

CHAPTER 6 : ECONOMIC IMPACTS

Like aesthetics, potential economic impacts of transportation projects are highly subjective and may arise from a variety of sources. Many communities pursue transportation improvements as a means of attracting economic development. Yet the impacts of a transportation project may also raise economic concerns. Typical concerns include the impacts of construction on business activity, the effect of new or wider roads on residential property values, adverse direct impacts of right-of-way acquisition, and the effect of median improvements on corridor businesses. The new emphasis on context sensitive design of transportation facilities also has economic implications. There is growing understanding of the role that design can play in stimulating the revitalization of older retail districts.



The impact assessment effort should consider potential economic effects of transportation projects broadly, and look for ways a project could be shaped to help advance the economic goals of a community or neighborhood. Identifying and addressing potential economic impacts in the context of an open public involvement process will improve project outcomes and local support. This chapter reviews strategies transportation agencies can use to identify and address the economic impacts of transportation projects. Other supporting information and techniques appear in the chapters on land use, aesthetics, and relocation.

UNDERSTANDING POTENTIAL IMPACTS

Economic impacts of transportation projects can affect businesses, residences, or government agencies. They can include changes in growth rates, business activity, property values, and tax revenues. And they can be positive or negative, short-or long-term, and direct or indirect. For example, the widening of a road can adversely and directly impact corridor businesses during construction by temporarily deterring patrons, but indirectly and positively impact business activity over the long-term through increased sales activity and property values.

Economic Impacts Can Be:

- Positive or Negative
- Temporary or Long-Term
- Direct or Indirect

Economic impacts of transportation projects are generally related to one of two factors:

1. A change in the accessibility of an area (e.g. opening a new area to development, rerouting traffic, bypassing an area), or
2. A change in the local environment (e.g.. pollution, relocation, aesthetics, congestion).

Transportation projects tend to affect businesses and residences in different ways. For example, wider roads and increased traffic may adversely affect residential property values, whereas commercial property values may be

positively affected by these same factors. Economic impacts can also vary, depending upon whether the property directly abuts the project or is only in close proximity. Many of the potential impacts discussed in this handbook, such as noise, vibration, accessibility, growth inducement, or aesthetics, are internalized in property values and business activity. If a property is made more or less desirable from one of these effects, this will be reflected in its property value or level of business activity.

Economic changes in a community may also arise from sources unrelated to the transportation project. These include, but are not limited to:

- **National, regional and local economic conditions.** For example, a reduction in tourism in a tourist-dependent region could adversely impact local business activity in the project corridor, in turn reducing local tax collection revenue and property values;
- **Other major infrastructure improvements.** For example, a local jurisdiction could extend sewer and water services to the area, increasing property values, and stimulating business and development activity on a project corridor.
- **Competition.** For example, the opening of a new major discount retail business could adversely impact other businesses on a corridor that provide similar products at higher cost.

Potential Impacts on Businesses

Potential economic impacts on businesses include changes in business activity, changes in available parking and land due to right-of-way takings (see Chapter 9, Relocation and Displacement and Chapter 7, Land Use), changes in the marketability or resale value of land for development, and changes in the local availability of employees (see Chapter 9, Relocation and Displacement and Chapter 10, Civil Rights).

Business activity is a general term for all activities associated with the operation of a business (e.g. sales, revenue, marketing). One issue that affects business activity would be changes in traffic due to a transportation project. How a business could be affected by a reduction in pass-by traffic can vary according to the type of business. A destination business is often unaffected or positively affected by reduced through traffic, whereas a convenience or impulse business relies on pass-by traffic and may be adversely affected. For example, pass-by traffic generates only 17 percent of weekday peak business activity at a free-standing discount store, while a 24-hour convenience market depends on pass-by traffic for 61 percent of business activity (*Trip Generation Handbook*, Institute of Transportation Engineers, October 1998.)

Changing the local business environment (noise, vibration, air quality, pedestrian amenities, etc.) can affect business activity by making the shopping experience more or less pleasant. For example, increased noise, vibration and dust during construction can make the shopping experience less pleasant and discourage business patronage. Improved pedestrian amenities can help attract shoppers and improve the shopping experience by making it easier for pedestrians to cross the street or by providing benches or other pedestrian amenities.

Access Changes

Most studies of the economic effects of access changes have focused on median projects and the potential impacts of left-turn restrictions on business activity. Due to the proprietary nature of sales information and the variety of factors that affect business activity, systematic study of this issue is difficult. Studies have instead focused on business owner perceptions of impacts before and after a median project (surveys of business owners), anecdotal information, or of generalized comparisons of business activity across corridors.

Access changes during the roadway improvement process may include median changes (new medians, median reconstruction, closure of median openings), driveway closure, driveway relocation, change in grade, or provision of alternative access.

In surveys conducted by the FDOT, some businesses report increases in sales, some report no change, and others report decreases. However, the majority report no change in business activity following a median project. For example, FDOT conducted a survey of merchants on Oakland Park Boulevard in Ft. Lauderdale after closure of several median openings and reconstruction of the raised median (see Figure 6-1). 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, with others reporting increases or decreases. 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.

Public Involvement in Median Projects

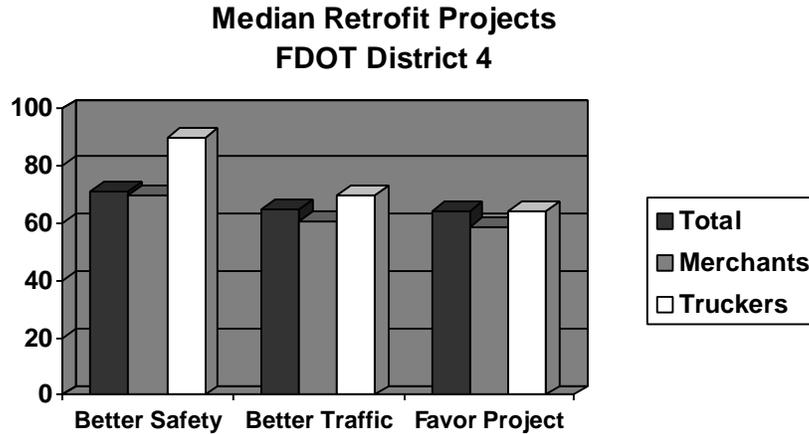
A study of public involvement in median projects conducted by the FDOT found that FDOT offices with a public involvement strategy had fewer problems with political or legal appeals and reported greater success in achieving their access management objectives than other FDOT offices interviewed. Each office attributed their success to their fair and open process for responding to public concerns. This included early public involvement in design decisions, as well as an open house meeting format, to provide a more personal atmosphere.

Source: 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.)

Research findings to date suggest that the actual economic impacts of median projects are not nearly as significant as proprietors may fear, and that the more pressing issue is the anxiety that median projects tend to invoke among affected businesses. The solution is *direct and meaningful involvement of affected businesses in median issues* preferably beginning in planning, and early and

continuing involvement at each stage of production. This requires continuity in the project decision-making process and attention to the issues raised in previous project phases and no last minute changes in design without first consulting with affected parties.

Figure 6-1



For more in-depth assessment of these issues, consider conducting a special study of potential economic impacts before and after construction of a particular median project. The sites selected would preferably reflect different types of businesses. Consider whether trips per day had changed at the affected businesses based upon counts of vehicles entering and exiting, and/or conduct customer and business owner surveys to determine perceived impacts. Also examine the characteristics of the corridor, the regional economy, and affected businesses, such as:

- Business location on the corridor (in relation to peak hour traffic and the proposed access changes);
- Traffic volumes and roadway geometrics (Are left turns already difficult?);
- Crash rates (Is the area unsafe for left turns?);
- Business type (destination or pass by?);
- The alternative method of accessing the business (Is it safer?; How does it affect delivery vehicles?); and
- Economic variables (competition from big box retailers, general sales trends, property value trends, etc.).

Efforts to assess the potential economic effects of left turn restrictions need to consider the potential economic benefits of access improvements, as well. One option is to use tax assessors data and real estate broker interviews to measure changes in property values over time on corridor segments with and without good access design. 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.

Potential Residential Impacts

Potential economic impacts on residential areas include changes in property values and changes in available parking and land due to right-of-way takings (see Chapter 9, Relocation and Displacement and Chapter 7, Land Use). The right-of-way acquisition impact is a direct impact and typically experienced in the short-term, even before construction commences. Changes in property values or employment opportunities are potential long-term, indirect impacts.



Residential property value is the value at which a property is assessed for taxation (assessed value) and the value at which the property can be sold on the open market (market value). A change in the market value of any given property would change the amount of equity the owner has in that property. Any change in assessed value, typically coincidental with a change in market value, translates into a change in property tax.

Property value is a reflection of the desirability of a property with regard to aesthetic qualities, accessibility, safety, and many other factors, both objective and subjective. If any one of these factors changes, the value of a property can change, either positively or negatively. For example, a transportation project can enhance the desirability of a residential area, raising property values by reducing commute times between that neighborhood and regional employment and commercial centers. However, a project may increase noise, vibration, and air pollution or adversely affect the aesthetics of a neighborhood, making it less desirable and reducing property values. The extent of changes in property values is a function of proximity to the transportation project and the changes brought about by the presence of that project in the community.

Factors Affecting Residential Development

- The accessibility of raw land suitable for residential development (and the economic demand, or competition, for such raw land), as well as the corridor's relationship to major employment centers, retail facilities and other services (i.e., location factors).
- The image, market appeal, and prestige associated with various residential sectors in the region (i.e., consumer preferences).
- Dependence upon the availability of public water and sewer service.
- Zoning regulations, densities permitted, and the attitudes of local governments toward residential growth (i.e., growth policies).

Source: *Economic Impacts: A Guidance Manual For The Assessment Of Economic Impacts Due To Highway Facility Improvements, Notebook 3.*, U.S. Department of Transportation, 1975.

Potential Impacts on Taxing Authorities

The primary potential economic impact on local government agencies or other taxing authorities relates to changes in property or sales tax revenues. Sales taxes are collected by a government entity based on gross sales receipts of businesses in the jurisdiction. Therefore, the amount of sales tax collected will change as business activity changes. Sales tax revenues, including gasoline taxes, are also used to fund the activities and programs of special use districts and other governmental agencies (Airport Authority activities, the State Transportation Trust Fund, etc.). Generally, impacts to sales tax revenues by transportation projects are considered relatively minor and are extremely difficult to estimate.

Potential Governmental Impacts

- Property Tax Revenues
- Sales Tax Revenues

Property taxes are collected by a governmental entity based on the assessed value of property in the jurisdiction. Local governments and other agencies (public schools, special use taxing districts, transit, etc.) use property tax revenues to fund their activities and programs. The amount of annual property taxes collected can be affected by changes in the value of commercial and residential properties, or by removal of properties from the tax rolls (e.g., displacement). Conversion of private, tax-generating property to public use has a direct impact on property tax revenues. Changes in property values are a long-term, indirect impact that may be experienced after the real estate market has an opportunity to react.

DATA SOURCES

In general, data required to assess potential economic impacts include:

- Business activity;
- Property values;
- Sales and property tax;
- Project alternative design information, particularly related to the provision of access to abutting properties;
- Other potential impacts information (noise, vibration, air quality, traffic volumes, aesthetics, etc.);
- Regional economic conditions; and
- Anecdotal economic information from similar transportation projects, preferably local projects.

General business activity, property value, tax, and regional economic conditions data should already have been collected to develop the community profile (see Chapter 4). Additional data sources include:

- Census Bureau publications and statistical abstracts for economic indicators;
- Yellow pages for business locations and types;

- Commercial providers, such as Dunn & Bradstreet, for business locations, types, employee information and other economic data;
- The Florida Statistical Abstract and the Bureau of Economic and Business Research at the University of Florida for a wide variety of economic data; and
- Regional real estate journals for information pertaining to property values.

Use this information to determine which corridor businesses are sensitive to changes in pass-by traffic, the existence of local competition (malls, superstores, national chains, etc.), employment characteristics, property values, sales,

Table 6-1: Published Economic Impact Reports From Across The Country

Bypasses

An Economic Impact Analysis of the Proposed Memorial Causeway Bridge Realignment on the Central Business District of Clearwater, Florida, Center for Urban Transportation Research, University of South Florida, 1996.

The Economic Impact of Rural Highway Bypasses: Iowa and Minnesota Case Studies, Midwest Transportation Center, Iowa State University, 1995.

Economic Impact of Highway Bypasses, Transportation Research Record 1395, S. Jonann Andersen, 1993.

The Economic Impacts of Highway Bypasses on Communities, Wisconsin Department of Transportation, 1998.

The Bypass Impact on Communities, Traffic Congestion and Traffic Safety in the 21st Century, American Society of Civil Engineers, 1997.

Effects of Highway Bypasses on Rural Communities and Small Urban Areas, Research Results Digest, Transportation Research Board, 1996.

Road Widening

Methodology for Estimating the Economic Impacts of Highway Improvements: Two Case Studies in Texas, Transportation Research Board Paper No. 920824.

Estimated Impact of Widening U.S. Highway 80 (Marshall Avenue) in Longview, Texas, Transportation Research Record 1450, Jesse L. Buffington and Marie T. Wildenthal, 1994.

Assessing the Effects of Highway-Widening improvements on Urban and Suburban Areas, Transportation Research Board, National Cooperative Highway Research Program Synthesis of Highway Practice 221, Thomas N. Harvey, 1996.

New Facility

The I-73 Economic Impact Analysis, Virginia Transportation Research Council, 1995.

Access Management

NCHRP Report 420: Impacts of Access Management Techniques, Transportation Research Board, 1998.

Raised Medians – Economic Impacts on Adjacent Businesses, Texas Transportation Institute, Proceedings of the ITE 69th Annual Meeting, Las Vegas, NV 1999.

Economic Impacts of Restricting Left Turns, NCHRP Research Results Digest, Number 231: August 1998.

Iowa Access Management Research and Awareness Project, Center for Transportation Research and Education, Iowa State University, 1997.

regional economic conditions (recession, growth trends, etc.), and tax rates and revenues. Also, useful data can be obtained by spending time in the field observing activity and traffic patterns at project corridor businesses. Project alternative design information is available as part of the broader PD&E effort. These data are useful in determining how property access may be affected during or after construction.



Information on other potential impacts of relevance to the economic assessment is generated by the assessment techniques described in this handbook and in the PD&E Manual. Other impacts of the project that may affect economic conditions in the project corridor include increased noise, vibration, and air pollution, changes to aesthetic resources, and changes in traffic volumes.

Contact local jurisdictions, Metropolitan Planning Organizations, Chambers of Commerce, Regional Planning Councils, other local business associations and other FDOT offices for case study information from similar transportation projects. Useful information includes changes in corridor business activity, employment and property values after the implementation of the transportation project. Some published reports also contain useful case study information regarding the economic impacts of transportation projects (see table 6-3 for a sample of published reports). Case study data can provide insight into the type of economic impacts that can be caused by the proposed project.

Useful economic information can be collected from business owners and managers, customers, local property appraisers and real estate agents using interview techniques. Business owners can provide information specific to business conditions and factors (pass-by traffic, customer access, freight delivery, visibility, etc.). Customers can provide important information on their travel and shopping habits and how these travel habits might change with a transportation improvement. Such information is relevant for properties abutting the improvement and retail districts potentially affected by a change in travel patterns created by a proposed bypass project. Property appraisers and real estate agents can provide useful insight on factors affecting the value of commercial and residential properties in the community. Remember that the information provided only reflects individual opinions. A survey form with suggested questions follows this section.

Suggested Economic Assessment Survey Questions

For Business Owners/Managers

1. Are there other businesses within two miles offering a similar product or service to yours? Yes No
Which businesses? _____

2. Do you believe there are existing or proposed regional factors that affect your business?
Mall or mega-store? Yes No
Economic development program? Yes No
Major infrastructure improvements (water and sewer extension)? Yes No
Other? Yes No
Explain _____

3. Do you believe local economic conditions are positive? Yes No
If yes, do you believe conditions will remain positive? Yes No
Explain _____

4. Do you believe that your customer base is composed primarily of people passing through the area (pass-by traffic)? Yes No

5. Which two of the following factors do you believe are the most important to customers when selecting a business of your type?
 - Distance to travel
 - Hours of operation
 - Customer service
 - Product quality
 - Product price
 - Accessibility
 - Exterior shopping environment
 - Other (Explain) _____

6. Are there any special business factors that you believe need to be taken into account when designing the proposed transportation project? Yes No

- Freight delivery
- Special needs clientele
- Employee access/parking

Other _____

Explain _____

7. Do you believe the proposed transportation project will help your business? Yes No

Explain _____

8. Do you believe the proposed transportation project will hurt your business? Yes No

Explain _____

For Customers

1. Do you work in this area? Yes No

2. If you do not work in this area, was this business your destination or were you just passing through?

3. If you were passing through, what is your destination?

4. If this area was your destination, what other businesses are you stopping at in this area?

5. What factors were most important to your decision to patronize this business today?

For Property Appraisers and Real Estate Agents:

1. What are the overall commercial/residential property value trends within the study area? _____

2. Are commercial/residential values growing faster or slower than surrounding areas and why? _____

3. Is demand for commercial/residential property changing in the area? Yes No

4. Is demand for commercial/residential property becoming more intensive? Yes No

5. What, in your view, will be the effects of this transportation improvement on commercial/residential property values in the study area?

ASSESSMENT TECHNIQUES

There are a variety of quantitative and qualitative assessment techniques that could be used to evaluate the potential economic impacts of transportation projects. Some of these techniques include economic modeling, the application of economic multipliers and the case studies approach. For various reasons (cost, data requirements and accuracy to name a few. None of these assessment techniques is suggested for the average transportation project, though each may be appropriately applied under certain circumstances.

The suggested technique provided below involves the collection of data and the use of a checklist to stimulate critical consideration of possible outcomes. The most important aspect of this assessment technique is that it be conducted in conjunction with significant community input and outreach. Ensure that the decision-making process is open and that local concerns are accounted for in the project design and the Maintenance of Traffic Plan. Be sensitive to perceptions that construction activity will significantly impact local business. Remember that local business owners operate in a constantly changing environment and that the proposed project further complicates the environment and may be greeted with significant anxiety. Keeping corridor stakeholders informed will help reduce anxiety over the proposed project and effectively build trust between the agency and the community.

The steps of the suggested assessment technique are as follows:

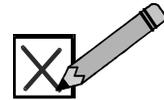
1. **Assemble all relevant economic data for the project corridor.** As described in the Data Sources section of this chapter, most of this information is already available from other assessment activities described in this handbook and the PD&E Manual. Conduct interviews of local business owners, customers and real estate professionals using the questions provided in this chapter to supplement already collected information. This primary data will provide the best site-specific anecdotal information regarding current business activity and potential impacts. Of particular value are customer surveys, which will reveal what factors shoppers consider important in making patronage decisions. Where it is not practical to conduct an interview at every business in the project corridor, consider interviewing only those businesses that are most sensitive to changes in pass-by traffic, such as gasoline stations, restaurants, and dry cleaners. Consider conducting interviews at businesses with significant local competition. Assemble case studies of similar transportation projects (see Table 6-1). If no case studies can be found of similar projects, consider conducting a review of similar projects in the region by doing some field work and interviewing local business officials, customers and business owners.
2. **Complete the checklist located at the end of this section for each proposed project alternative.** The answers to the checklist questions should flow from a thorough consideration of potential economic impacts using the assembled economic data. Techniques for considering the available data include:
 - Analysis of traffic data – closely consider the available data to determine trends and correlation. Consider current and existing traffic volume relative to the proportion of businesses in the project corridor that are

sensitive to pass-by traffic, particularly when the project will alter traffic volume through an established commercial district by means of a bypass. This analysis can be simply accomplished by determining the proportion of pass-by sensitive businesses in the potentially impacted commercial district and comparing existing traffic volumes to projected traffic volumes through the commercial district. Are a high proportion of businesses in the commercial district sensitive to pass-by traffic? Do project alternatives substantially reduce the number of vehicles passing through the potentially impacted commercial district? If the answer is “yes” to both questions, then the economic impact of project alternatives may be adverse.

- **Case Study Comparisons** – compare case studies of similar transportation projects to draw analogies to the proposed project. Are there similarities? Are there differences? What economic changes occurred where similar transportation projects were implemented? Did the commercial character of the corridor change? Did business activity change? For the better or worse? Did business activity in the project corridor follow the same trend as the local economy? Could changes be attributed to the transportation project, or was some other factor introduced that contributed to any changes (i.e. extension of water service, new mall or other direct competition introduced, etc.)? What lessons can be learned from case studies that can be applied to the proposed project? (*see also*, Appendix B).
- **Expert Consultation and Peer Review** – Ask economic development professionals to review the data, critique the conclusions drawn from the data, or to develop their own conclusions. This activity draws on the experiences of others to identify data gaps, analysis faults and interject new ideas.

The checklist is designed to stimulate critical thought and provide a framework for considering potential economic impacts. The checklist can be modified to meet specific project needs, and should only be used as a general guide. There is no quantitative scoring or evaluation mechanism associated with the checklist. The answers to the checklist questions simply indicate the likelihood of economic impacts being caused by project alternatives. Summarize potential economic impacts based on checklist answers.

3. **Make the summary of potential economic impacts available to the community and modify, as appropriate, based on additional community input.** Remember that the stakeholders in the project corridor, as a group, know what drives business activity and property valuation better than anybody else. Give them an opportunity to review and comment on the findings of the economic assessment. They may raise concerns that otherwise have not been addressed or accounted for. The effort will also demonstrate that a sincere attempt is being made to address their concerns and that reasonable accommodations will be made where potential impacts are anticipated.
4. **Use the results of the economic impact assessment to guide in the project development process and mitigate where feasible.** Explore the potential for revising alternatives or otherwise addressing the impacts identified, where feasible. Reasonable mitigation efforts should be employed where project impacts are unavoidable.



Checklist for Assessing Potential Economic Impacts

Business Activity

Potential for Bypass Impacts

1. Will regional travel patterns change due to the proposed project?
 - During construction? Yes No
 - After construction? Yes No
2. If there will be a change in regional travel patterns, will traffic volume through an existing commercial district be reduced (bypassed)? Yes No
 - If yes, what proportion of bypassed businesses are sensitive to changes in pass-by traffic? _____
 - By what percent will traffic decrease in the bypassed commercial district? _____
 - Will business activity in the bypassed commercial district be substantially and adversely impacted? Yes No

Explain _____

Business Environment

1. Will the proposed project change the business environment in the project corridor by:
 - Changing noise levels during construction? Yes No
 - Changing corridor noise levels permanently? Yes No
 - Will noise levels: Improve Worsen
 - Changing air quality (dust, emissions, etc.) during construction? Yes No
 - Changing air quality (dust, emissions, etc.) permanently? Yes No
 - Will air quality: Improve Worsen
 - Changing aesthetic qualities? Yes No
 - Changing amenities (benches, pedestrian facilities, etc.)? Yes No
 - Other change? _____
2. Will business activity in the project corridor be substantially and adversely impacted as a result of the change in the business environment? Yes No

Explain _____

Traffic Volume

1. Will project corridor traffic volume change? Increase Decrease No Change
2. If there will be a change in project corridor traffic volume, will business activity in the project corridor be substantially and adversely impacted? Yes No

Explain

Traffic Speed

1. Will project corridor traffic speeds change? Increase Decrease No Change
2. If there will be a change in project corridor traffic speed, will business activity in the project corridor be substantially and adversely impacted? Yes No

Explain

Accessibility

1. Will the proposed project substantially change accessibility for:
 - Delivery vehicles? Yes No
 - During construction
 - After construction

Explain

- Special needs clientele? Yes No
 - During construction
 - After construction

Explain

- Employees? Yes No
 - During construction
 - After construction

Explain

- Customers/Clients? Yes No
 - During construction
 - After construction

Explain

- Others? Yes No
 - During construction
 - After construction

Explain

2. Could business activity in the project corridor be affected by the project? Yes No

Explain

3. Will any specific project corridor business be substantially and adversely impacted? Yes No

If yes, which businesses and how

Compatibility with Economic Development Plans

1. Is the proposed project located in a business district covered by an economic development program or plan? Yes No
2. If yes, does the proposed project support that program or plan? Yes No

Explain

Residential Property Values

Residential Environment

1. Are the majority of abutting project corridor properties residential in nature? Yes No

2. Will the proposed project permanently change the residential environment in the project corridor by:

- Changing noise levels? Yes No
Will noise levels: Improve Worsen
- Changing air quality (dust, emissions, etc.)? Yes No
Will air quality: Improve Worsen
- Changing aesthetic qualities? Yes No
Will aesthetic qualities: Improve Worsen
- Changing amenities (pedestrian and bicycle facilities, parks, etc.)? Yes No
Will amenities: Improve Worsen
- Changing traffic volumes? Yes No
Will traffic volumes: Increase Decrease
- Changing travel speeds? Yes No
Will traffic speeds: Increase Decrease
- Other changes?

3. Will residential property values in the project corridor be potentially, substantially, and adversely impacted as a result of the change in the residential environment? Yes No

Explain

Regional Accessibility

1. Is the project study area substantially residential in nature? Yes No
2. Will the project substantially change accessibility between the project study area and other parts of the region? Improve Worsen No Change
3. If regional accessibility will change for study area residents, will residential property values? Increase Decrease

Explain

Government Revenue

Property Conversion

1. Will taxable private property be permanently converted to public use? Yes No

2. Which taxing authorities currently rely on property tax revenue collected from properties that will be converted from private to public use?

3. By how much (\$) will revenue based on property taxation be reduced for each identified taxing authority ?

4. For each taxing authority identified, what percentage of total annual budgets does the reduction in revenue represent?

MITIGATION AND PROBLEM SOLVING

Addressing Construction Stage Impacts

A variety of methods can be used to address business impacts during construction of the transportation improvement including, but not limited to, the following strategies:

1. Schedule construction for after business hours or to occur during times of low usage for seasonally-oriented businesses;
2. Stagger construction along a corridor so impacts are localized and staged;
3. Expedite construction through incentive/disincentive programs;
4. Avoid blocking business entrances with construction equipment or construction barriers;
5. Provide temporary and/or secondary business and residential access points, where feasible;
6. Clearly sign business entrances from the roadway;
7. Establish a single point of contact through which direct and regular communication with business and property owners can be achieved. This person does not need to be the project manager, but does need to be somebody who is well informed on all aspects of the proposed project. It may be useful to obtain the services of a local individual to fill this role, particularly where agency relations with the local community are strained;
8. Communicate the specifics of process and construction events with property and business owners;
9. Provide regular project progress reports to business and property owners;
10. Notify project corridor customers of impending construction activities and a contact for further information;
11. Avoid taking or blocking parking spaces whenever possible;
12. Provide alternative parking, where feasible; and
13. Provide technical assistance and support to local communities developing plans to minimize construction stage economic impacts (sales events, fairs, etc.). An example of this strategy can be found in a document by the Wisconsin Department of *Transportation (In This Together: A Workbook To Help Wisconsin Businesses Thrive During Highway Construction, Wisconsin Department of Transportation, 1998).*



YES... WE ARE
OPEN

Addressing Long-Term Impacts

The majority of long-term economic impacts are indirect and associated with other project impacts (e.g. changes in air and noise pollution, aesthetic character, traffic volume, relocation, etc.). Mitigation strategies related to other project impacts are discussed in the PD&E Manual and other chapters of this handbook. Additional



strategies, not discussed elsewhere, are listed below. Some of these strategies can only be implemented by local governments.

1. Improve signage for bypassed local business districts;
2. Joint-use of project right-of-way for such things as parking;
3. Implement economic development planning and incentive programs;
4. Improve accessibility of corridor business through joint and cross-access, shared access, and provision of alternative access roads. (see *Managing Corridor Development: A Municipal Handbook*, Center for Urban Transportation Research (CUTR), University of South Florida, 1996); and
5. Incorporate project design elements that enhance local business districts (e.g., pedestrian and bicycle amenities, improved landscaping, street furniture, etc.).



CONCLUSION

Upon completing the economic assessment detailed in this chapter, the following actions should be completed:

1. Document all relevant actions taken, findings reached and commitments made as part of the economic assessment;
2. File all relevant documentation related to the assessment of economic impacts in the official project file;
3. Incorporate the relevant findings of this assessment into the project development process in order to minimize the potential economic impacts of the final project; and
4. Incorporate the documentation developed as part of the economic assessment process into the relevant section of the environmental document under development for this project, per the Engineering Reports Chapter in Part 1 of the PD & E Manual.