



# Transportation Analysis, Modeling, and Simulation (TAMS) Application

The Center for Transportation Analysis (CTA) TAMS application is a web-based tool that supports multi-disciplinary transportation related project development. The TAMS application integrates custom simulation and modeling applications with data analysis and visualization tools. The TAMS application incorporates simulation and modeling, data analysis and visualization, spatial data, complex datasets with the latest web-based technologies. In addition, TAMS combines CTA transportation and modeling data services with external data services such as real-time transportation information. Also, TAMS can analyze real-time data streams using the integrated TAMS analysis, modeling, simulation, and visualization tools.

The TAMS application was developed to help the United States reach a sustainable transportation future. CTA's vision is to meet the mobility needs of a contemporary lifestyle while enhancing operational efficiencies, reducing direct and indirect emissions of greenhouse gases, increasing the use of renewable

energy, and improving overall security and system resiliency.

The TAMS application provides interactive analysis of various transportation modeling and simulations. The TAMS application uses stochastic and agent-based models and simulations to analyze a variety of transportation related issues. TAMS models and simulations include network optimization, supply chain analysis, lifecycle cost, resiliency and risk models, and biofuels analysis. TAMS analysis products include dashboard summaries, graphic and spatial displays, and detailed reports. The TAMS incorporates data from a variety of sources including USDOT, Census, DHS, web services, and custom sponsor data.

TAMS web-based applications are accessible by different browsers (e.g. IE, Firefox, and Google Chrome) and also across multiple platforms such as Windows and Apple systems. Future versions of TAMS applications will also be available on handheld devices like tablets and phones.



## Research Areas

Freight Flows

Passenger Flows

Supply Chain Efficiency

Transportation:  
Energy  
Environment

Safety  
Security

Vehicle  
Technologies

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