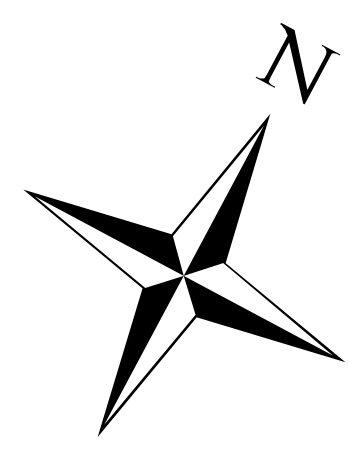


SCALE: 1" = 1,000'

STUDY ROADWAYS AND INTERSECTIONS





SCALE: 1" = 1,000'

TRAFFIC GENERATION LOCATIONS & TYPES

• South Whitehall Township Scenario Driveways: May 2021

ID	Color	Buildout	Description	ID	Color	Buildout	Description
1	yellow			38	driveway	B6	50k conv. retail
2	yellow			39	driveway	25 du	50000neighborcomm
3	yellow			40	driveway	25 du	50000neighborcomm
4	yellow d	200 du, 70000 sf	200 mf3+, 70k community shopping	41	driveway	240du	5000restbar
5	yellow	100 du, 30000 sf	100 mf3, 30k community shopping	42	driveway	120 du	120 sfd
6	yellow			43	driveway	40000 office	40k prof office
7	yellow			44	driveway	250k warehouse	250k warehouse
8	yellow			45	driveway	25k wawa, 25 med off	25k conv-ret, 25 med off
9	yellow			46	driveway	10 sfd	10 sfd
10	yellow			47	driveway	30kfd	30kfd
11	yellow			48	driveway	100 sfa, 100mf3	100sfa 100mf3
12	yellow			49	driveway	50sfa	50sfa
13	yellow			50	driveway	50 sfa, 100mf3	50sfa 100 mf3
14	orange			51	driveway	25kconret25krest	25k cnovretail, 25k rest-bar
15	orange			52	driveway	100 sfd	100sfd
16	orange			53	driveway	300mf3	300 mfr3 (age-restricted)
17	orange			54	driveway	100sfa	100 sfa
18	orange			55	driveway	100med,50off	100k med off, 50k prof off
19	orange			56	driveway	150du 100kres50bar	50k rest-bar, 100k commtyshop, 50 mf3, 100 mf3+
20	orange			57	driveway	150du, 100cmnttyshop	100k commtyshop, 50 mf3, 100 mf3+
21	orange			58	driveway	10 sfd	10 sfd
22	orange			59	driveway	10 sfd	10 sfd
23	orange			60	driveway	10 sfd	10 sfd
24	orange			61	driveway	30000 conretail	30k conv-ret
25	blue			62	driveway	20000 convret	20k conv-ret
26	blue			63	driveway	35 sfd	35 sfd
27	blue			64	driveway	all of k11	100 mf3 50kconretail 50krest-bar 50kprof 300kmed
28	blue			65	driveway	all of k11	20k med off, 20k prof off, 50k pad, 50k rest-bar
29	blue			66	driveway	all of j10	50k rest-bar 50k conv retail
30	blue			67	driveway	50k bar-rest	50k bar-rest
31	driveway	half of C6	10k rest-bar	68	driveway	50k pad, 50k bar	50k pad, 50k bar-rest
32	driveway	half of C6	10k rest-bar	69	driveway	50k pad, 50k bar	50k pad, 50k bar-rest
33	driveway	D7	280k community shopping	70	driveway		20mfr3, 50k neighborhood shopping
34	driveway	half B5	50 sfd, 15k conv retail	71	driveway	250kware	70k conv retail, 250k ware
35	driveway	half B5	50sfd, 15k rest bar	72	driveway	50k barrest	50k bar-rest
36	driveway	a5 2bdfd, 20sfa	20sfd, 20sfa	73	driveway	65kneig, 150mf4, 18s	65kneig, 150mf4, 18sfa
37	driveway	A5 30 sfd, 50 sfa	30sfd, 50 sfa	74	driveway	65kneig, 150mf4, 18s	65kneig, 150mf4, 18sfa

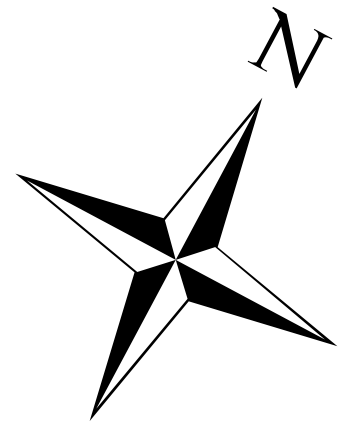
□ South Whitehall Township Scenario: April 2021

HEXID	SUM_LUCIS	NOTES	POP	JOBS	DEVTYPE	HOW1	HOW2	sfa	df	mfr3plus	conv_retail	rest_bar	comm_shop_neigh_shop	pad_site	prof_offic_med_office	flex_ware	build_note
A5	100.0000000000	LOW POPULATION	G10	90	70	70	0	0	0	0	0	0	0	0	0	0	0
B4	0.0000000000	ZEROS															0 some retail for "low jobs"
B6	10.0000000000	LOW POPULATION, LOW JOBS	G10	100	0	0	0	0	0	0	0	0	0	0	0	0	0 adaptive reuse
B7	0.0000000000	ZEROS															0
C3	0.0000000000	ZEROS															0
C4	0.0000000000	ZEROS															0
C5	0.0000000000	ZEROS															0
C6	10.0000000000	LOW JOBS														20000	0 adaptive reuse (barn weddings, etc...)
C7	0.0000000000	ZEROS															0
C8	0.0000000000	ZEROS															0
D2	110.0000000000	LOW POPULATION, LOW JOBS	G10	30	0	0	0	0	0	0	0	0	0	0	0	0	0 retail along 309, sfd out of floodplain
D3	0.0000000000	ZEROS															0
D4	0.0000000000	ZEROS															0
D5	0.0000000000	ZEROS															0
D6	0.0000000000	ZEROS															0
D7	10.0000000000	LOW JOBS															4-6 acres of retail space
D8	0.0000000000	ZEROS															0
D9	0.0000000000	ZEROS															0
E1	0.0000000000	ZEROS															0
E2	0.0000000000	ZEROS															0
E3	0.0000000000	ZEROS															0
E4	0.0000000000	ZEROS															0
E5	0.0000000000	ZEROS															0
E6	0.0000000000	ZEROS															0
E7	320.0000000000	HIGH POPULATION, MEDIUM JOBS	H19	129	0	0	0	0	0	0	0	0	0	0	0	0	0 ridge farm recent approved
E8	110.0000000000	LOW POPULATION, LOW JOBS	G10	19	0	0	0	0	0	0	0	0	0	0	0	0	0 ridge farms part of recent build
E9	0.0000000000	ZEROS															0
F2	0.0000000000	ZEROS															0
F3	0.0000000000	ZEROS															0
F4	110.0000000000	LOW POPULATION, LOW JOBS	G10	19	60	0	0	0	0	0	25000	0	0	0	0	25000	25000 infill, adjacent uses
F5	130.0000000000	LOW POPULATION, LOW JOBS	G10	19	120	240	0	0	0	0	5000	5000	0	0	0	40000	0 infill, hau
F6	100.0000000000	LOW POPULATION, LOW JOBS	G10	19	0	0	0	0	0	0	0	0	0	0	0	0	0 winchester, recent approved
F7	120.0000000000	LOW POPULATION, MEDIUM JOBS	R13	R14	0	0	0	0	0	0	50	0	0	0	0	0	0 not much redev opp.
F8	120.0000000000	LOW POPULATION, MEDIUM JOBS	R13	R14	0	0	0	0	0	0	100	200	0	0	0	0	0 redevelopment some population
F9	0.0000000000	ZEROS															0
G4	210.0000000000	MEDIUM POPULATION, LOW JOBS	H19	113	115	100	200	200	0	0	25000	25000	0	0	0	0	0 1nd prime developable land
G5	120.0000000000	LOW POPULATION, MEDIUM JOBS	H19	117	0	0	0	0	0	0	0	0	0	0	0	0	0 250000 recentwarehouse
G6	210.0000000000	MEDIUM POPULATION, LOW JOBS	H19	0	36	0	0	300	0	0	0	0	0	0	0	0	0 premier center
G7	100.0000000000	LOW POPULATION, LOW JOBS	H19	11	35	0	0	0	0	0	0	0	0	0	0	0	0 ag field
G8	0.0000000000	ZEROS															0
H5	10.0000000000	LOW JOBS															0 not much developable
H6	110.0000000000	LOW POPULATION, LOW JOBS	H19	19	0	100	300	0	0	0	0	0	0	0	0	0	0 potential for age restricted
H7	0.0000000000	ZEROS															0
H9	0.0000000000	ZEROS															0
I7	230.0000000000	MEDIUM POPULATION, HIGH JOBS	R23	R20	0	0	0	100	200	0	50000	20000	0	0	0	0	0 targeted redevelopment area
I8	0.0000000000	ZEROS															0
I9	0.0000000000	ZEROS															0
J10	10.0000000000	LOW JOBS															0 along haines mill & broadway
J11	10.0000000000	LOW JOBS															0 dorneyville and kuss bros
J8	0.0000000000	ZEROS															0
J9	0.0000000000	ZEROS															0
K10	220.0000000000	MEDIUM POPULATION, MEDIUM JOBS	H19	123	125	0	0	100	0	0	50000	50000	0	0	0	0	0 hospital expansion
K11	10.0000000000	LOW JOBS															0 redevelopment along hamilton



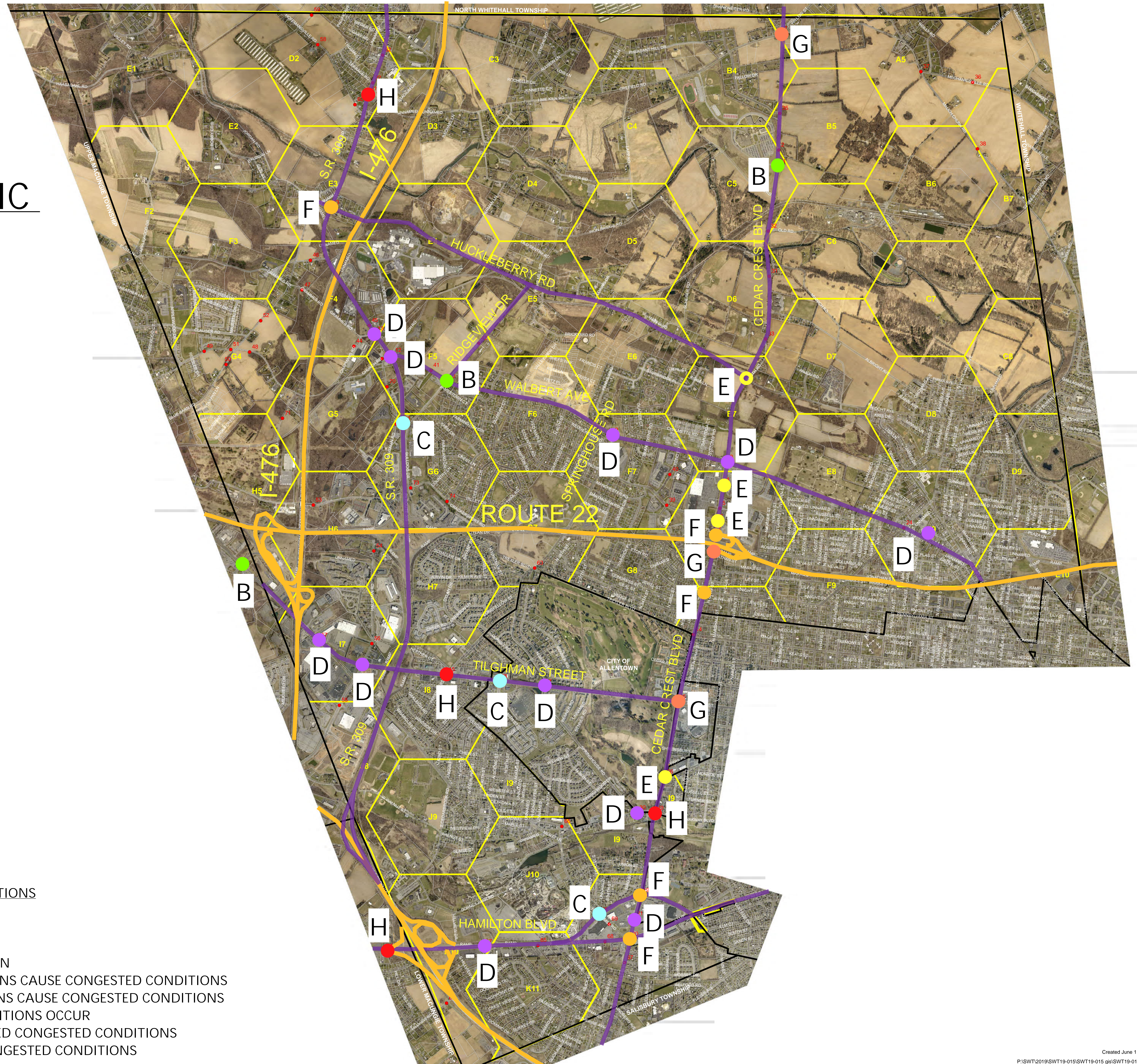
Legend

- 29 (Yellow circle with dot) South Whitehall Township Scenario Driveways: May 2021
- (Yellow outline) South Whitehall Township Scenario: May 2021



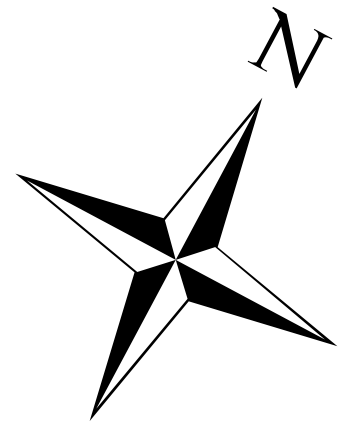
SCALE: 1" = 1,000'

2040 BASE TRAFFIC CONDITIONS



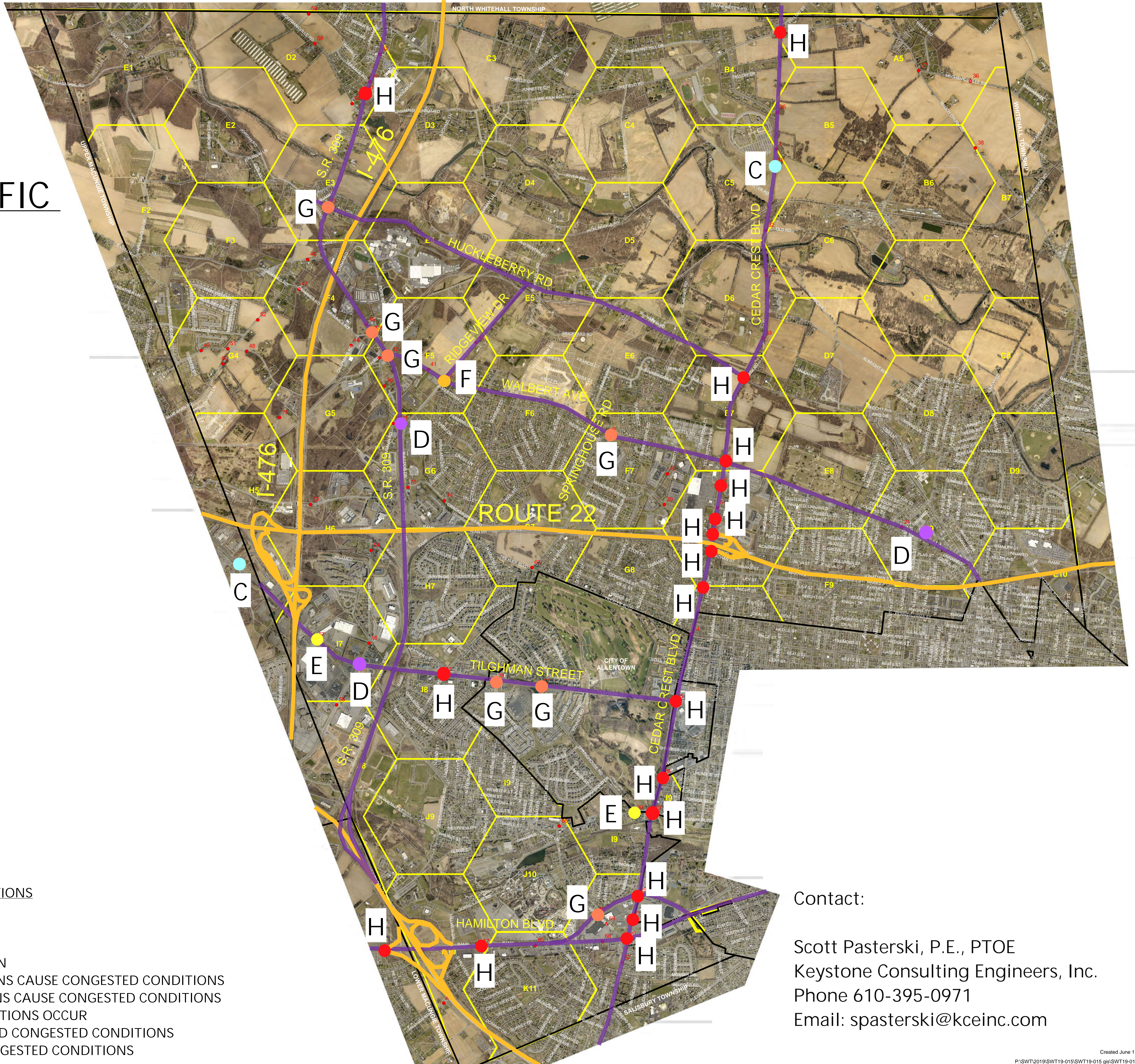
INTERSECTION CAPACITY UTILIZATION (ICU) DESCRIPTIONS

- LOS A (< 55%) - NO CONGESTION
- LOS B (55% - 64%) - NEARLY NO CONGESTION
- LOS C (64% - 73%) - PERIODIC MINOR CONGESTION
- LOS D (73% - 82%) - MAJOR TRAFFIC FLUCTUATIONS CAUSE CONGESTED CONDITIONS
- LOS E (82% - 91%) - MINOR TRAFFIC FLUCTUATIONS CAUSE CONGESTED CONDITIONS
- LOS F (91% - 100%) - ROUTINE CONGESTED CONDITIONS OCCUR
- LOS G (100% - 109%) - OVER-CAPACITY, SUSTAINED CONGESTED CONDITIONS
- LOS H (> 109%) - OVER CAPACITY, EXTENDED CONGESTED CONDITIONS



SCALE: 1" = 1,000'

2040 FUTURE TRAFFIC CONDITIONS



INTERSECTION CAPACITY UTILIZATION (ICU) DESCRIPTIONS

- LOS A (< 55%) - NO CONGESTION
- LOS B (55% - 64%) - NEARLY NO CONGESTION
- LOS C (64% - 73%) - PERIODIC MINOR CONGESTION
- LOS D (73% - 82%) - MAJOR TRAFFIC FLUCTUATIONS CAUSE CONGESTED CONDITIONS
- LOS E (82% - 91%) - MINOR TRAFFIC FLUCTUATIONS CAUSE CONGESTED CONDITIONS
- LOS F (91% - 100%) - ROUTINE CONGESTED CONDITIONS OCCUR
- LOS G (100% - 109%) - OVER-CAPACITY, SUSTAINED CONGESTED CONDITIONS
- LOS H (> 109%) - OVER CAPACITY, EXTENDED CONGESTED CONDITIONS

Contact:

Scott Pasterski, P.E., PTOE
 Keystone Consulting Engineers, Inc.
 Phone 610-395-0971
 Email: spasterski@kceinc.com