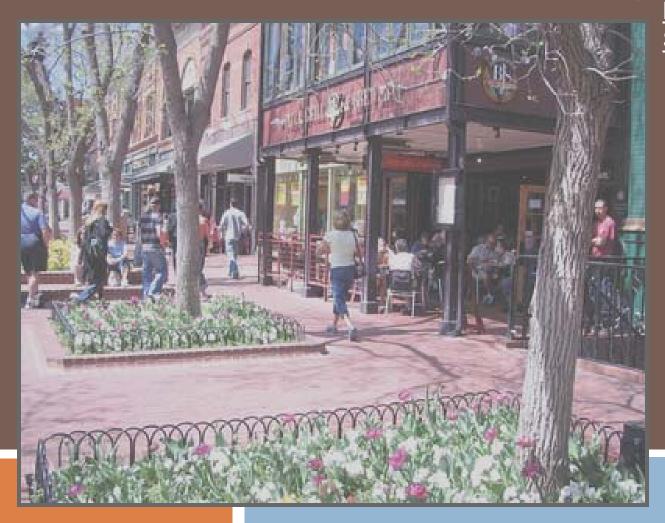
## Transforming the Michigan Avenue Corridor

a complete streets and transit-oriented development study





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#### <u>Clientele</u>

City of East Lansing



City of Lansing



Lansing Township



## Project Acknowledgements

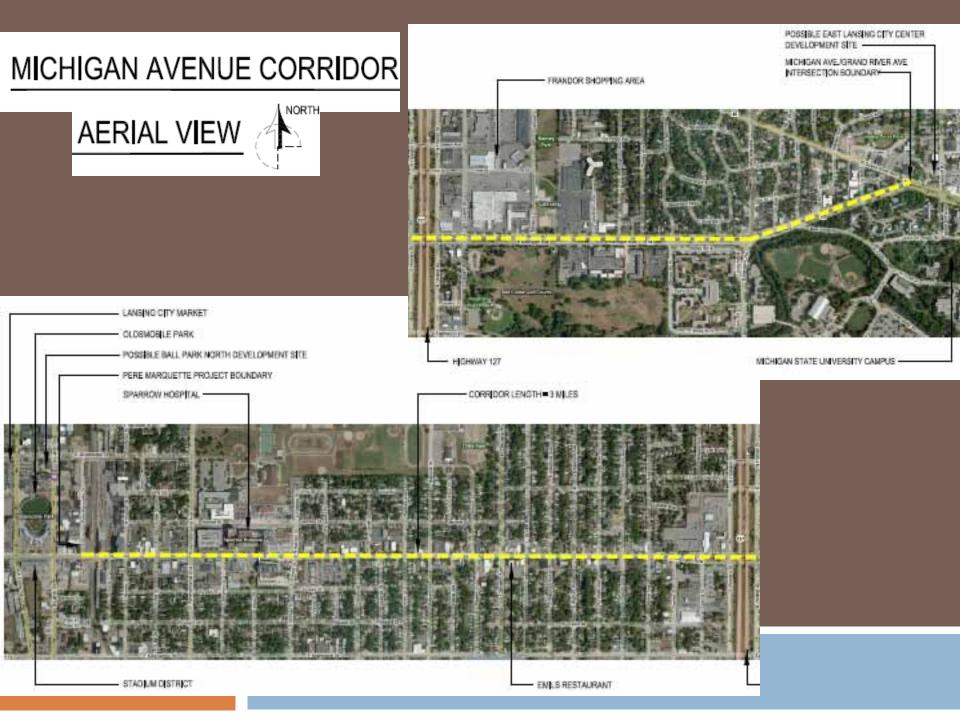
- The Michigan Avenue Corridor Improvement Practicum Team would like to thank everyone involved with this project. The following contributors have provided valuable guidance and input throughout the course of this study:
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#### Transforming the Michigan Avenue Corridor

- Connecting the MSU campus with downtown Lansing, Michigan's Capitol City.
- Cross-Jurisdictional, falling within the boundaries of the City of East Lansing, Lansing Charter Township and the City of Lansing.
- Determining how well the Corridor accommodates a variety of transportation users: Transit,
   Pedestrians, Bicyclists,
   Automobiles, Disabilities.
- Potential for multi-modal transportation system.







## MICHIGAN AVE CORRIDOR IMPROVEMENT AUTHORITY STUDY COMMITEE

- The goal of the authority is to revitalize and beautify the Michigan Avenue corridor by:
  - Creating a walkable and bikable enviornment
  - Attracting a larger base of customers and creating a pleasant living environment for surrounding neighbors
  - $\blacksquare$  Conceptual Development Plan (draft 03/05/09)

Can be viewed at www.michiganavecorridor.com



#### **Complete Streets:**

Roadways that accommodate all users.





#### **Transit Oriented Development:**



• Maximizes access to mass transit and non-motorized transportation with centrally located rail/bus stations surrounded by high density, mixed use development.



## Methodology

#### Complete Streets

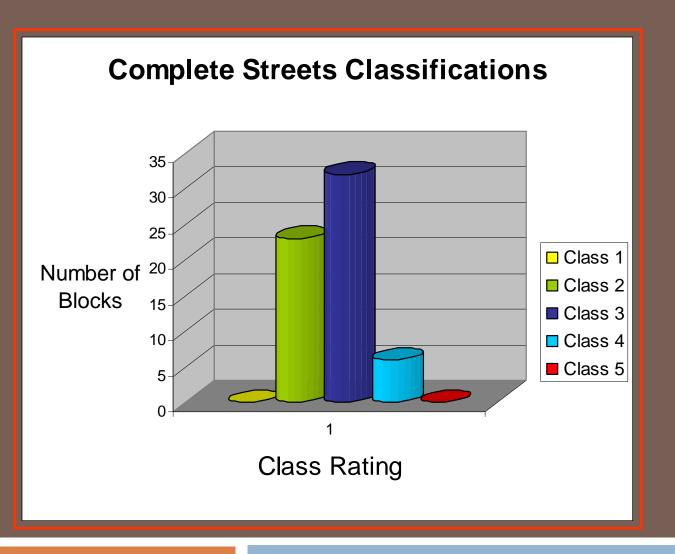
- □ Four User Groups: Pedestrians, Bicyclists, Transit, Automobile.
- Created Survey Instrument.
- □ Compiled data into un-weighted "point system".
- Used rating system to classify each block into one of five "complete streets" categories.
- Created a block-by-block analysis for the entire study site.





# Transit OrientedDevelopment

- Researched existing examples of T.O.D. to determine suitability for success.
- Researched components of these successful T.O.D. examples.
- Researched possible transit-systems which could be implemented along the corridor.
- Referenced block-by-block manual for possible development sites.



Michigan Avenue is **NOT** a complete street.

#### COMPLETE STREET CLASSIFICATION MAP







#### Classifications

Class 1 = most complete Class 5 = least complete





The Michigan Avenue Corridor typically:

- Is dominated by automobiles
- Frequent Traffic Congestion
- Has an abundance of space dedicated to parking

- Majority of corridor lacks pedestrian accommodations
  - Cracked, uneven and narrow sidewalks
  - Obstructions along some walkways
  - Lack of curb cuts
  - Few detectable warnings
  - Little decorative landscaping
  - Insufficient crosswalks





Bus stop lacking shelter

- Inadequate bus stops
- Few bus pullouts
- Absence of bike lanes
- Lack of bike racks
- Non-ADA compliant





- Lacks attractive design features
- Consists of low-density development that creates a disconnected visual appearance
- Does not take advantage of proximity to nearby attractions





## Most Complete

2000 North, Fairview St. to Clemens St. Class 2 Rating

- Short setbacks provide comfortable enclosure
- Pedestrian-scaled ornamental lighting
- Outdoor restaurant seating
- Wide and smooth sidewalks
- Pedestrian-activated crosswalk
- On-street parking available
- Attractive business facades
- Close proximity to sheltered bus stop





## Least Complete

## 1300-3400 North, Highland Avenue to Friendship Circle Class 4 Rating

- Sidewalk cracked, uneven & not continuous
- Minimal lighting
- Lack of attractive landscaping

- □ Large building setbacks
- No crosswalks
- No bicycle lanes or parking





- Report provides block-by-block recommendations
- 8 goals/categories
- In this section detail on 3 goals
  - Objectives
  - Impacts





- Implement road diet along entire Corridor
- 2. Provide bicycle infrastructure
- 3. Provide improved transit infrastructure to encourage transit use for residents and visitors
- 4. Provide pedestrian infrastructure to allow safe access for all



- Improve parking and access management to reduce the dominance of parking
- Improve building appearance to create an attractive and consistent street design
- 7. Guide future developments to be pedestrian and transit-oriented
- Enhance strengths of the Corridor

#### Implement road diet along entire Corridor

- Redesign roadway by repainting lane dividers
- Narrow the width of lanes to 10 feet
- Reduce by one lane in some areas
- Extend curb in some areas
- Lower speed limit where needed to make the whole

Corridor 30 miles per hour



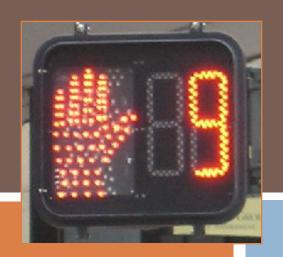
# Provide Pedestrian Infrastructure to Allow Safe Access for All

- Repave sidewalk where surfaces are uneven and cracked
- Widen sidewalk to 8 feet
- Relocate trees that obstruct the walkway, replant in verge
- Widen verge and add decorative landscaping
- Add ornamental, pedestrian-scaled lighting where it is not present
- Better maintenance

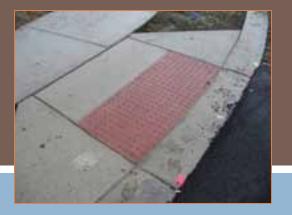


# Provide Pedestrian Infrastructure to Allow Safe Access for All (cont.)

- Add detectable warnings to all block corners
- Add crosswalks where needed, suited to need and activity
- Make drivers more aware of pedestrian presence









#### **Enhance Strengths of the Corridor**

- Provide decorative signage for destinations including
   Old Town, Wharton Center, River Trail, Lansing
   Center, etc.
- Draw attention to the Red Cedar River
- Decorative flags on light post to indicate proximity to Michigan State University and the State Capitol







#### **Components of a Transit-Oriented Development**

- Walkable design with pedestrian as the highest priority
- Alternative Transportation as prominent feature
- Multi-Modal Transportation Center containing a mixture of uses
- High density development
- Designed to include the easy use of bicycles, scooters, and rollerblades as daily support of transportation systems
- Reduced and managed parking

#### Michigan Avenue Corridor Demographics

Suggested Population Density to support a TOD

Boston, MA 5,819,100 1,034.1 people per square mile

San Diego, CA 2,813,833 670 people per square mile

Wash., D.C. 7,608,070 794.5 people per square mile

Minimum suggested density to support at TOD = 500 people per sq. mile.

Michigan Avenue
Population Density

Lansing MSA 447,728 total 262.3 people per square mile

Michigan Avenue Corridor 9,377 total

Source: Michiganavecorridor.com

Our research suggests that there are no municipalities, with similar demographics, that have implemented a Transit-Oriented Development.

#### TOD RECOMMENDATIONS

- "20-Minute Corridor. Live, work and play"
  - Stretching from MSU Union to State of Michigan Capitol
- Encourage new developments to utilize TOD characteristics
  - Stadium District
  - Lansing City Market
  - East Lansing City Center(s)

sed Moved-true Europies North of Ballon

Sparrow Healthcare

- -Ball Park North
- -Market Place
- -Capitol Club Tower
- -City Center Studios









#### Electric Streetcar System

- Clean energy, environmentally responsible
- Reduce traffic congestion on corridor
- Primary Stakeholders
  - Local Municipalities
  - Capitol Area Transportation Authority (CATA)
  - Lansing Board of Water and Light
  - Option for General Motors Involvement
    - New niche for struggling industry
    - Existing infrastructure
    - Help local economy and job market











#### Transit-Oriented Development Recommendations

#### Multi-Modal Transportation Center

- Mixed Use (hotel, conference center, retail & food service)
- Commuter Parking
  - Transportation Service
    - (bus, BRT, streetcar, airport, cabs, Michigan Flyer, Amtrak)
  - Covered Bike Lock Stations and Rental
  - 2 site options(park-like setting with green space)







#### Possible Site Options for Multi-Modal Transit Hub

#### RED CEDAR GOLF COURSE

- -approximately 45 acres
- -has remained closed the previous 2 seasons
- -existing park setting reused
- -flood zone issues
- -close proximity to highway

#### East Frandor Shopping Center

- approximately 14 acres
- -vacant storefront
- -large parking lot underutilized
- -relocation of businesses
- -close proximity to highway
- -revitalize Frandor Shopping Center







- Use Highway 127 as an official welcoming "gateway" municipalities
  - Beautify overpass
  - Diminish "barrier" between municipalities
- "Live, work and play on the Corridor"

# We welcome your Questions and Comments!