### MINNESOTA'S BEST PRACTICES FOR PEDESTRIAN/BICYCLE SAFETY, SEPTEMBER 2013:

• The use of raised median islands to simplify crossing maneuvers has been proven to be an effective technique to improve pedestrian safety, especially on multi-lane arterials with traffic volumes greater than 10,000 vehicles per day.

### The Federal Highway Administration's (FHWA) Office Benefits of Access Management Brochure April, 2013:

- Installing raised medians that prevent movement across a roadway often raises serious concerns by the business community that local businesses will be adversely affected by medians.
- Surveys conducted in multiple corridors in Texas, Iowa, and Florida demonstrate that the vast majority of business owners believe there have been no declines in sales, with some believing there are actually improvements in business sales after raised medians have been installed.

### Report No. UT-12.17 RAISED MEDIAN ECONOMIC IMPACT STUDY, Utah Department of Transportation Research Division, 2013

- Raised medians offer a departure from more traditional two-way left turn lanes typically built on Utah collector and arterial streets and can offer advantages in terms of safety, capacity, and aesthetics. At the same time, individual business owners often oppose raised medians due to fear of business loss.
- For all of the corridors in which raised medians were constructed there was an increase in retail sales and sales per square foot. Analysis showed that in every case there was **no evidence of a negative impact** on sales due to installation of a raised median.

#### Mississippi Department of Transportation: ACCESS MANAGEMENT MANUAL, 2012:

• Studies have reported where direct left-turns are prohibited many motorists will change their driving or shopping patterns to continue patronizing specific businesses.

### Business Perceptions of Access Management Techniques, North Carolina State University, 2010:

- Efforts have led to the implementation of many different access management techniques along corridors, such as installing medians versus two-way left-turn lanes.
- Businesses along these corridors have indicated their concern that these new designs will have a negative economic impact on their business because of the lack of direct access to their properties.
- The performance of treatment sites in terms of reported impacts on business revenues indicates that there is **no direct evidence of negative economic impacts** due to access management/median installations.

# Center for Transportation research and Education, Iowa State University: Access Management and Commercial Businesses: What We Know About Impacts and Stakeholder Involvement February 2008:

- Businesses and developers perceive access management as a threat to their success
- Business sales do not seem to depend much at all on the details of access, except in a few cases
- Business sales are usually not impacted except during construction

### LELAND CONSULTING GROUP THE IMPACT OF TRAFFIC PATTERNS ON CORRIDOR RETAIL Spring 2007:

• While the perceptions of business owners on the installation of raised medians tend to be negative, research suggests these concerns are unwarranted. In fact, in most cases, property values, gross revenue, and customers per day increased after raised medians were installed.

#### Minnesota Department of Transportation I-394 Business Impact Study, 2007

Each state conducted different types of studies, but each provided strong evidence that access management techniques do not have overriding negative economic impacts. The bullets below summarize the premise and findings of these studies:

- The Kansas Department of Transportation studied businesses that filed lawsuits claiming their businesses
  were negatively impacted by a variety of access management treatments. This involved "before" and
  "after" studies of a limited number of parcels from around Kansas that were involved in litigation. Key
  Finding: Relatively minor changes in access (less than one mile) were not sufficient to cause significant
  changes in land use and value.
- The **Texas Department of Transportation** studied the economic impacts (changes in property values) of restricting left turns by installing raised medians in a limited number of improved urban arterial corridors. In lieu of sales data, the researchers in Texas personally interviewed business owners, and found that owner perception of business change due to the access treatment was generally more negative than the actual change. **Key Finding**: Property values along the improved corridors continued to rise
- Researchers in Iowa used secondary data, interviews, and field investigations to determine the effects of
  changes in access on business vitality. Key Finding: The Iowa study found that corridors with completed
  access treatments reported higher overall sales than corridors with uncontrolled access. This is the same
  overall conclusion as the Florida study.
  - The state of Florida performed two studies on the economic impacts of median reconstruction projects. **Key Finding**: Perceptions of business vitality after construction were found to be more negative than what actual economic conditions. This is the same result found in the lowa study.

Generally, these state studies demonstrate that business owners' perceptions of how transportation projects, most of which involved changes in access, would affect their companies were usually worse than the actual, measured impacts. These studies also indicate that these projects did not lead to significant increases in business failure rates; and that businesses located in the vicinity of managed corridors did not suffer inordinate retail sales losses. In fact, the lowa study showed that businesses located along newly accessmanaged corridors actually outperformed other businesses in their communities in terms of sales growth.

#### SAFE ACCESSIS GOOD FOR BUSINESS: U.S. Department of Transportation, 2006

• Studies of the business impacts of access management projects in Florida, Iowa, Minnesota, Kansas and Texas have consistently found that most businesses continue to do well when the project is completed.

## NE 3rd-4th Corridor Improvements, City of Renton, WA, Transportation Systems Division, May 2005:

- Economic effects of access management are dependent upon the type of business. In general, studies
  indicate that left turn restrictions have little overall adverse impact on business activity
- Destination businesses are less impacted than businesses dependent on automobile-oriented pass-by traffic.

### Project 7-3904: Economic Impact of Median Design: The Texas Transportation Institute and Texas A&M University, 2001:

- When asked to rank factors that affect customers frequenting their businesses, business owners generally
  ranked "accessibility to store" below customer service, product quality, and product price. According to
  business owners, the most important elements used by customers when deciding where to shop or eat are
  factors controlled by the business owners themselves. Customers ranked "accessibility to store" in much
  the same way as the business owners.
- Generally, customers indicated construction was a greater factor in deciding where to shop than the existence of the raised median.

### Economic Impacts of Access Management, Center for Urban Transportation Research, University of South Florida, 2000:

- Median projects have little overall adverse impact on business activity.
- Perceptions of business owners before a median was installed were more pessimistic than what usually happened.

### A Methodology for Determining Economic Impacts of Raised Medians: Data Analysis on Additional Case Studies, Texas Transportation Institute, Texas A&M University, 1999.

• Specialty retail, fast-food and sit-down restaurants indicated increasing customers per day, gross sales and property values after the median installation.

### **CORRIDOR IMPROVEMENT STUDY, Manchester, Maine**

• Very few businesses are likely to be impacted negatively by a raised median

#### **Robert Street Reconstruction**

#### **Current:**

- Over 100 businesses located on the 2.4 mile Robert Street corridor
- Throughout the corridor, but especially in the southern two-thirds, there are numerous driveway openings along both sides of the street. In some areas the driveways are spaced just 50-feet apart.
- The majority of the 125 commercial driveways and public streets are free to make left turns to and from Robert Street that results in approximately 1,466 conflict points along Robert Street

#### Planned:

- A raised median will be installed down the existing center turn-lane
- Nearly all left turn in/out business access will be eliminated
- Right turn in/out only onto Robert Street will be the primary access method for most businesses
- Many business driveways will be closed or consolidated

#### **Business Concerns:**

- A major concern is how the improvements will impact business activity. Many business owners fear that their business will be negatively affected by the restricted access.
- Before and after studies have been conducted for similar corridors where access management practices have been implemented. The majority of these studies find that after construction, businesses do just as well and in some cases better than before.
- MnDOT has some information on their web site that explains the safety advantages and necessity of a center median on roadways like Robert Street and how a safe road can increase business vitality.
- National studies have shown that customers will adjust to the center median restrictions and learn alternative routes to access their desired business.