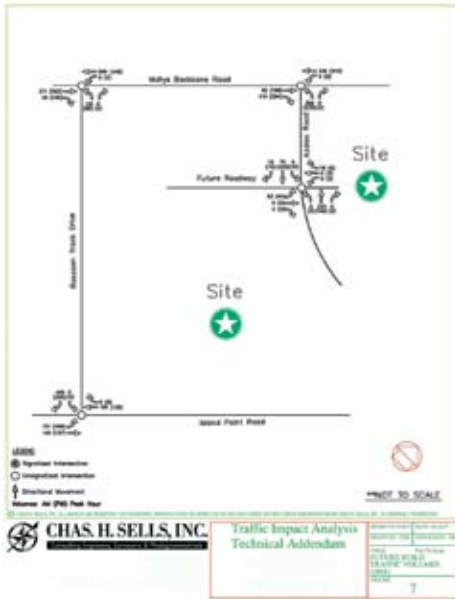


TRAFFIC FORECASTING

Traffic forecasting is the process of estimating the number of vehicles that will use a defined roadway in the future. Project level traffic forecasts are key inputs into:

- Corridor Planning
- Environmental Studies
- Roadway Design
- Signal Design
- Pavement Design
- Feasibility Studies
- Signal Warrant Studies
- Systems Planning
- Traffic Studies
- Intersection Design

Traffic forecasting begins with the collection of current traffic data for the base year, followed by traffic projections based on historic and projected trends in travel, economic, demographic and land use for the design year. Design years may be 10, 20 or 30 years beyond the base year. Projections of trips due to future land use changes may be obtained using the Trip Generation Manual from the Institute of Transportation Engineers.



Analysis and Data

The analysis and data used to perform a traffic forecast may vary based on the complexity and purpose of the forecast. If a project falls in a region with available Travel Demand Models or Traffic Simulation Models, then that model should also be reviewed for forecasting. Various analysis methods include regression analysis, graphical analysis, simple & compound interest analysis, or any other method mutually agreed upon by the agencies involved.

Depending on the purpose of the traffic forecast, it will have different data output. All project level traffic forecasts essentially show 24-hour volumes for through and turning movements, peak hour percent, directional distribution, and include truck percentages for the study area network.

Some of the standard inputs include:

Average Annual Daily Traffic (AADT)	The AADT is the total volume of vehicle traffic in both directions of a highway or facility for a year divided by 365 days.
Intersection Movements	Intersection movements are estimates of through, left, right and u-turn movements for the intersection in the study area.
Design Hour Volume (DHV)	The DHV is the volume for the 30th highest peak hour in the year.
K Factor (K)	The K factor is the DHV expressed as a percentage of the AADT, or $K = DHV/AADT$. K is dependent of location and facility type.
Directional Split (D)	The proportion of traffic moving in the peak direction of travel during peak hours is denoted as D (veh/h).
Truck Percentage	The truck percentages are typically for dual-tired vehicles and TTST (truck, trailer, semi-trailer) classification.

Forecasts are dependent on input data. Therefore, forecasts should be reviewed periodically as additional information becomes available.

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