# Priority Mapper

By InfoHarvest Inc.

***Integrating InfoHarvest's Priority Analyst with ESRI's ArcMap® GIS***

## Background:

Prioritizing actions related to geographically distributed assets/resources (e.g. – facilities or people in multiple locations.), and involving multiple stakeholders is a complex challenge in both the public and private sectors. Consider:

- Waste Clean-up and Disposal following a major flood, hurricane or earthquake
- Site Selection
- Habitat Restoration
- Global Supply Chain and Shipping
- Maintenance of Utility & Transportation Infrastructure

## What is the Priority Mapper?

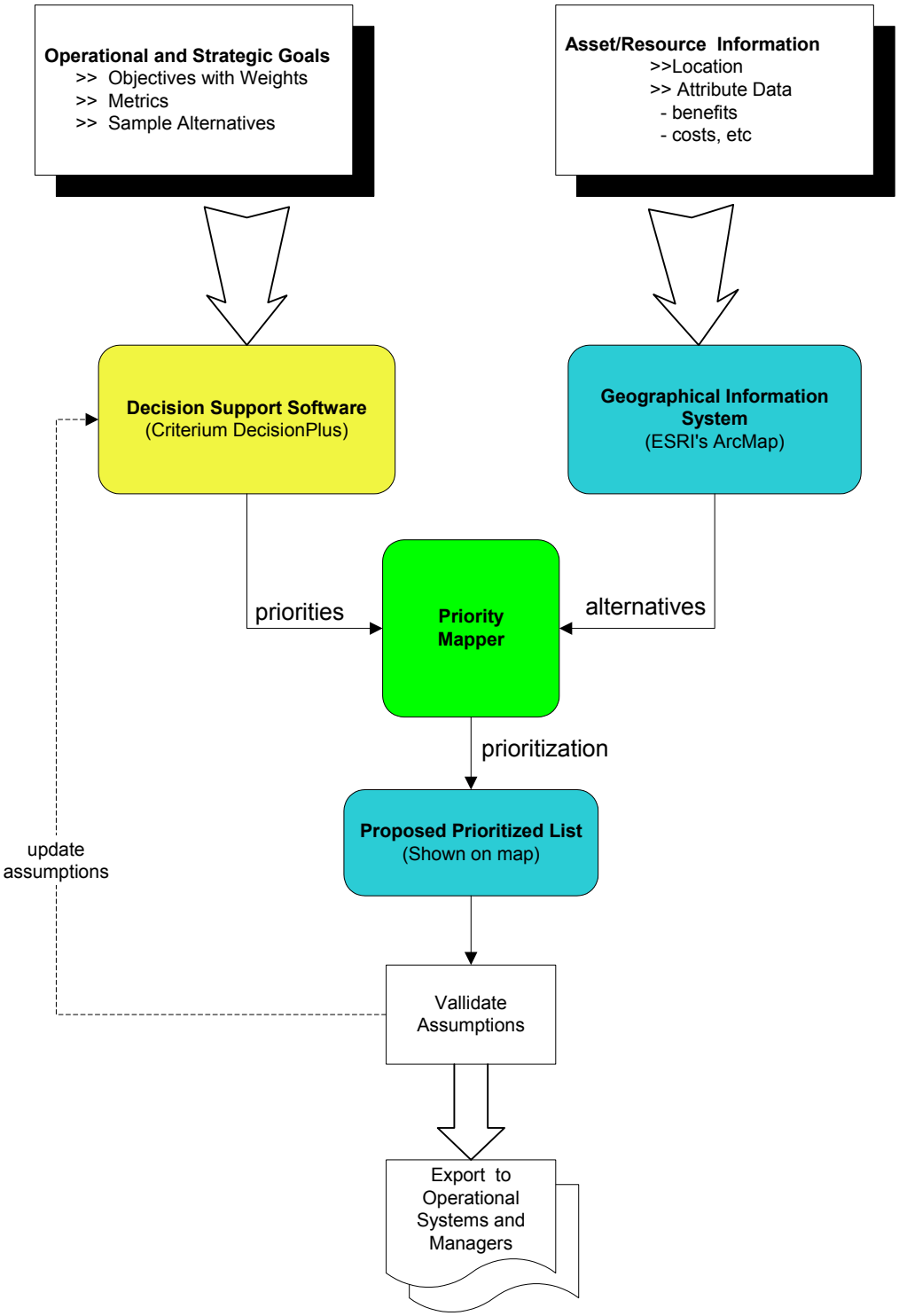
The Priority Mapper is a decision support tool used with maps supported by Geographical Information Systems (GIS). Managers and executives use it to realistically prioritize actions (i.e. – projects, tasks, programs, etc.) related to geographically distributed assets and resources. Prioritizations are immediately applied to all actions and their rankings shown on maps. Results can be outputted directly to work plans, project management systems and to executive presentations. It provides:

- **Decision Framework** - Designed to enable users to develop a prioritization process that incorporates the expertise, insights, needs and objectives of key stakeholders.
- **Impact on Recommendations** - An integrated sensitivity analysis gives decision makers a means to examine the direct impacts of trade-offs on decision recommendations and funding constraints.
- **Visualization of Priorities and Consequences** - The outputs are clear, visual representations of the prioritizations and their recommended alternatives. Decision makers can visualize prioritization and financial consequences on a map.
- **Defensible Process** - The process is transparent and defensible. Prioritization is based upon proven decision science.

## Target Audience

Public Sector – Local, State, and Federal Governments
Private Sector – Utilities, Telecommunications, Logistic, Commercial Real Estate

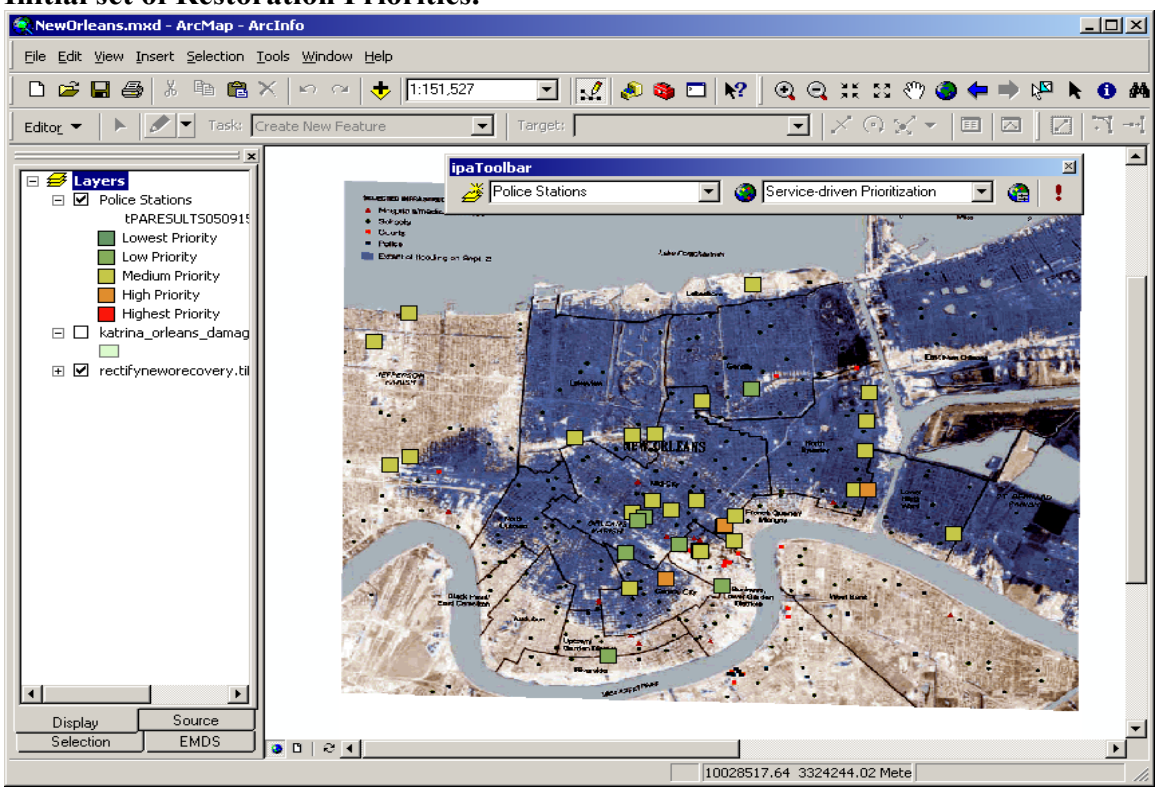
## *Decision Framework*



## Sample Prioritization Screen Shots

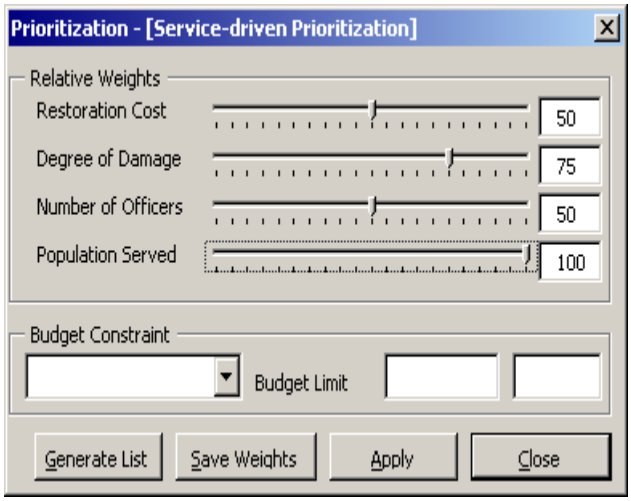
*This is a demonstration model related to restoration of Police Stations in New Orleans following hurricane Katrina. Criteria, Weighting, Operational Data, and Costs are fictitious and were produced by InfoHarvest staff for testing purposes only. Maps and facilities locations were taken from satellite photos and Arc Map. See InfoHarvest's Introduction to the Action Prioritizer for more details on this example.*

### Initial set of Restoration Priorities.

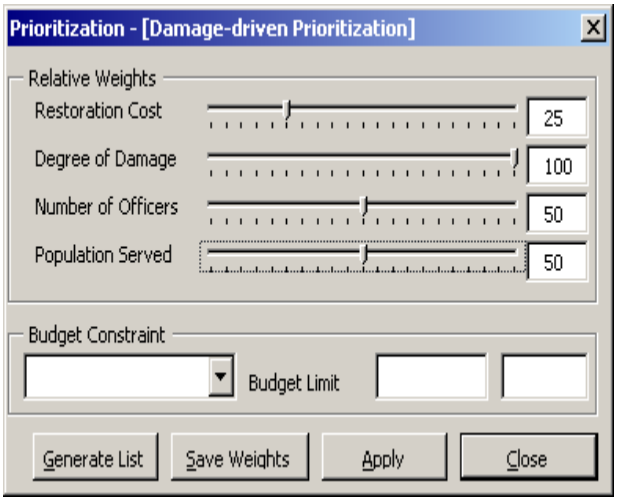



The map shows prioritization for restoration of police stations based on a simple prioritization model where the population served is the most important criteria.

### Ability to explore how changing criteria weights affect Prioritization

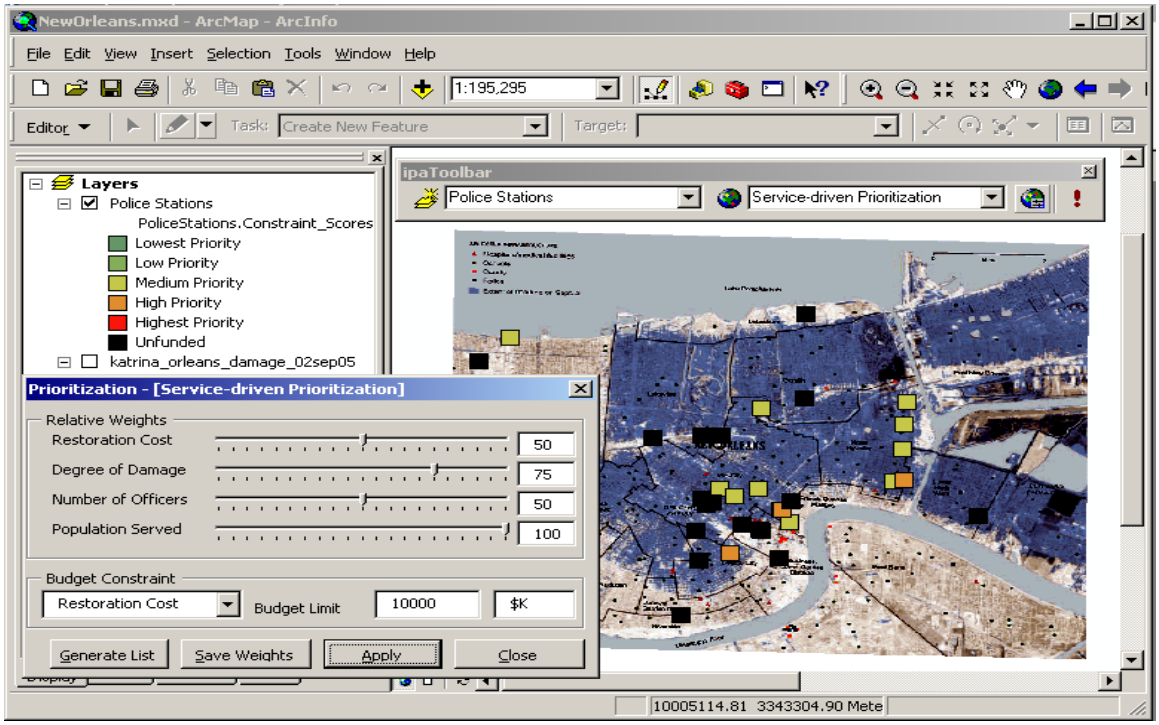



**Service Driven Prioritization**

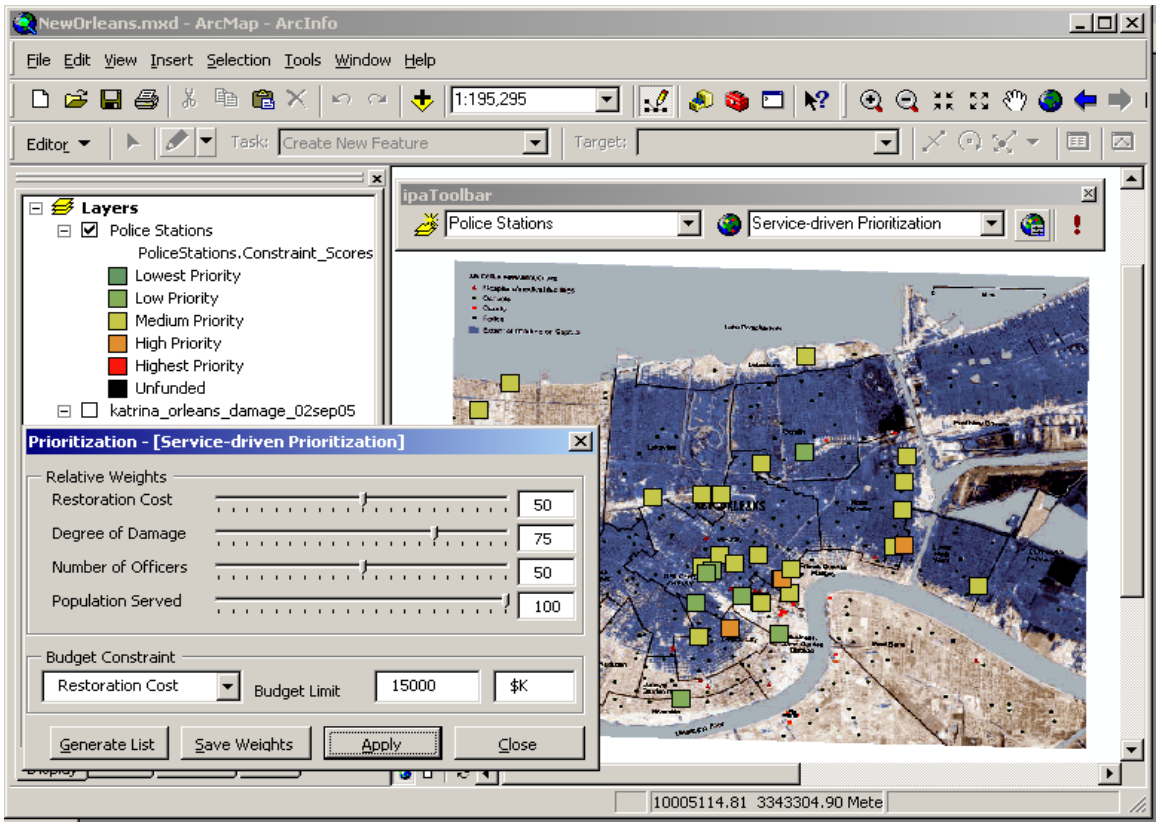



**Damage-driven Prioritizaton**

**Calculate actions which fall within funding constraints** - Action Prioritizer supports budget development in a map setting by displaying consequences of a budget limit on the map.




A budget of $10,000,000 would restore most Medium and all High Priority stations.




A budget of $1,500,000 would pay for restoration of all police stations in the example.