

Travel Time – Facility

Study Area – Overland Park conducts travel time runs on several of its arterial corridors each year throughout the city. A map is attached to show where these corridors are located along with the traffic signal locations in each section.

Study Period – These travel time runs are conducted for both the morning (7 a.m. to 9 a.m.) and evening (4:30 pm. to 6:00 p.m.) peak periods. These are the typical periods of our highest daily demand as confirmed by ADT counts and peak hour turning movement counts.

Sample Size – A typical travel time summary along a corridor will involve approximately 10 runs for each direction of travel.

Deviations or exceptions - Our travel times are collected in seconds vs. minutes.

Cost Estimates - We took about 150 hours to conduct approximately 1000 individual travel time runs and another 70 hours to compile our annual travel time report. With the addition of our CCTV cameras over the last few years, we are now able to evaluate some corridor specific signal timing changes by conducting virtual travel time runs using this technology.

Utility of Performance Measure – This information is used internally for our traffic operations section. The information allows us to observe traffic before and after signal timing changes have been made. No widespread distribution of the report is made at this time. We have also been able to get some additional information for comparison purposes when our traffic signals were running uncoordinated (these runs are noted in our report as “FREE”).

Complete a TRAVEL TIME DATA COLLECTION WORKSHEET for the base level travel time data.

Attach a copy of the data collected, and calculated performance metrics.

Travel Time Data Collection Worksheet

Complete the following worksheet for travel time data used in the calculation of performance measures.

- Travel time data is based on:
- Speed Sensors
 - Vehicle Probe Methods
 - Other – please describe

Speed Sensors:

Type of Speed Detectors Used ->
Density of detectors ->
Are they uniformly spaced? (if not, explain)->
Method used to convert speed to travel time estimates ->
Maintenance and quality control procedures ->

Vehicle Probes:

Probe technology (i.e. floating vehicle, toll tags, GPS AVL, etc.) -> Floating car
Sample size and anticipated level of accuracy -> Approximately 1,000 runs in 2006
Validation procedures (if travel time data is contracted) -> TT runs are done in-house

Other:

Description of technology ->
Method to determine and validate accuracy ->

For all methods:

Provide estimate of the cost of data collection:

Equipment - \$1,000 (mostly mileage on city vehicle)
Staff time - \$8,000 (100 hours @ \$50/hr and 120 hours @ \$25/hr)
Consultant support - NA
Contracted services - NA
Overall estimate - \$9,000

Does the data support other programs or applications. (For example, video based speed detection may be an outgrowth of a video surveillance program that support a traffic control center.) NA

Provide a log of any changes, calibrations, or technology updates during the study period that may cause fluctuation in the data not attributed to traffic flow. NA