

National Association of County Engineers (NACE)



What is NACE?

- ▣ Nonprofit, non-partisan professional association
- ▣ Representing over 1,900 members since 1956.
- ▣ Roads - about 1.74 million miles by counties.
- ▣ Bridges - counties also own 231,000 bridges and operate 1/3 of the nation's transit systems.

NACE – More Than Engineers, County Road Professionals Titles:

- * County Engineer * Highway Superintendent
 - * Road & Bridge Superintendent
 - * Parish Engineer * Road Supervisor
 - * Commissioner of Public Works
- * Highway Administrator * Transportation Director
 - * Road Operations Manager
- * Public Works Director * Highway Commissioner
 - * Engineer-Manager Road Commission
 - * Road Master * Road Administrator

Advocacy

Representing county engineers and professional road managers nationally.

- Local Roads Matter! Campaign Launched
- Legislative Priorities - NACE and NACo
- Testimony before Congress
- Visits on the Hill and Legislative Fly-ins
- Information and Alerts for individual call to action
- Works with other groups such as the Local Officials for Transportation (LOT) coalition as well as the Roadway Infrastructure Safety Coalition (RISC)



Local Roads Matter! web site



The banner features the 'local roads matter!' logo on the left, which includes the text 'National Association of County Engineers'. To the right are three images: a construction site with cranes, a road leading to wind turbines, and a pile of US dollar bills. Below these images are the phrases 'to revitalization!', 'to business!', and 'to the economy!'.

local roads matter!
National Association
of County Engineers

to revitalization! to business! to the economy!

- Local Roads Matter! ▼
- News that Matter! ▼
- LRM! Tool Kit ▼
- Needs Assessment ▼
- NACE Alerts
- Contact Congress

Local Roads Matter!

Our nation's local roads are critical to every facet of our lives. Safe and efficient roads and bridges are necessary for **economic vitality, to revitalization, to schools, to trade, to healthcare, to business, in times of crisis, to families and to our overall quality of life.** Join our campaign and let our country know that **Local Roads**

Social Media Center

Click on the video below to hear directly from Dan Fedderly, Dunn County, Wis. Supervisor and chair of NACo's subcommittee on highways as he highlights the importance of maintaining local roads.



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NATION'S HIGHWAYS BY THE NUMBERS

Total miles of public roads—3,967,159

Total miles of roads by ownership

- Federal—128,378 miles (3.2 percent)
- State—783,643 miles (19.8 percent)
- Local—3,055,138 miles (77 percent)

Total miles of rural and urban roads

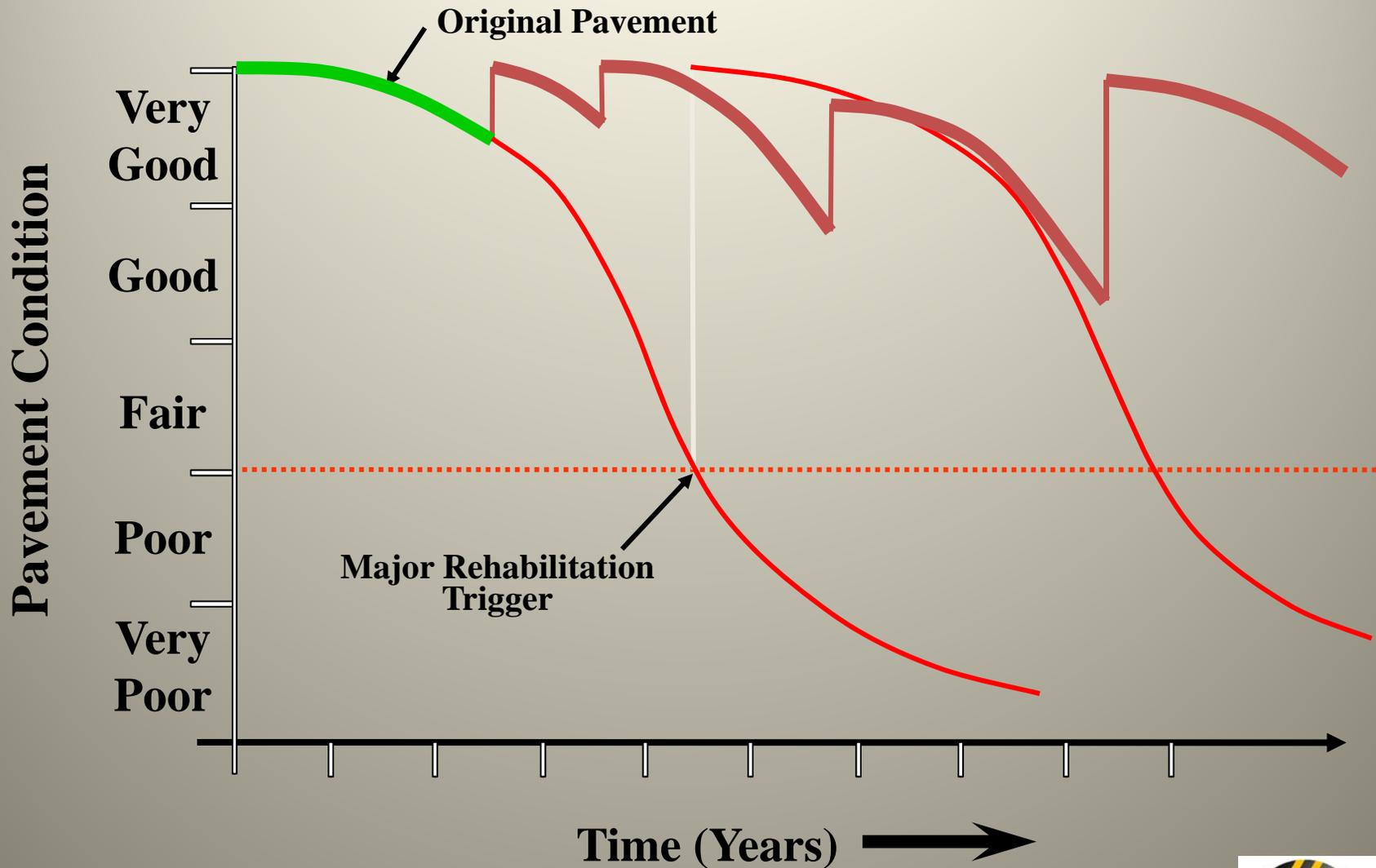
- Rural - 2,939,042 (74 percent)
- Urban - 1,028,107 (26 percent)

Preventive Maintenance is “a planned strategy of cost-effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (without significantly increasing the structural capacity).” Preventive maintenance is typically applied to pavements in good condition having significant remaining service life. As a major component of pavement preservation, preventive maintenance is a strategy of extending the service life by applying cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples of preventive treatments include asphalt crack sealing, chip sealing, slurry or micro-surfacing, thin and ultra-thin hot-mix asphalt overlay, concrete joint sealing, diamond grinding, dowel-bar retrofit, and isolated, partial and/or full depth concrete repairs to restore functionality of the slab; e.g., edge spalls, or corner breaks.

Routine Maintenance “consists of work that is planned and performed on a routine basis to maintain and preserve the condition of the highway system or to respond to specific conditions and events that restore the highway system to an adequate level of service.” Routine maintenance consists of day-to-day activities that are scheduled by maintenance personnel to maintain and preserve the condition of the highway system at a satisfactory level of service. Examples of pavement-related routine maintenance activities include cleaning of roadside ditches and structures, maintenance of pavement markings and crack filling, pothole patching and isolated overlays. Crack filling is another routine maintenance activity which consists of placing a generally, bituminous material into “non-working” cracks to substantially reduce water infiltration and reinforce adjacent top-down cracks. Depending on the timing of application, the nature of the distress, and the type of activity, certain routine maintenance activities may be classified as preservation. Routine Maintenance activities are often “in-house” or agency-performed and are not normally eligible for Federal-aid funding.

Deferred maintenance is the practice of postponing maintenance activities such as repairs on both real property (i.e. [infrastructure](#)) and personal property (i.e. [machinery](#)) in order to save costs, meet budget funding levels, or realign available budget monies. The failure to perform needed repairs could lead to asset deterioration and ultimately asset impairment. Generally, a policy of continued deferred maintenance may result in higher costs, asset failure, and in some cases, health and safety implications.

The Pavement Preservation Concept

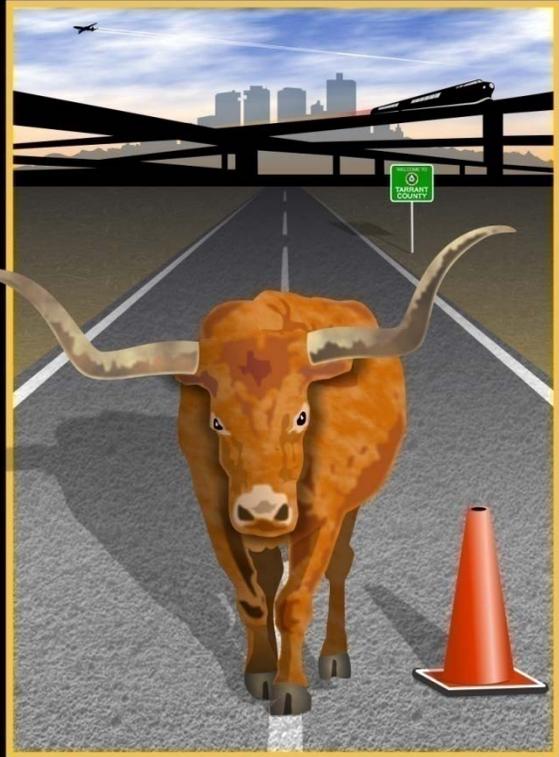


Strategies for Saving America's Highways – A Call to Action

- **Use the best materials throughout the life of a road**
- **Keep Good Roads Good**
- **View Highways as Public Assets to be Managed rather than Projects to be Fixed**
- **Invest to Save America's Highways**
- **Getting the Message Out**

NACE 2010: April 25-29, 2010

Celebrating the Past - Engineering the Future



NACE - 2010
National Association of County Engineers Annual Conference
Hosted by Texas Association of County Engineers and Road Administrators
April 25-30, 2010
Fort Worth - Tarrant County, Texas

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The Impacts of Deferred Maintenance

ROUGH ROADS LEAD TO HIGHER COSTS (1)

A well-connected highway system, maintained in good condition, is critical to the nation's economy. America's \$1.75 trillion public highway system is in jeopardy. Years of wear and tear, unrelenting traffic, an explosion of heavy trucks, deferred maintenance, harsh weather conditions, and soaring construction costs have taken their toll on America's roads.

Even with continued growth in public transit, enhanced rail services, and a national commitment to reduce greenhouse gas emissions from vehicles, roads remain a vital component of the system that moves people and goods throughout the country. Local Roads are essential to everyday life. Nearly 24 million children—55 percent of the country's kindergarten through high school population—ride 450,000 school buses 180 days per year. Every year, 50,000 ambulances make 60 million trips—that is an average of 164,000 trips per day. A fire department responds in one or more vehicles to a fire alarm in the United States every 20 seconds. Trucks in the United States carry 32 million tons of goods valued at \$25 billion every day. The country's 240 million registered vehicles travel more than 2.9 trillion miles annually. Those vehicles, and the people who drive and ride in them, rely on the nation's nearly 4 million miles of public roads—from Interstate highways to neighborhood streets—to get somewhere to do something. Highways are a backbone of American life, connecting people, goods, and services.

While the American Reinvestment and Recovery Act (ARRA) of 2009 will provide \$27 billion, about 3.4 % of the total ARRA funding, for highway projects, that money will barely make a dent in highway maintenance, preservation, and reconstruction needs. A recent report (AASHTO Bottom Line Report of 2009) documented that there is a need for all levels of government to invest \$166 billion each year in highways and bridges. More than half that amount would be needed for system preservation.

Only half of the nation's major roads are in good condition based on an analysis of recent Federal Highway Administration data. The situation is worse in high traffic, urban areas where one in four roads is in poor condition. In some major urban centers, more than 60 percent of roads are in poor condition. The American public pays for poor road conditions twice—first through additional vehicle operating costs and then in higher repair and reconstruction costs. For the average driver, rough roads add \$335 annually to typical vehicle operating costs. In urban areas with high concentrations of rough roads, extra vehicle operating costs can be as high as \$746 annually. Sustaining deteriorating roads costs significantly more over time than regularly maintaining a road in good condition. Costs per lane mile for reconstruction after 25 years can be more than three times the costs of preservation treatments over the same 25-year period.

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Let's Look at Maintenance

Preventive Maintenance is “a planned strategy of cost-effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (without significantly increasing the structural capacity).”(2)

Preventive maintenance is typically applied to pavements in good condition having significant remaining service life. As a major component of pavement preservation, preventive maintenance is a strategy of extending the service life by applying cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples of preventive treatments include asphalt crack sealing, chip sealing, slurry or micro-surfacing, thin and ultra-thin hot-mix asphalt overlay, concrete joint sealing, diamond grinding, dowel-bar retrofit, and isolated, partial and/or full depth concrete repairs to restore functionality of the slab; e.g., edge spalls, or corner breaks.

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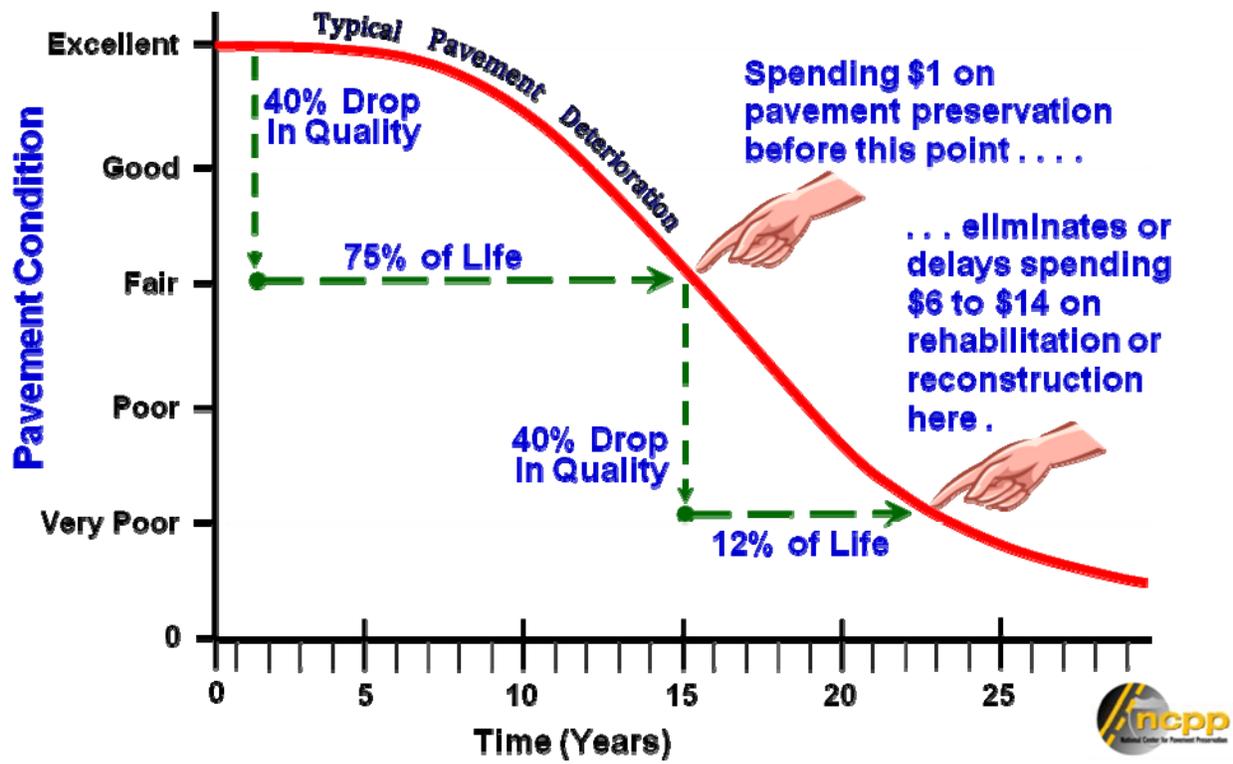
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Deferred maintenance is the practice of postponing maintenance activities such as repairs on both real property (i.e. infrastructure) and personal property (i.e. machinery and equipment) in order to save costs, meet budget funding levels, or realign available budget monies. The failure to perform needed repairs could lead to asset deterioration and ultimately asset impairment. Generally, a policy of continued deferred

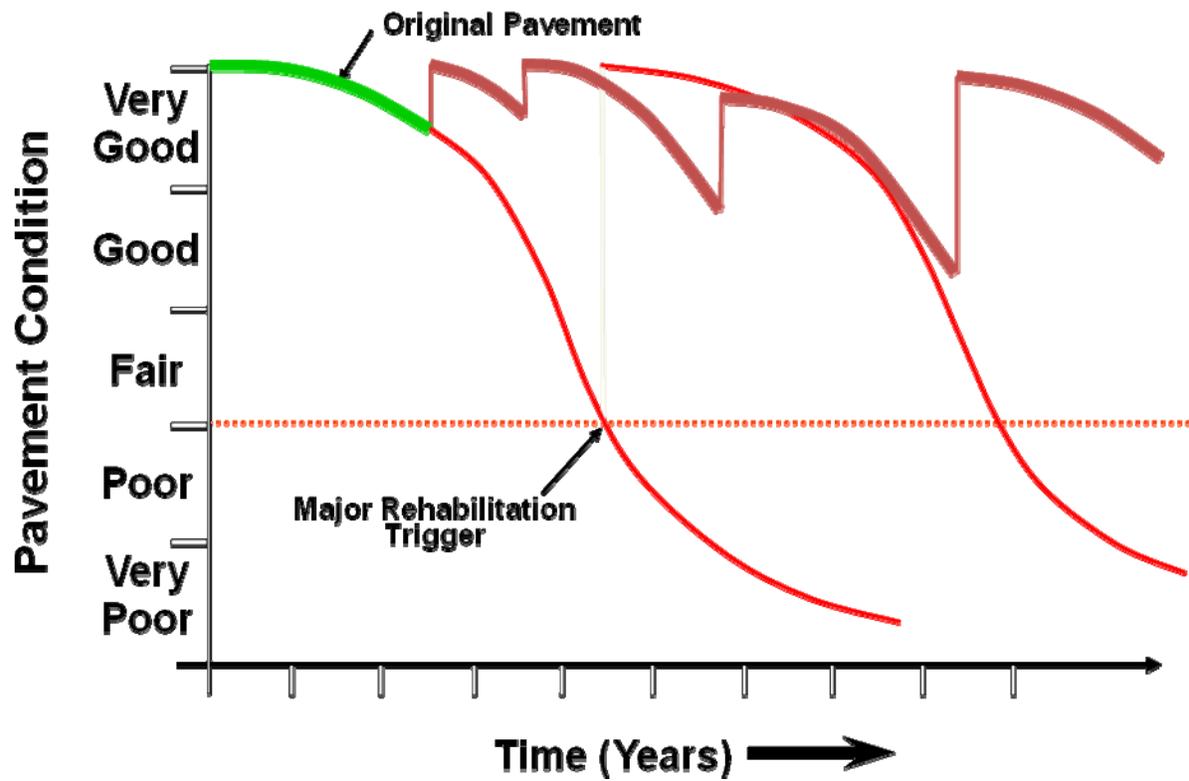
maintenance may result in higher costs, asset failure, and in some cases, health and safety implications.

According to the accounting standard-setter for the U.S. Government (www.FASAB.gov) in its Statement of Federal Financial Accounting Standard 6, defines deferred maintenance in this way, *“Deferred maintenance” is maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period. For purposes of this standard, maintenance is described as the act of keeping fixed assets in acceptable condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve the asset so that it continues to provide acceptable services and achieves its expected life. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended.*

Pavement Preservation is Cost Effective



The Pavement Preservation Concept



Strategies for Saving America's Highways – A Call to Action!

1. Use the best materials throughout the life of a road

From filling a pothole to reconstructing a major highway using materials to meet specific climate and traffic conditions will extend the service life of a road and reduce costs over the long run.

2. Keep Good Roads Good

Maintaining a road in good condition is easier and less expensive as you can see from the notional graph, than repairing one in poor condition. Achieving that goal involves a carefully planned and consistently funded pavement preservation program that make proactive improvements in good roads to keep them good.

3. View Highways as Public Assets to be Managed rather than Projects to be Fixed

Asset management is a comprehensive approach to ensuring the most cost effective return on investment for operating, maintaining, upgrading and expanding transportation systems. It starts from the assumption that the nearly 4 million miles of public roads, valued at \$1.75 trillion, are a valuable national asset, essential to the vitality of the American economy.

4. Invest to Save America's Highways

Our current shortsighted view of investment is “how much money do we have, and let's decide what we want to do with that.” This approach doesn't produce the best decisions. Rebuilding for the future requires a commitment from all levels of government to significant and sustained investments in transportation based on a vision of what we want our transportation system to look like in the future.

5. Getting the Message Out

Local government officials in cooperation and collaboration with the private sector (industry, agriculture, chambers of commerce, suppliers, manufacturers) need to undertake a communications program to inform the public and legislative leaders that:

1. Damage caused by roads in bad condition cost the traveling public (car repairs, safety, insurance, medical costs, etc.)
2. The high costs associated with deferring maintenance
3. Economic and environmental impacts

Reference Materials:

- (1) General Source Document: Rough Roads Ahead – Fix Them Now or Pay for it Later: AASHTO and TRIP*
- (2) Source: AASHTO Standing Committee on Highways, 1997*
- (3) At the Crossroads-Preserving our Highway Investment – National Center for Pavement Preservation – 2007*
- (4) Local Roads Matter – National Association of County Engineers - 2009*