

Congratulations and Welcome

EEl would like to recognize the following employees for their milestone anniversaries with the company:

15 Yrs: Michele L. Piotrowski, P.E., LEED AP
Senior Project Manager

Angela D. McCoy
Accounting Assistant

25 Yrs: Mark G. Scheller, P.L.S.
Project Manager

40 Yrs: Peter G. Wallers, P.E., CFM
President

EEl congratulates **Christopher J. Ott, Christopher R. Walton, and Michael W. Schweisthal** on passing the P.E. exam.



Welcome to **Keith E. Powell, P.E.,** *Project Manager* in our Environmental Group.



Did You Know?

The Illinois Department of Transportation (IDOT) has released updates to the Bureau of Local Roads and Streets (BLRS) Policy Manual - Chapter 5? Two major changes that will impact your federally funded projects are: 1. threshold changed from \$150,000 to \$25,000; 2. QBS requirements as laid out in the BLRS Manual. Contact **Tim Weidner** at tweidner@eeiweb.com for more information.



Enterprises Trivia Challenge

Q: Which team won the 2017 World Series? Houston Astros or the LA Dodgers?

Send your answer to eei@eeiweb.com or fax to (630) 466-6701 January 31st to be entered in a drawing for a \$50 gift card!



Engineering Enterprises, Inc. (EEl), founded in 1974, is an award winning, progressive consulting engineering firm providing services throughout northeastern Illinois. Our expertise includes water, wastewater, transportation, stormwater, construction management, land surveying and GIS.

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Capital Improvement Planning - Why Do You Need It?

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Did You Know?

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The development of a Capital Improvement Plan (CIP) is a critical and vital responsibility for municipal staff in order to address immediate concerns and address long-term infrastructure needs. The 2017 American Society of Civil Engineers (ASCE) shows the overall infrastructure report card of our nation graded at a D-. Based on the 2014 ASCE infrastructure report card for Illinois a grade of a C- was given. It is estimated that trillions of dollars are needed to address this serious infrastructure deficiency. For a complete listing of all infrastructure areas please visit: <https://www.infrastructurereportcard.org/state-item/illinois>

CATEGORY	1988*	1998	2001	2006	2009	2013	2017
Aviation	B-	C-	D	D+	D	D	D
Bridges	-	C-	C	C	C	C+	C+
Dams	-	D	D	D+	D	D	D
Drinking Water	B-	D	D	D-	D-	D	D
Energy	-	-	D+	D	D+	D+	D+
Hazardous Waste	D	D-	D+	D	D	D	D+
Inland Waterways	B-	-	D+	D-	D-	D-	D
Levees	-	-	-	-	D-	D-	D
Ports	-	-	-	-	-	C	C+
Public Parks & Recreation	-	-	-	C-	C-	C-	D+
Rail	-	-	-	C-	C-	C+	B
Roads	C+	D-	D+	D	D-	D	D
Schools	D	F	D-	D	D	D	D+
Solid Waste	C-	C-	C+	C+	C+	B-	C+
Transit	C-	C-	C-	D+	D	D	D-
Wastewater	C	D+	D	D-	D-	D	D+
GPA	C	D	D+	D	D	D+	D+
Cost to Improve**	-	-	\$1.3T	\$1.6T	\$2.2T	\$3.6T	\$4.59T

*The first infrastructure grades were given by the National Council on Public Works Improvements in its report *Fragile Foundations: A Report on America's Public Works*, released in February 1986. ASCE's first Report Card for America's Infrastructure was issued a decade later.

**The 2017 Report Card's investment needs are over 10 years. The 2013 Report is over eight years. In the 2001, 2005, and 2009 Report Cards the time period was five years.

Fall / Winter
2017

Enterprises

Capital Improvement Planning - Why Do You Need It?, Cont'd.

The CIP process is an excellent resource to help communities address their infrastructure needs. At its simplest, CIP planning is assigning costs to needed projects over a planned period of time. However, there is a whole lot more to the art of maximizing your CIP program which is an area of engineering expertise where EEI excels. EEI has over 40 years of expertise providing long-term infrastructure planning for municipalities throughout the north-eastern Illinois area.

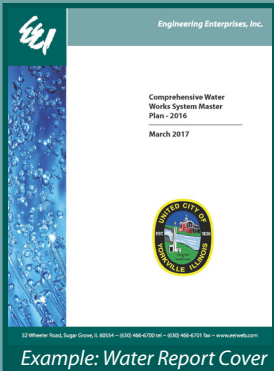


Maximize Your Money

The preparation of asset management plans and/or master planning documents are typically a good place to start with the development of a CIP. EEI has vast experience in the creation of these plans that allow a community to identify short and long-term project needs, costs and funding sources. These plans may be developed for transportation, water, wastewater, stormwater, and building needs.

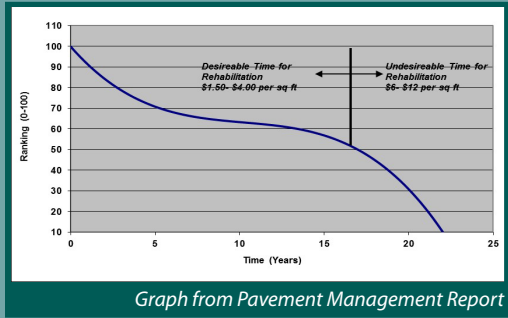
For example, EEI has prepared numerous drinking water planning documents that assist in identifying required improvements to meet growth, infrastructure replacement schedules and operational needs. Along with the planned improvements a funding analysis may be performed to identify how the improvements are to be paid for, such as user rate increases. This information is then plugged directly into the communities CIP with a level of certainty for municipal staff and elected officials that system infrastructure and funding needs are adequately addressed.

Similarly, long-term planning can occur for road infrastructure through the development of a pavement management system. The purpose of a pavement management system is to create a tool to aid communities in developing a multi-year plan that will maintain the roadways that are currently in good condition, and gradually improve those in less acceptable conditions. The end result is a systematic approach to roadway maintenance that will identify the



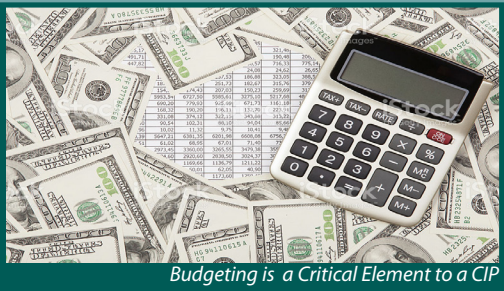
Example: Water Report Cover

necessary annual costs that should be expended to meet the desired goal. By gathering all of the condition data and determining the appropriate rehabilitation methods and costs for each roadway section, the system can be evaluated to determine a required budget that would be part of a CIP.



Graph from Pavement Management Report

Cost is always a key component and primary concern for communities when preparing and implementing CIP's. Preparation of cost estimates for the planning documents is both an art and a science. In addition to fully identifying work items and quantities, preparing cost estimates requires knowledge of current and projected material and construction costs. This is where the staff of EEI excels at employing their experience in bidding and managing construction projects and our extensive contractor contacts to create cost estimates that can be counted on. It is critical that budgets are not too low and/or too high as both are problematic.



Budgeting is a Critical Element to a CIP

EEI has the experience and expertise to help you make the most of your CIP program. If your community is interested in learning more about the ways that EEI can assist please contact **Brad Sanderson at bsanderson@eeiweb.com** for more information.



President's Message



Peter G. Wallers, P.E., CFM

Tis the Season..... The American Society of Civil Engineers (ASCE) has issued the 2017 Infrastructure Report Card, and their conclusions are.....let's just say it appears we have some work to do in nearly all of our infrastructure areas. If you're not sure where we should start, let me point you to one area you may find of interest. The current grade for Drinking Water infrastructure is a "D". Nationally we lose 6 billion gallons of treated water every year through leaking pipes. There are 240,000 water main ***** (my Public Works friends no longer allow me to print or say this word out loud, but it rhymes with aches) each year. ASCE estimates that we need to spend \$1 Trillion to maintain and expand service to meet demands over the next 25 years.

Part of the problem with water infrastructure is a lot of it is buried, and Public Works and the Water Professionals that run our systems do a phenomenal job of keeping things operating no matter what. Therefore, lack of adequate funding sometimes goes unnoticed until we reach a crisis. There are some areas of the country that are already dealing with a water crisis. Given our nation's overall water infrastructure unsatisfactory grade, unless our water system reinvestment approach drastically changes, it would seem there will be more crises in the near future.

As we near the winter season, I know crews will be out all hours of the day and night maintaining our systems and missing quality family time. We owe them all a debt of gratitude. Yes, it is their job, but keep in mind

it is our job as owners of our water utilities to demand that we reinvest in our systems. After all, none of us would be happy with a "D" on our report card.

2017 INFRASTRUCTURE REPORT CARD		American Society of Civil Engineers Foundation 1801 Alexander Bell Drive Reston, VA 20191 Ph: (800) 548-2723
	Categories	Grade
	Aviation	D
	Bridges	C+
	Dams	D
	Drinking Water	D
	Energy	D+
	Hazardous Waste	D+
	Ports	C+
	Rail	B
	Roads	D
	Schools	D+
	Solid Waste	C+
	Transit	D-
	Wastewater	D+

www.infrastructurereportcard.org
www.ascefoundation.org/donate

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