

# FUNDING YOUR INFRASTRUCTURE PROJECTS



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# INTRODUCTION

The following is a compilation of a four-part blog series by Jim Hegarty, PE, a civil engineer, project manager, grants specialist and a member of Grand Rapids-based consulting engineering firm Prein&Newhof's Executive Committee. He is a past president of the Michigan Section of the American Society of Civil Engineers, and speaks and writes frequently about grants, project financing and other industry issues.

“Are there any grants out there for my project?”

Right behind “How much will it cost?” this is the most frequent question I get from clients about their projects.

Before the American Recovery and Reinvestment Act (ARRA, or Stimulus) I used to tell my clients their best prospect for a grant was if they were poor, created jobs or wanted police or fire equipment or training. In this article, you will see examples of how Michigan communities are using their creativity and persistence to make their infrastructure projects happen in both conventional and unconventional ways.



## CONVENTIONAL PROGRAMS FOR WATER AND SEWER SYSTEMS

Water and wastewater systems are the most common infrastructure assets under municipal control. They are largely financed in two conventional ways, including loans from Michigan's Drinking Water Revolving Fund (DWRF) or State Revolving Fund (SRF) and loans and grants from the USDA Rural Development's Water and Environmental Programs (WEP).

DWRF and SRF loans are administered by MDEQ and will finance up to 100% of a project's cost, which is paid back over 20 years. The current interest rate is 2.5%.

Rural Development's WEP is targeted at communities with a population below 10,000. Depending on the median household income (MHI) within the community, interest rates of between 2.375% and 4.0% are available. Making WEP more attractive is the potential for a project to receive a grant for a portion of the project's cost. To qualify for a grant, the residential water or sewer utility bill in the community must exceed between 1.25% and 1.5% of the MHI. For a MHI of \$35,000, a community whose users' rates range between \$36.45 to \$43.75 each month are grant-eligible. With ARRA funds, Rural Development has given out grants of up to 75% of a project's cost. Before ARRA, and presumably after ARRA funds are expended, grants up to 45% of a project's cost are possible. To make the WEP program even more enticing to communities, an announcement for the availability of up to a \$30,000 SEARCH planning and engineering grant is expected soon. This will allow communities to get reliable project cost estimates and complete a WEP pre-application for funding.



# IMPROVING YOUR CHANCES FOR SUCCESS

## 1. Get an Engineering Study

Regardless of the grant you're seeking, I've found that it can be a tremendous help if you have invested in a preliminary engineering study that outlines the scope and cost of your proposed project. A blown cost estimate can be very embarrassing for an applicant who receives a grant only to learn later that the project cost estimate upon which it was based was too low. Most grant programs have a set amount to give away each grant cycle. This might mean you'll have to increase your local share of the cost, or worse, abandon the project!

Many grant programs take a while after the application deadline to decide on the projects they will support. Once they make their awards, however, they are anxious to see some results! This is why projects that are "shovel-ready" often get preference over those that have yet to be designed. Although there is a significant cost to develop a full set of plans and apply for permits, having them in-hand is a decided advantage more often than not.

## 2. Prepare your "Match"

Grant providers also prefer to see applicants with some "skin" in the game, meaning the more local money you can offer to reduce the grant request amount the better your chances. Often, grant programs do not publish a "set" match amount or percentage, but they intimate that more is better. If you can, look at previous grant cycle awards from those agencies that publish that information. You'll quickly get a feel not only for the range of match amount you'll need to offer, but also the type of projects that have received grants in the past.

## 3. Find Partners

Partnering with other communities or community groups invariably increases your chance for grant success. Lacking direct participation, it's important to seek support letters from those individuals, groups or elected officials likely to "champion" or benefit from your proposed project.

## 4. Go Up the Ladder

And while unfortunate, it's also a reality that political connections rarely hurt. I never recommend this approach unless you learn that your project is in jeopardy of not being funded, and it is worth the risk you'll take of alienating the staff-level people who review future applications.

# CASE STUDIES IN CREATIVE FINANCING

THE FOLLOWING CASE STUDIES ARE EXAMPLES OF HOW COMMUNITY INGENUITY AND IMAGINATIVE THINKING HAVE SOLVED SOME VEXING INFRASTRUCTURE ISSUES IN NOT-SO-CONVENTIONAL WAYS.

## Kent County's Alpine Township uses S.A.D. to improve highway intersection

This is one of the more unique projects in Alpine Township's history. A commercial Special Assessment District (S.A.D.) was established to pay for 93% of an intersection improvement project on Alpine Avenue, which is also State Highway M-37. This \$740,000 project greatly improved traffic flow and allowed better access to retail developments in the most highly congested area of Alpine Township. Area businesses have expressed their satisfaction with the improvements, and Township residents have experienced fewer delays and traffic bottlenecks. At the time, it was the only project of its kind anywhere in Michigan, insofar as road financing was concerned.

## Building bridges

Since 1973, MDOT's Critical Bridge program, now known as the Local Bridge program, has funded hundreds of bridge rehabilitation and replacement projects across Michigan. Three West Michigan communities, however, were unable to qualify for Local Bridge funds because their "bridges" technically were not bridges—structures spanning at least 20 feet. Coopersville, Kent City and Morley made badly-needed bridge replacements using some unusual funding sources.

Kent City and Coopersville each turned to the Federal Emergency Management Agency's (FEMA)



Cannon Trail

Hazard Mitigation Grants Program (HMGP) to replace undersized bridges. Kent City used a \$217,000 HMGP grant and a \$67,000 Community Development Block Grant (CDBG) through Kent County to build a new, larger structure that alleviated frequent flooding problems. Similarly, Coopersville matched a HMGP grant with local road funds to build a new creek crossing at East and Cleveland Streets.

Morley, in Mecosta County, took advantage of its low-to-moderate income status to qualify for a \$148,000 CDBG Infrastructure Capacity Enhancement (ICE) grant. ICE grants are administered by the Michigan Economic Development Corporation (MEDC).

Morley used its ICE grant and \$80,000 from its street fund to replace the dilapidated Two Mile Road bridge over Big Creek.

## Cannon and Saugatuck Townships build non-motorized trails with grants

After being in the planning stages since 2000, Cannon Township in Kent County built the first leg of its non-motorized trail system in 2007. A key part of Cannon Township's planning included passage of a parks millage that still generates about \$167,000

each year for its trail system. Using banked funds from its millage, general funds and a \$500,000 Michigan Natural Resources Trust Fund (MNRTF) grant, Cannon’s spectacular trail connecting its Township hall with Townsend Park is now enjoyed by thousands of citizens and visitors each year.

Another West Michigan community, Saugatuck Township in Allegan County, built a portion of its trail system using a \$246,000 Congestion Mitigation and Air Quality (CMAQ) grant through MDOT. The grant is given to projects that reduce transportation-related emissions in areas that do not meet air quality standards.

### Holland Township non-motorized trail crosses I-196 on the wings of MDOT grant

Holland Township’s Adams Street non-motorized trail used to dead-end on both sides of I-196, but not anymore. Using a \$217,000 MDOT Surface Transportation Program (STP) grant and a \$343,000 MDOT CMAQ grant, they built a 235-foot-long pedestrian bridge over I-196 that connects to the existing trail on either side of the highway. Holland Township voters first approved a trails millage in 1981, and they are using its proceeds to cover its remaining \$504,000 share of the \$1,064,000 project.

### Casnovia Township sewer project gets 75% grant

The “Bailey” community, part of Muskegon County’s Casnovia Township, can finally build a much-needed sewer system thanks to a 75% grant from USDA’s Rural Development program under the ARRA program. Septic tanks there had been failing for years, but until now residents could not afford the approximately \$25,000 per household cost of sewers.

This project started with an income survey sanctioned by Rural Development that qualified the specific project area for the low-income grant.



### Allegan’s new water treatment plant gets unexpected boost from two grants

Allegan built a brand-new water treatment plant, and its original plan was to finance its almost \$10,000,000 price tag using a loan from the DWRP program. During the design phase, two serendipitous events occurred that benefited Allegan’s rate payers for the next twenty years. First, local company Perrigo announced two major expansions to its private-label pharmaceutical operations headquartered in Allegan. Working with the US Department of Commerce’s Economic Development Administration (EDA), Allegan received a \$3,744,000 EDA grant to build the water treatment plant. At about the same time, the SRF program announced that 40% of Allegan’s proposed loan from them, almost \$2,500,000, would be forgiven using ARRA funds.

### Plainfield Township acquires prime riverfront property for park

When a developer bought the Grand Island Golf Ranch to develop a retail and condominium project,

he offered to sell the golf course's entire Grand River frontage to Plainfield Township, immediately north of Grand Rapids. The Township had long coveted this portion of the Grand River's frontage both as a park and a key link of its planned Grand River Trail. Plainfield's \$540,000 grant request was honored by the MNRTF in 2009. No matching funds were required. Communities seeking less than \$100,000 either to buy parkland or develop a park are encouraged to apply for MNRTF funding, as chances for success are higher than average at this modest funding level.

### Creative drainage financing scheme solves problems, spares cost to Township

Frequent rains exposed a number of localized flooding issues within the developing York Creek watershed in Kent County's Alpine Township. While the proposed solution was complicated, it could be built at a cost of \$2,300,000. Unfortunately, Alpine Township did not have the resources to fund a project of this size. With a bit of luck and some careful planning, Alpine officials found a way that the project could be done without undue financial strain on its residents. By using a little-known funding mechanism within the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grants Program, Alpine Township tied York Creek's flooding issues to a regional disaster declaration in another part of Michigan. The result was a \$570,000 FEMA grant to buy three houses impacted by frequent flooding so that they could be demolished and removed from the flood plain, creating additional flood storage to minimize future downstream damages. In addition, Alpine negotiated with a developer to donate land to build a major upstream stormwater detention pond in York Creek's watershed. A special assessment district paid for the pond.

### ARRA Energy Grant helps Cannon's sidewalk program

Cannon Township's new Town Center retail and commercial development recently opened at the busiest road intersection in the community. Even though the Lake Bella Vista neighborhood surrounds the Town Center, there was no easy way to walk between the two. That will change this summer, as Cannon Township recently secured an approximately \$75,000 grant from the Energy Efficiency and Conservation Block Grant (EECBG) portion of the ARRA through the Michigan Department of Labor and Economic Growth. The grant covers about 40% of the project's estimated cost. Almost \$22,000,000 was available via EECBG for smaller Michigan communities.

### Hart hits olfactory home run with improved wastewater process

For years the summer air in the Oceana County community of Hart was so foul that many residents didn't even open their windows. The reason? Local fruit processors discharged sugar-laden wastes to Hart's sewers, and its treatment plant's lagoons stunk to high heaven! The engineering solution was simple—introduce more oxygen in the treatment process. Paying the approximately \$5,000,000 tab for improvements was another story. To spare its residents the cost associated with the improvement, Hart created one of Michigan's first Agricultural Renaissance Zones, which captured the increase in property taxes on fruit processors to make payments on the bond that enabled the project to go forward. Having the ability to treat this strong waste also is an economic development advantage for Hart. One fruit processing company since doubled its production, while another moved its headquarters there from Washington.



## PARTING THOUGHTS

One of my favorite characters is the late Wisconsin Senator William Proxmire, who issued a “Golden Fleece Award” monthly from 1975 to 1988. In his own words, the award singled out “wasteful, ridiculous or ironic uses of the taxpayers’ money.” Some of the more famous programs shamed with this “honor” were a \$27,000 study to determine why inmates want to escape from prison; the infamous Pentagon contract that paid \$400 per hammer and \$1,200 per toilet seat; and his personal favorite, a study to find out whether sunfish who drink tequila are more aggressive than sunfish who drink gin.



My point? If grants were available for these crazy projects, think how much more reasonable and attractive your “pet project” will look to those making grant decisions. Remain hopeful, optimistic and persistent and you will succeed! Happy hunting.