

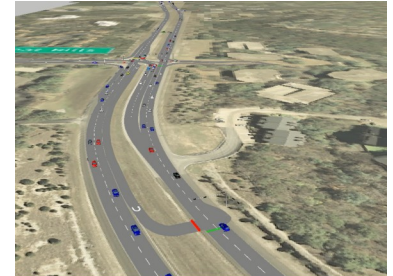


Traffic Engineering Services

Traffic Studies
Traffic Signal Design
Transportation Planning
Intelligent Transportation Systems

TRAFFIC STUDIES

SL 360 (TxDOT AUS) – ISE performed a traffic study of 14.25 miles of SL 360 in Austin which investigated alternative improvements such as diverging diamond interchanges, Michigan left, superstreets, continuous flow intersections, continuous Green-T and developed a series of improvements for implementation. Study also developed optimal signal timings for the corridor as an interim solution. Synchro and VISSIM software were used for traffic analysis and modeling of the entire corridor.



Loop 375* (TxDOT ELP) – Performed study for the widening of Loop 375 from Spur 601 to Dyer Street in El Paso. The study was performed using HCM methods and VISSIM microsimulation analysis. Recommendations for inclusion in schematic design were developed based upon results of the study.

IH 20 IAJR* (TxDOT ODA) – Developed IAJR for ramp reversal on IH 20 in Midland. Study was reviewed and approved by FHWA.



TRAFFIC SIGNAL DESIGN

SL 360 (TxDOT AUS) – ISE designed six new traffic signals as part of improvements to the corridor including two u-turn facilities where superstreet concepts were implemented to improve traffic flow. The plans were developed in accordance with TxDOT Standards and Specifications.

SH 242* (TxDOT HOU) – Designed two traffic signals for reconstruction as part of the installation of a Direct Connector from IH 45 NB to SH 242 WB. The plans were developed in accordance with TxDOT Standards and Specifications.

FM 685* (TxDOT AUS) – Designed three new traffic signals as part of the widening of this roadway to a five lane section. Project included the design of communications facilities and railroad coordination, exhibits, and timings.

TRANSPORTATION PLANNING

Greatwood Intersection Concept Studies (City of Sugar Land) – ISE performed a study for the City of Sugar Land to develop concepts for the intersection of Greatwood Subdivision with US 59 frontage road. Two concepts were developed and presented to the City that would alleviate traffic back ups and congestion during peak hours.

IH 20 Frontage Road Study* (TxDOT ODA) – Performed operations study for frontage road conversion from one-way to two-way operations for 26-mile corridor between Odessa and Midland. Developed recommendations for implementation, sequencing of conversion, and a list of additional improvements needed.

Tyler/Longview Regional Toll Analysis* (TxDOT TYL) – Modified existing travel demand model for region to model proposed toll road network and then developed travel times across the region for use in a region wide environmental justice analysis.

US 67 at Loop 306* (TxDOT SJT) – Managed study to determine if a DC is or will be needed from southbound Loop 306/US 67 to southbound US 67. Study also examined future need for an existing cloverleaf ramp and the possibility of implementing access management practices on the southern portion of US 67.

** denotes staff experience while with another firm*

INTELLIGENT TRANSPORTATION SYSTEMS



IH 35W Segment 3B –
Under construction

IH 35W 3C (TxDOT FTW) – ISE is responsible for the design of ITS facilities as part of the reconstruction of 7.5 miles of IH 35W. Design included tolling infrastructure design, conduits, loops, gantry structure design, closed circuit TV cameras, AVIs, DMVs, and dynamic message sign design.

Tomball Tollway, SH 249 (HCTRA) – ISE is responsible for the design of one mainlane and four ramp gantry signature structures and toll infrastructure design for Tomball Tollway project. Design included conduits, loops, power, communication, and toll area design as well as state-of-the-art gantry structures.

IH 35W 3B (TxDOT FTW) – ISE provided design services for ITS facilities as part of the reconstruction of 3.5 miles of IH 35W from IH 820 to US 287/SH 81 Interchange. Design included tolling infrastructure design, conduits, loops, gantry structure design, closed circuit TV cameras, AVI's, DMV's, and dynamic message sign design. The project is currently under construction.

Community Signage Program (City of Sugar Land) – ISE provided conceptual design of community signage for the City of Sugar Land. These signs would provide routing information for visitors entering the community, provide parking availability information and warn residents and employees of delays that can be avoided by using alternative routes. Design included preliminary site layouts for each sign and presentation to the City Council.

Sam Houston Toll Plazas* (HCTRA) – Developed plans for conduit layouts to support the implementation of tolling equipment as part of plans to modify several toll plazas along the Sam Houston Tollway in Harris County, Texas.

Weigh-In-Motion Design Project* (Mississippi DOT) – Niko Mozaffar was the project manager for the preparation of plans, specifications and estimate for the construction of a prototype, state-of-the-art real time electronic weigh-in-motion facility for use by MDOT on a statewide basis. The facility had ITS elements such VMS features to direct heavy vehicle traffic into, through, and out the facility as well as signal elements to direct traffic flow at conflict points within the facility such as lane signals. Niko provided services for conceptual schematics, final design and construction assistance. Niko had to coordinate extensively with MDOT, Mississippi law enforcement, and electronic weigh-in-motion system integrator, Mettler-Toledo.



** denotes staff experience while with another firm*

Traffic Engineering Clients

Texas Department of Transportation
(TxDOT)
(HOU, AUS, FTW, ODA, TYL, SJT, ELP)

Harris County Toll Road Authority
(HCTRA)
Fort Bend County Toll Road Authority
(FBCTRA)

Harris County (Texas)
Travis County (Texas)
City of Houston (Texas)
City of Missouri City (Texas)

Central Texas Regional Mobility Authority
(CTRMA)
City of Sugar Land (Texas)
Private Developers (Texas)



7700 San Felipe Street, Suite 485
Houston, Texas 77063
Tel: (713) 234-7118