



## Data & Data Analysis



**MICHIGAN ECONOMIC  
DEVELOPMENT CORPORATION**

### *What you will learn:*

*Data sources*

*Techniques to find data in  
your community*

*Determine next steps once  
you have the data*

Municipal staff and elected and appointed officials make decisions daily that impact their communities, and data based decisions will have better outcomes than decisions made on the fly. Data is simply facts, statistics and information gathered, and then analyzed, to make informed decisions. Data is particularly useful for planning, as it provides a better sense of future needs for infrastructure and municipal amenities, so that resources can be optimally allocated and budgeted. From population projections and demographic details about your residents to the age of your municipal water and sewer lines and property values over time, data is used by every department in your municipality.

Data can help you determine whether that new housing development proposed on the edge of town will cause over-crowding in schools because more school age children are predicted to move in, or how much additional property tax revenue can be expected from a new development downtown. It can tell you how many linear feet of sidewalks are in your municipality, and where gaps are present, so that you can plan, budget and construct meaningful – and data based – improvements.

The development of a community master plan relies heavily on data. You must know the demographic characteristics of your community now, make some data based assumptions, and predict what that will look like in the future. Because anticipating that future is what planning is all about. Understanding demographic trends – is your population aging, are families with school age children moving in, are the educational attainment levels providing the business sector with the employees they need now and into the future – is critical to remain competitive, prosper, and create a quality of life that meets the needs of all residents now and into the future. Data about

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## ***What the Law Says:***

### **The Michigan Planning Enabling Act, in part states the following:**

#### Sec. 7

- (1) A local unit of government may adopt, amend, and implement a master plan as provided in this act.
- (2) The general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:
  - (a) Is coordinated, adjusted, harmonious, efficient, and economical.
  - (b) Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development.
  - (c) Will, in accordance with present and future needs, best promote public health, safety, morals, order, convenience, prosperity, and general welfare.
  - (d) Includes, among other things, promotion of or adequate provision for 1 or more of the following:
    - (i) A system of transportation to lessen congestion on streets and provide for safe and efficient movement of people and goods by motor vehicles, bicycles, pedestrians, and other legal users.
    - (ii) Safety from fire and other dangers.
    - (iii) Light and air.
    - (iv) Healthful and convenient distribution of population.
    - (v) Good civic design and arrangement and wise and efficient expenditure of public funds.
    - (vi) Public utilities such as sewage disposal and water supply and other public improvements.
    - (vii) Recreation.
    - (viii) The use of resources in accordance with their character and adaptability

#### Sec 31

- (2) In the preparation of a master plan, a planning commission shall do all of the following, as applicable:
  - (a) Make careful and comprehensive surveys and studies of present conditions and future growth within the planning jurisdiction with due regard to its relation to neighboring jurisdictions.
  - (b) Consult with representatives of adjacent local units of government in respect to their planning so that conflicts in master plans and zoning may be avoided.
  - (c) Cooperate with all departments of the state and federal governments, public transportation agencies, and other public agencies concerned with programs for economic, social, and physical development within the planning jurisdiction and seek the maximum coordination of the local unit of government's programs with these agencies.

Sec. 33 (1) A master plan shall address land use and infrastructure issues and may project 20 years or more into the future. A master plan shall include maps, plats, charts, and descriptive, explanatory, and other related matter and shall show the planning commission's recommendations for the physical development of the planning jurisdiction

income is useful, as lower income neighborhoods will require additional resources and interventions to uplift those residents. Data about current housing stock – age and condition, type (single family, multiple family), cost (is there a range of housing for all income levels), and location are all part of the data puzzle that needs to be put together to plan a high quality future.

Data collection and analysis should be central to the work of municipal government, not just planners. Knowing the types of data, where to find them, and how to use them will provide decision makers with the confidence to advance evidence based policy.

The sources for the data you can use are as varied as the questions that you are asking! From easily accessible US Census data, to more complicated data modeling methods that can be purchased, there is a data source for every municipal need.

If you have a municipal planner on staff, or retain a planning consultant, they are a logical first step to access good data. Good decision making starts with having the best possible information about what has happened in the community, and educated predictions about the future. Good data makes for good decision making.

Zoning and land-use information, traffic counts, and individual parcel details are basics, and this information can be easily obtained at city hall in the planning or building department, the assessor's office, or with your engineer or engineering consultant. Municipal professionals can access this information with little trouble.

The municipal building department provides a motherlode of data. Individual property files can show year built, alternations or expansions over time, number of units, and history of code violations. This information can reveal which neighborhoods are experiencing investment through home improvements, and ... which ones are not. Data like this can be used to identify neighborhoods for a targeted code enforcement campaign, or identify neighborhoods to target housing rehabilitation dollars. The police department can provide crime data, and policies can be developed to integrate safety enhancing design protocols into your site plan review process. CEPTED (Crime Prevention

Through Environmental Design) is a wide used, data driven approach that improves community safety and well-being.

## ***Walking/Driving Surveys***

Data about your community can also be found by conducting “windshield surveys”, which are exactly what it sounds like. Systematic observations made from a moving vehicle or made on foot can help you to quickly and better understand your community. Surveys can be an important part of an overall community assessment.

## ***Where to Find Data***

HUD Office of Policy Development and Research,  
State of the Cities Data Systems (SOCDS)

U.S. Census Data for Social, Economic, and Health  
Research (IPUMS)

American Community Survey

Center for Neighborhood Technology

Asset Limited Income Constrained, Employed  
(Alice)

Chicago Federal Reserve – information about  
Illinois, Indiana, Iowa, Michigan and Wisconsin  
Region

ESRI

U.S. Housing Market Conditions

National Equity Atlas

HUD E-GIS Open Data Storefront

Gale Business

Michigan Economic Development Corporation's  
Zoom Prospector

Michigan Association of Regions. There are  
fourteen planning regions in Michigan. Your local  
region has data, resources and experts to assist you.

## What is GIS?

Geographic Information Systems, or GIS, is a framework for gathering, managing, and analyzing data. Rooted in the science of geography, GIS integrates many types of data. It analyzes spatial location and organizes layers of information into visualizations using maps and 3D scenes. Larger municipalities usually have their own GIS system, but smaller communities can avail themselves of the important data through the County, or sometimes your Region. GIS allows for detailed analysis of everything from zoning, building placement, topography, wetlands and flood plains and flood ways. You can map, analyze, and assess real-world problems using GIS.

Driving surveys are more convenient when you want to cover a large area and the characteristics you are looking to survey or observe can be easily discerned from a vehicle. Walking surveys are a better choice when you're seeking to understand the pedestrian's point of view or you are gathering data that is harder to see from a moving vehicle.

Before undertaking the survey, you need to decide where and how the survey will be conducted. Will staff or commissioners or elected officials be surveying the area? Decide when to conduct the survey. The time of day, whether it's a weekday or weekend, weather and the season will affect what you observe. Conducting the survey at different times will yield richer results. What questions do you want your survey to answer? "What is the nature of the community?" is a much bigger question than "Do most streets in the community have sidewalks?" Make and use a checklist to ensure that you address all of your questions, and observe all the areas you want to.

When conducting a survey, work in a team to make the most efficient use of everyone's time. A two-person

team is the minimum, but three or four (if it's a driving survey) is better. A driving survey will take one person to drive, another to navigate and observe and another to take notes or photos. With a walking survey, one person will be navigating and referencing the map, while another is taking notes or photos, the other team members will be making observations. In addition to being more efficient, a team allows for a variety of perspectives which will enrich the survey. Record and discuss your findings as you go.

Data is essential. It provides quality information to drive informed municipal decisions. There are many and varied sources of data available, and the use of data will provide confidence and accuracy in the development and implementation of government planning, programs, policies.

## What Can A Walking or Driving Survey Tell You?

**Housing.** What type of housing is there and what condition is it in?

**Infrastructure.** What's the condition of roads, streetlights, sidewalks? Do you feel safe as a pedestrian or a driver?

**Businesses.** How many businesses? What type of businesses are there? How many vacancies? Is the signage in good shape? What language are the signs in?

**Activity.** How busy are the streets or sidewalks at various times of the day, week, or year? How noisy is that activity?

**Public buildings and parks.** What condition are they in? Are they easily accessible? Who do you see visiting/using the public buildings and parks?

This tear sheet was developed by the Michigan Association of Planning (MAP) for the Michigan Economic Development Corporation (MEDC). The Michigan Association of Planning is a 501 c 3 organization, dedicated to promoting sound community planning that benefits the residents of Michigan. MAP was established in 1945 to achieve a desired quality of life through comprehensive community planning that includes opportunities for a variety of lifestyles and housing, employment, commercial activities, and cultural and recreational amenities.

