**Introduction**

Well designed transportation investments have many short-term and long-term economic benefits. They can spur economic growth, create jobs, boost labor productivity and profitability, increase efficiency and accelerate local and regional economic development. Given the anemic job growth in the US economy today, and the growing fiscal constraints imposed on public agencies, policy makers and stakeholders are increasingly demanding that impacts of infrastructure investments be quantified. This would allow scarce resources to be allocated more efficiently and effectively.

**Purpose**

This study measures the impact of GDOT’s highway expenditures on economic activity in the State of Georgia. The study examines impacts at three levels (1) Statewide impacts; (2) Impacts within GDOT Highway Districts; and (3) County impacts.

The timeframe of the analysis is January 2009 through May 2013. During this period, GDOT spent $3.6 billion on highway projects. Each project expenditure had a ripple effect on economic activity in local areas.

**Methodology**

The research measures all highway project expenditures and classifies them by detailed industry, location of project, year of award and headquarters location of prime and subcontract recipients.

A 440 sector IMPLAN model is used to measure the flow of related industry activity at the county level. Multipliers are derived that measure direct effects, indirect effects, induced effects and related industry activity at the county level. Multipliers are derived from the data through a series of closed equations that can be solved for the dependent variables and relate to the independent variables.

The impacts measured include the following:

- Total industry output (gross sales)
- Employment (full-time and part-time jobs)
- Value-added (additions to total output)
- Employment compensation (wages, salaries and labor income)
- Proprietors income (proprietors and self-employed)
- Asset income (dividends, interest, rent)
- Indirect business taxes (sales, gasoline, excise taxes and fees)

**Unique Outcomes**

Most impact studies only provide aggregate measures of economic activity and job creation. In contrast, the current study estimates direct impacts, indirect impacts and induced impacts of GDOT’s expenditures by the following breakdown:

- Statewide impacts
  - GDOT highway district impacts
  - Individual county impacts
  - Impacts arising from direct awards to prime contractors
  - Impacts arising from prime contractors’ awards to local subcontractors
  - Impacts arising from GDOT’s direct awards to city and county jurisdictions
  - Impacts arising from prime contractors’ awards to local Disadvantage Business Enterprises
  - Impacts classified by project work codes/industries
  - Impacts based on the geographic location of contractors
  - Impacts based on the geographic location of subcontractors
  - Impacts based on the geographic location of projects

**Prior Research**


This bipartisan report makes an argument for the development of a broad set of goals to capture the full impact of investments. The report leveraged information collected from test cases, best practices and interviews with subject matter experts, politicians and policy makers. The results identified five key metrics of transportation investments impacts: (1) economic growth per dollar invested; (2) national connectivity or connection of people and goods across a region; (3) metropolitan accessibility or the provision of efficient access to jobs, labor and other activities; (4) energy security and environmental protection; and (5) safety, or a reduction in the number of accidents, injuries and fatalities associated with modes of transportation. Along with outlining goals, the report also identified several performance metrics to capture benefits. For economic growth the report advocates using access to jobs and non-work activities, improvements in network utility and reductions in corridor congestion. For energy and environmental metrics, the metrics include petroleum consumption and CO emissions. Safety metrics comprise the number of fatalities and injuries per capita as well as fatalities and injuries per vehicle miles traveled.

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