# Travel Time & Delay Report for Kingwood Dr.

## Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT:

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL:

Summarized Cumulative Travel Distance since beginning of Run (feet)

#### StopD:

Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay 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 spee after exceeding 15 mph until it exceeds 15 mph once again

#### BS1T:

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

#### CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

## 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 exc

#### Summary of runs Eastbound from Sorters Rd. (#16)

4 Before-type runs, 4 of unverifiable origin, collected Thursday 9/11/2014 to Thursday 9/11/2014, over day(s) Thu, with starting times during

| Node                       | TT        | <u>CTT</u>    | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> |
|----------------------------|-----------|---------------|-----------|------------|--------------|---------------|------|-------|-----------|
| o US 59 SBFR (#15)         |           |               |           |            |              |               |      |       |           |
| Average<br>Before<br>(n=4) | 113       | 113           | 3322      | 3322       | 40           | 40            | 40   | 40    | 22.4      |
| Std Dev<br>Before<br>(n=4) | 47        | 47            | 46        | 46         | 42           | 42            | 43   | 43    | 7.8       |
| to US 59                   | NBFR (#14 | <del>1)</del> |           |            |              |               |      |       |           |
| Average<br>Before<br>(n=4) | 7         | 120           | 291       | 3613       | 0            | 40            | 0    | 40    | 27.9      |

| Std Dev<br>Before<br>(n=4) | 1           | 47         | 1    | 47    | 0  | 42       | 0        | 43       | 3.2  |
|----------------------------|-------------|------------|------|-------|----|----------|----------|----------|------|
| to Loop 4                  | 94 (#13)    |            |      |       |    |          |          |          |      |
| Average<br>Before<br>(n=4) | 27          | 147        | 1362 | 4975  | 0  | 40       | 0        | 40       | 34.9 |
| Std Dev<br>Before<br>(n=4) | 2           | 47         | 1    | 47    | 0  | 42       | 0        | 43       | 3    |
|                            | Forest Dr.  | (#12)      |      |       |    |          |          |          |      |
| Average<br>Before<br>(n=4) | 14          | 161        | 539  | 5515  | 1  | 41       | 1        | 42       | 27.6 |
| Std Dev<br>Before<br>(n=4) | 5           | 44         | 0    | 47    | 2  | 41       | 2        | 41       | 7.7  |
| to Chestr                  | nut Ridge   | Rd. (#11)  |      |       |    | •        |          | •        |      |
| Average<br>Before<br>(n=4) | 42          | 204        | 1788 | 7303  | 7  | 47       | 7        | 48       | 31.8 |
| Std Dev<br>Before<br>(n=4) | 18          | 41         | 23   | 48    | 14 | 37       | 14       | 37       | 9.1  |
|                            | Oak Dr. (#  | ±10)       |      |       |    | <u> </u> | <u> </u> | <u> </u> |      |
| Average<br>Before<br>(n=4) | 53          | 256        | 2410 | 9713  | 5  | 52       | 5        | 54       | 32.3 |
| Std Dev<br>Before<br>(n=4) | 12          | 46         | 12   | 52    | 10 | 37       | 10       | 38       | 6.1  |
| · ·                        | and Grove   | Dr. (#9)   |      | ı     |    |          |          |          |      |
| Average<br>Before<br>(n=4) | 61          | 317        | 2879 | 12591 | 4  | 56       | 4        | 58       | 33.3 |
| Std Dev<br>Before<br>(n=4) | 12          | 53         | 6    | 55    | 8  | 39       | 8        | 40       | 6.1  |
|                            | and Hills I | Dr. (#8)   |      | •     |    |          |          |          |      |
| Average<br>Before<br>(n=4) | 88          | 404        | 2737 | 15329 | 35 | 91       | 35       | 93       | 23.1 |
| Std Dev<br>Before<br>(n=4) | 25          | 52         | 40   | 45    | 24 | 41       | 24       | 40       | 8.5  |
| to Valley                  | Manor Dr.   | (#7)       |      |       |    |          |          |          |      |
| Average<br>Before<br>(n=4) | 138         | 543        | 6502 | 21830 | 26 | 117      | 26       | 119      | 32.3 |
| Std Dev<br>Before<br>(n=4) | 14          | 45         | 18   | 54    | 18 | 40       | 18       | 39       | 3.2  |
|                            | e Houstor   | າ Pkwy. (# | 6)   |       |    |          |          |          |      |
| Average<br>Before<br>(n=4) | 96          | 639        | 4938 | 26769 | 5  | 122      | 5        | 124      | 35.3 |
| . ,                        |             |            |      |       |    |          |          |          |      |

| Std Dev<br>Before<br>(n=4) | 10          | 45       | 6    | 48    | 7  | 41  | 7  | 39  | 3.9  |
|----------------------------|-------------|----------|------|-------|----|-----|----|-----|------|
| to Forest                  | Garden D    | Or. (#5) |      |       |    |     |    |     |      |
| Average<br>Before<br>(n=4) | 66          | 705      | 3501 | 30269 | 4  | 126 | 4  | 128 | 36.3 |
| Std Dev<br>Before<br>(n=4) | 6           | 44       | 11   | 48    | 7  | 36  | 7  | 35  | 2.9  |
| to Timber                  | r Shade D   | r. (#4)  |      | •     |    |     |    |     |      |
| Average<br>Before<br>(n=4) | 47          | 752      | 1899 | 32169 | 13 | 139 | 13 | 141 | 30.7 |
| Std Dev<br>Before<br>(n=4) | 20          | 60       | 15   | 58    | 18 | 49  | 18 | 48  | 10.8 |
| to Willow                  | Terrace I   | Dr. (#3) | I.   |       | Į. | Į.  | Į. | Į.  |      |
| Average<br>Before<br>(n=4) | 72          | 825      | 2946 | 35114 | 9  | 148 | 13 | 154 | 28.3 |
| Std Dev<br>Before<br>(n=4) | 12          | 60       | 10   | 53    | 11 | 48  | 15 | 50  | 4.1  |
| to High V                  | alley Dr. ( | (#2)     |      |       |    |     |    |     |      |
| Average<br>Before<br>(n=4) | 44          | 868      | 1736 | 36850 | 9  | 157 | 9  | 163 | 28.9 |
| Std Dev<br>Before<br>(n=4) | 13          | 51       | 20   | 58    | 11 | 40  | 11 | 41  | 8    |
| to Mills B                 | ranch Dr.   | (#1)     |      |       |    |     |    |     |      |
| Average<br>Before<br>(n=4) | 33          | 901      | 1317 | 38167 | 4  | 161 | 5  | 167 | 27.4 |
| Std Dev<br>Before<br>(n=4) | 4           | 51       | 1    | 58    | 3  | 40  | 2  | 40  | 4    |
| · /                        | 4           | !        |      | !     | !  | !   | !  |     |      |

Cumulative Travel Distance since beginning of Run (feet)

9:41:14 AM

# Travel Time & Delay Report for Kingwood Dr.

## **Contents:**

(imported) EB AM #1, (imported) EB AM #2, (imported) EB AM #3, (imported) EB AM #4, Cumulative Reports
Collapse All

# [-] Before-type Trip Log "(imported) EB AM #1", AM-period, started Thursday 9/11/2014 6:53:30 AN

Entered artery 6:53:44 am (14 seconds) traveling Eastbound from Sorters Rd. (#1

| No. 1                               |           |            |           |            |              |               | _    |       | ters ka. (#1 |
|-------------------------------------|-----------|------------|-----------|------------|--------------|---------------|------|-------|--------------|
| Node                                | <u>TT</u> | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u>    |
| to US 59<br>SBFR (#15)              | 80        | 80         | 3307      | 3307       | 6            | 6             | 6    | 6     | 28.3         |
| to US 59<br>NBFR<br>(#14)           | 6         | 86         | 292       | 3599       | 0            | 6             | 0    | 6     | 30.6         |
| to Loop 494<br>(#13)                | 26        | 112        | 1362      | 4961       | 0            | 6             | 0    | 6     | 35.9         |
| to Royal<br>Forest Dr.<br>(#12)     | 12        | 124        | 540       | 5500       | 0            | 6             | 0    | 6     | 29.8         |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 33        | 157        | 1777      | 7278       | 0            | 6             | 0    | 6     | 37.1         |
| to Green<br>Oak Dr.<br>(#10)        | 45        | 202        | 2402      | 9680       | 0            | 6             | 0    | 6     | 36.4         |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 49        | 251        | 2877      | 12557      | 0            | 6             | 0    | 6     | 40.1         |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 98        | 350        | 2796      | 15353      | 50           | 55            | 51   | 57    | 19.4         |
| to Valley<br>Manor Dr.<br>(#7)      | 149       | 499        | 6501      | 21854      | 34           | 89            | 34   | 91    | 29.7         |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 102       | 601        | 4933      | 26787      | 6            | 95            | 6    | 97    | 32.9         |
| to Forest<br>Garden Dr.<br>(#5)     | 64        | 665        | 3495      | 30281      | 0            | 95            | 0    | 97    | 37.3         |
| to Timber<br>Shade Dr.<br>(#4)      | 48        | 713        | 1914      | 32195      | 13           | 108           | 13   | 110   | 27           |
| to Willow<br>Terrace Dr.<br>(#3)    | 63        | 777        | 2931      | 35126      | 8            | 116           | 9    | 118   | 31.6         |
| to High<br>Valley Dr.<br>(#2)       | 60        | 837        | 1765      | 36891      | 24           | 140           | 24   | 142   | 20           |
| to Mills<br>Branch Dr.<br>(#1)      | 37        | 874        | 1316      | 38207      | 5            | 145           | 5    | 147   | 24.3         |

# [-] Before-type Trip Log "(imported) EB AM #2", AM-period, started Thursday 9/11/2014 7:27:48 AN

Entered artery 7:28:04 am (16 seconds) traveling Eastbound from Sorters Rd. (#1

|                                     |           |            | ittered arter | , , , ===, , , | (=======     | ,             | -6   |       |           |
|-------------------------------------|-----------|------------|---------------|----------------|--------------|---------------|------|-------|-----------|
| Node                                | <u>TT</u> | <u>CTT</u> | <u>TL</u>     | <u>CTL</u>     | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> |
| to US 59<br>SBFR (#15)              | 177       | 177        | 3390          | 3390           | 96           | 96            | 97   | 97    | 13        |
| to US 59<br>NBFR<br>(#14)           | 7         | 185        | 291           | 3681           | 0            | 96            | 0    | 97    | 27.3      |
| to Loop 494<br>(#13)                | 28        | 213        | 1363          | 5043           | 0            | 96            | 0    | 97    | 33.2      |
| to Royal<br>Forest Dr.<br>(#12)     | 11        | 223        | 539           | 5583           | 0            | 96            | 0    | 97    | 33.8      |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 34        | 257        | 1775          | 7358           | 0            | 96            | 0    | 97    | 36        |
| to Green<br>Oak Dr.<br>(#10)        | 51        | 309        | 2402          | 9760           | 0            | 96            | 0    | 97    | 31.8      |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 59        | 367        | 2875          | 12636          | 0            | 96            | 0    | 97    | 33.4      |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 108       | 475        | 2717          | 15352          | 53           | 149           | 53   | 150   | 17.2      |
| to Valley<br>Manor Dr.<br>(#7)      | 130       | 605        | 6527          | 21880          | 18           | 167           | 18   | 168   | 34.1      |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 97        | 702        | 4934          | 26814          | 0            | 167           | 0    | 168   | 34.8      |
| to Forest<br>Garden Dr.<br>(#5)     | 65        | 767        | 3495          | 30309          | 0            | 167           | 0    | 168   | 36.4      |
| to Timber<br>Shade Dr.<br>(#4)      | 75        | 842        | 1910          | 32219          | 38           | 205           | 39   | 206   | 17.4      |
| to Willow<br>Terrace Dr.<br>(#3)    | 67        | 909        | 2951          | 35170          | 0            | 205           | 3    | 210   | 29.8      |
| to High<br>Valley Dr.<br>(#2)       | 35        | 944        | 1722          | 36892          | 0            | 205           | 0    | 210   | 33.8      |
| to Mills<br>Branch Dr.<br>(#1)      | 34        | 978        | 1319          | 38210          | 6            | 211           | 6    | 216   | 26.5      |

Entered artery 8:08:06 am (13 seconds) traveling Eastbound from Sorters Rd. (#1

|                                     |     |            |           |            |              | ,             | 0    | 14 110111 301 |           |
|-------------------------------------|-----|------------|-----------|------------|--------------|---------------|------|---------------|-----------|
| Node                                | TΤ  | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T         | <u>AS</u> |
| to US 59<br>SBFR (#15)              | 77  | 77         | 3308      | 3308       | 8            | 8             | 9    | 9             | 29.5      |
| to US 59<br>NBFR<br>(#14)           | 8   | 85         | 290       | 3598       | 0            | 8             | 0    | 9             | 23.5      |
| to Loop 494<br>(#13)                | 29  | 114        | 1364      | 4962       | 0            | 8             | 0    | 9             | 31.9      |
| to Royal<br>Forest Dr.<br>(#12)     | 22  | 137        | 540       | 5502       | 4            | 12            | 5    | 14            | 16.4      |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 69  | 205        | 1823      | 7325       | 27           | 39            | 28   | 42            | 18.1      |
| to Green<br>Oak Dr.<br>(#10)        | 69  | 275        | 2428      | 9753       | 20           | 59            | 20   | 62            | 23.9      |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 78  | 353        | 2887      | 12640      | 16           | 75            | 17   | 79            | 25.2      |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 52  | 404        | 2707      | 15347      | 0            | 75            | 0    | 79            | 35.7      |
| to Valley<br>Manor Dr.<br>(#7)      | 124 | 528        | 6486      | 21833      | 6            | 81            | 6    | 85            | 35.8      |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 82  | 610        | 4938      | 26771      | 0            | 81            | 0    | 85            | 40.9      |
| to Forest<br>Garden Dr.<br>(#5)     | 74  | 685        | 3517      | 30288      | 15           | 96            | 15   | 100           | 32.3      |
| to Timber<br>Shade Dr.<br>(#4)      | 36  | 721        | 1885      | 32172      | 0            | 96            | 0    | 100           | 35.8      |
| to Willow<br>Terrace Dr.<br>(#3)    | 68  | 788        | 2947      | 35119      | 5            | 101           | 5    | 106           | 29.6      |
| to High<br>Valley Dr.<br>(#2)       | 48  | 836        | 1729      | 36848      | 12           | 112           | 12   | 118           | 24.7      |
| to Mills<br>Branch Dr.<br>(#1)      | 35  | 871        | 1318      | 38165      | 6            | 118           | 6    | 123           | 25.6      |

[-] Before-type Trip Log "(imported) EB AM #4", AM-period, started Thursday 9/11/2014 8:16:52 AN

| Node                                | TT  | CTT | <u>TL</u> | CTL   | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> |
|-------------------------------------|-----|-----|-----------|-------|-------|---------------|------|-------|-----------|
| to US 59<br>SBFR (#15)              | 119 | 119 | 3283      | 3283  | 48    | 48            | 49   | 49    | 18.9      |
| to US 59<br>NBFR<br>(#14)           | 7   | 125 | 291       | 3574  | 0     | 48            | 0    | 49    | 30        |
| to Loop 494<br>(#13)                | 24  | 149 | 1362      | 4936  | 0     | 48            | 0    | 49    | 38.7      |
| to Royal<br>Forest Dr.<br>(#12)     | 12  | 161 | 539       | 5475  | 0     | 48            | 0    | 49    | 30.2      |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 34  | 195 | 1776      | 7251  | 0     | 48            | 0    | 49    | 35.8      |
| to Green<br>Oak Dr.<br>(#10)        | 44  | 239 | 2406      | 9657  | 0     | 48            | 0    | 49    | 37.1      |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 57  | 296 | 2874      | 12532 | 0     | 48            | 0    | 49    | 34.5      |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 92  | 388 | 2730      | 15262 | 36    | 85            | 37   | 86    | 20.2      |
| to Valley<br>Manor Dr.<br>(#7)      | 150 | 539 | 6493      | 21755 | 47    | 132           | 46   | 132   | 29.4      |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 104 | 643 | 4947      | 26702 | 14    | 146           | 14   | 146   | 32.5      |
| to Forest<br>Garden Dr.<br>(#5)     | 61  | 703 | 3498      | 30200 | 0     | 146           | 0    | 146   | 39.3      |
| to Timber<br>Shade Dr.<br>(#4)      | 30  | 734 | 1888      | 32087 | 0     | 146           | 0    | 146   | 42.4      |
| to Willow<br>Terrace Dr.<br>(#3)    | 90  | 824 | 2955      | 35042 | 24    | 170           | 35   | 181   | 22.3      |
| to High<br>Valley Dr.<br>(#2)       | 32  | 856 | 1727      | 36769 | 0     | 170           | 0    | 181   | 37.3      |
| to Mills<br>Branch Dr.<br>(#1)      | 27  | 883 | 1316      | 38085 | 0     | 170           | 3    | 183   | 33.2      |

# **Cumulative Reports**

## l artery 6:53:44 am (14 seconds) traveling Eastbound from Sorters R

| Node                           | CTT | CTL   | CStopD | CBS1T | CAS  |
|--------------------------------|-----|-------|--------|-------|------|
| to Mills<br>Branch Dr.<br>(#1) | 874 | 38207 | 145    | 147   | 29.8 |

## [-] Before-type Trip Log "(imported) EB AM #2", AM-period, started Thursday 9/11/2014 7:27:48 AN

## l artery 7:28:04 am (16 seconds) traveling Eastbound from Sorters R

| Node                           | CTT | <u>CTL</u> | CStopD | CBS1T | CAS  |
|--------------------------------|-----|------------|--------|-------|------|
| to Mills<br>Branch Dr.<br>(#1) | 978 | 38210      | 211    | 216   | 26.6 |

## [-] Before-type Trip Log "(imported) EB AM #3", AM-period, started Thursday 9/11/2014 8:07:54 AN

## l artery 8:08:06 am (13 seconds) traveling Eastbound from Sorters R

| Node                           | <u>CTT</u> | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|--------------------------------|------------|------------|---------------|-------|------|
| to Mills<br>Branch Dr.<br>(#1) | 871        | 38165      | 118           | 123   | 29.9 |

## [-] Before-type Trip Log "(imported) EB AM #4", AM-period, started Thursday 9/11/2014 8:16:52 AN

## l artery 8:17:01 am (10 seconds) traveling Eastbound from Sorters R

|             | Node | <u>CTT</u> | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|-------------|------|------------|------------|---------------|-------|------|
| <u>(#1)</u> |      | 883        | 38085      | 170           | 183   | 29.4 |

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

y" is counted from when

d drops below 5 mph

eeding 15 mph

## g 6:53:44 AM to 8:17:01 AM

| CAS  | <u>Stops</u> |
|------|--------------|
|      | -            |
| 22.4 | 1.8          |
| 7.8  | 0.5          |
|      |              |
| 22.6 | 0            |

| 7.4  | 0   |
|------|-----|
|      |     |
| 24.6 | 0   |
| 6.6  | 0   |
|      |     |
| 24.4 | 0.3 |
| 5.7  | 0.5 |
|      |     |
| 25.2 | 0.3 |
| 5    | 0.5 |
|      |     |
| 26.5 | 0.3 |
| 4.8  | 0.5 |
|      |     |
| 27.7 | 0.3 |
| 4.9  | 0.5 |
|      |     |
| 26.2 | 0.8 |
| 3.3  | 0.5 |
|      |     |
| 27.6 | 1   |
| 2.2  | 0   |
|      |     |
| 28.7 | 0.5 |
|      |     |

| 2    | 0.6 |
|------|-----|
|      |     |
| 29.4 | 0.3 |
| 1.8  | 0.5 |
|      |     |
| 29.3 | 0.5 |
| 2.2  | 0.6 |
|      |     |
| 29.1 | 0.8 |
| 2    | 0.5 |
|      |     |
| 29   | 0.5 |
| 1.6  | 0.6 |
|      |     |
| 28.9 | 0.8 |
| 1.5  | 0.5 |
|      |     |

.6)

| (0.  |              |  |
|------|--------------|--|
| CAS  | <u>Stops</u> |  |
| 28.3 | 1            |  |
| 28.4 | 0            |  |
| 30.2 | 0            |  |
| 30.1 | 0            |  |
| 31.6 | 0            |  |
| 32.6 | 0            |  |
| 34.1 | 0            |  |
| 29.9 | 1            |  |
| 29.9 | 1            |  |
| 30.4 | 1            |  |
| 31   | 0            |  |
| 30.8 | 1            |  |
| 30.8 | 1            |  |
| 30.1 | 1            |  |
| 29.8 | 1            |  |
|      |              |  |

6)

| .6)  |              |  |
|------|--------------|--|
| CAS  | <u>Stops</u> |  |
| 13   | 2            |  |
| 13.6 | 0            |  |
| 16.2 | 0            |  |
| 17   | 0            |  |
| 19.5 | 0            |  |
| 21.6 | 0            |  |
| 23.5 | 0            |  |
| 22   | 1            |  |
| 24.7 | 1            |  |
| 26.1 | 0            |  |
| 26.9 | 0            |  |
| 26.1 | 1            |  |
| 26.4 | 0            |  |
| 26.6 | 0            |  |
| 26.6 | 1            |  |

| ره.  |              |  |
|------|--------------|--|
| CAS  | <u>Stops</u> |  |
| 29.5 | 2            |  |
| 28.9 | 0            |  |
| 29.6 | 0            |  |
| 27.5 | 1            |  |
| 24.3 | 1            |  |
| 24.2 | 1            |  |
| 24.4 | 1            |  |
| 25.9 | 0            |  |
| 28.2 | 1            |  |
| 29.9 | 0            |  |
| 30.2 | 1            |  |
| 30.4 | 0            |  |
| 30.4 | 1            |  |
| 30   | 1            |  |
| 29.9 | 1            |  |

6)

| CAS  | Stops |  |
|------|-------|--|
| 18.9 | 2     |  |
| 19.5 | 0     |  |
| 22.6 | 0     |  |
| 23.1 | 0     |  |
| 25.3 | 0     |  |
| 27.5 | 0     |  |
| 28.9 | 0     |  |
| 26.8 | 1     |  |
| 27.5 | 1     |  |
| 28.3 | 1     |  |
| 29.3 | 0     |  |
| 29.8 | 0     |  |
| 29   | 1     |  |
| 29.3 | 0     |  |
| 29.4 | 0     |  |

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↑Contents

## Travel Time & Delay Report for Kingwood Dr.

### Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL:

Summarized Cumulative Travel Distance since beginning of Run (feet)

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

BS1T:

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

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

#### Summary of runs Westbound from Mills Branch Dr. (#1)

Before-type runs, 3 of unverifiable origin, collected Thursday 9/11/2014 to Thursday 9/11/2014, over day(s) Thu, with starting times during 6:36:51 AM to 7:46:36 AN

|                            |             |            |           |            |              | ay 9/11/2014, |      |       |           |      |              |
|----------------------------|-------------|------------|-----------|------------|--------------|---------------|------|-------|-----------|------|--------------|
| Node                       | <u>TT</u>   | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|                            | alley Dr. ( | #2)        |           |            |              |               |      |       |           |      |              |
| Average<br>Before<br>(n=3) | 33          | 33         | 1370      | 1370       | 0            | 0             | 2    | 2     | 28.7      | 28.7 | 0            |
| Std Dev<br>Before<br>(n=3) | 4           | 4          | 7         | 7          | 0            | 0             | 4    | 4     | 3.1       | 3.1  | 0            |
| to Willow                  | Terrace [   | Or. (#3)   |           |            |              |               |      |       |           |      |              |
| Average<br>Before<br>(n=3) | 60          | 93         | 1644      | 3015       | 26           | 26            | 26   | 28    | 21.6      | 23.1 | 0.7          |
| Std Dev<br>Before<br>(n=3) | 27          | 24         | 14        | 16         | 28           | 28            | 28   | 25    | 10.2      | 5.7  | 0.6          |
| to Timbe                   | r Shade D   | r. (#4)    | •         | •          | •            | •             |      | •     |           | •    |              |
| Average<br>Before<br>(n=3) | 64          | 157        | 2846      | 5861       | 11           | 37            | 11   | 40    | 32.5      | 26.8 | 0.3          |
| Std Dev<br>Before<br>(n=3) | 24          | 47         | 10        | 19         | 19           | 46            | 20   | 44    | 9.8       | 7.1  | 0.6          |
| to Forest                  | Garden D    | r. (#5)    |           |            |              |               |      |       |           |      |              |
| Average<br>Before<br>(n=3) | 75          | 233        | 2003      | 7864       | 36           | 73            | 36   | 76    | 19.8      | 24.4 | 1            |
| Std Dev<br>Before<br>(n=3) | 28          | 72         | 30        | 39         | 25           | 67            | 24   | 65    | 6.7       | 6.4  | 0            |
|                            |             |            |           |            |              |               |      |       |           |      |              |

| to W. Lak                  | e Houstor   | n Pkwy. (# | 6)   |             |        |             |        |            |        |      |     |
|----------------------------|-------------|------------|------|-------------|--------|-------------|--------|------------|--------|------|-----|
| Average<br>Before<br>(n=3) | 150         | 383        | 3583 | 11447       | 82     | 155         | 82     | 158        | 16.3   | 20.9 | 1   |
| Std Dev<br>Before<br>(n=3) | 9           | 80         | 25   | 62          | 7      | 74          | 7      | 71         | 0.9    | 3.9  | 0   |
|                            | Manor Dr.   | . (#7)     |      | l           |        | l           |        |            |        |      |     |
| Average<br>Before<br>(n=3) | 82          | 464        | 4870 | 16317       | 0      | 155         | 0      | 158        | 40.6   | 24.4 | 0   |
| Std Dev<br>Before<br>(n=3) | 1           | 81         | 1    | 63          | 0      | 74          | 0      | 71         | 0.6    | 3.8  | 0   |
| to Woodl                   | and Hills I | Dr. (#8)   |      |             | I.     |             | I.     | l .        | I.     | l .  |     |
| Average<br>Before<br>(n=3) | 106         | 571        | 6420 | 22737       | 0      | 155         | 0      | 158        | 41.4   | 27.6 | 0   |
| Std Dev<br>Before<br>(n=3) | 10          | 91         | 5    | 64          | 0      | 74          | 0      | 71         | 3.6    | 4    | 0   |
| to Woodl                   | and Grove   | e Dr. (#9) |      |             | I.     |             | l.     | ı          | l.     | ı    |     |
| Average<br>Before<br>(n=3) | 45          | 616        | 2751 | 25488       | 0      | 155         | 0      | 158        | 41.9   | 28.6 | 0   |
| Std Dev<br>Before<br>(n=3) | 5           | 96         | 5    | 65          | 0      | 74          | 0      | 71         | 4.4    | 4    | 0   |
|                            | Oak Dr. (#  | 10)        |      | 1           | ·<br>I | 1           | ·<br>I |            | ·<br>I |      |     |
| Average<br>Before<br>(n=3) | 70          | 685        | 2900 | 28388       | 14     | 169         | 14     | 172        | 30.1   | 28.7 | 0.7 |
| Std Dev<br>Before<br>(n=3) | 19          | 105        | 5    | 70          | 14     | 75          | 15     | <i>7</i> 2 | 9.7    | 4.1  | 0.6 |
|                            | ut Ridge    | Rd. (#11)  |      | T           | Ι      | T           | Ι      |            | Ι      |      |     |
| Average<br>Before<br>(n=3) | 55          | 741        | 2384 | 30772       | 6      | 174         | 6      | 178        | 30.3   | 28.7 | 0.3 |
| Std Dev<br>Before<br>(n=3) | 12          | 101        | 14   | 59          | 10     | 69          | 10     | 66         | 5.9    | 3.6  | 0.6 |
|                            | Forest Dr.  | (#12)      |      | ı           | ı      | ı           | ı      |            | ı      |      |     |
| Average<br>Before<br>(n=3) | 49          | 790        | 1777 | 32548       | 13     | 187         | 14     | 192        | 28.7   | 28.5 | 0.3 |
| Std Dev<br>Before<br>(n=3) | 26          | 127        | 10   | 63          | 23     | 92          | 24     | 90         | 11.9   | 4.2  | 0.6 |
| to Loop 4                  | 94 (#13)    | I          |      | ı           | ı      | ı           | ı      |            | ı      |      |     |
| Average<br>Before<br>(n=3) | 14          | 804        | 539  | 33088       | 0      | 187         | 0      | 192        | 26.3   | 28.5 | 0   |
| Std Dev<br>Before<br>(n=3) | 2           | 128        | 1    | 64          | 0      | 92          | 0      | 90         | 3.1    | 4.1  | 0   |
|                            | NBFR (#1    | 4)         |      | I           | Τ      | I           | Γ      |            | Γ      |      |     |
| Average<br>Before<br>(n=3) | 34          | 838        | 1366 | 34453       | 3      | 191         | 4      | 196        | 28.8   | 28.5 | 0.3 |
| Std Dev<br>Before<br>(n=3) | 9           | 135        | 3    | 65          | 6      | 98          | 7      | 96         | 8.6    | 4.2  | 0.6 |
|                            | SBFR (#15   | 5)         |      | <del></del> |        | <del></del> |        |            |        |      |     |
| Average<br>Before<br>(n=3) | 5           | 843        | 291  | 34744       | 0      | 191         | 0      | 196        | 38.8   | 28.5 | 0   |
| Std Dev<br>Before<br>(n=3) | 1           | 136        | 1    | 64          | 0      | 98          | 0      | 96         | 4.5    | 4.2  | 0   |
| to Sorters                 | s Rd. (#16  | )          |      | 1           | ı      | 1           | ı      |            | ı      |      |     |
| Average<br>Before<br>(n=3) | 82          | 925        | 3318 | 38062       | 15     | 205         | 15     | 211        | 27.8   | 28.5 | 2   |

| Std Dev<br>Before | 6 | 142 | 10 | 65 | 4 | 101 | 5 | 100 | 2.2 | 4 | 0 |
|-------------------|---|-----|----|----|---|-----|---|-----|-----|---|---|
| (n=3)             |   |     |    |    |   |     |   |     |     |   |   |

#### 9:44:51 AM

## Travel Time & Delay Report for Kingwood Dr.

### Contents:

(imported) WB AM #1, (imported) WB AM #2, (imported) WB AM #3, Cumulative Reports Collapse All

## [-] Before-type Trip Log "(imported) WB AM #1", AM-period, started Thursday 9/11/2014 6:36:47 AM↑Contents

## Entered artery 6:36:51 am (5 seconds) traveling Westbound from Mills Branch Dr. (#1)

|                                     | Entered artery 6:36:31 am (3 seconds) traveling westbound from while Branch Dr. (#1) |     |           |       |       |               |      |       |      |      |       |  |
|-------------------------------------|--|-----|-----------|-------|-------|---------------|------|-------|------|------|-------|--|
| Node                                | TT   | CTT | <u>TL</u> | CTL   | StopD | <u>CStopD</u> | BS1T | CBS1T | AS   | CAS  | Stops |  |
| to High<br>Valley Dr.<br>(#2)       | 37   | 37  | 1364      | 1364  | 0     | 0             | 7    | 7     | 25.1 | 25.1 | 0     |  |
| to Willow<br>Terrace Dr.<br>(#3)    | 34   | 71  | 1635      | 2998  | 0     | 0             | 0    | 7     | 32.8 | 28.8 | 0     |  |
| to Timber<br>Shade Dr.<br>(#4)      | 50   | 121 | 2850      | 5848  | 0     | 0             | 0    | 7     | 38.8 | 32.9 | 0     |  |
| to Forest<br>Garden Dr.<br>(#5)     | 70   | 191 | 2025      | 7874  | 34    | 34            | 34   | 41    | 19.8 | 28.1 | 1     |  |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 142  | 333 | 3603      | 11477 | 76    | 110           | 76   | 117   | 17.3 | 23.5 | 1     |  |
| to Valley<br>Manor Dr.<br>(#7)      | 82   | 415 | 4871      | 16347 | 0     | 110           | 0    | 117   | 40.4 | 26.8 | 0     |  |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 101  | 516 | 6416      | 22763 | 0     | 110           | 0    | 117   | 43.2 | 30.1 | 0     |  |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 41   | 557 | 2757      | 25519 | 0     | 110           | 0    | 117   | 45.9 | 31.2 | 0     |  |
| to Green<br>Oak Dr.<br>(#10)        | 48   | 605 | 2901      | 28421 | 0     | 110           | 0    | 117   | 41.2 | 32   | 0     |  |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 68   | 673 | 2386      | 30807 | 17    | 127           | 17   | 135   | 23.9 | 31.2 | 1     |  |
| to Royal<br>Forest Dr.<br>(#12)     | 36   | 710 | 1769      | 32576 | 0     | 127           | 0    | 135   | 33.2 | 31.3 | 0     |  |
| to Loop<br>494 (#13)                | 14   | 724 | 541       | 33117 | 0     | 127           | 0    | 135   | 26.2 | 31.2 | 0     |  |
| to US 59<br>NBFR<br>(#14)           | 36   | 759 | 1363      | 34480 | 0     | 127           | 0    | 135   | 26.2 | 31   | 0     |  |
| to US 59<br>SBFR<br>(#15)           | 5  | 764 | 290       | 34770 | 0     | 127           | 0    | 135   | 41.2 | 31   | 0     |  |
| to Sorters<br>Rd. (#16)             | 80   | 844 | 3328      | 38098 | 15    | 142           | 15   | 150   | 28.4 | 30.8 | 2     |  |

## [-] Before-type Trip Log "(imported) WB AM #2", AM-period, started Thursday 9/11/2014 7:10:06 AM↑Contents

Entered artery 7:10:22 am (16 seconds) traveling Westbound from Mills Branch Dr. (#1)

| Node                                | π        | CTT        | red artery 7                                  | CTL   | StopD | CStopD | BS1T        | CBS1T | AS        | CAS  | Stops        |  |
|-------------------------------------|----------|------------|---|-------|-------|--------|-------------|-------|-----------|------|--------------|--|
| to High                             | <u> </u> | <u>C11</u> | <u>                                      </u> | CIL   | 3ιορυ | СЗТОРГ | <u>D311</u> | CB311 | <u>A3</u> | CAS  | <u>310ps</u> |  |
| Valley Dr.<br>(#2)                  | 31       | 31         | 1378  | 1378  | 0     | 0      | 0           | 0     | 30.5      | 30.5 | 0            |  |
| to Willow<br>Terrace Dr.<br>(#3)    | 58       | 89         | 1639  | 3017  | 22    | 22     | 23          | 23    | 19.3      | 23.2 | 1            |  |
| to Timber<br>Shade Dr.<br>(#4)      | 51       | 140        | 2835  | 5852  | 0     | 22     | 0           | 23    | 37.6      | 28.5 | 0            |  |
| to Forest<br>Garden Dr.<br>(#5)     | 51       | 191        | 1969  | 7821  | 12    | 34     | 13          | 36    | 26.5      | 27.9 | 1            |  |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 148      | 339        | 3555  | 11376 | 80    | 114    | 81          | 117   | 16.3      | 22.9 | 1            |  |
| to Valley<br>Manor Dr.<br>(#7)      | 80       | 420        | 4870  | 16245 | 0     | 114    | 0           | 117   | 41.4      | 26.4 | 0            |  |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 100      | 520        | 6420  | 22665 | 0     | 114    | 0           | 117   | 43.7      | 29.7 | 0            |  |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 44       | 564        | 2748  | 25413 | 0     | 114    | 0           | 117   | 42.5      | 30.7 | 0            |  |
| to Green<br>Oak Dr.<br>(#10)        | 83       | 646        | 2894  | 28307 | 29    | 142    | 29          | 146   | 23.9      | 29.9 | 1            |  |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 46       | 692        | 2396  | 30703 | 0     | 142    | 0           | 146   | 35.7      | 30.2 | 0            |  |
| to Royal<br>Forest Dr.<br>(#12)     | 32       | 724        | 1773  | 32476 | 0     | 142    | 0           | 146   | 37.7      | 30.6 | 0            |  |
| to Loop<br>494 (#13)                | 12       | 737        | 538   | 33014 | 0     | 142    | 0           | 146   | 29.4      | 30.6 | 0            |  |
| to US 59<br>NBFR<br>(#14)           | 24       | 761        | 1365  | 34379 | 0     | 142    | 0           | 146   | 38.4      | 30.8 | 0            |  |
| to US 59<br>SBFR<br>(#15)           | 5        | 766        | 292   | 34671 | 0     | 142    | 0           | 146   | 41.6      | 30.9 | 0            |  |
| to Sorters<br>Rd. (#16)             | 76       | 842        | 3316  | 37987 | 10    | 153    | 11          | 156   | 29.6      | 30.8 | 2            |  |

## [-] Before-type Trip Log "(imported) WB AM #3", AM-period, started Thursday 9/11/2014 7:46:22 AM↑Contents

## Entered artery 7:46:36 am (13 seconds) traveling Westbound from Mills Branch Dr. (#1)

|                                  | Entered divery 7.40.50 din (15 seconds) traveling vestboding from Minis Branch Br. (#1) |     |           |            |       |               |      |       |           |      |       |  |  |
|----------------------------------|---|-----|-----------|------------|-------|---------------|------|-------|-----------|------|-------|--|--|
| Node                             | <u>TT</u>   | CTT | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | Stops |  |  |
| to High<br>Valley Dr.<br>(#2)    | 31  | 31  | 1369      | 1369       | 0     | 0             | 0    | 0     | 30.5      | 30.5 | 0     |  |  |
| to Willow<br>Terrace Dr.<br>(#3) | 89  | 119 | 1660      | 3029       | 55    | 55            | 55   | 55    | 12.8      | 17.3 | 1     |  |  |
| to Timber<br>Shade Dr.<br>(#4)   | 92  | 211 | 2853      | 5882       | 34    | 89            | 34   | 89    | 21.2      | 19   | 1     |  |  |

| to Forest<br>Garden Dr.<br>(#5)     | 105 | 316  | 2014 | 7897  | 61 | 150 | 61 | 151 | 13   | 17   | 1 |
|-------------------------------------|-----|------|------|-------|----|-----|----|-----|------|------|---|
| to W. Lake<br>Houston<br>Pkwy. (#6) | 159 | 475  | 3592 | 11488 | 90 | 240 | 90 | 241 | 15.4 | 16.5 | 1 |
| to Valley<br>Manor Dr.<br>(#7)      | 83  | 558  | 4871 | 16360 | 0  | 240 | 0  | 241 | 40.1 | 20   | 0 |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 118 | 676  | 6425 | 22785 | 0  | 240 | 0  | 241 | 37.3 | 23   | 0 |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 50  | 726  | 2747 | 25531 | 0  | 240 | 0  | 241 | 37.2 | 24   | 0 |
| to Green<br>Oak Dr.<br>(#10)        | 79  | 805  | 2904 | 28436 | 13 | 253 | 13 | 254 | 25.2 | 24.1 | 1 |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 52  | 856  | 2369 | 30805 | 0  | 253 | 0  | 254 | 31.4 | 24.5 | 0 |
| to Royal<br>Forest Dr.<br>(#12)     | 80  | 936  | 1788 | 32593 | 40 | 293 | 41 | 295 | 15.3 | 23.7 | 1 |
| to Loop<br>494 (#13)                | 16  | 952  | 539  | 33132 | 0  | 293 | 0  | 295 | 23.2 | 23.7 | 0 |
| to US 59<br>NBFR<br>(#14)           | 43  | 995  | 1369 | 34501 | 10 | 304 | 11 | 307 | 21.8 | 23.6 | 1 |
| to US 59<br>SBFR<br>(#15)           | 6   | 1001 | 290  | 34791 | 0  | 304 | 0  | 307 | 33.6 | 23.7 | 0 |
| to Sorters<br>Rd. (#16)             | 89  | 1089 | 3309 | 38100 | 18 | 322 | 20 | 327 | 25.4 | 23.8 | 2 |

## **Cumulative Reports**

## [-] Before-type Trip Log "(imported) WB AM #1", AM-period, started Thursday 9/11/2014 6:36:47 AM↑Contents

### Entered artery 6:36:51 am (5 seconds) traveling Westbound from I

| Node                    | CTT | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|-------------------------|-----|------------|---------------|-------|------|
| to Sorters<br>Rd. (#16) | 844 | 38098      | 142           | 150   | 30.8 |

## [-] Before-type Trip Log "(imported) WB AM #2", AM-period, started Thursday 9/11/2014 7:10:06 AM↑Contents

### Entered artery 7:10:22 am (16 seconds) traveling Westbound from

| Node                    | CTT | CTL   | CStopD | CBS1T | CAS  |
|-------------------------|-----|-------|--------|-------|------|
| to Sorters<br>Rd. (#16) | 842 | 37987 | 153    | 156   | 30.8 |

### [-] Before-type Trip Log "(imported) WB AM #3", AM-period, started Thursday 9/11/2014 7:46:22 AM↑Contents

# Entered artery 7:46:36 am (13 seconds) traveling Westbound from

| Lincolca ai | intered differ y 7.40.30 dim (13 seconds) traveling westboding mon |     |        |       |     |  |  |  |  |  |  |
|-------------|--|-----|--------|-------|-----|--|--|--|--|--|--|
| Node        | CTT  | CTL | CStopD | CBS1T | CAS |  |  |  |  |  |  |

| to Sorters | 1089 | 38100 | 322 | 327 | 23.8 |
|------------|------|-------|-----|-----|------|
| Rd. (#16)  | 1009 | 30100 | 322 | 321 | 23.0 |

# Travel Time & Delay Report for Kingwood Dr.

### Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT:

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL

Summarized Cumulative Travel Distance since beginning of Run (feet)

#### StopD:

Summarized Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds). The "Stopped Delay 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 spee after exceeding 15 mph until it exceeds 15 mph once again

#### BS1T

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

#### CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

### 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 exc

### Summary of runs Eastbound from Sorters Rd. (#16)

 $2\ Before-type\ runs,\ 2\ of\ unverifiable\ origin,\ collected\ Thursday\ 9/11/2014\ to\ Thursday\ 9/11/2014,\ over\ day(s)\ Thu,\ with\ starting\ times\ durin$ 

| Node                       | <u>TT</u>          | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> |  |
|----------------------------|--------------------|------------|-----------|------------|--------------|---------------|------|-------|-----------|--|
| to US 59 S                 | o US 59 SBFR (#15) |            |           |            |              |               |      |       |           |  |
| Average<br>Before<br>(n=2) | 120                | 120        | 3331      | 3331       | 43           | 43            | 43   | 43    | 19.6      |  |
| Std Dev<br>Before<br>(n=2) | 30                 | 30         | 2         | 2          | 30           | 30            | 32   | 32    | 4.9       |  |

to US 59 NBFR (#14)

| Average<br>Before<br>(n=2) | 10                | 130       | 290      | 3620  | 0   | 43  | 0   | 43  | 19.3 |
|----------------------------|-------------------|-----------|----------|-------|-----|-----|-----|-----|------|
| Std Dev<br>Before<br>(n=2) | 0                 | 30        | 1        | 1     | 0   | 30  | 0   | 32  | 0.3  |
| to Loop 4                  | Q <i>A (</i> #13) | <u>I</u>  | <u>I</u> | l     | ı   |     |     |     |      |
| Average                    | 94 (#13 <i>)</i>  | ı         | ı        | I     | I   | 1   | 1   | 1   | 1    |
| Before<br>(n=2)            | 217               | 347       | 1427     | 5047  | 169 | 211 | 169 | 212 | 4.8  |
| Std Dev<br>Before          | 81                | 51        | 13       | 12    | 76  | 46  | 81  | 49  | 1.7  |
| (n=2)<br>to Royal I        | Forcet Dr         | /#12\     |          |       |     |     |     |     |      |
|                            | orest Dr.         | (#12)     | 1        | I     | 1   |     |     |     |      |
| Average<br>Before<br>(n=2) | 60                | 408       | 579      | 5626  | 44  | 256 | 45  | 257 | 15.6 |
| Std Dev<br>Before          | 66                | 15        | 56       | 44    | 63  | 17  | 63  | 14  | 16.5 |
| (n=2)                      | ut Didge          | Dd /#11\  |          |       |     |     |     |     |      |
| to Chestn                  | iut Klage l       | Ku. (#11) | 1        | 1     | 1   |     |     |     | 1    |
| Average<br>Before<br>(n=2) | 103               | 510       | 1832     | 7458  | 58  | 314 | 57  | 314 | 20.8 |
| Std Dev<br>Before<br>(n=2) | 95                | 110       | 79       | 123   | 82  | 99  | 81  | 95  | 18.7 |
| to Green                   | Oak Dr. (#        | 10)       | <u> </u> | l     | 1   |     |     |     |      |
| Average<br>Before<br>(n=2) | 121               | 631       | 2422     | 9880  | 60  | 374 | 62  | 376 | 21.7 |
| Std Dev<br>Before<br>(n=2) | 104               | 214       | 27       | 150   | 85  | 184 | 88  | 183 | 18.5 |
| to Woodla                  | and Grove         | Dr (#9)   |          |       |     |     |     |     |      |
| Average<br>Before<br>(n=2) | 58                | 689       | 2855     | 12734 | 0   | 374 | 1   | 377 | 34.1 |
| Std Dev<br>Before<br>(n=2) | 9                 | 223       | 35       | 114   | 0   | 184 | 1   | 184 | 5.8  |
| to Woodla                  | and Hills [       | Dr. (#8)  | 1        | 1     | 1   |     |     |     |      |
| Average<br>Before<br>(n=2) | 63                | 752       | 2730     | 15464 | 0   | 374 | 0   | 377 | 29.6 |
| Std Dev<br>Before<br>(n=2) | 1                 | 224       | 26       | 141   | 0   | 184 | 0   | 184 | 0.1  |
| to Valley                  | Manor Dr.         | (#7)      | •        | •     |     |     |     |     |      |
| Average<br>Before<br>(n=2) | 125               | 877       | 6472     | 21936 | 0   | 374 | 3   | 380 | 35.6 |
| Std Dev<br>Before<br>(n=2) | 15                | 209       | 10       | 151   | 0   | 184 | 5   | 179 | 4.3  |
| to W. Lak                  | e Houstor         | Pkwy. (#  | 6)       | •     | •   | •   | •   | •   |      |

| Average<br>Before<br>(n=2) | 205         | 1082     | 4973 | 26909 | 84 | 458 | 91 | 471 | 16.7 |
|----------------------------|-------------|----------|------|-------|----|-----|----|-----|------|
| Std Dev<br>Before<br>(n=2) | 25          | 235      | 0    | 151   | 42 | 225 | 37 | 216 | 2.1  |
| · ·                        | Garden D    | )r. (#5) | l    | 1     |    |     |    |     |      |
| Average<br>Before<br>(n=2) | 71          | 1153     | 3501 | 30410 | 4  | 461 | 6  | 476 | 33.8 |
| Std Dev<br>Before<br>(n=2) | 8           | 242      | 4    | 154   | 5  | 230 | 3  | 220 | 3.7  |
| · ·                        | r Shade D   | r. (#4)  |      |       |    | Į.  | Į. | Į.  |      |
| Average<br>Before<br>(n=2) | 37          | 1190     | 1878 | 32288 | 0  | 461 | 0  | 476 | 34.7 |
| Std Dev<br>Before<br>(n=2) | 4           | 246      | 15   | 139   | 0  | 230 | 0  | 219 | 3.7  |
|                            | Terrace [   | Or. (#3) |      |       |    |     |    |     |      |
| Average<br>Before<br>(n=2) | 64          | 1254     | 3011 | 35299 | 7  | 468 | 7  | 483 | 32.6 |
| Std Dev<br>Before<br>(n=2) | 14          | 260      | 123  | 262   | 10 | 240 | 10 | 230 | 5.6  |
|                            | alley Dr. ( | #2)      | •    |       |    |     |    |     |      |
| Average<br>Before<br>(n=2) | 36          | 1290     | 1737 | 37036 | 0  | 468 | 3  | 486 | 33.8 |
| Std Dev<br>Before<br>(n=2) | 8           | 252      | 17   | 245   | 0  | 240 | 4  | 226 | 6.8  |
| to Mills B                 | ranch Dr.   | (#1)     | •    | •     |    | •   | •  | •   |      |
| Average<br>Before<br>(n=2) | 34          | 1324     | 1315 | 38351 | 6  | 474 | 6  | 492 | 26.6 |
| Std Dev<br>Before<br>(n=2) | 0           | 253      | 4    | 242   | 2  | 242 | 1  | 227 | 0.4  |
|                            |             | ·        | ·    |       | •  |     |    |     |      |

Stopped Delay, or Time spent Waiting in Queue while traveling from previous Node (seconds)

9:43:46 AM

# Travel Time & Delay Report for Kingwood Dr.

## Contents:

(imported) EB PM #1, (imported) EB PM #2, Cumulative Reports

# [-] Before-type Trip Log "(imported) EB PM #1", PM-period, started Thursday 9/11/2014 4:48:30 PM

# Entered artery 4:48:47 pm (17 seconds) traveling Eastbound from Sorters Rd. (#16)

| Node                                | TT  | CTT  | TL   | CTL   | StopD | CStopD | BS1T | CBS1T | AS   |
|-------------------------------------|-----|------|------|-------|-------|--------|------|-------|------|
| to US 59<br>SBFR (#15)              | 99  | 99   | 3330 | 3330  | 22    | 22     | 21   | 21    | 23   |
| to US 59<br>NBFR<br>(#14)           | 10  | 109  | 290  | 3620  | 0     | 22     | 0    | 21    | 19   |
| to Loop 494<br>(#13)                | 274 | 383  | 1436 | 5056  | 222   | 244    | 226  | 247   | 3.6  |
| to Royal<br>Forest Dr.<br>(#12)     | 14  | 397  | 539  | 5595  | 0     | 244    | 0    | 247   | 27.2 |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 36  | 432  | 1776 | 7371  | 0     | 244    | 0    | 247   | 34.1 |
| to Green<br>Oak Dr.<br>(#10)        | 47  | 480  | 2403 | 9774  | 0     | 244    | 0    | 247   | 34.8 |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 51  | 531  | 2880 | 12653 | 0     | 244    | 0    | 247   | 38.2 |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 62  | 593  | 2711 | 15365 | 0     | 244    | 0    | 247   | 29.6 |
| to Valley<br>Manor Dr.<br>(#7)      | 136 | 729  | 6465 | 21830 | 0     | 244    | 7    | 254   | 32.5 |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 187 | 916  | 4973 | 26803 | 55    | 298    | 64   | 318   | 18.1 |
| to Forest<br>Garden Dr.<br>(#5)     | 66  | 982  | 3498 | 30301 | 0     | 298    | 3    | 321   | 36.4 |
| to Timber<br>Shade Dr.<br>(#4)      | 35  | 1016 | 1889 | 32189 | 0     | 298    | 0    | 321   | 37.3 |
| to Willow<br>Terrace Dr.<br>(#3)    | 55  | 1071 | 2924 | 35114 | 0     | 298    | 0    | 321   | 36.6 |
| to High<br>Valley Dr.<br>(#2)       | 41  | 1112 | 1749 | 36863 | 0     | 298    | 5    | 326   | 29   |
| to Mills<br>Branch Dr.<br>(#1)      | 33  | 1145 | 1317 | 38180 | 4     | 303    | 6    | 332   | 26.9 |

# [-] Before-type Trip Log "(imported) EB PM #2", PM-period, started Thursday 9/11/2014 5:32:50 PM

Entered artery 5:33:04 pm (15 seconds) traveling Eastbound from Sorters Rd. (#16)

|                                     |           |      |           | \          |              | lavelling Las |      |       |           |
|-------------------------------------|-----------|------|-----------|------------|--------------|---------------|------|-------|-----------|
| Node                                | <u>TT</u> | CTT  | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> |
| to US 59<br>SBFR (#15)              | 141       | 141  | 3332      | 3332       | 64           | 64            | 66   | 66    | 16.1      |
| to US 59<br>NBFR<br>(#14)           | 10        | 151  | 289       | 3621       | 0            | 64            | 0    | 66    | 19.5      |
| to Loop 494<br>(#13)                | 160       | 311  | 1418      | 5039       | 115          | 179           | 111  | 177   | 6         |
| to Royal<br>Forest Dr.<br>(#12)     | 107       | 418  | 618       | 5657       | 89           | 268           | 89   | 266   | 3.9       |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 170       | 588  | 1888      | 7544       | 116          | 384           | 115  | 381   | 7.6       |
| to Green<br>Oak Dr.<br>(#10)        | 194       | 783  | 2441      | 9986       | 120          | 503           | 125  | 506   | 8.6       |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 64        | 847  | 2830      | 12815      | 0            | 503           | 1    | 507   | 29.9      |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 64        | 911  | 2749      | 15564      | 0            | 503           | 0    | 507   | 29.5      |
| to Valley<br>Manor Dr.<br>(#7)      | 114       | 1025 | 6479      | 22043      | 0            | 503           | 0    | 507   | 38.7      |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 223       | 1248 | 4973      | 27016      | 114          | 617           | 117  | 624   | 15.2      |
| to Forest<br>Garden Dr.<br>(#5)     | 77        | 1324 | 3503      | 30519      | 7            | 624           | 8    | 632   | 31.2      |
| to Timber<br>Shade Dr.<br>(#4)      | 40        | 1364 | 1867      | 32386      | 0            | 624           | 0    | 631   | 32.1      |
| to Willow<br>Terrace Dr.<br>(#3)    | 74        | 1438 | 3098      | 35484      | 14           | 638           | 14   | 646   | 28.6      |
| to High<br>Valley Dr.<br>(#2)       | 30        | 1468 | 1726      | 37210      | 0            | 638           | 0    | 646   | 38.6      |
| to Mills<br>Branch Dr.<br>(#1)      | 34        | 1502 | 1312      | 38522      | 7            | 645           | 7    | 653   | 26.4      |

## [-] Before-type Trip Log "(imported) EB PM #1", PM-period, started Thursday 9/11/2014 4:48:30 PM

## l artery 4:48:47 pm (17 seconds) traveling Eastbound from Sorters R

| Node                           | <u>CTT</u> | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|--------------------------------|------------|------------|---------------|-------|------|
| to Mills<br>Branch Dr.<br>(#1) | 1145       | 38180      | 303           | 332   | 22.7 |

# [-] Before-type Trip Log "(imported) EB PM #2", PM-period, started Thursday 9/11/2014 5:32:50 PM

# | artery 5:33:04 pm (15 seconds) traveling Eastbound from Sorters R

| Node                           | <u>CTT</u> | <u>CTL</u> | <u>CStopD</u> | CBS1T | <u>CAS</u> |
|--------------------------------|------------|------------|---------------|-------|------------|
| to Mills<br>Branch Dr.<br>(#1) | 1502       | 38522      | 645           | 653   | 17.5       |

y" is counted from when

d drops below 5 mph

eeding 15 mph

## g 4:48:47 PM to 5:33:04 PM

| CAS  | <u>Stops</u> |  |  |  |  |
|------|--------------|--|--|--|--|
|      |              |  |  |  |  |
| 19.6 | 2            |  |  |  |  |
| 4.9  | 0            |  |  |  |  |
|      |              |  |  |  |  |

| 19.5 | 0   |
|------|-----|
| 4.4  | 0   |
|      |     |
| 10   | 1.5 |
| 1.5  | 0.7 |
|      |     |
| 9.4  | 0.5 |
| 0.3  | 0.7 |
|      |     |
| 10.2 | 1   |
| 2    | 1.4 |
|      |     |
| 11.3 | 1.5 |
| 3.7  | 2.1 |
|      |     |
| 13.3 | 0   |
| 4.2  | 0   |
|      |     |
| 14.7 | 0   |
| 4.2  | 0   |
|      |     |
| 17.5 | 0   |
| 4.1  | 0   |
|      |     |

| 17.4 | 1.5 |  |  |  |  |
|------|-----|--|--|--|--|
| 3.7  | 0.7 |  |  |  |  |
|      |     |  |  |  |  |
| 18.4 | 0.5 |  |  |  |  |
| 3.8  | 0.7 |  |  |  |  |
|      |     |  |  |  |  |
| 18.9 | 0   |  |  |  |  |
| 3.8  | 0   |  |  |  |  |
|      |     |  |  |  |  |
| 19.6 | 0.5 |  |  |  |  |
| 3.9  |     |  |  |  |  |
|      |     |  |  |  |  |
| 19.9 | 0   |  |  |  |  |
| 3.8  | 0   |  |  |  |  |
|      |     |  |  |  |  |
| 20.1 | 1   |  |  |  |  |
| 3.7  | 0   |  |  |  |  |
|      |     |  |  |  |  |

# I ↑Contents

| CAS  | <u>Stops</u> |
|------|--------------|
| 23   | 2            |
| 22.7 | 0            |
| 9    | 1            |
| 9.6  | 0            |
| 11.6 | 0            |
| 13.9 | 0            |
| 16.2 | 0            |
| 17.7 | 0            |
| 20.4 | 0            |
| 19.9 | 1            |
| 21   | 0            |
| 21.6 | 0            |
| 22.4 | 0            |
| 22.6 | 0            |
| 22.7 | 1            |

# I ↑Contents

| CAS  | <u>Stops</u> |
|------|--------------|
| 16.1 | 2            |
| 16.4 | 0            |
| 11   | 2            |
| 9.2  | 1            |
| 8.7  | 2            |
| 8.7  | 3            |
| 10.3 | 0            |
| 11.7 | 0            |
| 14.7 | 0            |
| 14.8 | 2            |
| 15.7 | 1            |
| 16.2 | 0            |
| 16.8 | 1            |
| 17.3 | 0            |
| 17.5 | 1            |

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### Travel Time & Delay Report for Kingwood Dr.

#### Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL:

Summarized Cumulative Travel Distance since beginning of Run (feet)

#### 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

#### BS1T:

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

#### CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

#### 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

#### Summary of runs Westbound from Mills Branch Dr. (#1)

Before-type runs, 2 of unverifiable origin, collected Thursday 9/11/2014 to Thursday 9/11/2014, over day(s) Thu, with starting times during 5:09:55 PM to 6:00:52 PM

| Node                       | <u>TT</u>                  | CTT     | Ҵ    | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|----------------------------|----------------------------|---------|------|------------|--------------|---------------|------|-------|-----------|------|--------------|
| to High Valley Dr. (#2)    |                            |         |      |            |              |               |      |       |           |      |              |
| Average<br>Before<br>(n=2) | 51                         | 51      | 1379 | 1379       | 19           | 19            | 20   | 20    | 22.2      | 22.2 | 0.5          |
| Std Dev<br>Before<br>(n=2) | 29                         | 29      | 13   | 13         | 27           | 27            | 28   | 28    | 12.5      | 12.5 | 0.7          |
| to Willow                  | to Willow Terrace Dr. (#3) |         |      |            |              |               |      |       |           |      |              |
| Average<br>Before<br>(n=2) | 65                         | 116     | 1644 | 3023       | 28           | 47            | 29   | 49    | 17.9      | 19.4 | 1            |
| Std Dev<br>Before<br>(n=2) | 19                         | 48      | 18   | 31         | 20           | 48            | 20   | 48    | 5         | 7.8  | 0            |
| to Timber                  | Shade D                    | r. (#4) |      |            |              |               |      |       |           |      |              |
| Average<br>Before<br>(n=2) | 54                         | 170     | 2841 | 5864       | 0            | 47            | 0    | 49    | 36        | 24.3 | 0            |
| Std Dev<br>Before<br>(n=2) | 5                          | 43      | 10   | 40         | 0            | 48            | 0    | 48    | 3.4       | 6    | 0            |
| to Forest                  | Garden D                   | r. (#5) |      |            |              |               |      |       |           |      |              |
| Average<br>Before<br>(n=2) | 55                         | 225     | 1984 | 7849       | 18           | 66            | 18   | 67    | 28.9      | 23.9 | 0.5          |

|                               |                            |           |      |          |    | •        | •  | •   | •        |          |     |
|-------------------------------|----------------------------|-----------|------|----------|----|----------|----|-----|----------|----------|-----|
| Std Dev<br>Before<br>(n=2)    | 30                         | 13        | 21   | 19       | 26 | 22       | 26 | 21  | 15.5     | 1.3      | 0.7 |
| to W. Lake Houston Pkwy. (#6) |                            |           |      |          |    |          |    |     |          |          |     |
| Average<br>Before<br>(n=2)    | 159                        | 384       | 3553 | 11402    | 85 | 151      | 87 | 154 | 15.5     | 20.4     | 1.5 |
| Std Dev<br>Before<br>(n=2)    | 32                         | 44        | 12   | 31       | 32 | 54       | 33 | 54  | 3        | 2.3      | 0.7 |
| to Valley Manor Dr. (#7)      |                            |           |      |          |    |          |    |     |          |          |     |
| Average                       |                            | <u> </u>  |      |          |    |          |    |     |          |          |     |
| Before<br>(n=2)<br>Std Dev    | 87                         | 471       | 4873 | 16275    | 0  | 151      | 0  | 154 | 38.3     | 23.7     | 0   |
| Before (n=2)                  | 5                          | 50        | 2    | 28       | 0  | 54       | 0  | 54  | 2.4      | 2.5      | 0   |
|                               | to Woodland Hills Dr. (#8) |           |      |          |    |          |    |     |          |          |     |
| Average<br>Before<br>(n=2)    | 147                        | 618       | 6459 | 22734    | 29 | 181      | 30 | 184 | 30       | 25.2     | 1   |
| Std Dev<br>Before<br>(n=2)    | 5                          | 45        | 7    | 21       | 3  | 50       | 4  | 50  | 1        | 1.8      | 0   |
| to Woodland Grove Dr. (#9)    |                            |           |      |          |    |          |    |     |          |          |     |
| Average<br>Before<br>(n=2)    | 101                        | 719       | 2771 | 25506    | 39 | 220      | 42 | 226 | 18.7     | 24.2     | 1   |
| Std Dev<br>Before             | 8                          | 37        | 6    | 15       | 5  | 46       | 6  | 45  | 1.5      | 1.2      | 0   |
| (n=2)                         | Oak Dr. (#                 | H10\      |      |          |    |          |    |     |          |          |     |
| Average                       | Oak Dr. (#                 | 10)       |      |          |    | 1        |    |     | 1        |          |     |
| Before (n=2)                  | 55                         | 774       | 2874 | 28379    | 0  | 220      | 0  | 226 | 35.9     | 25       | 0   |
| Std Dev<br>Before<br>(n=2)    | 4                          | 33        | 43   | 27       | 0  | 46       | 0  | 45  | 2.1      | 1.1      | 0   |
|                               | nut Ridge                  | Rd. (#11) |      | -        |    | •        |    |     | •        | 3        |     |
| Average<br>Before<br>(n=2)    | 102                        | 876       | 2422 | 30802    | 50 | 270      | 50 | 275 | 16.2     | 24       | 1   |
| Std Dev<br>Before<br>(n=2)    | 6                          | 39        | 37   | 9        | 16 | 61       | 13 | 58  | 0.7      | 1        | 0   |
|                               | Forest Dr.                 | (#12)     |      |          |    |          |    |     |          | l        |     |
| Average<br>Before<br>(n=2)    | 55                         | 931       | 1768 | 32570    | 14 | 284      | 9  | 284 | 24.2     | 23.9     | 0.5 |
| Std Dev<br>Before<br>(n=2)    | 23                         | 61        | 1    | 8        | 20 | 82       | 12 | 70  | 10.1     | 1.6      | 0.7 |
| to Loop 4                     | 194 (#13)                  |           |      | ļ        |    |          |    |     |          | ļ        |     |
| Average<br>Before             | 15                         | 946       | 541  | 33111    | 0  | 284      | 0  | 284 | 24       | 23.9     | 0   |
| (n=2)<br>Std Dev<br>Before    | 1                          | 63        | 2    | 9        | 0  | 82       | 0  | 70  | 1.9      | 1.6      | 0   |
| (n=2)                         | NDED ("1                   | 4)        |      |          |    | <u> </u> |    |     | <u> </u> |          |     |
| Average                       | NBFR (#1                   | 4)        |      |          |    | 1        |    |     | 1        |          |     |
| Before<br>(n=2)               | 73                         | 1019      | 1384 | 34495    | 46 | 330      | 47 | 331 | 23.5     | 23.3     | 0.5 |
| Std Dev<br>Before<br>(n=2)    | 70                         | 133       | 32   | 42       | 66 | 147      | 66 | 136 | 22.2     | 3        | 0.7 |
| to US 59                      | SBFR (#1                   | 5)        |      |          |    |          |    |     |          |          |     |
| Average<br>Before<br>(n=2)    | 6                          | 1025      | 291  | 34786    | 0  | 330      | 0  | 331 | 36.2     | 23.3     | 0   |
| Std Dev<br>Before<br>(n=2)    | 1                          | 134       | 1    | 41       | 0  | 147      | 0  | 136 | 9.3      | 3        | 0   |
|                               | s Rd. (#16                 | )         |      | <u> </u> |    | ļ        |    |     | ļ        | <u> </u> |     |
| to Sorters Rd. (#16)          |                            |           |      |          |    |          |    |     |          |          |     |

| Average<br>Before<br>(n=2) | 78 | 1103 | 3316 | 38102 | 10 | 340 | 11 | 341 | 28.9 | 23.7 | 2 |
|----------------------------|----|------|------|-------|----|-----|----|-----|------|------|---|
| Std Dev<br>Before<br>(n=2) | 1  | 133  | 1    | 40    | 1  | 148 | 1  | 137 | 0.5  | 2.8  | 0 |

9:45:55 AM

# Travel Time & Delay Report for Kingwood Dr.

# Contents:

(imported) WB PM #1, (imported) WB PM #2, Cumulative Reports Collapse All

# [-] Before-type Trip Log "(imported) WB PM #1", PM-period, started Thursday 9/11/2014 5:09:20 PM ↑Contents

Entered artery 5:09:55 pm (36 seconds) traveling Westbound from Mills Branch Dr. (#1)

| Node                                | П   | CTT  | TL   | CTL   | StopD | CStopD | BS1T | CBS1T | AS   | CAS  | Stops |
|-------------------------------------|-----|------|------|-------|-------|--------|------|-------|------|------|-------|
| to High<br>Valley Dr.<br>(#2)       | 71  | 71   | 1389 | 1389  | 39    | 39     | 39   | 39    | 13.3 | 13.3 | 1     |
| to Willow<br>Terrace Dr.<br>(#3)    | 78  | 149  | 1656 | 3045  | 42    | 81     | 43   | 82    | 14.4 | 13.9 | 1     |
| to Timber<br>Shade Dr.<br>(#4)      | 51  | 200  | 2848 | 5893  | 0     | 81     | 0    | 82    | 38.4 | 20.1 | 0     |
| to Forest<br>Garden Dr.<br>(#5)     | 34  | 234  | 1969 | 7862  | 0     | 81     | 0    | 82    | 39.9 | 22.9 | 0     |
| to W. Lake<br>Houston<br>Pkwy. (#6) | 182 | 415  | 3561 | 11424 | 108   | 189    | 110  | 192   | 13.4 | 18.8 | 2     |
| to Valley<br>Manor Dr.<br>(#7)      | 91  | 506  | 4872 | 16295 | 0     | 189    | 0    | 192   | 36.6 | 21.9 | 0     |
| to<br>Woodland<br>Hills Dr.<br>(#8) | 143 | 650  | 6454 | 22749 | 27    | 216    | 28   | 220   | 30.7 | 23.9 | 1     |
| to<br>Woodland<br>Grove Dr.<br>(#9) | 95  | 745  | 2767 | 25516 | 35    | 252    | 38   | 257   | 19.8 | 23.3 | 1     |
| to Green<br>Oak Dr.<br>(#10)        | 52  | 797  | 2844 | 28360 | 0     | 252    | 0    | 257   | 37.3 | 24.3 | 0     |
| to Chestnut<br>Ridge Rd.<br>(#11)   | 106 | 903  | 2448 | 30808 | 61    | 313    | 59   | 316   | 15.7 | 23.3 | 1     |
| to Royal<br>Forest Dr.<br>(#12)     | 71  | 974  | 1767 | 32576 | 29    | 342    | 17   | 334   | 17   | 22.8 | 1     |
| to Loop<br>494 (#13)                | 16  | 990  | 542  | 33118 | 0     | 342    | 0    | 334   | 22.6 | 22.8 | 0     |
| to US 59<br>NBFR<br>(#14)           | 122 | 1113 | 1407 | 34525 | 93    | 434    | 93   | 427   | 7.8  | 21.2 | 1     |

| to US 59<br>SBFR<br>(#15) | 7  | 1119 | 290  | 34815 | 0  | 434 | 0  | 427 | 29.6 | 21.2 | 0 |
|---------------------------|----|------|------|-------|----|-----|----|-----|------|------|---|
| to Sorters<br>Rd. (#16)   | 77 | 1197 | 3315 | 38130 | 11 | 445 | 11 | 438 | 29.3 | 21.7 | 2 |

# [-] Before-type Trip Log "(imported) WB PM #2", PM-period, started Thursday 9/11/2014 6:00:33 PM ↑Contents

Entered artery 6:00:52 pm (20 seconds) traveling Westbound from Mills Branch Dr. (#1)

| To High   Control   Cont | Node TT CTT TL CTL StopD CStopD BS1T CBS1T AS CAS Stops |           |            |   |       |       |        |             |       |           |      |       |  |
|--|---|-----------|------------|---|-------|-------|--------|-------------|-------|-----------|------|-------|--|
| Valley Dr. (#2)  10 Willow Terrace Dr. 52  |   | <u>II</u> | <u>C11</u> | <u>                                      </u> | CIL   | StopD | CStopD | <u>BS11</u> | CBS11 | <u>AS</u> | CAS  | Stops |  |
| Terrace Dr. 52 82 1632 3002 14 14 14 15 15 21.4 24.9 1 (#3)  10 Timber Shade Dr. 57 140 2834 5836 0 14 0 15 33.6 28.5 0 (#4)  10 Torrest Garden Dr. 76 216 1999 7835 37 50 37 52 17.9 24.8 1 (#5)  10 W. Lake Houston Play. 483 436 4875 16255 0 113 0 115 17.7 22 1 1 Play. 483 10 10 Volley Manor Dr. 83 436 4875 16255 0 113 0 115 40 25.4 0 (#7)  10 Woodland Hills Dr. (#8)  10 To Green Oak Dr. 58 751 2904 28399 0 187 0 194 34.4 25.8 0 (#10)  10 Green Oak Dr. 58 751 2904 28399 0 187 0 194 34.4 25.8 0 (#10)  10 Royal Forest Dr. 39 887 1769 32565 0 226 0 235 31.3 25 0 (#12)  10 To Royal Forest Dr. 39 887 1769 32565 0 226 0 235 31.3 25 0 (#12)  10 Lough 494 (#13) 15 902 540 33105 0 226 0 235 39.3 25.4 0 (#14)  10 US S9 Play. 400 236 3877 0 226 0 235 39.3 25.4 0 (#14)  10 US S9 Play. 400 236 3877 0 226 0 235 39.3 25.7 23.8 10 (#15)  10 US S9 Play. 400 236 3877 0 226 0 235 39.3 25.7 23.8 10 (#15)  10 US S9 Play. 400 236 3877 0 226 0 235 39.3 25.7 23.8 10 (#15)  10 US S9 Play. 400 236 3877 0 226 0 235 42.7 25.5 0 (#15)  10 US S9 Play. 400 236 3877 0 226 0 235 42.7 25.5 0 (#15)  10 US S9 Play. 400 236 3877 0 226 0 235 42.7 25.5 0 (#15)  10 US S9 Play. 400 236 3877 0 226 0 236 42.7 25.5 0 (#15)  10 US S9 Play. 400 236 3877 0 226 0 236 42.7 25.5 0 (#15)  10 US S9 Play. 400 236 3877 0 226 0 236 42.7 25.5 0 (#15)  | Valley Dr.<br>(#2)                                      | 30        | 30         | 1370  | 1370  | 0     | 0      | 0           | 0     | 31.1      | 31.1 | 0     |  |
| Shade Dr. 67   | to Willow<br>Terrace Dr.<br>(#3)                        | 52        | 82         | 1632  | 3002  | 14    | 14     | 15          | 15    | 21.4      | 24.9 | 1     |  |
| Garden Dr. 76 216 1999 7835 37 50 37 52 17.9 24.8 1  (#5) Low Lake Houston Pkwy. (#6) 137 352 3545 11380 63 113 63 115 17.7 22 1  Nov Lake Houston Pkwy. (#6) 137 352 3545 11380 63 113 63 115 17.7 22 1  Novel Low  | Shade Dr.<br>(#4)                                       | 57        | 140        | 2834  | 5836  | 0     | 14     | 0           | 15    | 33.6      | 28.5 | 0     |  |
| Houston 137 352 3545 11380 63 113 63 115 17.7 22 1 Pkwy. (#6) to Valley Manor Dr. 83 436 4875 16255 0 113 0 115 40 25.4 0 (#7) to Woodland Hills Dr. (#8) to Woodland Grove Dr. (#9) 693 2776 25495 42 187 46 194 17.7 25.1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | Garden Dr.<br>(#5)                                      | 76        | 216        | 1999  | 7835  | 37    | 50     | 37          | 52    | 17.9      | 24.8 | 1     |  |
| Manor Dr. (#7)         83         436         4875         16255         0         113         0         115         40         25.4         0           (#7)         to         Woodland Hills Dr. (#8)         151         586         6464         22719         32         145         33         148         29.3         26.4         1           (#8)         to         Woodland Grove Dr. (#8)         107         693         2776         25495         42         187         46         194         17.7         25.1         1           (#9)         to Green Oak Dr. (#9)         58         751         2904         28399         0         187         0         194         34.4         25.8         0           (#10)         to Chestnut Ridge Rd. (#11)         849         2397         30795         39         226         40         235         16.7         24.7         1           to Royal Forest Dr. (#12)         39         887         1769         32565         0         226         0         235         31.3         25         0           494 (#13)         15         902         540         33105         0         226         0         235  | Houston<br>Pkwy. (#6)                                   | 137       | 352        | 3545  | 11380 | 63    | 113    | 63          | 115   | 17.7      | 22   | 1     |  |
| Woodland<br>Hills Dr.<br>(#8)         151         586         6464         22719         32         145         33         148         29.3         26.4         1           (#8) to<br>Woodland<br>Grove Dr.<br>(#9)         107         693         2776         25495         42         187         46         194         17.7         25.1         1           (#9) to Green<br>Oak Dr.<br>(#10)         58         751         2904         28399         0         187         0         194         34.4         25.8         0           (#10) to Chestnut<br>(#11)         88         849         2397         30795         39         226         40         235         16.7         24.7         1           to Royal<br>Forest Dr.<br>(#12)         39         887         1769         32565         0         226         0         235         31.3         25         0           to Loop<br>494 (#13)         15         902         540         33105         0         226         0         235         25.3         25         0           to US 59<br>SBFR         5         930         291         34757         0         226         0         235         42.7         25.5         0           t   | to Valley<br>Manor Dr.<br>(#7)                          | 83        | 436        | 4875  | 16255 | 0     | 113    | 0           | 115   | 40        | 25.4 | 0     |  |
| Woodland Grove Dr. (#9)         107         693         2776         25495         42         187         46         194         17.7         25.1         1           (#9)         to Green         Oak Dr. (#10)         58         751         2904         28399         0         187         0         194         34.4         25.8         0           (#10)         to Chestnut Ridge Rd. (#11)         98         849         2397         30795         39         226         40         235         16.7         24.7         1           to Royal Forest Dr. (#11)         39         887         1769         32565         0         226         0         235         31.3         25         0           (#12)         to Loop 494 (#13)         15         902         540         33105         0         226         0         235         25.3         25         0           NBFR Probability Company         24         925         1361         34466         0         226         0         235         39.3         25.4         0           (#14)         to US 59         SBFR         5         930         291         34757         0         226         0   | to<br>Woodland<br>Hills Dr.<br>(#8)                     | 151       | 586        | 6464  | 22719 | 32    | 145    | 33          | 148   | 29.3      | 26.4 | 1     |  |
| Oak Dr. (#10)         58         751         2904         28399         0         187         0         194         34.4         25.8         0           to Chestnut Ridge Rd. (#11)         98         849         2397         30795         39         226         40         235         16.7         24.7         1           to Royal Forest Dr. (#12)         39         887         1769         32565         0         226         0         235         31.3         25         0           (#12)         to Loop 494 (#13)         15         902         540         33105         0         226         0         235         25.3         25         0           to US 59 NBFR (#14)         24         925         1361         34466         0         226         0         235         39.3         25.4         0           SBFR 5         930         291         34757         0         226         0         235         42.7         25.5         0           to Sorters         70         1000         3316         38074         10         236         10         245         235         25.7         2   | to<br>Woodland<br>Grove Dr.<br>(#9)                     | 107       | 693        | 2776  | 25495 | 42    | 187    | 46          | 194   | 17.7      | 25.1 | 1     |  |
| Ridge Rd. (#11)  10 Royal Forest Dr. (#12)  11 90 887 1769 32565 0 226 0 235 31.3 25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | to Green<br>Oak Dr.<br>(#10)                            | 58        | 751        | 2904  | 28399 | 0     | 187    | 0           | 194   | 34.4      | 25.8 | 0     |  |
| Forest Dr. (#12) 39 887 1769 32565 0 226 0 235 31.3 25 0 (#12) to Loop 494 (#13) 15 902 540 33105 0 226 0 235 25.3 25 0 to US 59 NBFR 24 925 1361 34466 0 226 0 235 39.3 25.4 0 (#14) 15 US 59 SBFR 5 930 291 34757 0 226 0 235 42.7 25.5 0 (#15) 10 Sorters 79 1000 3316 38074 10 236 10 245 38.6 25.7 2  | to Chestnut<br>Ridge Rd.<br>(#11)                       | 98        | 849        | 2397  | 30795 | 39    | 226    | 40          | 235   | 16.7      | 24.7 | 1     |  |
| 494 (#13)     15     902     540     33105     0     226     0     235     25.3     25     0       to US 59     NBFR (#14)     24     925     1361     34466     0     226     0     235     39.3     25.4     0       SBFR 5     930     291     34757     0     226     0     235     42.7     25.5     0       (#15)     to Sorters     70     1000     2316     38074     10     236     10     245     28.6     25.7     2  | to Royal<br>Forest Dr.<br>(#12)                         | 39        | 887        | 1769  | 32565 | 0     | 226    | 0           | 235   | 31.3      | 25   | 0     |  |
| to US 59 NBFR 24 925 1361 34466 0 226 0 235 39.3 25.4 0 (#14) to US 59 SBFR 5 930 291 34757 0 226 0 235 42.7 25.5 0 (#15) to Sorters 70 1000 2316 38074 10 236 10 245 38.6 25.7 2  | to Loop<br>494 (#13)                                    | 15        | 902        | 540   | 33105 | 0     | 226    | 0           | 235   | 25.3      | 25   | 0     |  |
| SBFR 5 930 291 34757 0 226 0 235 42.7 25.5 0 (#15) to Sorters 70 1000 2316 38074 10 236 10 245 38.6 25.7 2   | to US 59<br>NBFR<br>(#14)                               | 24        | 925        | 1361  | 34466 | 0     | 226    | 0           | 235   | 39.3      | 25.4 | 0     |  |
|  | to US 59<br>SBFR<br>(#15)                               | 5         | 930        | 291   | 34757 | 0     | 226    | 0           | 235   | 42.7      | 25.5 | 0     |  |
|  | to Sorters<br>Rd. (#16)                                 | 79        | 1009       | 3316  | 38074 | 10    | 236    | 10          | 245   | 28.6      | 25.7 | 2     |  |

# **Cumulative Reports**

# [-] Before-type Trip Log "(imported) WB PM #1", PM-period, started Thursday 9/11/2014 5:09:20 PM ↑Contents

#### 

| to Sorters | 1107 | 20120 | 445 | 420 | 04.7 |
|------------|------|-------|-----|-----|------|
| Rd. (#16)  | 1197 | 38130 | 445 | 438 | 21.7 |

# [-] Before-type Trip Log "(imported) WB PM #2", PM-period, started Thursday 9/11/2014 6:00:33 PM ↑Contents

# tery 6:00:52 pm (20 seconds) traveling Westbound from Mills Bran

| Node                    | CTT  | CTL   | CStopD | CBS1T | CAS  |
|-------------------------|------|-------|--------|-------|------|
| to Sorters<br>Rd. (#16) | 1009 | 38074 | 236    | 245   | 25.7 |

Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

# Raghu Veturi

From: Raghu Veturi

**Sent:** Monday, June 09, 2014 9:06 PM **To:** 'Smart, Allie - CNL'; Ramesh Gunda

Cc: Martin, Dave - CNL; 'stan.sarman@gmail.com'
Subject: RE: Kingwood Mobility Study Comments...

Allie,

We will review and consider this information when evaluating improvement alternatives.

Thank you, Raghu.

From: Smart, Allie - CNL [mailto:Allie.Smart@houstontx.gov]

**Sent:** Friday, June 06, 2014 11:29 AM **To:** Ramesh Gunda; Raghu Veturi

Cc: Martin, Dave - CNL

Subject: Kingwood Mobility Study Comments...

### Ramesh,

Council Member Martin and I met with Ralph this morning and he suggested I send the below comments to you about the signalization timing in Kingwood. Council Member Martin believes that the timing is one of the main issues is the timing of lights.

See below... let me know your thoughts or if you will take this into consideration when developing the proposals.

# Thanks,

Allie Smart
Chief of Staff & Agenda Director
Office of Council Member Dave Martin
District E
832.393.3008-office
832.393.3279-fax
Allie.Smart@houstontx.gov
Subscribe to our e-newsletter!

# Follow Council Member Martin on:





From: Johana Clark [mailto:Johana.Clark@houstontranstar.org]

Sent: Monday, June 02, 2014 9:25 AM

To: Weatherford, Jeffrey - PWE

Subject: RE: Kingwood Mobility Study Comments...

Jeff.

We have been monitoring Kingwood past few weeks in response to this request. Travel times collected during peak hours show acceptable levels with average 9'-50" to 11'-30" AM Peak (7-8 AM) westbound and 11'-30" to 12'-20" PM Peak (5-6 PM) eastbound [US-59 - West Lake Houston section]. These times are pretty consistent with previous runs completed. Still a few locations were found with detection issues that are currently being worked out with Signal Maintenance and temporary timing adjustments implemented to mitigate any impact. As you know, we are running here maximum cycles of 144" and 150" during peak hours. Any increase is estimated to generate major delays for which side street traffic will not probably be content about nor will allow us to move traffic more efficiently.

Please let me know if further details are needed.

Thanks.

Johana E. Clark, P.E., PTOE Supervising Engineer Public Works & Engineering Traffic Operations Division Houston TranStar 713-881-3179 Office 713-304-3512 Mobile 713-881-3171 Fax

>>> "Weatherford, Jeffrey - PWE" < Jeffrey.Weatherford@houstontx.gov > 5/15/2014 11:08 AM >>> The lights are timed correctly. We already minimize the green time for the minor streets as it is. In general, we try to give as much available time to Kingwood Drive as is possible and in some cases on minor intersections have even tried to double cycle the intersection rather than just increase the delay on the side streets. The problem is not how the signals are timed, but in the number of unnecessary traffic signals and the irregular spacing coupled with insufficient capacity. I could improve the signal progression on Kingwood Drive greatly by beginning to remove unwarranted traffic signals. Since that's probably not going to happen, I think we're pretty much stuck where we are. As I've said many times, you can't get 5 gallons of traffic into a 1 gallon intersection. The theoretical capacity of Kingwood Drive as currently designed is optimally about 33,000 vehicles per day. The traffic volumes that we have on file show that Kingwood Drive from US 59 to West Lake Houston Pkwy exceeds this optimal maximum volume. The segment between Loop 494 and Woodland Hills is around 41,000 vehicles per day. That is in the 8 lane range of volumes, not 6. You can't fix capacity issues with signal timing.

With that said, I will ask my signal engineer to have her staff make sure that everything is still optimized for Kingwood, but I do not expect much if any improvement.

From: Smart, Allie - CNL

**Sent:** Thursday, May 15, 2014 10:56 AM

To: Weatherford, Jeffrey - PWE

Cc: Martin, Dave - CNL

Subject: FW: Kingwood Mobility Study Comments...

Jeff.

I know we have discussed in the past.... Is there anything that can be done at this time?

Allie Smart Chief of Staff & Agenda Director Office of Council Member Dave Martin District E 832.393.3008-office

# 832.393.3279-fax

# Allie.Smart@houstontx.gov Subscribe to our e-newsletter!

# Follow Council Member Martin on:





From: Martin, David P [mailto:David.P.Martin@marsh.com]

Sent: Thursday, May 15, 2014 8:25 AM

To: Smart, Allie - CNL; <a href="mailto:dave.p.martin@hotmail.com">dave.p.martin@hotmail.com</a>
Subject: RE: Kingwood Mobility Study Comments...

Can you check with Jeff and see if there is a way to LENGTHEN the green light time on KW Dr. from front to back.

For instance - - - the green light times for KW Dr. should be doubled, except for the intersections at KW Dr. @ both Woodland Hills Dr. and W. Lake Houston Dr.

We could do this and see what the results tell us. We can add a hundred lanes, but if the lights are not timed correctly, your commute time down KW Dr. will NOT improve unless the lights are synchronized AND timed to allow the flow of traffic on KW. Dr. to move.

#### DM

From: Smart, Allie - CNL [mailto:Allie.Smart@houstontx.gov]

Sent: Wednesday, May 14, 2014 7:14 PM

**To:** Martin, David P; <u>dave.p.martin@hotmail.com</u> **Subject:** Fwd: Kingwood Mobility Study Comments...

# Begin forwarded message:

**From:** "priority@kingwood.com" <pri>priority@kingwood.com>

**Date:** May 14, 2014 at 6:44:53 PM CDT

**To:** "kingwoodmobility@gundacorp.com" < kingwoodmobility@gundacorp.com>

**Cc:** "priority@kingwood.com" <pri>priority@kingwood.com>

**Subject: Kingwood Mobility Study Comments...** 

**Reply-To:** "Kirk.boswell@gmail.com" <Kirk.boswell@gmail.com>

Name: Kirk Boswell

Email: Kirk.boswell@gmail.com

Phone: 713-594-2382

Address: 4119 Brook Shadow Dr, Kingwood

IP Address: 75.108.195.208

# **COMMENTS / FEEDBACK:**

Please consider adding more lanes to Kingwood Drive and Northpark. Also, please consider a study on light lengths and timing during morning and afternoon commuting times. Often times it seems as though the light length of both these streets at the 59 and 494 intersections are the reasons for backups during morning commute hours.

Poll Question: Do you support adding additional lanes to Kingwood Drive?:

Answer: Yes

-----

Confirmation #: GYY8N Submitted: 05/14/2014 6:44pm

\*\* This email was sent from Kirk Boswell through the <u>Kingwood.com</u> web site, here:

 $\underline{http:/\!/www.kingwood.com/mobility}$ 

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337955

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\*

### Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT:

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL:

Summarized Cumulative Travel Distance since beginning of Run (feet)

#### 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

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

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

#### CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

CTT

AS:

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

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

TT

#### Stops:

Node

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

### Summary of runs Eastbound from Sorters Rd. (#10)

CTL

StopD

Wednesday 9/10/2014 to Wednesday 9/10/2014, over day(s) Wed, with starting times during 6:56:52 AM to 6:56:52 AM

CBS1T

AS

CAS

Stons

CStopD

BS1T to US 59 SBFR (#9) Average Before (n=1) 17.2 17.2 Std Dev Before (n=1) to US 59 NBFR (#8) Average Before (n=1) 29.3 17.5 Std Dev Before (n=1) to Loop 494 (#7) Average Before (n=1) Std Dev Before (n=1) to Russell Palmer Rd. (#6) Average Before (n=1) 28.1 20.4 Std Dev Before (n=1) to Woodland Hills Dr. (#5) Average Before (n=1) 22.4 20.9 Std Dev Before (n=1) to Brookdale Dr. (#4) Average Before (n=1) 41.8 Std Dev Before (n=1)to W. Lake Houston Pkwy. (#3) Average Before (n=1) 24 6 41 1 Std Dev Before (n=1) to Rock Springs Dr. (#2) Average Before (n=1) 40.7 25.7 

#### Contents:

Std Dev Before (n=1)

Std Dev Before (n=1)

to Mills Branch Rd. (#1)

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 6:44:22 AM ↑Contents

Entered artery 6:56:52 am (750 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                          | Ш   | CTT | <u>TL</u> | <u>CTL</u> | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | Stops |
|-------------------------------|-----|-----|-----------|------------|-------|--------|------|-------|-----------|------|-------|
| to US 59 SBFR (#9)            | 224 | 224 | 5649      | 5649       | 200   | 200    | 84   | 84    | 17.2      | 17.2 | 1     |
| to US 59 NBFR (#8)            | 7   | 231 | 287       | 5936       | 0     | 200    | 0    | 84    | 29.3      | 17.5 | 0     |
| to Loop 494 (#7)              | 65  | 296 | 1669      | 7605       | 29    | 230    | 29   | 113   | 17.5      | 17.5 | 1     |
| to Russell Palmer Rd. (#6)    | 109 | 405 | 4498      | 12103      | 30    | 260    | 30   | 143   | 28.1      | 20.4 | 1     |
| to Woodland Hills Dr. (#5)    | 157 | 562 | 5151      | 17254      | 67    | 327    | 67   | 211   | 22.4      | 20.9 | 1     |
| to Brookdale Dr. (#4)         | 77  | 639 | 4693      | 21947      | 0     | 327    | 0    | 211   | 41.8      | 23.4 | 0     |
| to W. Lake Houston Pkwy. (#3) | 44  | 683 | 2658      | 24605      | 0     | 327    | 0    | 211   | 41.1      | 24.6 | 0     |
| to Rock Springs Dr. (#2)      | 53  | 736 | 3166      | 27771      | 0     | 327    | 0    | 211   | 40.7      | 25.7 | 0     |
| to Mills Branch Rd. (#1)      | 149 | 885 | 4445      | 32216      | 10    | 337    | 23   | 233   | 20.3      | 24.8 | 2     |

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 7:36:23 AM †Contents

# n (147 seconds) traveling Eastbound from US 59 SBFR (#9)

| Node                          | TT  | CTT | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----|-----|-----------|------------|-------|---------------|------|-------|-----------|------|--------------|
| to US 59 NBFR (#8)            | 8   | 8   | 286       | 286        | 0     | 0             | 0    | 0     | 23.1      | 23.1 | 0            |
| to Loop 494 (#7)              | 68  | 77  | 1692      | 1978       | 33    | 33            | 33   | 33    | 16.9      | 17.6 | 1            |
| to Russell Palmer Rd. (#6)    | 109 | 186 | 4487      | 6465       | 27    | 60            | 27   | 60    | 28        | 23.7 | 1            |
| to Woodland Hills Dr. (#5)    | 212 | 398 | 5123      | 11588      | 112   | 172           | 111  | 171   | 16.5      | 19.8 | 2            |
| to Brookdale Dr. (#4)         | 129 | 527 | 4704      | 16291      | 42    | 214           | 42   | 213   | 24.9      | 21.1 | 1            |
| to W. Lake Houston Pkwy. (#3) | 89  | 615 | 2691      | 18982      | 31    | 245           | 31   | 244   | 20.7      | 21   | 1            |
| to Rock Springs Dr. (#2)      | 97  | 712 | 3206      | 22188      | 40    | 285           | 41   | 285   | 22.5      | 21.2 | 1            |
| to Mills Branch Rd. (#1)      | 153 | 865 | 4133      | 26321      | 8     | 293           | 13   | 298   | 18.5      | 20.7 | 1            |

# **Cumulative Reports**

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 6:44:22 AM †Contents

# Entered artery 6:56:52 am (750 seconds) traveling Eastbound from Sorters Rd. (#10)

|   | Entered dittery 0.50.52 din (75 | o seconas, | ceonas, traveling Eastboana from Sorters Rai (#14 |        |       |      |  |  |  |  |  |
|---|---------------------------------|------------|---|--------|-------|------|--|--|--|--|--|
|   | Node                            | CTT        | CTL   | CStopD | CBS1T | CAS  |  |  |  |  |  |
| ſ | to Mills Branch Rd. (#1)        | 885        | 32216   | 337    | 233   | 24.8 |  |  |  |  |  |

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 7:36:23 AM †Contents

# Entered artery 7:38:50 am (147 seconds) traveling Eastbound from US 59 SBFR (#9)

| Node                     | CTT | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|--------------------------|-----|------------|---------------|-------|------|
| to Mills Branch Rd. (#1) | 865 | 26321      | 293           | 298   | 20.7 |

### Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT:

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL:

Summarized Cumulative Travel Distance since beginning of Run (feet)

#### 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

#### BS1T:

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

#### CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

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

#### Summary of runs Westbound from Mills Branch Rd. (#1)

3 Before-type runs, 3 of unverifiable origin, collected Wednesday 9/10/2014 to Wednesday 9/10/2014, over day(s) Wed, with starting times during 7:11:37 AM to 11:32:26 AM

| Node                       | <u>II</u> | CTT | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|----------------------------|-----------|-----|-----------|------------|-------|---------------|------|-------|-----------|------|--------------|
| to Rock Springs Dr. (#2)   |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=3)       | 54        | 54  | 1859      | 1859       | 12    | 12            | 14   | 14    | 24.3      | 24.3 | 1            |
| Std Dev Before (n=3)       | 12        | 12  | 63        | 63         | 13    | 13            | 13   | 13    | 5.1       | 5.1  | 1            |
| to W. Lake Houston Pkwy    | . (#3)    |     | •         | •          |       | •             |      |       |           |      |              |
| Average Before (n=3)       | 70        | 124 | 3106      | 4965       | 10    | 22            | 10   | 24    | 31.9      | 28.1 | 0.3          |
| Std Dev Before (n=3)       | 21        | 26  | 30        | 58         | 17    | 20            | 17   | 21    | 8         | 5.5  | 0.6          |
| to Brookdale Dr. (#4)      |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=3)       | 69        | 193 | 2620      | 7584       | 21    | 43            | 21   | 45    | 30.2      | 27.1 | 0.3          |
| Std Dev Before (n=3)       | 36        | 23  | 17        | 42         | 36    | 19            | 37   | 19    | 12.2      | 3.5  | 0.6          |
| to Woodland Hills Dr. (#5) | )         |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=3)       | 201       | 394 | 4770      | 12355      | 106   | 149           | 103  | 148   | 20.9      | 22.5 | 2            |
| Std Dev Before (n=3)       | 136       | 114 | 44        | 85         | 127   | 115           | 122  | 109   | 10.7      | 5.7  | 1.7          |
| to Russell Palmer Rd. (#6  | )         | -   | •         | •          |       | •             | -    | •     |           | •    |              |
| Average Before (n=3)       | 110       | 504 | 5109      | 17464      | 11    | 160           | 11   | 159   | 32.6      | 24.1 | 0.7          |
| Std Dev Before (n=3)       | 22        | 93  | 14        | 84         | 10    | 104           | 10   | 98    | 7.1       | 4    | 0.6          |
| to Loop 494 (#7)           |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=3)       | 230       | 734 | 4475      | 21939      | 108   | 268           | 113  | 272   | 14        | 20.7 | 2.7          |
| Std Dev Before (n=3)       | 71        | 110 | 36        | 49         | 56    | 121           | 65   | 121   | 3.8       | 3.4  | 1.5          |
| to US 59 NBFR (#8)         |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=3)       | 70        | 804 | 1671      | 23609      | 21    | 289           | 23   | 296   | 18.7      | 20.2 | 0.7          |
| Std Dev Before (n=3)       | 34        | 79  | 22        | 71         | 23    | 105           | 25   | 102   | 7.8       | 2.1  | 0.6          |
| to US 59 SBFR (#9)         | *         | -   | •         | •          |       | •             | -    | •     |           | •    |              |
| Average Before (n=3)       | 7         | 811 | 285       | 23894      | 0     | 289           | 0    | 296   | 31.2      | 20.2 | 0            |
| Std Dev Before (n=3)       | 2         | 77  | 2         | 72         | 0     | 105           | 0    | 102   | 8.6       | 2    | 0            |
| to Sorters Rd. (#10)       |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=3)       | 116       | 926 | 5288      | 29182      | 20    | 309           | 20   | 316   | 31.4      | 21.6 | 1            |
| Std Dev Before (n=3)       | 13        | 81  | 10        | 72         | 10    | 112           | 10   | 107   | 3.5       | 1.9  | 0            |

#### Contents:

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 6:44:22 AM ↑Contents

# Entered artery 6:44:22 am (1 seconds) traveling Westbound from Rock Springs Dr. (#2)

| Node                          | П   | CTT | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----|-----|-----------|------------|--------------|---------------|------|-------|-----------|------|--------------|
| to W. Lake Houston Pkwy. (#3) | 56  | 56  | 3104      | 3104       | 0            | 0             | 0    | 0     | 37.7      | 37.7 | 0            |
| to Brookdale Dr. (#4)         | 42  | 98  | 2614      | 5718       | 0            | 0             | 0    | 0     | 42.7      | 39.8 | 0            |
| to Woodland Hills Dr. (#5)    | 117 | 214 | 4896      | 10614      | 17           | 17            | 18   | 18    | 28.6      | 33.7 | 1            |

# Entered artery 6:49:16 am (295 seconds) traveling Westbound from Woodland Hills Dr. (#5)

| Node                       | Ш   | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|----------------------------|-----|------------|-----------|------------|--------------|---------------|------|-------|-----------|------|--------------|
| to Russell Palmer Rd. (#6) | 91  | 91         | 5096      | 5096       | 0            | 0             | 0    | 0     | 38.1      | 38.1 | 0            |
| to Loop 494 (#7)           | 206 | 297        | 4494      | 9590       | 105          | 105           | 99   | 99    | 14.9      | 22   | 2            |
| to US 59 NBFR (#8)         | 36  | 334        | 1647      | 11237      | 0            | 105           | 0    | 99    | 30.8      | 22.9 | 0            |
| to US 59 SBFR (#9)         | 5   | 339        | 285       | 11522      | 0            | 105           | 0    | 99    | 36        | 23.2 | 0            |
| to Sorters Rd. (#10)       | 106 | 445        | 5203      | 16724      | 13           | 118           | 14   | 113   | 33.5      | 25.6 | 1            |

# Entered artery 7:11:37 am (1635 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                          | Ш   | CTT  | <u>TL</u> | <u>CTL</u> | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----|------|-----------|------------|-------|--------|------|-------|-----------|------|--------------|
| to Rock Springs Dr. (#2)      | 65  | 65   | 1928      | 1928       | 25    | 25     | 27   | 27    | 20.3      | 20.3 | 2            |
| to W. Lake Houston Pkwy. (#3) | 57  | 122  | 3084      | 5012       | 0     | 25     | 0    | 27    | 36.8      | 28   | 0            |
| to Brookdale Dr. (#4)         | 45  | 167  | 2611      | 7623       | 0     | 25     | 0    | 27    | 39.4      | 31.1 | 0            |
| to Woodland Hills Dr. (#5)    | 357 | 524  | 4819      | 12441      | 252   | 277    | 242  | 269   | 9.2       | 16.2 | 4            |
| to Russell Palmer Rd. (#6)    | 85  | 609  | 5099      | 17540      | 0     | 277    | 0    | 269   | 40.7      | 19.6 | 0            |
| to Loop 494 (#7)              | 206 | 815  | 4447      | 21987      | 97    | 374    | 98   | 367   | 14.7      | 18.4 | 3            |
| to US 59 NBFR (#8)            | 58  | 873  | 1690      | 23677      | 18    | 392    | 20   | 387   | 19.8      | 18.5 | 1            |
| to US 59 SBFR (#9)            | 6   | 878  | 285       | 23962      | 0     | 392    | 0    | 387   | 35        | 18.6 | 0            |
| to Sorters Rd. (#10)          | 128 | 1006 | 5281      | 29243      | 31    | 423    | 31   | 418   | 28.2      | 19.8 | 1            |

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 7:36:23 AM ↑Contents

### Entered artery 7:53:23 am (1021 seconds) traveling Westbound from Mills Branch Rd. (#1)

|                               | Liiterea a | 100. 7 7 .55.2 | .5 a (1022 | i seconas, c | raveling or  | cotbound n    | OIII IVIIIIS B | rancii itai ( | ,         |      |              |
|-------------------------------|------------|----------------|------------|--------------|--------------|---------------|----------------|---------------|-----------|------|--------------|
| Node                          | П          | CTT            | <u>TL</u>  | <u>CTL</u>   | <u>StopD</u> | <u>CStopD</u> | BS1T           | CBS1T         | <u>AS</u> | CAS  | <u>Stops</u> |
| to Rock Springs Dr. (#2)      | 41         | 41             | 1805       | 1805         | 0            | 0             | 2              | 2             | 30        | 30   | 0            |
| to W. Lake Houston Pkwy. (#3) | 58         | 99             | 3094       | 4900         | 0            | 0             | 0              | 2             | 36.3      | 33.7 | 0            |
| to Brookdale Dr. (#4)         | 110        | 210            | 2640       | 7540         | 63           | 63            | 63             | 65            | 16.3      | 24.5 | 1            |
| to Woodland Hills Dr. (#5)    | 140        | 349            | 4732       | 12271        | 49           | 112           | 50             | 115           | 23.1      | 23.9 | 1            |
| to Russell Palmer Rd. (#6)    | 120        | 469            | 5103       | 17374        | 12           | 124           | 14             | 129           | 29.1      | 25.3 | 1            |
| to Loop 494 (#7)              | 310        | 779            | 4515       | 21889        | 169          | 293           | 184            | 313           | 9.9       | 19.2 | 4            |
| to US 59 NBFR (#8)            | 43         | 822            | 1646       | 23536        | 0            | 293           | 0              | 313           | 25.9      | 19.5 | 0            |
| to US 59 SBFR (#9)            | 5          | 827            | 283        | 23818        | 0            | 293           | 0              | 313           | 37.2      | 19.6 | 0            |
| to Sorters Rd. (#10)          | 103        | 930            | 5284       | 29102        | 12           | 305           | 12             | 325           | 35.1      | 21.3 | 1            |

# [-] Before-type Trip Log "(imported) unit 14 billy am", AM-period, started Wednesday 9/10/2014 11:29:03 AM ↑Contents

# Entered artery 11:32:26 am (203 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Entered artery 11:32:26 am (203 seconds) traveling westbound from Willis Branch Rd. (#1) |     |            |           |            |       |               |      |       |           |      |       |  |
|--|-----|------------|-----------|------------|-------|---------------|------|-------|-----------|------|-------|--|
| Node   | Щ   | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | Stops |  |
| to Rock Springs Dr. (#2)   | 56  | 56         | 1842      | 1842       | 11    | 11            | 13   | 13    | 22.5      | 22.5 | 1     |  |
| to W. Lake Houston Pkwy. (#3)  | 94  | 150        | 3140      | 4982       | 29    | 40            | 30   | 44    | 22.7      | 22.6 | 1     |  |
| to Brookdale Dr. (#4)  | 51  | 201        | 2608      | 7590       | 0     | 40            | 0    | 44    | 34.8      | 25.7 | 0     |  |
| to Woodland Hills Dr. (#5)   | 107 | 309        | 4761      | 12351      | 17    | 57            | 16   | 60    | 30.3      | 27.3 | 1     |  |
| to Russell Palmer Rd. (#6)   | 125 | 434        | 5125      | 17476      | 21    | 77            | 20   | 80    | 27.9      | 27.5 | 1     |  |
| to Loop 494 (#7)   | 175 | 608        | 4463      | 21940      | 59    | 137           | 56   | 136   | 17.4      | 24.6 | 1     |  |
| to US 59 NBFR (#8)   | 109 | 717        | 1676      | 23616      | 45    | 182           | 50   | 186   | 10.5      | 22.5 | 1     |  |
| to US 59 SBFR (#9)   | 9   | 726        | 286       | 23902      | 0     | 182           | 0    | 186   | 21.3      | 22.4 | 0     |  |
| to Sorters Rd. (#10)   | 117 | 843        | 5300      | 29201      | 17    | 198           | 18   | 204   | 30.9      | 23.6 | 1     |  |

# **Cumulative Reports**

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 6:44:22 AM †Contents

Entered artery 6:44:22 am (1 seconds) traveling Westbound from Rock Springs Dr. (#2)

|                            |      |            |               |       | 0 ,  |
|----------------------------|------|------------|---------------|-------|------|
| Node                       | CTT  | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
| to Woodland Hills Dr. (#5) | 214  | 10614      | 17            | 18    | 33.7 |
| to Sorters Rd. (#10)       | 445  | 16724      | 118           | 113   | 25.6 |
| to Sorters Rd. (#10)       | 1006 | 29243      | 423           | 418   | 19.8 |

# [-] Before-type Trip Log "(imported) david am unit 15", AM-period, started Wednesday 9/10/2014 7:36:23 AM ↑Contents

Entered artery 7:53:23 am (1021 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                 | CTT | <u>CTL</u> | CStopD | CBS1T | CAS  |
|----------------------|-----|------------|--------|-------|------|
| to Sorters Rd. (#10) | 930 | 29102      | 305    | 325   | 21.3 |

# [-] Before-type Trip Log "(imported) unit 14 billy am", AM-period, started Wednesday 9/10/2014 11:29:03 AM ↑Contents

Entered artery 11:32:26 am (203 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                 | CTT | CTL   | <b>CStopD</b> | CBS1T | CAS  |
|----------------------|-----|-------|---------------|-------|------|
| to Sorters Rd. (#10) | 843 | 29201 | 198           | 204   | 23.6 |

# Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL:

Summarized Cumulative Travel Distance since beginning of Run (feet)

#### StonD

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

#### CStonD

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

#### BS1T

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

#### CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

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

### Summary of runs Eastbound from Sorters Rd. (#10)

6 Before-type runs, 6 of unverifiable origin, collected Wednesday 9/10/2014 to Wednesday 9/10/2014, over day(s) Wed, with starting times during 9:32:36 PM to 11:08:37 PM

| Node                       | <u>II</u> | CTT | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|----------------------------|-----------|-----|-----------|------------|-------|---------------|------|-------|-----------|------|--------------|
| to US 59 SBFR (#9)         |           |     |           | •          |       |               |      |       |           |      |              |
| Average Before (n=6)       | 139       | 139 | 5277      | 5277       | 45    | 45            | 45   | 45    | 27.7      | 27.7 | 0.8          |
| Std Dev Before (n=6)       | 43        | 43  | 39        | 39         | 44    | 44            | 44   | 44    | 7.4       | 7.4  | 0.4          |
| to US 59 NBFR (#8)         |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=6)       | 8         | 148 | 288       | 5565       | 0     | 45            | 0    | 45    | 25.6      | 27.5 | 0            |
| Std Dev Before (n=6)       | 3         | 45  | 8         | 41         | 0     | 44            | 0    | 44    | 7.8       | 7.4  | 0            |
| to Loop 494 (#7)           | •         |     | •         | •          |       | •             | •    | •     |           | •    |              |
| Average Before (n=6)       | 118       | 266 | 1722      | 7287       | 74    | 119           | 75   | 119   | 11.6      | 20.3 | 1.3          |
| Std Dev Before (n=6)       | 54        | 90  | 65        | 96         | 54    | 89            | 52   | 87    | 4.6       | 6    | 0.5          |
| to Russell Palmer Rd. (#6  | )         |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=6)       | 97        | 362 | 4466      | 11754      | 13    | 132           | 13   | 133   | 33.9      | 23.2 | 0.5          |
| Std Dev Before (n=6)       | 34        | 88  | 19        | 94         | 26    | 89            | 26   | 87    | 8.6       | 5.7  | 0.8          |
| to Woodland Hills Dr. (#5) | )         |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=6)       | 163       | 525 | 5114      | 16868      | 60    | 192           | 60   | 192   | 23.7      | 22.8 | 1.3          |
| Std Dev Before (n=6)       | 54        | 118 | 37        | 108        | 47    | 116           | 47   | 114   | 8.5       | 5.2  | 0.5          |
| to Brookdale Dr. (#4)      |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=6)       | 82        | 607 | 4693      | 21561      | 0     | 192           | 0    | 192   | 39.1      | 24.9 | 0            |
| Std Dev Before (n=6)       | 5         | 116 | 4         | 111        | 0     | 116           | 0    | 114   | 2.7       | 4.8  | 0            |
| to W. Lake Houston Pkwy    | /. (#3)   |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=6)       | 98        | 705 | 2738      | 24299      | 45    | 237           | 45   | 237   | 19.7      | 24.1 | 1            |
| Std Dev Before (n=6)       | 19        | 126 | 87        | 191        | 18    | 126           | 18   | 124   | 4.2       | 4.4  | 0            |
| to Rock Springs Dr. (#2)   |           |     |           |            |       |               |      |       |           |      |              |
| Average Before (n=6)       | 60        | 765 | 3175      | 27474      | 3     | 240           | 4    | 241   | 36.9      | 25   | 0.3          |
| Std Dev Before (n=6)       | 9         | 123 | 9         | 193        | 7     | 123           | 7    | 121   | 5.1       | 3.9  | 0.5          |
| to Mills Branch Rd. (#1)   |           | -   |           |            | -     |               |      |       |           |      |              |
| Average Before (n=3)       | 157       | 908 | 4482      | 31840      | 37    | 263           | 46   | 270   | 20.1      | 23.9 | 2.7          |
| Std Dev Before (n=3)       | 34        | 20  | 26        | 83         | 37    | 15            | 36   | 13    | 4.4       | 0.5  | 2.1          |

#### Contents:

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 9:26:32 PM ↑Contents

Entered artery 10:09:39 pm (2587 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                          | Ш   | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----|------------|-----------|------------|--------------|---------------|------|-------|-----------|------|--------------|
| to US 59 SBFR (#9)            | 147 | 147        | 5269      | 5269       | 45           | 45            | 46   | 46    | 24.4      | 24.4 | 1            |
| to US 59 NBFR (#8)            | 7   | 154        | 284       | 5553       | 0            | 45            | 0    | 46    | 26.9      | 24.5 | 0            |
| to Loop 494 (#7)              | 76  | 230        | 1669      | 7222       | 34           | 79            | 35   | 81    | 15        | 21.4 | 1            |
| to Russell Palmer Rd. (#6)    | 107 | 337        | 4471      | 11693      | 15           | 93            | 14   | 94    | 28.5      | 23.7 | 1            |
| to Woodland Hills Dr. (#5)    | 180 | 517        | 5109      | 16802      | 64           | 157           | 65   | 159   | 19.3      | 22.1 | 1            |
| to Brookdale Dr. (#4)         | 79  | 596        | 4690      | 21492      | 0            | 157           | 0    | 159   | 40.6      | 24.6 | 0            |
| to W. Lake Houston Pkwy. (#3) | 101 | 697        | 2675      | 24168      | 44           | 202           | 46   | 205   | 18.1      | 23.6 | 1            |
| to Rock Springs Dr. (#2)      | 51  | 747        | 3176      | 27343      | 0            | 202           | 0    | 205   | 42.9      | 24.9 | 0            |

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 10:25:42 PM ↑Contents

# Entered artery 11:08:37 pm (2576 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                          | <u>II</u> | CTT | <u>TL</u> | <u>CTL</u> | <u>StopD</u> | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----------|-----|-----------|------------|--------------|---------------|------|-------|-----------|------|--------------|
| to US 59 SBFR (#9)            | 217       | 217 | 5342      | 5342       | 128          | 128           | 127  | 127   | 16.8      | 16.8 | 1            |
| to US 59 NBFR (#8)            | 13        | 230 | 285       | 5627       | 0            | 128           | 0    | 127   | 15.3      | 16.7 | 0            |
| to Loop 494 (#7)              | 184       | 414 | 1746      | 7373       | 140          | 268           | 137  | 264   | 6.5       | 12.1 | 2            |
| to Russell Palmer Rd. (#6)    | 73        | 487 | 4456      | 11830      | 0            | 268           | 0    | 264   | 41.6      | 16.6 | 0            |
| to Woodland Hills Dr. (#5)    | 237       | 724 | 5188      | 17018      | 129          | 397           | 130  | 394   | 14.9      | 16   | 2            |
| to Brookdale Dr. (#4)         | 74        | 798 | 4694      | 21712      | 0            | 397           | 0    | 394   | 43.2      | 18.5 | 0            |
| to W. Lake Houston Pkwy. (#3) | 122       | 920 | 2800      | 24512      | 66           | 464           | 68   | 461   | 15.7      | 18.2 | 1            |
| to Rock Springs Dr. (#2)      | 64        | 984 | 3167      | 27679      | 4            | 467           | 4    | 466   | 33.9      | 19.2 | 1            |

# [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 9:31:03 PM ↑Contents

Entered artery 9:32:36 pm (92 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                          | П   | <u>CTT</u> | <u>TL</u> | CTL   | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----|------------|-----------|-------|-------|---------------|------|-------|-----------|------|--------------|
| to US 59 SBFR (#9)            | 109 | 109        | 5289      | 5289  | 15    | 15            | 16   | 16    | 33.2      | 33.2 | 1            |
| to US 59 NBFR (#8)            | 9   | 117        | 304       | 5593  | 0     | 15            | 0    | 16    | 23.9      | 32.5 | 0            |
| to Loop 494 (#7)              | 73  | 190        | 1840      | 7433  | 27    | 42            | 29   | 46    | 17.3      | 26.7 | 1            |
| to Russell Palmer Rd. (#6)    | 80  | 270        | 4456      | 11889 | 0     | 42            | 0    | 46    | 38        | 30   | 0            |
| to Woodland Hills Dr. (#5)    | 95  | 365        | 5086      | 16975 | 6     | 48            | 7    | 53    | 36.3      | 31.7 | 1            |
| to Brookdale Dr. (#4)         | 81  | 446        | 4700      | 21676 | 0     | 48            | 0    | 53    | 39.6      | 33.1 | 0            |
| to W. Lake Houston Pkwy. (#3) | 83  | 529        | 2887      | 24563 | 31    | 78            | 32   | 84    | 23.8      | 31.7 | 1            |
| to Rock Springs Dr. (#2)      | 75  | 604        | 3184      | 27747 | 17    | 95            | 17   | 101   | 29        | 31.3 | 1            |

### Entered artery 9:57:07 pm (1563 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                          | <u>II</u> | <u>CTT</u> | <u>TL</u> | CTL   | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----------|------------|-----------|-------|-------|--------|------|-------|-----------|------|--------------|
| to US 59 SBFR (#9)            | 138       | 138        | 5287      | 5287  | 43    | 43     | 43   | 43    | 26.1      | 26.1 | 1            |
| to US 59 NBFR (#8)            | 9         | 147        | 285       | 5572  | 0     | 43     | 0    | 43    | 22.6      | 25.9 | 0            |
| to Loop 494 (#7)              | 102       | 249        | 1694      | 7266  | 56    | 99     | 57   | 100   | 11.3      | 19.9 | 1            |
| to Russell Palmer Rd. (#6)    | 161       | 410        | 4503      | 11769 | 65    | 164    | 65   | 165   | 19.1      | 19.6 | 2            |
| to Woodland Hills Dr. (#5)    | 110       | 520        | 5099      | 16868 | 19    | 184    | 19   | 184   | 31.5      | 22.1 | 1            |
| to Brookdale Dr. (#4)         | 89        | 609        | 4692      | 21561 | 0     | 184    | 0    | 184   | 36        | 24.1 | 0            |
| to W. Lake Houston Pkwy. (#3) | 103       | 712        | 2702      | 24263 | 52    | 235    | 51   | 235   | 17.9      | 23.2 | 1            |
| to Rock Springs Dr. (#2)      | 55        | 767        | 3184      | 27447 | 0     | 235    | 0    | 235   | 39.5      | 24.4 | 0            |
| to Mills Branch Rd. (#1)      | 160       | 928        | 4489      | 31935 | 22    | 257    | 37   | 272   | 19.1      | 23.5 | 2            |

# Entered artery 10:28:02 pm (3419 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node               | П  | CTT | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|--------------------|----|-----|-----------|------------|-------|---------------|------|-------|-----------|------|--------------|
| to US 59 SBFR (#9) | 93 | 93  | 5230      | 5230       | 0     | 0             | 0    | 0     | 38.3      | 38.3 | 0            |
| to US 59 NBFR (#8) | 5  | 98  | 284       | 5514       | 0     | 0             | 0    | 0     | 39.2      | 38.3 | 0            |
| to Loop 494 (#7)   | 84 | 182 | 1667      | 7181       | 44    | 44            | 45   | 45    | 13.6      | 27   | 1            |

| to Russell Palmer Rd. (#6)    | 84  | 265 | 4456 | 11636 | 0  | 44  | 0  | 45  | 36.2 | 29.9 | 0 |
|-------------------------------|-----|-----|------|-------|----|-----|----|-----|------|------|---|
| to Woodland Hills Dr. (#5)    | 202 | 468 | 5110 | 16746 | 99 | 144 | 95 | 140 | 17.2 | 24.4 | 2 |
| to Brookdale Dr. (#4)         | 84  | 552 | 4689 | 21435 | 0  | 144 | 0  | 140 | 38   | 26.5 | 0 |
| to W. Lake Houston Pkwy. (#3) | 108 | 660 | 2687 | 24122 | 56 | 200 | 57 | 197 | 17   | 24.9 | 1 |
| to Rock Springs Dr. (#2)      | 61  | 721 | 3179 | 27301 | 0  | 200 | 0  | 197 | 35.4 | 25.8 | 0 |
| to Mills Branch Rd. (#1)      | 189 | 910 | 4504 | 31806 | 80 | 280 | 85 | 282 | 16.3 | 23.8 | 5 |

# [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 10:59:19 PM †Contents

Entered artery 10:59:48 pm (29 seconds) traveling Eastbound from Sorters Rd. (#10)

|                               |     |            | , p ,     |            |       |        |      |       |           |      |              |
|-------------------------------|-----|------------|-----------|------------|-------|--------|------|-------|-----------|------|--------------|
| Node                          | Ш   | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
| to US 59 SBFR (#9)            | 132 | 132        | 5246      | 5246       | 37    | 37     | 37   | 37    | 27.1      | 27.1 | 1            |
| to US 59 NBFR (#8)            | 8   | 140        | 286       | 5532       | 0     | 37     | 0    | 37    | 25.6      | 27   | 0            |
| to Loop 494 (#7)              | 190 | 330        | 1717      | 7249       | 145   | 182    | 144  | 181   | 6.2       | 15   | 2            |
| to Russell Palmer Rd. (#6)    | 76  | 405        | 4456      | 11706      | 0     | 182    | 0    | 181   | 40.1      | 19.7 | 0            |
| to Woodland Hills Dr. (#5)    | 151 | 556        | 5093      | 16798      | 42    | 225    | 42   | 224   | 23        | 20.6 | 1            |
| to Brookdale Dr. (#4)         | 87  | 643        | 4691      | 21490      | 0     | 225    | 0    | 224   | 36.9      | 22.8 | 0            |
| to W. Lake Houston Pkwy. (#3) | 70  | 713        | 2675      | 24165      | 18    | 243    | 17   | 241   | 26.2      | 23.1 | 1            |
| to Rock Springs Dr. (#2)      | 53  | 765        | 3161      | 27325      | 0     | 243    | 0    | 241   | 40.9      | 24.3 | 0            |
| to Mills Branch Rd. (#1)      | 122 | 887        | 4454      | 31780      | 10    | 253    | 15   | 256   | 25        | 24.4 | 1            |
|                               |     |            |           |            |       |        |      |       |           |      |              |

# **Cumulative Reports**

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 9:26:32 PM ↑Contents

Entered artery 10:09:39 pm (2587 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                     | <u>CTT</u> | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|--------------------------|------------|------------|---------------|-------|------|
| to Rock Springs Dr. (#2) | 747        | 27343      | 202           | 205   | 24.9 |

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 10:25:42 PM ↑Contents

Entered artery 11:08:37 pm (2576 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                     | <u>CTT</u> | <u>CTL</u> | CStopD | CBS1T | CAS  |
|--------------------------|------------|------------|--------|-------|------|
| to Rock Springs Dr. (#2) | 984        | 27679      | 467    | 466   | 19.2 |

# [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 9:31:03 PM ↑Contents

Entered artery 9:32:36 pm (92 seconds) traveling Eastbound from Sorters Rd. (#10)

| to. ou a. to. / 5.000 p (5- | 5555       |            |               |       | (==) |
|-----------------------------|------------|------------|---------------|-------|------|
| Node                        | <u>CTT</u> | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
| to Rock Springs Dr. (#2)    | 604        | 27747      | 95            | 101   | 31.3 |
| to Mills Branch Rd. (#1)    | 928        | 31935      | 257           | 272   | 23.5 |
| to Mills Branch Rd. (#1)    | 910        | 31806      | 280           | 282   | 23.8 |

# [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 10:59:19 PM ↑Contents

# Entered artery 10:59:48 pm (29 seconds) traveling Eastbound from Sorters Rd. (#10)

| Node                     | CTT | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|--------------------------|-----|------------|---------------|-------|------|
| to Mills Branch Rd. (#1) | 887 | 31780      | 253           | 256   | 24.4 |

### Legend:

TT:

Summarized Travel Time from previous Node (seconds)

CTT:

Summarized Cumulative Travel Time since beginning of Run (seconds)

TL:

Summarized Travel Distance from previous Node (feet)

CTL:

Summarized Cumulative Travel Distance since beginning of Run (feet)

#### 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

#### CStonD

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

#### BS1T:

Summarized Time spent Below Speed #1 (10 mph) while traveling from previous Node (seconds)

#### CBS1T:

Summarized Cumulative Time spent Below Speed #1 (10 mph) since beginning of Run (seconds)

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

### Summary of runs Westbound from Mills Branch Rd. (#1)

5 Before-type runs, 5 of unverifiable origin, collected Wednesday 9/10/2014 to Wednesday 9/10/2014, over day(s) Wed, with starting times during 9:30:00 PM to 11:14:35 PM CStopD BS1T CBS1T StopD CAS Stons TT CTT CTL AS Node to Rock Springs Dr. (#2) Average Before (n=5) 49 49 1814 1814 12 12 13 27.6 27.6 13 Std Dev Before (n=5) 31 31 14 14 15 15 7.7 7.7 0.7 to W. Lake Houston Pkwy. (#3) Average Before (n=5) 62 111 3099 4912 8 20 8 21 36 31.2 0.2 Std Dev Before (n=5, 20 19 31 18 19 18 19 8 6 0.4 to Brookdale Dr. (#4) Average Before (n=5) Std Dev Before (n=5 19 0 19 0 to Woodland Hills Dr. (#5) Average Before (n=5) 82 4707 12229 0 20 22 39.7 36 0 Std Dev Before (n=5) 9 29 33 0 19 21 4.6 4.4 0 to Russell Palmer Rd. (#6) Average Before (n=5) 94 329 5103 17332 10 30 10 33 38 36.5 0.6 Std Dev Before (n=5) 17 45 37 11 27 11 29 7.7 5.1 0.5 to Loop 494 (#7) Average Before (n=5) 21800 40 71 Std Dev Before (n=5) 16 to US 59 NBFR (#8) Average Before (n=5) 23477 0.8 103 562 1677 65 135 64 141 17.8 29 Std Dev Before (n=5) 63 79 25 44 59 52 59 52 13.7 0.8 4.5 to US 59 SBFR (#9) Average Before (n=5) 568 285 23761 135 0 141 31.9 0 Std Dev Before (n=5) 81 0 0 52 0 to Sorters Rd. (#10) 114 682 29184 160 161 33 Std Dev Before (n=5)

#### Contents:

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 9:26:32 PM ↑Contents

Entered artery 9:30:00 pm (208 seconds) traveling Westbound from Mills Branch Rd. (#1)

|                               |     |            | 00 p (200 |            |       |        |      | /     | -,        |      |              |
|-------------------------------|-----|------------|-----------|------------|-------|--------|------|-------|-----------|------|--------------|
| Node                          | Ш   | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
| to Rock Springs Dr. (#2)      | 76  | 76         | 1868      | 1868       | 36    | 36     | 37   | 37    | 16.7      | 16.7 | 2            |
| to W. Lake Houston Pkwy. (#3) | 56  | 132        | 3088      | 4957       | 0     | 36     | 0    | 37    | 37.9      | 25.6 | 0            |
| to Brookdale Dr. (#4)         | 40  | 172        | 2609      | 7566       | 0     | 36     | 0    | 37    | 44.6      | 30   | 0            |
| to Woodland Hills Dr. (#5)    | 81  | 252        | 4708      | 12273      | 0     | 36     | 0    | 37    | 39.9      | 33.1 | 0            |
| to Russell Palmer Rd. (#6)    | 102 | 354        | 5104      | 17377      | 9     | 45     | 12   | 49    | 34.1      | 33.4 | 1            |
| to Loop 494 (#7)              | 128 | 482        | 4477      | 21855      | 40    | 85     | 41   | 90    | 23.9      | 30.9 | 1            |
| to US 59 NBFR (#8)            | 138 | 620        | 1696      | 23551      | 99    | 184    | 99   | 189   | 8.4       | 25.9 | 1            |
| to US 59 SBFR (#9)            | 8   | 628        | 285       | 23835      | 0     | 184    | 0    | 189   | 24.4      | 25.9 | 0            |
| to Sorters Rd. (#10)          | 146 | 774        | 5318      | 29153      | 59    | 243    | 60   | 249   | 24.8      | 25.7 | 1            |

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 10:25:42 PM ↑Contents

Entered artery 10:58:22 pm (1961 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Entered artery 10:30:22 pm (1301 seconds) traveling westboard from Mins Branch Rd. (#1) |     |     |           |       |       |        |      |       |           |      |              |
|---|-----|-----|-----------|-------|-------|--------|------|-------|-----------|------|--------------|
| Node  | II  | CTT | <u>TL</u> | CTL   | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
| to Rock Springs Dr. (#2)  | 39  | 39  | 1802      | 1802  | 7     | 7      | 7    | 7     | 31.2      | 31.2 | 1            |
| to W. Lake Houston Pkwy. (#3)   | 51  | 90  | 3100      | 4902  | 0     | 7      | 0    | 7     | 41.5      | 37   | 0            |
| to Brookdale Dr. (#4)   | 38  | 128 | 2611      | 7513  | 0     | 7      | 0    | 7     | 47.4      | 40   | 0            |
| to Woodland Hills Dr. (#5)  | 70  | 198 | 4707      | 12220 | 0     | 7      | 0    | 7     | 46        | 42.1 | 0            |
| to Russell Palmer Rd. (#6)  | 69  | 267 | 5096      | 17316 | 0     | 7      | 0    | 7     | 50.3      | 44.2 | 0            |
| to Loop 494 (#7)  | 140 | 407 | 4472      | 21788 | 62    | 69     | 68   | 75    | 21.8      | 36.5 | 1            |
| to US 59 NBFR (#8)  | 33  | 440 | 1652      | 23440 | 0     | 69     | 0    | 75    | 34.4      | 36.4 | 0            |
| to US 59 SBFR (#9)  | 5   | 444 | 285       | 23726 | 0     | 69     | 0    | 75    | 39.1      | 36.4 | 0            |
| to Sorters Rd. (#10)  | 126 | 571 | 5984      | 29709 | 32    | 101    | 7    | 82    | 32.3      | 35.5 | 2            |

# [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 9:31:03 PM ↑Contents

Entered artery 9:52:42 pm (1299 seconds) traveling Westbound from Loop 494 (#7)

| Node                 | <u> </u> | CTT | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|----------------------|----------|-----|-----------|------------|-------|---------------|------|-------|-----------|------|--------------|
| to US 59 NBFR (#8)   | 33       | 33  | 1649      | 1649       | 0     | 0             | 0    | 0     | 33.8      | 33.8 | 0            |
| to US 59 SBFR (#9)   | 6        | 39  | 284       | 1934       | 0     | 0             | 0    | 0     | 34.2      | 33.8 | 0            |
| to Sorters Rd. (#10) | 145      | 184 | 6178      | 8111       | 27    | 27            | 31   | 31    | 29        | 30.1 | 2            |

Entered artery 10:12:35 pm (2491 seconds) traveling Westbound from Mills Branch Rd. (#1)

|                               |     |            | (         |            |       |        |      |       |           |      |              |
|-------------------------------|-----|------------|-----------|------------|-------|--------|------|-------|-----------|------|--------------|
| Node                          | Ш   | <u>CTT</u> | <u>TL</u> | <u>CTL</u> | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
| to Rock Springs Dr. (#2)      | 54  | 54         | 1797      | 1797       | 15    | 15     | 16   | 16    | 22.6      | 22.6 | 1            |
| to W. Lake Houston Pkwy. (#3) | 53  | 108        | 3079      | 4876       | 0     | 15     | 0    | 16    | 39.4      | 30.9 | 0            |
| to Brookdale Dr. (#4)         | 42  | 150        | 2605      | 7481       | 0     | 15     | 0    | 16    | 41.9      | 34   | 0            |
| to Woodland Hills Dr. (#5)    | 76  | 226        | 4707      | 12187      | 0     | 15     | 0    | 16    | 42.1      | 36.7 | 0            |
| to Russell Palmer Rd. (#6)    | 86  | 312        | 5096      | 17283      | 0     | 15     | 0    | 16    | 40.4      | 37.7 | 0            |
| to Loop 494 (#7)              | 162 | 474        | 4473      | 21756      | 50    | 66     | 61   | 77    | 18.8      | 31.3 | 2            |
| to US 59 NBFR (#8)            | 159 | 633        | 1689      | 23445      | 118   | 184    | 115  | 192   | 7.2       | 25.2 | 2            |
| to US 59 SBFR (#9)            | 7   | 641        | 284       | 23729      | 0     | 184    | 0    | 192   | 26.6      | 25.3 | 0            |
| to Sorters Rd. (#10)          | 101 | 742        | 5268      | 28997      | 12    | 195    | 12   | 204   | 35.5      | 26.7 | 1            |

Entered artery 10:43:12 pm (4329 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                          | <u>TT</u> | CTT | <u>TL</u> | <u>CTL</u> | StopD | <u>CStopD</u> | BS1T | CBS1T | <u>AS</u> | CAS  | <u>Stops</u> |
|-------------------------------|-----------|-----|-----------|------------|-------|---------------|------|-------|-----------|------|--------------|
| to Rock Springs Dr. (#2)      | 36        | 36  | 1800      | 1800       | 0     | 0             | 1    | 1     | 34.5      | 34.5 | 0            |
| to W. Lake Houston Pkwy. (#3) | 53        | 89  | 3097      | 4897       | 0     | 0             | 0    | 1     | 39.5      | 37.5 | 0            |
| to Brookdale Dr. (#4)         | 45        | 134 | 2613      | 7510       | 0     | 0             | 0    | 1     | 39.4      | 38.2 | 0            |
| to Woodland Hills Dr. (#5)    | 88        | 222 | 4705      | 12216      | 0     | 0             | 0    | 1     | 36.5      | 37.5 | 0            |
| to Russell Palmer Rd. (#6)    | 102       | 324 | 5106      | 17322      | 13    | 13            | 13   | 14    | 34.2      | 36.4 | 1            |
| to Loop 494 (#7)              | 115       | 439 | 4459      | 21781      | 24    | 37            | 25   | 39    | 26.4      | 33.8 | 1            |

| to US 59 NBFR (#8)   | 148 | 588 | 1699 | 23480 | 106 | 143 | 106 | 145 | 7.8  | 27.2 | 1 |
|----------------------|-----|-----|------|-------|-----|-----|-----|-----|------|------|---|
| to US 59 SBFR (#9)   | 7   | 594 | 285  | 23765 | 0   | 143 | 0   | 145 | 28.9 | 27.3 | 0 |
| to Sorters Rd. (#10) | 99  | 693 | 5267 | 29032 | 11  | 154 | 11  | 156 | 36.2 | 28.5 | 1 |

### [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 10:59:19 PM ↑Contents

# Entered artery 11:14:35 pm (916 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                          | <u> </u> | CTT | <u>TL</u> | <u>CTL</u> | StopD | CStopD | BS1T | CBS1T | <u>AS</u> | CAS  | Stops |
|-------------------------------|----------|-----|-----------|------------|-------|--------|------|-------|-----------|------|-------|
| to Rock Springs Dr. (#2)      | 37       | 37  | 1800      | 1800       | 4     | 4      | 5    | 5     | 33.1      | 33.1 | 1     |
| to W. Lake Houston Pkwy. (#3) | 98       | 135 | 3130      | 4930       | 40    | 44     | 40   | 44    | 21.8      | 24.9 | 1     |
| to Brookdale Dr. (#4)         | 45       | 180 | 2611      | 7541       | 0     | 44     | 0    | 44    | 39.9      | 28.6 | 0     |
| to Woodland Hills Dr. (#5)    | 93       | 273 | 4709      | 12249      | 0     | 44     | 5    | 50    | 34.3      | 30.6 | 0     |
| to Russell Palmer Rd. (#6)    | 113      | 386 | 5112      | 17361      | 26    | 70     | 27   | 77    | 30.9      | 30.7 | 1     |
| to Loop 494 (#7)              | 106      | 492 | 4458      | 21819      | 26    | 96     | 26   | 103   | 28.6      | 30.2 | 1     |
| to US 59 NBFR (#8)            | 36       | 528 | 1648      | 23467      | 0     | 96     | 0    | 103   | 31        | 30.3 | 0     |
| to US 59 SBFR (#9)            | 5        | 533 | 285       | 23752      | 0     | 96     | 0    | 103   | 40.3      | 30.4 | 0     |
| to Sorters Rd. (#10)          | 99       | 632 | 5276      | 29028      | 11    | 107    | 11   | 113   | 36.3      | 31.3 | 1     |
|                               |          |     |           |            |       |        |      |       |           |      |       |

# **Cumulative Reports**

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 9:26:32 PM ↑Contents

#### Entered artery 9:30:00 pm (208 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                 | CTT | CTL   | CStopD | CBS1T | CAS  |
|----------------------|-----|-------|--------|-------|------|
| to Sorters Rd. (#10) | 774 | 29153 | 243    | 249   | 25.7 |

# [-] Before-type Trip Log "(imported) unit 13 billy pm", PM-period, started Wednesday 9/10/2014 10:25:42 PM ↑Contents

# Entered artery 10:58:22 pm (1961 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                 | CTT | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|----------------------|-----|------------|---------------|-------|------|
| to Sorters Rd. (#10) | 571 | 29709      | 101           | 82    | 35.5 |

# [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 9:31:03 PM ↑Contents

# Entered artery 9:52:42 pm (1299 seconds) traveling Westbound from Loop 494 (#7)

| Node                 | CTT | <u>CTL</u> | CStopD | CBS1T | CAS  |
|----------------------|-----|------------|--------|-------|------|
| to Sorters Rd. (#10) | 184 | 8111       | 27     | 31    | 30.1 |
| to Sorters Rd. (#10) | 742 | 28997      | 195    | 204   | 26.7 |
| to Sorters Rd. (#10) | 693 | 29032      | 154    | 156   | 28.5 |

# [-] Before-type Trip Log "(imported) unit 15 david mpm", PM-period, started Wednesday 9/10/2014 10:59:19 PM †Contents

### Entered artery 11:14:35 pm (916 seconds) traveling Westbound from Mills Branch Rd. (#1)

| Node                 | <u>CTT</u> | <u>CTL</u> | <u>CStopD</u> | CBS1T | CAS  |
|----------------------|------------|------------|---------------|-------|------|
| to Sorters Rd. (#10) | 632        | 29028      | 107           | 113   | 31.3 |