SUMMARY OF HIGHWAY BYPASS STUDIES

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This paper reviews prior studies of the economic impacts of highway bypasses, based on prior research conducted by Wisconsin Dept. of Transportation. It is excerpted from the report Economic Impact Analysis: St. Croix River Crossing—Minnesota TH 36 / Wisconsin STH 64, prepared by Economic Development Research Group for the Minnesota Dept. of Transportation and the Wisconsin Dept. of Transportation, July 1999.

The following is a summary of US statewide studies of the economic development impact of highway bypasses on small towns.

1 Highway Bypasses in Wisconsin

In January 1998, WisDOT published the results of a year-long study of the economic impacts of highway bypasses on all 17 Wisconsin communities that had been bypassed since 1980. Population of the 17 communities ranged from 304 to over 28,000. The study employed economic data, traffic counts, mapping, interviews, media research, and site visits to compare the 17 bypassed communities to 14 similar (“control”) communities without bypasses. Major conclusions of the study were as follows:

- "In most communities, highway bypasses have little adverse impact on overall economic activity. The economies of smaller communities [less than 2,000 population] have a greater potential to be adversely impacted by a bypass.

- Over the long term, average traffic levels on the "old routes" in medium and large bypassed communities are close to or higher than pre-bypass counts, indicating continued strong economic activity in those communities and the opportunity for retail trade to flourish.

- Very little retail flight has occurred in bypassed communities, meaning that few businesses have relocated or developed new operations in areas adjacent to the bypass route.

- Communities view their bypasses as beneficial overall, while at the same time communities and individual businesses understand that the bypasses presented changes that must be addressed proactively."

Among the benefits of bypasses and associated accessibility improvements that were identified by the communities are improved traffic flow, reduced congestion, reduction of truck traffic, and opportunities for implementation of planned development.

In an earlier WisDOT publication, Highway Bypasses: Wisconsin Communities Share Their Experiences (Division of Planning, 1988) two communities similar to Stillwater, Rice Lake and Sturgeon Bay, were among the communities profiled. These communities shared two features: (1) a similar size, and (2) a downtown that was a tourism destination.
In Rice Lake, a survey of community leaders showed that 40% believed the bypass had no impact on the tax base, while 43% believed the tax base had increased due to the bypass. Overall, 40% felt there was no impact on employment, while 50% believed the bypass stimulated employment. Only 4% believed there were fewer jobs with the bypass in place. (Note: percentages do not sum to 100% because some respondents had no opinion.)

In Sturgeon Bay, a survey of community leaders showed that 50% felt there was no impact on employment due to the bypass, 21% believed the bypass stimulated employment and 21% believed there were fewer jobs following construction of the bypass. One-third believed the tax base had increased because of the bypass, and 46% saw no effect on the tax base. Noted bypass deficiencies included a lack of signage with directions to downtown.

2 Highway Bypass in Kansas

A 1996 study conducted by David Buress, of the Institute for Public Policy and Business research at the University of Kansas addresses some of the economic impacts of bypasses on 21 small Kansas towns. The primary findings include the following:

"First, in the long term, typical bypasses in Kansas probably do not have significant negative effects on the local economy. Most counties and many towns may have benefited in the long term from the construction of bypasses…"

"Second, in the short term, effects on individual firms are different from effects on the aggregate work force. In Kansas towns, bypasses probably did not have negative short-term effects on the town as a whole. Bypasses probably did have transitory negative impacts on selected firms. The negatively-impacted firms are concentrated in travel-related businesses, including restaurants, bars, motels, and service stations. However, not all travel-related firms in a bypassed town were negatively impacted." 

"Third, …individual towns and firms could be affected by bypasses in ways that differ quite a lot from the average effects. In particular, it is possible that some towns suffered permanent gains or losses due to bypasses. Also, some individual firms may have chosen to go out of business rather than adjust to changed circumstances caused by the bypass. Those firms typically were replaced by other firms."

"Fourth, …many factors other than bypasses affect the economy of small towns and individual firms, and these various factors together are substantially more important than bypasses…"

(Note: These other factors may include regional and national economic trends, population movements away from small towns, and shifts in retailing toward large chain stores.)

3 Highway Bypass in Iowa

A 1991 study for the Office of Advanced Planning of the Iowa Department of Transportation examined 11 communities where highway bypasses had been constructed. Populations of the communities ranged from 673 to nearly 7,900. The following are among the findings:
"The results from analyzing the secondary data indicate that the overall levels of retail sales in a community are not significantly affected by the presence of a bypass."

"The benefits of an improved flow of traffic from bypasses around rural communities along a transportation corridor does not appear to be offset by losses of retail sales in the aggregate. Businesses serving the local trade area and those dependent on repeat customers are actually likely to benefit from an improved downtown shopping environment. A transfer among individual business owners appears to be occurring in these communities where certain businesses along the old highway close and others open along the new bypass. Over time, the majority of merchants appear to be adjusting to the new situation and report being in favor of the bypass."

"The overall majority of respondents favored the bypass. Regardless of [their] location, a majority of merchants agreed that the traffic volume and noise had decreased since the bypass. They thought the shopping environment and accessibility of suppliers and delivery trucks to their places of business had improved or not changed since the opening of the bypass."

4 Highway Bypass in Texas

A study of bypassed towns in Texas by Johann Andersen et al used statistical models incorporating data on retail sales, gasoline sales, restaurant sales, and service receipts to analyze the economic base, changes in business volume, and related economic impacts of highway bypasses on six small Texas cities. Among the study's conclusions were the following:

"...the economic impact of highway bypasses on small cities in a rural setting is not uniform across cities and in most cases appears to be rather minor. The way in which a social and business community responds to a highway bypass is complex and involves the interaction of several factors..."

"Econometric models showed that a bypass generally brought a small, but statistically significant, decrease in business volumes in bypassed cities... Cluster analysis highlighted the importance of the economic base of a city, as captured in the geographic regions..."

"...individual case studies show that local communities might not necessarily perceive bypasses as negative. Rather, the construction of a bypass is seen as one of many factors contributing to the overall economic performance of a city in a rural setting. The initial decreases in certain types of sales were often counteracted by reorientation of local stores. Political and business leadership in a given area seems to play an important role in the evolution of the city after bypass opening."

5 Highway Bypass in North Carolina

A 1991 report, Impacts of highway Bypasses on Community Businesses, was prepared for the North Carolina Division of Community Assistance and the I-40 Steering Committee. The report primarily addresses impacts of a specific highway improvement, but notes:
"Efforts should focus on maximizing opportunities made available by the improvements, as opposed to avoiding the improvements. Highway improvements generally are a benefit to the community as a whole, even though some businesses will be negatively impacted. Efforts can be launched early to minimize negative impacts. Efforts to minimize negative impacts include adequate advertising, signage along the new routes and efforts to obtain adequate access between old and new routes."

6 Summary of Findings on Impacts of Highway Bypasses

The wide range of highway bypass studies carried out around the country provide a generally consistent story. They indicate that highway bypasses are seldom either devastating or the savior of a community business district. The locational shift in traffic can cause some existing businesses to turn over or relocate, but net economic impacts on the broader community are usually relatively small (positive or negative). Communities and business districts that have a strong identity as a destination for visitors or for local shoppers (such as Stillwater) are the ones that are most likely to be strengthened due to the reduction in traffic delays through their centers. However, there is also a broad perception that adequate signage to the bypassed business center is an important need (and concern) for ensuring its continued success.

7 Bibliography on Impacts of Highway Bypasses

Andersen, Johann et al, Center for Transportation research, the University of Texas at Austin, Economic Impact of Highway Bypasses, published in Transportation Research Record 1395, Transportation Research Board, publication date unknown.


David Burress, Institute for Public Policy and Business Research, University of Kansas, Impacts of Highway Bypasses on Kansas Towns, October 1996.


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