# Freight Economic Analysis Tool (FEAT)

**Operation and Safety Project Model** 

Incorporating economic analysis into the planning process provides critical information for the transportation investment decision making process. The ITTS states developed FEAT to assist in providing this critical information.



The FEAT Operation and Safety (OPS) Model

features a systematic framework for conducting customized economic analysis of projects that generally cannot be evaluated using a travel demand model but that can have impacts on traffic delay and safety including:

Increasing in Length of Turn Bay	Adding a Traffic Signal
Increasing in the Turn Radius	Adding a Roundabout
Striping Changes	Bridge Replacement
Signal Timing/Phasing Changes	Interchange Reconstruction
Adding Turn Lanes	Innovative Intersection (Continuous Flow Interchange, etc.,)
Adding a Through Lane	Grade Separation

FEAT OPS model uses information on K-factor, hours of congestion, level of delay and crash rates to automate the estimation of travel time and safety benefits for a specific project and for a program of projects. The analysis can be conducted using default values or user supplied data. The only data required by the tool is project type, project location (county or region) and the average annual daily traffic.

The FEAT OPS model calculates the benefits and prepares the input sheets needed to conduct economic impact analysis using REMI or IMPLAN.





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### Process for Calculating Impacts of Operational and Safety Projects



#### Step 4: Auto Inputs

- This tab compiles all of the monetized auto inputs in preparation for the economic impact model runs.

#### Step 5: Truck Inputs

- This tab compiles all of the monetized truck inputs in preparation for the economic impact model runs.

#### Step 6a: Economic Impact Model Inputs

- Allows users to run self-generating input file for the economic impact model.

#### Step 6b: Economic Impact Result

- Users must copy and paste the exported REMI or IMPLAN Results into this tab.