APPENDIX E
TRAVEL TIME DATA

Travel Time & Delay Report for William Hilton Parkway

Legend:

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

Cumulative Summary of runs Eastbound from Squire Pope Road (#2)

9 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 6:38:05 AM to 8:46:14 AM

9 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 6:37:14 AM to 8:26:57 AM

	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)					
Average Before (n=9)	293	81	60	33.8	1.4
Minimum Before (n=9)	206	-7	0	25.5	0.0
85th Percentile Before (n=9)	345	133	105	40.8	2.0
Maximum Before (n=9)	375	163	105	46.5	2.0
Std Dev Before (n=9)	*56*	*56*	*42*	*7.0*	*0.7*
Average After (n=9)	293	81	49	34.0	1.6
Minimum After (n=9)	201	-12	0	22.7	0.0
85th Percentile After (n=9)	334	121	63	42.3	3.0
Maximum After (n=9)	423	210	161	47.5	4.0
Std Dev After (n=9)	*64*	*64*	*47*	*7.4*	*1.3*
Difference	0	0	-10	0.2	0.1
Difference Minimum	-5	-5	0	-2.8	0.0
Difference 85th Percentile	-12	-12	-42	1.5	1.0
Difference Maximum	47	47	55	1.1	2.0
Std Dev Difference	*86*	*86*	*63*	*10.2*	*1.5*
% Difference	0%	0%	-17%	0.6%	7.7%

Cumulative Summary of runs Westbound from Beach City Road (#20)

9 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 6:42:48 AM to 8:53:09 AM
8 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 6:42:03 AM to 8:21:12 AM

	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)					
Average Before (n=9)	272	59	40	35.7	1.7
Minimum Before (n=9)	233	21	13	29.6	1.0
85th Percentile Before (n=9)	317	104	74	39.7	2.0
Maximum Before (n=9)	324	111	89	40.9	3.0
Std Dev Before (n=9)	36	36	30	4.5	0.7
Average After (n=8)	265	53	31	36.7	1.5
Minimum After (n=8)	224	11	0	27.1	0.0
85th Percentile After (n=8)	282	69	41	42.1	2.0
Maximum After (n=8)	352	140	104	42.8	4.0
Std Dev After (n=8)	41	41	33	5.0	1.2
Difference	-6	-6	-9	1.0	-0.2
Difference Minimum	-10	-10	-13	-2.4	-1.0
Difference 85th Percentile	-35	-35	-34	2.4	0.0
Difference Maximum	29	29	15	1.8	1.0
Std Dev Difference	55	55	44	6.7	1.4
% Difference	-2%	-11%	-23%	2.8%	-10.0%

Cumulative Summary of all runs, either direction through artery

18 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 6:41:21 AM to 8:56:40 AM
17 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 6:40:50 AM to 8:31:24 AM

	CTT	CD	CStopD	CAS	CStops
to End of Artery					
Average Before (n=18)	282	70	50	34.8	1.6
Minimum Before (n=18)	233	21	13	29.6	1.0
85th Percentile Before (n=18)	317	104	74	39.7	2.0
Maximum Before (n=18)	324	111	89	40.9	3.0
Std Dev Before (n=18)	47	47	36	5.8	0.7
Average After (n=17)	280	68	41	35.3	1.5

Minimum After (n=17)	224	11	0	27.1	0.0
85th Percentile After (n=17)	282	69	41	42.1	2.0
Maximum After (n=17)	352	140	104	42.8	4.0
Std Dev After (n=17)	55	55	41	6.3	1.2
Difference	-2	-2	-9	0.5	0.0
Difference Minimum	-10	-10	-13	-2.4	-1.0
Difference 85th Percentile	-35	-35	-34	2.4	0.0
Difference Maximum	29	29	15	1.8	1.0
Std Dev Difference	72	72	55	8.6	1.4
% Difference	-1%	-3%	-19%	1.5%	-1.7%

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Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Travel Time from previous Node (seconds)

CTT:
Cumulative Travel Time since beginning of Run (seconds)

Delay:
Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Contents:

[-] Collapse All

[-] Before-type Trip Log "Trip #16:36:48 AM", AM-period, started Wednesday 3/28/2018 6:36:47 AM ↑Contents

Entered artery 6:38:05 am (78 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	32	32	-2	-2	0	0	47.5	47.5	0	0	1.07	0.06	0.68	94.6	32.52
to Gumtree Road (#11)	68	100	22	20	18	18	30.6	36.0	1	1	1.59	0.09	0.89	143.4	49.49
to Wilborn Road (#8)	28	128	4	24	0	18	37.9	36.4	0	1	0.69	0.03	0.47	71.1	24.29
to Museum Street (#14)	21	149	2	26	0	18	40.9	37.0	0	1	0.43	0.02	0.31	48.3	16.50
to Whooping Crane Way (#17)	47	196	0	26	0	18	45.4	39.0	0	1	1.44	0.06	0.94	133.7	45.67
to Beach City Road (#20)	39	235	-4	22	0	18	49.7	40.8	0	1	1.05	0.05	0.69	102.2	34.96

Entered artery 6:49:24 am (758 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	62	62	29	29	18	18	24.3	24.3	1	1	1.38	0.07	0.70	111.9	38.39
to Gumtree Road (#11)	59	122	13	42	0	18	35.2	29.6	0	1	1.99	0.10	1.05	152.3	52.42
to Wilborn Road (#8)	24	146	0	42	0	18	44.4	32.1	0	1	1.39	0.06	0.69	89.6	30.59
to Museum Street	18	164	-1	41	0	18	47.2	33.7	0	1	0.49	0.02	0.31	45.9	15.71

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
(#14)															
to Whooping Crane Way (#17)	43	206	-4	37	0	18	49.7	37.0	0	1	1.44	0.07	0.89	125.0	42.77
to Beach City Road (#20)	38	244	-5	31	0	18	51.1	39.2	0	1	1.19	0.06	0.77	109.4	37.43

Entered artery 7:05:53 am (1747 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	32	32	-2	-2	0	0	47.4	47.4	0	0	1.64	0.07	0.91	118.1	40.32
to Gumtree Road (#11)	48	80	1	0	0	0	43.7	45.2	0	0	0.80	0.05	0.52	90.6	31.32
to Wilborn Road (#8)	28	107	4	3	0	0	38.8	43.5	0	0	1.11	0.05	0.56	78.3	26.76
to Museum Street (#14)	17	125	-1	2	0	0	48.4	44.2	0	0	0.50	0.02	0.33	47.7	16.30
to Whooping Crane Way (#17)	41	166	-6	-3	0	0	51.6	46.1	0	0	1.43	0.06	0.91	126.0	43.05
to Beach City Road (#20)	40	206	-3	-7	0	0	48.3	46.5	0	0	0.88	0.04	0.61	94.3	32.27

Entered artery 7:21:37 am (2690 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	30	30	-4	-4	0	0	50.6	50.6	0	0	1.81	0.07	0.78	103.0	35.40
to Gumtree Road (#11)	151	181	104	101	79	79	13.9	20.0	1	1	1.38	0.08	0.70	138.8	48.15
to Wilborn Road (#8)	30	211	7	107	0	79	35.2	22.1	0	1	1.97	0.09	0.93	118.4	40.63
to Museum Street (#14)	19	230	1	108	0	79	43.6	23.9	0	1	0.51	0.02	0.29	44.3	15.19
to Whooping Crane Way (#17)	53	284	7	114	0	79	39.7	26.9	0	1	2.61	0.10	1.12	150.1	51.94
to Beach City Road (#20)	42	326	-1	113	0	79	46.1	29.4	0	1	1.33	0.06	0.82	117.6	40.20

Entered artery 7:36:59 am (3613 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	93	93	59	59	55	55	16.3	16.3	1	1	1.42	0.07	0.75	115.9	39.83
to Gumtree Road (#11)	113	206	66	126	51	105	18.6	17.6	1	2	4.67	0.14	1.31	179.4	63.10
to Wilborn Road (#8)	42	247	18	144	0	105	25.5	18.9	0	2	0.81	0.04	0.46	79.6	27.39
to Museum Street (#14)	24	271	5	149	0	105	35.3	20.4	0	2	0.82	0.04	0.48	68.1	23.25
to Whooping Crane Way (#17)	57	328	10	159	0	105	37.0	23.3	0	2	1.48	0.07	0.89	135.8	46.50
to Beach City Road (#20)	47	375	4	163	0	105	41.2	25.5	0	2	1.22	0.06	0.74	112.8	38.70

Entered artery 7:52:00 am (4513 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	86	86	52	52	48	48	17.7	17.7	1	1	1.24	0.06	0.66	104.5	35.91
to Gumtree Road (#11)	109	195	63	115	54	102	19.5	18.7	1	2	3.29	0.15	1.47	209.9	72.52
to Wilborn															

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Road (#8)	30	225	7	121	0	102	35.1	20.9	0	2	0.74	0.03	0.45	70.7	24.16
to Museum Street (#14)	18	243	-1	121	0	102	46.2	22.8	0	2	0.90	0.04	0.51	66.5	22.71
to Whooping Crane Way (#17)	41	285	-5	116	0	102	51.0	26.9	0	2	1.57	0.07	0.95	130.2	44.49
to Beach City Road (#20)	39	324	-5	111	0	102	50.2	29.7	0	2	1.10	0.05	0.64	95.4	32.66

Entered artery 8:07:03 am (5416 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	77	77	43	43	28	28	19.7	19.7	1	1	1.43	0.07	0.76	122.0	41.88
to Gumtree Road (#11)	63	140	17	60	14	41	33.0	25.7	1	2	2.44	0.13	1.25	175.7	60.41
to Wilborn Road (#8)	25	166	2	62	0	41	42.0	28.2	0	2	1.49	0.07	0.78	99.7	34.02
to Museum Street (#14)	18	184	-1	61	0	41	46.6	30.0	0	2	0.51	0.02	0.34	49.9	17.05
to Whooping Crane Way (#17)	55	239	9	70	0	41	38.4	32.0	0	2	1.75	0.08	0.95	140.6	48.20
to Beach City Road (#20)	40	279	-4	67	0	41	48.7	34.3	0	2	6.16	0.13	1.21	141.7	50.69

Entered artery 8:24:18 am (6451 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	34	34	1	1	0	0	43.9	43.9	0	0	0.91	0.04	0.56	84.1	28.77
to Gumtree Road (#11)	169	204	123	124	105	105	12.3	17.7	2	2	2.28	0.12	1.19	202.4	69.84
to Wilborn Road (#8)	23	227	-1	123	0	105	45.8	20.6	0	2	1.45	0.07	0.69	89.2	30.50
to Museum Street (#14)	18	245	-1	123	0	105	47.1	22.5	0	2	0.42	0.02	0.28	42.7	14.61
to Whooping Crane Way (#17)	56	301	9	132	0	105	38.0	25.4	0	2	1.91	0.09	1.04	149.8	51.41
to Beach City Road (#20)	45	345	1	133	0	105	43.4	27.7	0	2	1.33	0.06	0.77	114.1	39.10

Entered artery 8:46:14 am (7768 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	74	74	41	41	31	31	20.3	20.3	1	1	1.06	0.05	0.56	104.4	35.82
to Gumtree Road (#11)	98	172	52	92	40	70	21.8	21.2	1	2	2.23	0.12	1.16	181.1	62.31
to Wilborn Road (#8)	27	200	4	96	0	70	38.8	23.6	0	2	1.22	0.06	0.69	91.9	31.44
to Museum Street (#14)	19	219	0	96	0	70	45.1	25.4	0	2	0.51	0.02	0.34	49.8	17.03
to Whooping Crane Way (#17)	47	266	1	97	0	70	44.9	28.9	0	2	1.11	0.05	0.73	112.4	38.48
to Beach City Road (#20)	41	307	-2	94	0	70	47.2	31.3	0	2	1.32	0.16	0.80	108.6	39.16

[-] After-type Trip Log "Trip #4", AM-period, started Thursday 10/4/2018 6:36:58 AM ↑Contents

Entered artery 6:37:14 am (16 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	33	33	-1	-1	0	0	45.7	45.7	0	0	0.72	0.04	0.52	79.3	27.31

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Gumtree Road (#11)	46	79	0	-1	0	0	45.4	45.5	0	0	0.99	0.06	0.71	109.4	37.60
to Wilborn Road (#8)	22	102	-1	-2	0	0	47.5	46.0	0	0	0.69	0.03	0.44	63.3	21.65
to Museum Street (#14)	34	135	15	13	11	11	25.0	40.7	1	1	0.67	0.03	0.35	60.7	20.92
to Whooping Crane Way (#17)	81	217	34	47	21	32	26.1	35.3	1	2	2.07	0.09	1.18	173.7	59.43
to Beach City Road (#20)	49	265	5	53	0	32	39.7	36.1	0	2	1.73	0.08	1.08	150.3	51.33

Entered artery 6:48:04 am (666 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	34	34	1	1	0	0	44.0	44.0	0	0	1.41	0.06	0.81	110.5	37.77
to Gumtree Road (#11)	45	79	-1	-1	0	0	46.5	45.4	0	0	1.27	0.07	0.81	118.8	40.86
to Wilborn Road (#8)	22	101	-2	-3	0	0	48.6	46.1	0	0	0.71	0.03	0.46	64.4	22.00
to Museum Street (#14)	17	118	-2	-4	0	0	49.3	46.6	0	0	0.47	0.02	0.31	45.2	15.45
to Whooping Crane Way (#17)	43	161	-4	-8	0	0	49.4	47.3	0	0	1.31	0.06	0.82	118.8	40.60
to Beach City Road (#20)	40	201	-4	-12	0	0	48.5	47.5	0	0	10.01	0.14	1.01	104.7	40.34

Entered artery 6:59:43 am (1366 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	50	50	16	16	0	0	30.5	30.5	0	0	1.33	0.06	0.82	123.1	42.15
to Gumtree Road (#11)	52	101	5	21	0	0	40.4	35.5	0	0	1.44	0.08	0.91	133.6	45.90
to Wilborn Road (#8)	24	125	0	22	0	0	44.0	37.2	0	0	0.86	0.04	0.53	73.9	25.24
to Museum Street (#14)	17	143	-1	20	0	0	48.4	38.5	0	0	0.47	0.02	0.31	45.7	15.61
to Whooping Crane Way (#17)	45	188	-1	19	0	0	46.7	40.5	0	0	1.23	0.06	0.75	113.0	38.67
to Beach City Road (#20)	38	226	-5	14	0	0	51.0	42.3	0	0	4.10	0.10	1.05	121.4	42.91

Entered artery 7:12:34 am (2136 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	39	39	6	6	0	0	38.4	38.4	0	0	2.29	0.06	0.69	93.4	32.78
to Gumtree Road (#11)	101	140	54	60	36	36	20.8	25.8	1	1	1.39	0.08	0.79	157.2	54.10
to Wilborn Road (#8)	28	168	4	64	0	36	38.2	27.8	0	1	0.76	0.04	0.48	71.2	24.36
to Museum Street (#14)	20	188	2	66	0	36	41.2	29.3	0	1	0.73	0.03	0.41	57.9	19.80
to Whooping Crane Way (#17)	45	233	-2	64	0	36	47.5	32.8	0	1	1.57	0.07	0.90	127.5	43.61
to Beach City Road (#20)	41	274	-2	61	0	36	47.3	35.0	0	1	0.92	0.04	0.64	98.9	33.82

Entered artery 7:24:32 am (2855 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	79	79	45	45	34	34	19.3	19.3	1	1	1.19	0.06	0.62	105.9	36.29
to Gumtree Road (#11)	181	259	134	179	118	152	11.4	13.8	2	3	83.83	0.74	3.41	236.6	122.80

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wilborn Road (#8)	33	292	9	188	0	152	33.7	16.0	0	3	0.60	0.03	0.37	63.2	21.68
to Museum Street (#14)	20	312	1	189	0	152	42.0	17.7	0	3	0.93	0.04	0.51	68.1	23.28
to Whooping Crane Way (#17)	67	379	21	210	8	161	31.7	20.2	1	4	1.92	0.09	1.06	161.2	55.19
to Beach City Road (#20)	44	423	0	210	0	161	44.3	22.7	0	4	1.55	0.07	0.89	126.0	43.09

Entered artery 7:42:40 am (3943 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	39	39	5	5	0	0	39.1	39.1	0	0	1.06	0.05	0.66	98.8	33.79
to Gumtree Road (#11)	105	144	59	64	46	46	19.8	25.0	1	1	1.58	0.09	0.94	154.1	53.08
to Wilborn Road (#8)	27	171	3	67	0	46	39.4	27.3	0	1	1.18	0.05	0.70	93.4	31.87
to Museum Street (#14)	19	190	1	68	0	46	43.7	28.9	0	1	0.48	0.02	0.33	49.4	16.89
to Whooping Crane Way (#17)	61	252	15	82	0	46	34.7	30.3	0	1	1.72	0.08	0.96	146.1	50.10
to Beach City Road (#20)	53	305	10	92	0	46	36.3	31.4	0	1	1.82	0.08	1.01	145.3	49.78

Entered artery 7:58:45 am (4908 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	38	38	4	4	0	0	39.8	39.8	0	0	0.88	0.04	0.51	81.4	27.96
to Gumtree Road (#11)	124	162	78	82	61	61	16.9	22.2	1	1	1.34	0.07	0.76	138.3	47.78
to Wilborn Road (#8)	28	190	4	86	0	61	38.5	24.6	0	1	0.93	0.04	0.59	82.7	28.23
to Museum Street (#14)	19	209	0	86	0	61	44.3	26.4	0	1	0.61	0.03	0.39	54.9	18.76
to Whooping Crane Way (#17)	46	255	0	86	0	61	45.9	29.9	0	1	1.52	0.07	0.94	132.5	45.29
to Beach City Road (#20)	44	298	0	86	0	61	44.5	32.1	0	1	0.96	0.05	0.61	96.0	32.99

Entered artery 8:14:16 am (5838 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	65	65	31	31	16	16	23.3	23.3	1	1	5.16	0.15	1.42	178.9	62.64
to Gumtree Road (#11)	55	120	9	40	0	16	37.8	30.0	0	1	1.22	0.07	0.70	114.1	39.38
to Wilborn Road (#8)	39	159	15	56	0	16	27.2	29.3	0	1	29.63	0.31	1.61	121.9	55.70
to Museum Street (#14)	56	215	37	93	31	47	15.1	25.6	1	2	0.66	0.04	0.33	59.9	20.73
to Whooping Crane Way (#17)	77	293	31	124	15	63	27.4	26.1	1	3	2.02	0.09	1.12	174.5	59.79
to Beach City Road (#20)	41	334	-2	121	0	63	47.1	28.7	0	3	110.59	0.80	2.85	106.9	91.90

Entered artery 8:26:57 am (6599 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	36	36	3	3	0	0	41.8	41.8	0	0	1.98	0.09	1.05	136.7	46.65
to Gumtree Road	100	136	53	56	40	40	21.0	26.5	1	1	0.88	0.05	0.48	115.7	40.01

(#11)														
to Wilborn Road (#8)	50	186	26	82	6	46	21.2	25.1	1	2	0.97	0.05	0.53	93.0	31.93
to Museum Street (#14)	25	211	6	89	0	46	33.9	26.1	0	2	2.46	0.06	0.62	74.6	26.46
to Whooping Crane Way (#17)	56	267	9	98	0	46	38.2	28.7	0	2	1.57	0.08	0.91	136.3	46.74
to Beach City Road (#20)	47	314	3	101	0	46	41.3	30.5	0	2	1.48	0.07	0.76	113.5	38.86

Cumulative Reports

[-] Before-type Trip Log "Trip #16:36:48 AM", AM-period, started Wednesday 3/28/2018 6:36:47 AM ↑Contents

Entered artery 6:38:05 am (78 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	235	22	18	40.8	1
to Beach City Road (#20)	244	31	18	39.2	1
to Beach City Road (#20)	206	-7	0	46.5	0
to Beach City Road (#20)	326	113	79	29.4	1
to Beach City Road (#20)	375	163	105	25.5	2
to Beach City Road (#20)	324	111	102	29.7	2
to Beach City Road (#20)	279	67	41	34.3	2
to Beach City Road (#20)	345	133	105	27.7	2
to Beach City Road (#20)	307	94	70	31.3	2

[-] After-type Trip Log "Trip #4", AM-period, started Thursday 10/4/2018 6:36:58 AM ↑Contents

Entered artery 6:37:14 am (16 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	265	53	32	36.1	2
to Beach City Road (#20)	201	-12	0	47.5	0
to Beach City Road (#20)	226	14	0	42.3	0
to Beach City Road (#20)	274	61	36	35.0	1
to Beach City Road (#20)	423	210	161	22.7	4
to Beach City Road (#20)	305	92	46	31.4	1
to Beach City Road (#20)	298	86	61	32.1	1
to Beach City Road (#20)	334	121	63	28.7	3
to Beach City Road (#20)	314	101	46	30.5	2

Stantec Consulting Services Inc 4969 Centre Pointe Drive, Suite 200

Thursday 10/18/2018 2:43:12 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Summarized Travel Time from previous Node (seconds)

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

Delay:
Summarized Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Summarized Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Summarized Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Summarized Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Summarized Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Summarized Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Summarized Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Summarized Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Summary of runs Eastbound from Squire Pope Road (#2)
9 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 6:38:05 AM to 8:46:14 AM
9 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 6:37:14 AM to 8:26:57 AM

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)															
Average Before (n=9)	58	58	24	24	20	20	32.0	32.0	0.6	0.6	1.33	0.06	0.70	106.5	36.54
Minimum Before (n=9)	30	30	-4	-4	0	0	16.3	16.3	0.0	0.0	0.91	0.04	0.56	84.1	28.77
85th Percentile Before (n=9)	86	86	52	52	48	48	47.5	47.5	1.0	1.0	1.64	0.07	0.78	118.1	40.32
Maximum Before (n=9)	93	93	59	59	55	55	50.6	50.6	1.0	1.0	1.81	0.07	0.91	122.0	41.88
Std Dev Before (n=9)	*26*	*26*	*26*	*26*	*22*	*22*	*14.8*	*14.8*	*0.5*	*0.5*	*0.29*	*0.01*	*0.11*	*12.0*	*4.12*
Average After (n=9)	46	46	12	12	6	6	35.8	35.8	0.2	0.2	1.78	0.07	0.79	112.0	38.59
Minimum After (n=9)	33	33	-1	-1	0	0	19.3	19.3	0.0	0.0	0.72	0.04	0.51	79.3	27.31
85th Percentile After (n=9)	65	65	31	31	16	16	44.0	44.0	1.0	1.0	2.29	0.09	1.05	136.7	46.65
Maximum After (n=9)	79	79	45	45	34	34	45.7	45.7	1.0	1.0	5.16	0.15	1.42	178.9	62.64
Std Dev After (n=9)	*16*	*16*	*16*	*16*	*12*	*12*	*9.3*	*9.3*	*0.4*	*0.4*	*1.36*	*0.03*	*0.29*	*31.2*	*10.95*
Difference	-12	-12	-12	-12	-14	-14	3.8	3.8	-0.3	-0.3	0.45	0.01	0.09	5.5	2.05
Difference Minimum	3	3	3	3	0	0	3.0	3.0	0.0	0.0	-0.19	0.00	-0.05	-4.8	-1.46
Difference 85th Percentile	-21	-21	-21	-21	-32	-32	-3.6	-3.6	0.0	0.0	0.65	0.02	0.27	18.6	6.33
Difference	-14	-14	-14	-14	-20	-20	-4.9	-4.9	0.0	0.0	3.35	0.08	0.51	56.9	20.76

Maximum															
Std Dev Difference	*30*	*30*	*30*	*30*	*25*	*25*	*17.5*	*17.5*	*0.7*	*0.7*	*1.40*	*0.04*	*0.31*	*33.4*	*11.70*
% Difference	-21%	-21%	-49%	-49%	-72%	-72%	11.8%	11.8%	-60.0%	-60.0%	33.99%	9.90%	12.10%	5.2%	5.62%
to Gumtree Road (#11)															
Average Before (n=9)	98	155	51	75	40	60	25.4	25.7	0.9	1.4	2.30	0.11	1.06	163.7	56.62
Minimum Before (n=9)	48	80	1	0	0	0	12.3	17.6	0.0	0.0	0.80	0.05	0.52	90.6	31.32
85th Percentile Before (n=9)	151	204	104	124	79	105	35.2	36.0	1.0	2.0	3.29	0.14	1.31	202.4	69.84
Maximum Before (n=9)	169	206	123	126	105	105	43.7	45.2	2.0	2.0	4.67	0.15	1.47	209.9	72.52
Std Dev Before (n=9)	*42*	*47*	*42*	*47*	*36*	*42*	*10.7*	*9.6*	*0.6*	*0.7*	*1.13*	*0.03*	*0.30*	*36.8*	*12.73*
Average After (n=9)	90	136	43	56	33	39	28.9	30.0	0.7	0.9	10.44	0.14	1.06	142.0	53.50
Minimum After (n=9)	45	79	-1	-1	0	0	11.4	13.8	0.0	0.0	0.88	0.05	0.48	109.4	37.60
85th Percentile After (n=9)	124	162	78	82	61	61	45.4	45.4	1.0	1.0	1.58	0.09	0.94	157.2	54.10
Maximum After (n=9)	181	259	134	179	118	152	46.5	45.5	2.0	3.0	83.83	0.74	3.41	236.6	122.80
Std Dev After (n=9)	*45*	*55*	*45*	*55*	*40*	*48*	*13.5*	*10.5*	*0.7*	*0.9*	*27.52*	*0.22*	*0.89*	*39.5*	*26.66*
Difference	-8	-20	-8	-20	-6	-21	3.5	4.2	-0.2	-0.6	8.14	0.04	0.00	-21.8	-3.12
Difference Minimum	-3	-1	-3	-1	0	0	-1.0	-3.8	0.0	0.0	0.08	0.00	-0.04	18.8	6.28
Difference 85th Percentile	-27	-42	-27	-42	-18	-44	10.2	9.4	0.0	-1.0	-1.71	-0.05	-0.37	-45.2	-15.74
Difference Maximum	11	54	11	54	13	47	2.8	0.4	0.0	1.0	79.17	0.59	1.94	26.7	50.28
Std Dev Difference	*62*	*72*	*62*	*72*	*54*	*64*	*17.2*	*14.2*	*0.9*	*1.2*	*27.55*	*0.23*	*0.94*	*54.0*	*29.54*
% Difference	-8%	-13%	-15%	-26%	-16%	-35%	13.8%	16.5%	-25.0%	-38.5%	354.52%	33.47%	-0.40%	-13.3%	-5.51%
to Wilborn Road (#8)															
Average Before (n=9)	29	184	5	80	0	60	38.2	27.4	0.0	1.4	1.21	0.06	0.64	87.6	29.97
Minimum Before (n=9)	23	107	-1	3	0	0	25.5	18.9	0.0	0.0	0.69	0.03	0.45	70.7	24.16
85th Percentile Before (n=9)	30	227	7	123	0	105	44.4	36.4	0.0	2.0	1.49	0.07	0.78	99.7	34.02
Maximum Before (n=9)	42	247	18	144	0	105	45.8	43.5	0.0	2.0	1.97	0.09	0.93	118.4	40.63
Std Dev Before (n=9)	*6*	*49*	*6*	*49*	*0*	*42*	*6.0*	*8.4*	*0.0*	*0.7*	*0.42*	*0.02*	*0.16*	*15.1*	*5.19*
Average After (n=9)	30	166	7	62	1	40	37.6	31.0	0.1	1.0	4.04	0.07	0.63	80.8	29.18
Minimum After (n=9)	22	101	-2	-3	0	0	21.2	16.0	0.0	0.0	0.60	0.03	0.37	63.2	21.65
85th Percentile After (n=9)	39	190	15	86	0	61	47.5	46.0	0.0	2.0	1.18	0.05	0.70	93.4	31.93
Maximum After (n=9)	50	292	26	188	6	152	48.6	46.1	1.0	3.0	29.63	0.31	1.61	121.9	55.70
Std Dev After (n=9)	*9*	*58*	*9*	*58*	*2*	*48*	*9.1*	*10.1*	*0.3*	*1.0*	*9.60*	*0.09*	*0.38*	*19.5*	*10.74*
Difference	2	-18	2	-18	1	-20	-0.6	3.7	0.1	-0.4	2.83	0.01	0.00	-6.8	-0.79
Difference Minimum	-1	-6	-1	-6	0	0	-4.3	-2.9	0.0	0.0	-0.09	0.00	-0.09	-7.5	-2.50
Difference 85th Percentile	9	-37	9	-37	0	-44	3.1	9.6	0.0	0.0	-0.31	-0.02	-0.08	-6.3	-2.08
Difference Maximum	8	44	8	44	6	47	2.8	2.6	1.0	1.0	27.66	0.21	0.67	3.5	15.07
Std Dev Difference	*11*	*76*	*11*	*76*	*2*	*64*	*10.9*	*13.2*	*0.3*	*1.2*	*9.61*	*0.09*	*0.41*	*24.6*	*11.93*
% Difference	6%	-10%	34%	-23%	N/D	-34%	-1.5%	13.4%	N/D	-30.8%	233.95%	20.51%	-0.39%	-7.8%	-2.64%

Difference															
to Museum Street (#14)															
Average Before (n=9)	19	203	0	81	0	60	44.5	28.9	0.0	1.4	0.57	0.03	0.35	51.5	17.60
Minimum Before (n=9)	17	125	-1	2	0	0	35.3	20.4	0.0	0.0	0.42	0.02	0.28	42.7	14.61
85th Percentile Before (n=9)	21	245	2	123	0	105	47.2	37.0	0.0	2.0	0.82	0.04	0.48	66.5	22.71
Maximum Before (n=9)	24	271	5	149	0	105	48.4	44.2	0.0	2.0	0.90	0.04	0.51	68.1	23.25
Std Dev Before (n=9)	*2*	*50*	*2*	*50*	*0*	*42*	*4.1*	*8.0*	*0.0*	*0.7*	*0.17*	*0.01*	*0.08*	*9.3*	*3.16*
Average After (n=9)	25	191	7	69	5	44	38.1	31.1	0.2	1.2	0.83	0.03	0.39	57.4	19.77
Minimum After (n=9)	17	118	-2	-4	0	0	15.1	17.7	0.0	0.0	0.47	0.02	0.31	45.2	15.45
85th Percentile After (n=9)	34	215	15	93	11	61	48.4	40.7	1.0	2.0	0.93	0.04	0.51	68.1	23.28
Maximum After (n=9)	56	312	37	189	31	152	49.3	46.6	1.0	3.0	2.46	0.06	0.62	74.6	26.46
Std Dev After (n=9)	*13*	*58*	*13*	*58*	*11*	*46*	*11.4*	*9.0*	*0.4*	*1.0*	*0.63*	*0.01*	*0.11*	*9.9*	*3.62*
Difference	6	-12	6	-12	5	-15	-6.4	2.2	0.2	-0.2	0.26	0.01	0.04	5.9	2.17
Difference Minimum	0	-6	0	-6	0	0	-20.2	-2.7	0.0	0.0	0.05	0.00	0.03	2.5	0.84
Difference 85th Percentile	13	-30	13	-30	11	-44	1.2	3.7	1.0	0.0	0.11	0.01	0.03	1.5	0.57
Difference Maximum	32	41	32	41	31	47	0.9	2.3	1.0	1.0	1.56	0.02	0.11	6.6	3.21
Std Dev Difference	*13*	*76*	*13*	*76*	*11*	*62*	*12.1*	*12.1*	*0.4*	*1.2*	*0.65*	*0.01*	*0.13*	*13.6*	*4.80*
% Difference	33%	-6%	1676%	-15%	N/D	-26%	-14.3%	7.6%	N/D	-15.4%	46.83%	28.10%	11.64%	11.5%	12.34%
to Whooping Crane Way (#17)															
Average Before (n=9)	49	252	2	83	0	60	44.0	31.7	0.0	1.4	1.64	0.07	0.94	133.7	45.83
Minimum Before (n=9)	41	166	-6	-3	0	0	37.0	23.3	0.0	0.0	1.11	0.05	0.73	112.4	38.48
85th Percentile Before (n=9)	56	301	9	132	0	105	51.0	39.0	0.0	2.0	1.91	0.09	1.04	149.8	51.41
Maximum Before (n=9)	57	328	10	159	0	105	51.6	46.1	0.0	2.0	2.61	0.10	1.12	150.1	51.94
Std Dev Before (n=9)	*7*	*54*	*7*	*54*	*0*	*42*	*5.9*	*7.5*	*0.0*	*0.7*	*0.43*	*0.01*	*0.11*	*12.1*	*4.29*
Average After (n=9)	58	249	11	80	5	49	38.6	32.3	0.3	1.6	1.66	0.08	0.96	142.6	48.82
Minimum After (n=9)	43	161	-4	-8	0	0	26.1	20.2	0.0	0.0	1.23	0.06	0.75	113.0	38.67
85th Percentile After (n=9)	77	293	31	124	15	63	47.5	40.5	1.0	3.0	2.02	0.09	1.12	173.7	59.43
Maximum After (n=9)	81	379	34	210	21	161	49.4	47.3	1.0	4.0	2.07	0.09	1.18	174.5	59.79
Std Dev After (n=9)	*15*	*63*	*15*	*63*	*8*	*47*	*9.1*	*8.0*	*0.5*	*1.3*	*0.30*	*0.01*	*0.14*	*22.8*	*7.82*
Difference	9	-3	9	-3	5	-10	-5.4	0.6	0.3	0.1	0.02	0.00	0.03	8.9	2.99
Difference Minimum	2	-5	2	-5	0	0	-10.9	-3.1	0.0	0.0	0.12	0.00	0.02	0.5	0.18
Difference 85th Percentile	22	-8	22	-8	15	-42	-3.5	1.5	1.0	1.0	0.11	0.00	0.08	23.9	8.01
Difference Maximum	24	51	24	51	21	55	-2.2	1.3	1.0	2.0	-0.53	0.00	0.06	24.4	7.85
Std Dev Difference	*16*	*83*	*16*	*83*	*8*	*63*	*10.8*	*11.0*	*0.5*	*1.5*	*0.52*	*0.02*	*0.18*	*25.8*	*8.92*
% Difference	18%	-1%	379%	-4%	N/D	-17%	-12.2%	2.0%	N/D	7.7%	1.31%	4.12%	2.77%	6.6%	6.52%
to Beach City Road (#20)															
Average Before	41	293	-2	81	0	60	47.3	33.8	0.0	1.4	1.73	0.07	0.78	110.7	38.35

(n=9)															
Minimum Before (n=9)	38	206	-5	-7	0	0	41.2	25.5	0.0	0.0	0.88	0.04	0.61	94.3	32.27
85th Percentile Before (n=9)	45	345	1	133	0	105	50.2	40.8	0.0	2.0	1.33	0.13	0.82	117.6	40.20
Maximum Before (n=9)	47	375	4	163	0	105	51.1	46.5	0.0	2.0	6.16	0.16	1.21	141.7	50.69
Std Dev Before (n=9)	*3*	*56*	*3*	*56*	*0*	*42*	*3.3*	*7.0*	*0.0*	*0.7*	*1.67*	*0.04*	*0.18*	*14.2*	*5.46*
Average After (n=9)	44	293	1	81	0	49	44.4	34.0	0.0	1.6	14.80	0.16	1.10	118.1	47.22
Minimum After (n=9)	38	201	-5	-12	0	0	36.3	22.7	0.0	0.0	0.92	0.04	0.61	96.0	32.99
85th Percentile After (n=9)	49	334	5	121	0	63	48.5	42.3	0.0	3.0	10.01	0.14	1.08	145.3	51.33
Maximum After (n=9)	53	423	10	210	0	161	51.0	47.5	0.0	4.0	110.59	0.80	2.85	150.3	91.90
Std Dev After (n=9)	*5*	*64*	*5*	*64*	*0*	*47*	*4.7*	*7.4*	*0.0*	*1.3*	*36.04*	*0.24*	*0.68*	*19.5*	*17.87*
Difference	3	0	3	0	0	-10	-2.9	0.2	0.0	0.1	13.07	0.09	0.32	7.4	8.87
Difference Minimum	0	-5	0	-5	0	0	-5.0	-2.8	0.0	0.0	0.04	0.00	0.00	1.6	0.72
Difference 85th Percentile	4	-12	4	-12	0	-42	-1.8	1.5	0.0	1.0	8.68	0.02	0.26	27.8	11.13
Difference Maximum	6	47	6	47	0	55	-0.1	1.1	0.0	2.0	104.43	0.64	1.64	8.5	41.20
Std Dev Difference	*6*	*86*	*6*	*86*	*0*	*63*	*5.7*	*10.2*	*0.0*	*1.5*	*36.08*	*0.25*	*0.70*	*24.1*	*18.69*
% Difference	7%	0%	129%	0%	N/D	-17%	-6.1%	0.6%	N/D	7.7%	754.90%	115.25%	40.48%	6.7%	23.13%

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Travel Time from previous Node (seconds)

CTT:
Cumulative Travel Time since beginning of Run (seconds)

Delay:
Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Contents:

[-] Collapse All

[-] Before-type Trip Log "Trip #16:36:48 AM", AM-period, started Wednesday 3/28/2018 6:36:47 AM ↑Contents

Entered artery 6:42:48 am (362 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	56	56	13	13	0	0	35.0	35.0	0	0	1.82	0.09	0.91	136.4	46.83
to Museum Street (#14)	49	106	3	16	0	0	41.9	38.2	0	0	1.72	0.09	1.07	149.0	51.14
to Wilborn Road (#8)	19	125	0	16	0	0	44.5	39.2	0	0	0.55	0.02	0.36	52.4	17.91
to Gumtree Road (#11)	24	149	0	16	0	0	44.6	40.1	0	0	0.55	0.03	0.37	57.7	19.79
to Wild Horse Road (#5)	47	196	1	17	0	0	44.0	41.0	0	0	1.31	0.06	0.82	121.5	41.54
to Squire Pope Road (#2)	62	258	28	45	21	21	24.5	37.0	1	1	0.79	0.04	0.46	85.8	29.46

Entered artery 6:54:17 am (1050 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	78	78	35	35	27	27	25.2	25.2	1	1	0.68	0.03	0.37	84.0	28.86
to Museum Street (#14)	50	128	3	38	0	27	41.5	31.6	0	1	2.00	0.10	1.20	162.8	55.82
to Wilborn Road (#8)	31	160	12	51	6	32	27.1	30.7	1	2	0.53	0.03	0.27	51.0	17.59

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Gumtree Road (#11)	33	192	9	60	0	32	32.9	31.1	0	2	1.08	0.05	0.61	87.7	29.97
to Wild Horse Road (#5)	43	236	-3	57	0	32	47.9	34.2	0	2	1.75	0.08	1.03	140.6	48.03
to Squire Pope Road (#2)	32	267	-2	55	0	32	47.6	35.8	0	2	0.68	0.03	0.46	72.5	24.82

Entered artery 7:10:59 am (2052 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	43	43	-1	-1	0	0	46.5	46.5	0	0	2.46	0.11	1.31	167.7	57.28
to Museum Street (#14)	44	86	-3	-4	0	0	47.2	46.9	0	0	0.77	0.05	0.49	83.5	28.86
to Wilborn Road (#8)	20	107	2	-2	0	0	41.2	45.8	0	0	0.85	0.04	0.50	67.4	23.02
to Gumtree Road (#11)	23	130	0	-2	0	0	46.0	45.8	0	0	0.81	0.04	0.51	70.8	24.19
to Wild Horse Road (#5)	75	205	29	27	26	26	27.6	39.2	1	1	1.37	0.06	0.83	132.4	45.47
to Squire Pope Road (#2)	36	241	2	28	0	26	42.5	39.7	0	1	1.71	0.08	0.95	125.8	42.94

Entered artery 7:27:45 am (3059 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	70	70	27	27	20	20	28.1	28.1	1	1	1.43	0.07	0.85	141.4	48.50
to Museum Street (#14)	44	114	-3	24	0	20	47.8	35.7	0	1	2.07	0.11	1.11	147.0	50.44
to Wilborn Road (#8)	95	208	76	100	69	89	8.9	23.5	1	2	0.53	0.03	0.26	57.6	19.92
to Gumtree Road (#11)	27	235	3	102	0	89	40.4	25.4	0	2	1.48	0.07	0.79	102.0	34.85
to Wild Horse Road (#5)	52	287	5	108	0	89	40.2	28.1	0	2	1.22	0.06	0.74	115.9	39.77
to Squire Pope Road (#2)	37	324	3	111	0	89	41.0	29.6	0	2	1.44	0.07	0.84	115.5	39.49

Entered artery 7:44:31 am (4064 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	45	45	2	2	0	0	43.4	43.4	0	0	1.82	0.08	1.09	148.3	50.62
to Museum Street (#14)	45	90	-2	0	0	0	46.5	44.9	0	0	1.01	0.06	0.68	104.4	35.95
to Wilborn Road (#8)	18	109	0	0	0	0	45.7	45.0	0	0	0.52	0.02	0.33	48.9	16.72
to Gumtree Road (#11)	26	134	2	2	0	0	42.0	44.5	0	0	0.74	0.04	0.43	64.6	22.14
to Wild Horse Road (#5)	67	201	20	22	14	14	31.2	40.0	1	1	2.53	0.11	1.08	160.9	55.36
to Squire Pope Road (#2)	41	242	8	30	0	14	36.7	39.5	0	1	1.15	0.05	0.69	103.5	35.42

Entered artery 7:59:25 am (4959 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	42	42	-1	-1	0	0	46.4	46.4	0	0	2.54	0.12	1.28	164.8	56.27
to Museum Street (#14)	48	90	1	0	0	0	43.2	44.7	0	0	1.31	0.07	0.73	111.4	38.46
to Wilborn Road (#8)	20	110	1	2	0	0	42.5	44.3	0	0	1.00	0.05	0.54	71.5	24.41
to Gumtree															

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Road (#11)	22	133	-1	0	0	0	48.3	45.0	0	0	0.86	0.04	0.51	70.4	24.08
to Wild Horse Road (#5)	63	196	17	17	13	13	32.9	41.1	1	1	1.90	0.09	0.95	145.1	49.81
to Squire Pope Road (#2)	38	233	4	21	0	13	40.3	40.9	0	1	1.46	0.07	0.80	111.9	38.26

Entered artery 8:12:26 am (5740 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	86	86	43	43	35	35	22.9	22.9	1	1	1.13	0.05	0.67	121.0	41.51
to Museum Street (#14)	50	137	4	47	0	35	41.1	29.6	0	1	1.72	0.09	1.10	152.4	52.26
to Wilborn Road (#8)	42	179	23	70	11	46	20.3	27.4	1	2	0.72	0.04	0.33	65.2	22.40
to Gumtree Road (#11)	26	204	2	72	0	46	42.1	29.3	0	2	1.23	0.05	0.70	92.0	31.40
to Wild Horse Road (#5)	74	279	28	100	25	72	27.9	28.9	1	3	1.55	0.08	0.86	133.6	45.87
to Squire Pope Road (#2)	34	313	0	100	0	72	44.3	30.6	0	3	2.05	0.09	1.04	133.4	45.57

Entered artery 8:31:05 am (6859 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	52	52	9	9	0	0	38.0	38.0	0	0	1.11	0.05	0.68	110.1	37.82
to Museum Street (#14)	44	96	-3	6	0	0	47.3	42.3	0	0	1.74	0.09	0.98	134.4	46.17
to Wilborn Road (#8)	90	186	71	77	57	57	9.4	26.4	1	1	0.67	0.03	0.34	75.2	25.90
to Gumtree Road (#11)	26	211	2	79	0	57	41.8	28.3	0	1	1.36	0.06	0.76	98.8	33.71
to Wild Horse Road (#5)	67	278	21	100	18	74	31.0	28.9	1	2	1.50	0.07	0.86	132.4	45.44
to Squire Pope Road (#2)	39	317	5	104	0	74	39.3	30.2	0	2	1.35	0.06	0.79	111.7	38.17

Entered artery 8:53:09 am (8182 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	46	46	2	2	0	0	43.1	43.1	0	0	2.09	0.10	1.12	150.4	51.41
to Museum Street (#14)	63	109	17	19	14	14	32.8	37.1	1	1	1.74	0.10	0.98	148.2	51.11
to Wilborn Road (#8)	22	131	3	22	0	14	38.2	37.3	0	1	1.02	0.04	0.60	78.7	26.87
to Gumtree Road (#11)	23	154	-1	21	0	14	47.2	38.8	0	1	0.76	0.03	0.49	68.3	23.33
to Wild Horse Road (#5)	58	211	11	32	8	22	36.1	38.1	1	2	1.66	0.08	0.96	142.2	48.80
to Squire Pope Road (#2)	38	249	4	37	0	22	40.0	38.3	0	2	1.35	0.06	0.82	113.9	38.93

[-] After-type Trip Log "Trip #4", AM-period, started Thursday 10/4/2018 6:36:58 AM ↑Contents

Entered artery 6:42:03 am (305 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	44	44	0	0	0	0	45.1	45.1	0	0	0.99	0.05	0.59	94.8	32.48
to Museum															

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Street (#14)	45	88	-2	-2	0	0	46.3	45.7	0	0	1.21	0.07	0.81	118.4	40.68
to Wilborn Road (#8)	23	111	4	3	0	0	36.9	43.9	0	0	0.39	0.02	0.20	37.7	12.97
to Gumtree Road (#11)	27	139	3	6	0	0	39.5	43.0	0	0	0.78	0.04	0.49	72.5	24.81
to Wild Horse Road (#5)	83	221	36	42	33	33	25.1	36.3	1	1	1.48	0.07	0.86	138.1	47.35
to Squire Pope Road (#2)	36	258	3	45	0	33	41.7	37.1	0	1	1.74	0.08	0.96	127.5	43.54

Entered artery 6:51:54 am (897 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	43	43	0	0	0	0	45.6	45.6	0	0	1.48	0.07	0.82	118.0	40.39
to Museum Street (#14)	57	100	10	10	6	6	36.4	40.4	1	1	1.45	0.08	0.84	129.9	44.74
to Wilborn Road (#8)	21	121	2	13	0	6	39.8	40.3	0	1	1.22	0.05	0.67	85.2	29.06
to Gumtree Road (#11)	24	145	0	13	0	6	45.8	41.2	0	1	0.50	0.02	0.34	54.2	18.54
to Wild Horse Road (#5)	47	192	1	14	0	6	43.8	41.8	0	1	1.26	0.06	0.73	111.5	38.24
to Squire Pope Road (#2)	35	227	1	15	0	6	43.7	42.1	0	1	1.36	0.06	0.81	110.3	37.66

Entered artery 7:05:04 am (1686 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	65	65	22	22	9	9	30.3	30.3	1	1	1.15	0.06	0.69	120.9	41.47
to Museum Street (#14)	52	118	6	28	0	9	39.7	34.5	0	1	1.66	0.09	1.05	148.5	50.97
to Wilborn Road (#8)	52	169	33	60	20	29	16.4	29.0	1	2	0.54	0.03	0.27	61.0	20.98
to Gumtree Road (#11)	27	196	3	63	0	29	40.7	30.5	0	2	1.38	0.06	0.76	98.5	33.64
to Wild Horse Road (#5)	49	244	2	65	0	29	42.8	33.0	0	2	1.03	0.05	0.66	106.5	36.48
to Squire Pope Road (#2)	34	278	0	66	0	29	44.4	34.4	0	2	1.20	0.05	0.76	105.3	35.96

Entered artery 7:17:30 am (2432 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	49	49	5	5	0	0	40.4	40.4	0	0	0.62	0.03	0.40	79.2	27.20
to Museum Street (#14)	77	126	30	36	15	15	27.0	32.2	1	1	1.70	0.09	1.02	163.5	56.21
to Wilborn Road (#8)	24	149	5	41	0	15	35.6	32.8	0	1	1.13	0.05	0.64	84.1	28.72
to Gumtree Road (#11)	24	174	1	41	0	15	44.3	34.4	0	1	0.68	0.03	0.45	65.7	22.45
to Wild Horse Road (#5)	45	219	-1	40	0	15	45.7	36.7	0	1	1.23	0.06	0.79	117.5	40.16
to Squire Pope Road (#2)	33	252	0	40	0	15	45.7	37.9	0	1	0.96	0.05	0.60	87.4	29.92

Entered artery 7:33:21 am (3384 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	64	64	21	21	11	11	30.7	30.7	1	1	2.39	0.11	1.17	168.8	57.76
to Museum Street (#14)	82	146	35	56	30	41	25.2	27.6	1	2	2.04	0.11	1.09	159.6	54.89
to Wilborn	31	177	12	68	0	41	27.6	27.6	0	2	0.82	0.04	0.42	66.3	22.73

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Road (#8)															
to Gumtree Road (#11)	27	204	3	71	0	41	39.9	29.3	0	2	1.04	0.05	0.63	85.9	29.36
to Wild Horse Road (#5)	45	249	-1	70	0	41	46.2	32.3	0	2	1.25	0.06	0.79	116.6	39.87
to Squire Pope Road (#2)	33	282	-1	69	0	41	46.5	34.0	0	2	0.86	0.04	0.53	79.9	27.36

Entered artery 7:48:08 am (4270 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	42	42	-1	-1	0	0	46.2	46.2	0	0	0.84	0.04	0.53	88.2	30.23
to Museum Street (#14)	63	105	16	15	10	10	33.1	38.4	1	1	1.40	0.08	0.83	133.3	45.89
to Wilborn Road (#8)	46	151	27	42	15	24	18.5	32.4	1	2	1.08	0.05	0.55	86.1	29.57
to Gumtree Road (#11)	99	250	75	118	66	90	10.9	23.9	1	3	1.10	0.05	0.60	103.1	35.42
to Wild Horse Road (#5)	66	316	20	137	14	104	31.6	25.5	1	4	2.53	0.12	1.29	182.5	62.51
to Squire Pope Road (#2)	36	352	3	140	0	104	41.5	27.1	0	4	1.55	0.07	0.92	123.9	42.31

Entered artery 8:04:20 am (5243 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	54	54	11	11	0	0	36.5	36.5	0	0	1.70	0.08	0.92	136.0	46.66
to Museum Street (#14)	75	129	29	39	20	20	27.7	31.3	1	1	1.95	0.10	1.09	169.7	58.40
to Wilborn Road (#8)	20	149	1	40	0	20	42.7	32.9	0	1	0.97	0.04	0.56	73.1	24.94
to Gumtree Road (#11)	22	171	-2	38	0	20	49.1	34.9	0	1	0.70	0.03	0.44	63.0	21.55
to Wild Horse Road (#5)	44	214	-3	36	0	20	47.7	37.5	0	1	0.91	0.04	0.64	101.3	34.63
to Squire Pope Road (#2)	35	249	1	36	0	20	43.8	38.4	0	1	0.90	0.04	0.56	85.2	29.15

Entered artery 8:21:12 am (6254 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	45	45	2	2	0	0	44.0	44.0	0	0	1.13	0.05	0.75	112.6	38.50
to Museum Street (#14)	52	97	6	7	0	0	39.6	41.6	0	0	1.55	0.09	0.86	128.4	44.26
to Wilborn Road (#8)	20	118	2	9	0	0	41.6	41.6	0	0	0.85	0.04	0.48	65.8	22.47
to Gumtree Road (#11)	25	142	1	10	0	0	43.9	42.0	0	0	0.68	0.03	0.47	67.5	23.07
to Wild Horse Road (#5)	44	186	-2	7	0	0	47.1	43.2	0	0	1.16	0.05	0.76	113.2	38.71
to Squire Pope Road (#2)	37	224	4	11	0	0	40.6	42.8	0	0	0.81	0.04	0.51	81.9	28.03

Cumulative Reports

[-] Before-type Trip Log "Trip #16:36:48 AM", AM-period, started Wednesday 3/28/2018 6:36:47 AM ↑Contents

**Entered artery 6:42:48 am (362 seconds)
traveling Westbound from Beach City Road (#20)**

Node	CTT	CD	CStopD	CAS	CStops

to Squire Pope Road (#2)	258	45	21	37.0	1
to Squire Pope Road (#2)	267	55	32	35.8	2
to Squire Pope Road (#2)	241	28	26	39.7	1
to Squire Pope Road (#2)	324	111	89	29.6	2
to Squire Pope Road (#2)	242	30	14	39.5	1
to Squire Pope Road (#2)	233	21	13	40.9	1
to Squire Pope Road (#2)	313	100	72	30.6	3
to Squire Pope Road (#2)	317	104	74	30.2	2
to Squire Pope Road (#2)	249	37	22	38.3	2

[-] After-type Trip Log "Trip #4", AM-period, started Thursday 10/4/2018 6:36:58 AM ↑Contents

Entered artery 6:42:03 am (305 seconds)
traveling Westbound from Beach City Road (#20)

Node	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)	258	45	33	37.1	1
to Squire Pope Road (#2)	227	15	6	42.1	1
to Squire Pope Road (#2)	278	66	29	34.4	2
to Squire Pope Road (#2)	252	40	15	37.9	1
to Squire Pope Road (#2)	282	69	41	34.0	2
to Squire Pope Road (#2)	352	140	104	27.1	4
to Squire Pope Road (#2)	249	36	20	38.4	1
to Squire Pope Road (#2)	224	11	0	42.8	0

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Summarized Travel Time from previous Node (seconds)

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

Delay:
Summarized Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Summarized Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Summarized Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Summarized Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Summarized Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Summarized Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Summarized Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Summarized Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Summary of runs Westbound from Beach City Road (#20)
9 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 6:42:48 AM to 8:53:09 AM
8 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 6:42:03 AM to 8:21:12 AM

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)															
Average Before (n=9)	58	58	14	14	9	9	36.5	36.5	0.3	0.3	1.67	0.08	0.92	136.0	46.57
Minimum Before (n=9)	42	42	-1	-1	0	0	22.9	22.9	0.0	0.0	0.68	0.03	0.37	84.0	28.86
85th Percentile Before (n=9)	78	78	35	35	27	27	46.4	46.4	1.0	1.0	2.46	0.11	1.28	164.8	56.27
Maximum Before (n=9)	86	86	43	43	35	35	46.5	46.5	1.0	1.0	2.54	0.12	1.31	167.7	57.28
Std Dev Before (n=9)	*17*	*17*	*17*	*17*	*14*	*14*	*9.2*	*9.2*	*0.5*	*0.5*	*0.64*	*0.03*	*0.31*	*27.0*	*9.14*
Average After (n=8)	51	51	8	8	3	3	39.8	39.8	0.3	0.3	1.29	0.06	0.73	114.8	39.34
Minimum After (n=8)	42	42	-1	-1	0	0	30.3	30.3	0.0	0.0	0.62	0.03	0.40	79.2	27.20
85th Percentile After (n=8)	64	64	21	21	9	9	45.6	45.6	1.0	1.0	1.70	0.08	0.92	136.0	46.66
Maximum After (n=8)	65	65	22	22	11	11	46.2	46.2	1.0	1.0	2.39	0.11	1.17	168.8	57.76
Std Dev After (n=8)	*9*	*9*	*9*	*9*	*5*	*5*	*6.6*	*6.6*	*0.5*	*0.5*	*0.56*	*0.03*	*0.24*	*28.8*	*9.83*
Difference	-7	-7	-7	-7	-7	-7	3.3	3.3	-0.1	-0.1	-0.39	-0.02	-0.19	-21.2	-7.23
Difference Minimum	0	0	0	0	0	0	7.4	7.4	0.0	0.0	-0.05	0.00	0.04	-4.8	-1.66
Difference 85th Percentile	-14	-14	-14	-14	-18	-18	-0.8	-0.8	0.0	0.0	-0.76	-0.03	-0.36	-28.8	-9.62
Difference	-21	-21	-21	-21	-24	-24	-0.3	-0.3	0.0	0.0	-0.16	-0.01	-0.14	1.1	0.48

Maximum															
Std Dev Difference	19	19	19	19	15	15	11.3	11.3	0.7	0.7	0.85	0.04	0.39	39.4	13.42
% Difference	-12%	-12%	-48%	-48%	-72%	-72%	9.1%	9.1%	-25.0%	-25.0%	-23.09%	-21.57%	-20.17%	-15.6%	-15.53%
to Museum Street (#14)															
Average Before (n=9)	49	106	2	16	2	11	43.2	39.0	0.1	0.4	1.56	0.08	0.92	132.6	45.58
Minimum Before (n=9)	44	86	-3	-4	0	0	32.8	29.6	0.0	0.0	0.77	0.05	0.49	83.5	28.86
85th Percentile Before (n=9)	50	128	4	38	0	27	47.3	44.9	0.0	1.0	2.00	0.10	1.11	152.4	52.26
Maximum Before (n=9)	63	137	17	47	14	35	47.8	46.9	1.0	1.0	2.07	0.11	1.20	162.8	55.82
Std Dev Before (n=9)	6	18	6	18	5	14	4.8	6.1	0.3	0.5	0.44	0.02	0.24	26.7	9.07
Average After (n=8)	63	114	16	24	10	13	34.4	36.5	0.6	0.9	1.62	0.09	0.95	143.9	49.50
Minimum After (n=8)	45	88	-2	-2	0	0	25.2	27.6	0.0	0.0	1.21	0.07	0.81	118.4	40.68
85th Percentile After (n=8)	77	129	30	39	20	20	39.7	41.6	1.0	1.0	1.95	0.10	1.09	163.5	56.21
Maximum After (n=8)	82	146	35	56	30	41	46.3	45.7	1.0	2.0	2.04	0.11	1.09	169.7	58.40
Std Dev After (n=8)	14	19	14	19	11	13	7.4	6.1	0.5	0.6	0.28	0.01	0.12	19.0	6.51
Difference	14	8	14	8	8	2	-8.9	-2.5	0.5	0.4	0.06	0.00	0.02	11.4	3.93
Difference Minimum	1	2	1	2	0	0	-7.6	-2.0	0.0	0.0	0.44	0.02	0.32	34.9	11.82
Difference 85th Percentile	27	1	27	1	20	-6	-7.6	-3.3	1.0	0.0	-0.04	0.00	-0.01	11.1	3.96
Difference Maximum	19	9	19	9	15	6	-1.4	-1.2	0.0	1.0	-0.03	0.00	-0.11	6.9	2.58
Std Dev Difference	15	26	15	26	12	19	8.8	8.6	0.6	0.8	0.52	0.02	0.27	32.7	11.16
% Difference	30%	7%	729%	46%	524%	17%	-20.5%	-6.5%	462.5%	96.9%	3.60%	2.48%	2.67%	8.6%	8.61%
to Wilborn Road (#8)															
Average Before (n=9)	40	146	21	37	16	27	30.9	35.5	0.4	0.9	0.71	0.03	0.39	63.1	21.64
Minimum Before (n=9)	18	107	0	-2	0	0	8.9	23.5	0.0	0.0	0.52	0.02	0.26	48.9	16.72
85th Percentile Before (n=9)	90	186	71	77	57	57	44.5	45.0	1.0	2.0	1.00	0.04	0.54	75.2	25.90
Maximum Before (n=9)	95	208	76	100	69	89	45.7	45.8	1.0	2.0	1.02	0.05	0.60	78.7	26.87
Std Dev Before (n=9)	31	38	31	38	27	32	14.9	8.7	0.5	0.9	0.20	0.01	0.12	11.1	3.76
Average After (n=8)	29	143	11	35	4	17	32.4	35.1	0.3	1.1	0.87	0.04	0.47	69.9	23.93
Minimum After (n=8)	20	111	1	3	0	0	16.4	27.6	0.0	0.0	0.39	0.02	0.20	37.7	12.97
85th Percentile After (n=8)	46	169	27	60	15	29	41.6	41.6	1.0	2.0	1.13	0.05	0.64	85.2	29.06
Maximum After (n=8)	52	177	33	68	20	41	42.7	43.9	1.0	2.0	1.22	0.05	0.67	86.1	29.57
Std Dev After (n=8)	12	24	12	24	8	15	10.3	6.1	0.5	0.8	0.29	0.01	0.17	16.3	5.54
Difference	-10	-3	-10	-3	-11	-10	1.5	-0.5	-0.2	0.2	0.16	0.01	0.08	6.8	2.29
Difference Minimum	1	4	1	4	0	0	7.5	4.1	0.0	0.0	-0.13	0.00	-0.06	-11.2	-3.75
Difference 85th Percentile	-44	-17	-44	-17	-42	-28	-2.9	-3.4	0.0	0.0	0.13	0.01	0.09	9.9	3.16
Difference Maximum	-43	-31	-43	-31	-49	-48	-2.9	-1.9	0.0	0.0	0.20	0.01	0.07	7.3	2.70
Std Dev Difference	33	45	33	45	28	35	18.1	10.6	0.7	1.2	0.35	0.02	0.21	19.7	6.69
%	-26%	-2%	-49%	-7%	-72%	-36%	5.0%	-1.3%	-43.7%	26.6%	23.26%	21.14%	20.26%	10.8%	10.60%

Difference															
to Gumtree Road (#11)															
Average Before (n=9)	25	171	2	39	0	27	42.8	36.5	0.0	0.9	0.99	0.04	0.57	79.2	27.05
Minimum Before (n=9)	22	130	-1	-2	0	0	32.9	25.4	0.0	0.0	0.55	0.03	0.37	57.7	19.79
85th Percentile Before (n=9)	27	211	3	79	0	57	47.2	45.0	0.0	2.0	1.36	0.06	0.76	98.8	33.71
Maximum Before (n=9)	33	235	9	102	0	89	48.3	45.8	0.0	2.0	1.48	0.07	0.79	102.0	34.85
Std Dev Before (n=9)	*3*	*40*	*3*	*40*	*0*	*32*	*4.6*	*8.0*	*0.0*	*0.9*	*0.32*	*0.01*	*0.15*	*16.1*	*5.48*
Average After (n=8)	34	177	10	45	8	25	39.3	34.9	0.1	1.3	0.86	0.04	0.52	76.3	26.11
Minimum After (n=8)	22	139	-2	6	0	0	10.9	23.9	0.0	0.0	0.50	0.02	0.34	54.2	18.54
85th Percentile After (n=8)	27	204	3	71	0	41	45.8	42.0	0.0	2.0	1.10	0.05	0.63	98.5	33.64
Maximum After (n=8)	99	250	75	118	66	90	49.1	43.0	1.0	3.0	1.38	0.06	0.76	103.1	35.42
Std Dev After (n=8)	*26*	*38*	*26*	*38*	*23*	*30*	*11.9*	*6.9*	*0.4*	*1.0*	*0.29*	*0.01*	*0.13*	*17.6*	*6.05*
Difference	9	6	9	6	8	-1	-3.5	-1.6	0.1	0.4	-0.13	-0.01	-0.05	-2.8	-0.94
Difference Minimum	0	8	0	8	0	0	-22.0	-1.6	0.0	0.0	-0.05	0.00	-0.03	-3.6	-1.25
Difference 85th Percentile	1	-7	1	-7	0	-16	-1.4	-2.9	0.0	0.0	-0.26	-0.01	-0.14	-0.2	-0.06
Difference Maximum	66	15	66	15	66	1	0.8	-2.8	1.0	1.0	-0.11	-0.01	-0.03	1.1	0.57
Std Dev Difference	*26*	*55*	*26*	*55*	*23*	*44*	*12.8*	*10.5*	*0.4*	*1.4*	*0.43*	*0.02*	*0.20*	*23.9*	*8.17*
% Difference	35%	4%	534%	16%	N/D	-5%	-8.3%	-4.3%	N/D	40.6%	-13.07%	-12.42%	-9.05%	-3.6%	-3.49%
to Wild Horse Road (#5)															
Average Before (n=9)	61	232	14	53	11	38	35.4	35.5	0.7	1.6	1.64	0.08	0.90	136.1	46.68
Minimum Before (n=9)	43	196	-3	17	0	0	27.6	28.1	0.0	0.0	1.22	0.06	0.74	115.9	39.77
85th Percentile Before (n=9)	74	279	28	100	25	74	44.0	41.0	1.0	2.0	1.90	0.09	1.03	145.1	49.81
Maximum Before (n=9)	75	287	29	108	26	89	47.9	41.1	1.0	3.0	2.53	0.11	1.08	160.9	55.36
Std Dev Before (n=9)	*11*	*39*	*11*	*39*	*10*	*32*	*7.2*	*5.5*	*0.5*	*0.9*	*0.40*	*0.02*	*0.11*	*13.3*	*4.60*
Average After (n=8)	53	230	7	51	6	31	41.2	35.8	0.3	1.5	1.36	0.06	0.82	123.4	42.24
Minimum After (n=8)	44	186	-3	7	0	0	25.1	25.5	0.0	0.0	0.91	0.04	0.64	101.3	34.63
85th Percentile After (n=8)	66	249	20	70	14	41	47.1	41.8	1.0	2.0	1.48	0.07	0.86	138.1	47.35
Maximum After (n=8)	83	316	36	137	33	104	47.7	43.2	1.0	4.0	2.53	0.12	1.29	182.5	62.51
Std Dev After (n=8)	*14*	*41*	*14*	*41*	*12*	*33*	*8.3*	*5.6*	*0.5*	*1.2*	*0.50*	*0.02*	*0.21*	*26.2*	*9.00*
Difference	-8	-2	-8	-2	-6	-7	5.8	0.3	-0.4	-0.1	-0.29	-0.01	-0.09	-12.7	-4.43
Difference Minimum	0	-10	0	-10	0	0	-2.5	-2.6	0.0	0.0	-0.31	-0.02	-0.10	-14.7	-5.14
Difference 85th Percentile	-9	-30	-9	-30	-11	-34	3.1	0.8	0.0	0.0	-0.41	-0.03	-0.18	-7.0	-2.46
Difference Maximum	8	29	8	29	7	15	-0.2	2.2	0.0	1.0	0.00	0.00	0.21	21.6	7.15
Std Dev Difference	*18*	*56*	*18*	*56*	*16*	*46*	*11.0*	*7.9*	*0.7*	*1.5*	*0.64*	*0.03*	*0.23*	*29.4*	*10.10*
% Difference	-13%	-1%	-55%	-3%	-48%	-18%	16.4%	0.9%	-62.5%	-3.6%	-17.44%	-18.57%	-9.68%	-9.3%	-9.50%
to Squire Pope Road (#2)															
Average Before	40	272	6	59	2	40	39.6	35.7	0.1	1.7	1.33	0.06	0.76	108.2	37.01

(n=9)															
Minimum Before (n=9)	32	233	-2	21	0	13	24.5	29.6	0.0	1.0	0.68	0.03	0.46	72.5	24.82
85th Percentile Before (n=9)	41	317	8	104	0	74	44.3	39.7	0.0	2.0	1.71	0.08	0.95	125.8	42.94
Maximum Before (n=9)	62	324	28	111	21	89	47.6	40.9	1.0	3.0	2.05	0.09	1.04	133.4	45.57
Std Dev Before (n=9)	9	36	9	36	7	30	6.5	4.5	0.3	0.7	0.42	0.02	0.20	18.9	6.42
Average After (n=8)	35	265	1	53	0	31	43.5	36.7	0.0	1.5	1.17	0.05	0.71	100.2	34.24
Minimum After (n=8)	33	224	-1	11	0	0	40.6	27.1	0.0	0.0	0.81	0.04	0.51	79.9	27.36
85th Percentile After (n=8)	36	282	3	69	0	41	45.7	42.1	0.0	2.0	1.55	0.07	0.92	123.9	42.31
Maximum After (n=8)	37	352	4	140	0	104	46.5	42.8	0.0	4.0	1.74	0.08	0.96	127.5	43.54
Std Dev After (n=8)	2	41	2	41	0	33	2.1	5.0	0.0	1.2	0.35	0.01	0.18	19.2	6.51
Difference	-5	-6	-5	-6	-2	-9	3.9	1.0	-0.1	-0.2	-0.16	-0.01	-0.06	-8.0	-2.76
Difference Minimum	1	-10	1	-10	0	-13	16.1	-2.4	0.0	-1.0	0.13	0.01	0.05	7.4	2.54
Difference 85th Percentile	-5	-35	-5	-35	0	-34	1.3	2.4	0.0	0.0	-0.15	-0.01	-0.03	-1.9	-0.63
Difference Maximum	-25	29	-25	29	-21	15	-1.1	1.8	-1.0	1.0	-0.31	-0.02	-0.08	-6.0	-2.03
Std Dev Difference	9	55	9	55	7	44	6.8	6.7	0.3	1.4	0.55	0.02	0.27	26.9	9.14
% Difference	-12%	-2%	-79%	-11%	-100%	-23%	9.9%	2.8%	-100.0%	-10.0%	-11.87%	-12.66%	-7.25%	-7.4%	-7.47%

Travel Time & Delay Report for William Hilton Parkway

Legend:

CTT:
　　Summarized Cumulative Travel Time since beginning of Run (seconds)

CD:
　　Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

CStopD:
　　Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CAS:
　　Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

CStops:
　　Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

Cumulative Summary of runs Eastbound from Squire Pope Road (#2)

10 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 11:07:36 AM to 1:03:36 PM

11 After-type runs, 1 of unverifiable origin, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 11:16:18 AM to 1:57:27 PM

	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)					
Average Before (n=10)	281	68	38	34.6	1.9
Minimum Before (n=10)	236	24	0	27.4	0.0
85th Percentile Before (n=10)	328	115	64	40.2	3.0
Maximum Before (n=10)	349	137	79	40.5	4.0
Std Dev Before (n=10)	*39*	*39*	*27*	*4.6*	*1.2*
Average After (n=11)	279	66	26	34.8	1.5
Minimum After (n=11)	247	35	0	29.0	0.0
85th Percentile After (n=11)	329	117	47	38.7	3.0
Maximum After (n=11)	330	118	80	38.7	3.0
Std Dev After (n=11)	*33*	*33*	*26*	*3.9*	*1.2*
Difference	-2	-2	-12	0.1	-0.4
Difference Minimum	11	11	0	1.6	0.0
Difference 85th Percentile	2	2	-18	-1.5	0.0
Difference Maximum	-19	-19	1	-1.8	-1.0
Std Dev Difference	*50*	*50*	*37*	*6.0*	*1.7*
% Difference	-1%	-3%	-32%	0.4%	-23.4%

Cumulative Summary of runs Westbound from Beach City Road (#20)

11 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 11:01:13 AM to 1:10:47 PM

12 After-type runs, 2 of unverifiable origin, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 11:09:38 AM to 1:51:11 PM

	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)					
Average Before (n=11)	292	79	46	33.2	1.7
Minimum Before (n=11)	249	36	16	26.4	1.0
85th Percentile Before (n=11)	329	117	97	37.4	3.0
Maximum Before (n=11)	363	150	108	38.4	3.0
Std Dev Before (n=11)	*34*	*34*	*31*	*3.7*	*0.8*
Average After (n=12)	268	56	25	36.4	1.2
Minimum After (n=12)	225	12	0	25.5	0.0
85th Percentile After (n=12)	276	64	38	40.2	2.0
Maximum After (n=12)	376	163	131	42.6	3.0
Std Dev After (n=12)	*44*	*44*	*40*	*5.0*	*1.1*
Difference	-23	-23	-21	3.2	-0.6
Difference Minimum	-24	-24	-16	-0.9	-1.0
Difference 85th Percentile	-53	-53	-59	2.8	-1.0
Difference Maximum	13	13	23	4.2	0.0
Std Dev Difference	*56*	*56*	*50*	*6.2*	*1.4*
% Difference	-8%	-29%	-45%	9.7%	-32.5%

Cumulative Summary of all runs, either direction through artery

21 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 11:04:51 AM to 1:15:44 PM

23 After-type runs, 3 of unverifiable origin, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 11:13:07 AM to 1:55:00 PM

	CTT	CD	CStopD	CAS	CStops
to End of Artery					
Average Before (n=21)	286	74	43	33.9	1.8
Minimum Before (n=21)	249	36	16	26.4	1.0
85th Percentile Before (n=21)	329	117	97	37.4	3.0
Maximum Before (n=21)	363	150	108	38.4	3.0
Std Dev Before (n=21)	*36*	*36*	*29*	*4.1*	*1.0*
Average After (n=23)	273	61	26	35.6	1.3

Minimum After (n=23)	225	12	0	25.5	0.0
85th Percentile After (n=23)	276	64	38	40.2	2.0
Maximum After (n=23)	376	163	131	42.6	3.0
Std Dev After (n=23)	*38*	*38*	*33*	*4.5*	*1.1*
Difference	-13	-13	-17	1.8	-0.5
Difference Minimum	-24	-24	-16	-0.9	-1.0
Difference 85th Percentile	-53	-53	-59	2.8	-1.0
Difference Maximum	13	13	23	4.2	0.0
Std Dev Difference	*52*	*52*	*44*	*6.1*	*1.5*
% Difference	-5%	-18%	-40%	5.2%	-27.9%

Stantec Consulting Services Inc 4969 Centre Pointe Drive, Suite 200

Thursday 10/18/2018 2:47:02 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Travel Time from previous Node (seconds)

CTT:
Cumulative Travel Time since beginning of Run (seconds)

Delay:
Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Contents:

[-] Collapse All

[-] Before-type Trip Log "Trip #211:00:18 AM", Midday-period, started Wednesday 3/28/2018 11:00:17 AM ↑Contents

Entered artery 11:07:36 am (439 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	33	33	-1	-1	0	0	46.3	46.3	0	0	0.90	0.04	0.58	85.5	29.25
to Gumtree Road (#11)	48	81	2	1	0	0	43.2	44.5	0	0	0.94	0.06	0.60	99.1	34.16
to Wilborn Road (#8)	27	108	3	4	0	0	39.7	43.3	0	0	0.79	0.04	0.49	71.4	24.42
to Museum Street (#14)	67	174	48	52	40	40	12.7	31.6	1	1	0.89	0.04	0.45	74.1	25.49
to Whooping Crane Way (#17)	84	258	37	89	24	64	25.2	29.5	1	2	1.83	0.08	1.01	159.1	54.47
to Beach City Road (#20)	50	308	6	96	0	64	38.8	31.0	0	2	1.80	0.08	1.08	151.0	51.59

Entered artery 11:21:37 am (1281 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	33	33	0	0	0	0	45.5	45.5	0	0	1.14	0.05	0.71	99.5	33.99
to Gumtree Road (#11)	56	89	9	9	0	0	37.5	40.5	0	0	3.94	0.11	1.04	139.0	49.24
to Wilborn Road (#8)	46	135	22	31	14	14	23.3	34.6	1	1	0.86	0.04	0.48	84.8	29.12

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Museum Street (#14)	42	177	23	54	12	26	20.1	31.2	1	2	1.43	0.07	0.71	104.4	35.76
to Whooping Crane Way (#17)	78	255	32	86	18	44	27.1	29.9	1	3	1.95	0.09	1.10	167.0	57.23
to Beach City Road (#20)	73	328	29	115	19	63	26.7	29.2	1	4	2.28	0.11	1.20	171.0	58.58

Entered artery 11:34:45 am (2069 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	42	42	9	9	0	0	35.7	35.7	0	0	1.55	0.07	0.81	115.4	39.59
to Gumtree Road (#11)	75	117	28	37	16	16	28.0	30.8	1	1	1.78	0.09	0.99	152.6	52.51
to Wilborn Road (#8)	28	145	4	41	0	16	37.8	32.1	0	1	0.60	0.03	0.40	63.8	21.84
to Museum Street (#14)	21	167	2	44	0	16	39.7	33.1	0	1	0.53	0.02	0.33	50.7	17.36
to Whooping Crane Way (#17)	50	217	3	47	0	16	42.3	35.2	0	1	1.30	0.06	0.80	121.9	41.70
to Beach City Road (#20)	40	257	-3	45	0	16	47.7	37.2	0	1	1.60	0.08	0.88	121.7	41.65

Entered artery 11:46:27 am (2771 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	46	46	12	12	0	0	33.0	33.0	0	0	8.35	0.18	1.47	161.6	58.53
to Gumtree Road (#11)	88	134	42	54	33	33	23.6	26.8	1	1	4.64	0.13	1.18	177.3	62.49
to Wilborn Road (#8)	50	184	26	81	15	49	21.3	25.3	1	2	0.86	0.04	0.42	80.9	27.81
to Museum Street (#14)	31	215	12	93	0	49	27.6	25.6	0	2	1.30	0.06	0.67	92.4	31.71
to Whooping Crane Way (#17)	87	302	41	133	30	79	24.4	25.3	1	3	2.08	0.10	1.12	166.3	56.95
to Beach City Road (#20)	47	349	3	137	0	79	41.3	27.4	0	3	1.72	0.08	0.93	131.4	44.96

Entered artery 11:59:57 am (3581 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	52	52	18	18	8	8	29.1	29.1	1	1	1.04	0.05	0.51	91.4	31.42
to Gumtree Road (#11)	78	130	31	50	26	34	26.9	27.8	1	2	1.82	0.10	1.07	169.1	58.22
to Wilborn Road (#8)	25	155	1	51	0	34	42.4	30.2	0	2	1.30	0.06	0.70	90.9	31.06
to Museum Street (#14)	18	173	-1	50	0	34	47.3	31.9	0	2	0.45	0.02	0.28	43.1	14.76
to Whooping Crane Way (#17)	44	216	-3	47	0	34	48.5	35.3	0	2	7.19	0.14	1.17	131.5	47.89
to Beach City Road (#20)	59	276	16	63	12	46	32.6	34.7	1	3	1.87	0.09	0.98	145.7	49.97

Entered artery 12:12:22 pm (4326 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	34	34	0	0	0	0	45.1	45.1	0	0	171.72	1.19	3.77	90.7	117.16
to Gumtree Road (#11)	67	101	21	21	8	8	31.1	35.8	1	1	1.45	0.08	0.86	139.4	48.04
to Wilborn Road (#8)	26	126	2	23	0	8	41.5	37.0	0	1	1.22	0.06	0.68	90.0	30.76

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Museum Street (#14)	20	146	1	23	0	8	42.7	37.7	0	1	0.44	0.02	0.26	41.6	14.29
to Whooping Crane Way (#17)	47	194	1	24	0	8	44.7	39.4	0	1	1.24	0.06	0.82	122.3	41.82
to Beach City Road (#20)	43	236	-1	24	0	8	45.2	40.5	0	1	1.16	0.05	0.71	106.8	36.57

Entered artery 12:25:14 pm (5098 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	58	58	24	24	16	16	26.1	26.1	1	1	1.17	0.06	0.59	97.5	33.43
to Gumtree Road (#11)	77	135	31	55	24	40	27.1	26.7	1	2	2.67	0.13	1.14	162.6	56.11
to Wilborn Road (#8)	28	164	5	60	0	40	37.5	28.6	0	2	1.15	0.05	0.69	94.0	32.08
to Museum Street (#14)	19	183	1	60	0	40	43.5	30.1	0	2	0.36	0.02	0.23	39.0	13.39
to Whooping Crane Way (#17)	54	237	7	68	0	40	39.2	32.2	0	2	1.43	0.07	0.81	125.3	42.96
to Beach City Road (#20)	44	281	1	69	0	40	43.7	34.0	0	2	1.31	0.06	0.80	117.4	40.18

Entered artery 12:38:15 pm (5878 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	34	34	0	0	0	0	45.0	45.0	0	0	0.90	0.04	0.59	87.3	29.85
to Gumtree Road (#11)	54	87	7	7	0	0	39.0	41.3	0	0	2.42	0.11	1.06	148.9	51.43
to Wilborn Road (#8)	24	112	0	8	0	0	43.9	41.9	0	0	0.93	0.04	0.55	76.0	25.95
to Museum Street (#14)	19	130	0	8	0	0	44.6	42.3	0	0	0.48	0.02	0.32	47.9	16.39
to Whooping Crane Way (#17)	62	193	16	23	0	0	34.2	39.7	0	0	1.58	0.07	0.92	143.1	49.04
to Beach City Road (#20)	46	238	2	26	0	0	42.5	40.2	0	0	1.15	0.05	0.72	109.9	37.59

Entered artery 12:50:55 pm (6638 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	60	60	27	27	13	13	25.1	25.1	1	1	1.00	0.05	0.54	100.7	34.57
to Gumtree Road (#11)	91	152	45	72	37	50	22.9	23.8	1	2	2.15	0.11	1.18	169.2	58.23
to Wilborn Road (#8)	27	179	3	75	0	50	39.0	26.1	0	2	1.02	0.04	0.64	87.1	29.74
to Museum Street (#14)	18	197	-1	74	0	50	46.7	28.0	0	2	0.65	0.03	0.40	55.5	18.98
to Whooping Crane Way (#17)	45	242	-1	73	0	50	47.0	31.6	0	2	1.16	0.06	0.70	107.3	36.76
to Beach City Road (#20)	47	289	3	76	0	50	41.3	33.1	0	2	1.17	0.05	0.73	112.4	38.44

Entered artery 1:03:36 pm (7399 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	31	31	-3	-3	0	0	48.7	48.7	0	0	1.27	0.06	0.77	104.1	35.55
to Gumtree Road (#11)	67	98	21	18	18	18	31.2	36.7	1	1	1.46	0.09	0.85	136.4	47.10
to Wilborn Road (#8)	26	124	2	20	0	18	40.8	37.6	0	1	1.09	0.05	0.63	84.8	28.98
to Museum Street (#14)	20	144	1	21	0	18	42.7	38.3	0	1	0.43	0.02	0.29	45.6	15.62

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	53	197	7	28	0	18	39.8	38.7	0	1	1.69	0.08	0.98	142.0	48.78
to Beach City Road (#20)	48	245	4	33	0	18	40.5	39.1	0	1	1.30	0.06	0.78	117.5	40.25

[-] After-type Trip Log "Trip #5", Midday-period, started Thursday 10/4/2018 11:07:08 AM ↑Contents

Entered artery 11:16:18 am (550 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	50	50	17	17	5	5	30.1	30.1	1	1	1.12	0.05	0.65	106.5	36.52
to Gumtree Road (#11)	68	118	21	38	12	18	30.9	30.6	1	2	3.58	0.15	1.43	191.2	66.25
to Wilborn Road (#8)	33	151	9	47	0	18	32.3	30.9	0	2	0.66	0.03	0.39	65.7	22.63
to Museum Street (#14)	44	195	25	72	14	32	19.3	28.3	1	3	0.72	0.06	0.59	95.6	32.29
to Whooping Crane Way (#17)	60	255	13	85	0	32	35.5	30.0	0	3	3.99	0.13	1.27	162.1	56.65
to Beach City Road (#20)	49	303	6	91	0	32	39.5	31.5	0	3	1.78	0.08	1.04	145.1	49.62

Entered artery 11:29:12 am (1325 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	33	33	-1	-1	0	0	46.5	46.5	0	0	0.84	0.04	0.53	80.4	27.51
to Gumtree Road (#11)	48	80	2	1	0	0	43.6	44.8	0	0	1.20	0.07	0.76	114.9	39.56
to Wilborn Road (#8)	24	105	0	1	0	0	44.1	44.6	0	0	0.79	0.04	0.46	66.7	22.83
to Museum Street (#14)	20	125	2	2	0	0	41.3	44.1	0	0	0.38	0.02	0.27	43.5	14.91
to Whooping Crane Way (#17)	48	173	2	4	0	0	44.1	44.1	0	0	1.26	0.06	0.83	124.2	42.45
to Beach City Road (#20)	74	247	30	35	23	23	26.1	38.7	1	1	1.63	0.08	0.93	140.4	48.16

[-] After-type Trip Log "Trip #6", Midday-period, started Thursday 10/4/2018 11:41:21 AM ↑Contents

Entered artery 11:42:56 am (95 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	36	36	2	2	0	0	42.1	42.1	0	0	9.56	0.17	1.29	132.9	49.82
to Gumtree Road (#11)	46	82	-1	2	0	0	45.8	44.2	0	0	1.14	0.07	0.70	107.4	36.99
to Wilborn Road (#8)	27	109	4	5	0	0	38.7	42.8	0	0	0.73	0.03	0.45	68.7	23.50
to Museum Street (#14)	26	135	7	12	0	0	33.1	41.0	0	0	0.47	0.02	0.28	48.5	16.70
to Whooping Crane Way (#17)	63	197	16	28	0	0	34.0	38.8	0	0	2.06	0.10	1.14	165.3	56.63
to Beach City Road (#20)	52	249	8	36	0	0	37.4	38.5	0	0	1.53	0.07	0.82	124.1	42.55

Entered artery 11:53:03 am (702 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	38	38	4	4	0	0	40.2	40.2	0	0	0.97	0.05	0.58	89.3	30.62
to Gumtree Road (#11)	53	90	6	10	0	0	39.6	39.9	0	0	1.85	0.10	0.99	142.1	48.97
to Wilborn	39	130	15	26	0	0	27.2	36.0	0	0	0.82	0.04	0.45	75.6	25.98

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Road (#8)															
to Museum Street (#14)	22	151	3	29	0	0	39.0	36.5	0	0	0.90	0.04	0.50	67.4	23.13
to Whooping Crane Way (#17)	51	202	5	33	0	0	41.6	37.7	0	0	1.52	0.07	0.87	129.0	44.29
to Beach City Road (#20)	56	258	12	45	2	2	34.7	37.1	1	1	205.82	1.13	3.42	59.4	125.58

Entered artery 12:04:50 pm (1409 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	36	36	2	2	0	0	42.0	42.0	0	0	1.42	0.07	0.81	111.2	38.03
to Gumtree Road (#11)	51	87	5	7	0	0	41.0	41.4	0	0	4.61	0.12	1.04	134.1	47.81
to Wilborn Road (#8)	29	116	5	12	0	0	37.4	40.5	0	0	0.68	0.03	0.45	69.2	23.65
to Museum Street (#14)	31	147	12	24	0	0	27.3	37.7	0	0	1.01	0.05	0.52	76.6	26.34
to Whooping Crane Way (#17)	55	201	8	32	0	0	38.7	37.9	0	0	1.22	0.06	0.77	122.0	41.77
to Beach City Road (#20)	47	248	4	36	0	0	41.2	38.5	0	0	1.28	0.06	0.76	114.3	39.14

Entered artery 12:15:56 pm (2075 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	60	60	26	26	22	22	25.2	25.2	1	1	0.70	0.04	0.37	76.5	26.32
to Gumtree Road (#11)	69	129	22	49	12	34	30.4	28.0	1	2	2.66	0.14	1.30	185.5	63.72
to Wilborn Road (#8)	28	157	5	53	0	34	37.5	29.7	0	2	0.92	0.04	0.54	77.8	26.64
to Museum Street (#14)	22	179	4	57	0	34	37.8	30.7	0	2	0.35	0.02	0.25	43.3	14.81
to Whooping Crane Way (#17)	70	250	24	81	13	47	30.2	30.6	1	3	1.61	0.07	0.88	144.1	49.35
to Beach City Road (#20)	49	299	5	86	0	47	39.6	32.0	0	3	10.88	0.16	1.26	143.9	53.65

Entered artery 12:30:52 pm (2971 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	41	41	8	8	0	0	36.7	36.7	0	0	1.32	0.06	0.81	115.9	39.60
to Gumtree Road (#11)	59	100	12	20	0	0	35.7	36.1	0	0	1.58	0.09	0.89	135.7	46.75
to Wilborn Road (#8)	27	127	3	23	0	0	39.2	36.8	0	0	0.71	0.03	0.46	69.4	23.73
to Museum Street (#14)	22	149	3	26	0	0	38.3	37.0	0	0	0.36	0.02	0.23	41.3	14.18
to Whooping Crane Way (#17)	50	199	4	30	0	0	42.3	38.3	0	0	1.47	0.06	0.93	135.3	46.23
to Beach City Road (#20)	70	270	27	57	18	18	27.5	35.5	1	1	1.38	0.06	0.84	140.5	48.16

Entered artery 12:43:35 pm (3735 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	40	40	6	6	0	0	38.3	38.3	0	0	0.78	0.04	0.51	83.6	28.61
to Gumtree Road (#11)	95	135	49	55	39	39	21.9	26.7	1	1	1.96	0.10	1.13	166.6	57.38
to Wilborn Road (#8)	40	175	16	71	0	39	26.5	26.7	0	1	0.81	0.04	0.46	78.9	27.03

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Museum Street (#14)	30	206	12	83	0	39	27.7	26.8	0	1	0.91	0.04	0.46	70.1	24.02
to Whooping Crane Way (#17)	66	271	19	102	5	44	32.1	28.1	1	2	1.83	0.08	1.01	154.5	52.87
to Beach City Road (#20)	58	329	15	117	0	44	33.4	29.0	0	2	1.68	0.08	0.95	142.4	48.91

Entered artery 12:54:54 pm (4413 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	37	37	3	3	0	0	41.5	41.5	0	0	1.48	0.07	0.88	119.1	40.66
to Gumtree Road (#11)	82	119	36	39	27	27	25.5	30.4	1	1	1.47	0.08	0.89	151.0	51.99
to Wilborn Road (#8)	26	145	2	42	0	27	40.4	32.2	0	1	1.08	0.05	0.64	86.3	29.47
to Museum Street (#14)	20	165	1	43	0	27	42.5	33.4	0	1	0.60	0.03	0.35	51.8	17.75
to Whooping Crane Way (#17)	51	216	4	47	0	27	41.8	35.4	0	1	1.48	0.07	0.87	129.0	44.24
to Beach City Road (#20)	67	283	24	71	11	39	28.7	33.8	1	2	1.93	0.09	1.04	155.8	53.49

Entered artery 1:06:48 pm (5127 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	40	40	6	6	0	0	38.0	38.0	0	0	1.23	0.06	0.68	101.5	34.67
to Gumtree Road (#11)	51	91	4	11	0	0	41.2	39.8	0	0	1.19	0.07	0.74	114.7	39.46
to Wilborn Road (#8)	35	125	11	21	0	0	30.9	37.3	0	0	0.94	0.04	0.53	81.6	28.07
to Museum Street (#14)	19	144	1	22	0	0	43.7	38.2	0	0	1.43	0.05	0.56	67.5	23.39
to Whooping Crane Way (#17)	60	204	13	35	0	0	35.3	37.3	0	0	1.32	0.06	0.69	116.7	40.02
to Beach City Road (#20)	43	247	-1	35	0	0	45.3	38.7	0	0	1.66	0.08	0.97	133.3	45.56

Entered artery 1:19:35 pm (5894 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	32	32	-2	-2	0	0	47.7	47.7	0	0	1.03	0.05	0.64	91.2	31.21
to Gumtree Road (#11)	113	145	67	65	55	55	18.6	24.9	1	1	1.34	0.08	0.73	129.3	44.65

[-] After-type Trip Log "Trip #7", Midday-period, started Thursday 10/4/2018 1:33:50 PM ↑Contents

Entered artery 1:43:27 pm (577 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	32	32	-1	-1	0	0	46.8	46.8	0	0	0.77	0.03	0.53	80.8	27.61
to Gumtree Road (#11)	114	146	68	66	65	65	18.4	24.7	1	1	1.39	0.08	0.80	147.0	50.86
to Wilborn Road (#8)	35	182	11	78	2	67	30.0	25.7	1	2	1.05	0.05	0.54	82.0	28.12
to Museum Street (#14)	28	209	9	86	0	67	31.1	26.4	0	2	1.77	0.06	0.67	84.0	29.10
to Whooping Crane Way (#17)	73	282	26	113	13	80	29.2	27.1	1	3	1.68	0.08	0.95	154.1	52.79
to Beach City Road	48	330	5	118	0	80	40.0	29.0	0	3	1.66	0.08	0.94	134.2	45.92

| (#20) | | | | | | | | | | | | | |

Entered artery 1:57:27 pm (1418 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	33	33	0	0	0	0	45.3	45.3	0	0	1.04	0.05	0.67	95.6	32.64
to Gumtree Road (#11)	107	140	60	60	59	59	19.7	25.8	1	1	1.41	0.08	0.77	159.7	55.15
to Wilborn Road (#8)	32	172	8	68	0	59	33.8	27.3	0	1	1.04	0.05	0.59	86.2	29.45
to Museum Street (#14)	30	202	11	79	0	59	28.0	27.4	0	1	0.36	0.02	0.21	44.6	15.35

Cumulative Reports

[-] Before-type Trip Log "Trip #211:00:18 AM", Midday-period, started Wednesday 3/28/2018 11:00:17 AM ↑Contents

**Entered artery 11:07:36 am (439 seconds)
traveling Eastbound from Squire Pope Road (#2)**

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	308	96	64	31.0	2
to Beach City Road (#20)	328	115	63	29.2	4
to Beach City Road (#20)	257	45	16	37.2	1
to Beach City Road (#20)	349	137	79	27.4	3
to Beach City Road (#20)	276	63	46	34.7	3
to Beach City Road (#20)	236	24	8	40.5	1
to Beach City Road (#20)	281	69	40	34.0	2
to Beach City Road (#20)	238	26	0	40.2	0
to Beach City Road (#20)	289	76	50	33.1	2
to Beach City Road (#20)	245	33	18	39.1	1

[-] After-type Trip Log "Trip #5", Midday-period, started Thursday 10/4/2018 11:07:08 AM ↑Contents

**Entered artery 11:16:18 am (550 seconds)
traveling Eastbound from Squire Pope Road (#2)**

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	303	91	32	31.5	3
to Beach City Road (#20)	247	35	23	38.7	1

[-] After-type Trip Log "Trip #6", Midday-period, started Thursday 10/4/2018 11:41:21 AM ↑Contents

**Entered artery 11:42:56 am (95 seconds)
traveling Eastbound from Squire Pope Road (#2)**

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	249	36	0	38.5	0
to Beach City Road (#20)	258	45	2	37.1	1
to Beach City Road (#20)	248	36	0	38.5	0
to Beach City Road (#20)	299	86	47	32.0	3
to Beach City Road (#20)	270	57	18	35.5	1
to Beach City Road (#20)	329	117	44	29.0	2
to Beach City Road (#20)	283	71	39	33.8	2
to Beach City Road (#20)	247	35	0	38.7	0
to Gumtree Road (#11)	145	65	55	24.9	1

[-] After-type Trip Log "Trip #7", Midday-period, started Thursday 10/4/2018 1:33:50 PM ↑Contents

**Entered artery 1:43:27 pm (577 seconds)
traveling Eastbound from Squire Pope Road (#2)**

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	330	118	80	29.0	3
to Museum Street (#14)	202	79	59	27.4	1

Stantec Consulting Services Inc 4969 Centre Pointe Drive, Suite 200

Thursday 10/18/2018 2:47:02 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Summarized Travel Time from previous Node (seconds)

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

Delay:
Summarized Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Summarized Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Summarized Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Summarized Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Summarized Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Summarized Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Summarized Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Summarized Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Summary of runs Eastbound from Squire Pope Road (#2)
10 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 11:07:36 AM to 1:03:36 PM
13 After-type runs, 2 of unverifiable origin, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 11:16:18 AM to 1:57:27 PM

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)															
Average Before (n=10)	42	42	9	9	4	4	38.0	38.0	0.3	0.3	18.90	0.18	1.03	103.4	44.33
Minimum Before (n=10)	31	31	-3	-3	0	0	25.1	25.1	0.0	0.0	0.90	0.04	0.51	85.5	29.25
85th Percentile Before (n=10)	58	58	24	24	13	13	46.3	46.3	1.0	1.0	8.35	0.18	1.47	115.4	58.53
Maximum Before (n=10)	60	60	27	27	16	16	48.7	48.7	1.0	1.0	171.72	1.19	3.77	161.6	117.16
Std Dev Before (n=10)	*11*	*11*	*11*	*11*	*6*	*6*	*9.2*	*9.2*	*0.5*	*0.5*	*53.74*	*0.36*	*1.00*	*22.3*	*26.94*
Average After (n=13)	39	39	5	5	2	2	40.0	40.0	0.2	0.2	1.71	0.06	0.69	98.8	34.14
Minimum After (n=13)	32	32	-2	-2	0	0	25.2	25.2	0.0	0.0	0.70	0.03	0.37	76.5	26.32
85th Percentile After (n=13)	41	41	8	8	0	0	46.5	46.5	0.0	0.0	1.42	0.07	0.81	115.9	39.60
Maximum After (n=13)	60	60	26	26	22	22	47.7	47.7	1.0	1.0	9.56	0.17	1.29	132.9	49.82
Std Dev After (n=13)	*8*	*8*	*8*	*8*	*6*	*6*	*6.6*	*6.6*	*0.4*	*0.4*	*2.37*	*0.03*	*0.23*	*17.4*	*6.71*
Difference	-3	-3	-3	-3	-2	-2	2.1	2.1	-0.1	-0.1	-17.19	-0.12	-0.35	-4.6	-10.19
Difference Minimum	1	1	1	1	0	0	0.1	0.1	0.0	0.0	-0.19	-0.01	-0.15	-9.0	-2.94
Difference 85th Percentile	-17	-17	-17	-17	-13	-13	0.2	0.2	-1.0	-1.0	-6.93	-0.11	-0.66	0.5	-18.93

Difference Maximum	0	0	0	0	6	6	-1.0	-1.0	0.0	0.0	-162.16	-1.03	-2.48	-28.7	-67.34
Std Dev Difference	14	14	14	14	9	9	11.3	11.3	0.6	0.6	53.79	0.36	1.03	28.3	27.76
% Difference	-8%	-8%	-38%	-38%	-43%	-43%	5.4%	5.4%	-48.7%	-48.7%	-90.94%	-67.61%	-33.45%	-4.4%	-22.99%
to Gumtree Road (#11)															
Average Before (n=10)	70	112	24	32	16	20	31.1	33.5	0.7	1.0	2.33	0.10	1.00	149.4	51.75
Minimum Before (n=10)	48	81	2	1	0	0	22.9	23.8	0.0	0.0	0.94	0.06	0.60	99.1	34.16
85th Percentile Before (n=10)	88	135	42	55	33	40	39.0	41.3	1.0	2.0	3.94	0.13	1.18	169.2	58.23
Maximum Before (n=10)	91	152	45	72	37	50	43.2	44.5	1.0	2.0	4.64	0.13	1.18	177.3	62.49
Std Dev Before (n=10)	14	24	14	24	14	18	6.8	7.2	0.5	0.8	1.16	0.02	0.18	22.7	7.96
Average After (n=13)	73	112	27	32	21	23	31.7	33.6	0.5	0.7	1.95	0.09	0.94	144.6	49.96
Minimum After (n=13)	46	80	-1	1	0	0	18.4	24.7	0.0	0.0	1.14	0.07	0.70	107.4	36.99
85th Percentile After (n=13)	107	140	60	60	55	55	41.2	41.4	1.0	1.0	2.66	0.12	1.13	166.6	57.38
Maximum After (n=13)	114	146	68	66	65	65	45.8	44.8	1.0	2.0	4.61	0.15	1.43	191.2	66.25
Std Dev After (n=13)	26	25	26	25	25	25	10.1	7.6	0.5	0.8	1.06	0.03	0.23	26.1	9.00
Difference	3	0	3	0	5	3	0.7	0.2	-0.2	-0.3	-0.37	-0.01	-0.06	-4.8	-1.79
Difference Minimum	-3	-1	-3	-1	0	0	-4.5	0.9	0.0	0.0	0.20	0.01	0.10	8.4	2.83
Difference 85th Percentile	18	5	18	5	22	15	2.2	0.1	0.0	-1.0	-1.28	-0.01	-0.04	-2.7	-0.85
Difference Maximum	23	-5	23	-5	28	14	2.6	0.3	0.0	0.0	-0.03	0.02	0.25	13.9	3.75
Std Dev Difference	30	35	30	35	29	31	12.2	10.5	0.7	1.1	1.57	0.04	0.30	34.6	12.02
% Difference	5%	0%	14%	0%	28%	15%	2.1%	0.5%	-23.1%	-30.8%	-16.11%	-6.03%	-6.07%	-3.2%	-3.46%
to Wilborn Road (#8)															
Average Before (n=10)	31	143	7	39	3	23	36.7	33.7	0.2	1.2	0.98	0.04	0.57	82.4	28.18
Minimum Before (n=10)	24	108	0	4	0	0	21.3	25.3	0.0	0.0	0.60	0.03	0.40	63.8	21.84
85th Percentile Before (n=10)	46	179	22	75	14	49	42.4	41.9	1.0	2.0	1.22	0.06	0.69	90.9	31.06
Maximum Before (n=10)	50	184	26	81	15	50	43.9	43.3	1.0	2.0	1.30	0.06	0.70	94.0	32.08
Std Dev Before (n=10)	9	27	9	27	6	19	7.9	6.3	0.4	0.8	0.21	0.01	0.11	9.5	3.22
Average After (n=12)	31	141	7	37	0	20	34.8	34.2	0.1	0.8	0.85	0.04	0.50	75.7	25.93
Minimum After (n=12)	24	105	0	1	0	0	26.5	25.7	0.0	0.0	0.66	0.03	0.39	65.7	22.63
85th Percentile After (n=12)	35	172	11	68	0	39	39.2	40.5	0.0	2.0	1.04	0.05	0.54	82.0	28.12
Maximum After (n=12)	40	182	16	78	2	67	44.1	44.6	1.0	2.0	1.08	0.05	0.64	86.3	29.47
Std Dev After (n=12)	5	26	5	26	1	25	5.6	6.4	0.3	0.9	0.15	0.01	0.07	7.5	2.57
Difference	0	-2	0	-2	-3	-2	-1.9	0.5	-0.1	-0.5	-0.13	-0.01	-0.07	-6.7	-2.25
Difference Minimum	0	-3	0	-3	0	0	5.3	0.4	0.0	0.0	0.06	0.00	-0.01	1.9	0.80
Difference 85th Percentile	-11	-7	-11	-7	-14	-9	-3.2	-1.4	-1.0	0.0	-0.18	-0.01	-0.16	-8.9	-2.94
Difference Maximum	-10	-3	-10	-3	-13	17	0.3	1.4	0.0	0.0	-0.23	-0.01	-0.06	-7.7	-2.61
Std Dev	11	38	11	38	6	31	9.6	9.0	0.5	1.2	0.26	0.01	0.13	12.1	4.12

Difference															
% Difference	2%	-2%	7%	-5%	-93%	-11%	-5.1%	1.6%	-58.3%	-37.5%	-13.38%	-11.60%	-12.28%	-8.1%	-7.99%
to Museum Street (#14)															
Average Before (n=10)	27	171	9	48	5	28	36.8	33.0	0.2	1.4	0.70	0.03	0.39	59.4	20.37
Minimum Before (n=10)	18	130	-1	8	0	0	12.7	25.6	0.0	0.0	0.36	0.02	0.23	39.0	13.39
85th Percentile Before (n=10)	42	197	23	74	12	49	46.7	38.3	1.0	2.0	1.30	0.06	0.67	92.4	31.71
Maximum Before (n=10)	67	215	48	93	40	50	47.3	42.3	1.0	2.0	1.43	0.07	0.71	104.4	35.76
Std Dev Before (n=10)	16	25	16	25	13	17	12.2	5.1	0.4	0.7	0.38	0.02	0.17	22.9	7.88
Average After (n=12)	26	167	7	45	1	22	34.1	34.0	0.1	0.8	0.77	0.04	0.41	61.2	21.00
Minimum After (n=12)	19	125	1	2	0	0	19.3	26.4	0.0	0.0	0.35	0.02	0.21	41.3	14.18
85th Percentile After (n=12)	30	202	12	79	0	39	41.3	38.2	0.0	2.0	1.01	0.05	0.56	76.6	26.34
Maximum After (n=12)	44	209	25	86	14	67	43.7	44.1	1.0	3.0	1.77	0.06	0.67	95.6	32.29
Std Dev After (n=12)	7	30	7	30	4	25	7.5	6.0	0.3	1.0	0.46	0.02	0.16	18.2	6.21
Difference	-1	-3	-1	-3	-4	-6	-2.7	1.0	-0.1	-0.6	0.08	0.00	0.01	1.8	0.62
Difference Minimum	1	-5	1	-5	0	0	6.6	0.8	0.0	0.0	-0.01	0.00	-0.02	2.3	0.79
Difference 85th Percentile	-12	5	-12	5	-12	-9	-5.4	-0.1	-1.0	0.0	-0.29	-0.01	-0.12	-15.7	-5.37
Difference Maximum	-23	-6	-23	-6	-26	17	-3.6	1.8	0.0	1.0	0.34	-0.01	-0.03	-8.8	-3.47
Std Dev Difference	17	39	17	39	14	30	14.3	7.8	0.5	1.2	0.60	0.02	0.23	29.3	10.03
% Difference	-5%	-2%	-15%	-7%	-77%	-23%	-7.2%	2.9%	-58.3%	-40.5%	11.19%	8.11%	3.03%	3.0%	3.06%
to Whooping Crane Way (#17)															
Average Before (n=10)	61	231	14	62	7	35	37.2	33.7	0.3	1.7	2.15	0.08	0.94	138.6	47.76
Minimum Before (n=10)	44	193	-3	23	0	0	24.4	25.3	0.0	0.0	1.16	0.06	0.70	107.3	36.76
85th Percentile Before (n=10)	84	258	37	89	24	64	47.0	39.4	1.0	3.0	2.08	0.10	1.12	166.3	56.95
Maximum Before (n=10)	87	302	41	133	30	79	48.5	39.7	1.0	3.0	7.19	0.14	1.17	167.0	57.23
Std Dev Before (n=10)	17	35	17	35	12	25	9.0	4.8	0.5	0.9	1.80	0.02	0.16	20.5	6.98
Average After (n=11)	59	223	12	54	3	21	36.8	35.0	0.3	1.1	1.77	0.08	0.93	139.7	47.94
Minimum After (n=11)	48	173	2	4	0	0	29.2	27.1	0.0	0.0	1.22	0.06	0.69	116.7	40.02
85th Percentile After (n=11)	70	271	24	102	13	47	42.3	38.8	1.0	3.0	2.06	0.10	1.14	162.1	56.63
Maximum After (n=11)	73	282	26	113	13	80	44.1	44.1	1.0	3.0	3.99	0.13	1.27	165.3	56.65
Std Dev After (n=11)	8	35	8	35	5	27	5.2	5.3	0.5	1.4	0.78	0.02	0.16	17.1	6.02
Difference	-2	-8	-2	-8	-4	-14	-0.4	1.4	0.0	-0.6	-0.38	0.00	-0.02	1.1	0.18
Difference Minimum	5	-19	5	-19	0	0	4.8	1.9	0.0	0.0	0.05	0.00	-0.01	9.4	3.26
Difference 85th Percentile	-13	13	-13	13	-12	-18	-4.8	-0.7	0.0	0.0	-0.01	0.00	0.02	-4.2	-0.32
Difference Maximum	-14	-20	-14	-20	-17	1	-4.4	4.4	0.0	0.0	-3.20	-0.01	0.10	-1.7	-0.58
Std Dev Difference	19	50	19	50	13	37	10.4	7.2	0.7	1.7	1.96	0.03	0.23	26.7	9.21
% Difference	-3%	-4%	-12%	-13%	-61%	-41%	-1.2%	4.0%	-9.1%	-35.8%	-17.65%	-3.93%	-1.74%	0.8%	0.37%

to Beach City Road (#20)

Average Before (n=10)	50	281	6	68	3	38	40.0	34.6	0.2	1.9	1.54	0.07	0.88	128.5	43.98
Minimum Before (n=10)	40	236	-3	24	0	0	26.7	27.4	0.0	0.0	1.15	0.05	0.71	106.8	36.57
85th Percentile Before (n=10)	59	328	16	115	12	64	45.2	40.2	1.0	3.0	1.87	0.09	1.08	151.0	51.59
Maximum Before (n=10)	73	349	29	137	19	79	47.7	40.5	1.0	4.0	2.28	0.11	1.20	171.0	58.58
Std Dev Before (n=10)	*10*	*39*	*10*	*39*	*7*	*27*	*6.2*	*4.6*	*0.4*	*1.2*	*0.38*	*0.02*	*0.16*	*21.0*	*7.21*
Average After (n=11)	56	279	12	66	5	26	35.8	34.8	0.4	1.5	21.02	0.18	1.18	130.3	54.61
Minimum After (n=11)	43	247	-1	35	0	0	26.1	29.0	0.0	0.0	1.28	0.06	0.76	59.4	39.14
85th Percentile After (n=11)	70	329	27	117	18	47	41.2	38.7	1.0	3.0	10.88	0.16	1.26	145.1	53.65
Maximum After (n=11)	74	330	30	118	23	80	45.3	38.7	1.0	3.0	205.82	1.13	3.42	155.8	125.58
Std Dev After (n=11)	*10*	*33*	*10*	*33*	*9*	*26*	*6.2*	*3.9*	*0.5*	*1.2*	*61.35*	*0.32*	*0.76*	*26.0*	*23.92*
Difference	6	-2	6	-2	2	-12	-4.3	0.1	0.2	-0.4	19.48	0.11	0.30	1.8	10.63
Difference Minimum	2	11	2	11	0	0	-0.6	1.6	0.0	0.0	0.13	0.01	0.04	-47.4	2.56
Difference 85th Percentile	11	2	11	2	6	-18	-4.0	-1.5	0.0	0.0	9.01	0.07	0.18	-5.9	2.05
Difference Maximum	1	-19	1	-19	4	1	-2.4	-1.8	0.0	-1.0	203.53	1.02	2.23	-15.2	67.00
Std Dev Difference	*14*	*50*	*14*	*50*	*11*	*37*	*8.8*	*6.0*	*0.7*	*1.7*	*61.35*	*0.32*	*0.77*	*33.4*	*24.98*
% Difference	12%	-1%	97%	-3%	60%	-32%	-10.7%	0.4%	81.8%	-23.4%	1268.03%	151.23%	33.56%	1.4%	24.18%

Stantec Consulting Services Inc 4969 Centre Pointe Drive, Suite 200

Thursday 10/18/2018 2:47:02 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Travel Time from previous Node (seconds)

CTT:
Cumulative Travel Time since beginning of Run (seconds)

Delay:
Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Contents:

[-] Collapse All

[-] Before-type Trip Log "Trip #211:00:18 AM", Midday-period, started Wednesday 3/28/2018 11:00:17 AM ↑Contents

Entered artery 11:01:13 am (57 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	64	64	21	21	10	10	30.6	30.6	1	1	2.09	0.11	1.06	157.7	54.20
to Museum Street (#14)	60	124	13	34	6	16	34.7	32.6	1	2	2.16	0.11	1.15	163.4	56.19
to Wilborn Road (#8)	22	146	3	37	0	16	39.1	33.6	0	2	1.33	0.06	0.71	89.9	30.70
to Gumtree Road (#11)	24	170	0	37	0	16	44.8	35.1	0	2	0.59	0.03	0.39	59.2	20.28
to Wild Horse Road (#5)	48	218	2	39	0	16	43.1	36.9	0	2	1.22	0.06	0.71	110.1	37.71
to Squire Pope Road (#2)	39	257	5	44	0	16	38.8	37.2	0	2	1.01	0.05	0.66	99.0	33.87

Entered artery 11:14:59 am (882 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	87	87	44	44	32	32	22.7	22.7	1	1	2.18	0.10	1.10	162.0	55.46
to Museum Street (#14)	56	143	9	53	0	32	37.2	28.4	0	1	1.60	0.09	0.90	134.6	46.32
to Wilborn Road (#8)	24	167	5	58	0	32	35.0	29.4	0	1	1.18	0.05	0.65	85.4	29.19

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Gumtree Road (#11)	23	190	-1	57	0	32	47.0	31.5	0	1	0.61	0.03	0.38	57.6	19.73
to Wild Horse Road (#5)	54	244	8	65	0	32	38.4	33.0	0	1	1.59	0.08	0.88	131.8	45.21
to Squire Pope Road (#2)	49	293	15	80	0	32	30.9	32.7	0	1	0.89	0.04	0.57	97.1	33.29

Entered artery 11:29:38 am (1761 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	80	80	37	37	18	18	24.6	24.6	1	1	1.60	0.07	1.00	159.0	54.41
to Museum Street (#14)	50	131	4	41	0	18	41.2	31.0	0	1	1.73	0.08	1.06	148.1	50.84
to Wilborn Road (#8)	19	150	1	41	0	18	43.6	32.6	0	1	0.44	0.02	0.28	44.1	15.10
to Gumtree Road (#11)	24	173	0	41	0	18	45.8	34.4	0	1	0.64	0.03	0.42	62.0	21.19
to Wild Horse Road (#5)	44	218	-2	39	0	18	46.7	36.9	0	1	1.17	0.05	0.77	114.5	39.16
to Squire Pope Road (#2)	31	249	-3	36	0	18	48.8	38.4	0	1	0.96	0.04	0.63	90.0	30.75

Entered artery 11:39:41 am (2365 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	50	50	7	7	0	0	39.1	39.1	0	0	0.97	0.05	0.61	101.9	35.01
to Museum Street (#14)	52	103	6	13	0	0	39.8	39.4	0	0	1.46	0.08	0.86	128.3	44.14
to Wilborn Road (#8)	21	123	2	15	0	0	41.0	39.7	0	0	0.46	0.02	0.30	46.8	16.04
to Gumtree Road (#11)	86	209	62	77	53	53	12.6	28.5	1	1	1.34	0.07	0.64	102.2	35.16
to Wild Horse Road (#5)	56	265	9	86	0	53	37.2	30.4	0	1	1.95	0.09	1.04	149.8	51.32
to Squire Pope Road (#2)	38	303	4	90	0	53	40.1	31.6	0	1	1.57	0.07	0.89	121.3	41.47

Entered artery 11:53:03 am (3166 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	86	86	43	43	24	24	22.9	22.9	1	1	1.49	0.07	0.73	138.4	47.45
to Museum Street (#14)	44	129	-3	39	0	24	47.7	31.3	0	1	1.66	0.09	0.96	132.3	45.48
to Wilborn Road (#8)	21	150	2	41	0	24	41.1	32.6	0	1	0.51	0.03	0.28	44.5	15.37
to Gumtree Road (#11)	101	251	77	118	62	86	10.7	23.8	1	2	1.51	0.07	0.68	107.9	37.16
to Wild Horse Road (#5)	76	327	30	148	22	108	27.3	24.6	1	3	2.34	0.11	1.19	170.2	58.27
to Squire Pope Road (#2)	36	363	2	150	0	108	42.1	26.4	0	3	1.66	0.08	0.93	123.5	42.17

Entered artery 12:05:22 pm (3906 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	44	44	0	0	0	0	45.2	45.2	0	0	0.98	0.05	0.60	95.3	32.67
to Museum Street (#14)	51	95	4	5	0	0	40.6	42.7	0	0	1.09	0.06	0.73	114.5	39.41
to Wilborn Road (#8)	22	117	4	8	0	0	37.8	41.8	0	0	0.37	0.02	0.27	46.0	15.73
to Gumtree															

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Road (#11)	73	189	49	57	40	40	14.9	31.5	1	1	1.11	0.05	0.59	93.4	32.09
to Wild Horse Road (#5)	75	264	29	86	25	65	27.7	30.4	1	2	2.34	0.11	1.21	180.8	61.92
to Squire Pope Road (#2)	34	299	1	86	0	65	44.0	32.0	0	2	5.48	0.13	1.29	141.3	50.18

Entered artery 12:18:12 pm (4676 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	82	82	39	39	27	27	24.0	24.0	1	1	2.17	0.10	1.17	170.4	58.35
to Museum Street (#14)	54	137	8	47	0	27	37.8	29.5	0	1	1.93	0.10	1.11	155.0	53.31
to Wilborn Road (#8)	22	159	3	50	0	27	38.6	30.8	0	1	0.92	0.04	0.54	73.2	25.00
to Gumtree Road (#11)	25	184	1	51	0	27	42.9	32.4	0	1	0.81	0.04	0.51	72.5	24.78
to Wild Horse Road (#5)	49	233	3	54	0	27	42.5	34.5	0	1	9.77	0.16	1.29	142.5	53.00
to Squire Pope Road (#2)	37	270	4	58	0	27	40.5	35.4	0	1	0.81	0.04	0.48	77.8	26.68

Entered artery 12:32:29 pm (5533 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	58	58	14	14	0	0	34.3	34.3	0	0	1.32	0.06	0.72	118.5	40.70
to Museum Street (#14)	81	139	34	49	23	23	25.6	29.2	1	1	2.17	0.18	1.17	168.1	58.84
to Wilborn Road (#8)	21	160	2	51	0	23	40.0	30.6	0	1	0.73	0.03	0.44	62.1	21.21
to Gumtree Road (#11)	24	183	0	51	0	23	45.7	32.6	0	1	0.73	0.03	0.48	68.0	23.22
to Wild Horse Road (#5)	41	224	-5	46	0	23	50.7	35.9	0	1	1.41	0.07	0.86	120.7	41.28
to Squire Pope Road (#2)	32	256	-2	43	0	23	48.0	37.4	0	1	0.71	0.03	0.49	76.2	26.06

Entered artery 12:43:42 pm (6205 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	74	74	30	30	21	21	26.8	26.8	1	1	2.22	0.11	1.13	163.7	56.06
to Museum Street (#14)	68	141	21	51	12	33	30.5	28.6	1	2	2.04	0.11	1.14	167.0	57.45
to Wilborn Road (#8)	22	163	3	55	0	33	38.3	29.9	0	2	1.46	0.07	0.70	88.6	30.26
to Gumtree Road (#11)	24	187	0	54	0	33	45.8	31.9	0	2	0.73	0.03	0.46	66.0	22.59
to Wild Horse Road (#5)	65	252	18	73	0	33	32.1	31.9	0	2	1.66	0.08	0.91	142.4	48.84
to Squire Pope Road (#2)	47	298	13	86	0	33	32.4	32.0	0	2	0.91	0.04	0.55	93.7	32.18

Entered artery 12:57:39 pm (7043 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	76	76	33	33	18	18	25.7	25.7	1	1	1.80	0.08	1.00	160.8	55.02
to Museum Street (#14)	76	153	30	63	21	39	27.1	26.4	1	2	2.04	0.11	1.12	172.8	59.46
to Wilborn Road (#8)	24	177	5	68	0	39	35.2	27.6	0	2	0.78	0.03	0.50	70.2	23.98
to Gumtree Road (#11)	25	202	2	70	0	39	42.6	29.5	0	2	0.82	0.04	0.51	72.7	24.84
to Wild Horse	48	250	2	72	0	39	42.9	32.1	0	2	1.10	0.05	0.66	106.3	36.40

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Road (#5)															
to Squire Pope Road (#2)	40	290	6	78	0	39	37.9	32.9	0	2	0.75	0.04	0.48	81.5	27.95

Entered artery 1:10:47 pm (7831 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	133	133	90	90	76	76	14.8	14.8	2	2	1.73	0.09	0.90	152.6	52.54
to Museum Street (#14)	77	210	31	121	21	97	26.8	19.2	1	3	2.28	0.12	1.23	174.6	60.04
to Wilborn Road (#8)	22	232	3	123	0	97	38.9	21.1	0	3	1.26	0.06	0.66	84.9	28.98
to Gumtree Road (#11)	23	255	-1	123	0	97	46.8	23.4	0	3	0.83	0.04	0.49	68.8	23.53
to Wild Horse Road (#5)	41	297	-5	118	0	97	50.2	27.1	0	3	1.35	0.06	0.84	119.6	40.89
to Squire Pope Road (#2)	33	329	-1	117	0	97	46.3	29.0	0	3	0.59	0.03	0.40	66.6	22.84

[-] After-type Trip Log "Trip #5", Midday-period, started Thursday 10/4/2018 11:07:08 AM ↑Contents

Entered artery 11:09:38 am (150 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	48	48	5	5	0	0	41.1	41.1	0	0	1.55	0.08	0.97	136.7	46.93
to Museum Street (#14)	55	103	8	13	0	0	37.9	39.4	0	0	1.61	0.08	0.94	137.9	47.57
to Wilborn Road (#8)	18	121	-1	12	0	0	47.5	40.6	0	0	9.00	0.13	0.96	84.6	32.86
to Gumtree Road (#11)	23	144	-1	11	0	0	46.6	41.6	0	0	0.37	0.02	0.26	45.0	15.42
to Wild Horse Road (#5)	65	209	19	30	10	10	32.0	38.6	1	1	1.64	0.08	0.96	148.8	51.03
to Squire Pope Road (#2)	38	247	4	34	0	10	39.9	38.8	0	1	1.24	0.06	0.77	109.2	37.33

Entered artery 11:23:53 am (1006 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	51	51	8	8	0	0	38.6	38.6	0	0	1.19	0.05	0.76	118.6	40.55
to Museum Street (#14)	48	98	1	9	0	0	43.6	41.0	0	0	1.31	0.07	0.85	124.2	42.71
to Wilborn Road (#8)	20	118	1	10	0	0	42.7	41.3	0	0	0.46	0.02	0.32	48.5	16.59
to Gumtree Road (#11)	23	141	-1	9	0	0	47.0	42.2	0	0	1.12	0.05	0.56	75.0	25.66
to Wild Horse Road (#5)	45	186	-2	7	0	0	46.6	43.3	0	0	1.00	0.05	0.65	102.7	35.15
to Squire Pope Road (#2)	39	225	5	12	0	0	39.3	42.6	0	0	0.59	0.03	0.40	72.2	24.75

Entered artery 11:35:47 am (1719 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	46	46	3	3	0	0	42.6	42.6	0	0	1.90	0.09	1.08	147.4	50.36
to Museum Street (#14)	44	90	-3	0	0	0	47.8	45.1	0	0	1.25	0.07	0.79	115.3	39.64
to Wilborn Road (#8)	19	109	0	0	0	0	44.2	45.0	0	0	0.52	0.02	0.35	51.5	17.61

[-] After-type Trip Log "Trip #6", Midday-period, started Thursday 10/4/2018 11:41:21 AM ↑Contents

Entered artery 11:47:42 am (382 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	45	45	1	1	0	0	44.0	44.0	0	0	1.12	0.05	0.63	99.6	34.07
to Museum Street (#14)	51	96	5	6	0	0	40.6	42.2	0	0	0.87	0.05	0.55	96.4	33.25
to Wilborn Road (#8)	21	117	3	9	0	0	39.7	41.7	0	0	0.61	0.03	0.35	52.9	18.12
to Gumtree Road (#11)	26	143	2	10	0	0	42.1	41.8	0	0	0.94	0.04	0.56	77.9	26.64
to Wild Horse Road (#5)	58	201	11	22	0	0	36.0	40.1	0	0	1.45	0.07	0.86	132.8	45.57
to Squire Pope Road (#2)	35	235	1	23	0	0	43.7	40.7	0	0	1.59	0.07	0.86	115.0	39.31

Entered artery 11:59:06 am (1065 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	73	73	30	30	14	14	26.9	26.9	1	1	2.00	0.09	1.04	157.2	53.86
to Museum Street (#14)	51	124	4	34	0	14	41.0	32.7	0	1	1.64	0.09	1.04	146.1	50.15
to Wilborn Road (#8)	18	142	-1	33	0	14	46.3	34.4	0	1	0.72	0.03	0.43	58.7	20.06
to Gumtree Road (#11)	22	164	-2	31	0	14	49.7	36.4	0	1	0.66	0.03	0.43	61.0	20.87
to Wild Horse Road (#5)	74	238	28	59	23	38	27.9	33.8	1	2	1.53	0.07	0.89	139.3	47.76
to Squire Pope Road (#2)	38	276	4	64	0	38	40.0	34.6	0	2	1.31	0.06	0.76	107.9	36.88

Entered artery 12:09:31 pm (1690 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	66	66	23	23	7	7	29.9	29.9	1	1	1.91	0.09	1.05	157.9	54.09
to Museum Street (#14)	47	112	0	23	0	7	44.6	36.0	0	1	1.35	0.07	0.84	122.8	42.23
to Wilborn Road (#8)	19	132	0	23	0	7	44.3	37.2	0	1	0.60	0.03	0.36	52.2	17.85
to Gumtree Road (#11)	30	162	6	29	0	7	35.7	36.9	0	1	10.79	0.16	1.10	99.9	39.08
to Wild Horse Road (#5)	61	222	14	43	0	7	34.3	36.2	0	1	1.25	0.06	0.77	127.0	43.56
to Squire Pope Road (#2)	47	270	14	57	0	7	32.0	35.4	0	1	0.90	0.04	0.56	94.7	32.54

Entered artery 12:22:00 pm (2440 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	46	46	3	3	0	0	43.1	43.1	0	0	1.03	0.05	0.69	107.0	36.60
to Museum Street (#14)	48	94	1	4	0	0	43.2	43.1	0	0	1.22	0.06	0.79	118.0	40.60
to Wilborn Road (#8)	40	134	21	25	17	17	21.3	36.6	1	1	0.50	0.03	0.28	58.7	20.32
to Gumtree Road (#11)	27	161	4	28	0	17	39.4	37.1	0	1	1.96	0.09	0.95	118.7	40.52
to Wild Horse Road (#5)	44	205	-2	26	0	17	46.9	39.2	0	1	1.08	0.05	0.74	111.9	38.25
to Squire Pope Road (#2)	33	238	-1	26	0	17	46.1	40.2	0	1	0.65	0.03	0.41	68.1	23.34

Entered artery 12:36:08 pm (3287 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	103	103	60	60	49	49	19.2	19.2	1	1	1.66	0.08	0.95	149.0	51.09
to Museum Street (#14)	67	170	20	80	14	62	30.9	23.8	1	2	1.99	0.11	1.10	164.3	56.49
to Wilborn Road (#8)	23	193	4	84	0	62	36.9	25.4	0	2	1.37	0.06	0.70	89.4	30.54
to Gumtree Road (#11)	25	218	2	86	0	62	42.4	27.4	0	2	0.52	0.02	0.35	56.8	19.44
to Wild Horse Road (#5)	74	292	27	113	12	75	28.2	27.6	1	3	1.86	0.09	0.99	158.1	54.26
to Squire Pope Road (#2)	38	330	4	117	0	75	40.2	29.0	0	3	1.26	0.06	0.79	110.9	37.90

Entered artery 12:49:38 pm (4098 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	59	59	15	15	0	0	33.5	33.5	0	0	1.47	0.07	0.84	131.7	45.11
to Museum Street (#14)	50	108	3	18	0	0	42.0	37.4	0	0	1.58	0.08	0.98	139.9	48.04
to Wilborn Road (#8)	19	127	0	18	0	0	45.4	38.6	0	0	0.44	0.02	0.30	45.9	15.70
to Gumtree Road (#11)	23	150	-1	17	0	0	46.9	39.9	0	0	0.68	0.03	0.43	62.3	21.32
to Wild Horse Road (#5)	53	203	7	24	0	0	39.2	39.7	0	0	1.61	0.08	0.90	133.0	45.69
to Squire Pope Road (#2)	38	241	4	28	0	0	40.3	39.8	0	0	1.27	0.06	0.70	101.5	34.72

Entered artery 1:01:32 pm (4811 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	48	48	4	4	0	0	41.6	41.6	0	0	1.57	0.07	0.95	135.6	46.35
to Museum Street (#14)	45	93	-2	3	0	0	46.3	43.9	0	0	1.10	0.06	0.71	107.4	36.96
to Wilborn Road (#8)	31	124	12	15	0	0	27.1	39.6	0	0	0.71	0.03	0.37	61.7	21.15
to Gumtree Road (#11)	26	150	2	17	0	0	41.6	40.0	0	0	0.85	0.04	0.55	77.4	26.43
to Wild Horse Road (#5)	56	206	10	27	0	0	37.0	39.2	0	0	1.53	0.07	0.84	130.1	44.56
to Squire Pope Road (#2)	36	242	2	29	0	0	42.3	39.6	0	0	1.44	0.07	0.82	112.7	38.53

Entered artery 1:13:15 pm (5515 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	46	46	3	3	0	0	42.9	42.9	0	0	2.02	0.10	1.06	144.6	49.48
to Museum Street (#14)	62	108	15	18	0	0	33.7	37.6	0	0	1.61	0.09	0.87	135.8	46.76
to Wilborn Road (#8)	22	130	3	21	0	0	38.3	37.7	0	0	0.73	0.03	0.46	65.1	22.25
to Gumtree Road (#11)	34	163	10	31	0	0	32.0	36.5	0	0	5.03	0.09	0.73	86.1	31.59
to Wild Horse Road (#5)	70	233	23	54	7	7	29.8	34.5	1	1	1.79	0.09	0.95	150.8	51.74
to Squire Pope Road (#2)	39	272	6	60	0	7	38.6	35.1	0	1	1.34	0.06	0.78	110.9	37.92

[-] After-type Trip Log "Trip #7", Midday-period, started Thursday 10/4/2018 1:33:50 PM ↑Contents

Entered artery 1:34:55 pm (65 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	178	178	134	134	118	118	11.2	11.2	2	2	2.31	0.12	1.18	218.8	75.21
to Museum Street (#14)	49	226	2	136	0	118	42.6	18.0	0	2	1.87	0.09	1.12	153.2	52.55
to Wilborn Road (#8)	18	244	-1	136	0	118	46.7	20.1	0	2	0.43	0.02	0.29	44.6	15.26
to Gumtree Road (#11)	29	274	6	141	0	118	36.7	21.9	0	2	0.66	0.03	0.36	59.0	20.31
to Wild Horse Road (#5)	44	318	-2	139	0	118	46.9	25.4	0	2	1.70	0.08	0.99	137.3	46.90
to Squire Pope Road (#2)	58	376	24	163	13	131	26.1	25.5	1	3	0.86	0.04	0.48	93.3	32.01

Entered artery 1:51:11 pm (1042 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	66	66	23	23	11	11	29.7	29.7	1	1	2.07	0.09	1.16	170.2	58.21
to Museum Street (#14)	53	119	6	29	0	11	39.1	33.9	0	1	1.49	0.08	0.92	135.0	46.42
to Wilborn Road (#8)	22	141	3	33	0	11	38.5	34.6	0	1	0.59	0.03	0.36	54.0	18.51
to Gumtree Road (#11)	25	166	1	34	0	11	43.6	35.9	0	1	0.84	0.04	0.50	70.9	24.25
to Wild Horse Road (#5)	63	229	16	50	9	20	33.1	35.2	1	2	1.67	0.08	0.89	139.7	47.91
to Squire Pope Road (#2)	40	269	6	57	0	20	37.7	35.5	0	2	1.17	0.05	0.68	101.1	34.59

Cumulative Reports

[-] Before-type Trip Log "Trip #211:00:18 AM", Midday-period, started Wednesday 3/28/2018 11:00:17 AM ↑Contents

Entered artery 11:01:13 am (57 seconds) traveling Westbound from Beach City Road (#20)

Node	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)	257	44	16	37.2	2
to Squire Pope Road (#2)	293	80	32	32.7	1
to Squire Pope Road (#2)	249	36	18	38.4	1
to Squire Pope Road (#2)	303	90	53	31.6	1
to Squire Pope Road (#2)	363	150	108	26.4	3
to Squire Pope Road (#2)	299	86	65	32.0	2
to Squire Pope Road (#2)	270	58	27	35.4	1
to Squire Pope Road (#2)	256	43	23	37.4	1
to Squire Pope Road (#2)	298	86	33	32.0	2
to Squire Pope Road (#2)	290	78	39	32.9	2
to Squire Pope Road (#2)	329	117	97	29.0	3

[-] After-type Trip Log "Trip #5", Midday-period, started Thursday 10/4/2018 11:07:08 AM ↑Contents

Entered artery 11:09:38 am (150 seconds) traveling Westbound from Beach City Road (#20)

Node	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)	247	34	10	38.8	1
to Squire Pope Road (#2)	225	12	0	42.6	0
to Wilborn Road (#8)	109	0	0	45.0	0

[-] After-type Trip Log "Trip #6", Midday-period, started Thursday 10/4/2018 11:41:21 AM ↑Contents

**Entered artery 11:47:42 am (382 seconds)
traveling Westbound from Beach City Road (#20)**

Node	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)	235	23	0	40.7	0
to Squire Pope Road (#2)	276	64	38	34.6	2
to Squire Pope Road (#2)	270	57	7	35.4	1
to Squire Pope Road (#2)	238	26	17	40.2	1
to Squire Pope Road (#2)	330	117	75	29.0	3
to Squire Pope Road (#2)	241	28	0	39.8	0
to Squire Pope Road (#2)	242	29	0	39.6	0
to Squire Pope Road (#2)	272	60	7	35.1	1

[-] After-type Trip Log "Trip #7", Midday-period, started Thursday 10/4/2018 1:33:50 PM ↑Contents

**Entered artery 1:34:55 pm (65 seconds) traveling
Westbound from Beach City Road (#20)**

Node	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)	376	163	131	25.5	3
to Squire Pope Road (#2)	269	57	20	35.5	2

Stantec Consulting Services Inc 4969 Centre Pointe Drive, Suite 200

Thursday 10/18/2018 2:47:02 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Summarized Travel Time from previous Node (seconds)

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

Delay:
Summarized Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Summarized Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Summarized Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Summarized Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Summarized Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Summarized Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Summarized Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Summarized Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Summary of runs Westbound from Beach City Road (#20)
11 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 11:01:13 AM to 1:10:47 PM
13 After-type runs, 2 of unverifiable origin, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 11:09:38 AM to 1:51:11 PM

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)															
Average Before (n=11)	76	76	33	33	20	20	28.3	28.3	0.8	0.8	1.69	0.08	0.91	143.6	49.26
Minimum Before (n=11)	44	44	0	0	0	0	14.8	14.8	0.0	0.0	0.97	0.05	0.60	95.3	32.67
85th Percentile Before (n=11)	87	87	44	44	32	32	39.1	39.1	1.0	1.0	2.18	0.11	1.13	163.7	56.06
Maximum Before (n=11)	133	133	90	90	76	76	45.2	45.2	2.0	2.0	2.22	0.11	1.17	170.4	58.35
Std Dev Before (n=11)	*24*	*24*	*24*	*24*	*22*	*22*	*8.5*	*8.5*	*0.6*	*0.6*	*0.46*	*0.02*	*0.21*	*26.5*	*9.04*
Average After (n=13)	67	67	24	24	15	15	34.2	34.2	0.5	0.5	1.68	0.08	0.95	144.2	49.38
Minimum After (n=13)	45	45	1	1	0	0	11.2	11.2	0.0	0.0	1.03	0.05	0.63	99.6	34.07
85th Percentile After (n=13)	73	73	30	30	14	14	42.9	42.9	1.0	1.0	2.02	0.09	1.08	157.9	54.09
Maximum After (n=13)	178	178	134	134	118	118	44.0	44.0	2.0	2.0	2.31	0.12	1.18	218.8	75.21
Std Dev After (n=13)	*37*	*37*	*37*	*37*	*34*	*34*	*10.4*	*10.4*	*0.7*	*0.7*	*0.40*	*0.02*	*0.17*	*30.2*	*10.41*
Difference	-9	-9	-9	-9	-5	-5	5.9	5.9	-0.4	-0.4	-0.01	0.00	0.04	0.5	0.12
Difference Minimum	1	1	1	1	0	0	-3.6	-3.6	0.0	0.0	0.05	0.00	0.03	4.3	1.40
Difference 85th Percentile	-14	-14	-14	-14	-18	-18	3.8	3.8	0.0	0.0	-0.15	-0.01	-0.05	-5.7	-1.97
Difference	44	44	44	44	42	42	-1.3	-1.3	0.0	0.0	0.09	0.01	0.01	48.3	16.86

Maximum															
Std Dev Difference	44	44	44	44	40	40	13.4	13.4	0.9	0.9	0.61	0.03	0.27	40.1	13.79
% Difference	-11%	-11%	-27%	-27%	-25%	-25%	20.9%	20.9%	-43.6%	-43.6%	-0.66%	-1.96%	4.13%	0.4%	0.24%
to Museum Street (#14)															
Average Before (n=11)	61	137	14	47	8	28	35.4	30.7	0.5	1.3	1.83	0.10	1.04	150.8	51.95
Minimum Before (n=11)	44	95	-3	5	0	0	25.6	19.2	0.0	0.0	1.09	0.06	0.73	114.5	39.41
85th Percentile Before (n=11)	77	153	31	63	21	39	41.2	39.4	1.0	2.0	2.17	0.12	1.17	172.8	59.46
Maximum Before (n=11)	81	210	34	121	23	97	47.7	42.7	1.0	3.0	2.28	0.18	1.23	174.6	60.04
Std Dev Before (n=11)	13	30	13	30	10	26	7.1	6.2	0.5	0.9	0.36	0.03	0.16	20.6	7.16
Average After (n=13)	51	119	5	29	1	16	41.0	36.5	0.1	0.5	1.45	0.08	0.88	130.5	44.88
Minimum After (n=13)	44	90	-3	0	0	0	30.9	18.0	0.0	0.0	0.87	0.05	0.55	96.4	33.25
85th Percentile After (n=13)	55	124	8	34	0	14	44.6	43.1	0.0	1.0	1.64	0.09	1.04	146.1	50.15
Maximum After (n=13)	67	226	20	136	14	118	47.8	45.1	1.0	2.0	1.99	0.11	1.12	164.3	56.49
Std Dev After (n=13)	7	39	7	39	4	35	4.7	8.0	0.3	0.8	0.31	0.02	0.16	18.9	6.45
Difference	-9	-18	-9	-18	-7	-12	5.7	5.7	-0.4	-0.7	-0.38	-0.02	-0.15	-20.3	-7.08
Difference Minimum	0	-5	0	-5	0	0	5.4	-1.3	0.0	0.0	-0.22	-0.01	-0.18	-18.1	-6.16
Difference 85th Percentile	-22	-29	-22	-29	-21	-24	3.4	3.7	-1.0	-1.0	-0.53	-0.03	-0.14	-26.7	-9.31
Difference Maximum	-14	16	-14	16	-9	21	0.1	2.4	0.0	-1.0	-0.29	-0.07	-0.11	-10.4	-3.55
Std Dev Difference	14	49	14	49	10	44	8.5	10.1	0.6	1.2	0.47	0.03	0.22	27.9	9.64
% Difference	-16%	-13%	-67%	-39%	-86%	-42%	16.0%	18.6%	-83.1%	-57.7%	-20.81%	-24.21%	-14.91%	-13.5%	-13.62%
to Wilborn Road (#8)															
Average Before (n=11)	22	158	3	50	0	28	38.9	31.8	0.0	1.3	0.86	0.04	0.48	66.9	22.87
Minimum Before (n=11)	19	117	1	8	0	0	35.0	21.1	0.0	0.0	0.37	0.02	0.27	44.1	15.10
85th Percentile Before (n=11)	24	177	5	68	0	39	41.1	39.7	0.0	2.0	1.33	0.06	0.70	88.6	30.26
Maximum Before (n=11)	24	232	5	123	0	97	43.6	41.8	0.0	3.0	1.46	0.07	0.71	89.9	30.70
Std Dev Before (n=11)	1	30	1	30	0	26	2.5	5.6	0.0	0.9	0.40	0.02	0.18	19.0	6.45
Average After (n=13)	22	141	4	32	1	18	39.9	36.4	0.1	0.6	1.28	0.04	0.43	59.1	20.52
Minimum After (n=13)	18	109	-1	0	0	0	21.3	20.1	0.0	0.0	0.43	0.02	0.28	44.6	15.26
85th Percentile After (n=13)	23	142	4	33	0	17	46.3	41.3	0.0	1.0	0.73	0.03	0.46	65.1	22.25
Maximum After (n=13)	40	244	21	136	17	118	47.5	45.0	1.0	2.0	9.00	0.13	0.96	89.4	32.86
Std Dev After (n=13)	6	37	6	37	5	35	7.9	6.8	0.3	0.8	2.33	0.03	0.19	13.8	5.38
Difference	1	-18	1	-18	1	-10	1.0	4.6	0.1	-0.7	0.43	0.00	-0.06	-7.8	-2.35
Difference Minimum	-2	-8	-2	-8	0	0	-13.8	-1.0	0.0	0.0	0.06	0.00	0.01	0.6	0.16
Difference 85th Percentile	-1	-35	-1	-35	0	-22	5.2	1.6	0.0	-1.0	-0.61	-0.03	-0.23	-23.4	-8.02
Difference Maximum	16	12	16	12	17	21	3.9	3.2	1.0	-1.0	7.54	0.07	0.25	-0.5	2.15
Std Dev Difference	6	48	6	48	5	43	8.3	8.8	0.3	1.2	2.36	0.04	0.26	23.5	8.40
%	2%	-11%	17%	-35%	N/D	-37%	2.5%	14.5%	N/D	-51.6%	49.58%	-3.80%	-12.13%	-11.7%	-10.26%

Difference															
to Gumtree Road (#11)															
Average Before (n=11)	41	199	17	67	14	42	36.3	30.4	0.3	1.5	0.88	0.04	0.51	75.5	25.87
Minimum Before (n=11)	23	170	-1	37	0	16	10.7	23.4	0.0	1.0	0.59	0.03	0.38	57.6	19.73
85th Percentile Before (n=11)	86	251	62	118	53	86	46.8	34.4	1.0	2.0	1.34	0.07	0.64	102.2	35.16
Maximum Before (n=11)	101	255	77	123	62	97	47.0	35.1	1.0	3.0	1.51	0.07	0.68	107.9	37.16
Std Dev Before (n=11)	*30*	*29*	*30*	*29*	*25*	*27*	*15.2*	*3.9*	*0.5*	*0.7*	*0.31*	*0.02*	*0.10*	*17.5*	*6.07*
Average After (n=12)	26	170	2	37	0	19	42.0	36.5	0.0	0.7	2.03	0.05	0.56	74.2	25.96
Minimum After (n=12)	22	141	-2	9	0	0	32.0	21.9	0.0	0.0	0.37	0.02	0.26	45.0	15.42
85th Percentile After (n=12)	29	166	6	34	0	17	46.9	41.6	0.0	1.0	1.96	0.09	0.73	86.1	31.59
Maximum After (n=12)	34	274	10	141	0	118	49.7	42.2	0.0	2.0	10.79	0.16	1.10	118.7	40.52
Std Dev After (n=12)	*4*	*39*	*4*	*39*	*0*	*36*	*5.3*	*6.1*	*0.0*	*0.8*	*3.03*	*0.04*	*0.25*	*20.3*	*7.70*
Difference	-15	-30	-15	-30	-14	-23	5.6	6.0	-0.3	-0.9	1.15	0.01	0.06	-1.3	0.09
Difference Minimum	-1	-28	-1	-28	0	-16	21.3	-1.5	0.0	-1.0	-0.22	-0.01	-0.12	-12.6	-4.31
Difference 85th Percentile	-57	-85	-57	-85	-53	-69	0.1	7.2	-1.0	-1.0	0.62	0.02	0.09	-16.1	-3.58
Difference Maximum	-67	18	-67	18	-62	21	2.7	7.1	-1.0	-1.0	9.28	0.09	0.42	10.8	3.36
Std Dev Difference	*30*	*48*	*30*	*48*	*25*	*45*	*16.1*	*7.2*	*0.5*	*1.0*	*3.05*	*0.04*	*0.27*	*26.8*	*9.81*
% Difference	-36%	-15%	-87%	-45%	-100%	-55%	15.5%	19.9%	-100.0%	-56.9%	130.22%	30.40%	11.69%	-1.7%	0.35%
to Wild Horse Road (#5)															
Average Before (n=11)	54	254	8	75	4	46	39.9	32.2	0.2	1.7	2.35	0.08	0.94	135.3	46.73
Minimum Before (n=11)	41	218	-5	39	0	16	27.3	24.6	0.0	1.0	1.10	0.05	0.66	106.3	36.40
85th Percentile Before (n=11)	75	297	29	118	22	97	50.2	36.9	1.0	3.0	2.34	0.11	1.21	170.2	58.27
Maximum Before (n=11)	76	327	30	148	25	108	50.7	36.9	1.0	3.0	9.77	0.16	1.29	180.8	61.92
Std Dev Before (n=11)	*12*	*34*	*12*	*34*	*10*	*31*	*8.2*	*3.9*	*0.4*	*0.8*	*2.50*	*0.03*	*0.21*	*24.5*	*8.60*
Average After (n=12)	59	229	13	50	5	24	36.5	36.0	0.4	1.1	1.51	0.07	0.87	134.3	46.03
Minimum After (n=12)	44	186	-2	7	0	0	27.9	25.4	0.0	0.0	1.00	0.05	0.65	102.7	35.15
85th Percentile After (n=12)	70	238	23	59	10	38	46.6	39.7	1.0	2.0	1.70	0.08	0.96	148.8	51.03
Maximum After (n=12)	74	318	28	139	23	118	46.9	43.3	1.0	3.0	1.86	0.09	0.99	158.1	54.26
Std Dev After (n=12)	*11*	*39*	*11*	*39*	*7*	*36*	*7.1*	*5.2*	*0.5*	*1.0*	*0.27*	*0.01*	*0.10*	*15.6*	*5.39*
Difference	5	-25	5	-25	1	-22	-3.4	3.9	0.2	-0.6	-0.84	-0.01	-0.07	-1.0	-0.69
Difference Minimum	3	-32	3	-32	0	-16	0.6	0.7	0.0	-1.0	-0.10	0.00	-0.01	-3.6	-1.25
Difference 85th Percentile	-5	-58	-5	-58	-12	-59	-3.6	2.8	0.0	-1.0	-0.64	-0.03	-0.25	-21.4	-7.24
Difference Maximum	-2	-9	-2	-9	-1	10	-3.8	6.4	0.0	0.0	-7.91	-0.07	-0.30	-22.6	-7.66
Std Dev Difference	*17*	*52*	*17*	*52*	*12*	*48*	*10.8*	*6.5*	*0.7*	*1.3*	*2.51*	*0.04*	*0.24*	*29.0*	*10.15*
% Difference	8%	-10%	57%	-34%	21%	-48%	-8.5%	12.1%	129.2%	-37.3%	-35.87%	-14.05%	-7.64%	-0.8%	-1.49%
to Squire Pope Road (#2)															
Average Before	38	292	4	79	0	46	40.9	33.2	0.0	1.7	1.39	0.05	0.67	97.1	33.40

(n=11)															
Minimum Before (n=11)	31	249	-3	36	0	16	30.9	26.4	0.0	1.0	0.59	0.03	0.40	66.6	22.84
85th Percentile Before (n=11)	47	329	13	117	0	97	48.0	37.4	0.0	3.0	1.66	0.08	0.93	123.5	42.17
Maximum Before (n=11)	49	363	15	150	0	108	48.8	38.4	0.0	3.0	5.48	0.13	1.29	141.3	50.18
Std Dev Before (n=11)	6	34	6	34	0	31	5.8	3.7	0.0	0.8	1.40	0.03	0.26	23.0	8.20
Average After (n=12)	40	268	6	56	1	25	38.8	36.4	0.1	1.2	1.14	0.05	0.67	99.8	34.15
Minimum After (n=12)	33	225	-1	12	0	0	26.1	25.5	0.0	0.0	0.59	0.03	0.40	68.1	23.34
85th Percentile After (n=12)	40	276	6	64	0	38	42.3	40.2	0.0	2.0	1.34	0.06	0.79	110.9	37.92
Maximum After (n=12)	58	376	24	163	13	131	46.1	42.6	1.0	3.0	1.59	0.07	0.86	115.0	39.31
Std Dev After (n=12)	7	44	7	44	4	40	5.3	5.0	0.3	1.1	0.31	0.01	0.16	15.5	5.26
Difference	2	-23	2	-23	1	-21	-2.1	3.2	0.1	-0.6	-0.26	0.00	0.00	2.7	0.75
Difference Minimum	2	-24	2	-24	0	-16	-4.8	-0.9	0.0	-1.0	0.00	0.00	0.01	1.5	0.50
Difference 85th Percentile	-7	-53	-7	-53	0	-59	-5.8	2.8	0.0	-1.0	-0.32	-0.01	-0.14	-12.6	-4.26
Difference Maximum	9	13	9	13	13	23	-2.7	4.2	1.0	0.0	-3.88	-0.05	-0.43	-26.3	-10.88
Std Dev Difference	9	56	9	56	4	50	7.9	6.2	0.3	1.4	1.43	0.03	0.31	27.7	9.75
% Difference	5%	-8%	50%	-29%	N/D	-45%	-5.0%	9.7%	N/D	-32.5%	-18.46%	-1.68%	-0.48%	2.8%	2.24%

Travel Time & Delay Report for William Hilton Parkway

Legend:

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

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Cumulative Summary of runs Eastbound from Squire Pope Road (#2)

8 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 4:13:08 PM to 6:20:56 PM

10 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 3:39:05 PM to 6:19:21 PM

	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)					
Average Before (n=8)	375	163	130	25.9	2.8
Minimum Before (n=8)	309	97	78	19.9	2.0
85th Percentile Before (n=8)	390	177	148	28.1	3.0
Maximum Before (n=8)	481	269	229	30.9	4.0
Std Dev Before (n=8)	*51*	*51*	*47*	*3.2*	*0.7*
Average After (n=10)	312	99	55	31.0	2.7
Minimum After (n=10)	255	43	7	27.2	1.0
85th Percentile After (n=10)	348	136	91	34.9	4.0
Maximum After (n=10)	351	139	106	37.5	4.0
Std Dev After (n=10)	*34*	*34*	*31*	*3.5*	*0.9*
Difference	-63	-63	-75	5.1	-0.1
Difference Minimum	-54	-54	-71	7.4	-1.0
Difference 85th Percentile	-42	-42	-58	6.8	1.0
Difference Maximum	-130	-130	-123	6.5	0.0
Std Dev Difference	*61*	*61*	*56*	*4.8*	*1.2*
% Difference	-17%	-39%	-58%	19.9%	-1.8%

Cumulative Summary of runs Westbound from Beach City Road (#20)

9 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 4:00:23 PM to 6:27:13 PM
11 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 3:45:00 PM to 6:28:39 PM

	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)					
Average Before (n=9)	512	299	197	23.3	4.7
Minimum Before (n=9)	234	22	0	12.9	0.0
85th Percentile Before (n=9)	738	526	354	40.3	9.0
Maximum Before (n=9)	742	529	362	40.8	9.0
Std Dev Before (n=9)	*217*	*217*	*157*	*12.4*	*3.8*
Average After (n=11)	448	235	156	24.6	3.7
Minimum After (n=11)	216	3	0	13.9	0.0
85th Percentile After (n=11)	636	423	250	42.1	6.0
Maximum After (n=11)	685	473	433	44.4	7.0
Std Dev After (n=11)	*160*	*160*	*127*	*10.6*	*2.5*
Difference	-64	-64	-41	1.4	-0.9
Difference Minimum	-19	-19	0	1.0	0.0
Difference 85th Percentile	-102	-102	-104	1.8	-3.0
Difference Maximum	-56	-56	71	3.6	-2.0
Std Dev Difference	*270*	*270*	*202*	*16.3*	*4.5*
% Difference	-12%	-21%	-21%	6.0%	-20.1%

Cumulative Summary of all runs, either direction through artery

17 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 4:09:37 PM to 6:30:42 PM
21 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 3:42:39 PM to 6:31:53 PM

	CTT	CD	CStopD	CAS	CStops
to End of Artery					
Average Before (n=17)	447	235	166	24.5	3.8
Minimum Before (n=17)	234	22	0	12.9	0.0
85th Percentile Before (n=17)	738	526	354	40.3	9.0
Maximum Before (n=17)	742	529	362	40.8	9.0
Std Dev Before (n=17)	*172*	*172*	*120*	*9.1*	*2.9*
Average After (n=21)	383	171	108	27.7	3.2

Minimum After (n=21)	216	3	0	13.9	0.0
85th Percentile After (n=21)	636	423	250	42.1	6.0
Maximum After (n=21)	685	473	433	44.4	7.0
Std Dev After (n=21)	*135*	*135*	*106*	*8.5*	*1.9*
Difference	-64	-64	-58	3.2	-0.5
Difference Minimum	-19	-19	0	1.0	0.0
Difference 85th Percentile	-102	-102	-104	1.8	-3.0
Difference Maximum	-56	-56	71	3.6	-2.0
Std Dev Difference	*218*	*218*	*160*	*12.5*	*3.5*
% Difference	-14%	-27%	-35%	13.0%	-14.0%

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Travel Time from previous Node (seconds)

CTT:
Cumulative Travel Time since beginning of Run (seconds)

Delay:
Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Contents:

[-] Collapse All

[-] Before-type Trip Log "Trip #33:59:09 PM", PM-period, started Wednesday 3/28/2018 3:59:09 PM ↑Contents

Entered artery 4:13:08 pm (839 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	84	84	50	50	41	41	18.1	18.1	1	1	1.17	0.06	0.64	107.6	36.97
to Gumtree Road (#11)	132	216	86	136	75	115	15.8	16.7	1	2	2.05	0.10	1.11	171.8	59.15
to Wilborn Road (#8)	25	240	1	137	0	115	43.1	19.4	0	2	1.11	0.05	0.61	82.4	28.15
to Museum Street (#14)	83	324	65	201	57	173	10.2	17.0	1	3	0.93	0.05	0.48	80.2	27.70
to Whooping Crane Way (#17)	113	437	67	268	56	229	18.7	17.5	1	4	1.88	0.09	1.08	183.8	54.85
to Beach City Road (#20)	44	481	1	269	0	229	44.1	19.9	0	4	2.20	0.10	1.15	151.9	51.91

Entered artery 4:38:02 pm (2334 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	32	32	-2	-2	0	0	48.0	48.0	0	0	1.25	0.06	0.76	103.0	35.20
to Gumtree Road (#11)	82	113	36	33	30	30	25.6	31.8	1	1	1.96	0.10	1.03	158.1	54.58

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wilborn Road (#8)	86	199	62	95	52	82	12.5	23.5	1	2	1.28	0.06	0.69	109.4	37.54
to Museum Street (#14)	35	234	16	112	0	82	24.0	23.6	0	2	0.83	0.04	0.46	74.0	25.41
to Whooping Crane Way (#17)	96	330	49	161	32	114	22.1	23.1	1	3	2.46	0.12	1.27	193.5	66.34
to Beach City Road (#20)	46	376	2	164	0	114	42.1	25.4	0	3	1.63	0.07	0.96	134.4	45.97

Entered artery 4:58:19 pm (3550 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	79	79	45	45	35	35	19.3	19.3	1	1	1.01	0.05	0.57	100.2	34.39
to Gumtree Road (#11)	136	215	90	135	80	114	15.3	16.8	1	2	2.11	0.11	1.11	173.3	59.59
to Wilborn Road (#8)	26	241	3	138	0	114	40.4	19.3	0	2	1.50	0.07	0.74	96.4	32.94
to Museum Street (#14)	18	259	-1	136	0	114	48.1	21.3	0	2	0.67	0.03	0.40	55.1	18.83
to Whooping Crane Way (#17)	45	304	-1	135	0	114	47.1	25.1	0	2	1.01	0.05	0.63	100.3	34.35
to Beach City Road (#20)	83	387	40	175	33	147	23.2	24.7	1	3	2.01	0.09	0.93	142.7	49.33

Entered artery 5:20:06 pm (4857 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	36	36	2	2	0	0	42.4	42.4	0	0	1.17	0.05	0.70	100.3	34.32
to Gumtree Road (#11)	88	124	42	44	34	34	23.9	29.2	1	1	1.71	0.09	1.01	154.7	53.29
to Wilborn Road (#8)	26	150	2	46	0	34	40.9	31.3	0	1	0.81	0.04	0.51	73.3	25.05
to Museum Street (#14)	70	219	51	97	40	73	12.3	25.2	1	2	0.71	0.03	0.38	80.9	27.72
to Whooping Crane Way (#17)	106	325	60	156	48	121	20.1	23.6	1	3	1.95	0.09	1.12	173.4	59.39
to Beach City Road (#20)	45	371	2	158	0	121	42.4	25.9	0	3	1.84	0.08	1.08	147.5	50.37

Entered artery 5:38:38 pm (5969 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	49	49	15	15	0	0	30.9	30.9	0	0	0.52	0.03	0.29	67.4	23.25
to Gumtree Road (#11)	126	175	79	95	70	70	16.6	20.6	1	1	392.72	2.60	7.36	66.2	221.58
to Wilborn Road (#8)	25	200	1	96	0	70	42.3	23.3	0	1	1.34	0.06	0.74	96.1	32.80
to Museum Street (#14)	18	218	-1	95	0	70	46.7	25.3	0	1	0.37	0.02	0.27	42.1	14.40
to Whooping Crane Way (#17)	50	268	3	98	0	70	42.9	28.5	0	1	0.92	0.04	0.63	104.2	35.70
to Beach City Road (#20)	73	341	30	129	23	93	26.3	28.1	1	2	1.38	0.07	0.82	129.0	44.27

Entered artery 5:55:03 pm (6955 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	84	84	50	50	38	38	18.1	18.1	1	1	0.97	0.05	0.53	98.1	33.67
to Gumtree Road (#11)	125	209	79	129	70	108	16.7	17.3	1	2	2.35	0.12	1.23	179.6	61.78
to Wilborn Road (#8)	25	233	1	129	0	108	43.5	20.0	0	2	1.37	0.06	0.72	92.8	31.68
to Museum Street (#14)	18	251	-1	129	0	108	47.1	22.0	0	2	0.53	0.03	0.33	47.5	16.28
to Whooping Crane Way (#17)	49	300	2	131	0	108	43.2	25.4	0	2	1.08	0.05	0.68	108.0	37.04
to Beach City Road (#20)	46	346	2	133	0	108	42.1	27.6	0	2	1.70	0.08	0.92	129.3	44.31

Entered artery 6:08:58 pm (7790 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	89	89	56	56	48	48	17.0	17.0	1	1	1.03	0.05	0.52	95.6	32.84
to Gumtree Road (#11)	125	215	79	135	73	121	16.6	16.8	1	2	2.35	0.12	1.18	176.3	60.69
to Wilborn Road (#8)	25	240	1	136	0	121	42.8	19.5	0	2	2.11	0.09	0.90	111.2	38.18
to Museum Street (#14)	18	258	-1	135	0	121	46.7	21.4	0	2	0.28	0.01	0.21	36.6	12.50
to Whooping Crane Way (#17)	54	312	7	142	0	121	39.2	24.5	0	2	1.10	0.05	0.72	115.8	39.70
to Beach City Road (#20)	78	390	35	177	27	148	24.7	24.5	1	3	1.78	0.09	1.03	165.6	56.86

Entered artery 6:20:56 pm (8508 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	52	52	18	18	9	9	29.4	29.4	1	1	1.04	0.05	0.57	98.2	33.66
to Gumtree Road (#11)	123	175	77	95	70	78	17.0	20.6	1	2	2.31	0.12	1.16	168.7	58.01
to Wilborn Road (#8)	25	200	1	96	0	78	42.2	23.4	0	2	1.41	0.06	0.78	99.9	34.11
to Museum Street (#14)	17	217	-1	95	0	78	48.8	25.4	0	2	0.48	0.02	0.32	47.1	16.11
to Whooping Crane Way (#17)	46	264	0	95	0	78	46.0	29.0	0	2	1.24	0.06	0.73	111.2	38.15
to Beach City Road (#20)	46	309	2	97	0	78	42.1	30.9	0	2	1.18	0.06	0.63	99.3	34.02

[-] After-type Trip Log "Trip #8", PM-period, started Thursday 10/4/2018 3:38:00 PM ↑Contents

Entered artery 3:39:05 pm (66 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	52	52	18	18	6	6	29.2	29.2	1	1	1.05	0.06	0.56	97.2	33.55
to Gumtree Road (#11)	68	120	22	40	11	17	30.5	30.0	1	2	2.14	0.11	1.20	175.1	60.15
to Wilborn Road (#8)	26	146	2	42	0	17	41.4	32.0	0	2	1.37	0.06	0.72	94.0	32.13
to Museum Street (#14)	19	165	0	42	0	17	44.8	33.4	0	2	0.51	0.02	0.33	49.4	16.90
to Whooping Crane Way (#17)	49	214	2	44	0	17	43.7	35.8	0	2	0.95	0.04	0.63	103.1	35.28
to Beach															

City Road (#20)	72	285	28	73	19	37	26.9	33.6	1	3	1.69	0.08	0.95	143.8	49.25

Entered artery 3:53:02 pm (903 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	43	43	9	9	0	0	35.6	35.6	0	0	1.08	0.05	0.70	104.9	35.93
to Gumtree Road (#11)	63	106	17	26	8	8	33.2	34.2	1	1	1.96	0.10	1.11	161.3	55.48
to Wilborn Road (#8)	26	132	2	28	0	8	41.2	35.6	0	1	0.80	0.04	0.49	71.1	24.31
to Museum Street (#14)	61	193	42	70	35	43	13.8	28.7	1	2	0.73	0.04	0.39	69.1	23.85
to Whooping Crane Way (#17)	80	272	33	103	20	62	26.7	28.1	1	3	2.26	0.11	1.22	180.7	61.89
to Beach City Road (#20)	76	348	33	136	28	91	25.4	27.5	1	4	2.07	0.10	1.14	159.9	54.87

Entered artery 4:07:14 pm (1754 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	77	77	43	43	30	30	19.8	19.8	1	1	0.92	0.04	0.44	92.0	31.57
to Gumtree Road (#11)	72	148	25	68	12	42	29.2	24.3	1	2	1.89	0.10	1.05	162.0	55.72
to Wilborn Road (#8)	29	177	5	73	0	42	36.9	26.4	0	2	0.88	0.04	0.58	82.7	28.24
to Museum Street (#14)	21	198	2	75	0	42	40.9	27.9	0	2	0.40	0.02	0.28	45.5	15.56
to Whooping Crane Way (#17)	54	252	7	83	0	42	39.5	30.4	0	2	1.65	0.08	0.97	142.1	48.67
to Beach City Road (#20)	63	315	20	103	0	42	30.5	30.4	0	2	1.77	0.09	1.00	151.6	52.06

Entered artery 4:23:50 pm (2750 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	41	41	7	7	0	0	36.9	36.9	0	0	0.71	0.03	0.50	84.1	28.77
to Gumtree Road (#11)	54	95	8	15	0	0	38.5	37.8	0	0	2.24	0.11	0.96	139.1	48.01
to Wilborn Road (#8)	69	164	45	60	33	33	15.5	28.5	1	1	0.66	0.03	0.34	72.1	24.76
to Museum Street (#14)	31	195	12	73	0	33	27.2	28.3	0	1	0.45	0.02	0.28	52.6	18.00
to Whooping Crane Way (#17)	74	269	27	100	10	44	28.9	28.4	1	2	1.72	0.08	1.03	163.2	55.83
to Beach City Road (#20)	68	337	25	125	11	55	28.4	28.4	1	3	2.06	0.09	1.13	167.8	57.47

Entered artery 4:43:18 pm (3919 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	33	33	0	0	0	0	45.5	45.5	0	0	0.75	0.04	0.51	79.2	27.10
to Gumtree Road (#11)	139	172	93	92	78	78	15.0	20.9	2	2	4.55	0.15	1.37	196.6	69.05
to Wilborn Road (#8)	27	199	3	95	0	78	39.6	23.4	0	2	13.64	0.19	1.31	125.6	48.67
to Museum	16	216	-2	93	0	78	51.4	25.6	0	2	0.57	0.03	0.28	41.9	14.40

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
Street (#14)															
to Whooping Crane Way (#17)	60	276	14	107	7	85	35.2	27.7	1	3	1.45	0.07	0.85	134.3	46.02
to Beach City Road (#20)	75	351	32	139	21	106	25.7	27.2	1	4	1.71	0.08	0.93	151.4	51.90

Entered artery 5:00:26 pm (4946 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	34	34	0	0	0	0	44.6	44.6	0	0	0.97	0.04	0.63	91.8	31.37
to Gumtree Road (#11)	56	89	9	9	0	0	37.6	40.3	0	0	1.85	0.11	0.98	142.0	49.01
to Wilborn Road (#8)	31	121	7	17	0	0	34.2	38.7	0	0	2.29	0.05	0.61	79.3	27.97
to Museum Street (#14)	74	195	56	72	49	49	11.4	28.3	1	1	0.69	0.04	0.38	66.4	22.98
to Whooping Crane Way (#17)	73	268	27	99	14	64	29.0	28.5	1	2	2.40	0.11	1.19	171.5	58.72
to Beach City Road (#20)	75	343	31	130	24	87	25.8	27.9	1	3	11.73	0.21	1.59	177.2	65.35

Entered artery 5:18:29 pm (6029 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	81	81	48	48	38	38	18.6	18.6	1	1	2.07	0.10	1.00	144.1	49.47
to Gumtree Road (#11)	69	151	23	71	18	56	30.2	23.9	1	2	9.22	0.21	1.76	194.4	70.10
to Wilborn Road (#8)	25	176	2	72	0	56	41.7	26.5	0	2	1.37	0.06	0.74	96.0	32.78
to Museum Street (#14)	19	195	0	72	0	56	44.8	28.3	0	2	0.43	0.02	0.29	45.3	15.50

Entered artery 5:37:02 pm (7143 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	37	37	3	3	0	0	40.8	40.8	0	0	1.33	0.06	0.78	109.2	37.33
to Gumtree Road (#11)	65	102	18	22	7	7	32.3	35.4	1	1	1.71	0.09	1.01	153.7	52.88
to Wilborn Road (#8)	26	128	3	24	0	7	40.4	36.4	0	1	0.82	0.04	0.52	74.1	25.33
to Museum Street (#14)	19	147	0	25	0	7	44.5	37.4	0	1	0.70	0.03	0.41	57.5	19.67
to Whooping Crane Way (#17)	51	198	4	29	0	7	41.9	38.6	0	1	1.45	0.07	0.86	128.0	43.86
to Beach City Road (#20)	57	255	14	43	0	7	33.7	37.5	0	1	1.87	0.09	0.95	140.9	48.29

Entered artery 5:55:35 pm (8256 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	73	73	39	39	24	24	20.8	20.8	1	1	1.15	0.05	0.61	107.6	36.89
to Gumtree Road (#11)	81	154	34	74	22	46	25.9	23.5	1	2	1.89	0.10	1.10	165.1	56.84
to Wilborn Road (#8)	29	182	5	78	0	46	37.3	25.6	0	2	1.05	0.05	0.61	85.1	29.09
to Museum Street (#14)	19	201	0	78	0	46	44.7	27.4	0	2	0.45	0.02	0.28	44.1	15.14
to Whooping Crane Way (#17)	47	248	1	79	0	46	44.8	30.7	0	2	1.42	0.07	0.87	126.0	43.19

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Beach City Road (#20)	69	317	26	105	0	46	28.1	30.2	0	2	1.38	0.07	0.82	137.6	47.22

Entered artery 6:08:45 pm (9046 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	51	51	17	17	4	4	29.8	29.8	1	1	1.02	0.05	0.53	93.4	31.98
to Gumtree Road (#11)	66	117	19	37	9	13	31.8	30.9	1	2	2.23	0.12	1.20	172.7	59.38
to Wilborn Road (#8)	25	142	1	38	0	13	42.1	32.9	0	2	1.19	0.06	0.61	82.4	28.16
to Museum Street (#14)	19	161	1	39	0	13	43.4	34.2	0	2	0.62	0.03	0.41	57.5	19.64
to Whooping Crane Way (#17)	51	212	4	43	0	13	42.1	36.1	0	2	1.00	0.05	0.64	105.1	36.02
to Beach City Road (#20)	63	275	19	62	12	25	31.0	34.9	1	3	1.72	0.08	0.89	138.8	47.58

Entered artery 6:19:21 pm (9682 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	74	74	40	40	30	30	20.4	20.4	1	1	1.44	0.07	0.65	106.4	36.55
to Gumtree Road (#11)	80	155	34	75	23	54	25.9	23.3	1	2	1.83	0.12	1.16	170.5	58.18
to Wilborn Road (#8)	28	183	4	79	0	54	38.2	25.6	0	2	0.86	0.04	0.53	76.3	26.11
to Museum Street (#14)	19	202	1	79	0	54	43.4	27.3	0	2	0.56	0.03	0.32	48.0	16.45
to Whooping Crane Way (#17)	47	249	1	80	0	54	44.9	30.6	0	2	1.42	0.07	0.90	130.5	44.67
to Beach City Road (#20)	44	293	0	80	0	54	44.5	32.7	0	2	0.93	0.04	0.59	94.6	32.39

Cumulative Reports

[-] Before-type Trip Log "Trip #33:59:09 PM", PM-period, started Wednesday 3/28/2018 3:59:09 PM ↑Contents

Entered artery 4:13:08 pm (839 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	481	269	229	19.9	4
to Beach City Road (#20)	376	164	114	25.4	3
to Beach City Road (#20)	387	175	147	24.7	3
to Beach City Road (#20)	371	158	121	25.9	3
to Beach City Road (#20)	341	129	93	28.1	2
to Beach City Road (#20)	346	133	108	27.6	2
to Beach City Road (#20)	390	177	148	24.5	3
to Beach City Road (#20)	309	97	78	30.9	2

[-] After-type Trip Log "Trip #8", PM-period, started Thursday 10/4/2018 3:38:00 PM ↑Contents

Entered artery 3:39:05 pm (66 seconds) traveling Eastbound from Squire Pope Road (#2)

Node	CTT	CD	CStopD	CAS	CStops
to Beach City Road (#20)	285	73	37	33.6	3
to Beach City Road (#20)	348	136	91	27.5	4
to Beach City Road (#20)	315	103	42	30.4	2
to Beach City Road (#20)	337	125	55	28.4	3
to Beach City Road (#20)	351	139	106	27.2	4
to Beach City Road (#20)	343	130	87	27.9	3
to Museum Street (#14)	195	72	56	28.3	2
to Beach City Road (#20)	255	43	7	37.5	1

to Beach City Road (#20)	317	105	46	30.2	2
to Beach City Road (#20)	275	62	25	34.9	3
to Beach City Road (#20)	293	80	54	32.7	2

Thursday 10/18/2018 2:50:11 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Summarized Travel Time from previous Node (seconds)

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

Delay:
Summarized Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Summarized Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Summarized Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Summarized Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Summarized Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Summarized Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Summarized Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Summarized Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Summary of runs Eastbound from Squire Pope Road (#2)
8 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 4:13:08 PM to 6:20:56 PM
11 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 3:39:05 PM to 6:19:21 PM

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)															
Average Before (n=8)	63	63	29	29	21	21	27.9	27.9	0.6	0.6	1.02	0.05	0.57	96.3	33.04
Minimum Before (n=8)	32	32	-2	-2	0	0	17.0	17.0	0.0	0.0	0.52	0.03	0.29	67.4	23.25
85th Percentile Before (n=8)	84	84	50	50	41	41	42.4	42.4	1.0	1.0	1.17	0.06	0.70	103.0	35.20
Maximum Before (n=8)	89	89	56	56	48	48	48.0	48.0	1.0	1.0	1.25	0.06	0.76	107.6	36.97
Std Dev Before (n=8)	*23*	*23*	*23*	*23*	*21*	*21*	*12.0*	*12.0*	*0.5*	*0.5*	*0.23*	*0.01*	*0.14*	*12.2*	*4.14*
Average After (n=11)	54	54	21	21	12	12	31.1	31.1	0.5	0.5	1.14	0.05	0.63	100.9	34.59
Minimum After (n=11)	33	33	0	0	0	0	18.6	18.6	0.0	0.0	0.71	0.03	0.44	79.2	27.10
85th Percentile After (n=11)	77	77	43	43	30	30	44.6	44.6	1.0	1.0	1.44	0.07	0.78	109.2	37.33
Maximum After (n=11)	81	81	48	48	38	38	45.5	45.5	1.0	1.0	2.07	0.10	1.00	144.1	49.47
Std Dev After (n=11)	*19*	*19*	*19*	*19*	*15*	*15*	*10.2*	*10.2*	*0.5*	*0.5*	*0.38*	*0.02*	*0.16*	*17.4*	*5.98*
Difference	-9	-9	-9	-9	-9	-9	3.2	3.2	-0.1	-0.1	0.12	0.01	0.06	4.6	1.56
Difference Minimum	2	2	2	2	0	0	1.7	1.7	0.0	0.0	0.19	0.00	0.15	11.8	3.85
Difference 85th Percentile	-7	-7	-7	-7	-10	-10	2.3	2.3	0.0	0.0	0.27	0.02	0.08	6.1	2.14
Difference Maximum	-8	-8	-8	-8	-9	-9	-2.4	-2.4	0.0	0.0	0.82	0.04	0.24	36.5	12.50
Std Dev Difference	*30*	*30*	*30*	*30*	*26*	*26*	*15.8*	*15.8*	*0.7*	*0.7*	*0.44*	*0.02*	*0.21*	*21.2*	*7.27*
%	-14%	-14%	-30%	-30%	-43%	-43%	11.5%	11.5%	-12.7%	-12.7%	11.51%	12.21%	9.79%	4.8%	4.71%

Difference															
to Gumtree Road (#11)															
Average Before (n=8)	117	180	71	100	63	84	18.4	21.2	1.0	1.6	50.95	0.42	1.90	156.1	78.58
Minimum Before (n=8)	82	113	36	33	30	30	15.3	16.7	1.0	1.0	1.71	0.09	1.01	66.2	53.29
85th Percentile Before (n=8)	132	215	86	135	75	115	23.9	29.2	1.0	2.0	2.35	0.12	1.23	176.3	61.78
Maximum Before (n=8)	136	216	90	136	80	121	25.6	31.8	1.0	2.0	392.72	2.60	7.36	179.6	221.58
Std Dev Before (n=8)	*20*	*42*	*20*	*42*	*19*	*37*	*3.9*	*6.0*	*0.0*	*0.5*	*138.10*	*0.88*	*2.21*	*37.3*	*57.85*
Average After (n=11)	74	128	28	48	17	29	30.0	29.5	0.9	1.5	2.86	0.12	1.17	166.6	57.71
Minimum After (n=11)	54	89	8	9	0	0	15.0	20.9	0.0	0.0	1.71	0.09	0.96	139.1	48.01
85th Percentile After (n=11)	81	155	34	75	23	56	37.6	37.8	1.0	2.0	4.55	0.15	1.37	194.4	69.05
Maximum After (n=11)	139	172	93	92	78	78	38.5	40.3	2.0	2.0	9.22	0.21	1.76	196.6	70.10
Std Dev After (n=11)	*23*	*29*	*23*	*29*	*22*	*27*	*6.4*	*6.7*	*0.5*	*0.8*	*2.25*	*0.04*	*0.23*	*18.4*	*7.03*
Difference	-43	-52	-43	-52	-46	-55	11.6	8.3	-0.1	-0.2	-48.08	-0.30	-0.73	10.5	-20.88
Difference Minimum	-28	-24	-28	-24	-30	-30	-0.3	4.2	-1.0	-1.0	-0.01	-0.01	-0.05	72.9	-5.28
Difference 85th Percentile	-51	-60	-51	-60	-52	-60	13.7	8.5	0.0	0.0	2.20	0.03	0.14	18.1	7.27
Difference Maximum	3	-43	3	-43	-2	-43	12.9	8.5	1.0	0.0	-383.50	-2.39	-5.60	17.0	-151.49
Std Dev Difference	*31*	*51*	*31*	*51*	*29*	*46*	*7.5*	*9.0*	*0.5*	*1.0*	*138.11*	*0.88*	*2.22*	*41.6*	*58.28*
% Difference	-37%	-29%	-61%	-52%	-73%	-65%	62.8%	38.9%	-9.1%	-10.5%	-94.38%	-71.77%	-38.31%	6.7%	-26.56%
to Wilborn Road (#8)															
Average Before (n=8)	33	213	9	109	6	90	38.5	22.5	0.1	1.8	1.37	0.06	0.71	95.2	32.56
Minimum Before (n=8)	25	150	1	46	0	34	12.5	19.3	0.0	1.0	0.81	0.04	0.51	73.3	25.05
85th Percentile Before (n=8)	26	240	3	137	0	115	43.1	23.5	0.0	2.0	1.50	0.07	0.78	109.4	37.54
Maximum Before (n=8)	86	241	62	138	52	121	43.5	31.3	1.0	2.0	2.11	0.09	0.90	111.2	38.18
Std Dev Before (n=8)	*21*	*32*	*21*	*32*	*18*	*30*	*10.6*	*4.0*	*0.4*	*0.5*	*0.37*	*0.01*	*0.11*	*12.7*	*4.40*
Average After (n=11)	31	159	7	55	3	32	37.1	30.1	0.1	1.5	2.27	0.06	0.64	85.3	29.78
Minimum After (n=11)	25	121	1	17	0	0	15.5	23.4	0.0	0.0	0.66	0.03	0.34	71.1	24.31
85th Percentile After (n=11)	31	183	7	79	0	56	41.7	36.4	0.0	2.0	2.29	0.06	0.74	96.0	32.78
Maximum After (n=11)	69	199	45	95	33	78	42.1	38.7	1.0	2.0	13.64	0.19	1.31	125.6	48.67
Std Dev After (n=11)	*13*	*26*	*13*	*26*	*10*	*25*	*7.6*	*5.2*	*0.3*	*0.7*	*3.80*	*0.04*	*0.25*	*15.7*	*6.85*
Difference	-2	-54	-2	-54	-3	-58	-1.3	7.7	0.0	-0.2	0.90	0.00	-0.07	-9.9	-2.78
Difference Minimum	1	-29	1	-29	0	-34	3.0	4.1	0.0	-1.0	-0.15	0.00	-0.17	-2.2	-0.74
Difference 85th Percentile	5	-58	5	-58	0	-60	-1.4	12.9	0.0	0.0	0.79	-0.01	-0.04	-13.5	-4.76
Difference Maximum	-17	-42	-17	-42	-18	-43	-1.4	7.5	0.0	0.0	11.53	0.10	0.41	14.4	10.49
Std Dev Difference	*25*	*42*	*25*	*42*	*21*	*39*	*13.0*	*6.6*	*0.5*	*0.8*	*3.82*	*0.05*	*0.27*	*20.2*	*8.14*
% Difference	-6%	-25%	-20%	-49%	-53%	-64%	-3.4%	34.2%	-27.3%	-11.7%	65.91%	-2.12%	-9.95%	-10.4%	-8.53%
to Museum Street (#14)															
Average Before (n=8)	35	248	16	125	12	102	35.5	22.6	0.3	2.0	0.60	0.03	0.36	57.9	19.87
Minimum Before (n=8)	17	217	-1	95	0	70	10.2	17.0	0.0	1.0	0.28	0.01	0.21	36.6	12.50
85th Percentile Before (n=8)	70	259	51	136	40	121	48.1	25.3	1.0	2.0	0.83	0.04	0.46	80.2	27.70
Maximum Before (n=8)	83	324	65	201	57	173	48.8	25.4	1.0	3.0	0.93	0.05	0.48	80.9	27.72
Std Dev															

Before (n=8)	27	36	27	36	23	35	17.1	2.9	0.5	0.5	0.22	0.01	0.09	17.8	6.16
Average After (n=11)	29	188	10	65	8	40	37.3	29.7	0.2	1.7	0.55	0.03	0.33	52.5	18.01
Minimum After (n=11)	16	147	-2	25	0	7	11.4	25.6	0.0	1.0	0.40	0.02	0.28	41.9	14.40
85th Percentile After (n=11)	61	202	42	79	35	56	44.8	34.2	1.0	2.0	0.70	0.04	0.41	66.4	22.98
Maximum After (n=11)	74	216	56	93	49	78	51.4	37.4	1.0	2.0	0.73	0.04	0.41	69.1	23.85
Std Dev After (n=11)	20	21	20	21	17	21	13.5	3.6	0.4	0.5	0.12	0.01	0.05	9.1	3.18
Difference	-6	-60	-6	-60	-4	-63	1.8	7.1	-0.1	-0.3	-0.05	0.00	-0.02	-5.4	-1.86
Difference Minimum	-1	-70	-1	-70	0	-63	1.3	8.5	0.0	0.0	0.11	0.01	0.06	5.4	1.89
Difference 85th Percentile	-8	-57	-8	-57	-5	-65	-3.3	8.9	0.0	0.0	-0.13	0.00	-0.05	-13.8	-4.72
Difference Maximum	-9	-108	-9	-108	-8	-95	2.6	12.0	0.0	-1.0	-0.20	-0.01	-0.07	-11.7	-3.87
Std Dev Difference	33	41	33	41	29	40	21.8	4.6	0.6	0.7	0.25	0.01	0.11	20.0	6.94
% Difference	-17%	-24%	-36%	-48%	-37%	-61%	5.2%	31.2%	-27.3%	-13.6%	-7.85%	-5.62%	-6.30%	-9.4%	-9.36%
to Whooping Crane Way (#17)															
Average Before (n=8)	70	318	23	148	17	119	34.9	24.6	0.4	2.4	1.46	0.07	0.86	136.3	45.69
Minimum Before (n=8)	45	264	-1	95	0	70	18.7	17.5	0.0	1.0	0.92	0.04	0.63	100.3	34.35
85th Percentile Before (n=8)	106	330	60	161	48	121	46.0	28.5	1.0	3.0	1.95	0.09	1.12	183.8	59.39
Maximum Before (n=8)	113	437	67	268	56	229	47.1	29.0	1.0	4.0	2.46	0.12	1.27	193.5	66.34
Std Dev Before (n=8)	30	54	30	54	24	48	12.4	3.6	0.5	0.9	0.57	0.03	0.26	39.8	12.50
Average After (n=10)	59	246	12	77	5	43	37.7	31.5	0.4	2.1	1.57	0.07	0.92	138.5	47.42
Minimum After (n=10)	47	198	1	29	0	7	26.7	27.7	0.0	1.0	0.95	0.04	0.63	103.1	35.28
85th Percentile After (n=10)	74	272	27	103	14	64	44.8	36.1	1.0	3.0	2.26	0.11	1.19	171.5	58.72
Maximum After (n=10)	80	276	33	107	20	85	44.9	38.6	1.0	3.0	2.40	0.11	1.22	180.7	61.89
Std Dev After (n=10)	12	28	12	28	7	25	7.1	3.9	0.5	0.6	0.47	0.02	0.20	26.3	8.99
Difference	-11	-72	-11	-72	-12	-76	2.8	6.9	0.0	-0.3	0.12	0.00	0.06	2.2	1.73
Difference Minimum	2	-66	2	-66	0	-63	8.0	10.2	0.0	0.0	0.02	0.00	0.00	2.7	0.93
Difference 85th Percentile	-32	-58	-32	-58	-33	-57	-1.1	7.5	0.0	0.0	0.31	0.02	0.06	-12.4	-0.67
Difference Maximum	-34	-161	-34	-161	-37	-144	-2.2	9.6	0.0	-1.0	-0.06	0.00	-0.05	-12.8	-4.45
Std Dev Difference	32	61	32	61	25	54	14.3	5.3	0.7	1.1	0.74	0.03	0.32	47.7	15.40
% Difference	-16%	-23%	-49%	-48%	-70%	-64%	8.0%	28.0%	6.7%	-11.6%	8.10%	6.99%	6.79%	1.6%	3.78%
to Beach City Road (#20)															
Average Before (n=8)	58	375	14	163	10	130	35.9	25.9	0.4	2.8	1.72	0.08	0.94	137.5	47.13
Minimum Before (n=8)	44	309	1	97	0	78	23.2	19.9	0.0	2.0	1.18	0.06	0.63	99.3	34.02
85th Percentile Before (n=8)	78	390	35	177	27	148	42.4	28.1	1.0	3.0	2.01	0.09	1.08	151.9	51.91
Maximum Before (n=8)	83	481	40	269	33	229	44.1	30.9	1.0	4.0	2.20	0.10	1.15	165.6	56.86
Std Dev Before (n=8)	17	51	17	51	15	47	9.3	3.2	0.5	0.7	0.33	0.01	0.16	19.8	6.78
Average After (n=10)	66	312	23	99	12	55	30.0	31.0	0.6	2.7	2.69	0.09	1.00	146.4	50.64
Minimum After (n=10)	44	255	0	43	0	7	25.4	27.2	0.0	1.0	0.93	0.04	0.59	94.6	32.39
85th Percentile After (n=10)	75	348	32	136	24	91	33.7	34.9	1.0	4.0	2.07	0.10	1.14	167.8	57.47
Maximum After (n=10)	76	351	33	139	28	106	44.5	37.5	1.0	4.0	11.73	0.21	1.59	177.2	65.35
Std Dev After (n=10)	10	34	10	34	11	31	5.8	3.5	0.5	0.9	3.19	0.04	0.26	22.4	8.47

Difference	8	-63	8	-63	1	-75	-5.9	5.1	0.2	-0.1	0.97	0.01	0.06	8.9	3.51
Difference Minimum	0	-54	0	-54	0	-71	2.1	7.4	0.0	-1.0	-0.25	-0.01	-0.04	-4.7	-1.62
Difference 85th Percentile	-3	-42	-3	-42	-4	-58	-8.7	6.8	0.0	1.0	0.06	0.01	0.06	15.9	5.55
Difference Maximum	-7	-130	-7	-130	-5	-123	0.5	6.5	0.0	0.0	9.53	0.10	0.45	11.6	8.50
Std Dev Difference	*20*	*61*	*20*	*61*	*18*	*56*	*10.9*	*4.8*	*0.7*	*1.2*	*3.21*	*0.05*	*0.31*	*29.8*	*10.85*
% Difference	15%	-17%	59%	-39%	11%	-58%	-16.4%	19.9%	60.0%	-1.8%	56.79%	16.61%	6.53%	6.5%	7.45%

Thursday 10/18/2018 2:50:11 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Travel Time from previous Node (seconds)

CTT:
Cumulative Travel Time since beginning of Run (seconds)

Delay:
Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Contents:

[-] Collapse All

[-] Before-type Trip Log "Trip #33:59:09 PM", PM-period, started Wednesday 3/28/2018 3:59:09 PM ↑Contents

Entered artery 4:00:23 pm (74 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	51	51	8	8	0	0	38.4	38.4	0	0	1.25	0.06	0.80	122.3	42.03
to Museum Street (#14)	356	407	310	317	310	310	5.8	10.0	2	2	1.83	0.09	0.94	303.7	104.39
to Wilborn Road (#8)	64	471	45	363	30	339	13.2	10.4	1	3	0.90	0.04	0.51	87.7	30.07
to Gumtree Road (#11)	32	503	8	371	0	339	33.8	11.9	0	3	0.94	0.04	0.58	85.0	29.06
to Wild Horse Road (#5)	50	554	4	375	0	339	41.1	14.5	0	3	1.06	0.05	0.66	107.4	36.77
to Squire Pope Road (#2)	69	623	36	411	0	339	21.8	15.4	0	3	1.33	0.06	0.78	133.8	45.87

Entered artery 4:24:07 pm (1499 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	200	200	157	157	107	107	9.8	9.8	2	2	1.61	0.08	0.84	210.5	72.26
to Museum Street	212	412	166	322	127	234	9.8	9.8	4	6	2.52	0.12	1.30	273.2	93.99

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
(#14)															
to Wilborn Road (#8)	28	441	9	332	0	234	29.9	11.1	0	6	0.70	0.03	0.44	67.0	22.90
to Gumtree Road (#11)	30	471	6	338	0	234	36.0	12.7	0	6	1.03	0.05	0.57	81.3	27.82
to Wild Horse Road (#5)	163	633	117	455	82	316	12.7	12.7	2	8	1.85	0.09	0.99	181.6	62.45
to Squire Pope Road (#2)	105	738	71	526	47	362	14.5	13.0	1	9	1.33	0.07	0.76	142.8	49.12

Entered artery 4:45:38 pm (2790 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	211	211	167	167	129	129	9.4	9.4	2	2	1.53	0.07	0.80	180.6	62.04
to Museum Street (#14)	118	328	71	238	31	160	17.6	12.3	1	3	1.39	0.07	0.81	163.2	56.25
to Wilborn Road (#8)	43	371	24	263	10	171	19.5	13.2	1	4	0.85	0.04	0.50	84.8	29.14
to Gumtree Road (#11)	28	399	4	266	0	171	38.9	14.9	0	4	1.09	0.05	0.65	88.2	30.15
to Wild Horse Road (#5)	156	555	110	376	60	230	13.3	14.5	3	7	4.62	0.11	1.08	194.7	68.77
to Squire Pope Road (#2)	158	713	124	500	70	300	9.6	13.4	2	9	1.68	0.08	0.93	183.8	63.00

Entered artery 5:05:45 pm (3997 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	209	209	165	165	111	111	9.5	9.5	3	3	1.51	0.07	0.88	226.3	77.51
to Museum Street (#14)	189	398	143	308	104	215	11.0	10.2	2	5	1.22	0.06	0.69	201.8	69.35
to Wilborn Road (#8)	33	431	14	322	0	215	25.5	11.4	0	5	1.06	0.05	0.60	87.2	29.87
to Gumtree Road (#11)	61	492	37	360	18	233	17.7	12.1	1	6	1.10	0.05	0.57	103.2	35.37
to Wild Horse Road (#5)	156	648	109	469	89	322	13.4	12.4	1	7	1.55	0.08	0.82	150.8	51.82
to Squire Pope Road (#2)	94	742	60	529	33	354	16.1	12.9	1	8	2.04	0.10	1.05	162.9	55.83

Entered artery 5:27:49 pm (5321 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	102	102	59	59	28	28	19.4	19.4	1	1	2.38	0.11	1.23	191.7	65.69
to Museum Street (#14)	183	285	137	195	119	147	11.3	14.2	3	4	1.76	0.09	0.97	224.7	77.41
to Wilborn Road (#8)	58	342	39	234	27	175	14.7	14.3	1	5	1.11	0.05	0.66	104.3	35.68
to Gumtree Road (#11)	26	369	2	236	0	175	41.2	16.2	0	5	0.86	0.04	0.52	73.7	25.22
to Wild Horse Road (#5)	62	431	16	252	0	175	33.3	18.7	0	5	0.53	0.03	0.30	78.3	26.89
to Squire Pope Road (#2)	121	552	87	340	45	220	12.5	17.3	2	7	1.28	0.06	0.75	157.4	53.96

Entered artery 5:45:43 pm (6394 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	66	66	22	22	0	0	29.9	29.9	0	0	2.18	0.10	1.13	165.7	56.79
to Museum Street (#14)	51	117	4	27	0	0	40.6	34.6	0	0	1.19	0.07	0.71	111.5	38.44
to Wilborn Road (#8)	21	138	2	29	0	0	40.1	35.4	0	0	1.08	0.05	0.60	78.4	26.81
to Gumtree Road (#11)	116	254	93	122	80	80	9.3	23.5	1	1	1.60	0.08	0.70	111.8	38.53
to Wild Horse Road (#5)	133	387	86	208	62	142	15.6	20.8	2	3	2.44	0.12	1.22	207.3	71.16
to Squire Pope Road (#2)	123	510	89	297	48	190	12.4	18.7	2	5	1.66	0.08	0.90	176.9	60.60

Entered artery 6:02:08 pm (7379 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	60	60	17	17	0	0	32.8	32.8	0	0	1.22	0.06	0.74	123.1	42.19
to Museum Street (#14)	47	107	0	17	0	0	44.3	37.8	0	0	1.93	0.10	1.08	147.4	50.58
to Wilborn Road (#8)	19	126	0	17	0	0	44.7	38.8	0	0	0.49	0.02	0.30	45.4	15.58
to Gumtree Road (#11)	23	149	-1	16	0	0	47.1	40.1	0	0	0.90	0.04	0.50	69.5	23.76
to Wild Horse Road (#5)	43	192	-3	13	0	0	48.2	41.9	0	0	1.10	0.05	0.72	108.0	36.93
to Squire Pope Road (#2)	45	237	12	25	0	0	33.4	40.3	0	0	1.16	0.06	0.59	95.2	32.77

Entered artery 6:16:12 pm (8223 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	45	45	2	2	0	0	43.2	43.2	0	0	1.44	0.06	0.92	131.3	44.86
to Museum Street (#14)	46	91	-1	2	0	0	45.2	44.2	0	0	1.24	0.07	0.84	122.6	42.12
to Wilborn Road (#8)	18	110	0	1	0	0	45.8	44.5	0	0	0.33	0.02	0.23	38.5	13.18
to Gumtree Road (#11)	45	154	21	22	0	0	24.2	38.6	0	0	0.79	0.04	0.42	77.0	26.42
to Wild Horse Road (#5)	48	203	2	24	0	0	42.9	39.6	0	0	1.84	0.08	1.03	143.2	49.02
to Squire Pope Road (#2)	31	234	-2	22	0	0	48.3	40.8	0	0	1.00	0.04	0.64	91.1	31.11

Entered artery 6:27:13 pm (8885 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	51	51	7	7	0	0	39.0	39.0	0	0	1.67	0.08	0.96	138.1	47.19
to Museum Street (#14)	46	96	-1	7	0	0	45.0	41.9	0	0	1.69	0.09	1.00	138.1	47.46
to Wilborn Road (#8)	17	113	-2	5	0	0	49.6	43.0	0	0	0.36	0.02	0.22	35.8	12.27
to Gumtree Road (#11)	46	159	22	26	11	11	23.7	37.5	1	1	1.14	0.06	0.54	89.5	30.72
to Wild Horse Road (#5)	50	209	3	30	0	11	41.8	38.5	0	1	1.57	0.07	0.88	129.2	44.20
to Squire Pope Road (#2)	46	255	13	42	0	11	32.7	37.5	0	1	0.83	0.04	0.49	86.0	29.59

[-] After-type Trip Log "Trip #8", PM-period, started Thursday 10/4/2018 3:38:00 PM ↑Contents

Entered artery 3:45:00 pm (421 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	120	120	77	77	54	54	16.4	16.4	1	1	1.32	0.06	0.74	139.1	47.76
to Museum Street (#14)	62	183	16	93	0	54	33.3	22.1	0	1	1.26	0.07	0.76	125.7	43.34
to Wilborn Road (#8)	46	229	28	120	10	64	18.3	21.4	1	2	1.11	0.05	0.63	99.6	34.05
to Gumtree Road (#11)	84	313	60	180	48	112	12.9	19.1	1	3	0.83	0.04	0.45	84.6	29.06
to Wild Horse Road (#5)	47	360	1	181	0	112	44.2	22.4	0	3	1.79	0.08	1.07	148.0	50.53
to Squire Pope Road (#2)	33	393	0	181	0	112	45.4	24.3	0	3	0.96	0.04	0.60	88.4	30.24

Entered artery 3:59:30 pm (1291 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	58	58	14	14	0	0	34.2	34.2	0	0	1.48	0.07	0.84	130.7	44.71
to Museum Street (#14)	84	142	38	52	21	21	24.7	28.5	2	2	1.78	0.10	1.01	167.1	57.53
to Wilborn Road (#8)	102	244	83	135	58	80	8.3	20.1	1	3	0.92	0.04	0.51	99.1	34.05
to Gumtree Road (#11)	27	271	3	138	0	80	40.2	22.1	0	3	44.54	0.40	1.90	110.6	59.47
to Wild Horse Road (#5)	46	317	0	138	0	80	44.8	25.4	0	3	1.00	0.05	0.67	105.7	36.22
to Squire Pope Road (#2)	34	351	0	139	0	80	44.5	27.2	0	3	1.05	0.05	0.63	91.1	31.19

Entered artery 4:13:24 pm (2125 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	113	113	70	70	46	46	17.4	17.4	2	2	1.78	0.08	1.00	178.8	61.35
to Museum Street (#14)	147	260	100	171	93	139	14.1	15.5	1	3	1.35	0.08	0.74	174.7	60.22
to Wilborn Road (#8)	54	315	35	206	18	157	15.6	15.5	1	4	1.09	0.05	0.64	104.3	35.67
to Gumtree Road (#11)	28	342	4	210	0	157	39.1	17.4	0	4	0.72	0.03	0.43	65.4	22.39
to Wild Horse Road (#5)	52	395	6	216	0	157	39.6	20.4	0	4	1.11	0.05	0.73	115.9	39.68
to Squire Pope Road (#2)	130	524	96	312	58	215	11.7	18.2	2	6	1.51	0.07	0.86	169.6	58.12

Entered artery 4:32:05 pm (3245 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	63	63	20	20	7	7	31.4	31.4	1	1	2.65	0.11	1.27	177.6	61.01
to Museum Street (#14)	49	112	3	22	0	7	42.2	36.1	0	1	1.21	0.06	0.77	117.2	40.34
to Wilborn Road (#8)	80	192	61	84	51	58	10.5	25.4	1	2	0.64	0.03	0.37	73.5	25.31
to Gumtree Road (#11)	37	230	13	97	0	58	29.0	26.0	0	2	1.16	0.05	0.62	92.6	31.70

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wild Horse Road (#5)	184	413	137	234	104	162	11.3	19.5	2	4	1.93	0.09	1.01	201.7	69.17
to Squire Pope Road (#2)	151	564	117	351	89	250	10.1	17.0	2	6	1.79	0.08	0.98	188.6	64.65

Entered artery 4:50:23 pm (4343 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	118	118	74	74	41	41	16.7	16.7	1	1	1.19	0.06	0.69	141.2	48.42
to Museum Street (#14)	74	192	28	102	0	41	27.9	21.0	0	1	1.61	0.08	0.97	155.6	53.54
to Wilborn Road (#8)	76	267	57	159	46	87	11.2	18.2	1	2	0.71	0.03	0.40	73.1	25.13
to Gumtree Road (#11)	31	299	7	166	0	87	34.5	19.9	0	2	0.92	0.04	0.57	83.0	28.38
to Wild Horse Road (#5)	61	359	14	180	0	87	34.3	22.4	0	2	1.14	0.05	0.70	119.7	41.07
to Squire Pope Road (#2)	123	482	89	270	34	121	12.3	19.8	1	3	1.33	0.06	0.73	154.6	52.99

Entered artery 5:07:00 pm (5341 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	175	175	131	131	92	92	11.3	11.3	2	2	4.30	0.10	1.00	194.3	67.86
to Museum Street (#14)	46	221	0	131	0	92	44.9	18.3	0	2	421906.57	1674.42	1.59	-312080.5	112407.11
to Wilborn Road (#8)	31	252	13	144	0	92	26.8	19.3	0	2	0.97	0.05	0.53	78.5	26.91
to Gumtree Road (#11)	86	338	62	206	51	144	12.6	17.6	1	3	0.88	0.06	0.46	80.7	28.39
to Wild Horse Road (#5)	69	407	22	228	0	144	30.2	19.7	0	3	1.68	0.08	0.91	146.7	50.26
to Squire Pope Road (#2)	132	539	99	327	56	200	11.5	17.7	3	6	2.03	0.10	1.10	200.7	68.90

Entered artery 5:24:45 pm (6405 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	143	143	100	100	44	44	13.8	13.8	1	1	1.25	0.06	0.70	162.2	55.66
to Museum Street (#14)	151	294	104	204	68	112	13.7	13.8	2	3	1.86	0.09	1.09	194.0	66.79
to Wilborn Road (#8)	41	335	22	227	5	118	20.5	14.6	1	4	0.91	0.04	0.50	83.1	28.46
to Gumtree Road (#11)	30	365	6	233	0	118	36.3	16.4	0	4	0.95	0.04	0.58	83.4	28.49
to Wild Horse Road (#5)	141	506	95	327	56	174	14.7	15.9	1	5	1.02	0.05	0.56	134.0	46.00
to Squire Pope Road (#2)	130	636	96	423	59	233	11.7	15.0	2	7	1.40	0.07	0.76	156.2	53.54

Entered artery 5:42:22 pm (7463 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	106	106	63	63	49	49	18.6	18.6	1	1	1.08	0.05	0.56	110.4	37.93
to Museum Street (#14)	56	162	9	72	0	49	37.1	25.0	0	1	5.69	0.13	1.21	148.3	53.18

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Wilborn Road (#8)	31	192	12	83	0	49	27.6	25.4	0	1	1.00	0.05	0.53	78.2	26.83
to Gumtree Road (#11)	94	286	70	154	65	114	11.5	20.8	1	2	2.41	0.06	0.60	89.1	31.65
to Wild Horse Road (#5)	231	518	185	339	180	294	9.0	15.5	2	4	7.95	0.18	1.66	272.8	96.84
to Squire Pope Road (#2)	168	685	134	473	139	433	9.0	13.9	1	5	1.73	0.08	0.98	212.5	72.78

Entered artery 6:01:45 pm (8626 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	93	93	50	50	49	49	21.3	21.3	1	1	63.44	0.47	1.87	107.4	68.85
to Museum Street (#14)	77	171	31	81	26	75	26.9	23.8	1	2	4.61	0.15	1.31	168.8	59.28
to Wilborn Road (#8)	21	192	2	83	0	75	39.9	25.6	0	2	1.51	0.07	0.76	94.6	32.31
to Gumtree Road (#11)	23	215	-1	82	0	75	46.8	27.9	0	2	0.50	0.02	0.35	54.3	18.59
to Wild Horse Road (#5)	43	257	-4	79	0	75	48.7	31.3	0	2	1.17	0.05	0.76	112.6	38.49
to Squire Pope Road (#2)	49	306	15	94	0	75	31.1	31.3	0	2	1.70	0.08	0.93	132.5	45.45

Entered artery 6:13:57 pm (9358 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	47	47	4	4	0	0	40.4	40.4	0	0	1.45	0.07	0.87	127.3	43.52
to Museum Street (#14)	49	96	2	7	0	0	43.4	41.9	0	0	1.37	0.07	0.87	128.2	44.05
to Wilborn Road (#8)	18	115	0	6	0	0	45.9	42.6	0	0	0.46	0.02	0.31	46.7	15.97
to Gumtree Road (#11)	23	138	-1	5	0	0	47.0	43.3	0	0	0.51	0.02	0.34	53.7	18.37
to Wild Horse Road (#5)	46	183	-1	5	0	0	45.6	43.9	0	0	1.51	0.07	0.86	124.1	42.51
to Squire Pope Road (#2)	32	216	-2	3	0	0	47.1	44.4	0	0	0.82	0.04	0.51	77.9	26.71

Entered artery 6:28:39 pm (10239 seconds) traveling Westbound from Beach City Road (#20)

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)	56	56	13	13	0	0	35.2	35.2	0	0	2.06	0.10	1.09	154.6	52.95
to Museum Street (#14)	52	108	5	18	0	0	40.3	37.6	0	0	100.42	0.78	2.78	128.4	93.93
to Wilborn Road (#8)	20	128	2	20	0	0	41.6	38.3	0	0	0.63	0.03	0.40	57.7	19.72
to Gumtree Road (#11)	24	152	0	20	0	0	44.8	39.3	0	0	0.67	0.03	0.44	64.3	21.98
to Wild Horse Road (#5)	42	195	-4	16	0	0	48.9	41.4	0	0	1.42	0.06	0.86	121.2	41.45
to Squire Pope Road (#2)	33	227	-1	15	0	0	46.5	42.1	0	0	0.69	0.03	0.48	75.8	25.93

Cumulative Reports

[-] Before-type Trip Log "Trip #33:59:09 PM", PM-period, started Wednesday 3/28/2018 3:59:09 PM ↑Contents

Entered artery 4:00:23 pm (74 seconds) traveling Westbound from Beach City Road (#20)

Node	CTT	CD	CStopD	CAS	CStops

to Squire Pope Road (#2)	623	411	339	15.4	3
to Squire Pope Road (#2)	738	526	362	13.0	9
to Squire Pope Road (#2)	713	500	300	13.4	9
to Squire Pope Road (#2)	742	529	354	12.9	8
to Squire Pope Road (#2)	552	340	220	17.3	7
to Squire Pope Road (#2)	510	297	190	18.7	5
to Squire Pope Road (#2)	237	25	0	40.3	0
to Squire Pope Road (#2)	234	22	0	40.8	0
to Squire Pope Road (#2)	255	42	11	37.5	1

[-] After-type Trip Log "Trip #8", PM-period, started Thursday 10/4/2018 3:38:00 PM ↑Contents

Entered artery 3:45:00 pm (421 seconds)
traveling Westbound from Beach City Road (#20)

Node	CTT	CD	CStopD	CAS	CStops
to Squire Pope Road (#2)	393	181	112	24.3	3
to Squire Pope Road (#2)	351	139	80	27.2	3
to Squire Pope Road (#2)	524	312	215	18.2	6
to Squire Pope Road (#2)	564	351	250	17.0	6
to Squire Pope Road (#2)	482	270	121	19.8	3
to Squire Pope Road (#2)	539	327	200	17.7	6
to Squire Pope Road (#2)	636	423	233	15.0	7
to Squire Pope Road (#2)	685	473	433	13.9	5
to Squire Pope Road (#2)	306	94	75	31.3	2
to Squire Pope Road (#2)	216	3	0	44.4	0
to Squire Pope Road (#2)	227	15	0	42.1	0

Thursday 10/18/2018 2:50:11 PM

Travel Time & Delay Report for William Hilton Parkway

Legend:

TT:
Summarized Travel Time from previous Node (seconds)

CTT:
Summarized Cumulative Travel Time since beginning of Run (seconds)

Delay:
Summarized Delay in Travel Time from previous Node based on user-specified design speed and distance (seconds) = TT - RT

CD:
Summarized Cumulative Delay since beginning of Run (seconds) = CTT - CRT

StopD:
Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

CStopD:
Summarized Cumulative Stopped Delay since beginning of Run (seconds). The "Stopped Delay" is counted from when the speed drops below 5 mph after exceeding 15 mph until it exceeds 15 mph once again

AS:
Summarized Actual Average Speed from previous Node (mph) = TL/TT

CAS:
Summarized Cumulative Actual Average Speed since beginning of Run (mph) = CTL/CTT

Stops:
Summarized Number of Stops in Travel from previous Node. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CStops:
Summarized Cumulative number of Stops in Run. A "Stop" is counted when the speed drops below 5 mph after exceeding 15 mph

CMEM_VC4_TCO:
Summarized Tailpipe-out, Hot-Stabilized CO emission (g/veh), Eqs. (14) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ECO*min(1,max(0,CMEM_VC4_COCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_THC:
Summarized Tailpipe-out, Hot-Stabilized HC emission (g/veh), Eqs. (15) and (23) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_EHC*min(1,max(0,CMEM_VC4_HCCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TNOx:
Summarized Tailpipe-out, Hot-Stabilized NOx emission (g/veh), Eqs. (21) and (24a-c) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. Revised 12/23/2011. (= CMEM_VC4_ENOx*min(1,max(0,CMEM_VC4_NOxCPF))*DT , summed point-to-point from the previous Node)

CMEM_VC4_TCO2:
Summarized Tailpipe-out, Hot-Stabilized CO2 emission (g/veh), from decompiled source code of COMPREHENSIVE MODAL EMISSIONS MODEL 3.01 Beta Java GUI, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight". (= CMEM_VC4_ECO2*DT , summed point-to-point from the previous Node)

CMEM_VC4_TFC:
Summarized Approximate Fuel Consumption (in g/veh), integrating Eqs. (12a-b) from NCHRP PROJECT 25 - 11: DEVELOPMENT OF A COMPREHENSIVE MODAL EMISSIONS MODEL FINAL REPORT, for a vehicle from Table 4.4 for Vehicle Technology Category #4: "3-way Catalyst, FI, >50K miles, low power/weight" and the CMEM Model 3.01 Beta Java GUI. (= CMEM_VC4_FR*DT , summed point-to-point from the previous Node)

Summary of runs Westbound from Beach City Road (#20)
9 Before-type runs, collected Wednesday 3/28/2018 to Wednesday 3/28/2018, over day(s) Wed, with starting times during 4:00:23 PM to 6:27:13 PM
11 After-type runs, collected Thursday 10/4/2018 to Thursday 10/4/2018, over day(s) Thu, with starting times during 3:45:00 PM to 6:28:39 PM

Node	TT	CTT	Delay	CD	StopD	CStopD	AS	CAS	Stops	CStops	CMEM_VC4_TCO	CMEM_VC4_THC	CMEM_VC4_TNOx	CMEM_VC4_TCO2	CMEM_VC4_TFC
to Whooping Crane Way (#17)															
Average Before (n=9)	111	111	67	67	42	42	25.7	25.7	0.9	0.9	1.64	0.08	0.92	165.5	56.73
Minimum Before (n=9)	45	45	2	2	0	0	9.4	9.4	0.0	0.0	1.22	0.06	0.74	122.3	42.03
85th Percentile Before (n=9)	209	209	165	165	111	111	39.0	39.0	2.0	2.0	2.18	0.10	1.13	210.5	72.26
Maximum Before (n=9)	211	211	167	167	129	129	43.2	43.2	3.0	3.0	2.38	0.11	1.23	226.3	77.51
Std Dev Before (n=9)	74	74	74	74	56	56	13.9	13.9	1.2	1.2	0.39	0.02	0.16	39.1	13.42
Average After (n=11)	99	99	56	56	35	35	23.3	23.3	0.9	0.9	7.45	0.11	0.97	147.6	53.64
Minimum After (n=11)	47	47	4	4	0	0	11.3	11.3	0.0	0.0	1.08	0.05	0.56	107.4	37.93
85th Percentile After (n=11)	143	143	100	100	54	54	35.2	35.2	2.0	2.0	4.30	0.11	1.27	178.8	67.86
Maximum After (n=11)	175	175	131	131	92	92	40.4	40.4	2.0	2.0	63.44	0.47	1.87	194.3	68.85
Std Dev After (n=11)	40	40	40	40	30	30	10.0	10.0	0.7	0.7	18.59	0.12	0.36	28.5	10.21
Difference	-11	-11	-11	-11	-7	-7	-2.4	-2.4	0.0	0.0	5.81	0.03	0.04	-17.9	-3.09
Difference Minimum	2	2	2	2	0	0	1.9	1.9	0.0	0.0	-0.14	0.00	-0.18	-14.8	-4.10
Difference 85th Percentile	-65	-65	-65	-65	-57	-57	-3.8	-3.8	0.0	0.0	2.12	0.01	0.14	-31.7	-4.39
Difference Maximum	-36	-36	-36	-36	-37	-37	-2.8	-2.8	-1.0	-1.0	61.07	0.36	0.64	-32.1	-8.66
Std Dev Difference	84	84	84	84	64	64	17.1	17.1	1.4	1.4	18.60	0.12	0.40	48.4	16.86
% Difference	-10%	-10%	-17%	-17%	-16%	-16%	-9.2%	-9.2%	2.3%	2.3%	353.65%	44.82%	4.68%	-10.8%	-5.45%

to Museum Street (#14)

Average Before (n=9)	139	249	92	159	77	118	25.6	23.9	1.3	2.2	1.64	0.08	0.93	187.4	64.44
Minimum Before (n=9)	46	91	-1	2	0	0	5.8	9.8	0.0	0.0	1.19	0.06	0.69	111.5	38.44
85th Percentile Before (n=9)	212	407	166	317	127	234	45.0	41.9	3.0	5.0	1.93	0.10	1.08	273.2	93.99
Maximum Before (n=9)	356	412	310	322	310	310	45.2	44.2	4.0	6.0	2.52	0.12	1.30	303.7	104.39
Std Dev Before (n=9)	107	145	107	145	103	121	17.5	15.2	1.5	2.4	0.43	0.02	0.19	68.0	23.41
Average After (n=11)	77	176	30	87	19	54	31.7	25.8	0.5	1.5	38366.16	152.37	1.19	-28233.9	10270.85
Minimum After (n=11)	46	96	0	7	0	0	13.7	13.8	0.0	0.0	1.21	0.06	0.74	-312080.5	40.34
85th Percentile After (n=11)	147	260	100	171	68	112	43.4	37.6	2.0	3.0	100.42	0.78	1.59	174.7	93.93
Maximum After (n=11)	151	294	104	204	93	139	44.9	41.9	2.0	3.0	421906.56	1674.42	2.78	194.0	112407.10
Std Dev After (n=11)	38	63	38	63	32	47	11.2	9.3	0.8	1.0	127205.97	504.81	0.59	94141.3	33874.77
Difference	-62	-73	-62	-73	-58	-65	6.0	1.9	-0.8	-0.8	38364.52	152.28	0.26	-28421.2	10206.40
Difference Minimum	0	5	0	5	0	0	7.8	3.9	0.0	0.0	0.01	0.00	0.05	-312192.0	1.90
Difference 85th Percentile	-65	-147	-65	-147	-59	-121	-1.7	-4.2	-1.0	-2.0	98.49	0.69	0.51	-98.5	-0.06
Difference Maximum	-205	-118	-205	-118	-217	-171	-0.3	-2.3	-2.0	-3.0	421904.04	1674.29	1.48	-109.7	112302.71
Std Dev Difference	113	158	113	158	108	130	20.8	17.8	1.7	2.6	127205.97	504.81	0.62	94141.3	33874.78
% Difference	-44%	-29%	-67%	-46%	-75%	-55%	23.6%	8.0%	-59.1%	-34.5%	2340167.04%	179335.12%	28.49%	-15169.6%	15837.83%

to Wilborn Road (#8)

Average Before (n=9)	34	283	15	174	7	126	31.4	24.7	0.3	2.6	0.76	0.04	0.45	69.9	23.94
Minimum Before (n=9)	17	110	-2	1	0	0	13.2	10.4	0.0	0.0	0.33	0.02	0.22	35.8	12.27
85th Percentile Before (n=9)	58	441	39	332	27	234	45.8	43.0	1.0	5.0	1.08	0.05	0.60	87.7	30.07
Maximum Before (n=9)	64	471	45	363	30	339	49.6	44.5	1.0	6.0	1.11	0.05	0.66	104.3	35.68
Std Dev Before (n=9)	18	157	18	157	12	129	14.0	15.2	0.5	2.6	0.31	0.01	0.17	24.6	8.43
Average After (n=11)	47	224	29	115	17	71	24.2	24.2	0.5	2.0	0.90	0.04	0.51	80.8	27.67
Minimum After (n=11)	18	115	0	6	0	0	8.3	14.6	0.0	0.0	0.46	0.02	0.31	46.7	15.97
85th Percentile After (n=11)	80	315	61	206	51	118	41.6	38.3	1.0	4.0	1.11	0.05	0.64	99.6	34.05
Maximum After (n=11)	102	335	83	227	58	157	45.9	42.6	1.0	4.0	1.51	0.07	0.76	104.3	35.67
Std Dev After (n=11)	28	69	28	69	23	46	13.3	8.9	0.5	1.3	0.29	0.01	0.13	18.1	6.17
Difference	14	-59	14	-59	10	-55	-7.2	-0.4	0.2	-0.6	0.14	0.01	0.06	10.9	3.73
Difference Minimum	1	5	1	5	0	0	-4.9	4.2	0.0	0.0	0.13	0.01	0.09	10.9	3.70
Difference 85th Percentile	23	-126	23	-126	23	-116	-4.2	-4.8	0.0	-1.0	0.04	0.00	0.03	11.9	3.99
Difference Maximum	38	-136	38	-136	29	-182	-3.6	-1.9	0.0	-2.0	0.40	0.02	0.11	0.0	-0.01
Std Dev Difference	33	172	33	172	26	137	19.3	17.6	0.7	2.9	0.42	0.02	0.21	30.5	10.45
% Difference	41%	-21%	94%	-34%	130%	-44%	-23.0%	-1.8%	63.6%	-21.7%	18.35%	18.43%	12.84%	15.6%	15.58%

to Gumtree Road (#11)

Average Before (n=9)	45	328	21	195	12	138	30.2	23.1	0.3	2.9	1.05	0.05	0.56	86.6	29.67
Minimum Before (n=9)	23	149	-1	16	0	0	9.3	11.9	0.0	0.0	0.79	0.04	0.42	69.5	23.76
85th Percentile Before (n=9)	61	492	37	360	18	234	41.2	38.6	1.0	6.0	1.14	0.06	0.65	103.2	35.37
Maximum Before (n=9)	116	503	93	371	80	339	47.1	40.1	1.0	6.0	1.60	0.08	0.70	111.8	38.53
Std Dev Before (n=9)	29	150	29	150	26	122	12.3	12.3	0.5	2.5	0.24	0.01	0.08	13.7	4.76
Average After (n=11)	44	268	20	136	15	86	32.3	24.5	0.3	2.3	4.92	0.07	0.61	78.3	28.95

Minimum After (n=11)	23	138	-1	5	0	0	11.5	16.4	0.0	0.0	0.50	0.02	0.34	53.7	18.37
85th Percentile After (n=11)	86	342	62	210	51	144	46.8	39.3	1.0	4.0	2.41	0.06	0.62	92.6	31.70
Maximum After (n=11)	94	365	70	233	65	157	47.0	43.3	1.0	4.0	44.54	0.40	1.90	110.6	59.47
Std Dev After (n=11)	28	76	28	76	26	52	13.9	9.0	0.5	1.3	13.15	0.11	0.44	17.3	11.22
Difference	-1	-60	-1	-60	3	-52	2.0	1.5	-0.1	-0.6	3.87	0.02	0.05	-8.2	-0.72
Difference Minimum	0	-11	0	-11	0	0	2.2	4.5	0.0	0.0	-0.28	-0.01	-0.08	-15.7	-5.39
Difference 85th Percentile	25	-150	25	-150	33	-90	5.7	0.7	0.0	-2.0	1.27	0.00	-0.02	-10.6	-3.67
Difference Maximum	-22	-138	-22	-138	-15	-182	-0.1	3.2	0.0	-2.0	42.94	0.32	1.19	-1.2	20.94
Std Dev Difference	41	169	41	169	37	132	18.5	15.3	0.7	2.8	13.15	0.11	0.44	22.1	12.19
% Difference	-2%	-18%	-4%	-31%	23%	-38%	6.7%	6.4%	-18.2%	-21.3%	368.71%	48.16%	9.00%	-9.5%	-2.43%
to Wild Horse Road (#5)															
Average Before (n=9)	96	423	49	245	33	171	29.1	23.7	0.9	3.8	1.84	0.08	0.85	144.5	49.78
Minimum Before (n=9)	43	192	-3	13	0	0	12.7	12.4	0.0	0.0	0.53	0.03	0.30	78.3	26.89
85th Percentile Before (n=9)	156	633	110	455	82	322	42.9	39.6	2.0	7.0	2.44	0.11	1.08	194.7	68.77
Maximum Before (n=9)	163	648	117	469	89	339	48.2	41.9	3.0	8.0	4.62	0.12	1.22	207.3	71.16
Std Dev Before (n=9)	54	187	54	187	40	142	15.1	12.5	1.2	3.1	1.18	0.03	0.27	43.6	15.30
Average After (n=11)	87	355	41	177	31	117	33.8	25.3	0.5	2.7	1.97	0.07	0.89	145.7	50.20
Minimum After (n=11)	42	183	-4	5	0	0	9.0	15.5	0.0	0.0	1.00	0.05	0.56	105.7	36.22
85th Percentile After (n=11)	184	506	137	327	104	174	48.7	41.4	2.0	4.0	1.93	0.09	1.07	201.7	69.17
Maximum After (n=11)	231	518	185	339	180	294	48.9	43.9	2.0	5.0	7.95	0.18	1.66	272.8	96.84
Std Dev After (n=11)	66	111	66	111	60	84	15.3	9.6	0.8	1.6	2.01	0.04	0.30	49.7	17.93
Difference	-8	-68	-8	-68	-2	-54	4.6	1.5	-0.4	-1.1	0.13	0.00	0.04	1.2	0.42
Difference Minimum	-1	-9	-1	-9	0	0	-3.7	3.1	0.0	0.0	0.47	0.02	0.27	27.4	9.33
Difference 85th Percentile	27	-127	27	-127	22	-148	5.8	1.7	0.0	-3.0	-0.51	-0.02	-0.01	7.0	0.39
Difference Maximum	68	-130	68	-130	92	-45	0.8	2.0	-1.0	-3.0	3.33	0.06	0.44	65.5	25.68
Std Dev Difference	86	217	86	217	72	165	21.5	15.8	1.4	3.5	2.33	0.05	0.40	66.1	23.57
% Difference	-9%	-16%	-17%	-28%	-5%	-32%	15.8%	6.4%	-48.9%	-27.8%	7.31%	-1.63%	4.26%	0.8%	0.85%
to Squire Pope Road (#2)															
Average Before (n=9)	88	512	54	299	27	197	22.4	23.3	0.9	4.7	1.37	0.06	0.77	136.7	46.87
Minimum Before (n=9)	31	234	-2	22	0	0	9.6	12.9	0.0	0.0	0.83	0.04	0.49	86.0	29.59
85th Percentile Before (n=9)	123	738	89	526	48	354	33.4	40.3	2.0	9.0	1.68	0.08	0.93	176.9	60.60
Maximum Before (n=9)	158	742	124	529	70	362	48.3	40.8	2.0	9.0	2.04	0.10	1.05	183.8	63.00
Std Dev Before (n=9)	43	217	43	217	27	157	13.0	12.4	0.9	3.8	0.37	0.02	0.17	37.7	12.90
Average After (n=11)	92	448	59	235	40	156	25.5	24.6	1.0	3.7	1.36	0.06	0.78	140.7	48.23
Minimum After (n=11)	32	216	-2	3	0	0	9.0	13.9	0.0	0.0	0.69	0.03	0.48	75.8	25.93
85th Percentile After (n=11)	151	636	117	423	89	250	46.5	42.1	2.0	6.0	1.79	0.08	0.98	200.7	68.90
Maximum After (n=11)	168	685	134	473	139	433	47.1	44.4	3.0	7.0	2.03	0.10	1.10	212.5	72.78
Std Dev After (n=11)	55	160	55	160	46	127	17.2	10.6	1.1	2.5	0.44	0.02	0.21	50.7	17.41
Difference	4	-64	4	-64	13	-41	3.2	1.4	0.1	-0.9	0.00	0.00	0.01	4.1	1.36
Difference Minimum	1	-19	1	-19	0	0	-0.6	1.0	0.0	0.0	-0.14	-0.01	-0.01	-10.2	-3.66
Difference 85th	28	-102	28	-102	41	-104	13.1	1.8	0.0	-3.0	0.10	0.00	0.05	23.8	8.30

Percentile															
Difference Maximum	10	-56	10	-56	70	71	-1.2	3.6	1.0	-2.0	-0.01	0.00	0.06	28.7	9.78
Std Dev Difference	*70*	*270*	*70*	*270*	*53*	*202*	*21.6*	*16.3*	*1.4*	*4.5*	*0.57*	*0.03*	*0.27*	*63.2*	*21.67*
% Difference	5%	-12%	8%	-21%	47%	-21%	14.1%	6.0%	12.5%	-20.1%	-0.32%	-1.40%	1.62%	3.0%	2.89%