

## 1: Trailwood Village Dr. &amp; Kingwood Dr.

Direction	EB	WB	NB	All
Volume (vph)	2551	1517	148	4216
Control Delay / Veh (s/v)	116	45	55	88
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	116	45	55	88
Total Delay (hr)	82	19	2	103
Stops / Veh	0.18	0.75	0.68	0.40
Stops (#)	455	1131	101	1687
Average Speed (mph)	2	17	9	7
Total Travel Time (hr)	85	41	3	130
Distance Traveled (mi)	131	709	31	871
Fuel Consumed (gal)	69	49	3	122
Fuel Economy (mpg)	1.9	14.4	8.8	7.1
CO Emissions (kg)	4.84	3.45	0.24	8.53
NOx Emissions (kg)	0.94	0.67	0.05	1.66
VOC Emissions (kg)	1.12	0.80	0.06	1.98
Unserviced Vehicles (#)	478	27	0	505
Vehicles in dilemma zone (#)	106	48	0	154

## 4: Green Oak Dr. &amp; Kingwood Dr.

Direction	EB	NB	SB	All
Volume (vph)	2255	391	464	3110
Control Delay / Veh (s/v)	160	146	84	147
Queue Delay / Veh (s/v)	1	0	0	1
Total Delay / Veh (s/v)	162	146	84	148
Total Delay (hr)	101	16	11	128
Stops / Veh	0.68	0.54	0.45	0.62
Stops (#)	1524	210	209	1943
Average Speed (mph)	8	2	1	7
Total Travel Time (hr)	137	17	11	165
Distance Traveled (mi)	1063	38	8	1109
Fuel Consumed (gal)	126	14	9	150
Fuel Economy (mpg)	8.4	2.7	0.8	7.4
CO Emissions (kg)	8.83	1.00	0.66	10.49
NOx Emissions (kg)	1.72	0.20	0.13	2.04
VOC Emissions (kg)	2.05	0.23	0.15	2.43
Unserviced Vehicles (#)	506	53	30	590
Vehicles in dilemma zone (#)	0	0	0	0

**6: Northpark Dr. & Sorters**

Direction	WB	NB	SB	All
Volume (vph)	425	368	350	1143
Control Delay / Veh (s/v)	22	0	4	9
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	22	0	4	9
Total Delay (hr)	3	0	0	3
Stops / Veh	1.00	0.00	0.77	0.61
Stops (#)	425	0	269	694
Average Speed (mph)	22	30	25	22
Total Travel Time (hr)	6	0	1	7
Distance Traveled (mi)	120	5	33	158
Fuel Consumed (gal)	10	0	4	14
Fuel Economy (mpg)	11.6	NA	9.3	11.2
CO Emissions (kg)	0.72	0.01	0.25	0.99
NOx Emissions (kg)	0.14	0.00	0.05	0.19
VOC Emissions (kg)	0.17	0.00	0.06	0.23
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**8: Lake Houston Pkwy/Lake Houston Pkwy & Northpark Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	1464	705	1309	351	3829
Control Delay / Veh (s/v)	143	105	63	53	100
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	143	105	63	53	100
Total Delay (hr)	58	21	23	5	107
Stops / Veh	0.79	0.77	0.78	0.80	0.78
Stops (#)	1163	542	1019	280	3004
Average Speed (mph)	10	12	9	11	10
Total Travel Time (hr)	75	29	29	7	141
Distance Traveled (mi)	772	354	259	76	1461
Fuel Consumed (gal)	83	33	36	9	162
Fuel Economy (mpg)	9.3	10.7	7.2	8.2	9.0
CO Emissions (kg)	5.84	2.31	2.52	0.65	11.31
NOx Emissions (kg)	1.14	0.45	0.49	0.13	2.20
VOC Emissions (kg)	1.35	0.54	0.58	0.15	2.62
Unserviced Vehicles (#)	279	61	0	0	340
Vehicles in dilemma zone (#)	2	15	22	11	50

**11: Woodland Hills & Northpark Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	1810	1372	794	386	4362
Control Delay / Veh (s/v)	125	86	37	49	90
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	125	86	37	49	90
Total Delay (hr)	63	33	8	5	109
Stops / Veh	0.83	0.87	0.60	0.74	0.79
Stops (#)	1504	1188	479	286	3457
Average Speed (mph)	5	21	25	16	15
Total Travel Time (hr)	70	61	46	11	189
Distance Traveled (mi)	336	1259	1149	183	2928
Fuel Consumed (gal)	76	82	56	13	227
Fuel Economy (mpg)	4.4	15.3	20.6	14.2	12.9
CO Emissions (kg)	5.34	5.74	3.91	0.90	15.89
NOx Emissions (kg)	1.04	1.12	0.76	0.18	3.09
VOC Emissions (kg)	1.24	1.33	0.91	0.21	3.68
Unserviced Vehicles (#)	263	25	0	0	287
Vehicles in dilemma zone (#)	44	33	0	0	77

**14: US 59 SBFR & Northpark Dr.**

Direction	EB	WB	SB	All
Volume (vph)	492	1866	621	2979
Control Delay / Veh (s/v)	31	15	61	27
Queue Delay / Veh (s/v)	0	2	0	1
Total Delay / Veh (s/v)	31	17	61	28
Total Delay (hr)	4	9	11	24
Stops / Veh	0.61	0.64	0.82	0.67
Stops (#)	301	1198	509	2008
Average Speed (mph)	27	8	3	13
Total Travel Time (hr)	13	12	12	37
Distance Traveled (mi)	361	99	36	496
Fuel Consumed (gal)	19	17	12	48
Fuel Economy (mpg)	19.0	5.8	3.0	10.3
CO Emissions (kg)	1.33	1.20	0.84	3.37
NOx Emissions (kg)	0.26	0.23	0.16	0.65
VOC Emissions (kg)	0.31	0.28	0.19	0.78
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	12	0	0	12

## 17: US 59 NBFR &amp; Northpark Dr.

Direction	EB	WB	NB	All
Volume (vph)	718	1542	2497	4757
Control Delay / Veh (s/v)	36	32	27	30
Queue Delay / Veh (s/v)	1	1	0	0
Total Delay / Veh (s/v)	37	33	27	31
Total Delay (hr)	7	14	19	40
Stops / Veh	0.60	0.76	0.60	0.65
Stops (#)	433	1165	1491	3089
Average Speed (mph)	4	20	7	12
Total Travel Time (hr)	9	26	25	59
Distance Traveled (mi)	38	525	173	736
Fuel Consumed (gal)	9	43	29	81
Fuel Economy (mpg)	4.0	12.3	5.9	9.0
CO Emissions (kg)	0.66	2.99	2.04	5.69
NOx Emissions (kg)	0.13	0.58	0.40	1.11
VOC Emissions (kg)	0.15	0.69	0.47	1.32
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	48	0	48

## 19: US 59 NBFR &amp; Hamblen

Direction	EB	WB	NB	All
Volume (vph)	113	139	1905	2157
Control Delay / Veh (s/v)	0	0	0	0
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	0	0	0	0
Total Delay (hr)	0	0	0	0
Stops / Veh	1.00	1.00	0.00	0.12
Stops (#)	113	139	0	252
Average Speed (mph)	30	30	30	30
Total Travel Time (hr)	0	0	7	8
Distance Traveled (mi)	4	3	221	228
Fuel Consumed (gal)	1	1	9	11
Fuel Economy (mpg)	NA	NA	24.3	21.1
CO Emissions (kg)	0.05	0.06	0.64	0.75
NOx Emissions (kg)	0.01	0.01	0.12	0.15
VOC Emissions (kg)	0.01	0.01	0.15	0.17
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**20: Loop 494 & Northpark Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	1711	1170	723	666	4270
Control Delay / Veh (s/v)	133	74	102	84	104
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	133	74	102	84	104
Total Delay (hr)	63	24	21	16	123
Stops / Veh	0.84	0.70	0.71	0.68	0.75
Stops (#)	1431	814	515	453	3213
Average Speed (mph)	8	11	22	15	13
Total Travel Time (hr)	76	32	41	24	172
Distance Traveled (mi)	582	363	907	361	2213
Fuel Consumed (gal)	84	40	53	29	206
Fuel Economy (mpg)	6.9	9.0	17.3	12.3	10.7
CO Emissions (kg)	5.87	2.80	3.67	2.05	14.40
NOx Emissions (kg)	1.14	0.55	0.71	0.40	2.80
VOC Emissions (kg)	1.36	0.65	0.85	0.48	3.34
Unserviced Vehicles (#)	305	65	66	29	466
Vehicles in dilemma zone (#)	22	32	3	8	65

**23: Brookdale & Northpark Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	1726	1228	100	166	3220
Control Delay / Veh (s/v)	88	54	27	13	69
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	88	54	27	13	69
Total Delay (hr)	42	18	1	1	62
Stops / Veh	0.89	0.75	0.55	0.27	0.79
Stops (#)	1528	926	55	44	2553
Average Speed (mph)	20	20	16	18	20
Total Travel Time (hr)	78	33	2	2	113
Distance Traveled (mi)	1584	648	26	27	2284
Fuel Consumed (gal)	104	47	2	2	155
Fuel Economy (mpg)	15.2	13.7	13.5	14.8	14.7
CO Emissions (kg)	7.30	3.30	0.13	0.12	10.85
NOx Emissions (kg)	1.42	0.64	0.03	0.02	2.11
VOC Emissions (kg)	1.69	0.76	0.03	0.03	2.52
Unserviced Vehicles (#)	119	38	0	0	157
Vehicles in dilemma zone (#)	47	2	0	0	49

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**26: Northpark Dr. & Mills Branch**

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Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0

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**28: Kingwood Dr./Kingwood Dr. & Mills Branch**

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Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0

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**29: Northpark Dr. & Rock Springs**

Direction	SE	NW	SW	All
Volume (vph)	94	139	604	837
Control Delay / Veh (s/v)	32	53	26	31
Queue Delay / Veh (s/v)	0	2	0	0
Total Delay / Veh (s/v)	32	55	26	31
Total Delay (hr)	1	2	4	7
Stops / Veh	0.36	0.51	0.61	0.57
Stops (#)	34	71	369	474
Average Speed (mph)	5	2	22	17
Total Travel Time (hr)	1	2	9	13
Distance Traveled (mi)	5	5	204	214
Fuel Consumed (gal)	1	2	14	17
Fuel Economy (mpg)	5.1	2.1	14.5	12.4
CO Emissions (kg)	0.07	0.15	0.98	1.20
NOx Emissions (kg)	0.01	0.03	0.19	0.23
VOC Emissions (kg)	0.02	0.03	0.23	0.28
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	20	20

**34: Kingwood Dr. & Woodland Grove**

Direction	EB	WB	SB	All
Volume (vph)	2701	1539	164	4404
Control Delay / Veh (s/v)	118	4	60	76
Queue Delay / Veh (s/v)	0	0	1	0
Total Delay / Veh (s/v)	118	4	60	76
Total Delay (hr)	88	2	3	93
Stops / Veh	0.83	0.05	0.35	0.54
Stops (#)	2243	77	58	2378
Average Speed (mph)	1	19	7	2
Total Travel Time (hr)	93	4	4	101
Distance Traveled (mi)	129	79	25	233
Fuel Consumed (gal)	82	5	3	91
Fuel Economy (mpg)	1.6	16.3	7.5	2.6
CO Emissions (kg)	5.77	0.34	0.24	6.34
NOx Emissions (kg)	1.12	0.07	0.05	1.23
VOC Emissions (kg)	1.34	0.08	0.05	1.47
Unserviced Vehicles (#)	405	0	0	405
Vehicles in dilemma zone (#)	0	0	0	0

**35: Russel Palmer & Northpark Dr.**

Direction	EB	NB	SB	All
Volume (vph)	2181	273	156	2610
Control Delay / Veh (s/v)	70	43	154	72
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	70	43	154	72
Total Delay (hr)	42	3	7	52
Stops / Veh	0.87	0.58	0.88	0.84
Stops (#)	1906	159	137	2202
Average Speed (mph)	2	11	0	3
Total Travel Time (hr)	45	5	7	57
Distance Traveled (mi)	88	59	2	150
Fuel Consumed (gal)	45	6	6	57
Fuel Economy (mpg)	2.0	10.3	0.4	2.6
CO Emissions (kg)	3.16	0.40	0.40	3.96
NOx Emissions (kg)	0.62	0.08	0.08	0.77
VOC Emissions (kg)	0.73	0.09	0.09	0.92
Unserved Vehicles (#)	133	0	0	133
Vehicles in dilemma zone (#)	0	0	0	0

**36: Northpark Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0



**43: Sorters Rd & US 59 SBFR**

Direction	EB	WB	SB	All
Volume (vph)	148	614	176	938
Control Delay / Veh (s/v)	3	20	7	15
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	3	20	7	15
Total Delay (hr)	0	3	0	4
Stops / Veh	0.20	0.62	0.52	0.53
Stops (#)	30	380	91	501
Average Speed (mph)	34	16	29	26
Total Travel Time (hr)	6	6	8	20
Distance Traveled (mi)	215	100	224	539
Fuel Consumed (gal)	9	9	10	28
Fuel Economy (mpg)	25.3	10.9	22.5	19.5
CO Emissions (kg)	0.59	0.65	0.70	1.94
NOx Emissions (kg)	0.12	0.13	0.14	0.38
VOC Emissions (kg)	0.14	0.15	0.16	0.45
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	18	17	0	35

**45: Loop 494 & Sorters Rd**

Direction	EB	NB	SB	All
Volume (vph)	133	1021	384	1538
Control Delay / Veh (s/v)	1	11	7	9
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	1	11	7	9
Total Delay (hr)	0	3	1	4
Stops / Veh	0.10	0.69	0.49	0.59
Stops (#)	13	705	187	905
Average Speed (mph)	28	24	42	35
Total Travel Time (hr)	1	7	12	19
Distance Traveled (mi)	22	155	503	680
Fuel Consumed (gal)	1	16	20	38
Fuel Economy (mpg)	NA	9.5	25.0	18.1
CO Emissions (kg)	0.07	1.15	1.41	2.62
NOx Emissions (kg)	0.01	0.22	0.27	0.51
VOC Emissions (kg)	0.02	0.27	0.33	0.61
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	87	36	123

## 49: Hamblen &amp; Laurel Springs

Direction	EB	WB	SB	All
Volume (vph)	1159	210	76	1445
Control Delay / Veh (s/v)	4	0	16	4
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	4	0	16	4
Total Delay (hr)	1	0	0	2
Stops / Veh	0.87	0.00	1.00	0.75
Stops (#)	1010	0	76	1086
Average Speed (mph)	28	30	15	28
Total Travel Time (hr)	17	5	1	23
Distance Traveled (mi)	473	142	11	626
Fuel Consumed (gal)	26	6	1	33
Fuel Economy (mpg)	18.1	24.3	9.6	18.9
CO Emissions (kg)	1.82	0.41	0.08	2.31
NOx Emissions (kg)	0.35	0.08	0.01	0.45
VOC Emissions (kg)	0.42	0.09	0.02	0.54
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

## 53: Kingwood Dr.

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**54: Woodland Hills & Hamblen**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**57: Redbud & Hamblen**

Direction	EB	WB	NB	SB	All
Volume (vph)	77	21	166	55	319
Control Delay / Veh (s/v)	8	8	9	8	8
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	8	8	9	8	8
Total Delay (hr)	0	0	0	0	1
Stops / Veh	1.00	1.00	1.00	1.00	1.00
Stops (#)	77	21	166	55	319
Average Speed (mph)	25	29	16	15	23
Total Travel Time (hr)	1	1	1	0	3
Distance Traveled (mi)	26	26	14	4	70
Fuel Consumed (gal)	2	1	2	1	5
Fuel Economy (mpg)	16.0	21.4	7.7	NA	13.5
CO Emissions (kg)	0.11	0.09	0.12	0.04	0.36
NOx Emissions (kg)	0.02	0.02	0.02	0.01	0.07
VOC Emissions (kg)	0.03	0.02	0.03	0.01	0.08
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

**60: Forest Cove & Hamblen**

Direction	EB	WB	NB	SB	All
Volume (vph)	804	59	40	119	1022
Control Delay / Veh (s/v)	139	10	10	11	111
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	139	10	10	11	111
Total Delay (hr)	31	0	0	0	32
Stops / Veh	1.00	1.00	1.00	1.00	1.00
Stops (#)	804	59	40	119	1022
Average Speed (mph)	11	24	15	17	11
Total Travel Time (hr)	49	1	0	1	51
Distance Traveled (mi)	542	20	4	14	579
Fuel Consumed (gal)	49	1	0	1	53
Fuel Economy (mpg)	11.0	15.8	NA	9.2	11.0
CO Emissions (kg)	3.46	0.09	0.03	0.10	3.68
NOx Emissions (kg)	0.67	0.02	0.01	0.02	0.72
VOC Emissions (kg)	0.80	0.02	0.01	0.02	0.85
Unserviced Vehicles (#)	0	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0	0

**64: Woodland Hills & Kingwood Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	2330	1621	640	739	5330
Control Delay / Veh (s/v)	244	100	114	98	165
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	244	100	114	98	165
Total Delay (hr)	158	45	20	20	244
Stops / Veh	0.74	0.88	0.43	0.50	0.71
Stops (#)	1714	1432	277	371	3794
Average Speed (mph)	6	8	19	20	10
Total Travel Time (hr)	193	56	55	54	359
Distance Traveled (mi)	1089	452	1049	1070	3660
Fuel Consumed (gal)	170	63	60	60	353
Fuel Economy (mpg)	6.4	7.1	17.6	17.7	10.4
CO Emissions (kg)	11.89	4.43	4.16	4.22	24.70
NOx Emissions (kg)	2.31	0.86	0.81	0.82	4.80
VOC Emissions (kg)	2.76	1.03	0.96	0.98	5.72
Unserviced Vehicles (#)	649	85	64	37	835
Vehicles in dilemma zone (#)	34	36	5	6	81

## 69: Kingwood Dr. &amp; High Valley

Direction	EB	WB	NB	All
Volume (vph)	36	163	476	675
Control Delay / Veh (s/v)	43	50	8	20
Queue Delay / Veh (s/v)	5	0	0	0
Total Delay / Veh (s/v)	48	50	8	20
Total Delay (hr)	0	2	1	4
Stops / Veh	0.78	0.72	0.26	0.40
Stops (#)	28	117	125	270
Average Speed (mph)	2	8	32	22
Total Travel Time (hr)	1	3	5	9
Distance Traveled (mi)	1	24	164	189
Fuel Consumed (gal)	1	3	8	12
Fuel Economy (mpg)	NA	7.2	20.8	16.1
CO Emissions (kg)	0.04	0.23	0.55	0.82
NOx Emissions (kg)	0.01	0.04	0.11	0.16
VOC Emissions (kg)	0.01	0.05	0.13	0.19
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	40	40

## 74: Kingwood Dr. &amp; Willow Terrace

Direction	SE	NW	NE	All
Volume (vph)	60	387	1195	1642
Control Delay / Veh (s/v)	16	67	72	68
Queue Delay / Veh (s/v)	3	0	0	0
Total Delay / Veh (s/v)	19	67	72	69
Total Delay (hr)	0	7	24	31
Stops / Veh	0.23	0.92	0.89	0.87
Stops (#)	14	356	1065	1435
Average Speed (mph)	3	5	16	14
Total Travel Time (hr)	0	8	44	53
Distance Traveled (mi)	1	39	698	739
Fuel Consumed (gal)	0	9	52	61
Fuel Economy (mpg)	NA	4.4	13.4	12.1
CO Emissions (kg)	0.03	0.62	3.64	4.28
NOx Emissions (kg)	0.00	0.12	0.71	0.83
VOC Emissions (kg)	0.01	0.14	0.84	0.99
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

## 77: Timber Shade Dr. &amp; Kingwood Dr.

Direction	EB	NB	SB	All
Volume (vph)	1398	37	14	1449
Control Delay / Veh (s/v)	36	65	42	37
Queue Delay / Veh (s/v)	0	0	2	0
Total Delay / Veh (s/v)	36	65	44	37
Total Delay (hr)	14	1	0	15
Stops / Veh	0.79	0.89	0.57	0.79
Stops (#)	1100	33	8	1141
Average Speed (mph)	10	6	2	10
Total Travel Time (hr)	21	1	0	22
Distance Traveled (mi)	219	5	0	224
Fuel Consumed (gal)	25	1	0	26
Fuel Economy (mpg)	8.6	NA	NA	8.5
CO Emissions (kg)	1.77	0.06	0.01	1.85
NOx Emissions (kg)	0.34	0.01	0.00	0.36
VOC Emissions (kg)	0.41	0.01	0.00	0.43
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

## 80: Kingwood Dr.

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**81: US 59 SBFR**

Direction	SB	All
Volume (vph)	833	833
Control Delay / Veh (s/v)	0	0
Queue Delay / Veh (s/v)	0	0
Total Delay / Veh (s/v)	0	0
Total Delay (hr)	0	0
Stops / Veh	0.00	0.00
Stops (#)	0	0
Average Speed (mph)	30	30
Total Travel Time (hr)	10	10
Distance Traveled (mi)	286	286
Fuel Consumed (gal)	12	12
Fuel Economy (mpg)	24.3	24.3
CO Emissions (kg)	0.82	0.82
NOx Emissions (kg)	0.16	0.16
VOC Emissions (kg)	0.19	0.19
Unserviced Vehicles (#)	0	0
Vehicles in dilemma zone (#)	0	0

**83: US 59 NBFR**

Direction	EB	NB	All
Volume (vph)	213	1114	1327
Control Delay / Veh (s/v)	0	0	0
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	0	0	0
Total Delay (hr)	0	0	0
Stops / Veh	0.50	0.00	0.08
Stops (#)	106	0	106
Average Speed (mph)	30	30	30
Total Travel Time (hr)	0	2	3
Distance Traveled (mi)	11	65	77
Fuel Consumed (gal)	1	3	4
Fuel Economy (mpg)	10.8	24.3	20.5
CO Emissions (kg)	0.07	0.19	0.26
NOx Emissions (kg)	0.01	0.04	0.05
VOC Emissions (kg)	0.02	0.04	0.06
Unserviced Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0

**84: US 59 SBFR**

Direction	SB	SW	All
Volume (vph)	1219	278	1497
Control Delay / Veh (s/v)	0	0	0
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	0	0	0
Total Delay (hr)	0	0	0
Stops / Veh	0.00	0.50	0.09
Stops (#)	0	139	139
Average Speed (mph)	30	30	30
Total Travel Time (hr)	3	1	3
Distance Traveled (mi)	85	19	104
Fuel Consumed (gal)	3	2	5
Fuel Economy (mpg)	24.3	12.3	20.6
CO Emissions (kg)	0.24	0.11	0.35
NOx Emissions (kg)	0.05	0.02	0.07
VOC Emissions (kg)	0.06	0.03	0.08
Unserviced Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0

**87: Kingwood Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0



**88: Kingwood Dr. & Kingwood High School**

Direction	SE	NE	All
Volume (vph)	186	2075	2261
Control Delay / Veh (s/v)	16	21	21
Queue Delay / Veh (s/v)	0	1	1
Total Delay / Veh (s/v)	17	22	22
Total Delay (hr)	1	13	14
Stops / Veh	0.09	0.33	0.31
Stops (#)	17	676	693
Average Speed (mph)	4	4	4
Total Travel Time (hr)	1	15	16
Distance Traveled (mi)	4	64	68
Fuel Consumed (gal)	1	16	17
Fuel Economy (mpg)	NA	4.0	4.1
CO Emissions (kg)	0.06	1.10	1.16
NOx Emissions (kg)	0.01	0.21	0.23
VOC Emissions (kg)	0.01	0.25	0.27
Unserviced Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0

**90: Kingwood Dr.**

Direction	EB	All
Volume (vph)	2075	2075
Control Delay / Veh (s/v)	0	0
Queue Delay / Veh (s/v)	0	0
Total Delay / Veh (s/v)	0	0
Total Delay (hr)	0	0
Stops / Veh	0.00	0.00
Stops (#)	0	0
Average Speed (mph)	30	30
Total Travel Time (hr)	22	22
Distance Traveled (mi)	648	648
Fuel Consumed (gal)	27	27
Fuel Economy (mpg)	24.3	24.3
CO Emissions (kg)	1.86	1.86
NOx Emissions (kg)	0.36	0.36
VOC Emissions (kg)	0.43	0.43
Unserviced Vehicles (#)	0	0
Vehicles in dilemma zone (#)	0	0

**91: Lake Kingwood Trail & Kingwood Dr.**

Direction	EB	NB	SB	All
Volume (vph)	2014	135	65	2214
Control Delay / Veh (s/v)	38	82	26	41
Queue Delay / Veh (s/v)	0	0	7	0
Total Delay / Veh (s/v)	38	82	33	41
Total Delay (hr)	21	3	1	25
Stops / Veh	0.79	0.82	0.23	0.78
Stops (#)	1592	111	15	1718
Average Speed (mph)	23	4	2	22
Total Travel Time (hr)	88	4	1	92
Distance Traveled (mi)	1995	14	1	2010
Fuel Consumed (gal)	107	3	1	111
Fuel Economy (mpg)	18.7	4.1	NA	18.2
CO Emissions (kg)	7.46	0.24	0.04	7.74
NOx Emissions (kg)	1.45	0.05	0.01	1.51
VOC Emissions (kg)	1.73	0.06	0.01	1.79
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**96: Chestnut Ridge Dr. & Kingwood Dr.**

Direction	EB	NB	SB	All
Volume (vph)	1012	293	249	1554
Control Delay / Veh (s/v)	66	94	14	63
Queue Delay / Veh (s/v)	7	16	0	7
Total Delay / Veh (s/v)	73	109	14	70
Total Delay (hr)	20	9	1	30
Stops / Veh	0.91	0.75	0.36	0.79
Stops (#)	917	220	90	1227
Average Speed (mph)	4	5	4	4
Total Travel Time (hr)	24	11	1	36
Distance Traveled (mi)	102	54	5	160
Fuel Consumed (gal)	24	10	1	36
Fuel Economy (mpg)	4.2	5.4	3.3	4.5
CO Emissions (kg)	1.69	0.70	0.10	2.49
NOx Emissions (kg)	0.33	0.14	0.02	0.48
VOC Emissions (kg)	0.39	0.16	0.02	0.58
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**102: Kingwood Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**104: US 59 SBFR & Kingwood Dr.**

Direction	EB	WB	SB	All
Volume (vph)	606	1654	524	2784
Control Delay / Veh (s/v)	118	6	31	35
Queue Delay / Veh (s/v)	0	4	0	2
Total Delay / Veh (s/v)	118	10	31	38
Total Delay (hr)	20	5	5	29
Stops / Veh	0.80	0.50	0.74	0.61
Stops (#)	486	830	387	1703
Average Speed (mph)	13	11	4	12
Total Travel Time (hr)	30	7	5	42
Distance Traveled (mi)	395	80	20	495
Fuel Consumed (gal)	33	11	6	51
Fuel Economy (mpg)	11.8	7.0	3.2	9.7
CO Emissions (kg)	2.34	0.80	0.44	3.58
NOx Emissions (kg)	0.46	0.15	0.09	0.70
VOC Emissions (kg)	0.54	0.18	0.10	0.83
Unserviced Vehicles (#)	55	0	0	55
Vehicles in dilemma zone (#)	18	0	0	18

**105: US 59 NBFR & Kingwood Dr.**

Direction	EB	WB	NB	All
Volume (vph)	614	1595	2245	4454
Control Delay / Veh (s/v)	4	36	31	29
Queue Delay / Veh (s/v)	1	19	0	7
Total Delay / Veh (s/v)	5	55	31	36
Total Delay (hr)	1	24	19	45
Stops / Veh	0.11	0.99	0.61	0.68
Stops (#)	68	1583	1377	3028
Average Speed (mph)	16	12	3	9
Total Travel Time (hr)	2	40	22	63
Distance Traveled (mi)	30	457	77	564
Fuel Consumed (gal)	2	45	25	73
Fuel Economy (mpg)	13.2	10.1	3.1	7.8
CO Emissions (kg)	0.16	3.17	1.75	5.08
NOx Emissions (kg)	0.03	0.62	0.34	0.99
VOC Emissions (kg)	0.04	0.73	0.41	1.18
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**107: Kingwood Dr.**

Direction	WB	NB	SB	All
Volume (vph)	228	750	171	1149
Control Delay / Veh (s/v)	13	213	12	143
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	13	213	12	143
Total Delay (hr)	1	44	1	46
Stops / Veh	1.00	1.00	1.00	1.00
Stops (#)	228	750	171	1149
Average Speed (mph)	33	14	32	17
Total Travel Time (hr)	5	75	6	86
Distance Traveled (mi)	149	1090	187	1426
Fuel Consumed (gal)	8	80	9	97
Fuel Economy (mpg)	18.2	13.7	21.2	14.7
CO Emissions (kg)	0.57	5.57	0.62	6.76
NOx Emissions (kg)	0.11	1.08	0.12	1.32
VOC Emissions (kg)	0.13	1.29	0.14	1.57
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**111: Lake Houston Parkway & Rustic Woods**

Direction	EB	WB	NB	All
Volume (vph)	126	198	1695	2019
Control Delay / Veh (s/v)	20	43	75	68
Queue Delay / Veh (s/v)	9	0	0	1
Total Delay / Veh (s/v)	29	43	75	69
Total Delay (hr)	1	2	35	39
Stops / Veh	0.34	0.56	0.83	0.77
Stops (#)	43	111	1399	1553
Average Speed (mph)	3	7	9	9
Total Travel Time (hr)	1	3	46	50
Distance Traveled (mi)	3	21	420	444
Fuel Consumed (gal)	1	3	55	59
Fuel Economy (mpg)	2.6	6.5	7.7	7.5
CO Emissions (kg)	0.08	0.22	3.82	4.12
NOx Emissions (kg)	0.01	0.04	0.74	0.80
VOC Emissions (kg)	0.02	0.05	0.88	0.95
Unserviced Vehicles (#)	0	0	37	37
Vehicles in dilemma zone (#)	0	0	46	46

**115: Loop 494 & Kingwood Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	1623	1737	839	457	4656
Control Delay / Veh (s/v)	110	50	145	54	88
Queue Delay / Veh (s/v)	0	41	0	0	15
Total Delay / Veh (s/v)	110	90	145	54	103
Total Delay (hr)	50	44	34	7	134
Stops / Veh	0.76	0.83	0.63	0.87	0.77
Stops (#)	1228	1446	530	399	3603
Average Speed (mph)	8	4	19	29	12
Total Travel Time (hr)	61	48	58	20	187
Distance Traveled (mi)	465	172	1099	573	2309
Fuel Consumed (gal)	65	52	69	30	216
Fuel Economy (mpg)	7.2	3.3	15.9	19.4	10.7
CO Emissions (kg)	4.54	3.66	4.82	2.07	15.09
NOx Emissions (kg)	0.88	0.71	0.94	0.40	2.94
VOC Emissions (kg)	1.05	0.85	1.12	0.48	3.50
Unserviced Vehicles (#)	219	0	127	0	346
Vehicles in dilemma zone (#)	82	51	8	1	142

**118: Royal Forest /Royal Forest & Kingwood Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	2336	1513	339	162	4350
Control Delay / Veh (s/v)	34	26	91	14	35
Queue Delay / Veh (s/v)	37	0	0	0	20
Total Delay / Veh (s/v)	71	26	91	14	54
Total Delay (hr)	46	11	9	1	66
Stops / Veh	0.77	0.60	0.80	0.22	0.69
Stops (#)	1805	909	270	35	3019
Average Speed (mph)	4	17	3	16	8
Total Travel Time (hr)	52	23	9	1	85
Distance Traveled (mi)	231	377	25	23	657
Fuel Consumed (gal)	60	29	9	2	99
Fuel Economy (mpg)	3.9	13.2	2.9	14.3	6.7
CO Emissions (kg)	4.17	2.00	0.61	0.11	6.90
NOx Emissions (kg)	0.81	0.39	0.12	0.02	1.34
VOC Emissions (kg)	0.97	0.46	0.14	0.03	1.60
Unserviced Vehicles (#)	0	3	0	0	3
Vehicles in dilemma zone (#)	75	53	0	0	128

**121: US 59 SBFR**

Direction	SB	All
Volume (vph)	691	691
Control Delay / Veh (s/v)	0	0
Queue Delay / Veh (s/v)	0	0
Total Delay / Veh (s/v)	0	0
Total Delay (hr)	0	0
Stops / Veh	0.00	0.00
Stops (#)	0	0
Average Speed (mph)	30	30
Total Travel Time (hr)	27	27
Distance Traveled (mi)	809	809
Fuel Consumed (gal)	33	33
Fuel Economy (mpg)	24.3	24.3
CO Emissions (kg)	2.33	2.33
NOx Emissions (kg)	0.45	0.45
VOC Emissions (kg)	0.54	0.54
Unserviced Vehicles (#)	0	0
Vehicles in dilemma zone (#)	0	0

**122: US 59 NBFR**

Direction	EB	All
Volume (vph)	168	168
Control Delay / Veh (s/v)	0	0
Queue Delay / Veh (s/v)	0	0
Total Delay / Veh (s/v)	0	0
Total Delay (hr)	0	0
Stops / Veh	0.50	0.50
Stops (#)	84	84
Average Speed (mph)	30	30
Total Travel Time (hr)	0	0
Distance Traveled (mi)	11	11
Fuel Consumed (gal)	1	1
Fuel Economy (mpg)	NA	NA
CO Emissions (kg)	0.06	0.06
NOx Emissions (kg)	0.01	0.01
VOC Emissions (kg)	0.01	0.01
Unserviced Vehicles (#)	0	0
Vehicles in dilemma zone (#)	0	0

**123: US 59 SBFR**

Direction	SB	SW	All
Volume (vph)	1390	224	1614
Control Delay / Veh (s/v)	0	0	0
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	0	0	0
Total Delay (hr)	0	0	0
Stops / Veh	0.00	0.50	0.07
Stops (#)	0	112	112
Average Speed (mph)	30	30	30
Total Travel Time (hr)	2	0	2
Distance Traveled (mi)	48	13	61
Fuel Consumed (gal)	2	1	3
Fuel Economy (mpg)	24.3	11.2	19.5
CO Emissions (kg)	0.14	0.08	0.22
NOx Emissions (kg)	0.03	0.02	0.04
VOC Emissions (kg)	0.03	0.02	0.05
Unserviced Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0

**124: US 59 NBFR**

Direction	NB	All
Volume (vph)	2468	2468
Control Delay / Veh (s/v)	0	0
Queue Delay / Veh (s/v)	0	0
Total Delay / Veh (s/v)	0	0
Total Delay (hr)	0	0
Stops / Veh	0.00	0.00
Stops (#)	0	0
Average Speed (mph)	30	30
Total Travel Time (hr)	125	125
Distance Traveled (mi)	3765	3765
Fuel Consumed (gal)	155	155
Fuel Economy (mpg)	24.3	24.3
CO Emissions (kg)	10.83	10.83
NOx Emissions (kg)	2.11	2.11
VOC Emissions (kg)	2.51	2.51
Unserviced Vehicles (#)	0	0
Vehicles in dilemma zone (#)	0	0

**125: Chestnut Ridge Dr. & Kingwood Dr.**

Direction	WB	NB	SB	All
Volume (vph)	1439	209	287	1935
Control Delay / Veh (s/v)	72	47	106	74
Queue Delay / Veh (s/v)	5	0	1	4
Total Delay / Veh (s/v)	76	47	107	78
Total Delay (hr)	31	3	9	42
Stops / Veh	0.93	0.47	0.81	0.86
Stops (#)	1340	99	232	1671
Average Speed (mph)	13	1	2	11
Total Travel Time (hr)	53	3	9	65
Distance Traveled (mi)	677	4	15	695
Fuel Consumed (gal)	58	3	8	69
Fuel Economy (mpg)	11.7	1.4	1.8	10.2
CO Emissions (kg)	4.03	0.19	0.57	4.79
NOx Emissions (kg)	0.78	0.04	0.11	0.93
VOC Emissions (kg)	0.93	0.04	0.13	1.11
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0



**126: Kingwood Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**128: Kingwood Dr. & Green Oak Dr.**

Direction	WB	NB	SB	All
Volume (vph)	1521	244	455	2220
Control Delay / Veh (s/v)	18	19	242	64
Queue Delay / Veh (s/v)	0	0	4	1
Total Delay / Veh (s/v)	18	19	246	65
Total Delay (hr)	8	1	31	40
Stops / Veh	0.52	0.27	0.75	0.54
Stops (#)	790	66	342	1198
Average Speed (mph)	24	3	1	13
Total Travel Time (hr)	36	1	32	69
Distance Traveled (mi)	859	4	21	884
Fuel Consumed (gal)	45	2	26	72
Fuel Economy (mpg)	19.0	2.7	0.8	12.2
CO Emissions (kg)	3.17	0.10	1.78	5.05
NOx Emissions (kg)	0.62	0.02	0.35	0.98
VOC Emissions (kg)	0.73	0.02	0.41	1.17
Unserviced Vehicles (#)	0	0	130	130
Vehicles in dilemma zone (#)	0	0	0	0

**133: Kingwood Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**136: Kingwood Dr. & Lake Kingwood Trail**

Direction	WB	NB	SB	All
Volume (vph)	1347	51	79	1477
Control Delay / Veh (s/v)	14	12	102	19
Queue Delay / Veh (s/v)	0	4	0	0
Total Delay / Veh (s/v)	14	16	102	19
Total Delay (hr)	5	0	2	8
Stops / Veh	0.44	0.14	0.84	0.45
Stops (#)	595	7	66	668
Average Speed (mph)	22	4	2	19
Total Travel Time (hr)	18	0	2	21
Distance Traveled (mi)	396	1	4	402
Fuel Consumed (gal)	23	0	2	26
Fuel Economy (mpg)	16.9	NA	2.0	15.5
CO Emissions (kg)	1.64	0.02	0.15	1.81
NOx Emissions (kg)	0.32	0.00	0.03	0.35
VOC Emissions (kg)	0.38	0.00	0.04	0.42
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**139: Kingwood High School & Kingwood Dr.**

Direction	SE	NW	SW	All
Volume (vph)	238	20	1448	1706
Control Delay / Veh (s/v)	59	157	19	26
Queue Delay / Veh (s/v)	0	124	0	1
Total Delay / Veh (s/v)	59	281	19	27
Total Delay (hr)	4	2	8	13
Stops / Veh	0.75	1.00	0.61	0.63
Stops (#)	178	20	885	1083
Average Speed (mph)	3	0	16	12
Total Travel Time (hr)	4	2	16	22
Distance Traveled (mi)	14	0	244	259
Fuel Consumed (gal)	4	1	20	26
Fuel Economy (mpg)	3.2	0.3	11.9	9.9
CO Emissions (kg)	0.31	0.09	1.43	1.83
NOx Emissions (kg)	0.06	0.02	0.28	0.36
VOC Emissions (kg)	0.07	0.02	0.33	0.42
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**141: Lake Houston Parkway & Kingwood Dr.**

Direction	EB	WB	NB	SB	All
Volume (vph)	1970	971	1636	1557	6134
Control Delay / Veh (s/v)	26	7	136	31	54
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	26	7	136	31	54
Total Delay (hr)	14	2	62	13	91
Stops / Veh	0.75	0.33	0.78	0.69	0.68
Stops (#)	1483	325	1271	1075	4154
Average Speed (mph)	21	28	2	10	12
Total Travel Time (hr)	45	24	65	17	152
Distance Traveled (mi)	917	672	139	167	1896
Fuel Consumed (gal)	56	31	63	26	176
Fuel Economy (mpg)	16.3	21.8	2.2	6.4	10.8
CO Emissions (kg)	3.94	2.16	4.39	1.84	12.32
NOx Emissions (kg)	0.77	0.42	0.86	0.36	2.40
VOC Emissions (kg)	0.91	0.50	1.02	0.43	2.86
Unserviced Vehicles (#)	0	0	249	28	276
Vehicles in dilemma zone (#)	0	0	113	116	229

## 144: Forest Garden Dr. &amp; Kingwood Dr.

Direction	EB	WB	NB	SB	All
Volume (vph)	1660	813	626	213	3312
Control Delay / Veh (s/v)	71	12	29	7	44
Queue Delay / Veh (s/v)	0	0	0	0	0
Total Delay / Veh (s/v)	71	12	29	7	44
Total Delay (hr)	33	3	5	0	41
Stops / Veh	0.64	0.74	0.77	0.49	0.68
Stops (#)	1062	601	483	105	2251
Average Speed (mph)	16	20	8	18	16
Total Travel Time (hr)	71	9	7	1	87
Distance Traveled (mi)	1149	176	51	19	1395
Fuel Consumed (gal)	77	13	8	2	100
Fuel Economy (mpg)	14.9	14.0	6.0	11.4	14.0
CO Emissions (kg)	5.39	0.88	0.59	0.12	6.98
NOx Emissions (kg)	1.05	0.17	0.11	0.02	1.36
VOC Emissions (kg)	1.25	0.20	0.14	0.03	1.62
Unserviced Vehicles (#)	146	0	0	0	146
Vehicles in dilemma zone (#)	0	0	0	0	0

## 147: Kingwood Dr. &amp; Timber Shade Dr.

Direction	WB	NB	SB	All
Volume (vph)	773	158	91	1022
Control Delay / Veh (s/v)	14	3	25	13
Queue Delay / Veh (s/v)	0	1	0	0
Total Delay / Veh (s/v)	14	4	25	13
Total Delay (hr)	3	0	1	4
Stops / Veh	0.33	0.03	0.25	0.28
Stops (#)	254	5	23	282
Average Speed (mph)	27	13	9	26
Total Travel Time (hr)	16	0	1	17
Distance Traveled (mi)	442	4	8	454
Fuel Consumed (gal)	21	0	1	22
Fuel Economy (mpg)	20.9	NA	NA	20.3
CO Emissions (kg)	1.48	0.02	0.06	1.56
NOx Emissions (kg)	0.29	0.00	0.01	0.30
VOC Emissions (kg)	0.34	0.01	0.01	0.36
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	0	0

**149: Kingwood Dr. & Willow Terrace**

Direction	SE	NW	SW	All
Volume (vph)	86	446	439	971
Control Delay / Veh (s/v)	36	3	22	14
Queue Delay / Veh (s/v)	0	2	0	1
Total Delay / Veh (s/v)	36	6	22	16
Total Delay (hr)	1	1	3	4
Stops / Veh	0.37	0.02	0.52	0.28
Stops (#)	32	10	230	272
Average Speed (mph)	6	9	23	19
Total Travel Time (hr)	1	1	6	8
Distance Traveled (mi)	6	9	147	162
Fuel Consumed (gal)	1	1	9	11
Fuel Economy (mpg)	5.6	NA	15.5	14.2
CO Emissions (kg)	0.07	0.06	0.66	0.80
NOx Emissions (kg)	0.01	0.01	0.13	0.16
VOC Emissions (kg)	0.02	0.01	0.15	0.19
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	10	10

**151: Kingwood Dr. & High Valley**

Direction	EB	WB	SB	All
Volume (vph)	41	158	305	504
Control Delay / Veh (s/v)	32	19	17	19
Queue Delay / Veh (s/v)	0	3	0	1
Total Delay / Veh (s/v)	32	21	17	20
Total Delay (hr)	0	1	1	3
Stops / Veh	0.44	0.30	0.44	0.40
Stops (#)	18	48	135	201
Average Speed (mph)	5	4	24	18
Total Travel Time (hr)	0	1	4	5
Distance Traveled (mi)	2	4	84	90
Fuel Consumed (gal)	0	1	5	7
Fuel Economy (mpg)	NA	3.7	15.5	12.9
CO Emissions (kg)	0.03	0.08	0.38	0.49
NOx Emissions (kg)	0.01	0.02	0.07	0.09
VOC Emissions (kg)	0.01	0.02	0.09	0.11
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	10	10

**154: Kingwood Dr. & Mills Branch**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**157: US 59 NBFR**

Direction	NB	All
Volume (vph)	2774	2774
Control Delay / Veh (s/v)	0	0
Queue Delay / Veh (s/v)	0	0
Total Delay / Veh (s/v)	0	0
Total Delay (hr)	0	0
Stops / Veh	0.00	0.00
Stops (#)	0	0
Average Speed (mph)	30	30
Total Travel Time (hr)	108	108
Distance Traveled (mi)	3236	3236
Fuel Consumed (gal)	133	133
Fuel Economy (mpg)	24.3	24.3
CO Emissions (kg)	9.31	9.31
NOx Emissions (kg)	1.81	1.81
VOC Emissions (kg)	2.16	2.16
Unserviced Vehicles (#)	0	0
Vehicles in dilemma zone (#)	0	0

**159: Russel Palmer & Northpark Dr.**

Direction	WB	NB	All
Volume (vph)	1286	153	1439
Control Delay / Veh (s/v)	20	12	19
Queue Delay / Veh (s/v)	13	0	12
Total Delay / Veh (s/v)	33	12	31
Total Delay (hr)	12	1	12
Stops / Veh	0.41	0.08	0.38
Stops (#)	532	12	544
Average Speed (mph)	28	4	27
Total Travel Time (hr)	39	1	39
Distance Traveled (mi)	1067	2	1070
Fuel Consumed (gal)	52	1	53
Fuel Economy (mpg)	20.5	NA	20.3
CO Emissions (kg)	3.65	0.04	3.69
NOx Emissions (kg)	0.71	0.01	0.72
VOC Emissions (kg)	0.85	0.01	0.85
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	37	0	37

**161: Northpark Dr.**

Direction	EB	All
Volume (vph)	2207	2207
Control Delay / Veh (s/v)	0	0
Queue Delay / Veh (s/v)	0	0
Total Delay / Veh (s/v)	0	0
Total Delay (hr)	0	0
Stops / Veh	0.00	0.00
Stops (#)	0	0
Average Speed (mph)	45	45
Total Travel Time (hr)	25	25
Distance Traveled (mi)	1146	1146
Fuel Consumed (gal)	39	39
Fuel Economy (mpg)	29.2	29.2
CO Emissions (kg)	2.75	2.75
NOx Emissions (kg)	0.53	0.53
VOC Emissions (kg)	0.64	0.64
Unserved Vehicles (#)	0	0
Vehicles in dilemma zone (#)	0	0

**162: Northpark Dr.**

Direction	WB	NB	All
Volume (vph)	1501	26	1527
Control Delay / Veh (s/v)	0	14	0
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	0	14	0
Total Delay (hr)	0	0	0
Stops / Veh	0.00	0.50	0.01
Stops (#)	0	13	13
Average Speed (mph)	30	6	28
Total Travel Time (hr)	1	0	1
Distance Traveled (mi)	41	1	42
Fuel Consumed (gal)	2	0	2
Fuel Economy (mpg)	24.3	NA	22.4
CO Emissions (kg)	0.12	0.01	0.13
NOx Emissions (kg)	0.02	0.00	0.03
VOC Emissions (kg)	0.03	0.00	0.03
Unserviced Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0

**163: Northpark Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0



**164: Northpark Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**165: Northpark Dr. & Rock Springs**

Direction	SE	NW	NE	All
Volume (vph)	32	78	949	1059
Control Delay / Veh (s/v)	29	41	40	39
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	29	41	40	39
Total Delay (hr)	0	1	10	12
Stops / Veh	0.63	0.65	0.75	0.74
Stops (#)	20	51	715	786
Average Speed (mph)	4	12	8	9
Total Travel Time (hr)	0	1	13	15
Distance Traveled (mi)	1	17	109	127
Fuel Consumed (gal)	0	2	19	21
Fuel Economy (mpg)	NA	10.3	5.9	6.2
CO Emissions (kg)	0.02	0.11	1.30	1.44
NOx Emissions (kg)	0.00	0.02	0.25	0.28
VOC Emissions (kg)	0.01	0.03	0.30	0.33
Unserviced Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	28	28

**168: Kings Crossing**

Direction	NW	NE	SW	All
Volume (vph)	1761	223	357	2341
Control Delay / Veh (s/v)	344	25	187	290
Queue Delay / Veh (s/v)	0	0	4	1
Total Delay / Veh (s/v)	344	25	191	290
Total Delay (hr)	168	2	19	189
Stops / Veh	0.65	0.37	0.78	0.64
Stops (#)	1140	82	278	1500
Average Speed (mph)	2	6	3	2
Total Travel Time (hr)	176	2	21	199
Distance Traveled (mi)	311	11	55	377
Fuel Consumed (gal)	146	2	18	165
Fuel Economy (mpg)	2.1	5.5	3.1	2.3
CO Emissions (kg)	10.19	0.14	1.24	11.57
NOx Emissions (kg)	1.98	0.03	0.24	2.25
VOC Emissions (kg)	2.36	0.03	0.29	2.68
Unserviced Vehicles (#)	728	0	73	801
Vehicles in dilemma zone (#)	26	0	0	26

**171: Lake Houston Parkway**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserviced Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**172: Kings Crossing & Lake Houston Parkway**

Direction	SB	NE	SW	All
Volume (vph)	1691	195	352	2238
Control Delay / Veh (s/v)	389	60	169	326
Queue Delay / Veh (s/v)	0	0	0	0
Total Delay / Veh (s/v)	389	60	169	326
Total Delay (hr)	183	3	17	203
Stops / Veh	0.62	0.85	0.44	0.61
Stops (#)	1042	165	156	1363
Average Speed (mph)	3	5	1	2
Total Travel Time (hr)	195	4	17	216
Distance Traveled (mi)	494	17	18	530
Fuel Consumed (gal)	162	4	14	180
Fuel Economy (mpg)	3.1	4.4	1.3	2.9
CO Emissions (kg)	11.32	0.28	0.96	12.56
NOx Emissions (kg)	2.20	0.05	0.19	2.44
VOC Emissions (kg)	2.62	0.06	0.22	2.91
Unserved Vehicles (#)	756	0	75	831
Vehicles in dilemma zone (#)	0	0	0	0

**174:**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**175: Rustic Woods**

Direction	EB	WB	SB	All
Volume (vph)	167	239	1285	1691
Control Delay / Veh (s/v)	28	20	28	26
Queue Delay / Veh (s/v)	0	7	0	1
Total Delay / Veh (s/v)	28	27	28	27
Total Delay (hr)	1	2	10	13
Stops / Veh	0.37	0.26	0.69	0.60
Stops (#)	61	61	889	1011
Average Speed (mph)	10	3	28	26
Total Travel Time (hr)	2	2	34	38
Distance Traveled (mi)	18	5	971	995
Fuel Consumed (gal)	2	2	51	55
Fuel Economy (mpg)	9.0	2.8	19.1	18.2
CO Emissions (kg)	0.14	0.13	3.55	3.82
NOx Emissions (kg)	0.03	0.03	0.69	0.74
VOC Emissions (kg)	0.03	0.03	0.82	0.88
Unserved Vehicles (#)	0	0	0	0
Vehicles in dilemma zone (#)	0	0	41	41

**178: Lake Houston Parkway & Lake Houston Pkwy**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**185: Hamblen**

Direction	EB	WB	All
Volume (vph)	121	264	385
Control Delay / Veh (s/v)	0	4	3
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	0	4	3
Total Delay (hr)	0	0	0
Stops / Veh	0.00	0.73	0.50
Stops (#)	0	193	193
Average Speed (mph)	30	28	28
Total Travel Time (hr)	0	4	4
Distance Traveled (mi)	3	108	111
Fuel Consumed (gal)	0	6	6
Fuel Economy (mpg)	NA	18.9	19.0
CO Emissions (kg)	0.01	0.40	0.41
NOx Emissions (kg)	0.00	0.08	0.08
VOC Emissions (kg)	0.00	0.09	0.09
Unserviced Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0

**188: Sorters**

Direction	NB	SB	All
Volume (vph)	414	184	598
Control Delay / Veh (s/v)	0	0	0
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	0	0	0
Total Delay (hr)	0	0	0
Stops / Veh	0.00	0.00	0.00
Stops (#)	0	0	0
Average Speed (mph)	35	30	35
Total Travel Time (hr)	13	0	13
Distance Traveled (mi)	454	2	456
Fuel Consumed (gal)	17	0	17
Fuel Economy (mpg)	26.2	NA	26.2
CO Emissions (kg)	1.21	0.01	1.22
NOx Emissions (kg)	0.24	0.00	0.24
VOC Emissions (kg)	0.28	0.00	0.28
Unserviced Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0

**189: Northpark Dr.**

Direction	All
Volume (vph)	0
Control Delay / Veh (s/v)	
Queue Delay / Veh (s/v)	
Total Delay / Veh (s/v)	
Total Delay (hr)	0
Stops / Veh	
Stops (#)	0
Average Speed (mph)	0
Total Travel Time (hr)	0
Distance Traveled (mi)	0
Fuel Consumed (gal)	0
Fuel Economy (mpg)	NA
CO Emissions (kg)	0.00
NOx Emissions (kg)	0.00
VOC Emissions (kg)	0.00
Unserved Vehicles (#)	0
Vehicles in dilemma zone (#)	0

**Network Totals**

Number of Intersections	75
Control Delay / Veh (s/v)	62
Queue Delay / Veh (s/v)	2
Total Delay / Veh (s/v)	64
Total Delay (hr)	2288
Stops / Veh	0.57
Stops (#)	72751
Average Speed (mph)	13
Total Travel Time (hr)	3707
Distance Traveled (mi)	48603
Fuel Consumed (gal)	4127
Fuel Economy (mpg)	11.8
CO Emissions (kg)	288.50
NOx Emissions (kg)	56.13
VOC Emissions (kg)	66.86
Unserved Vehicles (#)	6342
Vehicles in dilemma zone (#)	1469
Performance Index	2490.0