



Michigan Association of Planning

Infrastructure Policy September 27, 2017

Infrastructure Policy Introduction

MAP created this policy to guide communities toward effective long-term planning of public infrastructure.

What is *infrastructure*?

Infrastructure includes the basic physical systems and facilities necessary for a community to function and thrive. It includes fundamental public and private systems that are vital to a community's development and prosperity, such as transportation (roads, railways, airports, ports), utilities (electrical grid, gas storage and distribution, water supply systems and stormwater, sanitation, telecommunications), natural and recreational assets (parks, watershed controls, agricultural/food systems), renewable energy resources (access to wind, solar, geothermal, etc.) and community facilities (schools, public safety, community centers).

Infrastructure History

Americans have always loved big, new infrastructure projects. When the economy is suffering, infrastructure projects are initiated to get people back to work. Such investments spur the economy out of a depression or recession, bring new facilities to rural and previously underserved areas, and connect the population centers of our large nation. Infrastructure projects have electrified rural communities, resulted in dams to power new cities, and created an interstate highway system to connect our coasts. More recently, "shovel ready" projects were prioritized for investment to reinvigorate the economy during the 2008 recession.

However, there are lessons to be learned from this propensity to build and expand. The long-term replacement and maintenance costs of these infrastructure projects have often been ignored or under-estimated and now, as a society, we face the consequences of declining legacy systems and mounting replacement costs, which threaten human health and property investments and cripple municipal finance.

Politically, it is a struggle to fund infrastructure maintenance and replacement activities. For example, repaving roads in traditional neighborhoods and downtowns, replacing water and sewer lines, and upgrading our electrical grid provides limited political benefit and has little short-term impact on tax base. Meanwhile, new highway projects and infrastructure

investments in areas where it has not previously existed create an immediate perception of growth and economic development and often create access to a new tax base for a few communities.

Infrastructure expansion does not address infrastructure decline in places where infrastructure and population already exist and sends pipes and people farther from the centers where billions have already been invested. The net result is an ever expanding system of infrastructure with ever expanding maintenance and replacement costs and a thinning tax base that limits each municipality's ability to fund the cycle.

There is no doubt that world-class infrastructure helped the United States achieve its status as the most prosperous nation in the world, but this legacy is also capable of crippling our nation under mounting replacement costs. We now face the challenge of planning for and prioritizing reinvestment in our infrastructure to support the next 100 years of our communities.

Infrastructure Needs Are Urgent

Much of the country's infrastructure - particularly roads and bridges and water and sewer lines – was built and paid for during the last century. Infrastructure investments after World War II created the highways, single-family neighborhoods, and commercial areas that are ubiquitous in our communities.

Combine aging and deteriorating infrastructure with the increasing financial vulnerability of Michigan's legacy urban and rural communities, and we are facing possibly insurmountable impacts on the health, vitality and sustainability of our communities. One organization - Strong Towns, which is dedicated to engaging people about municipal financial stability – has gone as far to state:

Most American cities find themselves caught in the Growth Ponzi Scheme. We experience a modest, short-term illusion of wealth in exchange for enormous, long-term liabilities. We deprive our communities of prosperity, overload our families with debt and become trapped in a spiral of decline. This cannot continue.¹

Effective infrastructure planning and management cannot be separated from the broader issues of municipal finance, and ultimately, the long-term viability of our current systems of governance. Michigan presents compelling examples of the consequences of the “buy now-pay later” approach to community growth. Detroit experienced the largest municipal bankruptcy in history, and Flint has captured the national conscience as a consequence of negligent management of a declining drinking water system.

While every city's story and challenges are unique, Detroit and Flint are not outliers: they are bellwethers of a much broader trend of mounting infrastructure replacement and operations

¹ Marohn, Charles. *Greatest Hits: The Growth Ponzi Scheme*. June 20, 2016.
<http://www.strongtowns.org/journal/2016/6/14/greatest-hits-the-growth-ponzi-scheme>

costs that are crippling our communities and threatening their long-term solvency. As an example of the challenge we currently face, our urban footprint in Michigan has increased by nearly 50% since 1982, while our population has grown by less than 10%.²

The American Institute of Certified Planners code of ethics states: “Our primary obligation is to the public interest...” Very simply, there is no greater threat to the general public interest of our communities than ensuring that our infrastructure systems that protect public health, allow commerce to take place, and maintain basic quality of life are maintained for future generations. To fail to address the pressing infrastructure investments faced by Michigan communities is to fail in our obligation as professional planners.

Infrastructure Policy Implications

Effective planning and implementation of infrastructure investments is a critical challenge facing Michigan’s local units of government. Communities are increasingly faced with a range of difficult decisions that affect the daily lives of their citizens. We now know all too well that building infrastructure based on assumptions for never-ending growth leaves future generations facing a cycle of ever-increasing maintenance costs and declining revenues. Very simply, we have to do something different, and we have to do it now.

Planners must begin to evaluate the true lifetime costs of development, including the impact on the financial stability of communities. Today, development decisions are driven by headline grabbing motives—jobs and private investment figures. In the future, these motives must be equally balanced with the long-term liabilities assumed by tax-paying citizens. Planners must become staunch advocates for the long-term solvency of the communities we serve and insist on infrastructure asset management.

When developing plans and reviewing projects we must analyze long-term fiscal impacts that extend beyond the lifetime of the existing infrastructure. We must also evaluate the fiscal impact of our current plans and developments to identify which areas of our communities are contributing to community financial sustainability and which are not paying their share. Before taxpayer money is invested in new or expanded infrastructure, proper asset management practices should be in place and demonstrated to be adequate. Use of regional GIS databases can assist with this practice.

One of the greatest impediments to effective infrastructure planning is the variety of jurisdictions and organizations responsible for each type of infrastructure. This issue is especially prevalent in urban and suburban areas. As an example, a single roadway may transition from state, to local government, to county road commission control in a just a few miles, with no obvious change in the development context. Furthermore, jurisdiction over sewer, water, electrical, gas, and telecommunications infrastructure varies greatly across Michigan communities. This mosaic of responsibility makes coordinated investments extremely

² Gregory P. Kacvinsky, P.E. *Infrastructure Planning and Investment*. Michigan Planner, Vo. 20 No. 3 May/June 2016.

difficult and time consuming. If infrastructure planning is to be truly effective, we must create mechanisms to incentivize coordination and cooperation of these various entities that hold responsibility for the long-term prosperity of our communities.

Another challenge is that while the Michigan Planning Enabling Act requires planning commission involvement in the creation of a regular Capital Improvements Program, many communities do not currently follow this requirement or have only token involvement in the process. Some of this situation stems from lack of knowledge and/or training, but in many cases it is the result of the decision making silos created for each separate infrastructure system. A planning commission and trained planners can bring a big picture, future oriented view to the community's asset management and capital planning.

Beyond successfully planning for infrastructure investment, we must re-think our financing structures for infrastructure. Michigan in particular has an extremely poor record when it comes to providing revenue options for local governments. In 2015, the Michigan Municipal League (MML) launched a campaign to shed light on the plight of Michigan's cities in trying to deal with this challenge. For instance, MML has found that over \$7.5 billion has been diverted from local revenue sharing since 2006.³

MAP Infrastructure Policy Statements

1. The Michigan Chapter of the APA prioritizes adequate funding for the maintenance and repair of existing critical infrastructure over funding of new infrastructure projects. We also strongly recommend that there be adequate budgeting for future maintenance and repair and proof of adequate asset management.
2. The Michigan Chapter of the APA strongly rejects the practice of redirecting for other purposes public funding sources targeted for infrastructure investment (e.g., fuel taxes).
3. The Michigan Chapter of the APA believes that the use of community planners and planning commissions in infrastructure planning is essential in order to appropriately prioritize infrastructure that best conforms to community development and redevelopment goals. The Michigan Planning Enabling Act requires many planning commissions to be involved in the creation of a Capital Improvements Program.
 - a. The Michigan Chapter of the APA advocates for incentives or penalties that better enforce the CIP requirement in the Planning Enabling Act, such as making it a pre-requisite for certain grant programs which provide funding for utility construction.
 - b. The Michigan Chapter of the APA encourages greater standardization in preparing and presenting CIPs (e.g., the guidebook used by the Redevelopment Ready Communities Program of the MEDC).
4. The Michigan Chapter of the APA encourages communities to study and understand the long-term infrastructure implications of land use planning, and apply this understanding to local decision-making on development projects and adoption of community plans.
5. The Michigan Chapter of the APA encourages greater cross-jurisdictional and cross-disciplinary coordination around infrastructure elements in public rights-of-way, with one

³ <http://www.savemycity.org/facts-and-figures/>

example being coordinated capital improvement plans that require consideration of other infrastructure needs when planning for a roadway or utility improvement.

6. The Michigan Chapter of the APA supports greater coordination of development and infrastructure investment at a community level with infrastructure needs at a state and regional level. Regional and state investments in critical infrastructure should not be used to just move jobs and people from one jurisdiction to another.
7. The Michigan Chapter of the APA supports a variety of solutions to infrastructure challenges, with the understanding that each must be adapted to the context of our diverse communities, local governments, and regions.
8. The Michigan Chapter of the APA encourages communities to evaluate the long-term impacts on fiscal health created by new development decisions, with a focus on the net revenue to the community and benefits provided to residents.

Other relevant Policies

- Smart Growth
- Community Planning Principles
- Surface Transportation
- Housing
- Public Redevelopment
- Regional Planning and Coordination
- Wind Energy
- Schools and Local Government