

Traffic Study

Purpose

Traffic studies may be needed to recommend mitigation measures when existing transportation problems are evident in an area, such as high occurrences of crashes, increases in traffic volume or complex road geometrics causing issues.

Scope

The CONSULTANT will provide GRPC, with a Traffic Study for review to address the existing transportation issue on X Road or intersection. The project study will include the intersections of X, Y, and Z and the section of roadway from X to Z.

The Traffic Study will be divided into four Tasks: 1) Documentation of existing conditions, 2) Crash Data review/analysis, 3) Development of Countermeasures and Recommendations and 4) Deliverables.

Task 1– Documentation of Existing Conditions:

Upon receipt of an executed contract, the CONSULTANT will initiate this analysis. The CONSULTANT will meet at the site to review the study intersections/corridor. The limits of the study area are proposed to include the intersections of X, Y, and Z and the section of roadway from X to Z. A field review of the study area will be conducted to document the existing conditions of the study corridor/intersections and traffic control within the project limits. Existing roadway geometrics will be obtained from X and X Road. 13-hour turning movement traffic counts at the study intersections of X, Y, and Z.

The traffic counts will be used to document the existing traffic volumes in the corridor and used for analysis of future conditions. The operational characteristics of the study intersections will be evaluated using the information provided in the Highway Capacity Manual (HCM).

A limited spot speed study will be conducted for one hour in the morning and one hour in the afternoon, to determine an 85th percentile speed on X Road in the vicinity of the project site. Intersection Sight Distance will be field measured (using a measuring wheel) along MS Highway X and X Road to determine the approximate sight distance limitations that could affect the crash rate and that currently affect the intersection of X Road.

GRPC will be available to collect some traffic data as negotiated in the contract.

Task 2 – Crash Data Review/Analysis:

Crash data will be requested from MDOT from the SAMS database to identify the 5-year crash history at the study location. The 5-year crash history will be analyzed to determine if patterns exist in the crash history/crash reports. Crash trends/crash totals will be evaluated and summarized for the study intersection/ corridor.

Task 3 – Countermeasures and Recommendations

Based on the roadway speeds, crash history, traffic counts, sight distance and field conditions, recommendations will be developed to implement countermeasures to address the types of crashes that are causing the corridor/intersection to have safety concerns.

Task 4 - Deliverables

The details of the existing/future traffic, 85th percentile speeds, Intersection/Stopping Sight Distance measurements, and proposed countermeasures will be provided in a letter-report documenting the Analysis to the client for review/approval. Comments from the LPA that identify additional intersections for study will be considered as additional services if modification to the Traffic Analysis is required.

The study intersections will be evaluated using the Highway Capacity Manual to identify deficiencies in operation/delays at the study intersections. Corresponding geometric improvements will be recommended to mitigate the failing levels of service identified in this analysis for the study area intersections (if necessary).

Fee, Schedule & Billing

The CONSULTANT proposes to provide these services for a lump sum fee of \$xx,xxx.xx. The Traffic Impact Analysis will be completed within xx weeks of receipt of a Notice to Proceed, receipt of an executed agreement, and identification of the study intersections/corridor.