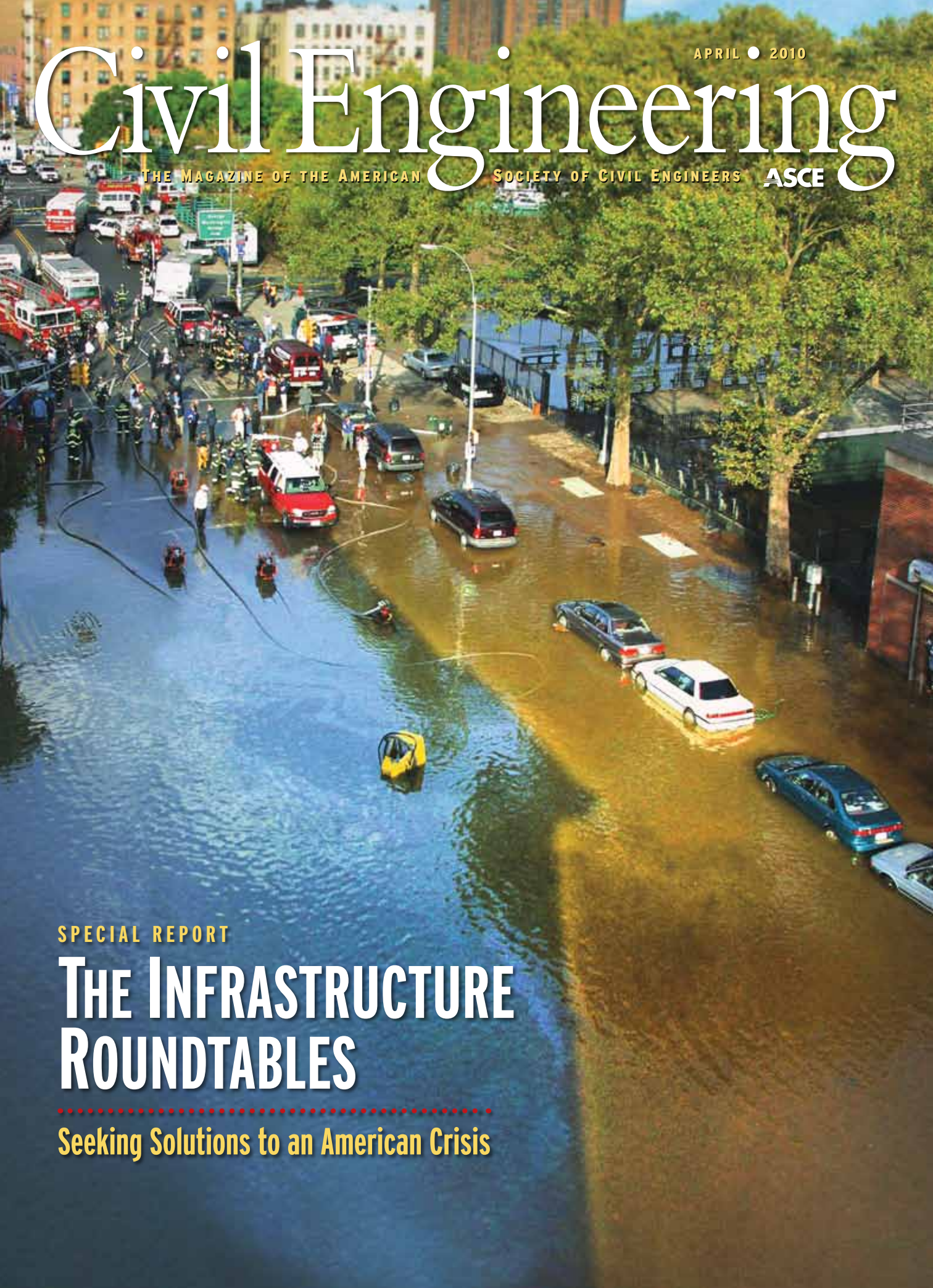


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# Civil Engineering

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SPECIAL REPORT

## THE INFRASTRUCTURE ROUNDTABLES

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Seeking Solutions to an American Crisis

## MODERATOR

**Henry J. “Hank” Hatch**, P.E., Dist.M.ASCE, retired from the U.S. Army as a lieutenant general and was the chief of engineers and commander of the U.S. Army Corps of Engineers. He has been an active volunteer with several professional organizations, among them two boards of the National Research Council. Hatch is also active in the affairs of the American Association of Engineering Societies and ASCE. A former national president of the Society of American Military Engineers, he currently chairs the Natural Sciences and Engineering Committee of the U.S. National Commission for the United Nations Educational, Scientific, and Cultural Organization. Hatch earned a bachelor’s degree from the United States Military Academy at West Point and a master’s degree from Ohio State University. He is a registered professional engineer in the District of Columbia and a member of the National Academy of Engineering.

## PARTICIPANTS

**Joseph A. “Bud” Ahearn**, P.E., Dist.M.ASCE, is well known and respected for his executive leadership in the engineering business lines of transportation, environment, water, industrial design, and related infrastructure. He was previously the vice-chairman of the board of CH2M HILL, of Englewood, Colorado, where he worked in collaboration with business group leaders to effectively represent the firm and was responsible for strategic planning, governmental affairs, strategic communications, and leadership development. Prior to joining CH2M HILL, Ahearn had a distinguished military career spanning three decades, and he achieved the rank of major general in the U.S. Air Force. During his 34 years with the Department of Defense, he was responsible for shaping strategy, developing budgets, and executing infrastructure programs totaling more than \$7 billion annually. As the senior civil engineer for the air force, he directed the development and operations of all U.S. air bases around the world. His numerous military awards include the Distinguished Service Medal, the Legion of Merit, and the Bronze Star, as well as a medal from the Federal Republic of Germany. He has also been the recipient of the air force’s Order of the Sword, the highest honor the noncommissioned officer corps of that branch can bestow in recognition of leadership and solicitude for the welfare of the enlisted troops.

**J. Richard Capka**, P.E., M.ASCE, is the chief operating officer for Dawson & Associates, Inc., of Washington, D.C. He served as the administrator of the Federal Highway Administration and as acting administrator of the U.S. Department of Transportation from 2005 to 2008 and as the chief executive officer and executive director of the Massachusetts Turnpike Authority from

The five roundtable discussions corresponded to the five solutions outlined in the *2009 Report Card for America’s Infrastructure*:

- 1) Increase federal leadership in infrastructure.
- 2) Promote sustainability and resilience in infrastructure.
- 3) Develop federal, regional, and state infrastructure plans.
- 4) Address life-cycle costs and ongoing maintenance.
- 5) Increase and improve infrastructure investment from all stakeholders.

# Increase Federal Leadership in Infrastructure

**T**HE ROUNDTABLE that addressed increasing federal leadership in infrastructure was moderated by Henry J. “Hank” Hatch, P.E., Dist.M.ASCE, and the participants were Joseph A. “Bud” Ahearn, P.E., Dist.M.ASCE, J. Richard Capka, P.E., M.ASCE, David R. Conrad, James Kolb, Representative Steven C. LaTourette (R-Ohio), John H. Moyle, P.E., M.ASCE, Kerry E. O’Hare, and T. Peter Ruane, Ph.D. (Ahearn participated by phone.)

In opening the discussion, Hatch read the first solution—*increase federal leadership in infrastructure*—as it was published in the *2009 Report Card for America’s Infrastructure*:

America’s infrastructure needs bold leadership and a compelling national vision. During the 20th century, the federal





**ASCE produced its report cards not only to inform the public and policy makers about the condition of the nation's infrastructure; it also produced them to sound an alarm. As noted in the executive summary of the 2009 report card, "The nation's infrastructure faces some very real problems that threaten our way of life if they are not addressed."**

government led the way in building our nation's greatest infrastructure systems by means ranging from the New Deal programs to the interstate highway system and the Clean Water Act. Since that time, federal leadership has diminished and the condition of the nation's infrastructure has suffered. Currently most infrastructure investment decisions are made without the benefit of a national vision. That strong national vision must originate with strong federal leadership and be shared by all levels of government and the private sector. Without a strong national vision, infrastructure will continue to deteriorate.

"I would point out from my experience in addressing this with the National Research Council, with ASCE, and with others that it's a very complex problem, and I think we're all aware of that," said Hatch. "Each one of those sectors has a different array of actors at the federal, state, local, and private-sector levels. In some cases, the majority of that particular sector is owned primarily by the private sector—almost entirely by the private sector. In other cases, it's owned almost entirely by the public sector—such

2001 to 2002. Capka retired from a 30-year career in the U.S. Army Corps of Engineers in 2001 as a brigadier general. Among his posts, he served as commander of the Corps's South Atlantic Division and South Pacific Division and of the Corps district headquartered in Baltimore.

**David R. Conrad** began his work on water resources issues in 1977. He has served for the past 20 years as a water resources specialist and senior water resources specialist for the National Wildlife Federation, the nation's largest conservation education and advocacy organization. For the previous eight years he was a legislative representative and water specialist for the organization Friends of the Earth. In recent years his major areas of activity have included the water resources development programs of the U.S. Army Corps of Engineers and federal river protection and floodplain management programs. More recently he has been involved in legislation and a range of public policy activities regarding flood hazard mitigation and floodplain management. An important goal here has been helping communities seeking assistance to move high-risk residences and businesses out of flood-prone areas and expanding opportunities for nonstructural flood damage reduction. Conrad has also been actively involved in legislation at the federal level for developing water resources that has encompassed projects and programs for the Corps of Engineers.

**James Kolb** serves as the staff director of the U.S. House Transportation and Infrastructure Committee's Subcommittee on Highways and Transit. He joined the subcommittee, which is responsible for highways, highway safety, and public transportation, in January 2007. Before that he was the vice president for congressional relations for the American Road and Transportation Builders Association. As a senior member of that group's government relations team, he was the primary liaison to the U.S. Congress. In that capacity he played a key role in the association's efforts to bring the transportation construction industry's concerns to the attention of the U.S. Department of Transportation and was involved in legislative efforts during the development of the 2005 legislation reauthorizing the nation's surface transportation programs.

**Steven C. LaTourette** (R-Ohio) is serving his eighth term in the U.S. House of Representatives and represents Ohio's 14th Congressional District, which includes all of Lake, Geauga, and Ashtabula counties and part of Cuyahoga, Summit, Trumbull, and Portage counties. LaTourette is a fiscally conservative moderate Republican who is well respected in his district. He strives to take a bipartisan and regional approach to governing and is widely credited with spearheading the congressional effort to save more than 1,100 jobs at the Defense Finance and (Continued on next page)

Accounting Service's offices in Cleveland, which the Pentagon hoped to close as part of its base realignment and closure process. LaTourette is a member of the House Committee on Appropriations and three of its subcommittees: the Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, the Subcommittee on Interior, Environment, and Related Agencies, and the Subcommittee on the Legislative Branch. He brings extensive experience in our nation's transportation policy to his subcommittee work, having served on the House Transportation and Infrastructure Committee in several leadership positions over the past 14 years. As a member of the Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, he continues to focus on the maintenance and growth of our nation's infrastructure, with a particular emphasis on northeast Ohio. In his work on the Subcommittee on Interior, Environment, and Related Agencies, he plays a role in setting funding priorities for our national parks, wildlife refuges, forests and other public lands, cultural agencies, and means of protecting water resources.

**John H. Moyle**, P.E., M.ASCE, holds a bachelor of science in civil engineering from the New Jersey Institute of Technology and is a licensed professional engineer. Moyle has been working on dam and flood control projects in New Jersey for 31 years. As chief of the Bureau of Dam Safety and Flood Control within New Jersey's Department of Environmental Protection, he is responsible for the engineering, economic, environmental, administrative, and emergency response aspects of New Jersey's flood control and dam safety program. Currently the National Flood Insurance Program coordinator for New Jersey, he is also responsible for administering the \$110-million dam restoration loan program and \$25-million flood control grant program for New Jersey. Moyle is a board member and the president-elect of the Association of State Dam Safety Officials and was president of that organization in 2001. He was also a board member of the National Dam Safety Review Board, which is administered by the Federal Emergency Management Agency, from 2001 to 2009. Moyle is on the U.S. Department of Homeland Security's Dams Sector Government Coordinating Council, which has been created to provide effective coordination in the area of dam security.

**Kerry E. O'Hare** is the vice president of Building America's Future, and she brings to her position nearly 25 years of experience in policy development and implementation; management; congressional, state, and local governmental relations; coalition building; and issue advocacy. O'Hare previously served as deputy administrator of the Federal Highway Administration, where she provided executive leadership to an agency with more than 2,500 employees and *(Continued on next page)*



as certain aspects of transportation versus, say, telecommunications on the other hand.

"So with that said, let me ask you a question: What do you think we really mean by federal leadership? What do we mean by federal leadership beyond money? What is the role of the federal government besides simply funding?"

O'Hare responded with a question of her own: "What's the vision? I think [the federal government's role] is coming up with the bold vision of where this country needs to go."

Conrad noted that such a vision should address the long term: "The country needs that vision to [encompass] a longer time frame. Some of the vision that the federal government has provided in the past has been century-level vision—it has looked past several generations and asked, what are the long-term needs of the country that are going to be met by this basic infrastructure that we build? I think that is an area to explore. I really don't believe we have kept our eye on that long-term factor."

Capka noted that "there is direct impact on the public, but there are very few who really understand the intricacies of infrastructure, and somehow there needs to be leadership providing the basis of public education and public awareness. I think the report card is a good step, but I also think that we need to ensure that the public doesn't see this as a hopeless situation—that there is something that can be done about it—because unless the two are connected in that fashion, everything else is going to get wrapped around the proverbial axle that we've seen over the last four years."

Ruane made the point that federal leadership must involve "sustained involvement," noting, "We've had federal leadership in the past, but it's never been sustained over time. It's got to be consistent, nonpartisan, and long term—making investments in strategic assets that further the country's goals. What are our goals? If, for example, one is to make our port system work better for foreign commerce, then make sure those investments in the ports go to the ports that really have the impact."



**“There is direct impact on the public, but there are very few who really understand the intricacies of infrastructure, and somehow there needs to be leadership providing the basis of public education and public awareness.”** —RICHARD CAPKA



an annual budget of \$40 billion. Before that she served as deputy assistant secretary for governmental affairs at the U.S. Department of Transportation, and in that capacity she was part of a select team that implemented the secretary's national strategy to reduce congestion on the country's transportation network. This team worked to educate state and local leaders, as well as the business community, in certain states about how to develop public-private partnerships and innovative ways to address traffic congestion. O'Hare has twice been honored with a medal from the Department of Transportation. Earlier in her career she served as deputy director in the Office of Federal Affairs for Governor George E. Pataki (R) of New York, as legislative director for Congressman Pete King (R–New York), and as legislative assistant to Senator Alfonse M. D'Amato (R–New York).

**T. Peter Ruane**, Ph.D., is the president and chief executive officer of the American Road and Transportation Builders Association, a 107-year-old national federation headquartered in Washington, D.C., of public and private transportation construction interests having more than 5,000 members. Ruane has more than 35 years of diversified experience in the economic development, transportation, and construction fields. He joined the American Road and Transportation Builders Association in 1988, and before that he served for nine years as the president and chief executive officer of the National Moving and Storage Association, an international trade association with members in more than 50 countries. As the deputy director of the U.S. Department of Defense's Office of Economic Adjustment and the President's Economic Adjustment Committee, he worked on complex economic development projects stemming from military base closures in more than 30 states in the period from 1970 to 1980. In 1999 he became the first association executive ever to receive the American Public Works Association's Distinguished Service Award, and *Engineering News-Record* named him one of the most newsworthy individuals of 1998. Both of these awards were for his unique personal leadership in the passage of the Transportation Equity Act for the 21st Century (TEA-21), at the time the largest public works legislation in the history of the United States. In December 2000 he was the only construction industry trade association executive to be appointed to the transportation transition team set up to help the new administration of President George W. Bush. In 2004 he was named one of the top 100 private-sector transportation construction professionals of the 20th century, and in 2005 the magazine *Public Works* named him a trendsetter for his leadership in helping to pass the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

**“We’ve identified 1,800 high-hazard dams throughout the United States that need to be rehabilitated. When I say ‘high-hazard dams,’ I mean those dams that if they were to fail there is the potential for loss of life. So we need a national program to provide assistance to states to make sure those dams get fixed.” —JOHN MOYLE**

In part, this failure to establish the “strong national vision” the *2009 Report Card for America’s Infrastructure* calls for stems from the very complexity of the nation’s infrastructure stewardship. Decision makers within each infrastructure sector are layered among federal, state, and local agencies, and achieving cross-sectoral integration of effort is difficult but certainly not impossible.

“There needs to be a kind of a master plan first—a framework upon which various components need to be built,” said Capka. “What is of federal importance, what is of state or regional importance, what is of local importance? They all build onto the same framework, but we need that framework.”

In LaTourette’s view, such a framework or vision should be established by the president—or “administration,” as he put it, noting that “this administration has not decided that it’s going to be a priority for them and I think that that’s unfortunate.” Ruane agreed: “I think absent presidential leadership, it will not happen. The whole question assumes that there is federal leadership, and I could make a case that it’s

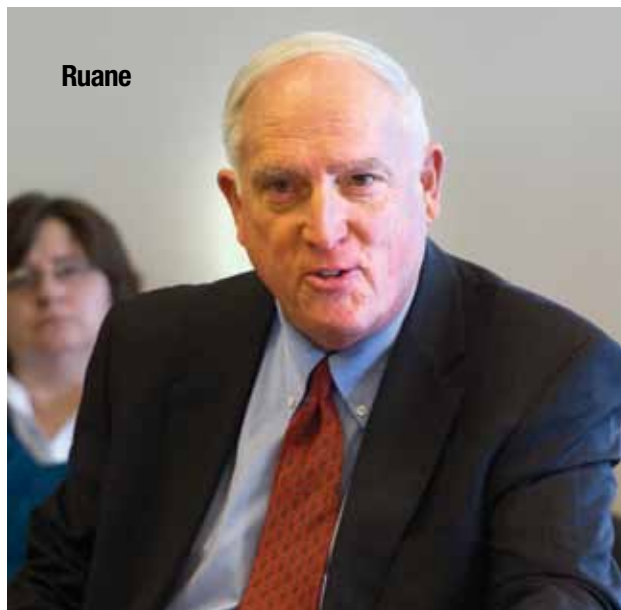
**“I have seen a continuous evaporation of the willingness to work together on what used to be a bipartisan issue: infrastructure. I was schooled at the knee of Norm Mineta and Bud Shuster and Don Young and Jim Oberstar, and these were really not difficult decisions as to what direction the country should go in.” —STEVEN LATOURETTE**



O'Hare

lacking dramatically.... You’re not going to get the...biggest bang from limited resources unless it’s driven by some kind of presidential initiative that focuses on what the real priorities are and then stays with it and transcends the political parties. It goes on beyond the four-year cycle of the president into the next one, because we’re not going to do it in four years. It will not be accomplished in four years. It has to be long term to be a redundant approach.

“The best example I can think of is SAFETEA-LU [the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users],” said LaTourette. “I thought it was a brilliant idea—to come up with projects of regional and national significance, and I think these projects were scheduled to cost \$30 billion and then it all got scaled down to \$17 billion and then it passed out of the House [of Representatives]. And I knew as a member that I was going to try for one. I was going to try and get the \$1.2-billion Innerbelt project [Cleveland Innerbelt Modernization Plan] in Cleveland.... When it



Ruane

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went over to the Senate they savaged it. Rather than \$1 billion for the Innerbelt in Cleveland they were able to squirrel \$200 million out of this account. They all went in there and took \$200 million here, \$300 million there. But you can't build a \$1-billion project with \$200 million.”

Kolb presented a similar scenario: the Port of Long Beach plan to replace the deteriorating Gerald Desmond Bridge. The existing bridge is so overtaxed that it has been outfitted with nylon “diapers” to catch falling chunks of concrete. The replacement bridge would be taller, wider, and better suited to serving the ports of Los Angeles and Long Beach, which constitute the nation's busiest port complex. But while the Port of Long Beach announced on February 4 that it would move forward with the plan, it is still subject to public hearings, and as Kolb pointed out, “they haven't done anything because it's a \$1.2-billion project and they've got a \$465-million funding gap right now.”

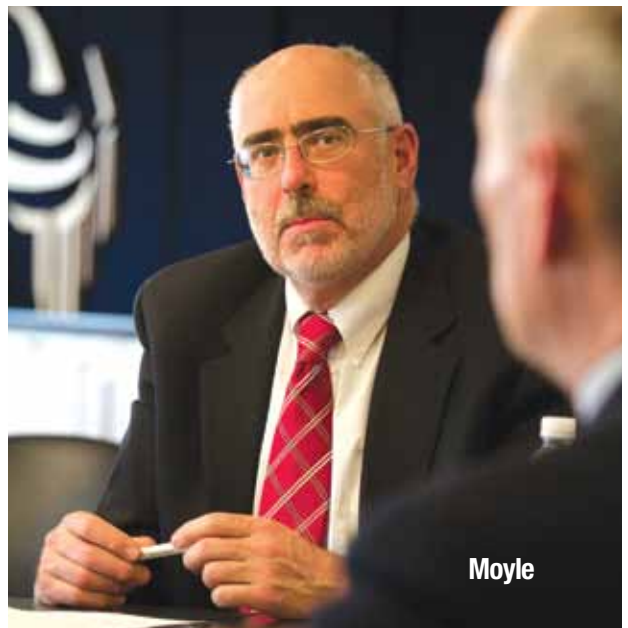
And Moyle linked the funding gap with a threat to public safety: “We—the Association of State Dam Safety Officials—would like to see federal legislation that would create a funding mechanism to help repair dams. We've identified 1,800 high-hazard dams throughout the United States that need to be rehabilitated. When I say ‘high-hazard dams,’ I mean those dams that if they were to fail there is the potential for loss of life. So we need a national program to provide assistance to states to make sure those dams get fixed.”

LaTourette laid the blame for the national funding gap on a lack of political will. “I have seen a continuous evaporation of the willingness to work together on what used to be a bipartisan issue: infrastructure. I was schooled at the knee of Norm Mineta and Bud Shuster and Don Young and Jim Oberstar, and these were really not difficult decisions as to what direction the country should go in. Today, everyone is going to run like a scalded cat from the 800-pound gorilla in this discussion—and I don't care what you're interested in, whether it's water or rail or roads or bridges—which is, where is the money going to come from? I don't sense the political will to find that money.

“I'll be a bipartisan basher. We had that with President Bush. President Bush and his OMB [Office of Management and Budget] folks got it into their heads that \$256 billion was enough in the last bill to take care of the problem. It was not. We were two years delayed, and as a result not a lot of things were planned or designed and we're paying the price for that in terms of unemployment and [the marks on] your report card.”

Funding, of course, is a thorny issue in the current economic climate, in which a need for deficit reduction looms large. Prioritization becomes important in such a climate,

and presidential influence on this goal setting becomes paramount. “One of the questions we've raised had to do with the role of the president and how important that is,” Hatch noted. “Several of you have said it's damn important. I would point out—having come from an agency—that it's very important in terms of the public and the influence the president may or may not have with the Hill, but it's extremely important with how the agencies themselves are driven and what they end up working on and proposing through the legislative process be included in the bills. The public sort of forgets the role that



the agencies have in helping work with the Hill and developing plans and programs. If the president—and his OMB, hopefully—have a clear and unambiguous direction, it's amazing what the agencies then can do, because those politically appointed members who head those agencies and their secretaries and undersecretaries may be responsive, and when they are they can produce awfully good work and it can be coherent, but there is not a single voice coming through the executive branch of government to provide that.”

“When you're talking about the resources to be invested—the amount of the resources that would be required to be invested in infrastructure—it's a major chunk of change and it attracts attention,” said Capka. “There are many other priorities out there, and without that leadership from the very top to say ‘this is important,’ it's going to be difficult to avoid having that sliced up and parceled out to other areas.” LaTourette agreed: “You're going to get people who are gagging on the spending, and it

**“In my humble opinion, we civil engineers owe it to society as we serve it to not only provide for their needs but also to help them mitigate that demand. You can satisfy the infrastructure needs in two ways: one is to provide it and the other is to manage the demand. What you were talking about was a way of managing demand.** —HENRY J. “HANK” HATCH

doesn't matter what it is—even if it's worthwhile, even if it's beneficial, even if it creates jobs. There is a gag reflex going on.”

Which is why, as Ahearn noted, private funding is an option well worth exploring: “If the promise of increased funding for infrastructure is relatively low from the federal government perspective, [why not investigate funding possibilities] from the finance companies in the United States and the global cash that's sitting in other financial institutions around the world? Is that not an element of a policy framework that needs some real wire brushing and some partnership creation? It just seems to me that there is a reality within the context of the huge deficits that we somehow or other have to manage and that threatens our capacity to get federal resources. So we've got to reach out to other financing alternatives.”

Kolb pointed out that one of the concerns of lawmakers on the Hill is that “private investment is not necessarily a complete replacement of the need for public investment, which needs to grow as well. Another is that when there is private investment—and let's be real about this, guys—they're in it to make money. That's their job. But it needs to be done in a way so that ultimately these public facilities are being done for public benefit. So there is an inherent tension between the desire of these folks with the cash to try to make sure they're getting a return on their investment and how we balance that with making sure that the public that has to use these facilities is not being disadvantaged. But it's not a substitute for the need to increase federal, state, and local investment.”

Ahearn responded, “I think we would conclude that there's a need for a policy framework that enables both sources to contribute to the solution.”

Capka made the point that it might be prudent to “look at the demand for resources and kind of figure out how we might be able to do more with what we have right now with the technologies that are emerging—balancing the use of the infrastructure so it's not all piled up on perhaps one mode when there may

be capacity in other modes. There may be an opportunity to work on both sides of the equation, and I would expect that in making the case to the American public, we have to show that we are doing our best to ensure that those dollars are being spent where they need to be spent—that we have done as much as we can to effectively and safely squeeze resources out of the system we have before we ask for that next dollar.”

With respect to increasing the capacity of existing infrastructure, O'Hare cited Michael Bloomberg's plan for a congestion pricing program to provide funding for additional mass transit in New York City. “If you take a metropolitan area, for example, where there are a lot of people, a great need—a lot of people coming in and out of the city—there are things you can do to increase that flow without actually building a new highway or building a new bridge. You price things and you get people to change their behavior based upon that, and you create other alternatives. Like Mayor Bloomberg in New York City, who was [considering] a congestion pricing program [that would] charge drivers coming into the city \$8 a day to go into a particular zone, and all the money collected was going to go into a fund that was going to provide for more mass transit. It was going to fund great mass transit alternatives. Unfortunately, some politics in Albany prevented him from going forward. But there are solutions—using technology that is available now and is being developed now to make better use of our current system and facilities.”

In response, Hatch introduced the concept of pursuing nonstructural solutions. “In my humble opinion, we civil engineers owe it to society as we serve it to not only provide for their needs but also to help them mitigate that demand. You can satisfy the infrastructure needs in two ways: one is to provide it and the other is to manage the demand. What you were talking about was a way of managing demand. To me, they go hand in hand, and as the federal government addresses its policy opportunities in this area, they should look to nonstructural

**But the group also concluded that if the federal government is to assume the leadership role in addressing the infrastructure crisis, it must do so in a judicious, sustained manner. The lack of sound, sustained federal leadership in this arena, combined with the regulatory hoops that are attendant upon infrastructure projects large and small, has created high levels of frustration.**

ways and, in a very broad sense, nonstructural ways of managing the demand as well as meeting the demand.”

Hatch then introduced “the beneficiary pays” notion: “There is another philosophy that creeps in here now and then, and it has to do sometimes with how one funds trust funds, inviolate or not. That was the concept I first heard of during the Reagan administration: the beneficiary pays. Some of us remember that from our days in the Corps. ‘The beneficiary pays’ referred to our new requirement to charge those who wished to use certain of our recreational facilities. They had never been charged before. Well, if they’re going to come to the lake and camp out, you know they had to pay \$15 or \$20 for the night—or whatever it was; it was fairly small—but it was the start of the idea that if you are the beneficiary of some federally or state or locally provided thing and you benefit disproportionately to the common person on the street, you ought to pay for it or at least contribute a little more than they do. I think one of the inhibitors there is that to the extent we have trust funds that can be raided or managed, the public lacks confidence in those trust funds. If I were the beneficiary of a particular program, I would be far more willing to pay my added charge to use that program if I were confident that the revenue arising from that would, in fact, come back and enhance or improve that particular feature of the public service that I was using, if there’s a loop. You’re talking about having a loop there. We don’t have very tight loops.”

Using the interstate highway system as an example of a long-term infrastructure success that was brought about by means of federal leadership and a clear vision of what the country needed, participants pointed to the need to establish “an operating platform,” as Ahearn dubbed it, or a set of “principles and standards,” as Conrad put it, that would help shape a broad policy framework for a federal infrastructure program. Such principles and standards would, the group believes, help avoid the fragmentation that has been occurring with respect to infrastructure funding. The group’s thinking is that a framework similar to the principles and standards that will guide federal resources development should be formulated for other types of infrastructure.

But the group also concluded that if the federal government is to assume the leadership role in addressing the infrastructure crisis, it must do so in a judicious, sustained manner. The lack of sound, sustained federal leadership in this arena, combined with the regulatory hoops that are attendant upon infrastructure projects large and small, has created high levels of frustration.

The group was also in agreement that there is considerable need to establish process efficiency within the regulatory arena, and as an example of a streamlined effort the members of the group cited the replacement of the bridge in Minneapolis carrying Interstate 35W over the Mississippi that collapsed in August 2007. “There was leadership there to crack the

whip,” observed Capka. “There was a public sense of urgency, and nobody wanted to step in front of that public sense of urgency. That’s one of the reasons why I say that leadership up front and establishing the case for infrastructure are so important, because without those there is room to second-guess. The replacement of that bridge is a really good example of how things get done. When the will is there and the leadership is saying, ‘It will happen,’ we can find a way of checking all of the boxes in a very efficient way. What happened was that the process constraints were removed.”

The group also drew the conclusion that funding the nation’s infrastructure is dependent upon strong leadership and public acceptance. As Capka noted, “Pragmatically, if the decision were made to reduce the federal draw—the demand on the trust fund—somebody else would have to pick up, and that means the state and local governments. But that can’t be done in the short haul because there are legislative cycles the states have to go through in order to create enabling legislation in whatever they do.... I think it has to come from the public to say, ‘Man, we have to make a change.’” But as O’Hare pointed out, “You first have to have the leader to articulate that.”

Andrew Herrmann, P.E., SECB, F.ASCE, who served as the chair of the advisory council that helped ASCE produce its 2009 *Report Card for America’s Infrastructure* and who observed the roundtable discussion, asked this question of the group: “What can the civil engineer and ASCE do to help solve the infrastructure problem?”

“I think it’s incumbent on the civil engineering profession to take more of a vocal role in this whole area of infrastructure and to use some tactics that may make some of the leaders uncomfortable,” said Ruane. “The report

card is now a brand. You’ve done a remarkable job. I think it’s been really, really helpful. But you are the ones who design, build, and manage all of this infrastructure all over the world. You’re the experts on it, and I think you should stand up and start telling people how vulnerable we really are. It’s only when we have a bridge collapse or an earthquake or a flood that the country all of a sudden says, ‘Oh, my God! Our infrastructure has been disrupted!’ So ASCE should get out there as the international experts on this and put the fear of God in people, and [let them know] that we’ve got to do something about this, and get the press and everybody else to focus on it—scare the crap out of them.

“We’ve done a good job—especially in the last couple of years—of defining what the needs are. There’s a lot of great research out there—hard, empirical evidence—about how big the problem is. But we haven’t done a good job of articulating what the cost of inaction would be—the cost of this inertia we have right now, the cost of doing nothing. We have not articulated that in a convincing manner.”

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—PETER RUANE