

## **ECONOMIC IMPACTS OF ACCESS MANAGEMENT**

A growing number of state and local transportation agencies are adopting regulations aimed at managing driveway access and incorporating raised medians into roadway projects in urban areas. The purpose of these actions is to reduce traffic conflicts, protect driver safety, and improve traffic flow on major roadways. Yet introducing a median or regulating driveway access on an existing roadway is often controversial. In particular, owners of abutting businesses often feel that their business will be adversely affected. Below is a synthesis of recent research on the economic impacts of access management to assist transportation agencies in responding to public questions and concerns.

### **Effects on Business Activity**

Several studies were conducted in the 1990s to help fill the need for more information on the potential economic effects of access management. These studies have focused largely on the potential impacts of left-turn restrictions (median projects) on business activity, although some have also addressed changes to driveway access. Due to the proprietary nature of sales information and the variety of factors that affect business activity, analysis of this issue has been difficult. Most studies have focused on business owner perceptions of impacts, before and after case examples, or generalized comparisons of business activity across corridors. Below is a summary of available studies and findings, beginning with the most recent.

### **Kansas**

In 1999, the Kansas Department of Transportation studied 15 businesses that had filed inverse condemnation lawsuits against the Department in the past on access related issues.<sup>1</sup> In nearly every case, the landowner had claimed that the applicable regulation, ranging from driveway consolidation to mainline relocation, would have devastating effects on their business and the highest and best use of their property. Some had been compensated for potential impacts. Each property was studied to determine if the economic impacts had in fact been realized. The study examined specific economic impact claims of the landowners, as well as “before” and “after” aerial photography of the involved parcels and roadways, and historical land uses for each parcel.

- n In all but one of the cases either the claimant was still in possession of the property and operating the business, the property was being used for the same use by a different operator, or the use of the property had been upgraded. The only exception was where a mainline was relocated with two gas stations remaining on the old mainline, which was converted to a

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<sup>1</sup> Michael Rees, Tim Orrick, and Robert Marx, “Police Power Regulation of Highway Access and Traffic Flow in the State of Kansas,” presentation, 79<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington D.C., January 10, 2000.

frontage road. In this case, drivers had to go about 2 miles out of their way to reach the frontage road and the gas stations went out of business.

- n The results provide strong anecdotal evidence that except in extreme factual situations, changes in access or traffic patterns did not cause a change in the highest and best use of abutting properties.

## Texas

A study of the economic impacts of left-turn restrictions was conducted for the Texas Department of Transportation in the mid-1990s. The study was intended both to identify potential impacts and to establish an assessment methodology. Researchers found that prearranged on-site interviews worked far better than telephone or mail surveys, which had very low response rates. Another suggested method was to obtain the endorsement of area Chambers of Commerce prior to approaching business owners for information. A letter of endorsement, signed by the appropriate Chamber of Commerce representative was sent to each of the business owners asking for their cooperation in the study.

Due to the sensitivity of information on business activity, researchers did not ask for sales details, but for general perceptions as to whether business activity had changed over time using ranges (e.g. better/worse/same). Information on historical property values was obtained through the use of appraisal district computers or by purchasing CDs from private companies with this information. Key findings included the following:<sup>2</sup>

- n Perceptions of business owners before a median was installed were more pessimistic than what usually happened.
- n Business owners reported no change in pass-by traffic after median installations.
- n Most business types (including specialty retail, fast-food restaurants and sit-down restaurants) reported increases in numbers of customers per day and gross sales, except for gasoline stations and automotive repair shops, which reported decreases in the numbers of customers per day and gross sales.
- n Most adverse economic impacts were realized during the construction phase of the median installations.
- n Employment within the corridors experienced upward trends overall, with some exceptions during construction phases.
- n When asked what factors were important to attracting customers, business owners generally ranked “accessibility to store” lower than customer service, product quality and product price, and ahead of store hours and distance to travel.

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<sup>2</sup> Eisele, W.L., W.F. Frawley, “A Methodology for Determining Economic Impacts of Raised Medians: Data Analysis on Additional Case Studies.” *Research Report 3904-3*, Texas Transportation Institute, College Station, Texas. October 1999.

- n About 94% of business owners reported that their regular customers were at least as likely or more likely to continue patronizing their business after the median installation.
- n Along corridors where property values were studied, the vast majority of land values stayed the same or increased, with very few exceptions.

## **Iowa**

A statewide study of the effects of access management on business vitality was conducted in Iowa in 1996.<sup>3</sup> Before and after data were collected on a series of corridor case studies. Data were collected from a variety of secondary sources, as well as opinion surveys and field investigations. Seven projects were selected for more in-depth research, to illustrate the variety of project types, access management issues, and geographic situations across the state. Results indicated that:

- n Corridors with completed access management projects performed better in terms of retail sales than the surrounding communities. Business failure rates along access managed corridors were at or below the statewide average for Iowa. Although this suggests that access management projects generally did not have an adverse effect on the majority of businesses, some businesses may have been negatively impacted.
- n Eighty percent of businesses surveyed in Iowa along access managed corridors reported sales at least as high after the project was in place. Relatively few businesses reported sales declines associated with the access management project, although these business owners clearly felt that they were hurt by the project. The firms perceiving negative impacts were a mixture of business types.
- n Similarly, about 80 percent of businesses reported no customer complaints about access to their businesses after project completion. Those businesses that tended to report most complaints were highly oriented toward automobile traffic.
- n In all cases, 90-100 percent of motorists surveyed had a favorable opinion of improvements made to roadways that involve access management. The vast majority of motorists thought that the improved roadways were safer and that traffic flow had improved.

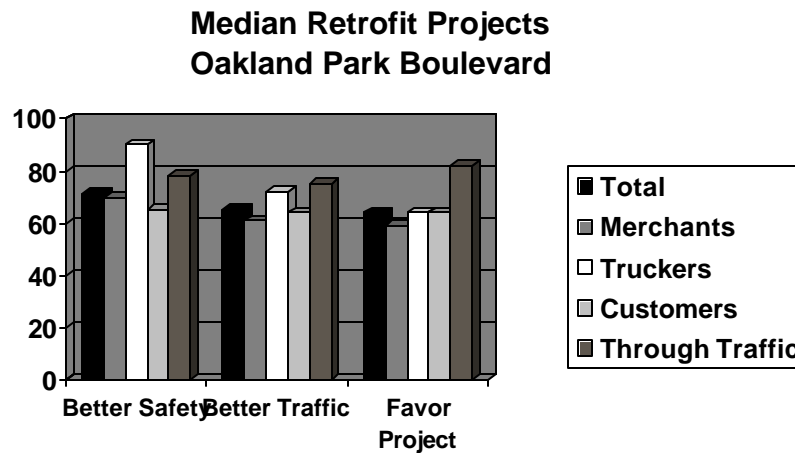
## **Florida**

Two studies for the Florida Department of Transportation have addressed economic effects of median reconstruction projects. Both studies used a combination of before and after data and opinion surveys to gauge effects of the median reconstruction. The results were as follows:

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<sup>3</sup> Iowa State University, Iowa Access Management Research and Awareness Project: Executive Summary, 1997.

- n A survey of merchants on Oakland Park Boulevard in Ft. Lauderdale, Florida, was conducted after closure of several median openings and reconstruction of the raised median (Figure 1). Seventy-percent of the merchants indicated that the median changes had no adverse effect on truck deliveries, and over 60% perceived no change in business activity following the project. More than half of the merchants (57%) reported that they favored the median changes, and 80% of those traveling on the corridor favored the project.



*Figure 1: Opinion survey following Oakland Park Boulevard median reconstruction. Source: Florida Department of Transportation, District 4, Traffic Operations.*

- n Another study was conducted in the Orlando metropolitan area of drivers and business owners affected by median changes in 5 corridors.<sup>4</sup> The projects resulted in closure of some median openings and redesign of others to directional movements with deceleration lanes. The study involved personal surveys and relied upon attitudes toward the changes. In general, the business community had less favorable attitudes toward the project than the drivers that were surveyed. A sizeable minority of business owners surveyed (about 43%) reported that their volume of business had decreased, while the majority of business owners indicated that the value of their business was unaffected or increased (57%) and that the changes were not inconvenient to delivery trucks.

## Conclusions

These results generally indicate that median projects have little overall adverse impact on business activity. Although some business report increases in sales and some report decreases, the majority of businesses report no change in business

<sup>4</sup> Ivey, Harris and Walls, "Districtwide Median Evaluation Technical Memorandum: Corridor Land Use, Development & Driver/Business Survey Analysis," prepared for FDOT District 5, 1995.

activity following a median project. Destination type businesses, such as certain restaurants and specialty stores, appear less sensitive to access changes than businesses that rely primarily on pass-by traffic, such as gas stations or convenience stores. In addition, because the likelihood of left-turns into a business declines as opposing traffic volumes increase, medians or other access changes will have less effect on the frequency of left turns into businesses on high volume roadways or during peak travel periods.

Although medians do not appear to have a significant adverse economic impact on corridor businesses, such projects do tend to invoke anxiety among affected business owners. One solution is *direct and meaningful involvement of affected businesses in median issues*. A Florida study of public involvement in median projects found that Florida Department of Transportation District offices with a public involvement process for median projects had fewer administrative hearings and reported greater success in achieving their access management objectives than other Districts.<sup>5</sup> Such success was attributed to a fair and open process for responding to public concerns, including early public involvement in design decisions, as well as an open house meeting format, to provide a more personal atmosphere.

Although several studies have attempted to assess the potential economic effects of left turn restrictions, none have systematically examined the potential long-term economic benefits of access improvements. Poorly designed vehicular access not only adversely impacts the character and efficiency of a corridor, but also its economic vitality over time. Property values that have increased rapidly during commercial development tend to decline after the area is built out, if the character and efficiency of the corridor has been damaged in the process. The end result is a pattern of disinvestment as successful businesses choose other, higher quality locations. This is exemplified by the growing number of older commercial strips across the country that are now experiencing economic decline. Further research is needed to document these trends in property values over time.

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<sup>5</sup> K. Williams, "Public Involvement in Median Projects," *Proceedings of the Urban Street Symposium*, Transportation Research Board, Dallas, TX, 1999. See also: *Public Involvement Handbook for Median Projects*, Center for Urban Transportation Research, University of South Florida, Tampa, 1994 (available at [www.cutr.eng.usf.edu](http://www.cutr.eng.usf.edu).)