Economic Impacts of the I-35W Bridge Collapse

The I-35W Mississippi River bridge provided direct access to downtown Minneapolis, the University of Minnesota, area businesses and north suburban destinations for more than 140,000 vehicles each day. The tragic collapse of the bridge caused substantial loss of life and injury.

The bridge collapse has also significantly impacted road-users and the Minnesota economy. Mn/DOT's initial study concluded that road-user costs due to the unavailability of the river crossing would total $400,000 per day. In addition to the road user cost study, further analysis by DEED and Mn/DOT estimate the economic impact - or loss to Minnesota's economy – at about $17 million in 2007 and $43 million in 2008.

The Mn/DOT study focused on valuing how the unavailability of the river crossing affected road-users and assigned monetary values to auto travel time, heavy commercial truck travel time, as well as to variable operating costs for both – a sound approach for measuring impacts to road-users.

The impact analysis takes an economic approach to estimate the impact of the bridge collapse. This approach focuses on factors that directly affect Minnesota's economy. It does not consider the value of auto travel time since non-business travel (i.e., commuting) is not considered an economic contribution. Moreover, some of the remaining road-user costs would have been spent on other goods and services in the state without the bridge collapse offsetting some of the road-user costs.

Economic Impact Background

Although the economic impacts of the bridge collapse and subsequent activities are widespread, this report examines only the economic impacts of the road-user transportation detours.

The data was collected through a variety of sources and analyzed with the assistance of REMI Consulting using their Transight and Policy Insight econometric models.[1] The model analyzes how detours affect costs and access to goods/services. The model also considers how strategies by businesses and commuters can mitigate the costs to the economy. The model generates initial, or direct, economic costs and indirect or "spin-off" impacts.

Transportation Costs

Mn/DOT has identified alternate routes for the 140,000 vehicles (including 5,000 heavy commercial trucks) that used the bridge on a daily basis. The department also completed an analysis that concluded costs to road-user due to the detours would total $400,000 per day. The study was completed prior to the improvements Mn/DOT made to the detour routes. This estimate assigned a monetary value associated with the detour to both the value of auto travel time ($247,000) and heavy commercial truck travel time ($15,000) for road-users, as well as to variable operating costs (due to increased travel distance) for each ($126,000 and $12,000, respectively).

The daily loss of $247,000 of auto travel time through longer commutes is a significant cost to individuals, but unlikely to have major economic ramifications. Business-related auto travel time is not separately analyzed in this report.

On the other hand, the $153,000 in longer road-time for commercial truck drivers and higher operating costs for all road-users due to the bridge collapse have measurable economic impacts. However, some of these dollars would have been spent on other goods and services in the state without this change in travel patterns. As a result, the model analyzes the net change in spending and business production costs through increased vehicle miles traveled (VMT) and vehicle hours traveled (VHT).

Net Economic Impact

The average daily net economic impact is a $113,000 reduction in the state's economic output (i.e., Minnesota's economic pie, or gross state product), or about $17 million in 2007 and $43 million in 2008. These impacts are concentrated in the Twin Cities and translate to about 0.01% of the state's economy on an annual basis.

This economic loss has the potential to cost the state jobs throughout the economy. Actual job losses will depend on how effectively road-users mitigate the economic losses and employer reaction to a possible temporary decline in sales.

[1] REMI models have been used to estimate economic impacts by more than 100 public and private organizations throughout the world. See Remi.com.