

## What is IMPLAN?

IMPLAN is an economic impact assessment software system. The system was originally developed and is now maintained by the Minnesota IMPLAN Group (MIG). It combines a set of extensive databases concerning economic factors, multipliers and demographic statistics with a highly refined and detailed system of modeling software. IMPLAN allows the user to develop local-level input-output models that can estimate the economic impact of new firms moving into an area as well as the impacts of professional sports teams, recreation and tourism, and residential development. The model accomplishes this by identifying direct impacts by sector, then developing a set of indirect and induced impacts by sector through the use of industry-specific multipliers, local purchase coefficients, income-to-output ratios, and other factors and relationships.

There are two major components to IMPLAN: data files and software. An impact analysis using IMPLAN starts by identifying expenditures in terms of the sectoring scheme for the model. Each spending category becomes a “group” of “events” in IMPLAN, where each event specifies the portion of price allocated to a specific IMPLAN sector. Groups of events can then be used to run impact analysis individually or can be combined into a project consisting of several groups.

The overall movement of specific jobs and contractor jobs into Maryland is defined as the direct economic impact. . Once the direct economic impacts have been identified, IMPLAN can calculate the indirect and induced impacts based on a set of multipliers and additional factors.

The hallmark of IMPLAN is the specificity of its economic datasets. The database includes information for five-hundred-and-twenty-eight different industries (generally at the four or five digit North American Industrial Classification level), and twenty-one different economic variables. Along with these data files, national input-output structural matrices detail the interrelationships between and among these sectors. The database also contains a full schedule of Social Accounting Matrix (SAM) data. All of this data is available at the national, state, and county level.

Another strength of the IMPLAN system is its flexibility. It allows the user to augment any of the data or algorithmic relationships within each model in order to more precisely account for regional relationships. This includes inputting different output-to-income ratios for a given industry, different wage rates, and different multipliers where appropriate. IMPLAN also provides the user with a choice of trade-flow assumptions, including the modification of regional purchase coefficients, which determine the mix of goods and services purchased locally with each dollar in each sector. Moreover, the system also allows the user to create custom impact analyses by entering changes in final demand. This flexibility is a critically important feature in terms of the RESI proposed approach. RESI is uniquely qualified to develop data and factors tailored to this project, and, where appropriate, overwrite the default data contained in the IMPLAN database.

Another major advantage of IMPLAN is its credibility and acceptance within the profession. There are over five hundred active users of IMPLAN databases and software within the federal and state governments, universities, and among private sector consultants. Figure 1 provides a sampling of IMPLAN users.

**Figure 1: Sampling of IMPLAN Users**

**Academic Institutions**

Alabama A&M University  
Albany State University  
Auburn University  
Cornell University  
Duke University  
Iowa State University  
Michigan Tech University  
Ohio State  
Penn State University  
Portland State University  
Purdue University  
Stanford University  
Texas A&M University  
University of California – Berkeley  
University of Wisconsin  
University of Minnesota  
Virginia Tech  
West Virginia University  
Marshall University College of Business

**Federal Government**

Argonne National Lab  
Federal Emergency Management Agency (FEMA)  
US Dep't of Agriculture, Forest Service  
US Dep't of Agriculture, Econ Research Service  
US Dep't of Interior, Bureau of Land Mgmt  
US Dep't of Interior, Fish and Wildlife Service  
US Dep't of Interior, National Parks Service  
US Army Corps of Engineers

**State Governments**

MD Dep't of Natural Resources  
Missouri Dep't of Economic Dev.  
California Energy Commission  
Florida Division of Forestry  
Illinois Dep't of Natural Resources  
New Mexico Dep't of Tourism  
South Carolina Empl Security  
Utah Dep't of Natural Resources  
Wisconsin Dep't of Transportation

**Private Consulting Firms**

Coopers & Lybrand  
Batelle Pacific NW Laboratories  
Boise Cascade Corporation  
Charles River Associates  
CIC Research  
BTG/Delta Research Division  
Crestar Bank  
Deloitte & Touche  
Ernst & Young  
Jack Faucett Associates  
KPMG Peat Marwick  
Price Waterhouse LLP  
SMS Research  
Economic Research Associates  
American Economics Group, Inc.  
L.E. Peabody Associates, Inc.  
The Kalorama Consulting Group  
West Virginia Research League