Promise Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 145 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1313	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.117	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.699	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	107	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	46	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	21.5	**ATS**	48.3	**% FFS**	96.7
FFS Delay	1.2	**LOS Thresh. Delay**	1.2	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	260	530	860	1210	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	380	760	1240	1740	2040
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	6500	10600	14900	17500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Monument Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 146 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3569	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.113	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.640	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	258	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	145	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	64.6	**ATS**	32.6	**% FFS**	81.5
FFS Delay	10.2	**LOS Thresh. Delay**	19.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	220	460	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	350	720	1190	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3100	6400	10600	19700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Monument Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 146 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3569	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.094	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	201	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	134	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	59.0	**ATS**	33.4	**% FFS**	83.6
FFS Delay	8.8	**LOS Thresh. Delay**	17.8	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	760	1240	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3700	8100	13200	25300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Monument Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 146 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3569	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.113	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.642	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	259	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	144	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	64.8	**ATS**	32.6	**% FFS**	81.5
FFS Delay	10.2	**LOS Thresh. Delay**	19.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	230	460	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	720	1200	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3200	6400	10700	19700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Monument Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Cumberland Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 146 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3569	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.094	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.601	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	202	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	134	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	59.1	**ATS**	33.4	**% FFS**	83.6
FFS Delay	8.9	**LOS Thresh. Delay**	17.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	750	1240	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3700	8000	13200	25300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 147 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	15676	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.083	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.760	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	989	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	312	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.69	**Density**	N/A	**PTSF**	96.1	**ATS**	35.1	**% FFS**	70.1
FFS Delay	24.5	**LOS Thresh. Delay**	24.5	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	400	730	1150	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	530	970	1520	1870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	6400	11700	18400	22600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 147 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	15676	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.100	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.680	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1066	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	502	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.75	**Density**	N/A	**PTSF**	92.4	**ATS**	33.6	**% FFS**	67.1
FFS Delay	28.2	**LOS Thresh. Delay**	28.2	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	320	710	1080	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	480	1050	1590	2090
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	4800	10600	16000	21000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 147 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	16480	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.088	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.775	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1124	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	326	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.79	**Density**	N/A	**PTSF**	96.9	**ATS**	33.8	**% FFS**	67.6
FFS Delay	27.6	**LOS Thresh. Delay**	27.6	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	420	740	1160	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	550	960	1500	1840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2000	6300	11000	17100	21000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Field Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 147 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	16480	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.100	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.686	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1131	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	517	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.79	**Density**	N/A	**PTSF**	93.3	**ATS**	32.9	**% FFS**	65.7
FFS Delay	30.0	**LOS Thresh. Delay**	30.0	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	330	720	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	490	1050	1590	2070
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	5000	10600	16000	20800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 148 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	7222	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.064	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.580	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	268	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	194	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	65.4	**ATS**	31.9	**% FFS**	79.7
FFS Delay	6.9	**LOS Thresh. Delay**	12.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	190	450	720	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	780	1250	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	5200	12200	19600	38300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 148 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	7222	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.117	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	515	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	330	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.36	**Density**	N/A	**PTSF**	78.0	**ATS**	29.4	**% FFS**	73.5
FFS Delay	9.7	**LOS Thresh. Delay**	15.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	210	450	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	350	740	1230	2330
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	3000	6400	10600	20000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 148 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	7222	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.064	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.576	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	266	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	196	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	65.1	**ATS**	31.9	**% FFS**	79.8
FFS Delay	6.8	**LOS Thresh. Delay**	12.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	190	450	720	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	790	1250	2470
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	5200	12400	19600	38600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	10th Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 148 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	7222	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.117	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.607	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	513	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	332	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.36	**Density**	N/A	**PTSF**	77.9	**ATS**	29.4	**% FFS**	73.6
FFS Delay	9.7	**LOS Thresh. Delay**	15.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	750	1220	2340
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	2900	6500	10500	20000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 149 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	2465	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.063	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	101	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	54	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	47.2	**ATS**	36.1	**% FFS**	90.3
FFS Delay	2.9	**LOS Thresh. Delay**	8.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	230	460	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	710	1190	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5800	11300	18900	34800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 149 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	2465	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.140	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	211	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	135	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	60.1	**ATS**	33.3	**% FFS**	83.3
FFS Delay	5.4	**LOS Thresh. Delay**	10.8	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	210	450	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	350	740	1230	2330
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	2500	5300	8800	16700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 149 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	2465	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.063	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.654	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	102	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	54	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	47.3	**ATS**	36.1	**% FFS**	90.3
FFS Delay	2.9	**LOS Thresh. Delay**	8.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	230	460	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	710	1180	2180
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5800	11300	18800	34700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Logan Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 149 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	2465	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.140	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	211	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	135	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	60.1	**ATS**	33.3	**% FFS**	83.3
FFS Delay	5.4	**LOS Thresh. Delay**	10.8	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	210	450	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	350	740	1230	2330
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	2500	5300	8800	16700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Conner Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 150 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	10814	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.064	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	381	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	311	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	69.0	**ATS**	30.9	**% FFS**	77.1
FFS Delay	10.7	**LOS Thresh. Delay**	17.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	180	460	730	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	330	840	1330	2710
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5200	13200	20800	42400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Conner Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 150 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	10814	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.089	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.620	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	597	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	366	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	80.6	**ATS**	28.8	**% FFS**	72.1
FFS Delay	13.9	**LOS Thresh. Delay**	21.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	220	480	790	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	780	1280	2410
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	4100	8800	14400	27100

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Conner Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 150 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	10814	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.064	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.555	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	384	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	308	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	69.3	**ATS**	30.8	**% FFS**	77.1
FFS Delay	10.7	**LOS Thresh. Delay**	17.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	180	460	730	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	330	830	1320	2690
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5200	13000	20700	42100

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cumberland Road	**Study Period**	**Kother**
Date Prepared	12/1/2023 10:58:32 AM	**From**	Monument Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Conner Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 150 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	10814	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.089	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.619	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	596	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	367	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	80.6	**ATS**	28.9	**% FFS**	72.1
FFS Delay	13.9	**LOS Thresh. Delay**	21.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	220	480	790	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	780	1280	2410
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	4100	8800	14400	27100

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 151 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	6480	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.078	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	329	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	177	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	70.7	**ATS**	41.4	**% FFS**	82.7
FFS Delay	7.5	**LOS Thresh. Delay**	7.5	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	300	690	1050	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	470	1070	1620	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	6100	13800	20800	28100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 151 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	6480	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.114	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	399	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	340	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.28	**Density**	N/A	**PTSF**	70.9	**ATS**	40.4	**% FFS**	80.9
FFS Delay	8.5	**LOS Thresh. Delay**	8.5	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	280	620	900	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	520	1150	1670	2630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4600	10100	14700	23100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 151 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	18965	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.081	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.731	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1123	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	413	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.79	**Density**	N/A	**PTSF**	94.8	**ATS**	33.4	**% FFS**	66.8
FFS Delay	17.9	**LOS Thresh. Delay**	17.9	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	370	730	1130	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	510	1000	1550	1950
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	6300	12400	19200	24100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Promise Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	181st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 151 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	18965	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.114	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.588	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1271	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	891	**Adjusted Capacity**	0

LOS Results

v/c Ratio	0.89	**Density**	N/A	**PTSF**	94.8	**ATS**	28.9	**% FFS**	57.8
FFS Delay	26.3	**LOS Thresh. Delay**	26.3	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	650	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	500	1110	1650	2420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4400	9800	14500	21300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Presley Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Union Chapel Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 162 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	Yes	**AADT**	6625	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.061	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.570	**Base Capacity**	1900
Posted Speed	40	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	230	**Local Adj. Factor**	0.88
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	174	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	3.2	**PTSF**	N/A	**ATS**	45.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	22.0	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	710	1220	1720	2220	2710
3	1070	1830	2580	3330	4060
4	1430	2440	3440	4450	5420
Lanes	**Hourly Volume In Both Directions**				
2					
4	1250	2150	3020	3900	4760
6	1880	3220	4530	5850	7130
8	2510	4290	6040	7810	9510
Lanes	**Annual Average Daily Traffic**				
2					

4	20500	35300	49600	64000	78100
6	30900	52800	74300	96000	116900
8	41200	70400	99100	128100	156000

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Presley Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Union Chapel Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 162 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	Yes	**AADT**	6625	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.130	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.620	**Base Capacity**	1900
Posted Speed	40	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	534	**Local Adj. Factor**	0.88
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	327	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	7.4	**PTSF**	N/A	**ATS**	45.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	22.0	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	710	1220	1720	2220	2710
3	1070	1830	2580	3330	4060
4	1430	2440	3440	4450	5420
Lanes	**Hourly Volume In Both Directions**				
2					
4	1150	1970	2780	3590	4380
6	1730	2960	4170	5380	6550
8	2310	3940	5550	7180	8750
Lanes	**Annual Average Daily Traffic**				
2					

4	8900	15200	21400	27700	33700
6	13400	22800	32100	41400	50400
8	17800	30400	42700	55300	67400

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Presley Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Union Chapel Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 162 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	Yes	**AADT**	7361	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.061	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.588	**Base Capacity**	1900
Posted Speed	40	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	264	**Local Adj. Factor**	0.88
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	185	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	3.7	**PTSF**	N/A	**ATS**	45.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	22.0	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	710	1220	1720	2220	2710
3	1070	1830	2580	3330	4060
4	1430	2440	3440	4450	5420
Lanes	**Hourly Volume In Both Directions**				
2					
4	1210	2080	2930	3780	4610
6	1820	3120	4390	5670	6910
8	2440	4150	5860	7570	9220
Lanes	**Annual Average Daily Traffic**				
2					

4	19900	34100	48100	62000	75600
6	29900	51200	72000	93000	113300
8	40000	68100	96100	124100	151200

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Presley Drive	**Analysis Type**	Multilane Segment
Agency	A & F Engineering LLC	**To**	Union Chapel Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 162 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	Yes	**AADT**	7361	**PHF**	0.920
# Thru Lanes	4	**Left Turn Impact**	No	**K**	0.133	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.636	**Base Capacity**	1900
Posted Speed	40	**% NPZ**	N/A	**Peak Dir. Hrly. Vol.**	623	**Local Adj. Factor**	0.88
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	356	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	8.7	**PTSF**	N/A	**ATS**	45.0	**% FFS**	100.0
FFS Delay	0.0	**LOS Thresh. Delay**	22.0	**Service Measure**	Density	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1850 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1					
2	710	1220	1720	2220	2710
3	1070	1830	2580	3330	4060
4	1430	2440	3440	4450	5420
Lanes	**Hourly Volume In Both Directions**				
2					
4	1120	1920	2710	3500	4270
6	1690	2880	4060	5240	6390
8	2250	3840	5410	7000	8530
Lanes	**Annual Average Daily Traffic**				
2					

4	8500	14500	20400	26400	32200
6	12800	21700	30600	39400	48100
8	17000	28900	40700	52700	64200

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Presley Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 163 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	Yes	**AADT**	1560	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.200	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	168	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	144	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	53.1	**ATS**	33.7	**% FFS**	84.3
FFS Delay	10.0	**LOS Thresh. Delay**	20.8	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	180	450	720	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	340	840	1340	2760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	1800	4200	6800	13800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Presley Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 163 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	Yes	**AADT**	1560	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.200	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.910	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	284	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	28	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	67.2	**ATS**	34.8	**% FFS**	87.0
FFS Delay	8.0	**LOS Thresh. Delay**	18.8	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	430	780	1080	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	480	860	1190	1640
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	2400	4400	6000	8200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Presley Drive	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 163 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	Yes	**AADT**	1591	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.200	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.547	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	174	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	144	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	54.1	**ATS**	33.7	**% FFS**	84.2
FFS Delay	10.1	**LOS Thresh. Delay**	20.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	180	450	720	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	330	830	1320	2730
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	1700	4200	6600	13700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Presley Drive	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 163 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	Yes	**AADT**	1591	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.200	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.904	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	288	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	31	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	67.0	**ATS**	34.7	**% FFS**	86.9
FFS Delay	8.2	**LOS Thresh. Delay**	19.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	430	770	1060	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	480	860	1180	1650
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	600	2400	4400	6000	8300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	19th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Clover Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 164 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	10153	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.053	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	274	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	264	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	62.6	**ATS**	31.9	**% FFS**	79.7
FFS Delay	4.6	**LOS Thresh. Delay**	8.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	160	440	690	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	320	870	1360	2930
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	6100	16500	25700	55300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	19th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Clover Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 164 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	10153	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.096	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.590	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	575	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	400	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.39	**Density**	N/A	**PTSF**	79.8	**ATS**	28.9	**% FFS**	72.3
FFS Delay	6.9	**LOS Thresh. Delay**	10.5	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	200	470	770	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	110	340	800	1310	2530
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3600	8400	13700	26400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	19th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Clover Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 164 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	10646	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.054	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.513	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	295	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	280	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.20	**Density**	N/A	**PTSF**	64.0	**ATS**	31.7	**% FFS**	79.2
FFS Delay	4.7	**LOS Thresh. Delay**	8.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	160	440	690	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	320	860	1350	2910
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	6000	16000	25000	53900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	19th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Clover Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 164 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	Yes	**AADT**	10646	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.096	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.590	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	603	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	419	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	81.0	**ATS**	28.6	**% FFS**	71.5
FFS Delay	7.2	**LOS Thresh. Delay**	10.8	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	200	470	770	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	110	340	800	1310	2530
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3600	8400	13700	26400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	19th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 165 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.090	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	46	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	44	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	11.4	**ATS**	39.0	**% FFS**	97.6
FFS Delay	0.7	**LOS Thresh. Delay**	6.1	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	310	520	710	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	610	1020	1400	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3200	6800	11400	15600	31000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	19th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 165 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.151	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	82	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	69	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	16.8	**ATS**	38.5	**% FFS**	96.2
FFS Delay	1.1	**LOS Thresh. Delay**	6.5	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	330	550	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	620	1020	1390	2630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	4200	6800	9300	17500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	19th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 165 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.090	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.511	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	46	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	44	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	11.4	**ATS**	39.0	**% FFS**	97.6
FFS Delay	0.7	**LOS Thresh. Delay**	6.1	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	310	520	710	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	610	1020	1390	2780
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3200	6800	11400	15500	30900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	19th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 165 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.151	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.543	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	82	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	69	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	16.8	**ATS**	38.5	**% FFS**	96.2
FFS Delay	1.1	**LOS Thresh. Delay**	6.5	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	330	550	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	610	1020	1400	2620
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	4100	6800	9300	17400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 166 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.057	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.700	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	40	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	17	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	12.8	**ATS**	39.4	**% FFS**	98.4
FFS Delay	0.6	**LOS Thresh. Delay**	7.8	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	220	430	680	950	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	620	980	1360	2030
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5700	10900	17200	23900	35700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 166 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.095	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.590	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	56	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	39	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	14.4	**ATS**	39.0	**% FFS**	97.5
FFS Delay	0.9	**LOS Thresh. Delay**	8.1	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	360	590	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	290	620	1000	1390	2410
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3100	6600	10600	14700	25400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 166 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.057	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.702	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	40	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	17	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	12.8	**ATS**	39.4	**% FFS**	98.4
FFS Delay	0.6	**LOS Thresh. Delay**	7.8	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	230	430	680	950	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	620	970	1360	2030
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5800	10900	17100	23900	35700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cherry Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	10th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	16th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 166 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.095	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.589	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	56	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	39	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	14.4	**ATS**	39.0	**% FFS**	97.5
FFS Delay	0.9	**LOS Thresh. Delay**	8.1	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	360	590	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	290	620	1010	1400	2420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3100	6600	10700	14800	25500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 167 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	10174	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.044	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	291	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	157	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	67.4	**ATS**	31.9	**% FFS**	79.9
FFS Delay	9.1	**LOS Thresh. Delay**	16.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	230	460	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	710	1190	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2300	8200	16200	27100	49800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 167 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	10174	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.090	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	549	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	366	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.39	**Density**	N/A	**PTSF**	79.9	**ATS**	29.0	**% FFS**	72.4
FFS Delay	13.7	**LOS Thresh. Delay**	20.9	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	760	1240	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3800	8500	13800	26400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 167 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	10733	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.045	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.603	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	291	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	192	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	68.0	**ATS**	31.7	**% FFS**	79.2
FFS Delay	9.5	**LOS Thresh. Delay**	16.7	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	750	1230	2360
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2000	7600	16700	27400	52500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	16th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 167 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	10733	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.090	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.602	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	582	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	384	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.41	**Density**	N/A	**PTSF**	81.4	**ATS**	28.6	**% FFS**	71.5
FFS Delay	14.4	**LOS Thresh. Delay**	21.6	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	750	1230	2360
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3800	8400	13700	26300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	8th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 168a AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.100	**Median**	No	**AADT**	5693	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.044	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	150	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	100	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	52.6	**ATS**	34.9	**% FFS**	87.2
FFS Delay	1.3	**LOS Thresh. Delay**	3.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	760	1240	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	7800	17300	28200	53900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	8th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 168a PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.100	**Median**	No	**AADT**	5693	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.087	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	253	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	243	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	62.1	**ATS**	32.0	**% FFS**	79.9
FFS Delay	2.3	**LOS Thresh. Delay**	4.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	40	150	420	650	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	80	300	830	1280	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3500	9600	14800	32100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	8th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 168a AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.100	**Median**	No	**AADT**	18310	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.071	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.584	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	759	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	541	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.53	**Density**	N/A	**PTSF**	86.3	**ATS**	26.3	**% FFS**	65.7
FFS Delay	4.7	**LOS Thresh. Delay**	6.5	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	190	450	720	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	780	1240	2440
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	4700	11000	17500	34400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	8th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	10th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 168a PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.100	**Median**	No	**AADT**	18310	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.097	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.565	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1003	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	773	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.70	**Density**	N/A	**PTSF**	91.1	**ATS**	22.4	**% FFS**	56.0
FFS Delay	7.1	**LOS Thresh. Delay**	8.9	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	180	440	710	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	320	780	1260	2520
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3300	8100	13000	26000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	2nd Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	8th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 168b AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	5693	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.044	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	150	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	100	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	27.3	**ATS**	37.4	**% FFS**	93.4
FFS Delay	1.9	**LOS Thresh. Delay**	7.3	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	180	370	590	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	620	990	1390	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	6900	14100	22500	31600	53900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	2nd Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	8th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 168b PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	5693	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.087	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.510	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	253	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	243	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	41.1	**ATS**	34.4	**% FFS**	86.1
FFS Delay	4.4	**LOS Thresh. Delay**	9.8	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	140	310	520	710	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	610	1020	1400	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	7100	11800	16100	32100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	2nd Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	8th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 168b AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	18310	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.071	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.584	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	759	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	541	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.53	**Density**	N/A	**PTSF**	78.3	**ATS**	27.6	**% FFS**	68.9
FFS Delay	12.2	**LOS Thresh. Delay**	17.6	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	360	580	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	620	1000	1390	2440
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4300	8800	14100	19600	34400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Pleasant Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	2nd Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	8th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 168b PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	18310	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.087	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.565	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	900	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	693	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.63	**Density**	N/A	**PTSF**	83.7	**ATS**	24.9	**% FFS**	62.3
FFS Delay	16.3	**LOS Thresh. Delay**	21.7	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	160	340	570	790	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	290	610	1010	1400	2520
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3400	7100	11700	16100	29000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cherry Tree Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 169 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2576	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.035	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.700	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	63	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	27	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	43.3	**ATS**	41.7	**% FFS**	92.8
FFS Delay	5.0	**LOS Thresh. Delay**	11.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	300	590	950	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	130	430	850	1360	2030
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3800	12300	24300	38900	58000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Cherry Tree Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 169 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2576	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.109	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	154	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	126	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	52.3	**ATS**	39.1	**% FFS**	86.9
FFS Delay	9.7	**LOS Thresh. Delay**	16.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	200	540	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	130	370	990	1480	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3400	9100	13600	23800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Cherry Tree Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 169 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	3239	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.038	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.623	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	77	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	46	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	43.6	**ATS**	41.4	**% FFS**	92.1
FFS Delay	5.5	**LOS Thresh. Delay**	11.9	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	240	570	890	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	130	390	920	1430	2280
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3500	10300	24300	37700	60000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Cherry Tree Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 169 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	3239	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.109	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.581	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	205	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	148	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	59.2	**ATS**	38.0	**% FFS**	84.4
FFS Delay	11.8	**LOS Thresh. Delay**	18.2	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	220	550	850	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	380	950	1470	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3500	8800	13500	22500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Willowview Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	171st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 170 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1473	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.042	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.710	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	44	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	18	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	41.1	**ATS**	46.9	**% FFS**	93.8
FFS Delay	2.4	**LOS Thresh. Delay**	2.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	350	720	1110	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	500	1020	1570	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4100	12000	24300	37400	47700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Willowview Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	171st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 170 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1473	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.070	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.560	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	58	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	45	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	38.2	**ATS**	46.5	**% FFS**	93.0
FFS Delay	2.7	**LOS Thresh. Delay**	2.7	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	280	630	930	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	500	1130	1670	2540
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	7200	16200	23900	36300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Willowview Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	171st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 170 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1905	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.042	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.763	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	61	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	19	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	45.5	**ATS**	46.7	**% FFS**	93.5
FFS Delay	2.5	**LOS Thresh. Delay**	2.5	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	400	730	1150	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	530	960	1510	1870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4300	12700	22900	36000	44600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Willowview Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	171st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 32	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 170 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1905	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.073	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.514	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	71	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	68	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	37.0	**ATS**	46.2	**% FFS**	92.4
FFS Delay	3.0	**LOS Thresh. Delay**	3.0	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	280	590	860	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	160	550	1150	1680	2770
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	7600	15800	23100	38000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 171 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1415	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.059	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.720	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	18	**Peak Dir. Hrly. Vol.**	60	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	23	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	28.0	**ATS**	49.0	**% FFS**	98.0
FFS Delay	0.7	**LOS Thresh. Delay**	0.7	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	270	550	880	1240	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	380	770	1230	1730	1980
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	6500	13100	20900	29400	33600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 171 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1415	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.079	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.590	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	18	**Peak Dir. Hrly. Vol.**	66	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	46	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	26.7	**ATS**	48.7	**% FFS**	97.5
FFS Delay	0.9	**LOS Thresh. Delay**	0.9	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	200	450	750	1030	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	770	1280	1750	2410
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4400	9800	16300	22200	30600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 171 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5119	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.059	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.675	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	18	**Peak Dir. Hrly. Vol.**	204	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	98	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	46.0	**ATS**	46.8	**% FFS**	93.5
FFS Delay	2.5	**LOS Thresh. Delay**	2.5	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	250	520	840	1170	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	380	780	1250	1740	2110
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	6500	13300	21200	29500	35800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Mill Creek Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	SR 32	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	171st Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 171 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5119	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.080	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.588	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	18	**Peak Dir. Hrly. Vol.**	241	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	169	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.17	**Density**	N/A	**PTSF**	50.6	**ATS**	45.0	**% FFS**	89.9
FFS Delay	4.0	**LOS Thresh. Delay**	4.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	200	450	750	1030	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	350	770	1280	1760	2420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4400	9700	16000	22000	30300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Gray Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 173 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3158	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.065	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.590	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	121	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	84	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	48.3	**ATS**	45.5	**% FFS**	91.0
FFS Delay	6.7	**LOS Thresh. Delay**	6.7	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	650	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	500	1110	1650	2410
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	7700	17100	25400	37100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Gray Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 173 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3158	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.120	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.530	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	201	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	178	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	58.1	**ATS**	42.5	**% FFS**	85.1
FFS Delay	12.0	**LOS Thresh. Delay**	12.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	280	610	880	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	530	1160	1670	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4500	9700	14000	22400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Gray Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 173 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4600	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.066	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.616	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	187	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	117	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.13	**Density**	N/A	**PTSF**	57.4	**ATS**	44.0	**% FFS**	88.0
FFS Delay	9.3	**LOS Thresh. Delay**	9.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	670	1010	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	480	1090	1640	2310
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	7300	16600	24900	35000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Gray Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 173 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4600	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.135	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	311	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	311	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.22	**Density**	N/A	**PTSF**	64.9	**ATS**	41.3	**% FFS**	82.6
FFS Delay	14.4	**LOS Thresh. Delay**	14.4	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	80	270	580	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	160	540	1160	1660	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	4000	8600	12300	21100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Semoinole Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 174 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1441	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.076	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	71	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	38	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	42.7	**ATS**	46.7	**% FFS**	93.4
FFS Delay	2.6	**LOS Thresh. Delay**	2.6	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	320	710	1060	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	500	1100	1640	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	6600	14500	21600	28900

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Semoinole Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 174 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1441	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.530	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	82	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	73	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	38.4	**ATS**	46.2	**% FFS**	92.5
FFS Delay	2.9	**LOS Thresh. Delay**	2.9	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	90	300	630	900	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	570	1190	1700	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5300	11100	15800	24900

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Semoinole Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 174 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1908	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.076	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	100	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	45	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	47.3	**ATS**	46.3	**% FFS**	92.7
FFS Delay	2.8	**LOS Thresh. Delay**	2.8	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	340	740	1110	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	500	1080	1610	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	6600	14300	21200	27200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	169th Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Hazel Dell Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Semoinole Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 174 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1908	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.111	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.588	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	75	**Peak Dir. Hrly. Vol.**	125	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	87	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	47.9	**ATS**	45.6	**% FFS**	91.2
FFS Delay	3.5	**LOS Thresh. Delay**	3.5	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	110	310	670	980	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	530	1140	1670	2420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	4800	10300	15100	21900

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Seminole Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Willowview Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 175 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1578	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.091	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.680	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	98	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	46	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	47.1	**ATS**	36.4	**% FFS**	91.0
FFS Delay	4.5	**LOS Thresh. Delay**	13.5	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	70	260	480	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	110	390	710	1180	2090
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	4300	7900	13000	23000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Seminole Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Willowview Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 175 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1578	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.124	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.530	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	104	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	92	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	42.6	**ATS**	35.7	**% FFS**	89.2
FFS Delay	5.4	**LOS Thresh. Delay**	14.4	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	170	430	680	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	120	330	820	1290	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	2700	6700	10500	21700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Seminole Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Willowview Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 175 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2110	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.091	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.604	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	116	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	76	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	47.6	**ATS**	35.9	**% FFS**	89.8
FFS Delay	5.1	**LOS Thresh. Delay**	14.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	210	470	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	350	780	1250	2360
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	3900	8600	13800	26000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Seminole Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Willowview Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 175 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2110	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.140	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.554	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	164	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	132	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	53.2	**ATS**	34.0	**% FFS**	85.0
FFS Delay	8.0	**LOS Thresh. Delay**	17.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	180	450	700	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	110	330	820	1270	2570
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	2400	5900	9100	18400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Willowview Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cherry Tree Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 176 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1570	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.075	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.670	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	79	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	39	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	44.8	**ATS**	36.5	**% FFS**	91.2
FFS Delay	4.3	**LOS Thresh. Delay**	13.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	240	460	780	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	360	690	1170	2120
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	4800	9200	15600	28300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Willowview Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cherry Tree Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 176 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1570	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.141	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.580	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	128	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	93	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	48.9	**ATS**	35.3	**% FFS**	88.2
FFS Delay	6.0	**LOS Thresh. Delay**	15.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	190	450	720	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	780	1250	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	2400	5600	8900	17400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Willowview Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cherry Tree Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 176 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1973	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.075	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.649	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	96	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	52	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	46.5	**ATS**	36.2	**% FFS**	90.5
FFS Delay	4.7	**LOS Thresh. Delay**	13.7	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	230	460	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	710	1190	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	4800	9500	15900	29200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	171st Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Willowview Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cherry Tree Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 176 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1973	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.145	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.613	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	175	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	111	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	55.9	**ATS**	34.3	**% FFS**	85.8
FFS Delay	7.4	**LOS Thresh. Delay**	16.4	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	210	450	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	350	740	1230	2320
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	700	2500	5200	8500	16100

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Pleasant Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Christian Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 177 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	9908	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.063	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.660	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	412	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	212	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.29	**Density**	N/A	**PTSF**	73.3	**ATS**	30.5	**% FFS**	76.3
FFS Delay	8.4	**LOS Thresh. Delay**	13.8	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	240	460	780	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	370	700	1190	2160
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5900	11200	18900	34300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Pleasant Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Christian Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 177 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	9908	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.102	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.640	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	647	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	364	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.46	**Density**	N/A	**PTSF**	83.7	**ATS**	28.1	**% FFS**	70.1
FFS Delay	11.5	**LOS Thresh. Delay**	16.9	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	220	460	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	350	720	1190	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3500	7100	11700	21800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Pleasant Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Christian Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 177 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	20137	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.082	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.501	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	827	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	824	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.58	**Density**	N/A	**PTSF**	86.9	**ATS**	23.6	**% FFS**	59.0
FFS Delay	18.8	**LOS Thresh. Delay**	24.2	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	40	150	410	640	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	80	300	820	1280	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3700	10100	15700	34700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Allisonville Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Pleasant Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Christian Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 177 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	20137	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.102	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.624	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1282	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	772	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.90	**Density**	N/A	**PTSF**	93.9	**ATS**	19.8	**% FFS**	49.6
FFS Delay	27.5	**LOS Thresh. Delay**	32.9	**Service Measure**	PctFFS	**LOS**	E		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	60	210	450	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	340	730	1210	2280
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3400	7200	11900	22400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Greenfield Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 178 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1322	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.059	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.580	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	45	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	33	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	37.3	**ATS**	36.9	**% FFS**	92.1
FFS Delay	4.6	**LOS Thresh. Delay**	15.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	190	450	720	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	780	1250	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5600	13300	21200	41600

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Greenfield Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 178 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1322	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.083	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	66	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	44	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	41.5	**ATS**	36.6	**% FFS**	91.4
FFS Delay	5.1	**LOS Thresh. Delay**	15.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	760	1240	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	4100	9200	15000	28600

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Greenfield Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 178 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1322	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.059	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.577	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	45	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	33	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	37.3	**ATS**	36.9	**% FFS**	92.1
FFS Delay	4.6	**LOS Thresh. Delay**	15.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	190	450	720	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	330	780	1250	2470
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	5600	13300	21200	41900

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	16th Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Greenfield Avenue	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 178 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1322	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.083	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	66	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	44	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	41.5	**ATS**	36.6	**% FFS**	91.4
FFS Delay	5.1	**LOS Thresh. Delay**	15.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	200	450	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	90	340	760	1240	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	4100	9200	15000	28600

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mercantile Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Town and Country Blvd	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 179 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	8790	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.055	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	261	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	222	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	62.8	**ATS**	32.0	**% FFS**	80.1
FFS Delay	8.9	**LOS Thresh. Delay**	16.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	180	450	720	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	340	840	1340	2760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	6200	15300	24400	50200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Mercantile Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Town and Country Blvd	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 179 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	8790	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.520	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	494	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	456	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.33	**Density**	N/A	**PTSF**	74.9	**ATS**	29.4	**% FFS**	73.6
FFS Delay	12.9	**LOS Thresh. Delay**	20.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	440	700	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	330	850	1350	2870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3100	7900	12500	26600

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Mercantile Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Town and Country Blvd	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 179 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	9120	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.056	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.520	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	266	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	245	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	62.6	**ATS**	32.0	**% FFS**	79.9
FFS Delay	9.0	**LOS Thresh. Delay**	16.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	170	440	700	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	330	850	1350	2870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	5900	15200	24200	51300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Mercantile Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Town and Country Blvd	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Pleasant Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 179 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	Yes	**AADT**	9120	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.108	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.518	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	510	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	475	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.34	**Density**	N/A	**PTSF**	75.4	**ATS**	29.2	**% FFS**	73.0
FFS Delay	13.3	**LOS Thresh. Delay**	20.5	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	50	160	440	690	1490
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	310	850	1340	2880
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	2900	7900	12500	26700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 185 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.032	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.530	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	46	**Peak Dir. Hrly. Vol.**	17	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	15	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	26.4	**ATS**	48.6	**% FFS**	97.3
FFS Delay	1.0	**LOS Thresh. Delay**	1.0	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	370	660	920	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	250	700	1250	1740	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	7900	21900	39100	54400	83800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 185 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.061	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.870	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	46	**Peak Dir. Hrly. Vol.**	53	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	8	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	40.3	**ATS**	48.4	**% FFS**	96.7
FFS Delay	1.2	**LOS Thresh. Delay**	1.2	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	280	650	970	1350	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	750	1120	1560	1640
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5500	12300	18400	25600	26900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 185 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1333	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.060	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.800	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	46	**Peak Dir. Hrly. Vol.**	64	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	16	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	41.2	**ATS**	48.2	**% FFS**	96.4
FFS Delay	1.4	**LOS Thresh. Delay**	1.4	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	260	540	880	1270	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	680	1100	1590	1780
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5600	11400	18400	26600	29700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 185 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1333	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.200	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.961	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	46	**Peak Dir. Hrly. Vol.**	256	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	10	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	62.6	**ATS**	46.4	**% FFS**	92.9
FFS Delay	2.8	**LOS Thresh. Delay**	2.8	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	310	750	1180	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	790	1230	1480	1480
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4000	6200	7400	7400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Olio Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	166th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 186 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	No	**AADT**	4038	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.085	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.610	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	35	**Peak Dir. Hrly. Vol.**	209	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	134	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	51.7	**ATS**	54.6	**% FFS**	90.9
FFS Delay	1.2	**LOS Thresh. Delay**	0.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	190	530	910	1270	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	870	1500	2090	2330
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3800	10300	17700	24600	27500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Olio Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	166th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Northbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 186 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	No	**AADT**	4038	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.102	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	35	**Peak Dir. Hrly. Vol.**	222	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	189	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	53.5	**ATS**	53.6	**% FFS**	89.3
FFS Delay	1.4	**LOS Thresh. Delay**	0.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	490	820	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	910	1520	2080	2630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	9000	15000	20400	25800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Olio Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	166th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 186 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	No	**AADT**	11824	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.085	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.629	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	35	**Peak Dir. Hrly. Vol.**	632	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	373	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.45	**Density**	N/A	**PTSF**	78.9	**ATS**	48.9	**% FFS**	81.6
FFS Delay	2.7	**LOS Thresh. Delay**	0.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	200	540	940	1300	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	860	1500	2070	2260
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3800	10200	17700	24400	26600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Olio Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	SR 38	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	166th Street	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 186 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.200	**Median**	No	**AADT**	11824	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.109	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.573	**Base Capacity**	1700
Posted Speed	55	**% NPZ**	35	**Peak Dir. Hrly. Vol.**	738	**Local Adj. Factor**	0.91
Free Flow Speed	60	**Class**	3	**Off Peak Dir. Hrly. Vol.**	550	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.52	**Density**	N/A	**PTSF**	82.6	**ATS**	46.9	**% FFS**	78.2
FFS Delay	3.3	**LOS Thresh. Delay**	0.9	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	510	870	1190	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	900	1520	2080	2480
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	8300	14000	19100	22800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Boden Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 187 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	1408	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.078	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.630	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	17	**Peak Dir. Hrly. Vol.**	69	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	41	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	27.5	**ATS**	48.8	**% FFS**	97.5
FFS Delay	1.7	**LOS Thresh. Delay**	1.7	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	220	480	800	1100	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	350	770	1270	1750	2260
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4500	9900	16300	22500	29000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Boden Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 187 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	1408	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.099	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	17	**Peak Dir. Hrly. Vol.**	84	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	56	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	29.1	**ATS**	48.5	**% FFS**	96.9
FFS Delay	2.2	**LOS Thresh. Delay**	2.2	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	200	460	770	1050	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	770	1290	1760	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3500	7800	13100	17800	24000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Boden Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 187 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4774	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.078	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.557	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	17	**Peak Dir. Hrly. Vol.**	207	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	165	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	46.2	**ATS**	45.3	**% FFS**	90.6
FFS Delay	7.1	**LOS Thresh. Delay**	7.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	180	430	710	970	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	780	1280	1750	2550
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4300	10000	16500	22500	32700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Boden Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Olio Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012

File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 187 PM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4774	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.166	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.741	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	17	**Peak Dir. Hrly. Vol.**	587	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	205	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.41	**Density**	N/A	**PTSF**	71.7	**ATS**	41.4	**% FFS**	82.9
FFS Delay	14.1	**LOS Thresh. Delay**	14.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	290	560	900	1260	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	400	760	1220	1710	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	4600	7400	10400	11600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Boden Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	166th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 188 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	5507	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.058	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.750	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	48	**Peak Dir. Hrly. Vol.**	240	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	80	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.17	**Density**	N/A	**PTSF**	59.2	**ATS**	45.8	**% FFS**	91.6
FFS Delay	2.6	**LOS Thresh. Delay**	2.6	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	230	470	840	1220	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	310	630	1120	1630	1900
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5400	10900	19400	28200	32800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	Boden Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	166th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 188 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	5507	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.096	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.580	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	48	**Peak Dir. Hrly. Vol.**	307	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	222	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.22	**Density**	N/A	**PTSF**	64.2	**ATS**	42.8	**% FFS**	85.5
FFS Delay	4.9	**LOS Thresh. Delay**	4.9	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	390	710	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	680	1230	1730	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	7100	12900	18100	25600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	Boden Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	166th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 188 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	13875	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.062	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.665	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	48	**Peak Dir. Hrly. Vol.**	572	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	288	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	77.6	**ATS**	40.0	**% FFS**	79.9
FFS Delay	7.2	**LOS Thresh. Delay**	7.2	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	190	420	780	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	290	640	1180	1690	2140
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4700	10400	19100	27300	34600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	Boden Road	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	166th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	SR 38	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 188 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	13875	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.096	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.580	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	48	**Peak Dir. Hrly. Vol.**	773	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	559	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.54	**Density**	N/A	**PTSF**	84.9	**ATS**	36.7	**% FFS**	73.3
FFS Delay	10.5	**LOS Thresh. Delay**	10.5	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	150	390	710	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	680	1230	1730	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	7100	12900	18100	25600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Summer Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Boden Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 189 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3846	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.067	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.530	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	30	**Peak Dir. Hrly. Vol.**	137	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	121	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.10	**Density**	N/A	**PTSF**	41.3	**ATS**	46.6	**% FFS**	93.1
FFS Delay	5.1	**LOS Thresh. Delay**	5.1	**Service Measure**	PctFFS	**LOS**	A		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	160	400	670	920	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	310	760	1270	1740	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4700	11400	19000	26000	40000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Summer Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Boden Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 189 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3846	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.119	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	30	**Peak Dir. Hrly. Vol.**	252	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	206	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	55.8	**ATS**	44.2	**% FFS**	88.3
FFS Delay	9.0	**LOS Thresh. Delay**	9.0	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	170	410	700	960	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	310	750	1280	1750	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	6400	10800	14800	21800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Summer Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Boden Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 189 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7955	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.067	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.662	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	30	**Peak Dir. Hrly. Vol.**	353	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	180	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.25	**Density**	N/A	**PTSF**	63.3	**ATS**	43.4	**% FFS**	86.9
FFS Delay	10.3	**LOS Thresh. Delay**	10.3	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	220	480	810	1140	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	730	1230	1730	2150
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5100	10900	18400	25900	32100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Summer Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Boden Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 189 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7955	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.121	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.593	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	30	**Peak Dir. Hrly. Vol.**	571	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	392	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	76.0	**ATS**	39.9	**% FFS**	79.8
FFS Delay	17.3	**LOS Thresh. Delay**	17.3	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	190	440	750	1030	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	750	1270	1740	2400
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	6200	10500	14400	19900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Union Chapel Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 190 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	6266	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.061	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	264	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	118	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	65.4	**ATS**	43.2	**% FFS**	86.5
FFS Delay	10.7	**LOS Thresh. Delay**	10.7	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	330	720	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	480	1050	1580	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3000	7900	17300	26000	33800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Union Chapel Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 190 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	6266	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.061	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.690	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	264	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	118	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	65.4	**ATS**	43.2	**% FFS**	86.5
FFS Delay	10.7	**LOS Thresh. Delay**	10.7	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	120	330	720	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	480	1050	1580	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3000	7900	17300	26000	33800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	TR	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Union Chapel Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\AM\Fu 190 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	12099	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.063	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.751	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	572	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	190	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	80.0	**ATS**	39.1	**% FFS**	78.2
FFS Delay	19.1	**LOS Thresh. Delay**	19.1	**Service Measure**	PctFFS	**LOS**	C		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	390	730	1140	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	520	980	1520	1900
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	8300	15600	24200	30200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	SK	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	12/4/2023 10:58:32 AM	**From**	Union Chapel Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Summer Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Future\PM\Fu 190 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	12099	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.111	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.593	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	796	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	547	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.56	**Density**	N/A	**PTSF**	87.5	**ATS**	35.8	**% FFS**	71.6
FFS Delay	27.1	**LOS Thresh. Delay**	27.1	**Service Measure**	PctFFS	**LOS**	D		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	660	980	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	490	1120	1660	2400
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4500	10100	15000	21700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Union Chapel Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mercantile Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Westbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 191 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3103	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.076	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.740	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	175	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	61	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	57.9	**ATS**	45.3	**% FFS**	90.5
FFS Delay	7.1	**LOS Thresh. Delay**	7.1	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	130	380	730	1130	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	520	990	1530	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2400	6900	13100	20200	25300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable with the presence of passing lanes. Refer to the service volume tables to obtain the LOS.

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	166th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Union Chapel Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mercantile Road	**Program**	HIGHPLAN 2012
Area Type	Transitioning/Urban	**Peak Direction**	Eastbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 191 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3103	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.122	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.600	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	227	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	151	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	61.5	**ATS**	42.7	**% FFS**	85.4
FFS Delay	11.7	**LOS Thresh. Delay**	11.7	**Service Measure**	PctFFS	**LOS**	B		

Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1650 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	100	290	660	990	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	490	1100	1660	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	4100	9100	13700	19500