Pedestrian Injuries Can be Reduced by Sound Requirements for Hybrid and Electric Vehicles

NHTSA Safety Standard Will Require an Audible Alert

The National Highway Traffic Safety Administration (NHTSA) estimates that pedestrian injuries will decrease by about 2,400 annually once hybrid vehicles (HVs) and electrical vehicles (EVs) are able to emit a sound. NHTSA research found that HVs are about 18% more likely than an internal combustion engine (ICE) vehicle to be involved in a collision with a pedestrian and about 50% more likely to be involved in a collision with a cyclist than an ICE vehicle. NHTSA assumes that this difference in accident rates is mostly attributable to the pedestrians’ inability to detect the presence of these vehicles through hearing.

The NHTSA therefore announced earlier this month that it is adding a sound requirement for all newly manufactured HVs and EVs to help protect pedestrians and cyclists. The new federal safety standard will help pedestrians who are blind, have low vision, and other pedestrians and cyclists detect the presence, direction and location of these vehicles when they (the HVs and EVs) are traveling at low speeds.

Under the new rule, all HVs and EVs will be required to make audible noise when traveling in reverse or forward at speeds up to about 19 mph. At higher speeds, the sound alert is not required because other factors, such as tire and wind noise, provide adequate audible warning to pedestrians.

“This is a common-sense tool to help pedestrians—especially folks who are blind or have low vision—make their way safely,” said NHTSA Administrator Dr. Mark Rosekind. “With pedestrian fatalities on the rise, it is vitally important we take every action to protect the most vulnerable.”

Caltrain Announces Partnership with Crisis Text Line

Suicides Along Track Continues to be of Great Concern

Last week, Caltrain became the first urban rail service in the U.S. to partner with Crisis Text Line, a national non-profit organization that offers free, 24/7, anonymous counseling services via text messaging for individuals who may be depressed, having suicidal thoughts or suffering from a mental disorder. Caltrain has added signage and information to stations urging people to text 741741 for crisis support.

Over the past year, Caltrain experienced 20 fatalities on its system, 16 of which have been classified as suicides. Caltrain devotes significant effort to educating the public about rail safety, but the agency has found that identifying strategies specifically to address suicides is challenging. For nearly a decade, Caltrain has engaged with numerous behavioral and mental health organizations in San Francisco, San Mateo and Santa Clara.
New Form of Underground Auto Tunnel Transportation to Address Traffic Urban Congestion

“Cartube” to Rely on Centrally Controlled Driverless "Automated" Electric Vehicles

A London-based architecture practice, PLP Architecture, has unveiled a new concept to address traffic congestion in metropolitan areas. The proposed underground system, named “Cartube”, will operate one-way in small diameter tunnels or “tubes.” Cartube is described as a “combination of two modes of transport, automated electric cars and mass transit, into a single, seamless underground road system.”

PLP Architecture provided this further information about the system:

“Cartube integrates existing freeways with a network of small-bore tunnels. Automated cars, circulating above and below ground, are controlled via a dynamic platoon system allowing cars to move within milliseconds of one another. Cars will travel in a continuous flow at a steady speed without ever slowing down, providing far greater capacity than conventional public transportation.”

“Cartube also permits direct travel replacing the stop-start model of current transportation with a fluid, integrated network. According to PLP’s research, Cartube will typically double transport capacity for the same investment as conventional mass transport and reduce travel time by 75%.”

“Users will be able to book a Cartube trip through smartphones using either their own cars or available public cars. The Cartube app will calculate a fare and an estimated arrival time based on an optimal route through the network. The whole journey will be point-to-point, without any transfers or stops.”

Lars Hesselgren, Director of Research at PLP, stated “Cartube is a direct response to mass transit and traffic congestion in the world’s largest cities. Moving high-speed car traffic below ground will revolutionize our concept of the city, allowing our urban spaces to be designed not for cars, but for people. Cartube has the potential to be the next best thing to teleportation and will revolutionize cities and allow for unprecedented urban forms.”

PLP plan to investigate how vehicle breakdowns and other emergency situations might be addressed. They are presently looking at robotic technologies for removal of cars which obstruct the way.

For more information, contact Anne Feikje Weidema, PLP, tel. +44 (0)20 3006 3900 or email AWeidema@plparchitecture.com. Additional information is available on https://www.dropbox.com/sh/5yhj1bu2h 2oppiw/AACsLxh2xa9LRqCBIXWv2lh Oa?dl=0

An illustration of the CarTube concept along the River Thames, London. (Courtesy of PLP Architecture)
Driver Background Checks by Uber and Lyft Under New Scrutiny

Maryland’s Required Fingerprint-Based Background Check Being Challenged

Maryland has become the first state in the U.S. to require a state background check for drivers including fingerprint-based criminal background checks. Therefore, under this state law, Uber and Lyft must submit their drivers to fingerprint-based criminal background checks, conducted by Maryland law enforcement and the FBI. However, this is being challenged.

Uber and Lyft have petitioned the Maryland Public Service Commission (PSC)—the regulatory agency these companies, other taxicab companies, and limousines—for permission to continue using the companies’ controversial name-based, private background checks to screen their drivers. The PSC is expected to decide by December 22, 2016, whether the state of Maryland will continue to require fingerprint-based criminal background checks.

“Who’s Driving You,” a public-safety campaign by the Taxicab, Limousine & Paratransit Association, a non-profit trade association with the goals of promoting for-hire vehicle safety and educating the public about the dangers of Uber and Lyft, believes that Uber and Lyft are evading reasonable safety requirements and, more specifically, evading proper insurance and driver background checks.

The “Who’s Driving You” campaign keeps records of news headlines on Uber and Lyft incidents, such as the following examples of incidents associated with Uber and Lyft in 2016:

- Florida Uber Driver Found Guilty of Running Red Light in Fatal Crash (10/14/16)
- Federal Officer and Part-Time Uber Driver Sentenced to 5 Years for Fatal Drunken Driving Crash in Montgomery County, Maryland (8/3/16)
- Woman Dies After Being Struck by Uber Driver in North Philadelphia (6/1/16)
- Florida Crash Victim’s Family Files Negligence Lawsuit Against Seminole County Deputy, Uber Driver (4/19/16)
- Uber Driver Shoots and Kills Six People
- Pedestrian Struck By An Uber Driver in Connecticut Pronounced Dead at Hospital (2/22/16)
- Uber and Uber Driver Sued for Negligence After Collision Kills Passenger in Miami (1/14/16)

Massachusetts recently moved up the timeline for implementing its state background checks, in part because a flurry of Boston-area passengers were allegedly assaulted by Uber drivers.

In addition, California Gov. Jerry Brown recently signed legislation which makes it illegal for ride-hailing companies such as Uber and Lyft to hire drivers with any violent felony convictions. Previously background checks were limited to seven years.

For more information, contact Dave Sutton, email: dsutton@melwoodglobal.com, tel. (301) 873-2393, or visit www.whosdrivingyou.org

Caltrain Announces Partnership

Continued from Page 1

Caltrain serves counties as partners to address the root causes of suicide on the Caltrain corridor and throughout the communities that Caltrain serves.

Sally Longyear, a Palo Alto parent whose daughter, Sarah Longyear, died by suicide on a Caltrain in April, supports Crisis Text Line. “If my daughter had known about Crisis Text Line she might be here today,” she said. “If just one life is saved by adding these signs, it will be worth it.”

Information on suicides on the Caltrain system is limited. A study conducted in 2010 by the Mineta Transportation Institute entitled “Suicides on Commuter Rail in California: Possible Patterns - A Case Study” about suicides on the system provides some insightful information:

Only 20 percent of all the Caltrans suicides occurred at the stations. Thus a station may be a convenient point of access but not the preferred place to commit suicide.

Approximately two thirds of the suicides occurred within 0.5 of a mile from the stations. This holds true for unintended deaths as well. This result may be significant when considering prevention and mitigation of deaths because efforts can be concentrated in close proximity to stations.

Proximity to road crossings: 43 percent of the suicides occurred within 0.1 of a mile from a road crossing and almost two-thirds within 0.3 of a mile. This may be an indication that a person committing suicide uses the road as access to the tracks and then walks a relatively short distance away from the road, possibly to avoid interference.

For more information, contact Will Reisman at email: ReismanW@samtrans.com.
Trade-Off Analysis: Fundamentals in the MAP-21 Era

By Erik Cempel, Principal, Cambridge Systematics

MAP-21, “Moving Ahead for Progress in the 21st Century” and its successor, the Fixing American Surface Transportation (FAST) Act, are facts of life for metropolitan planning organizations (MPOs) and transit agencies even though the U.S. Department of Transportation is still completing some of its rules.

MAP-21 is about accountability, transparency and improving performance management in order to achieve national performance goals. In the process, however, MPOs and agencies have experienced several obstacles, among them a variety of planning, programming, and reporting processes. Data and tools are available nationally for specific goal areas, but they do not address all priorities at the state and local levels, and they do not help agencies compare between goal areas.

In response, data and tools have been developed to facilitate short- and long-range performance-based planning and programming. One group of tools—trade-off analysis—evaluates investments toward different goals and the level of achievability considering fiscal realities. The tools are essential for performance management. They provide the agency or organization with information for decision-makers showing the pros and cons of investing in competing objectives while considering the realities of their environment.

Trade-Off Analysis and MAP-21

Most states and organizations tend to utilize existing tools and other nationally-available analytic software for a clearer picture of performance management, in particular asset management of pavement or bridge management systems.

One example is the Highway Economic Requirements System (HERS-ST), an economic analysis tool for states to identify highway deficiencies and determine the most cost-efficient improvements. Included in HERS-ST analytics is the capability to analyze the implications of different levels of investment.

But a major piece of the performance management puzzle has been missing: trade-off analysis. This technique is capable of comparisons across goals and investment areas including highway capacity expansion versus bridge/pavement asset management or safety-focused investments versus congestion/mobility focused investments. This is especially important as agencies consider the eventual performance management requirements of MAP-21. Sophisticated comparative analytics will be needed for MPOs or other organizations to align data program goals with business objectives based on comparative project analysis.

Square one in this case is target setting; this should involve every agency, stakeholder or constituency that has a role in implementing projects and/or policies to achieve goals. At minimum, a serious dialogue about targets has to include departments of transportation (DOTs), MPOs and transit agencies. All entities have to be on board and in agreement with the targets established and the actions necessary to achieve them.

NCHRP #666, Tools and Targets

The National Cooperative Highway Research Program (NCHRP) Report #666, issued in 2010, is a valuable guide to target setting and data management that supports performance-based planning and programming. It references internal and external factors that influence how agencies set transportation targets, such as land use for housing, the environment and the economy. Of special importance is the report’s finding that although several different approaches for target setting exist, most agencies will use a hybrid approach. It finds that “an agency could use modeling combined with customer feedback to arrive at a target that is both analytically grounded (to ensure a connection with predicted outcomes based on resources and existing plans) and satisfactory to the stakeholders.”

Erik Cempel, Principal, Cambridge Systematics.
Trade-Off Analysis: Fundamentals in the MAP-21 Era

Federal rules articulate time frames of two to four years for short-term targets for federal measures. Nevertheless, longer-term targets on par with long-range plan time horizons should be included in every transit agency or MPO plan, and tied back to shorter-term targets. It is here where the value of trade-off analysis is very compelling. Investment planning for decades into the future requires analytics that examine and compare a countless number of options and variables. The information gleaned from this data is fundamental for setting targets and making investment decisions for the best use of resources as well as compliance with MAP-21.

DOT Experiences with Trade-Off Analysis

Massachusetts, Georgia and Mississippi DOTs have developed plans based on comparative data provided by trade-off analysis. All three have relied on the analysis to visualize decision consequences and generate funding scenarios that address their goals and objectives. Massachusetts DOT has used this approach for its 2017 capital improvement plan while Georgia DOT implemented it in 2015 for its long-range transportation plan.

Mississippi DOT (MDOT) utilized trade-off analysis in the development of its 2040 statewide transportation plan as it evaluated implications of alternative spending levels for preservation and maintenance of the state roadway system. MDOT’s analytics examined the costs of keeping the status quo versus the potential return on investment by maintaining its roads in an improved state of good repair. The conclusion based on the analytics’ finding: an improved state of good repair is the better option. MDOT found that maintaining status quo would cost Mississippi drivers more in travel costs than with an adequate funding scenario. That insight is the foundation for a joint campaign by MDOT and the Chamber of Commerce to press state legislators to increase transportation funding.

The performance-based provisions of MAP-21, although a work in progress, are setting the bar for state DOTs, MPOs and transit agencies, which have to follow its lead. It is incumbent upon all of these agencies to examine their analytical capabilities for asset management and performance-based decision-making in this environment. Entities should be able to comparatively evaluate all their potential investments while considering other factors such as external influences, to set targets and improve their transportation investment decision-making. Such information should be viewed as essential for MAP-21 compliance.

About the Author:
Erik Cempel is a principal of Cambridge Systematics, Chicago, IL. Cambridge Systematics leverages technology and ingenuity to advance the world of transportation including movement of people and goods, software design and development of partnerships. For more information, call (617) 354-0167 or visit www.camsys.com.

New Parking App Clarifies Often Confusing and Difficult to Read On-Street Parking Regulations

Currently Limited to Manhattan

Can I park here? This question is often asked by drivers when looking for an on-street parking space. Manhattan is particularly challenging. Now there is a new app that can help with this dilemma. Launched recently, the iPhone app, named parkken, makes it easier to establish if a driver can park at a specific location by providing very specific answers.

By tapping on its map screen, or filling in any other time and place in the CAN I PARK HERE? query box, the parkken app calculates the current or future legal parking available on that block.

If legal parking is not immediately available the app responds with the soonest time free or metered parking will be allowed. Responses extend to the future to include when legal parking will no longer be allowed, or if the free legal parking will change to metered parking.

For times when a driver has to park but can’t find a space anywhere, parkken shows small, green, dollar-like symbols to indicate pay garages and/or lots in the vicinity.

Tom Hibbard of Parallel Spaces Maps, who designed the app, says “This began as a personal need and then a personal obsession for an easy to understand, condensed view of parking rules in Manhattan. It has become a tool everyone can use.” Other features of the app are an address Search function, a Favorites bookmark function for neighborhoods where you go often, and a GPS locator button.

For further information, contact Thomas Hibbard, President, Parallel Spaces Maps, LLC, tel. (office) (888) 775-7353 mobile (718) 812-5569, or email 135673@email4pr.com. Website: http://www.parkken.com
Wrightbus of Northern Ireland launched its new ‘zero-emission’ bus in London, UK, earlier this month.

The vehicle debuts a new hydrogen fuel cell driveline from Wrightbus which will rapidly become available to power both single-deck and double-deck buses as it reaches full production next year.

The new technology provides a zero-emission drive system which encompasses a hydrogen fuel cell and a battery pack to power the vehicle. The combination of these two technologies makes continuous daily operation of public transport vehicles feasible. Offering a reliable system with no emissions, all Wrightbus hydrogen fuel cell vehicles will feature an electric drive axle packaged to allow a full-length flat floor throughout the bus, a zero-emission heating/cooling system, the ability for overnight charging if the operator desires, and remote diagnostics.

Keys to the success of this concept are the lightweight hydrogen storage tanks, and the automatic battery management system, which continuously monitor and balance the stored power while the vehicle is in service.

Dr William Wright CBE, Co-Founder & Director of the Wrights Group, said: “Wrightbus is a company where innovation and technology is at the core of everything we do. We have led the way in the practical development of clean vehicle technology in buses over many years. This vehicle joins the recently launched StreetAir EV and brings an interesting new dimension to zero-emission bus technology, offering transport operators a responsible choice to help address the world’s environmental challenges.”

For more information, contact Claire Taggart, email: Claire.Taggart@wright-bus.com, tel. +44(0) 28 2566-3048

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Pedestrian Injuries Can Be Reduced by Sound Requirements

Manufacturers have until Sept. 1, 2019, to equip all new hybrid and electric vehicles with sounds that meet the new federal safety standard. Half of new hybrid and electric vehicles must be in compliance one year before the final deadline.

“We commend NHTSA on bringing this process to completion,” said Eric Bridges, executive director of the American Council of the Blind. “This new safety standard moving forward will not just make our streets safer for blind and visually impaired Americans, but also serves as an additional safety cue for all pedestrians who share the streets with hybrid or electric vehicles.”

“Having raised concerns on behalf of blind Americans about the dangers posed by silent hybrid and electric vehicles, the National Federation of the Blind is extremely pleased that technical specifications for a safe level of sound to be emitted by such vehicles have now been issued,” said Mark A. Riccobono, President of the National Federation of the Blind. “This regulation will ensure that blind Americans can continue to travel safely and independently as we work, learn, shop, and engage in all facets of community life.”

For more information, contact Mike Pyne, Office of Crash Avoidance Standards, NHTSA, tel. (202) 366-4171.
In a recent judgment, where the City of Charlevoix, MI, was the defendant-appellant in a case where a woman injured her ankle crossing a walkway which ran alongside a municipal parking lot, the Michigan Court of Appeals overturned the trial court’s order denying the City’s motion for summary disposition, because the order was contrary to binding caselaw.

Citing cases from 1987 through 2001, the statute, the Michigan Vehicle Code, and five different dictionaries, the Court clarified which elements are definitive for the legal definition of a sidewalk.

The case arose from plaintiff’s injury sustained as she walked through a municipal parking lot owned by defendant. Specifically, she tripped on a tree grate in the middle of a ‘sidewalk’ that ran alongside the parking lot, which, like the ‘sidewalk’, ran perpendicular to, and were connected with, parallel city streets.

Plaintiff alleged the “highway exception” to generalized governmental exemption from tort liability was applicable in this case. The “highway exception” defines a sidewalk as being “installed adjacent to a municipal, county, or state highway.”

City asserted that the sidewalk was not adjacent to a public highway, and therefore, the highway exception did not apply.

The trial court described the accident area as “looking like” a sidewalk, and indeed, as the “perpendicular continuation” of the sidewalks on the two parallel streets. It determined that the issue facing it was not whether it was a sidewalk, but whether it was sufficiently ‘adjacent’ to the public roads to meet the requirements of highway exception. To determine this, it referenced the definition of ‘adjacent’ in Black’s Law Dictionary (“lying near or close to, but not necessarily touching”) and compared it to ‘ adjoining.’ In applying this definition, it ruled that the sidewalk was “close enough” to the two streets to meet the definition of ‘adjacent’ under the highway exception and denied defendant’s motion for summary judgment. City then appealed.

The Court of Appeals found that trial court erred by focusing on the meaning of ‘adjacent’ while failing to recognize that caselaw is quite specific regarding the meaning of ‘sidewalk’ as being “a path for pedestrians along the side of a road.” It noted that the statutory scheme also defines ‘sidewalk’ as being intended for pedestrian use.

It cited a 1998 case in which the Supreme Court had explored the meaning of ‘sidewalk,’ by comparing definitions from Webster’s New World Dictionary; the American Heritage Dictionary (2nd ed.); Random House Webster’s College Dictionary (1992) and Black’s Law Dictionary (6th ed.), the Michigan Vehicle Code (MVC) and the immunity statute; all these defined a sidewalk in relation to use by pedestrians, and running alongside a roadway.

The Court paid particular attention to an earlier finding which concluded that where a pedestrian way did not run alongside the road, it was not a sidewalk for purposes of the statute. The Court of Appeals noted that the earlier finding did not address distance between the pathway and roadway; what was important was the orientation of the walkway in relation to the road, not the proximity of the accident to the road.

In 2001 the Supreme Court again addressed a pedestrian accident on a walkway through a parking lot owned by a city: in that case it found that the trial court’s grant of summary disposition in favor of the city was clearly supported by Michigan case law. At that time the Court noted that the length of a sidewalk, amount of foot traffic it bore, or whether traffic was allowed through a parking lot, were not relevant as the statute did not make these distinctions. The Court of Appeals commented that the ruling in this case clarified that the word ‘sidewalk’ itself inherently includes the requirement that the walkway runs alongside a road.

For all these reasons the Court held that the trial court erred in denying the City’s motion for summary disposition. It therefore reversed and remanded for entry of an order granting summary disposition in favor of the City.

### Items for Success in Ridesharing Identified

**Xerox Ethnographer Studied Ridesharing from Driver’s Viewpoint**

James Glasnapp, an ethnographer (a person who studies the customs of individual peoples and cultures) at Xerox, recently researched the carpool offerings from Lyft Carpool, Scoop, and Waze.

Based on his research, he identifies nine conditions a carpooling offering needs to be successful. Two major findings include that the offering must be mutually beneficial for both the rider and the driver, so they feel that the system was built specifically for them. Glasnapp also suggests the offering must allow drivers to choose their personal ‘sweet zone’, the distance they’re willing to deviate from their usual journey to pick up other riders.

The full list of nine conditions is provided below:

- **Routes** must be in the sweet zone – the distance the driver is willing to deviate from his or her usual route to pick up other riders.
- **The system** must be able to learn and improve.
- **Drivers** should have moderate insight and control into how and when they receive ride requests.
- **The offering** must offer safety and feeling of comfort.
- **Offerers** must develop a culture of carpooling.
- **The offering** must add more choice to the number and types of riders and drivers.
- **The offering** must add the ability for drivers to take multiple riders.

For more information, contact Laura Meyers, email: laura.meyers@text100.com, tel. (585) 230-2897
This Month’s Survey Results (Survey 1)

National Transportation Funding Priorities - Your Opinion

The Urban Transportation Monitor conducted a survey among transportation professionals to obtain their opinion about National Transportation Funding Priorities in the U.S. Emails requesting participation in the survey were sent to 700 individuals (mostly transportation planners, traffic engineers and transit professionals. A total of 41 replies were received. The results of the survey are published here.

Please note - the following appeared at the start of the questionnaire:

One in nine of the nation’s bridges are rated as structurally deficient, while the average age of the nation’s 607,380 bridges is currently 42 years.

Forty-two percent of America’s major urban highways remain congested, costing the economy an estimated $101 billion in wasted time and fuel annually.

Unlike many U.S. infrastructure systems, the transit system is not comprehensive, as 45% of American households lack any access to transit.

(Source: ASCE)

The World Economic Forum’s latest Global Competitive Index, the US ranked 10th for transportation, 18th for roads, and 19th for quality of overall infrastructure—well below other advanced economies. We are well behind countries including Poland, Estonia, Hungary, Spain and Greece.

Assume a new federal transportation funding source is available. The questions pertain to the distribution of these new funds.

How should funds from this new federal transportation funding source be distributed?

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing formulas for distribution should be used</td>
</tr>
<tr>
<td>A new way of distribution should be used</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

If you selected “a new way of distribution” please suggest a new way.

- The TIGER program demonstrates a method for distributing limited funds to initiatives that must demonstrate comprehensive benefits. This provides a means to remove the bureaucratic and political manipulation inherent in local and state transportation agencies overseeing programmatic funding programs.
- By county GDP
- Based on VMT, population and level of congestion.
- Distribution by area, not by state
- Reduce the number of funding programs to simplify the process.
- It appears to me that the United states is blindly building roads without considering the maintenance and rehab of the existing highway network. No one appears to be worried about the deteriorating highway network as its not in their political lifetime. This is how we get to the statement at the head of this questionnaire, suddenly we have deteriorating bridges. Bridges have a design life of 50 years, so when I bridge is constructed then the money for the maintenance and replacement should be accrued in a commitment based accounting format. Building Assets that you hope will be maintained in the future is financially irresponsible and politically negligent.
- Distribute in proportion to revenue raised—no “donor” states
- Direct distribution to MPOs and rural planning organizations. Funds for local projects should not be filtered through the feds or states.
National Transportation Funding Priorities - Your Opinion (continued)

If you selected “a new way of distribution” please suggest a new way (continued)

- Given the onslaught of emerging technology (AV, CV, etc.) it is important to focus on preparing the traditional system for this transition. Grant programs for deployment projects will accelerate the use of these technologies and enhance quality of life. NOTE: The 4 categories in question 10 are missing the opportunity to spend $$ on these innovative applications.
- A percentage directly to cities and Metropolitan areas; a percentage directly to State DOT’s; a percentage for USDOT distribution for major projects, particularly those of national significance, importance and merit.
- A system that does not reward capital funds to projects that have chosen to defer maintenance to the point of failure.
- The funding needs to be proportional to the needs of the state. Example, New Jersey is often short-changed compared to the amount of money put in vs. what is returned.

How should new federal capital expenditure be divided among the following: (please provide percentages adding up to 100%)

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Average Percentages of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair bridges and highways</td>
<td>44%</td>
</tr>
<tr>
<td>Add new capacity to highways</td>
<td>15%</td>
</tr>
<tr>
<td>Repair and upgrade existing transit systems</td>
<td>22%</td>
</tr>
<tr>
<td>Expand existing transit systems</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Should most new freeways or added capacity on existing freeways (e.g. managed lanes) be tolled?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>51%</td>
</tr>
<tr>
<td>No</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
</tr>
</tbody>
</table>

Those respondents who selected “other” in the prior question provided the following comments:

- Yes, but environmental justice is critical
- Tolls are OK where justified but adding new freeway capacity shouldn’t be tied to tolls.
- With the move to electric cars and autonomous cars, the funding of highway systems needs to be changed from a gas based tax to a usage based tax.
- Yes, unless the project aims to increase density.
- Some should, some shouldn’t.
- Depends on the amount and source of the additional funding that this survey is based on. Tolling does need to be an option but it does not work in all places.

How do you view the adequate federal funding of highway operations (including ITS, incident response, traffic signal optimization, etc.) compared to the adequate federal funding of highway capital costs?

<table>
<thead>
<tr>
<th>Funding Comparison</th>
<th>Percentages of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>More important than the funding of highway capital costs</td>
<td>35%</td>
</tr>
<tr>
<td>Equally important to the funding of highway capital costs</td>
<td>41%</td>
</tr>
<tr>
<td>Less important than the funding of highway capital costs</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
National Transportation Funding Priorities - Your Opinion (continued)

Please provide a reason for your answer to the previous question.

Reasons provided by respondents who viewed adequate federal funding of highway operations (including ITS, incident response, traffic signal optimization, etc.) as more important than the funding of highway capital costs

- Connected and autonomous vehicles are projected to add functional capacity and operational investments help to expedite this transition to the future.
- It doesn’t make sense to add new capacity if existing capacity is not utilized to the full.
- Traffic signal optimization is something the traffic engineering profession and industry doesn’t devote enough time and resources to do.
- Traffic demand management is the what we need to focus on as we move forward.
- I work in operations and see the lack of funding in this area.
- It’s difficult to build new highways. Concentrate on increasing capacity and safety on existing roads.
- The coming AV/CV technology should be recognized.
- Most congested highways do not have ability for any more capacity addition, the only way to solve congestion is smoother operations.
- The long term future of the highway system will not depend on traditional views of capacity but on new and innovative ways to use the infrastructure (connected and autonomous systems).
- Highway capacity funding is a negative-sum game.

Reasons provided by respondents who viewed adequate federal funding of highway operations (including ITS, incident response, traffic signal optimization, etc.) as equally important than the funding of highway capital costs.

- Efficient operations is equivalent to extra capacity at a cheaper price.
- Need a balanced system, that is maintained adequately, operated efficiently, and able to be expanded to address new needs.
- It doesn’t make sense to build it if you aren’t going to fund its ongoing operations.
- As funding becomes more difficult to obtain, funding the ITS, signal optimization, and other technology based systems can help improve capacity/congestion without physically widening roads.
- Highway operations needs to focus on human throughput and not vehicle throughput. Current efforts largely focus on vehicle throughput and not moving a larger number of humans. The mission needs to pivot somewhat before I can say it needs to be more of a priority.
- Operation and maintenance of the US transportation system should be spelled out so consumers and voters know the cost of this item.
- Equally important because we can’t always build our way out of congestion. However equality doesn’t translate to capital costs, where highway construction demands more capital.
- I have seen the expansion of operations programs with no expansion in new highways.
- Operational improvements can help, but not a magic bullet and capital improvements still have a place.

Reasons provided by respondents who viewed adequate federal funding of highway operations (including ITS, incident response, traffic signal optimization, etc.) as less important than the funding of highway capital costs.

- Because our elected leaders have neglected for years capital infrastructure expenditures even while they campaign saying they will increase expenditures.
- There are too many infrastructure deficiencies that need to be addressed.
- The feds seem more comfortable and familiar with funding capital programs in transportation.
- Rebuilding and maintaining of infrastructure is more critical at this moment than ITS/incident response, etc.

Should pedestrian and bicycle facilities be adequately funded at the expense (a small percentage) of highway and or transit funding?

<table>
<thead>
<tr>
<th></th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>70%</td>
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<td>No</td>
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<td>Other</td>
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National Transportation Funding Priorities - Your Opinion (continued)

Those respondents who selected "other" in the prior question provided the following comments:

- Yes, as long as it is for the basics.
- It should be a strategic system of implementation. So many times shared use paths are added to projects that serve no purpose or have limited use. Without clear demands for a shared use path or sidewalk with origin/destination strategies, then the money is wasted. If a project is to be constructed along a future bicycle route, then allocate money for the construction of that section of the route, when it is needed, not in advance of it being needed, else it just deteriorates and the public scratches their head at a 10’ wide shared use path, that no one has ever used.
- These are local decisions.
- This is a largely a local issue and should be resolved at that level.
- Only if it contributes to a national architecture. The NHS is based on a defense responsiveness model. Short, unconnected pedestrian and bicycle facilities should be a local responsibility.

Any further comments?

- We do not adequately integrate social equity into transportation decision-making thus never capturing the needs of the poor and very poor. With social equity, fully integrated, investments would shift to transit and community investments and away from expanding the freeway system.
- Bicycle facilities planning should be a priority.
- I thought the federal government budgeted more than $500 billion in the past for the repair and maintenance of bridges, e.g. stimulus package, shovel ready jobs. How come bridges are still poorly maintained and repaired?
- A small percentage of all transportation funding should go to education and training needs.
- Pedestrian and bicycle facilities, if done correctly, are transit supportive. It should not be seen as competition for funding, but rather an investment in the first/last mile (1/4 mile?) for transit customers.
- Any FHWA money coming available will be snatched by all states as their highway funds are depleted because of over-spending, poor budgetary control, state political short-sightedness as well as falling gas prices and reliance on gas tax for funds. This combined with the future of electric cars and autonomous vehicles should show that we need a new way of collecting funds and spending funds. There is a massive amount of preparation of the highway network and systems if autonomous cars are to be publicly acceptable. They will improve capacity, improve travel times and could become the savior of the highway network — if there is one left!
- Regarding tolls: most new freeways should have tolls; managed lanes on existing highways should not be tolled.
- I have been in the business for 46-years and the one constant is the lack of funds, but we continue to waste the funds we have building engineering monuments rather than providing services people need to have a better life.
- I think your introductory statement, "...as 45% of American households lack any access to transit." gives the wrong implication. Transit does not and should not work for most. I’m fully behind GOOD transit — serving more than about half this country with transit is not a good use of funds.
- Communities are very different, so it doesn’t make sense to take a one-size-fits-all approach and assume the same funding split between transit and highway or asset management vs. new capacity everywhere. That decision making should be focused at the local, regional and state levels as much as possible.
- Transportation and land use decisions must be made together, with the costs and benefits clearly defined.
- Before building new, let’s fix the existing system and improve operations.
- Any pedestrian/bike funding should be for projects identified in advance as contributing to regional and local network connectivity, not as disconnected enhancements to individual development or road projects.
- The US would do well to reduce our subsidies of fossil fuels to reduce its perverted market influence. This would bring about more rational choices in transportation spending. The US is 16th in terms of democracy, and the majority seem disinterested in changing any of our rankings among other countries.
REQUESTS FOR PROPOSALS

1. Statewide Environmental Documents and Related Analysis
Agency: Virginia Department of Transportation
Deadline: January 12, 2017, by 2 p.m.
Contact: Jeff L. Rodger at (804) 786-2552, email: Jeff.Rodgers@VDOT.Virginia.gov
Website: http://virginiadot.org/business/rfps.asp#IPD
Description: RFP No.: ENV-20161129
The Virginia Department of Transportation’s (VDOT) Environmental Division is seeking expressions of interest from consulting firms to provide professional services. These services relate to the preparation of National Environmental Policy Act (NEPA) documents and related analyses for proposed transportation projects and studies as needed throughout the state. The level of environmental documentation is expected to include all levels of NEPA documents, but primarily focus on Environmental Impact Statements (EISs) and multi-alternative Environmental Assessments (EAs). Services for individual components of these documents may require expertise and analyses in: air and noise impact and abatement; natural, social, and cultural resources; hazardous materials management; public participation, traffic, and preliminary engineering. This will be a Fixed Billable Rate Contract. It is anticipated that more than one, but not to exceed three (3) contracts may be awarded under the “multiple award” procurement process. Each contract will be for a two (2) year contract period with two (2) optional one-year renewable terms. The proposed two-year contracts will have a total maximum compensation not to exceed $5,000,000.00 per term.

2. INDOT Statewide Corridor Planning Study
Agency: Indiana DOT
Deadline: January 10, 2017
Contact: contractrfrp@indot.in.gov
Website: N/A
Description: Item Details RFP #: 1701
INDOT is soliciting proposals from qualified consultants to provide professional services to develop a Statewide Corridor Planning Study (SCPS) report for state jurisdictional facilities. The SCPS will supplement the agency’s existing, non-project specific, future year transportation needs report http://www.in.gov/indot/2666.htm; supplement the agency’s performance based asset management process; develop district management plans; and link to existing corridor specific studies. Interested respondents shall include a cost proposal in the Letter of Interest (LOI) for this item which will be considered in the selection evaluation process. Required Prequalification Categories (Combination of Prime and Sub Consultants): 1.1 Systems Planning 2.2 Traffic Forecasting 3.2 Complex Traffic Capacity and Operations Analysis 4.1 Traffic Safety Analysis 8.1 Non-Complex Roadway Design Additional Qualification: Long range planning, TransCAD Travel Demand Modeling, Synchro or TransModeler, TREDIS Economic Modeling, Application Development, ArcGIS Online Experience, Public Involvement 5 No Performance Types.

3. Professional Wayfinding Services
Agency: City of Sevierville, TN
Deadline: January 5, 2017 at 10 am
Contact: Pamela Caskie, email: pcaskie@seviervilletn.org
Description: The City of Sevierville, Tennessee invites proposals from qualified Wayfinding Professionals for the development of a comprehensive Wayfinding approach and design throughout the city. The purpose of this signage program is to establish a unified signage system throughout Sevierville, project a consistent image for the City, guide visitors and locals to key attractions, city facilities, and points of interest. The signage should promote walking, bicycling and where appropriate, the use of trolleys. In addition, the signage system will provide for a plan to inform and promote community and downtown special events. The project is to prepare a comprehensive Wayfinding Design Strategy, which shall Include at a minimum: Wayfinding Master Plan Standard Drawings for Wayfinding Elements Bid Documents (design plans, specifications, and detailed engineer’s estimate)

4. Regional Transportation Plan Development Assistance
Agency: The Atlanta Regional Commission
Deadline: January 20, 2017, by 4 pm
Contact: dhynes@atlantaregional.com
Website: http://www.atlantaregional.com/rfps-rfqs
Description: RFP - Regional Transportation Plan Development Assistance
Posted Date: 12/06/2016
Questions Due by: 12/16/2016
The Atlanta Regional Commission (ARC) is seeking proposals from firms or teams of firms experienced in transportation policy, multimodal planning, and technical support necessary to support ARC in undertaking certain tasks during calendar year 2017 related to preparation of the next update to The Atlanta Region’s Plan. The next federally mandated deadline for an update to the transportation element of the plan occurs in the 1st quarter of 2020. The Scope of Services for the work is attached as Exhibit A and provides information regarding the level of effort required, as well as specific tasks to be accomplished.

Regional Transportation Plan Development Assistance
The Atlanta Regional Commission (ARC) is seeking proposals from firms or teams of firms experienced in transportation policy, multimodal planning, and technical support necessary to support ARC in undertaking certain tasks during calendar year 2017 related to preparation of the next update to The Atlanta Region’s Plan. The next federally mandated deadline for an update to the transportation element of the plan occurs in the 1st quarter of 2020. The Scope of Services for the work is attached as Exhibit A and provides information regarding the level of effort required, as well as specific tasks to be accomplished.

The assignment of highly qualified and experienced staff to project deliverables and tasks is critical and will be closely evaluated during the proposal review process. Successful firms or teams of firms must also be skilled at working with local and state government staffs and elected officials. Available funds in 2017 for completion of the project will be approximately $150,000. Any contract award for this study is contingent upon ARC receiving adequate funding for this purpose from the Georgia Department of Transportation. ARC reserves the right to award all or part of the available funds for this project.

PUBLIC AGENCIES — RFP notices are published here FREE OF CHARGE — call (703)764-0512 for details and deadline.
## CONFERENCES

<table>
<thead>
<tr>
<th>DATES</th>
<th>CONFERENCE AND SPONSOR</th>
<th>CITY</th>
<th>VENUE</th>
<th>MAIN TOPICS</th>
<th>WEBSITE / CONTACT INFO</th>
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<tr>
<td>Jan. 8-12</td>
<td>TRB 96th Annual Meeting</td>
<td>Washington, DC</td>
<td>Walter E. Washington Convention Center,</td>
<td>The meeting program will cover all transportation modes, with more than 5,000 presentations in nearly 750 sessions and workshops,</td>
<td><a href="http://www.trb.org/AnnualMeeting/AnnualMeeting.aspx">http://www.trb.org/AnnualMeeting/AnnualMeeting.aspx</a></td>
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<tr>
<td>March 12-14</td>
<td>APTA Legislative Conference</td>
<td>Washington, DC</td>
<td>JW Marriott Hotel</td>
<td>The Legislative Conference educates members on important federal legislation and policy initiatives; provides members with the opportunity to shape future industry positions and federal transportation policy; provides direction on the industry’s legislative strategy and advocacy efforts with the U.S. Congress and Administration executives; and offers sessions with key members of Congress, Hill staff, Administration officials, and Washington opinion makers.</td>
<td><a href="http://www.apta.com/mc/legislative/Pages/default.aspx">http://www.apta.com/mc/legislative/Pages/default.aspx</a></td>
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<td>April 4-6</td>
<td>Traffex 2017</td>
<td>Birmingham, England</td>
<td>The NEC</td>
<td>Now in its 28th year, Traffex 2017 is Europe’s largest dedicated traffic, parking and transport event. Showcasing the latest technological advancements that will shape the future of the UK’s road network, a visit to Traffex is essential for local authorities, regional government and all organizations looking to deliver continuous, cost-effective and efficient improvements to their roads and highways.</td>
<td><a href="http://www.traffex.com/">http://www.traffex.com/</a></td>
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<tr>
<td>April 10-12</td>
<td>International Congress on Transport Infrastructure and Systems (AIIT, the Italian Association for Traffic and Transport Engineering)</td>
<td>Rome, Italy</td>
<td>ACI Building, via Marsala 8 (near Termini Station)</td>
<td>The objective of the AIIT International Congress TIS Rome 2017 is to promote transport as a growing industry, and its current significance. The Congress provides a forum for discussion, interactions and exchange among researchers, scientists and engineers whose fields of interest are transport and infrastructure engineering. The congress is organized by the Italian Association for Traffic and Transport Engineering AIIT founded in 1957. The meeting program will cover all transportation modes, with more than 100 presentations in sessions and workshops, addressing topics of interest to policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions.</td>
<td><a href="http://bisroma.aiit.it/">http://bisroma.aiit.it/</a></td>
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<tr>
<td>May 7-10</td>
<td>2017 Bus &amp; Paratransit Conference (APTA)</td>
<td>Reno, NV</td>
<td>Grand Sierra Hotel</td>
<td>This technical, educational program covers operations and maintenance, accessibility and paratransit, integrated mobility and transformative technology, first- and last-mile transportation, safety and security, planning and sustainability, funding and finance, capital programs, procurement, and workforce development. Participate in the Maintenance Managers Workshop and Bus Rapid Transit (BRT) Tuesday, DBE Academy Training, National Transit Institute training courses, Bus Display, Products &amp; Services Showcase, and technical tours.</td>
<td><a href="http://www.apta.com/mc/bus/Pages/default.aspx">http://www.apta.com/mc/bus/Pages/default.aspx</a></td>
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<tr>
<td>May 8-10</td>
<td>5th International Conference on Roundabouts (Sponsored by TRB and hosted by the Wisconsin Department of Transportation and the University of Wisconsin-Madison)</td>
<td>Green Bay, WI</td>
<td>N/A</td>
<td>The International Roundabout Conference brings hundreds of transportation professionals together as a community of roundabout proponents and practitioners. This triennial conference provides a forum for the exchange of technical, policy, planning, operational, and administrative information on all aspects of roundabouts, including the safety and operational performance that this unique intersection provides for all modes.</td>
<td><a href="http://onlinepubs.trb.org/Onlinepubs/conferences/2017_TRBRoundaboutsConferences.pdf">http://onlinepubs.trb.org/Onlinepubs/conferences/2017_TRBRoundaboutsConferences.pdf</a></td>
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<td>May 14-18</td>
<td>16th TRB National Transportation Planning Applications Conference</td>
<td>Raleigh, NC</td>
<td>Sheraton Hotel, Downtown Raleigh</td>
<td>Conference provides opportunities to showcase new transportation planning techniques and methods emphasizing practical, innovative, and timely technical and policy approaches to transportation planning. Presentations, workshops, discussion sessions and tutorials are all expected to be a part of the 2017 program, continuing the focus on practical, innovative and timely techniques for solving planning problems. As with past conferences, we anticipate hundreds of planners and engineers to gather in Raleigh to discuss, share and network with their peers.</td>
<td><a href="http://www.trbappcon.org/index.aspx">http://www.trbappcon.org/index.aspx</a></td>
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<td>May 15-17</td>
<td>Global Public Transport Summit (UITP)</td>
<td>Montreal</td>
<td>Palais des congres de Montreal</td>
<td>A unique global platform for public transport professionals to take the lead in urban mobility. The Global Public Transport Summit is a unique event that covers all urban and regional transport modes. It combines a full program of congress sessions with an exhibition of the latest solutions, innovations and products in public transport and urban mobility.</td>
<td><a href="http://www.uitp.org/events/global-public-transport-summit">http://www.uitp.org/events/global-public-transport-summit</a></td>
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<td>May 21-24</td>
<td>5th Urban Street Symposium (TRB)</td>
<td>Raleigh, NC</td>
<td>N/A</td>
<td>The symposium will explore improvements in suburban and urban street design practices, foster discussions on alternative street design practices, examine alternative street designs, and facilitate the transfer of urban street research findings to state agencies and to local governments.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/174674.aspx">http://www.trb.org/Calendar/Blurbs/174674.aspx</a></td>
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<tr>
<td>June 11-14</td>
<td>2017 Rail Conference</td>
<td>Baltimore, MD</td>
<td>Hilton Baltimore Hotel</td>
<td>For all rail modes – urban, commuter, high-speed, and intercity – this technical conference features sessions on technology, operations, maintenance, safety &amp; security, planning, finance, capital projects, workforce development, and more. Experience the latest industry advances at the Products &amp; Services Showcase and join the technical tours.</td>
<td><a href="http://www.apta.com/mo/rail/Pages/default.aspx">http://www.apta.com/mo/rail/Pages/default.aspx</a></td>
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<tr>
<td>June 12-15</td>
<td>First International Roadside Safety Conference: “Safer Roads, Saving Lives, Saving Money” (TRB)</td>
<td>San Francisco, CA</td>
<td>Holiday Inn Golden Gateway</td>
<td>The First International Roadside Safety Conference (IRSC) will provide a global forum to explore current roadside safety problems and practices and disseminate research results related to a full range of roadside safety issues, including: administration, planning, design, construction, operations, and maintenance. The conference theme is “Safer Roads, Saving Lives, &amp; Saving Money.” It is also the goal to highlight technological advancements and innovations involving new research as well as proven practices related to the theme.</td>
<td><a href="http://www.cvent.com/events/trb-first-international-roadside-safety-conference/event-summary-ce287b3b93704997822cda96c2beb455.aspx">http://www.cvent.com/events/trb-first-international-roadside-safety-conference/event-summary-ce287b3b93704997822cda96c2beb455.aspx</a></td>
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<td>July 16-18</td>
<td>Joint Symposium on Managed Lanes and All Electronic Tolling (IBTTA, TRB)</td>
<td>Dallas, TX</td>
<td>Hilton Anatole Dallas</td>
<td>The symposium will explore the latest research, policies, and innovative practices found on toll roads and tolled managed lanes to stimulate continued project development, adoption of the latest technology, and operational practice. Technical sessions and local tours will emphasize the role that the latest practices in innovative project delivery and system planning play in managed lane implementation. While TRB has hosted 16 prior managed lane conferences from 1988 through 2016, this is the first one to focus on innovative project delivery experiences that are becoming common in the profession.</td>
<td><a href="http://ibtta.org/events/joint-symposium-aet-managed-lanes">http://ibtta.org/events/joint-symposium-aet-managed-lanes</a></td>
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<tr>
<td>July 24-26</td>
<td>22nd International Symposium on Transportation and Traffic Theory (TRB, Northwestern University)</td>
<td>Evanston, IL</td>
<td>Northwestern University</td>
<td>Covers all scientific aspects of transportation and traffic, spanning all modes of transport—public and private—including freight, air, and maritime modes.</td>
<td><a href="http://sites.northwestern.edu/iattt/">http://sites.northwestern.edu/iattt/</a></td>
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<tr>
<td>July 27-28</td>
<td>8th International Visualization in Transportation Symposium: Visualization in Action (TRB)</td>
<td>Washington, D.C.</td>
<td>NAS Building 2101 Constitution Ave, NW Washington, DC</td>
<td>The goal of the 2017 Symposium is to explore the opportunities and challenges of the mainstream use of visualization in the transportation field while presenting examples of how visualization is transforming today’s workplace.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/175064.aspx">http://www.trb.org/Calendar/Blurbs/175064.aspx</a></td>
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<tr>
<td>July 30-Aug. 2</td>
<td>ACT International Conference</td>
<td>New Orleans, LA</td>
<td>Sheraton New Orleans Hotel 500 Canal Street</td>
<td>The conference will attract TDM professionals and practitioners from across the United States and around the globe, representing public and private sector employers and providers of services and programs, universities and non-profit organizations, as we gather to share best practices and emerging innovations, engage with colleagues, and take part in intensive training workshops, discussions and educational tours.</td>
<td><a href="http://actweb.org/events/international-conference/">http://actweb.org/events/international-conference/</a></td>
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<tr>
<td>Sept. 6-8</td>
<td>Transit GIS Conference (TRB)</td>
<td>Washington, D.C.</td>
<td>Hamilton Crowne Plaza – Washington, DC 1001 14th St NW</td>
<td>The mission of the biennial conference is to provide a forum for geographic information systems (GIS) in transit professionals and other key industry stakeholders to share innovative GIS solutions, industry best practices, and new technologies. The conference is also designed to explore ways to use GIS to improve the safety, reliability, sustainability, and operation of public transportation.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/175077.aspx">http://www.trb.org/Calendar/Blurbs/175077.aspx</a></td>
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N/A = Not Available; m = member; nm = non-member. To list your transportation conferences here FREE send all information as above to: The UTM Conference Dept., P.O. Box 12300, Burke, VA 22009-2300, or call (703) 764-0512, or fax (703) 764-0516, or email: editors@lawleypublications.com.