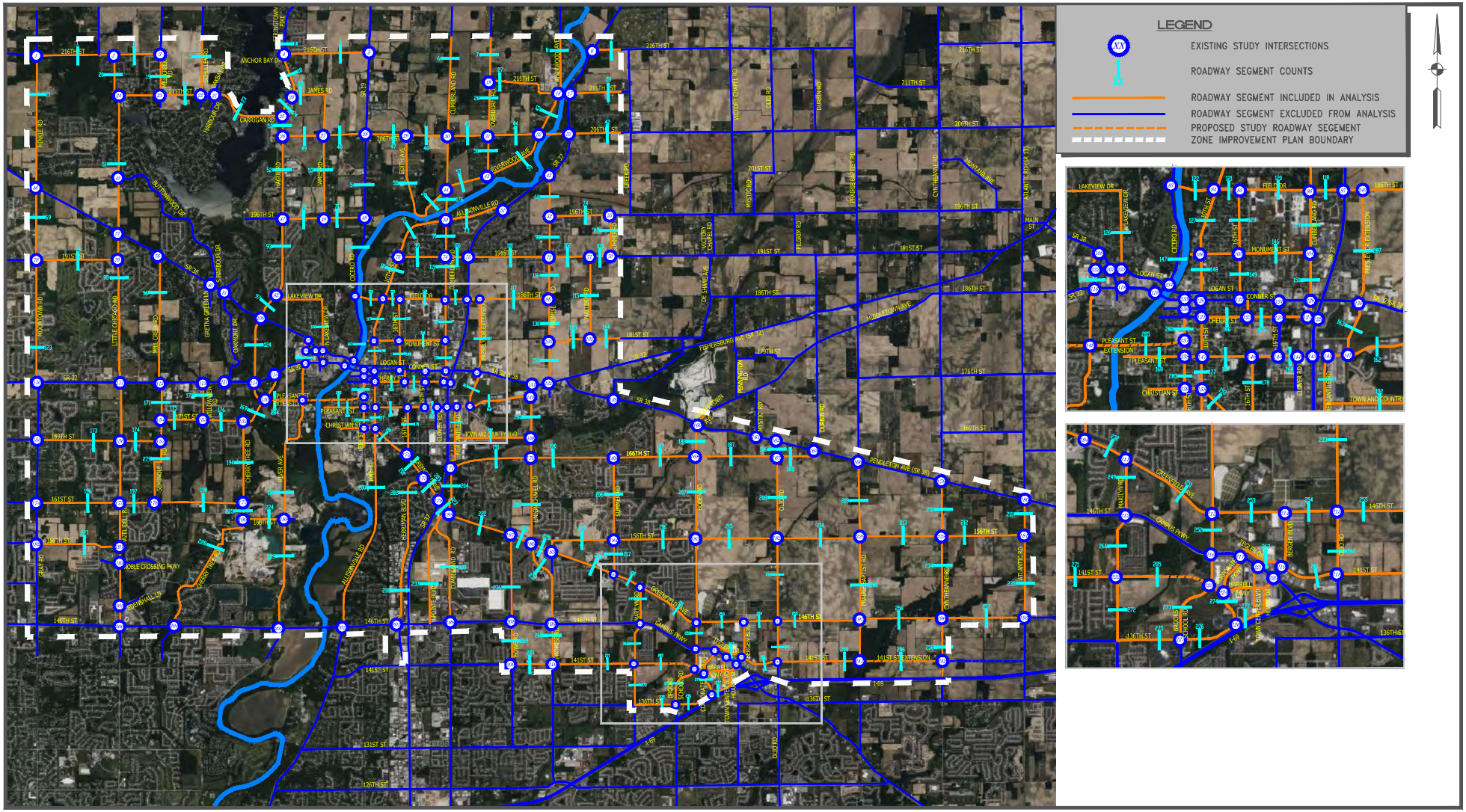
145	181st Street	Mallery Road - Promise Road	388
146	Monument Street	Cumberland Road - 16th Street	392
147	Cicero Road	Field Drive - Logan Street	400
148	10th Street	Monument Street - Logan Street	404
149	16th Street	Monument Street - Logan Street	408
150	Cumberland Road	Monument Street - Conner Street	412
151	Promise Road	SR 32 - 181st Street	420
162	Pleasant Street	Presley Drive - Union Chapel Road	424
163	Presley Drive	SR 32 - Pleasant Street	432
164	Pleasant Street	19th Street - Clover Road	436
165	Cherry Street	16th Street - 19th Street	440
166	Cherry Street	10th Street - 16th Street	444
167	Pleasant Street	16th Street - 10th Street	448
168a	Pleasant Street	8th Street - 10th Street	452
168b	Pleasant Street	2nd Street - 8th Street	456
169	Cherry Tree Road	SR 32 - 171st Street	460
170	Willowview Road	171st Street - SR 32	464
171	Mill Creek Road	SR 32 - 171st Street	468
173	169th Street	Hazel Dell Road - Gray Road	472
174	169th Street	Hazel Dell Road - Seminole Road	476
175	171st Street	Seminole Road - Willowview Road	484
176	171st Street	Willowview Road - Cherry Tree Road	492
177	Allisonville Road	Pleasant Street - Christian Road	500
178	16th Street	Greenfield Avenue - Pleasant Street	508
179	Mercantile Road	Town and Country Blvd - Pleasant Street	516
185	166th Street	SR 38 - Olio Road	524
186	Olio Road	SR 38 - 166th Street	528
187	166th Street	Boden Road - Olio Road	532
188	Boden Road	166th Street - SR 38	536
189	166th Street	Summer Road - Boden Road	540
190	166th Street	Union Chapel Road - Summer Road	544
191	166th Street	Union Chapel Road - Mercantile Road	552
192	Town and Country Blvd	Union Chapel Road & Mercantile Road	560
193	Greenfield Avenue	16th Street - Allisonville Road	568
194	Cherry Tree Road	161st Street - 171st Street	580
196	161st Street	Gray Road - Hazel Dell Road	584
197	161st Street	Hazel Dell Road - Seminole Road	588
198	161st Street	Seminole Road - Cherry Tree Road	596
199a	River Avenue	160th Street - SR 32	604
199b	River Avenue	160th Street - SR 32	608
199c	River Avenue	160th Street - SR 32	612
200	Allisonville Road	146th Street - Christian Street	616
201	Greenfield Avenue	16th Street - Herriman Blvd	624

202	Herriman Boulevard	before curve heading to Greenfield Ave	636
203	Greenfield Avenue	SR 37 & Herriman BLVD	644
204	Cumberland Road	166th Street - Greenfield Avenue	656
205	Union Chapel Road	166th Street - Greenfield Avenue	664
206	Summer Road	166th Street - 156th Street	672
207	Boden Road	166th Street - 156th Street	676
208	Olio Road	166th Street - 156th Street	680
209	Prairie Baptist Road	156th Street - SR 38	686
210	Cyntheanne Road	SR 38 - 156th Street	690
211	Atlantic Road	SR 38 - 156th Street	694
212	156th Street	Cyntheanne Road - Atlantic Road	698
213	156th Street	Prairie Baptist Road - Cyntheanne Road	702
214	156th Street	Prairie Baptist Road & Olio Road	710
215	156th Street	Boden Road - Olio Road	714
216	156th Street	Boden Road & Summer Road	718
217	Summer Road	156th Street - Greenfield Avenue	722
218	Greenfield Avenue	Summer Road - 156th Street	730
219	156th Street	Summer Road - Greenfield Avenue	742
220	Greenfield Avenue	156th Street - Union Chapel Road	750
221	Greenfield Avenue	Union Chapel Road - Howe Road	762
222	Greenfield Avenue	Cumberland Road - Howe Road	774
223	Greenfield Avenue	SR 37 - Cumberland Road	786
224	160th Street	River Avenue - Cherry Tree Road	798
225	Cherry Tree Road	161st Street - 160th Street	802
227	156th Street	Gray Road - Hazal Dell Rd	806
228a	Cherry Tree Road	160th Street - 146th Street	810
228b	Cherry Tree Road	160th Street - 146th Street	814
229	River Avenue	160th Street - 146th Street	818
230a	Cumberland Road	146th Road - Greenfield Ave	822
230b	Cumberland Road	146th Road - Greenfield Ave	830
230c	Cumberland Road	146th Road - Greenfield Ave	838
231a	Promise Road/Union Chapel Road	Greenfield Ave - 146th Street	846
231b	Promise Road/Union Chapel Road	Greenfield Ave - 146th Street	850
232	Greenfield Avenue	Marilyn Road - Summer Road	854
233	Olio Road	146th Street - 156th Street	866
234	Cyntheanne Road	156th Street - 146th Street	872
235	Atlantic Road	156th Street - 146th Street	876
236a	Howe Road	146th Street - Greenfield Avenue	880
236b	Howe Road	146th Street - Greenfield Avenue	884
237	North Pointe Blvd	146th Street - Cumberland Road	888
238	Herriman Boulevard	Stony Creek Way - 146th Street	896
249	Marilyn Road	146th Street - Greenfield Avenue	904
251	Greenfield Avenue	Marilyn Road - Boden Road	908

252	Boden Road	Greenfield Avenue - Campus Pkwy	914
253	146th Street	Boden Road - Bergen Boulevard	926
254	146th Street	Bergen Boulevard - Olio Road	932
255	146th Street	Olio Road - Prairie Baptist Road	938
256	146th Street	Prairie Baptist Road - Cyntheanne Road	944
257	146th Street	Cyntheanne Road - Atlantic Road	952
258	Cyntheanne Road	146th Street - 136th Street	956
259a	141st Street	Olio Road - Prarie Baptist Road	960
259b	141st Street	Olio Road - Prarie Baptist Road	966
260	Olio Road	146th Street - 141st Street	972
261	141st Street	Bergen Boulevard - Olio Road	976
263a	Tegler Drive	Coporate Pkwy - Bergen Boulevard	980
263b	Tegler Drive	Coporate Pkwy - Bergen Boulevard	988
266	Marilyn Road	Campus Pkwy - 141st Street	996
268	Promise Road	141st Street - 146th Street	1000
269	Howe Road	146th Street - 141st Street	1004
270	141st Street	Howe Road - Promise Road	1008
271	141st Street	Marilyn Road - Promise Road	1012
272	Marilyn Road	136th Street - 141st Street	1016
273	Brooks School Road	136th Street - Harrell Pkwy	1020
274	Corporate Pkwy	136th Street - Harrell Pkwy	1024
275	136th Street	Marilyn Road - Brooks School Road	1028
276	136th Street	Brooks School Road - Corporate Pkwy	1032
277	136th Street	Corporate Pkwy - Hoard Drive	1040
279	Seminole Road/Mill Creek Road	161st Street - 169th Street	1044
280	Prairie Baptist Road	146th Street - 156th Street	1048
281	Union Chapel Road	Town and Country Boulevard - Pleasant Street	1054
282a	8th Street	Walnut St - Cherry St	1062
282b	8th Street	Walnut St - Cherry St	1066
283	8th Street	Christian St - Walnut St	1072
284	Cumberland Rd	Allisonville Road - Riverwood Ave	1076
285	Cumberland Rd	Riverwood Ave - 206th St	1084
286	141st St Extension	Prairie Baptist Rd – Cyntheanne Rd	1092
287	Presley Drive Extension	Phillip Dr – 186th St	1096
288	141st Street (Extension)	Marilyn Rd - Brooks School Rd	1098
289	Pleasant Street	Cherry Tree Ln - River Ave	1102
290	Pleasant Street	River Ave - 8th St	1106



Prepared By:

A&F ENGINEERING
Transportation & Site Engineering
Creating Order Since 1966

CITY OF NOBLESVILLE
ZONE IMPROVEMENT PLAN
STUDY AREA ROADWAY NETWORK

FIGURE 1

Z:\2023\230775-City of Noblesville, Road Impact Fee Update, Noblesville\DWG\230775-Impact Fee Map.dwg

HIGHPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	Danah	**Highway Name**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hinkle Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Little Chicago 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\AM\Ex 1 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	2756	**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**	0.790	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	31	**Peak Dir. Hrly. Vol.**	161	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	43	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	46.5	**ATS**	42.8	**% FFS**	95.1
FFS Delay	3.9	**LOS Thresh. Delay**	11.5	**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	290	540	860	1210	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	370	690	1090	1540	1800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5000	9400	14800	20900	24400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hinkle Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Little Chicago 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\AM\Ex 1 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	2756	**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**	0.810	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	31	**Peak Dir. Hrly. Vol.**	301	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	71	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	58.9	**ATS**	41.2	**% FFS**	91.6
FFS Delay	6.9	**LOS Thresh. Delay**	14.5	**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	300	570	880	1230	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	380	710	1090	1520	1760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	5300	8100	11300	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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hinkle Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Little Chicago 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 1 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3059	**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	40	**% NPZ**	31	**Peak Dir. Hrly. Vol.**	172	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	60	**Adjusted Capacity**	0

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	46.8	**ATS**	42.5	**% FFS**	94.5
FFS Delay	4.4	**LOS Thresh. Delay**	12.0	**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	260	490	830	1150	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	360	670	1130	1560	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4800	8900	14900	20600	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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hinkle Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Little Chicago 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 1 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3059	**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**	0.777	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	31	**Peak Dir. Hrly. Vol.**	321	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	92	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	60.7	**ATS**	40.7	**% FFS**	90.5
FFS Delay	8.0	**LOS Thresh. Delay**	15.6	**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	280	530	850	1200	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	370	690	1100	1550	1830
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	5200	8200	11500	13600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mill Creek 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\AM\Ex 2 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1397	**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**	0.760	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	71	**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	0.05	**Density**	N/A	**PTSF**	46.9	**ATS**	41.7	**% FFS**	92.7
FFS Delay	3.8	**LOS Thresh. Delay**	8.6	**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	100	360	600	990	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	480	790	1310	1870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	7200	11800	19600	28000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mill Creek 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\AM\Ex 2 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1397	**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**	0.810	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	112	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	26	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	53.7	**ATS**	41.3	**% FFS**	91.8
FFS Delay	4.3	**LOS Thresh. Delay**	9.1	**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	410	650	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	510	810	1240	1760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	5200	8200	12600	17800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/11/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mill Creek 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 2 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1537	**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**	0.757	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	78	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	25	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	47.6	**ATS**	41.6	**% FFS**	92.5
FFS Delay	3.9	**LOS Thresh. Delay**	8.7	**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	100	360	600	990	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	480	800	1310	1880
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2100	7200	12000	19600	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	TR	**Highway Name**	216th Street	**Study Period**	**Kother**
Date Prepared	9/11/2023 10:58:32 AM	**From**	Little Chicago Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Mill Creek 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 2 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1537	**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**	0.758	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	117	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	37	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	52.5	**ATS**	41.1	**% FFS**	91.4
FFS Delay	4.5	**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	360	600	990	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	480	800	1310	1880
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	4800	8000	13200	18800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Schuller Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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\AM\Ex 3 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1531	**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**	0.830	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	65	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	13	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	47.4	**ATS**	42.6	**% FFS**	94.6
FFS Delay	3.7	**LOS Thresh. Delay**	10.1	**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	180	480	740	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	220	580	900	1320	1720
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4400	11400	17700	25900	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**	Schuller Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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\AM\Ex 3 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1531	**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**	0.710	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	108	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	44	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	48.6	**ATS**	41.9	**% FFS**	93.0
FFS Delay	4.8	**LOS Thresh. Delay**	11.2	**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	150	350	670	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	220	500	950	1440	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2300	5100	9600	14600	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	TR	**Highway Name**	Schuller Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 3 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	3059	**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**	0.583	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	91	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	65	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	42.3	**ATS**	41.8	**% FFS**	92.9
FFS Delay	4.9	**LOS Thresh. Delay**	11.3	**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	120	290	600	880	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	500	1030	1510	2440
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4200	9900	20200	29700	47900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Schuller Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 3 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	3059	**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**	0.864	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	367	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	58	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	71.3	**ATS**	39.3	**% FFS**	87.4
FFS Delay	9.2	**LOS Thresh. Delay**	15.6	**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	180	530	810	1110	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	620	940	1290	1650
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4500	6800	9300	11900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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 Rd	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	North of	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	216th St	**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\AM\Ex 4 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3280	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.072	**% 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.**	196	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	40	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	61.8	**ATS**	35.4	**% FFS**	88.4
FFS Delay	11.2	**LOS Thresh. Delay**	28.3	**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	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	1400	6300	10200	13900	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**	Hague Rd	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	North of	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	216th St	**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\AM\Ex 4 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	3280	**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**	0.640	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	246	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	138	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.17	**Density**	N/A	**PTSF**	63.6	**ATS**	32.9	**% FFS**	82.3
FFS Delay	18.5	**LOS Thresh. Delay**	35.6	**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	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	3000	6200	10200	19000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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 Rd	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	North of	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	216th St	**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 4 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4034	**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**	0.845	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	256	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	47	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	66.1	**ATS**	34.8	**% FFS**	86.9
FFS Delay	12.9	**LOS Thresh. Delay**	30.0	**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	80	380	630	860	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	450	750	1020	1690
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	6000	10000	13600	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**	Hague Rd	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	North of	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	216th St	**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 4 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	4034	**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**	0.648	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	306	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	166	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.22	**Density**	N/A	**PTSF**	68.7	**ATS**	31.6	**% FFS**	79.0
FFS Delay	22.8	**LOS Thresh. Delay**	39.9	**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	60	230	460	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	360	710	1190	2200
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	900	3100	6100	10200	18900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hague 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\AM\Ex 5 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.020	**Median**	No	**AADT**	2497	**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**	0.740	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	155	**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	0.11	**Density**	N/A	**PTSF**	54.8	**ATS**	46.1	**% FFS**	92.2
FFS Delay	6.2	**LOS Thresh. Delay**	6.2	**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	170	420	790	1180	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	230	570	1070	1600	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	6800	12800	19100	22900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hague 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\AM\Ex 5 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.020	**Median**	No	**AADT**	2497	**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	45	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	303	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	106	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.22	**Density**	N/A	**PTSF**	67.4	**ATS**	43.8	**% FFS**	87.7
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	170	420	790	1180	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	230	570	1070	1600	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	3500	6600	9800	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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hague 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\Future\AM\Fu 5 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.020	**Median**	No	**AADT**	3248	**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**	0.774	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	216	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	63	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	61.5	**ATS**	45.5	**% FFS**	90.9
FFS Delay	7.3	**LOS Thresh. Delay**	7.3	**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	180	460	800	1210	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	240	600	1040	1570	1840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2800	7000	12100	18300	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**	216th Street	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	Hague 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 5 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.020	**Median**	No	**AADT**	3248	**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**	0.643	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	60	**Peak Dir. Hrly. Vol.**	236	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	131	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.17	**Density**	N/A	**PTSF**	61.0	**ATS**	43.8	**% FFS**	87.6
FFS Delay	10.4	**LOS Thresh. Delay**	10.4	**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	150	360	730	1070	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	240	560	1140	1670	2210
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	5000	10100	14800	19600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Cumberkand Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	E 234th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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\AM\Ex 6 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	2.850	**Median**	No	**AADT**	4003	**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**	0.780	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	200	**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	0.14	**Density**	N/A	**PTSF**	54.1	**ATS**	46.8	**% FFS**	93.5
FFS Delay	14.2	**LOS Thresh. Delay**	14.2	**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	270	530	890	1260	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	350	680	1150	1620	1830
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5500	10700	18000	25400	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**	Cumberkand Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	E 234th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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\AM\Ex 6 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	2.850	**Median**	No	**AADT**	4003	**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**	0.730	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	298	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	110	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	62.0	**ATS**	44.9	**% FFS**	89.8
FFS Delay	23.3	**LOS Thresh. Delay**	23.3	**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	240	480	840	1210	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	660	1160	1660	1950
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	6500	11400	16300	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	TR	**Highway Name**	Cumberkand Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	E 234th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 6 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	2.850	**Median**	No	**AADT**	5618	**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**	0.796	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	295	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	76	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	62.1	**ATS**	45.7	**% FFS**	91.4
FFS Delay	19.3	**LOS Thresh. Delay**	19.3	**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	280	550	900	1280	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	360	700	1140	1610	1790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5500	10700	17300	24400	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	TR	**Highway Name**	Cumberkand Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	E 234th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 6 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	2.850	**Median**	No	**AADT**	5618	**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**	0.733	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	420	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	153	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.30	**Density**	N/A	**PTSF**	68.5	**ATS**	42.7	**% FFS**	85.4
FFS Delay	35.1	**LOS Thresh. Delay**	35.1	**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	240	490	850	1220	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	670	1160	1670	1940
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	6600	11400	16400	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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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\AM\Ex 7 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.844	**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**	0.710	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	15	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	6	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	37.0	**ATS**	47.4	**% FFS**	94.7
FFS Delay	3.4	**LOS Thresh. Delay**	3.4	**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	730	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	500	1030	1580	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	8100	23900	49100	75300	95300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/19/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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\AM\Ex 7 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**	0.040	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.550	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	22	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	18	**Adjusted Capacity**	1547

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	32.1	**ATS**	47.2	**% FFS**	94.3
FFS Delay	3.5	**LOS Thresh. Delay**	3.5	**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	90	290	630	920	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	530	1150	1680	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4300	13300	28800	42000	64800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/11/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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 7 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.844	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.028	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.710	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	20	**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	0.01	**Density**	N/A	**PTSF**	37.8	**ATS**	47.3	**% FFS**	94.6
FFS Delay	3.5	**LOS Thresh. Delay**	3.5	**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	120	350	730	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	500	1030	1580	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	6100	17900	36800	56500	71500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/11/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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 7 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.844	**Median**	No	**AADT**	1000	**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**	0.538	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	28	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	24	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	32.3	**ATS**	47.1	**% FFS**	94.1
FFS Delay	3.8	**LOS Thresh. Delay**	3.8	**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	90	280	620	900	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	530	1160	1680	2640
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	10200	22400	32400	50800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 8 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	2756	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.162	**% 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.**	237	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	210	**Adjusted Capacity**	0

LOS Results

v/c Ratio	0.17	**Density**	N/A	**PTSF**	61.4	**ATS**	42.2	**% FFS**	84.3
FFS Delay	12.7	**LOS Thresh. Delay**	12.7	**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	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	1100	3300	7200	10400	16600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 8 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	2756	**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**	0.640	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	226	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	127	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	61.8	**ATS**	43.4	**% FFS**	86.7
FFS Delay	10.5	**LOS Thresh. Delay**	10.5	**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	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	1500	3600	8500	12600	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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 8 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	1000	**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**	0.505	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	101	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	99	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	41.7	**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	80	270	590	840	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	160	540	1170	1670	2820
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	800	2800	5900	8400	14200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	221st Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 8 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.157	**% 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.**	102	**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	0.07	**Density**	N/A	**PTSF**	47.2	**ATS**	46.0	**% FFS**	92.0
FFS Delay	5.9	**LOS Thresh. Delay**	5.9	**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	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	1100	3000	6900	10400	14000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th 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**	Creek 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 9 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.450	**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**	0.910	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	10	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	1	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	41.2	**ATS**	47.4	**% FFS**	94.8
FFS Delay	1.8	**LOS Thresh. Delay**	1.8	**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	160	570	950	1300	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	630	1050	1430	1570
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	16400	57300	95500	130000	142800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th 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**	Creek 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 9 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.450	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.036	**% 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.**	19	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	17	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	30.8	**ATS**	47.2	**% FFS**	94.3
FFS Delay	2.0	**LOS Thresh. Delay**	2.0	**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	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	4800	14800	32300	46400	74500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th 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**	Creek 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 9 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.450	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.013	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.923	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	12	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	1	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	42.1	**ATS**	47.4	**% FFS**	94.8
FFS Delay	1.8	**LOS Thresh. Delay**	1.8	**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	160	570	990	1350	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	620	1080	1470	1540
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	13900	47700	83100	113100	118500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th 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**	Creek 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 9 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.450	**Median**	No	**AADT**	1000	**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**	0.523	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	23	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	21	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	31.1	**ATS**	47.1	**% FFS**	94.2
FFS Delay	2.0	**LOS Thresh. Delay**	2.0	**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	90	280	600	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	540	1150	1670	2720
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4100	12300	26200	38000	61900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 18 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4261	**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**	0.730	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	31	**Peak Dir. Hrly. Vol.**	215	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	79	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	51.3	**ATS**	37.0	**% FFS**	92.4
FFS Delay	2.2	**LOS Thresh. Delay**	7.6	**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	230	420	710	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	580	980	1370	1950
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4700	8500	14300	19900	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**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 18 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4261	**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**	0.600	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	31	**Peak Dir. Hrly. Vol.**	276	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	184	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.20	**Density**	N/A	**PTSF**	57.9	**ATS**	34.5	**% FFS**	86.2
FFS Delay	4.3	**LOS Thresh. Delay**	9.7	**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	170	360	610	840	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	290	600	1020	1400	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	5600	9500	13000	22000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 18 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4507	**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**	0.720	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	224	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	87	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.16	**Density**	N/A	**PTSF**	62.2	**ATS**	34.6	**% FFS**	86.4
FFS Delay	4.2	**LOS Thresh. Delay**	9.6	**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	70	280	470	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	100	390	660	1130	1980
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	5700	9600	16400	28700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 18 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4507	**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**	0.599	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	292	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	195	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	68.2	**ATS**	31.7	**% FFS**	79.2
FFS Delay	7.1	**LOS Thresh. Delay**	12.5	**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	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	900	3200	7100	11500	22100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th St	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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 19 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1742	**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**	0.550	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	74	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	60	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	39.3	**ATS**	51.1	**% FFS**	92.9
FFS Delay	2.5	**LOS Thresh. Delay**	0.0	**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	100	360	720	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	660	1310	1860	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	8600	17100	24200	33700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th St	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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 19 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	1742	**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**	0.550	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	74	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	60	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.05	**Density**	N/A	**PTSF**	39.3	**ATS**	51.1	**% FFS**	92.9
FFS Delay	2.5	**LOS Thresh. Delay**	0.0	**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	100	360	720	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	660	1310	1860	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	8600	17100	24200	33700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th St	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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 19 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2206	**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**	0.562	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	100	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	78	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	43.4	**ATS**	50.7	**% FFS**	92.1
FFS Delay	2.8	**LOS Thresh. Delay**	0.0	**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	110	360	730	1040	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	650	1300	1860	2530
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	8100	16100	23000	31300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	216th St	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St	**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 19 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2206	**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**	0.508	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	90	**Peak Dir. Hrly. Vol.**	120	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	116	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	45.1	**ATS**	49.6	**% FFS**	90.1
FFS Delay	3.6	**LOS Thresh. Delay**	0.3	**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	90	350	670	950	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	690	1320	1880	2800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	6500	12400	17600	26200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 20 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2964	**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**	0.700	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	164	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	70	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	55.5	**ATS**	40.4	**% FFS**	89.8
FFS Delay	4.6	**LOS Thresh. Delay**	8.6	**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	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	1700	5500	10800	17300	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**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 20 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	2964	**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**	0.710	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	250	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	102	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	64.4	**ATS**	38.9	**% FFS**	86.4
FFS Delay	6.3	**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	100	310	590	960	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	440	840	1360	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3700	7100	11500	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	TR	**Highway Name**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 20 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3177	**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**	0.709	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	178	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	73	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.13	**Density**	N/A	**PTSF**	57.3	**ATS**	40.2	**% FFS**	89.4
FFS Delay	4.7	**LOS Thresh. Delay**	8.7	**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	310	590	960	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	440	840	1360	2010
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	5600	10700	17300	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	TR	**Highway Name**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 20 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3177	**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**	0.704	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	268	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	113	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.19	**Density**	N/A	**PTSF**	65.7	**ATS**	38.4	**% FFS**	85.3
FFS Delay	6.9	**LOS Thresh. Delay**	10.9	**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	310	590	960	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	130	450	840	1370	2020
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	3800	7000	11500	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	Danah	**Highway Name**	Hinkle Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th 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\AM\Ex 21 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.180	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.890	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	160	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	20	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	59.0	**ATS**	51.0	**% FFS**	92.8
FFS Delay	8.2	**LOS Thresh. Delay**	0.0	**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	210	650	1030	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	240	740	1160	1600	1600
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	4200	6500	8900	8900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Hinkle Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th 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 21 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	1000	**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**	0.580	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	116	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	84	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	45.8	**ATS**	50.8	**% FFS**	92.3
FFS Delay	8.7	**LOS Thresh. Delay**	0.0	**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	120	390	760	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	680	1320	1880	2450
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1100	3400	6600	9400	12300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Hinkle Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th 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 21 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	1000	**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**	0.808	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	162	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	38	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	58.2	**ATS**	50.8	**% FFS**	92.4
FFS Delay	8.6	**LOS Thresh. Delay**	0.0	**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	190	530	910	1370	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	240	660	1130	1700	1760
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3400	5700	8600	8800
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Hinkle Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	216th 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 21 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.600	**Median**	No	**AADT**	1000	**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**	0.500	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	64	**Peak Dir. Hrly. Vol.**	100	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	100	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.07	**Density**	N/A	**PTSF**	39.8	**ATS**	50.5	**% FFS**	91.9
FFS Delay	9.3	**LOS Thresh. Delay**	0.0	**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	100	360	680	940	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	720	1360	1880	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1000	3600	6800	9400	14200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mill Creek Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Schulley 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 22 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7763	**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**	0.610	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	365	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	233	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.26	**Density**	N/A	**PTSF**	71.3	**ATS**	35.9	**% FFS**	79.9
FFS Delay	10.1	**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	80	240	570	880	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	400	940	1450	2330
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	5200	12300	18900	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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mill Creek Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Schulley 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 22 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7763	**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**	0.600	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	540	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	360	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.38	**Density**	N/A	**PTSF**	79.5	**ATS**	34.1	**% FFS**	75.7
FFS Delay	12.8	**LOS Thresh. Delay**	16.8	**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	80	230	560	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	390	940	1460	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3400	8200	12600	20500

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mill Creek Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Schulley 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 22 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	10983	**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**	0.546	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	522	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	434	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.37	**Density**	N/A	**PTSF**	77.8	**ATS**	33.9	**% FFS**	75.4
FFS Delay	13.0	**LOS Thresh. Delay**	17.0	**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	70	200	530	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	130	370	980	1490	2610
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4300	11300	17200	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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Mill Creek Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Schulley 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 22 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	10983	**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**	0.615	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	784	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	491	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.55	**Density**	N/A	**PTSF**	87.1	**ATS**	31.3	**% FFS**	69.6
FFS Delay	17.5	**LOS Thresh. Delay**	21.5	**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	80	240	570	880	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	400	930	1440	2310
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3500	8100	12500	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**	Carrigan Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Harbor Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Hague 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 23 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	8950	**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**	0.710	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	483	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	197	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.34	**Density**	N/A	**PTSF**	75.4	**ATS**	34.9	**% FFS**	77.6
FFS Delay	22.0	**LOS Thresh. Delay**	29.6	**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	100	310	590	960	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	440	840	1360	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2000	5800	11100	17900	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**	Carrigan Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Harbor Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Hague 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 23 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	8950	**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**	0.530	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	531	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	471	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.37	**Density**	N/A	**PTSF**	77.5	**ATS**	33.7	**% FFS**	74.9
FFS Delay	25.4	**LOS Thresh. Delay**	33.0	**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	200	520	780	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	380	990	1480	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3400	8900	13300	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**	Carrigan Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Harbor Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Hague 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 23 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	15289	**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	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	860	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	302	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.60	**Density**	N/A	**PTSF**	92.7	**ATS**	31.3	**% FFS**	69.5
FFS Delay	33.4	**LOS Thresh. Delay**	41.0	**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	460	820	1330	1920
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	6100	10800	17600	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**	Carrigan Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Harbor Drive	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Hague 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 23 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	15289	**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**	0.565	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	993	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	765	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.70	**Density**	N/A	**PTSF**	90.9	**ATS**	27.6	**% FFS**	61.2
FFS Delay	48.1	**LOS Thresh. Delay**	55.7	**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	80	210	540	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	380	960	1470	2520
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	3400	8400	12800	22000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St (James Rd)	**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 24 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4268	**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**	0.690	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	200	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	90	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	59.3	**ATS**	44.6	**% FFS**	89.2
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	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	2700	7100	15500	23300	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**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St (James Rd)	**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 24 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4268	**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**	0.630	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	301	**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	0.21	**Density**	N/A	**PTSF**	68.5	**ATS**	41.6	**% FFS**	83.2
FFS Delay	4.4	**LOS Thresh. Delay**	4.4	**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	1700	4200	9700	14500	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**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St (James Rd)	**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 24 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4580	**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**	0.685	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	216	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	100	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.15	**Density**	N/A	**PTSF**	60.9	**ATS**	44.2	**% FFS**	88.4
FFS Delay	2.8	**LOS Thresh. Delay**	2.8	**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	120	330	720	1090	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	490	1060	1600	2080
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	7200	15400	23200	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**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th St (James Rd)	**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 24 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	4580	**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**	0.624	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	320	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	193	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	70.2	**ATS**	41.4	**% FFS**	82.8
FFS Delay	4.5	**LOS Thresh. Delay**	4.5	**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	100	290	680	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	470	1090	1640	2280
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4200	9800	14700	20400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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 25 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**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	5	**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	0.00	**Density**	N/A	**PTSF**	5.3	**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	160	390	640	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	780	1280	1740	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	32000	78000	128000	174000	284000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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 25 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**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	5	**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	0.00	**Density**	N/A	**PTSF**	5.3	**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	160	390	640	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	780	1280	1740	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	32000	78000	128000	174000	284000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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 25 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	1778	**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**	0.656	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	21	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	11	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	10.0	**ATS**	49.5	**% FFS**	99.0
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	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	20600	42800	70000	96700	120600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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\PM\Fu 25 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	1778	**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**	0.568	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	21	**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	0.02	**Density**	N/A	**PTSF**	9.1	**ATS**	49.4	**% FFS**	98.9
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	990	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	780	1290	1750	2500
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	16200	37200	61500	83400	119100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	211th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 26 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.049	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.880	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	43	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	6	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.03	**Density**	N/A	**PTSF**	45.3	**ATS**	47.0	**% FFS**	94.1
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	150	550	880	1200	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	630	1000	1370	1620
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3700	12900	20500	28000	33100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	211th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 26 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**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**	0.610	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	33	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	21	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	37.3	**ATS**	47.0	**% FFS**	94.0
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	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	3200	8900	20400	30400	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	TR	**Highway Name**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	211th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 26 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	1317	**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**	0.819	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	68	**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	0.05	**Density**	N/A	**PTSF**	48.2	**ATS**	46.7	**% FFS**	93.4
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	140	470	740	1180	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	580	910	1450	1740
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	9300	14500	23100	27700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	211th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 26 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.700	**Median**	No	**AADT**	1317	**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**	0.584	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	59	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	42	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.04	**Density**	N/A	**PTSF**	39.6	**ATS**	46.5	**% FFS**	93.1
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	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	2400	6500	14600	21500	31700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 27 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**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**	1.000	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	26	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	0	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	8.5	**ATS**	39.7	**% FFS**	99.1
FFS Delay	0.7	**LOS Thresh. Delay**	16.9	**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	340	700	1060	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	700	1060	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	13100	27000	40800	54700	54700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 27 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**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	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	11	**Local Adj. Factor**	0.91
Free Flow Speed	40	**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**	39.8	**% FFS**	99.4
FFS Delay	0.5	**LOS Thresh. Delay**	16.7	**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	510	770	1050	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	350	650	980	1330	1800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	25100	46500	70000	95100	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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 27 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	1000	**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**	0.589	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	33	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	23	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	11.2	**ATS**	39.4	**% FFS**	98.4
FFS Delay	1.3	**LOS Thresh. Delay**	17.5	**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	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	5200	11100	18100	25100	43300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 27 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**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**	0.537	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	29	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	25	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	9.6	**ATS**	39.4	**% FFS**	98.5
FFS Delay	1.3	**LOS Thresh. Delay**	17.5	**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	540	750	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	620	1010	1400	2650
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5200	11500	18800	26000	49100

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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**	Creek 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 28 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**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	5	**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	0.00	**Density**	N/A	**PTSF**	5.3	**ATS**	49.7	**% FFS**	99.4
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	160	390	640	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	780	1280	1740	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	32000	78000	128000	174000	284000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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**	Creek 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 28 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**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	5	**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	0.00	**Density**	N/A	**PTSF**	5.3	**ATS**	49.7	**% FFS**	99.4
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	160	390	640	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	780	1280	1740	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	32000	78000	128000	174000	284000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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**	Creek 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 28 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**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	5	**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	0.00	**Density**	N/A	**PTSF**	5.3	**ATS**	49.7	**% FFS**	99.4
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	160	390	640	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	780	1280	1740	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	32000	78000	128000	174000	284000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	211th 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**	Creek 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 28 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**	0.010	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	5	**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	0.00	**Density**	N/A	**PTSF**	5.3	**ATS**	49.7	**% FFS**	99.4
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	160	390	640	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	780	1280	1740	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	32000	78000	128000	174000	284000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	CreekRoad	**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 42 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1935	**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**	0.740	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	115	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	40	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.08	**Density**	N/A	**PTSF**	51.6	**ATS**	46.0	**% FFS**	92.1
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	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	2300	6600	12400	19200	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	Danah	**Highway Name**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	CreekRoad	**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 42 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	1935	**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**	0.600	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	129	**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	0.09	**Density**	N/A	**PTSF**	49.8	**ATS**	45.4	**% FFS**	90.8
FFS Delay	5.9	**LOS Thresh. Delay**	5.9	**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	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	1600	4500	10000	15000	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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	CreekRoad	**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 42 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2450	**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**	0.760	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	153	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	48	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	56.4	**ATS**	45.6	**% FFS**	91.2
FFS Delay	5.6	**LOS Thresh. Delay**	5.6	**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	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	6500	11900	18600	22900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	CreekRoad	**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 42 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.800	**Median**	No	**AADT**	2450	**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**	0.607	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	165	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	107	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	54.6	**ATS**	44.5	**% FFS**	88.9
FFS Delay	7.2	**LOS Thresh. Delay**	7.2	**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	100	290	670	1000	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	480	1110	1650	2340
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1600	4400	10000	14900	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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 43 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1305	**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	45	**% NPZ**	45	**Peak Dir. Hrly. Vol.**	86	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	76	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	35.6	**ATS**	47.5	**% FFS**	94.9
FFS Delay	2.3	**LOS Thresh. Delay**	2.3	**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	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	2100	5700	10100	14100	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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 43 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1305	**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**	0.650	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	45	**Peak Dir. Hrly. Vol.**	87	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	47	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	39.3	**ATS**	47.7	**% FFS**	95.4
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	190	430	770	1110	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	670	1190	1710	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3000	6600	11600	16700	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	TR	**Highway Name**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 43 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1823	**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**	0.535	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	45	**Peak Dir. Hrly. Vol.**	121	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	105	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.09	**Density**	N/A	**PTSF**	41.6	**ATS**	46.5	**% FFS**	93.0
FFS Delay	3.3	**LOS Thresh. Delay**	3.3	**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	140	370	670	930	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	270	700	1260	1740	2660
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	5700	10200	14100	21500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 43 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1823	**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**	0.657	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	45	**Peak Dir. Hrly. Vol.**	134	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	70	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.10	**Density**	N/A	**PTSF**	45.5	**ATS**	47.1	**% FFS**	94.1
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	190	430	780	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	290	660	1190	1710	2170
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	5900	10700	15300	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	Danah	**Highway Name**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Riverwood Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Overdorf 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 44 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	4791	**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**	0.510	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	173	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	167	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	49.6	**ATS**	40.1	**% FFS**	89.0
FFS Delay	5.9	**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	130	370	590	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	730	1160	1570	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3700	10300	16400	22200	39300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Riverwood Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Overdorf 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 44 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	4791	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.106	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.500	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	254	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	254	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.18	**Density**	N/A	**PTSF**	57.5	**ATS**	39.1	**% FFS**	86.8
FFS Delay	7.3	**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	130	360	580	790	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	720	1160	1580	2840
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	6800	11000	15000	26800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Riverwood Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Overdorf 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 44 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	7208	**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**	0.613	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	336	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	212	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.24	**Density**	N/A	**PTSF**	65.0	**ATS**	38.4	**% FFS**	85.4
FFS Delay	8.2	**LOS Thresh. Delay**	13.0	**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	420	710	960	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	690	1160	1570	2320
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3700	9100	15300	20700	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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Riverwood Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Overdorf Road	**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 44 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	7208	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.106	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.533	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	42	**Peak Dir. Hrly. Vol.**	407	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	357	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.29	**Density**	N/A	**PTSF**	68.3	**ATS**	37.3	**% FFS**	82.8
FFS Delay	10.0	**LOS Thresh. Delay**	14.8	**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	140	390	620	840	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	270	740	1170	1580	2670
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	7000	11100	15000	25200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**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 45 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4818	**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**	0.510	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	53	**Peak Dir. Hrly. Vol.**	165	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	158	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.12	**Density**	N/A	**PTSF**	51.6	**ATS**	39.5	**% FFS**	87.8
FFS Delay	5.6	**LOS Thresh. Delay**	9.6	**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	110	310	570	790	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	220	610	1120	1550	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	9200	16800	23200	41700

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**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\Existing\Ex 45 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	4818	**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**	0.530	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	53	**Peak Dir. Hrly. Vol.**	291	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	258	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.21	**Density**	N/A	**PTSF**	63.2	**ATS**	37.9	**% FFS**	84.2
FFS Delay	7.5	**LOS Thresh. Delay**	11.5	**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	320	580	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	610	1100	1550	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	5400	9700	13600	23600

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**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 45 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5307	**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**	0.525	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	53	**Peak Dir. Hrly. Vol.**	198	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	179	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.14	**Density**	N/A	**PTSF**	55.3	**ATS**	39.0	**% FFS**	86.6
FFS Delay	6.2	**LOS Thresh. Delay**	10.2	**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	320	580	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	610	1110	1550	2710
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3000	8600	15700	21900	38200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**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\PM\Fu 45 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	5307	**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**	0.531	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	53	**Peak Dir. Hrly. Vol.**	321	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	284	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.23	**Density**	N/A	**PTSF**	64.9	**ATS**	37.5	**% FFS**	83.4
FFS Delay	7.9	**LOS Thresh. Delay**	11.9	**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	320	590	820	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	210	610	1120	1550	2680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	5400	9900	13600	23600

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th 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**	Edith Ave	**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 46 AM.xhp
User Notes	

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	5.000	**Median**	No	**AADT**	8505	**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**	0.680	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	376	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	177	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.27	**Density**	N/A	**PTSF**	71.6	**ATS**	36.1	**% FFS**	80.2
FFS Delay	99.1	**LOS Thresh. Delay**	139.1	**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	100	290	600	950	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	430	890	1400	2090
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2400	6700	13700	21600	32200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th 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**	Edith Ave	**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 46 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	5.000	**Median**	No	**AADT**	8505	**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**	0.510	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	429	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	413	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.30	**Density**	N/A	**PTSF**	71.9	**ATS**	35.0	**% FFS**	77.8
FFS Delay	114.3	**LOS Thresh. Delay**	154.3	**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	210	520	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	160	420	1020	1500	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4300	10400	15200	28200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th 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**	Edith Ave	**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 46 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	12477	**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**	0.626	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	508	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	303	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.36	**Density**	N/A	**PTSF**	77.3	**ATS**	34.7	**% FFS**	77.0
FFS Delay	11.9	**LOS Thresh. Delay**	15.9	**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	250	590	900	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	400	950	1440	2270
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2400	6200	14700	22200	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	TR	**Highway Name**	206th 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**	Edith Ave	**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 46 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	12477	**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**	0.508	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	792	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	767	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.56	**Density**	N/A	**PTSF**	85.8	**ATS**	29.6	**% FFS**	65.7
FFS Delay	20.9	**LOS Thresh. Delay**	24.9	**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	80	210	520	760	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	160	420	1030	1500	2800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1300	3400	8300	12000	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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**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 47 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	8284	**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**	0.680	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	33	**Peak Dir. Hrly. Vol.**	377	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	178	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.27	**Density**	N/A	**PTSF**	64.8	**ATS**	33.5	**% FFS**	83.8
FFS Delay	8.7	**LOS Thresh. Delay**	17.7	**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	200	390	680	940	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	580	1000	1390	2090
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4500	8700	15000	20800	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	Danah	**Highway Name**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**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 47 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	8284	**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	35	**% NPZ**	33	**Peak Dir. Hrly. Vol.**	435	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	418	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.31	**Density**	N/A	**PTSF**	69.3	**ATS**	31.6	**% FFS**	78.9
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	130	320	530	710	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	630	1040	1400	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	6200	10100	13600	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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**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 47 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	10418	**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**	0.593	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	33	**Peak Dir. Hrly. Vol.**	414	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	284	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.29	**Density**	N/A	**PTSF**	67.0	**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	160	350	600	830	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	270	600	1020	1400	2400
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4100	9000	15300	20900	35900
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**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\PM\Fu 47 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	10418	**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**	0.528	**Base Capacity**	1700
Posted Speed	35	**% NPZ**	33	**Peak Dir. Hrly. Vol.**	732	**Local Adj. Factor**	0.91
Free Flow Speed	40	**Class**	3	**Off Peak Dir. Hrly. Vol.**	654	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.51	**Density**	N/A	**PTSF**	82.1	**ATS**	26.8	**% FFS**	67.1
FFS Delay	22.1	**LOS Thresh. Delay**	31.1	**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	130	330	540	740	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	250	630	1030	1410	2690
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	4800	7800	10700	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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cicero 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 48 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7327	**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**	0.790	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	70	**Peak Dir. Hrly. Vol.**	388	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	103	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.27	**Density**	N/A	**PTSF**	73.5	**ATS**	38.1	**% FFS**	84.6
FFS Delay	7.3	**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	150	420	660	1050	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	540	840	1330	1800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	8100	12600	19900	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	Danah	**Highway Name**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cicero 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 48 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7327	**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**	0.510	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	70	**Peak Dir. Hrly. Vol.**	407	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	391	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.29	**Density**	N/A	**PTSF**	70.1	**ATS**	35.6	**% FFS**	79.0
FFS Delay	10.6	**LOS Thresh. Delay**	14.6	**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	90	240	530	770	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	480	1040	1510	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1700	4500	9600	13900	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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cicero 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\AM\Fu 48 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	10045	**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**	0.762	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	70	**Peak Dir. Hrly. Vol.**	513	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	160	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.36	**Density**	N/A	**PTSF**	74.7	**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	140	390	660	1040	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	190	520	870	1370	1870
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	7800	13000	20500	28000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Cicero 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\PM\Fu 48 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	10045	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.126	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.536	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	70	**Peak Dir. Hrly. Vol.**	678	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	587	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.48	**Density**	N/A	**PTSF**	82.2	**ATS**	32.0	**% FFS**	71.2
FFS Delay	16.2	**LOS Thresh. Delay**	20.2	**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	90	250	550	810	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	470	1030	1520	2650
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	3800	8200	12100	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**	206th 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**	Hague 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 49 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7356	**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**	0.800	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	10	**Peak Dir. Hrly. Vol.**	388	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	97	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.27	**Density**	N/A	**PTSF**	53.9	**ATS**	40.2	**% FFS**	89.3
FFS Delay	4.8	**LOS Thresh. Delay**	8.8	**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	310	580	890	1210	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	390	730	1120	1520	1780
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	6000	11100	17000	23100	27000
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th 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**	Hague 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 49 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	7356	**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**	0.510	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	10	**Peak Dir. Hrly. Vol.**	409	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	393	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.29	**Density**	N/A	**PTSF**	61.6	**ATS**	36.8	**% FFS**	81.8
FFS Delay	8.9	**LOS Thresh. Delay**	12.9	**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	160	360	590	800	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	710	1160	1570	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3000	6600	10700	14500	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**	206th 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**	Hague 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 49 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	9727	**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**	0.766	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	10	**Peak Dir. Hrly. Vol.**	492	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	150	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.35	**Density**	N/A	**PTSF**	60.7	**ATS**	38.3	**% FFS**	85.0
FFS Delay	7.1	**LOS Thresh. Delay**	11.1	**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	290	540	850	1160	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	380	710	1110	1520	1860
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5800	10800	16900	23100	28200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th 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**	Hague 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 49 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	9727	**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**	0.537	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	10	**Peak Dir. Hrly. Vol.**	669	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	576	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.47	**Density**	N/A	**PTSF**	76.6	**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	170	370	620	850	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	690	1160	1590	2650
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	5400	9100	12500	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**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 50 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	10663	**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**	0.790	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	564	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	150	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.40	**Density**	N/A	**PTSF**	78.7	**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	130	440	740	1170	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	560	940	1490	1800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2600	8400	14100	22300	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	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 50 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	10663	**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**	0.590	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	736	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	512	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.52	**Density**	N/A	**PTSF**	85.4	**ATS**	36.6	**% FFS**	73.1
FFS Delay	7.9	**LOS Thresh. Delay**	7.9	**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	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	1500	4300	9500	14200	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	TR	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 50 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	17017	**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**	0.790	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	954	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	254	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.67	**Density**	N/A	**PTSF**	99.4	**ATS**	35.5	**% FFS**	70.9
FFS Delay	8.8	**LOS Thresh. Delay**	8.8	**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	130	440	740	1170	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	560	940	1490	1800
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2400	7900	13300	21000	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**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Carrigan Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 50 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.300	**Median**	No	**AADT**	17017	**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**	0.598	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	1191	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	800	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.84	**Density**	N/A	**PTSF**	94.0	**ATS**	30.4	**% FFS**	60.8
FFS Delay	13.9	**LOS Thresh. Delay**	13.9	**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	100	290	660	980	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	490	1110	1640	2380
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1500	4200	9500	14100	20400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Buttonwood Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 51 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	11374	**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**	0.850	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	812	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	143	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.57	**Density**	N/A	**PTSF**	87.6	**ATS**	32.5	**% FFS**	72.3
FFS Delay	29.1	**LOS Thresh. Delay**	36.7	**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	460	720	1010	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	550	850	1190	1680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	6600	10200	14200	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**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Buttonwood Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 51 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	11374	**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**	0.600	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	682	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	455	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.48	**Density**	N/A	**PTSF**	84.5	**ATS**	32.4	**% FFS**	72.0
FFS Delay	29.6	**LOS Thresh. Delay**	37.2	**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	80	230	560	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	140	390	940	1460	2370
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1400	4000	9400	14600	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**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Buttonwood Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 51 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	12571	**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**	0.841	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	888	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	168	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.62	**Density**	N/A	**PTSF**	91.3	**ATS**	31.2	**% FFS**	69.4
FFS Delay	33.6	**LOS Thresh. Delay**	41.2	**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	450	700	1010	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	150	540	840	1210	1690
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	6500	10000	14500	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**	Little Chicago Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Buttonwood Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	211th 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 51 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	12571	**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**	0.606	**Base Capacity**	1700
Posted Speed	40	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	777	**Local Adj. Factor**	0.91
Free Flow Speed	45	**Class**	3	**Off Peak Dir. Hrly. Vol.**	505	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.55	**Density**	N/A	**PTSF**	86.7	**ATS**	31.3	**% FFS**	69.6
FFS Delay	33.2	**LOS Thresh. Delay**	40.8	**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	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	1400	3800	9200	14200	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	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	196th 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 52 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7103	**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**	0.520	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	284	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	263	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.20	**Density**	N/A	**PTSF**	64.4	**ATS**	41.6	**% FFS**	83.3
FFS Delay	13.7	**LOS Thresh. Delay**	13.7	**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	2100	7100	15100	21900	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	Danah	**Highway Name**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**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\Existing\Ex 52 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	7103	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.153	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.620	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	674	**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	0.47	**Density**	N/A	**PTSF**	84.7	**ATS**	37.6	**% FFS**	75.1
FFS Delay	22.6	**LOS Thresh. Delay**	22.6	**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	100	290	680	1010	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	470	1100	1630	2300
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1200	3100	7200	10700	15100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	196th 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 52 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	9078	**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**	0.641	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	559	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	313	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.39	**Density**	N/A	**PTSF**	80.1	**ATS**	39.0	**% FFS**	78.1
FFS Delay	19.2	**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	110	290	690	1040	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	460	1080	1630	2220
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1900	4800	11300	17000	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**	Hague Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**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 52 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.950	**Median**	No	**AADT**	9078	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.153	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.617	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	857	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	532	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.60	**Density**	N/A	**PTSF**	89.0	**ATS**	35.3	**% FFS**	70.6
FFS Delay	28.4	**LOS Thresh. Delay**	28.4	**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	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	1200	3200	7200	10800	15100
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	James 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**	206th 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 53 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**	0.032	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.780	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	25	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	7	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	10.9	**ATS**	49.5	**% FFS**	99.0
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	320	590	950	1310	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	420	760	1220	1680	1830
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	13200	23800	38200	52600	57200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	James 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**	206th 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 53 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**	0.057	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.540	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	31	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	26	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.02	**Density**	N/A	**PTSF**	9.9	**ATS**	49.3	**% FFS**	98.5
FFS Delay	1.1	**LOS Thresh. Delay**	1.1	**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	420	690	940	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	320	780	1280	1750	2630
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5700	13700	22500	30800	46200
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	James 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**	206th 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 53 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**	0.073	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.781	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	57	**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	0.04	**Density**	N/A	**PTSF**	15.3	**ATS**	49.1	**% FFS**	98.2
FFS Delay	1.3	**LOS Thresh. Delay**	1.3	**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	320	590	950	1310	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	410	760	1220	1680	1820
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5700	10500	16800	23100	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	TR	**Highway Name**	James 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**	206th 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 53 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**	0.129	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.597	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	0	**Peak Dir. Hrly. Vol.**	77	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	52	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	17.3	**ATS**	48.6	**% FFS**	97.1
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	200	460	760	1040	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	780	1280	1750	2380
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	6100	10000	13600	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	Danah	**Highway Name**	Cicero Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	196th 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 54 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	9408	**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**	0.850	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	44	**Peak Dir. Hrly. Vol.**	768	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	135	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.54	**Density**	N/A	**PTSF**	79.4	**ATS**	44.4	**% FFS**	80.8
FFS Delay	15.6	**LOS Thresh. Delay**	9.0	**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	280	660	1020	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	780	1200	1680	1680
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3500	8200	12600	17600	17600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**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\Existing\Ex 54 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	9408	**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**	0.690	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	44	**Peak Dir. Hrly. Vol.**	747	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	335	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.52	**Density**	N/A	**PTSF**	83.1	**ATS**	43.0	**% FFS**	78.1
FFS Delay	18.4	**LOS Thresh. Delay**	11.8	**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	210	500	890	1280	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	310	730	1290	1860	2060
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2700	6400	11300	16200	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**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	196th 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 54 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	13148	**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**	0.884	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	44	**Peak Dir. Hrly. Vol.**	1209	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	159	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.85	**Density**	N/A	**PTSF**	86.7	**ATS**	39.8	**% FFS**	72.3
FFS Delay	25.1	**LOS Thresh. Delay**	18.5	**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	300	720	1080	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	340	820	1230	1610	1610
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3300	7900	11900	15500	15500
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	206th Street	**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 54 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.000	**Median**	No	**AADT**	13148	**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**	0.747	**Base Capacity**	1700
Posted Speed	50	**% NPZ**	44	**Peak Dir. Hrly. Vol.**	1129	**Local Adj. Factor**	0.91
Free Flow Speed	55	**Class**	3	**Off Peak Dir. Hrly. Vol.**	383	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.79	**Density**	N/A	**PTSF**	92.6	**ATS**	39.2	**% FFS**	71.3
FFS Delay	26.4	**LOS Thresh. Delay**	19.8	**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	240	520	940	1360	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	700	1260	1830	1910
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2900	6100	11000	16000	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**	Edith Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 55 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**	0.012	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	12	**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**	45.3	**ATS**	47.5	**% FFS**	94.9
FFS Delay	4.2	**LOS Thresh. Delay**	4.2	**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	180	630	1080	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	640	1080	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	15000	53400	90000	118400	118400
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Edith Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 55 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**	0.020	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	13	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	7	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	34.9	**ATS**	47.4	**% FFS**	94.8
FFS Delay	4.4	**LOS Thresh. Delay**	4.4	**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	110	300	700	1060	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	170	470	1080	1640	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	8600	23600	54000	82000	109600
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Edith Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 55 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	No	**AADT**	1476	**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**	0.835	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	67	**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	0.05	**Density**	N/A	**PTSF**	48.1	**ATS**	46.8	**% FFS**	93.6
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	150	500	780	1190	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	600	940	1430	1710
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	3400	11200	17500	26500	31700
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Edith Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 55 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	1.100	**Median**	No	**AADT**	1476	**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**	0.621	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	85	**Peak Dir. Hrly. Vol.**	77	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	47	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	42.9	**ATS**	46.4	**% FFS**	92.8
FFS Delay	6.2	**LOS Thresh. Delay**	6.2	**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	110	300	690	1020	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	490	1120	1650	2290
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2200	5900	13400	19700	27300
4					
6					
8					

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland 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 56 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**	0.012	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	12	**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**	40.2	**ATS**	48.6	**% FFS**	97.2
FFS Delay	0.8	**LOS Thresh. Delay**	0.8	**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	300	750	1200	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	760	1200	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	25000	63400	100000	118400	118400

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland Road	**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 56 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**	0.020	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.650	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	13	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	7	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	30.9	**ATS**	48.5	**% FFS**	97.0
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	180	410	760	1100	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	280	640	1170	1700	2190
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	14000	32000	58600	85000	109600

4
6
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*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland 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 56 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	2000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.040	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.835	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	67	**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	0.05	**Density**	N/A	**PTSF**	43.6	**ATS**	47.9	**% FFS**	95.9
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	250	580	890	1290	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	300	700	1070	1550	1710
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	7600	17600	26800	38800	42800

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6
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*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Edith Ave	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Cumberland Road	**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 56 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.400	**Median**	No	**AADT**	2000	**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**	0.621	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	50	**Peak Dir. Hrly. Vol.**	77	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	47	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.06	**Density**	N/A	**PTSF**	39.0	**ATS**	47.5	**% FFS**	95.0
FFS Delay	1.5	**LOS Thresh. Delay**	1.5	**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	160	400	740	1060	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	650	1200	1710	2290
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4200	10500	19400	27600	37000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**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**	Overdorf Road	**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 57 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**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**	0.710	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	43	**Peak Dir. Hrly. Vol.**	15	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	6	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	30.4	**ATS**	48.9	**% FFS**	97.8
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	230	470	820	1190	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	330	670	1160	1680	2000
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	15800	32000	55300	80000	95300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**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**	Overdorf 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 57 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1000	**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**	0.660	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	43	**Peak Dir. Hrly. Vol.**	31	**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	0.02	**Density**	N/A	**PTSF**	31.4	**ATS**	48.7	**% FFS**	97.3
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	200	440	790	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	310	670	1200	1700	2160
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	6600	14300	25600	36200	46000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**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**	Overdorf Road	**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 57 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**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**	0.654	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	43	**Peak Dir. Hrly. Vol.**	17	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	9	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	29.3	**ATS**	48.9	**% FFS**	97.7
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	200	440	780	1110	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	310	680	1200	1700	2180
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	12000	26200	46200	65400	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**	Riverwood Avenue	**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**	Overdorf 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 57 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.600	**Median**	No	**AADT**	1000	**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**	0.655	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	43	**Peak Dir. Hrly. Vol.**	36	**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	0.03	**Density**	N/A	**PTSF**	32.0	**ATS**	48.6	**% FFS**	97.2
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	200	440	780	1120	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	310	680	1200	1710	2170
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	5700	12400	21900	31100	39500

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 58 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**	0.016	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	1.000	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	57	**Peak Dir. Hrly. Vol.**	16	**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**	45.5	**ATS**	48.1	**% FFS**	96.3
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	710	1160	1420	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	720	1160	1420	1420
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	16300	45000	72600	88800	88800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 58 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**	0.021	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.670	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	57	**Peak Dir. Hrly. Vol.**	14	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	7	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	34.6	**ATS**	48.1	**% FFS**	96.2
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	170	380	760	1110	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	570	1140	1660	2120
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	12400	27200	54300	79100	101000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 58 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**	0.019	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.842	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	57	**Peak Dir. Hrly. Vol.**	16	**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**	40.6	**ATS**	48.1	**% FFS**	96.2
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	210	560	850	1260	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	250	670	1010	1500	1690
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	13200	35300	53200	79000	89000

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Overdorf Road	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	206th Street	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	Riverwood Avenue	**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 58 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**	0.024	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.708	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	57	**Peak Dir. Hrly. Vol.**	17	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	7	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	36.3	**ATS**	48.1	**% FFS**	96.1
FFS Delay	1.5	**LOS Thresh. Delay**	1.5	**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	180	390	780	1160	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	260	560	1110	1640	2010
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	10900	23400	46300	68400	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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 59 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.025	**% 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.**	19	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	6	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.01	**Density**	N/A	**PTSF**	39.6	**ATS**	47.3	**% FFS**	94.5
FFS Delay	3.8	**LOS Thresh. Delay**	3.8	**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	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	7200	21200	38800	60800	74800

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 59 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.040	**% 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.**	27	**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	0.02	**Density**	N/A	**PTSF**	37.7	**ATS**	47.1	**% FFS**	94.2
FFS Delay	4.0	**LOS Thresh. Delay**	4.0	**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	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	4300	12000	26300	39800	52300

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 59 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	1000	**PHF**	0.920
# Thru Lanes	2	**Left Turn Impact**	No	**K**	0.027	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.704	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	19	**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	0.01	**Density**	N/A	**PTSF**	37.3	**ATS**	47.2	**% FFS**	94.5
FFS Delay	3.8	**LOS Thresh. Delay**	3.8	**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	120	340	720	1100	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	490	1030	1570	2020
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	6700	18200	38200	58200	74900

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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**	Riverwood Avenue	**Study Period**	**Kother**
Date Prepared	9/20/2023 10:58:32 AM	**From**	Overdorf Road	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	206th 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 59 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.900	**Median**	No	**AADT**	1000	**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**	0.644	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	100	**Peak Dir. Hrly. Vol.**	29	**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	0.02	**Density**	N/A	**PTSF**	37.5	**ATS**	47.1	**% FFS**	94.1
FFS Delay	4.0	**LOS Thresh. Delay**	4.0	**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	110	290	690	1040	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	180	460	1080	1620	2210
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	4000	10300	24000	36000	49200

4
6
8

*** Cannot be achieved based on input data provided.**
 # Performance measure results are no longer applicable 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 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	196th 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 68 AM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3138	**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	45	**% NPZ**	65	**Peak Dir. Hrly. Vol.**	152	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	124	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.11	**Density**	N/A	**PTSF**	50.4	**ATS**	44.6	**% FFS**	89.3
FFS Delay	4.3	**LOS Thresh. Delay**	4.3	**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	110	320	650	930	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	590	1190	1700	2590
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2300	6800	13600	19400	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	Danah	**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**	Southbound	**Version Date**	12/12/2012
File Name	Z:\2023\23077S-City of Noblesville, Road Impact Fee Update, Noblesville\Capacity Analysis\HCS\Existing\Ex 68 PM.xhp				
User Notes					

Highway Data

Roadway Variables				Traffic Variables			
Segment Length	0.500	**Median**	No	**AADT**	3138	**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	45	**% NPZ**	65	**Peak Dir. Hrly. Vol.**	186	**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	0.13	**Density**	N/A	**PTSF**	54.6	**ATS**	43.2	**% FFS**	86.4
FFS Delay	5.6	**LOS Thresh. Delay**	5.6	**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	310	620	870	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	200	610	1220	1710	2790
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	1800	5300	10600	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**	SR 37	**Analysis Type**	Two-Lane Segment
Agency	A & F Engineering LLC	**To**	196th 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 68 AM.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**	0.091	**% Heavy Vehicles**	3.0
Terrain	Level	**Pass Lane Length**	N/A	**D**	0.693	**Base Capacity**	1700
Posted Speed	45	**% NPZ**	65	**Peak Dir. Hrly. Vol.**	545	**Local Adj. Factor**	0.91
Free Flow Speed	50	**Class**	3	**Off Peak Dir. Hrly. Vol.**	242	**Adjusted Capacity**	1428

LOS Results

v/c Ratio	0.38	**Density**	N/A	**PTSF**	77.9	**ATS**	39.7	**% FFS**	79.5
FFS Delay	9.3	**LOS Thresh. Delay**	9.3	**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	150	360	760	1130	1420
2					
3					
4					
Lanes	**Hourly Volume In Both Directions**				
2	220	520	1100	1640	2050
4					
6					
8					
Lanes	**Annual Average Daily Traffic**				
2	2500	5800	12100	18100	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**	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.