The Impact of Placemaking Attributes on Home Prices in the Midwest United States

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Michigan State University
Land Policy Institute

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- The ways in which we use our land and build upon it **impact our quality of life**, today and tomorrow.

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Presentation Outline

- Introduction and Background

- Midwest U.S. Home and Neighborhood Survey

- Midwest U.S. Property Price Assessment

- Conclusions

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U N I V E R S I T Y

Background

- U.S. population demographics are changing (e.g., race).
- Growing segments of the population (e.g., young talent) are looking for dense, walkable, mixed-use neighborhoods with access to jobs, green space, arts and culture, entertainment, housing and transportation options and affordable living.
- Michigan cities currently can not meet changing demand for housing and neighborhood types.
- Placemaking efforts are needed to meet market demand and to make cities and downtowns more attractive places with a high quality of life for all residents.

"Placemaking" Defined

The targeted improvement of a place, within a neighborhood or community, that uniquely creates a **functional space** with a variety of uses, that is **appealing to a wide range of people** and that has an identifiable character, or "**sense of place**."

Study Purpose

- The purpose of this study is to determine:

  1. How do citizens view placemaking, both in terms of what value it has for their communities and what types of "place amenities" they like to have within their neighborhoods?

  2. What economic value does placemaking derive in a neighborhood, as measured by the change in housing prices in places that boast such placemaking elements as walkability, access to green space and mixed-use developments?

Previous Literature

- Belden, Russonello & Stewart, LLC. (2011) found that nearly **60% of survey respondents prefer to live in a neighborhood with a mix of uses in easy walking distance**. High priorities in choosing where to live included **privacy, commute time, high-quality public schools, and sidewalks/places to walk**.

- Konecny (2005) found that homes in neighborhoods with a **New Urbanist-style form (walkable neighborhoods with a range of housing and job types)** in Sacramento, CA, sell for a 4.25% premium compared to homes in a typical suburban neighborhood.

- Cortright (2009) estimated that **above-average levels of walkability (as measured by Walk Score)** command a premium of about $4,000 to $34,000 over houses with just average levels of walkability in the typical metropolitan area.
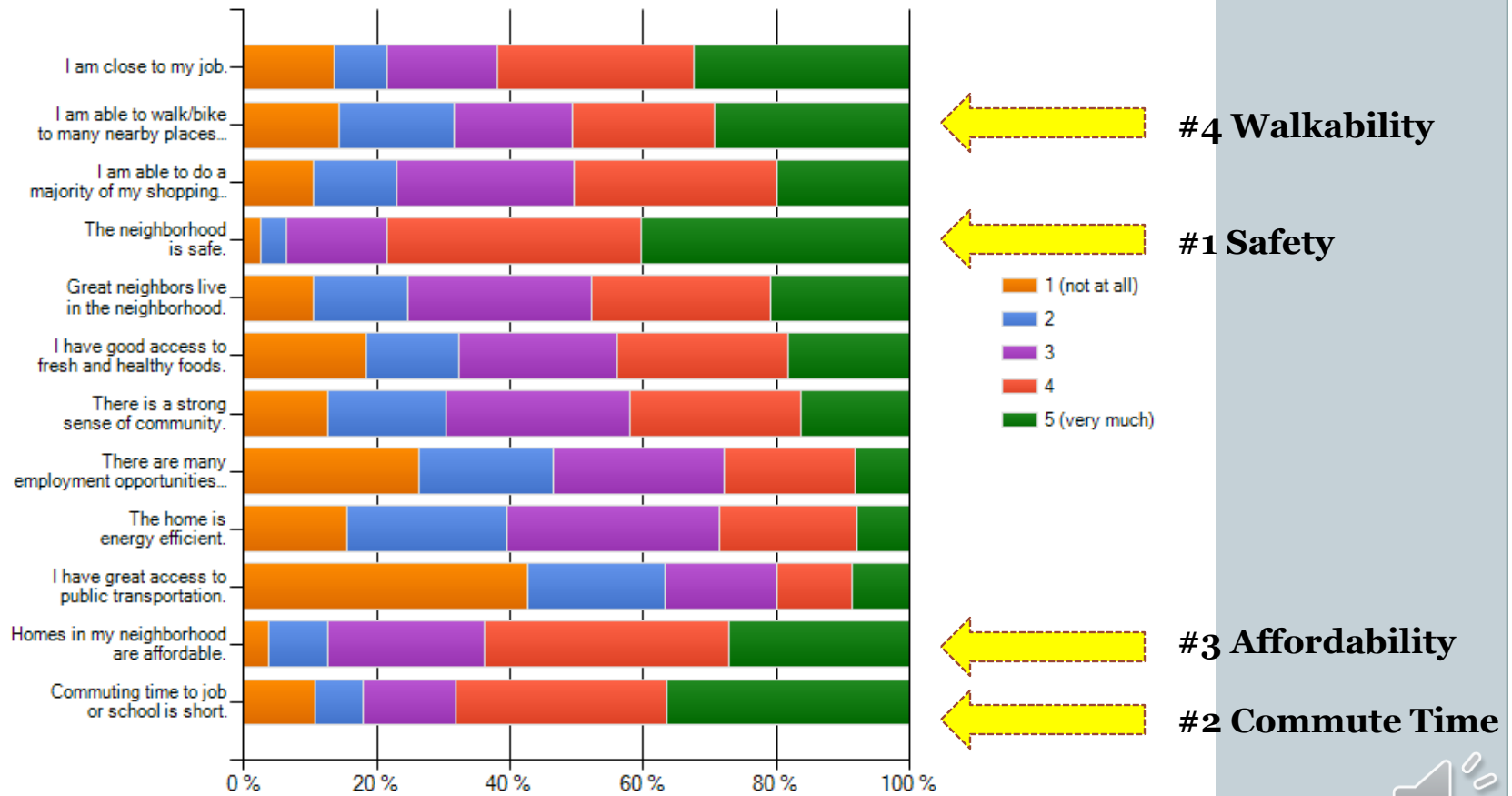
Midwest Home and Neighborhood Survey

Study Cities

Traverse City, MI

Manitowoc, WI

Rochester, MN

Flint, MI

Grand Rapids, MI

Lansing, MI

Madison, WI

Royal Oak, MI

Kalamazoo, MI

Lakewood, OH

Davenport, IA

Miles
0   25   50   100

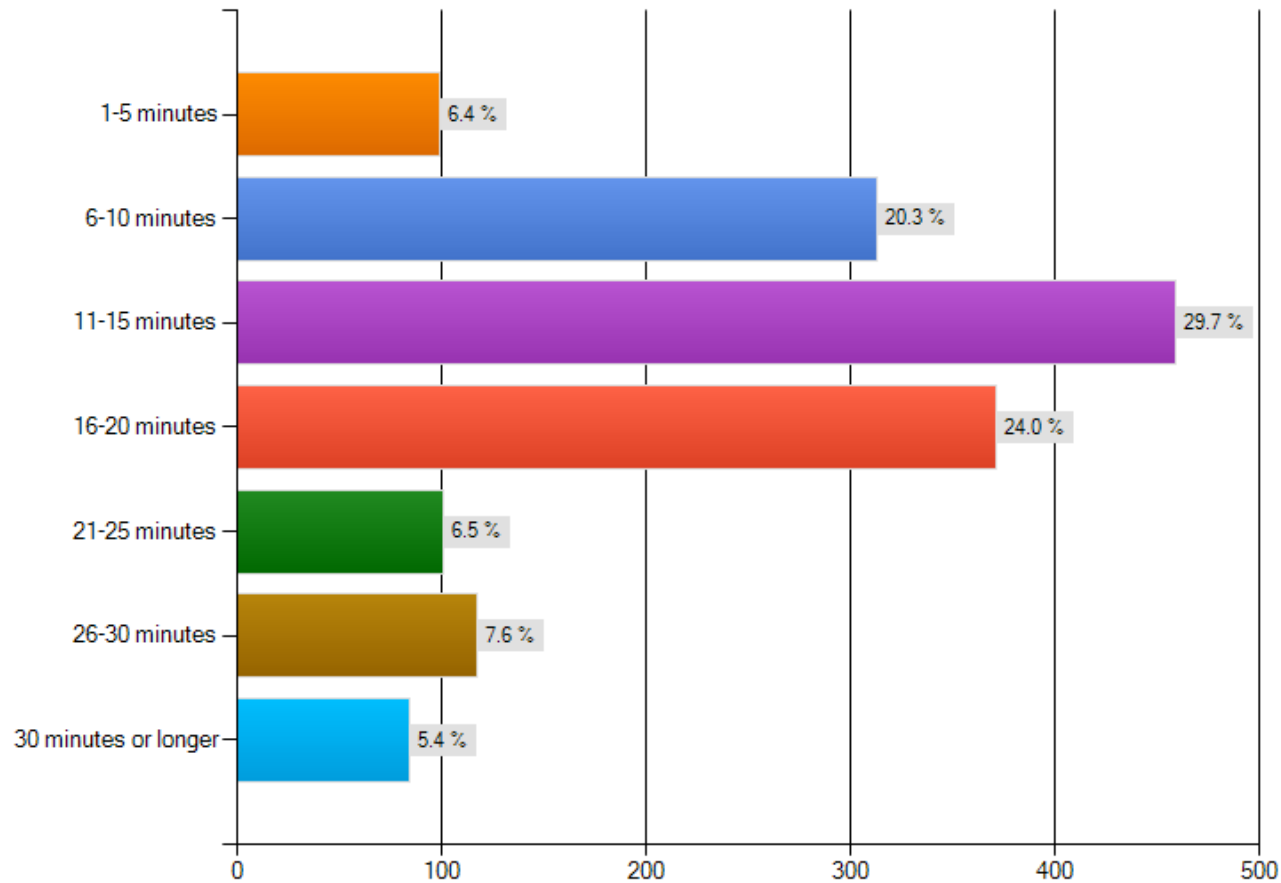# What Factors Influence Home Purchase Decisions?

Please indicate how much the following statements influenced your decision to purchase your home:
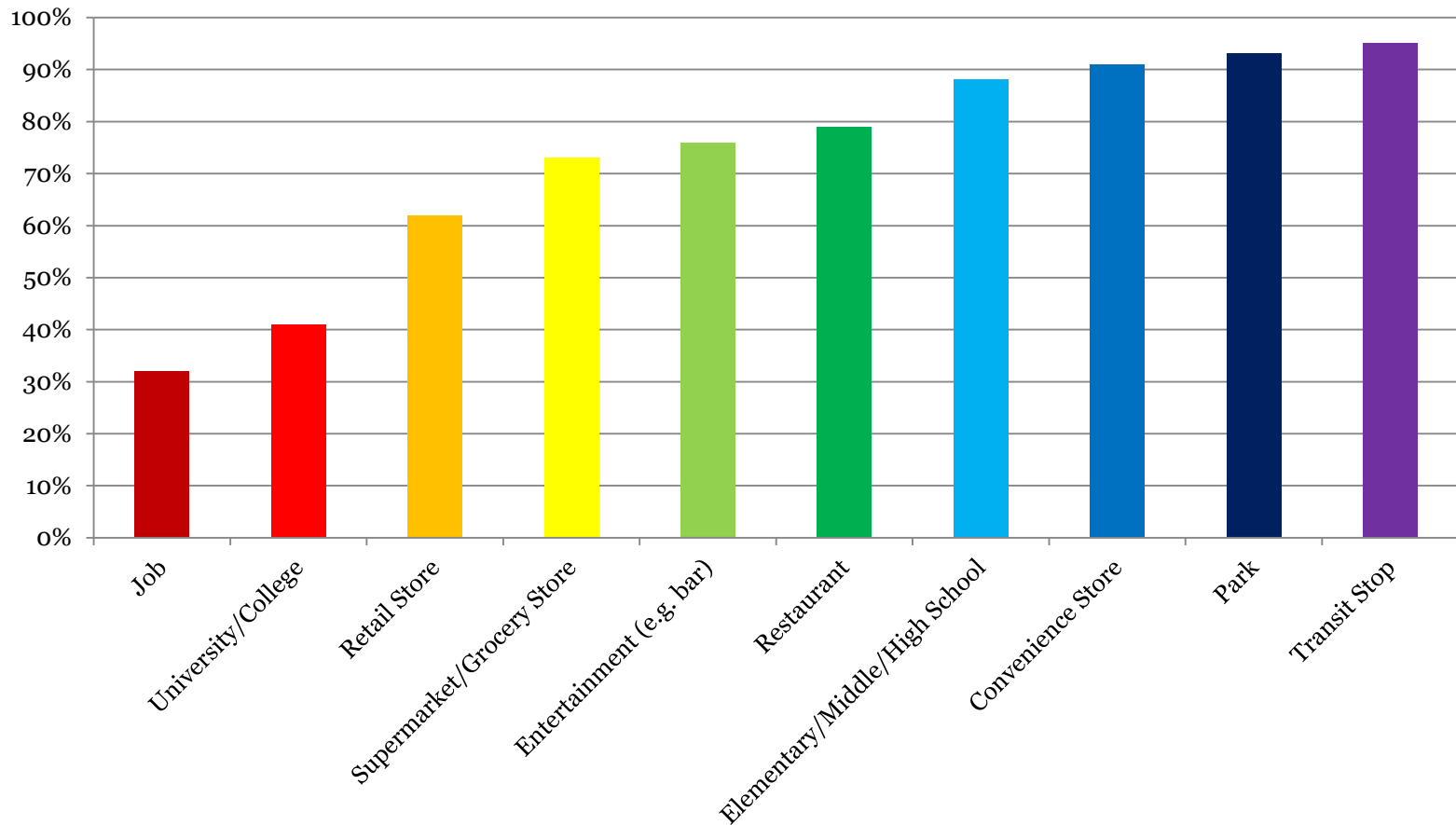
How Far Are People Willing to Walk?

Generally speaking, how many minutes are you willing to walk to reach a destination? (such as a restaurant, store, park, or other places you might frequently visit)

Category	Percentage
1-5 minutes	6.4 %
6-10 minutes	20.3 %
11-15 minutes	29.7 %
16-20 minutes	24.0 %
21-25 minutes	6.5 %
26-30 minutes	7.6 %
30 minutes or longer	5.4 %

Walk Time to Nearby Amenities

Walk within 20 Minutes

Aesthetically-Pleasing & Safe Neighborhood?

How would you rate the overall look and feel of a walk in your neighborhood?

1: Very low	2	3	4	5: Very high	Not practical/ Don't walk
2%	4%	16%	**38%**	**40%**	0%

How safe do you feel in this neighborhood?

Extremely safe	Very safe	Moderately safe	Slightly safe	Not at all safe
23%	**52%**	21%	3%	1%

Health, Happiness & Safety

- 93% of people who rated the **look and feel of a walk** in their neighborhood as very high quality also felt that the neighborhood was very to extremely **safe**.
- 68% of people who responded that they feel extremely **safe** in their neighborhood said that they **walk very often** or all of the time.
- 74% of people who said that they are **extremely healthy** indicated that they **walk very often** or all of the time.
- Extremely **healthy** people indicated that **ability to walk/bike** to many nearby places and access to **fresh and healthy foods** had a strong influence on their home purchase decision.
- 70% of extremely **happy** people said that they **walk often** or all of the time.

Midwest Hedonic Property Price Analysis

Hedonic Analysis

- Hedonic analysis can show us how much more people are willing to pay for a house that has certain features, all else remaining equal.

- For example, if you have two identical homes, but one was located in a mixed-use urban environment and one was in a low density suburb, hedonics could theoretically explain the difference in value.

- When people vote with their wallets, it tends to reflect their true desires.

- By understanding this, we can help build housing that has greater value and brings higher local impact along with it.

Data Utilized in the Analysis

- Assessor's data (e.g., sale price, building and lot characteristics).

- Municipal and other Spatial data (e.g., parcel layers, land use, parks, natural features, roads).

- Establishment data (e.g., employment, businesses, entertainment, retail).

- Census Socioeconomic and demographic data (e.g., income, race, age, educational attainment).

- Survey of homes in eleven Midwest cities.

Model Description

- Survey of homes in eleven Midwest Cities sold between 2000–2012. Received 2,008 responses.

- N = 1,669, R-squared = 0.658.

- Survey data provided some structural, property and neighborhood quality attributes, regressed on natural log of sale price.

- Asked about what influenced a purchaser's decision to buy a home, which were tested to see if these factors are associated with home price.

- Some bias associated with who responded to the survey (wealthy and education skew).

Model Control Results

- Found results for structural and property attributes typical with hedonic analysis:
  - More bathrooms and square footage associated with higher property prices.
  - Presence of garage, fireplace and finished basement associated with higher prices.
  - Higher educational attainment associated with higher property prices.
  - Living close to a lake (within 200 feet) is associated with higher property prices.

Model Control Results

- Dummy variables included for years reflected the general housing market, with prices rising from 2001 to 2007 and falling from 2008 to 2012.

- Dummy variables for cities showed that there are some housing cost differences between Lansing, the constant, and the other cities:

  - Madison, Royal Oak and Traverse City had higher property prices than Lansing.

  - Flint, Kalamazoo and Rochester had lower property prices.

Variable Transformations

- Data on influence factors (rated on a scale of 1 to 5, with 1 being low influence and 5 being high influence) transformed to dummy variables (4 and 5 became one to show **high influence**, while 1, 2 and 3 became zero).

- Quality of home and neighborhood features (rated on a scale of 1 to 5, with 1 being low quality and 5 being high quality) transformed to dummy variables (4 and 5 became one to show **high quality**, while 1, 2 and 3 became zero).

Model Target Results

- Influence factors (perception based) that had a <u>positive</u> relationship to sale price:
  - Shade trees (5.8% marginal price)
  - Great neighbors (4% marginal price)
- Influence factors that had a <u>negative</u> relationship to sale price:
  - Street lighting (-5.9% marginal price)
  - Investment potential (-4.5% marginal price)
  - Affordability (-7.7% marginal price)
- Insignificant: ability to walk/bike, commute, parks and rec, shopping, architecture, interior, off-street parking

Model Target Results

- Quality factors (perception based) that had a <u>positive</u> relationship to sale price:
  - Nearest restaurant (0.2%* marginal price)
  - Walk in the neighborhood (7.2% marginal price)
- Quality factors that had a <u>negative</u> relationship to sale price:
  - Nearest coffee shop (-0.4% marginal price)
  - Bedroom (-0.2%* marginal price)
- Insignificant: grocery store quality, energy efficiency, safety, sidewalks, bike lanes

  * Significant at 10%; all other coefficients significant at 5%.

Conclusions

- **Certain population segments**, like non-whites and low-income families and young "creative class" individuals, are **more likely to live in urban environments**, where there is, ideally, greater connectivity, mixed use and accessibility.

- To attract and retain these segments of the population, we need to **improve their quality of life in urban environments**, especially.

- People would like to be able to walk to nearby destinations, but the **quality and safety** of that walk is important. Walking has **health & happiness** benefits.

Conclusions (continued)

- High-quality places with walkability can enhance local economy, as evidenced by higher property prices. In particular, **high-quality walks**, **green space** (e.g., shade trees) and **good neighbors** (i.e., sense of community), have shown a positive relationship to property price.

- Places in the Midwest U.S., particularly Michigan cities, are still more auto-oriented than **people-oriented**.

- **Placemaking can** enhance walkability, transit access, connectivity, arts and culture, recreation, entertainment, services, etc.

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