Percentage Workers in U.S. Who Carpool Declined by 49% Over Past 30 Years

Latest Data from American Community Survey Released; Decline Continues

The U.S. Bureau of Census released new information from the American Community Survey which shows that the percentage of workers who carpool declined further over the past decade from 12.2% in 2000 to 10.0% in 2009. This continues the decline from 1980 when journey to work information started to be obtained by the Census Bureau. In total the percentage of workers who carpool has declined by 49% over the past 30 years.

For further information on the American Community Survey, visit http://factfinder.census.gov/servlet/DTCatalog?_bm=y&-geo_id=01000US&ds_name=ACS_2009_1YR_G00_&-lang=en&-mt_name=ACS_2009_1YR_G2000_B08006&-format=&-CONTEXT=dt

Percentages of U.S. Workers Who Carpoled to Work

<table>
<thead>
<tr>
<th>Census</th>
<th>Percent of Workers Who Carpoled</th>
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<tr>
<td>1980 Census</td>
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<td>1990 Census</td>
<td>13.4%</td>
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<tr>
<td>2000 Census</td>
<td>12.2%</td>
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<td>2009 ACS</td>
<td>10.0%</td>
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Source: U.S. Bureau of Census, Journey to Work information

Latest Urban Traffic Congestion Assessment Finds Economic Recovery Brings Renewed Growth in Congestion

TTI Releases Latest Urban Mobility Report

Researchers at the Texas Transportation Institute have found that after two years of slight declines in overall traffic congestion – attributable to the economic downturn and high fuel prices – congestion is increasing again. According to the 2010 Urban Mobility Report, 2008 was the best year for commuters in at least a decade, but in 2009 congestion again began to grow.

The report, released in January by the Texas Transportation Institute at Texas A&M University, paints the most accurate picture yet of traffic congestion in the 439 urban areas of the United States. With the speed data provided by INRIX, a leading private-sector provider of travel time information, the current report offers a greatly enhanced picture of congestion on a city-by-city basis.

“This Urban Mobility Report begins an exciting new era for comprehensive national congestion measurement,” said researcher Tim Lomax. “By combining the traffic speed data from INRIX with the traffic volume data from the states, we are now able to provide a much better and more detailed picture of the problems facing urban travelers.”

Main findings from the research illustrate the effects of the nation’s traffic problems:

- Congestion costs continue to rise: Measured in constant 2009 dollars, the cost of congestion has risen from $24 billion in 1982 to $115 billion in 2009.
- The total amount of wasted fuel in 2009 topped 3.9 billion gallons.
- Cost to the average commuter: $808 in 2009, compared to an inflation-adjusted $351 in 1982.
- Yearly peak delay for the average commuter was 34 hours in 2009, up from 14 hours in 1982.

“We have a great deal more confidence in the numbers we now have for the chaotic years of 2007, 2008 & 2009,” researcher Shawn Turner said. “Thanks to technology, we are using data that simply could not be collected in the past.”

Please turn to Page 5
Transit Agencies Consider Selling Station Naming Rights

A Multi-Year Contract Can Produce Millions of Dollars in Revenue

The Washington Area Metropolitan Transportation Authority is considering selling naming rights to its 86 Metro stations. In January, Metro General Manager Richard Sarles proposed a $1.4 billion operating budget for Fiscal Year 2012 that would maintain the current level of rail, bus and paratransit services without increasing fares. The budget proposal calls for raising $72.5 million of additional funding for the system through alternatives including wage reserves, increased subsidies from jurisdictions, commercial revenues through monetized ground leases, and marketing station naming rights.

Asked to comment on the sale of station naming rights, WMATA Public Affairs Officer Reggie Woodruff said that the sale of station naming rights is just one option under consideration. He wouldn’t comment on how many stations might be made available or how much income this option might yield.

The sale of station naming rights is getting increasing attention, however, as a method of raising revenue during difficult economic times. As a revenue tool, the sale of naming rights has been used for sports arenas and entertainment complexes for years.

In New York, the Atlantic Avenue-Pacific Street Station in Brooklyn will have the British bank Barclays added to the end of its name as part of a larger development package. The station naming rights are part of a 20 year, $4 million agreement between Barclays and the New York Metropolitan Transportation Authority. The name change is scheduled for 2012 along with the opening of new nearby sports arena, the Barclays Center, for which the British bank also has naming rights. The sports arena is expected to become a major attraction.

Transportation agencies in many jurisdictions — from the Chicago Transit Authority to Miami-Dade Transit — are considering selling naming rights as a revenue option. In November, the Chicago Transit Authority issued an RFP to help develop a plan to sell the naming rights to CTA train lines, train stations and bus routes to private companies. According to the RFP, the consultant would determine which of the agency’s assets might attract sponsorships and what the naming rights would be worth.

In June 2010, the Southeastern Pennsylvania Transit Authority (SEPTA) announced a major sponsorship deal with AT&T to rename the station at the end of its Broad Street subway line and thereby bring in needed revenue for transit operations. The SEPTA Board approved a resolution to allow Pattison Station to be renamed AT&T Station as part of a five-year contract valued at over $5 million. AT&T Station also builds on SEPTA’s relationship with AT&T, which is currently the only wireless carrier providing coverage underground along the Broad Street and Market-Frankford lines.

“SEPTA welcomes the opportunity to work with AT&T on this unique project,” said SEPTA General Manager Joseph M. Casey. “This is an exciting new step in SEPTA’s ongoing effort to help defray costs to customers and taxpayers by creating new advertising and sponsorship opportunities throughout the transit system.”

The AT&T station serves as a transit hub for fans traveling to and from games and other events at the sports and entertainment complex. According to Front Row Marketing Services, this type of passenger traffic is one of the most significant factors in determining the value of naming rights. The third party has to consider whether naming rights are of more or less value than a TV spot, explained Front Row Senior Vice President Eric Smallwood.

Front Row Marketing Services is a leader in valuing, soliciting, and negotiating naming rights for an assortment of clients worldwide. Front Row performed a study of the market for selling station naming rights for Miami-Dade Transit’s downtown Metromover stations. Smallwood said that in 2008-2009 the media value of the stations ranged from about $2,500 a year for the Third Street Station to $28,000 a year for the stop at Bayfront Park to a high of $43,000 a year for the Government Center stop. The Government Center stop has 2 million riders a year, he said. That amount of foot traffic has a high potential value. Smallwood cautioned, however, that the media value and the pricing of naming rights don’t have a dollar-for-dollar ratio.

Smallwood said that Front Row Marketing Services has also investigated the market for selling naming rights for the Tampa Streetcar system and the Detroit People Mover 2.5 mile circle transit system.

For more information, please visit www.wmata.com, www.septa.org, and www.frontrow-marketing.com, or contact Eric Smallwood at esmallwood@frontrow-marketing.com.
National Study Finds Red Light Running Cameras Reduce Fatal Accidents at Intersections

Cameras Recommended as a Measure to Reduce Fatalities at Intersections

The Insurance Institute for Highway Safety (IIHS) recently completed a study to estimate the effects of red light camera enforcement on per capita fatal crash rates at intersections with signal lights. The nationwide study analyzed accident data in 14 large cities in the U.S. with population exceeding 200,000 that applied red light camera enforcement programs. It then compared the results with 48 large cities that did not apply red light running cameras.

Analyses compared the citywide per capita rate of fatal red light running crashes and the citywide per capita rate of all fatal crashes at signalized intersections during the two study periods. Rate changes then were compared for cities with and without cameras programs. Poisson regression was used to model crash rates as a function of red light camera enforcement, land area, and population density.

It was found that the average annual rate of fatal red light running crashes declined for both study groups, but the decline was larger for cities with red light camera enforcement programs than for cities without camera programs (35 vs. 14 percent). The average annual rate of all fatal crashes at signalized intersections decreased by 14 percent for cities with camera programs and increased slightly (2 percent) for cities without cameras. After controlling for population density and land area, the rate of fatal red light running crashes for cities with camera programs was an estimated 24 percent lower than what would have been expected without cameras. The rate of all fatal crashes at signalized intersections with camera programs was an estimated 17 percent lower than what would have been expected without cameras.

The Insurance Institute for Highway Safety therefore concluded that red light camera enforcement programs reduce the citywide rate of fatal red light running crashes and, to a lesser but still significant extent, the rate of all fatal crashes at signalized intersections. The Institute recommended that cities that wish to reduce fatal crashes at signalized intersections consider red light camera enforcement. For more information, please visit http://www.iihs.org.

First Real-Time Parking App for iPhone Unveiled

Applied in Los Angeles to Help Drivers Find Vacant Spaces

A new iPhone application that gives drivers real-time parking information was unveiled in Los Angeles. Hailed as the first of its kind, the “Parker for iPhone” is designed to help drivers find vacant parking spaces and nearby garages in and around Hollywood, one of the country’s most visited tourist destinations.

The Parker App features a simple interface that gives users an instant, location-based map pinpointing the city blocks with the most available parking spaces. Users can see which blocks have more than four, more than two or less two spots, as well as blocks with “rock star” parking – the areas closest with the most open spaces. The app also delivers information about parking space time limits, pricing, and whether meters take credit cards or coins. It also will direct drivers to the nearest city parking garages as an alternative to street parking.

The app is based on Streetline’s patented smart parking platform that detects the presence of a car through a network of ultra-low power wireless sensors located in each parking space. This information is then transmitted back to mobile smart phones and web applications that give drivers a live, accurate picture of open parking spaces across a city. The entire system helps cities, airports, universities and private organizations reduce costs, increase efficiencies, and alleviate the environmental impact of traffic caused by vehicles circling to find parking.

Studies estimate that more than 30 percent of city traffic is caused by drivers looking for parking. Parker for iPhone dovetails Los Angeles’ and Streetline’s efforts to implement smart city technologies that make urban areas more livable, cleaner, and more efficient. For more information visit: www.streetlinenetworks.com or contact Annika Jensen-Lamka at (415) 516-3530 or annika@sparkpr.com

A park-and-pay meter in Hollywood. (Photo: Courtesy of the LADOT)
Low-Cost Survey Method Developed for Measuring Walking and Cycling

Overcomes Difficulties to Determine How Much Non-Motorized Travel Occurs in Communities

The Mineta Transportation Institute (MTI) conducted a project “Measuring Walking and Cycling Using the PABS (Pedestrian and Bicycling Survey) Approach: A Low-Cost Survey Method for Local Communities,” for use by communities in planning policies and programs related to these transportation modes.

Many communities want to promote walking and cycling. However, few know how much non-motorized travel already occurs in their communities. The researchers developed a low-budget survey method and related sampling strategy that can be used easily, affordably, and reliably to document the amount of local walking and cycling happening among a community’s residents. Co-principal investigators were Ann Forsyth, professor of city and regional planning at Cornell University, and Kevin Krizek, associate professor of planning, design and civil engineering at the University of Colorado, working with Asha Weinstein Agrawal, associate professor of urban and regional planning at San Jose State University.

“To tackle the problems of greenhouse gas emissions, traffic congestion, resident quality of life, and public health concerns, communities are using initiatives to spur more walking and cycling,” said Forsyth. “Local governments face hard choices about which programs to fund. Decision makers, planners, and residents want to understand if proposed policies to increase bicycling and walking actually work. However, most communities have unreliable means to know how many of these trips occur in their jurisdictions, let alone how the numbers may change over time.”

The researchers developed the Pedestrian and Bicycling Survey (PABS), a method that local governments can use to assess levels of local walking and cycling behavior. PABS is a four-page mail-out/mail-back survey that asks such questions as:

- How much walking and cycling is occurring in my community?
- What is the purpose of walking and cycling trips?
- Who is completing the bulk of the walking and cycling trips?
- How often are people walking and cycling?

According to the Mineta Institute, an important contribution of this research project is that the PABS instrument has been tested for reliability across administrations. Very few transportation surveys have been tested for this kind of reliability.

Asked about the difficulty of obtaining representative unbiased responses, Agrawal told UTM: “Obtaining such a sample is perhaps the most difficult challenge that any survey faces! And sadly, no survey can ever be done that is perfectly representative of the full population.” She added, “One of the key strengths of PABS is that it randomly selects addresses among all dwellings in a community, so all residents have an equal chance of being selected. (By contrast, many bike and pedestrian surveys only target people who are already using bike and walk paths, thus missing everyone who isn’t already using those modes.) Also, while a mail-out/mail-back survey may seem old-fashioned, it is more likely to get a representative sample than some of the more ‘modern’ surveys, such as web-based ones, which exclude people who don’t have regular Internet access.”

Study Methods
To test the quality of the questionnaire, the survey was administered twice to the same set of respondents, a week apart. This process checks for so-called test-retest reliability: Do respondents answer questions about their general behavior the same way when they take the survey multiple times? An early version of the questionnaire was tested with 100 people and the final version with another 87 people.

In addition, the survey was administered in San Jose, California, to verify that the sampling and administration procedures developed were sound. An important part of the test was to verify the feasibility of the random sampling strategy chosen, a two-stage cluster sample.

Findings
The PABS survey questions produce reliable data on walking and cycling. This finding confirms that the PABS questionnaire produces quality data, with most questions achieving adequate to excellent reliability when tested using standard statistical techniques. PABS is the first known survey that collects walking and cycling data for transportation planning purposes with questions tested for reliabili-


**Continued from Page 1**

### Latest Urban Traffic Congestion Assessment

not have been gathered a few years ago.”

The methodology has been improved many times since the Urban Mobility Report was first published in 1984, but the changes made possible by access to hour-by-hour speed data are the most significant improvement yet. “The data address the biggest shortcoming of previous reports,” researcher David Schrank said. “The data show conditions for every day of the year and include the effect of weather problems, traffic crashes, special events, holidays, work zones and other factors directly impacting traffic flow.”

As a result of the new data, the report includes a revised congestion trend for each urban region from 1982 to 2009. Eleven new urban regions have been added, including San Juan, Puerto Rico. Finally, three new measures of congestion are calculated for the 2010 report: delay per auto commuter, delay per non-peak traveler, and a Commuter Stress Index (CSI), which is calculated for the worst direction in each peak period to show the time penalty to those who travel in the peak direction.

The researchers found that congestion has spread significantly over the 20 years of the study—to more cities, to more of the road system and trips in cities, to more time during the day, and to more days of the week in some locations.

The new report discusses the congestion reduction benefits of two solutions—public transportation and roadway operations. Without public transportation services, travelers would have suffered an additional 785 million hours of delay and consumed 640 million more gallons of fuel—a savings of $19 billion in congestion costs. Roadway operational treatments save travelers 320 million hours of delay and 265 million gallons of fuel for a congestion cost savings of $8 billion.

Researchers recommend a balanced and diversified approach to reducing traffic congestion. Their strategies include:

- Get as much use as possible out of the transportation system we have.
- Add roadway and public transportation capacity in the places where it is needed most.
- Change patterns, employing ideas like ridesharing and flexible work times to avoid traditional “rush hours.”
- Provide more choices, such as alternate routes, telecommuting and toll lanes for faster and more reliable trips.
- Diversify land development patterns, to make walking, biking and mass transit more practical.
- Adopt realistic expectations, recognizing for instance that large urban areas are going to be congested, but they don’t have to stay that way all day long. “There is no rigid prescription — no ‘best way’ — to address congestion problems,” Lomax said. “The most effective strategy is one where agency actions are complemented by efforts of businesses, manufacturers, commuters and travelers. Each region must identify the projects, programs and policies that achieve goals, solve problems and capitalize on opportunities.”

For more information, the report is available for download at [http://mobility.tamu.edu/ums/report/](http://mobility.tamu.edu/ums/report/), or contact the authors of the report: David Schrank at d-schrank@tamu.edu, Tim Lomax at t-lomax@tamu.edu, or Shawn Turner at shawn-turner@tamu.edu.

**Continued from Page 4**

### Low-Cost Survey Method for Walking, Cycling

ity. Therefore, according to the Mineta Institute, it created a useful instrument and a baseline for future comparison with other instruments.

The test, using a single mailing of the survey instrument netted a low response rate that was nevertheless comparable to that for many similar surveys. The report suggests mechanisms that communities can use to improve the response rate to adequate levels such as reminder postcards, additional survey mailings, and strategies for raising general public awareness of the survey and its importance.

The San Jose field test identified many kinds of walking and cycling trips, including trips missed by other common survey approaches like the American Community Survey, the Mineta Institute said. PABS picked up more of these trips because the survey asks different questions, including questions about walking and cycling up to a year earlier and about many different trip purposes.

**Cost**

The San Jose pilot showed that the survey could be administered and analyzed by a small team: a local supervisor; three research assistants to coordinate, enter data, and analyze data; and volunteers to address and mail surveys. In addition, the two-stage cluster sampling method that was tested proved cost-effective, even for a large city like San Jose with a population of almost one million people.

The actual cost of conducting a survey would vary depending on such factors as the city’s population size and the desired level of precision in the responses, said Agrawal, the director of MTI’s National Transportation Finance Center. But, she added, a city might spend as little as $15,000 in direct costs under the following conditions: A goal of 1,000 completed surveys, with unskilled city staff or volunteer labor to label envelopes and do data entry, basic data analysis completed for free by city staff members or by a local university student who performs the work at no cost as part of a masters thesis or senior project, and aggressive outreach through the media to encourage survey response. By comparison, she said, hiring a firm to conduct a traditional phone-based trip diary survey could easily run into hundreds of thousands of dollars.

**Policy Recommendations**

The authors recommend that communities consider using PABS to document levels of walking and bicycling. This survey has a number of advantages:

- The well-documented method for administering the survey reduces staff time and costs compared with developing a non-standard approach.
- Because PABS uses a random sampling technique, the results can be generalized to the full community.
- Questions about habitual behaviors have high reliability—that is, people asked the same questions at different times will give similar answers.
- Answers can be compared across communities.

The research report is available at [www.transweb.sjsu.edu](http://www.transweb.sjsu.edu). For more information, contact the Mineta Institute’s Karen Philbrick at karen.philbrick@sjsu.edu or Asha W. Agrawal at asha.winstein.agrawal@sjsu.edu.
NYCDOT Examining Pay-As-You-Drive Car Insurance

Pay-As-You-Drive Insurance Programs Have Potential To Reduce Vehicle Miles Traveled

The New York City Department of Transportation recently issued a Request for Expressions of Interest (RFEI) inviting interested vendors to submit information to the agency about pay-as-you-drive motor vehicle insurance.

NYCDOT’s Strategic Plan commits the agency to a series of initiatives for improved mobility and transportation choice, safer streets, greening and public space and reduced impact on global climate. According to the agency, recent studies indicate that pay-as-you-drive insurance programs have significant potential to reduce vehicle miles traveled and therefore the emissions and congestion associated with it. For this reason, the NYCDOT is interested in how pay-as-you-drive insurance programs might be used as a tool to improve transportation for the region while achieving the city’s sustainability goals.

The RFEI focuses on the state of pay-as-you-drive programs in the United States, the potential for introducing such programs in New York City and New York state, and potential barriers to the introduction of this type of program. Specifically, the agency is interested in information about pay-as-you-drive programs that can use mileage-based insurance pricing signals to trigger change in driver behavior and that can be implemented in New York state and New York City.

In the RFEI, the NYCDOT asked vendors to answer the following:

- Are there any specific legal, regulatory, financial or technical issues or barriers to implementing such an insurance program in NYC?
- What are the technical, operational and programmatic parameters for a successful pay-as-you-drive insurance program in NY state?
- What mileage and safety-related data would need to be collected as part of such a program?
- Would such a program require an in-vehicle device? If so, what technical functionality would be required? If not, how would the necessary data be collected?
- What roles can NYC government agencies play in the development of a market for pay-as-you-drive products?

New York is not the only jurisdiction considering pay-as-you-drive insurance. In December, the California Department of Insurance approved plans by State Farm and the Automobile Club of Southern California to offer that state’s first ever pay-as-you-drive insurance program. Massachusetts has also announced plans to consider this type of program. The benefits can be large. According to a 2008 Brookings Institution study of pay-as-you-go-insurance, such programs provide incentives that could reduce driving by as much as 8 percent while also reducing emissions by 2 percent and oil consumption by 4 percent. They also provide monetary savings to drivers.

But some complicated issues are involved in offering such an insurance program. One is the requirement that insurance costs be clearly stated before the time of purchase. Another has to do equity: Would drivers in more rural areas pay more than those in more suburban or urban areas?

The NYCDOT is in any early stage of any process involved in considering this type of insurance, according to NYCDOT spokeswoman Nicole Garcia. There is no particular plan or timetable for procurement.

For more information, contact Nicole Garcia at ngarcia@dot.nyc.gov.

Automated Traffic Surveillance System Developed in Europe

EUREKA has announced the development of new software that could transform existing road traffic monitoring systems and establish a new paradigm. E! 4160 VICATS, a collaborative research effort, has yielded promising results in creating an innovative surveillance system which requires minimal human input. The research was sponsored by EUREKA, an intergovernmental network across Europe that supports market-oriented R&D and innovation projects by industry, research centers and universities.

Road traffic surveillance systems play a key role in mitigating congestion and enabling emergency services to respond to accidents effectively and rapidly. Until now, video surveillance systems have relied heavily on human input and concentration. According to EUREKA, extensive use of human analysis is expensive and demands a great deal of concentration, which means that errors and misjudgments can be made, with potentially fatal consequences.

The partners involved in E! 4160 VICATS have developed an automated software package capable of producing intelligent and reliable traffic assessments based on the trajectories of moving vehicles. According to a December EUREKA press release, the system anticipates potential hazards or congestion, before relaying a signal to humans, directing them to particular scenarios and enabling them to react accordingly in a prompt fashion. In this way, the project may benefit road users by helping prevent congestion, identifying accidents that do arise, and ensuring that rapid emergency responses are deployed when necessary.

The traffic monitoring system developed under the E! 4160 VICATS initiative is completely autonomous, gathering information on traffic conditions 24 hours a day, without the need to be initialized by a human operator.

For more information, visit: http://www.eurekanetwork.org or contact Piotr Pogorzelski at +32 2 777 0979 or by e-mail at: piotr.pogorzelski@eurekanetwork.org.

Existing road traffic monitoring requires observation of many monitors. The new Eureka software will do away with this. (Photo: Courtesy of EUREKA)
Why is the integration of the new HCM 2010 model into SIDRA INTERSECTION important for your roundabout design?

Highway Capacity Manual 2010 introduces a new capacity model for roundabouts based on US research. SIDRA INTERSECTION software Version 5.1 will offer the best implementation of this new model with powerful extensions to enhance your roundabout design capabilities. The roundabout capacity model is the only method in HCM 2010 which uses lane-by-lane analysis. This is best applied through SIDRA INTERSECTION which has been using lane-by-lane methodology since the 1980s.

Lane-By-Lane Model and Other Unique Features SIDRA INTERSECTION Offers

Unlike other software packages, SIDRA INTERSECTION does not claim to be a simple replication of the HCM procedures. Instead, it offers significant extensions on the capabilities of HCM with calibration using HCM defaults.

For all types of intersection, SIDRA INTERSECTION uses more advanced models and methods, including lane-by-lane analysis (rather than analysis by lane groups in the HCM), modelling of short lanes, detailed modelling of average and percentile queue lengths, stop rates, geometric delays, and the use of drive cycles (cruise, acceleration, deceleration and idling) for detailed modelling of delay and travel time components as well as operating cost, fuel consumption and emission estimation.

Some HCM models or methods are used in all versions of SIDRA INTERSECTION, including the Level of Service methods, the delay and queue progression factors for signal coordination effects, and so on. The HCM version of SIDRA INTERSECTION is based on the calibration of most model parameters using the HCM defaults as applicable.

Major Extensions SIDRA INTERSECTION Offers for Roundabouts

The HCM Version of SIDRA INTERSECTION 5.1 will use the HCM 2010 roundabout capacity model as the default model. SIDRA INTERSECTION will also continue to offer the SIDRA Standard model with a default Environment Factor of 1.2 to match the lower capacity estimates based on US roundabout research. The extensions of the HCM 2010 roundabout model available in SIDRA INTERSECTION include:

- **Geometry:** Roundabouts with more than 2 lanes can be analysed with any configuration of number of approach and circulating lanes, lane types and lane disciplines.
- **Templates:** SIDRA INTERSECTION offers numerous Templates for roundabouts including all roundabout configurations given in MUTCD 2009 and the TRB 2010 Roundabout Informational Guide. All Templates will be updated for HCM Version of SIDRA INTERSECTION.
- The HCM Version of SIDRA INTERSECTION offers options for US Customary and Metric units.
- **Roundabout Metering Signals** can be analysed using the HCM 2010 roundabout capacity model.

- **Capacity Constraint:** This essential element of roundabout modelling is readily available in SIDRA INTERSECTION.
- **Heavy Vehicle factor** for capacity adjustment is calculated for each lane using relevant movement HV percentages rather than the whole approach or lane group.
- **Pedestrian Effects:** The effects of pedestrians on roundabout entry and exit lane capacities are determined.
- **Lane Flows** are determined allowing for user-specified and program-determined lane underutilisation cases including downstream short lane effects. The method is extended to more than two lanes in a lane group.
- **Short Lane** capacity and any excess flow into adjacent lanes are determined using equivalent gap-acceptance parameters from the HCM 2010 model.
- **Shared and exclusive slip lanes and continuous bypass lanes** at roundabouts can be modelled. Single and multiple bypass lanes can be modelled, and slip lanes can be yield or stop controlled.
- Parameters for modeling unbalanced flow conditions can be used.
- **Level of Service:** SIDRA INTERSECTION offers alternative LOS methods (including HCM 2010 and HCM 2000 methods), alternative LOS thresholds for roundabouts, and a LOS Target parameter to specify different acceptable LOS levels for different intersection types, e.g. for Design Life analysis.
- **Model Calibration:** The parameters of the HCM 2010 roundabout capacity model can be calibrated as lane-based model parameters.
- Roundabout negotiation speeds and distances are estimated and geometric delays are calculated as a function of approach, exit and negotiation speeds and distances.
- **Geometric delays** are included in delay estimates allowing for roundabout negotiation speeds and distances.
- **Back of queue** models, including flexible percentile queue modeling, are used for roundabouts and signal-controlled intersections (not available in the HCM) consistent with signalized intersections and are useful for modeling of short lanes and for estimating the probability of blockage of upstream lanes.
- Estimates of stop rates and proportion queued are provided for all types of intersection.
- Time-proven models of fuel consumption, emissions and operating cost used for estimates consistent with the HCM 2010 model are important model extensions offered by SIDRA INTERSECTION.
- For closely-spaced roundabouts, or pedestrian crossings near roundabouts, the Capacity Adjustment parameter can be used to specify capacity reduction for upstream intersection lanes using the probability of blockage estimated for downstream intersection lanes with limited queue space.

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Save 20% OFF SIDRA INTERSECTION 5
Offer valid until 31st March 2011
Visit our Online Store at sidrasolutions.com
Enter Discount Code: SSSAVE20
Transportation Tort Liability: Case in Review

Old Utility Poles Next to Roads: Local Jurisdiction Not Necessarily Immune

In a recently decided case in the Superior Court of New Jersey, one of the presiding judges issued a minority opinion regarding the implications of the statement “... responsibility for the safety of motorists should rest with those who own, control, and maintain the thoroughfare”. This is a quote from the judgment in Contey v. New Jersey Bell Telephone Co., 136 N.J. 582 (1994), in which immunity was granted to utility companies.

The Superior Court’s opinion was that this statement did not impose liability on a public entity for the safety of its roadways, but the dissenting judge argued that the Contey Court’s decision to absolve the public utility of liability rested upon its conclusion that responsibility for safety rested elsewhere—on those who own, maintain or control roadways, i.e. the public entity.

In 2003 a vehicle skidded across the opposite lane of a county road in snowy weather and struck utility pole #617, located next to the road on private property. The pole belonged to a state-wide utility company that, according to records going back to 1928, appears to have an easement to place its pole in that area. The county (of Morris, New Jersey, where the accident occurred) maintains a right-of-way easement over this portion of the private property. The motorist sued the utility company and the county.

The roadway was never designed or engineered by the county as it was previously an old stagecoach road. Nor had county been consulted or involved in the placement of the poles along the road, including pole #617, sometime between 1928 and 1937. The utility company engineering supervisor testified that it does not conduct specific studies to determine whether the poles are in a safe location from a traffic engineering perspective. However, it would “react” to any direction given by the governing body regarding pole location or relocation and would only remove a pole if requested to by the governing body. The utility did not report accidents involving its poles to the county, as this was not a standard requirement. Nor was it required to notify the county when it works on or installs poles; it would deal directly with the property owner to obtain an easement to install a pole.

It also argued that since the pole was not in the roadway or in plaintiff’s direction of travel, the accident was not reasonably foreseeable, and that utility companies have not had a duty to drivers leaving the roadway since long before Contey was decided.

For these reasons the utility claimed it owed no duty to the plaintiffs and that the Contey judgment placed a duty on the county to conduct highway safety studies regarding the location of utility poles. It requested summary judgment, which was denied.

The county on the other hand argued that it does not have its own police force and does not investigate traffic accidents; it relies on notification by township police whenever a pattern of accidents occurs on one of its roads. Prior to plaintiff’s accident, county was never notified of a pattern of accidents regarding Pole #617, although at least three accidents, all involving motorists losing control of their vehicles on a wet road surface, had occurred near Pole #617 between 1989 and 2003.

Further, county stated it had not disregarded its duty to design a safe roadway because it did not design the road. It claimed it had limited resources in terms of personnel, as it employed a total of nine full-time engineers, who could not incur the additional responsibility to study or analyze the placement of utility poles. It argued this was the province of the utility company and that its engineers lacked the expertise to do an effective layout of utility pole location.

A supervising engineer in the county’s Department of Public Works testified that it had never been contemplated by the county government that a pole placed somewhere between 40-70 years ago by a public utility would bring liability on the county which had had no input into the pole’s location. Instead, he stated that the county and the utility operated on the basis that since the utility was the entity making decisions regarding the location of utility poles, it, and not the county, would be responsible for any mistakes. He claimed that the only items the county maintained, outside the roadway surface, were sight distance and guardrails and traffic signs. Finally county argued it was immune from liability under the New Jersey Tort Claims Act.

The motion judge disagreed and denied both motions, whereupon both parties appealed.

The Superior Court reversed the denial of summary judgment to the utility company, vacated the order denying summary judgment to the county and remanded it for further proceedings.

It stated that in Contey (1994), the court had considered the extent to which a legal duty may be imposed upon a utility company arising out of injuries to motorists. The Contey Court found that approximately 65,000 injuries occurred annually because of vehicle-utility-pole accidents, and from this it determined that the risk of harm to the public was “great” and that public interest in the solution was very great.

It had also found that a utility company had to locate poles with permission from the property owner and in accordance with ordinances and resolutions adopted by the local municipality or boards. Finally, it had noted the increased role of governmental bodies in paving highways.

Please turn to Page 9
Product and Industry News

McCain Parking Guidance Systems Reduce Traffic Congestion, Driver Stress

McCain, Inc., a leading manufacturer and supplier of parking, traffic, and transit management solutions, has developed a fully customizable parking guidance system that helps mitigate traffic congestion associated with parking, while simultaneously helping ensure that parking facilities are fully and efficiently utilized.

McCain’s Parking Guidance System works to alleviate congestion by quickly and efficiently guiding drivers to the first available parking space. The system starts by monitoring each individual parking bay, marking open spaces with green, overhead LEDs, and occupied spaces with red. By tracking each bay individually, the system is able to relay real-time information to variable message signs strategically placed at structure entry-points, aisle and levels crossings, indicating the number of open spaces ahead. This National Transportation Communications for ITS Protocol (NTCIP) compliant system easily integrates with other NTCIP-compliant hardware and software, such as McCain’s Transparency™ control software, allowing the system to direct drivers from approaching freeways and arterials. Also, it can be managed through the same location and interface as the overall traffic management system.

In June 2010, McCain entered an agreement to install its Parking Guidance System at the University of San Diego (USD). The official contract outlines a plan to refurbish 611 spaces in the USD Mission Parking Structure with McCain’s Parking Guidance System, which accurately monitors individual parking space occupancy and communicates availability to motorists, guiding drivers to open spaces by means of electronic guidance signs that indicate exact availability by level and row, and LED indicator lights in each parking bay.

“With drivers spending more and more time searching the east end of campus for an open parking space, we view the McCain Parking Guidance System as an effective way to help us improve the efficiency of our parking systems while simultaneously reducing emissions,” said Chief Larry Barnett, assistant vice president of public safety for University of San Diego. “We’re pleased to partner with a local company whose solution addresses our parking concerns and supports our campus-wide commitment to sustainability and reducing our carbon footprint.”

The project spotlights the University of San Diego as one of the only higher-education institutions in the United States to deploy a guidance system and — with a version that is fully National Transportation Communications for ITS Protocol (NTCIP) compliant places them in the ranks of some of the world’s most technologically advanced parking structures. According to a McCain press release, the technology will provide the University of San Diego with effective parking traffic management that will seamlessly integrate with their existing infrastructure and last for many years, yielding results that drastically reduce search times and driver stress.

“At McCain we strive to provide our customers with sustainable, technological solutions unique to any project specifications,” said Dan Ferson, director of parking solutions for McCain Inc. “We are confident that our parking system will prove helpful in providing USD with effective parking management and produce viable data to support further industry research and advancement.”

Through a unique agreement between the University of San Diego and McCain, Inc., geared to support industry research and advancements, installation of the parking guidance system will begin immediately at no out-of-pocket expense to the university, McCain said. McCain, Inc. will study the effectiveness of their Parking Guidance System by using the University of San Diego campus as a testing ground.

For more information, visit www.mccain-inc.com or contact Dan Ferson at dferson@mccain-inc.com.

Mentor Engineering Launches New Passenger Information System

Mentor Engineering has announced the release of their online passenger information system, Mentor MyRide™. Developed for transit agencies, MyRide provides passengers with various means of accessing real-time bus location, status, and arrival times, as well as the ability to track their bus in real-time.

The system includes a mobile app that allows passengers to view real-time bus locations, estimated arrival times, and bus stop schedules. It also features an online portal for bus operators to manage their routes and schedules, as well as an administrative dashboard for transit agencies to monitor system performance and make real-time adjustments to their operations.

For more information, visit www.mentorengineering.com.
Product and Industry News (continued)

and schedule information online using a desktop computer, smart phone or regular mobile phone.

“Today’s passengers want transit information at their fingertips, and available in an instant,” says Mentor Engineering. Mentor MyRide gives them the information —ranging from real-time maps to real-time bus departure information— that can enhance any transit organization’s customer service. The following sections describe what MyRide provides.

Real-Time Bus Departure Information: Passengers simply select the route and stop they are interested in and MyRide will return departure times for the next three buses passing through the requested stop.

Real-Time SMS: Passengers can text message the transit agency using a designated phone number and the bus stop code from the bus stop they are at. The system will automatically return the departure times of the next few buses leaving that stop.

Configurable Alerts and Notifications: Passengers who sign up for a rider information account at the agency’s website will receive automatic alerts for the specific routes and stops they wish, or system-wide alerts, when they want them. Alerts are sent out via SMS text message or e-mail.

Real-Time Map Updates: By updating MyRide with real-time GPS information supplied by the buses as they run their routes, the system can provide passengers with the real-time location of buses shown as they move on a map and the times they will be at the next stops. Each bus stop also reports the times of the next few buses.

Trip Planning: MyRide integrates with Google™ Maps. Passengers who visit an agency’s website can enter a starting and ending location, and Google will return transit trip options available and highlight their route on a map.

Mentor Engineering’s Sheena Archer told UTM that MyRide is scheduled for its first deployment in February of this year. Archer, the firm’s creative director for marketing, said it will be deployed and beta tested at Texas A&M University (TAMU).

MyRide uses web services provided by Mentor Streets® Transit to get real-time bus location and status information to passengers. Streets Transit is a fully integrated Intelligent Transportation System (ITS) solution that was developed for agencies to make their entire organization more efficient, keep their buses on schedule and their passengers on time.

The Mentor Streets® Transit ITS solution provides transit agencies with Computer Aided Dispatch/Automatic Vehicle Location, in-vehicle schedule adherence alerts, real-time passenger information, and comprehensive reporting and scheduling capabilities. It also provides wayside signs that stand at bus stops or terminals and inform passengers of the estimated departure time of upcoming buses. Using these tools, along with MyRide, transit agencies can keep their passengers informed and up-to-date for every step of their journey.

Mentor Engineering, a leading provider of mobile fleet management solutions, has more than 20 years experience helping hundreds of fleet-based organizations improve customer service, increase efficiency, reduce operating costs, and complete additional jobs each day.

For more information, visit www.mentoreng.com, or contact Jessica Parsons, Marketing Coordinator at (403) 777-3760 or by e-mail at jparsons@mentoreng.com.

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New Speed Trailer Improves Durability and Usability of Portable Radar Speed Signs

Information Display Company, a leading manufacturer of quality radar speed signs and other traffic displays, has unveiled the SpeedCheck DuraTrailer, a speed display trailer that is claimed to set new standards in durability, portability and ease of use.

The company said the new DuraTrailer represents the first significant breakthrough in radar speed trailer construction in more than 20 years.

Completely MUTCD and NHTSA compliant, the SpeedCheck DuraTrailer offers a variety of new design features that address the durability and ease-of-use concerns typically associated with other speed trailers. According to a January press release, the DuraTrailer’s unique high-strength one-piece molded cover, hot-dip-galvanized frame and high grade wiring harness ensure decades of rust-free, trouble-free service. Its lightweight construction and distributed balance design makes the speed trailer simple to maneuver and easy to setup.

The SpeedCheck DuraTrailer’s distinctive offset design and high-mounted sign increases its effectiveness by maximizing the display’s visibility. The trailer’s very low body profile eliminates the dangers associated with traditional speed trailers that hide pedestrians and workers from the view of approaching drivers.

The DuraTrailer is designed to work with any SpeedCheck radar speed sign, variable speed limit sign or intelligent information sign from Information Display Company. It is the only speed trailer system that allows users to quickly change from one sign type to another or switch signs between the speed trailer, portable stand or fixed pole mounting.

Once on the job, the SpeedCheck DuraTrailer’s batteries can keep a radar speed sign or other traffic display running for up to eight weeks without a recharge.

“We’ve found that DOT and Police Departments often don’t get the safety improvements they hoped for with other trailers simply because they are too difficult to use and are therefore left back in the warehouse rather than deployed on site,” said Gary ODell, president of Information Display Company. “The DuraTrailer’s light weight and simple setup design features makes deployment a no-brainer, encouraging day-to-day use, even for short-term projects.”

Information Display Company told UTM that, as a very new product, the DuraTrailer has several test site users and, as of early January, one customer. The Eaton Rapids Police Department in Eaton Rapids, Michigan has been using the trailer for several months now.

“We absolutely love this trailer. It’s so easy to set up. Our previous trailers were cumbersome and difficult to use. The SpeedCheck DuraTrailer is literally grab and go,” Police Chief Paul Malewski said recently. “Our public works department has been using the DuraTrailer and SpeedCheck radar speed sign to capture and report data on average traffic speeds on various roads. It’s been an incredibly easy tool for our traffic studies.”

The SpeedCheck DuraTrailer is the latest innovation from Information Display Company, a company focused on and dedicated to designing and manufacturing effective, high-quality traffic-management technology on the market. Their SpeedCheck radar speed signs are used in more U.S. cities than any other brand.

For more information, visit www.informationdisplay.com or call the company at (800) 421-8325, or contact Gary ODell at gary@informationdisplay.com.
**Product and Industry News (continued)**

**IBM, Telvent to Develop Smarter Traffic Solutions for Smaller Cities**

IBM and Telvent announced that together they will develop smarter traffic solutions that are affordable and customized for small cities, university and government campuses and business districts.

Traffic issues in large urban areas are well known. But congestion is common also in smaller cities and college campuses, where populations and traffic can spike during rush hour or weekend football games. Even in areas with populations of less than 500,000 people, people spend up to 20 hours a week wasted on delays. It can cost cities millions of dollars each year.

Taking advantage of predictive analytics and real-time information from road sensors allows agencies to be more proactive in dealing with traffic and mobility issues, IBM said in a December 17 press release. The solution will apply IBM’s advanced analytics and Telvent’s traffic management expertise to give small urban areas visibility for better traffic control and improving congestion – at a price point for their budgets.

“Whether it is suburban sprawl, corridors with a number of businesses located close together or the limited routes across a university campus, existing infrastructure was not designed to handle the reality of traffic today,” said Rich Varos, Director, Intelligent Transportation Solutions, IBM. “By combining predictive analytics with the realities of system constraints, transportation operators of any size can implement more sustainable traffic planning, improved passenger services and increased efficiencies.”

 Asked to describe the work program, Telvent’s Cary Vick said that IBM has a structured approach in which it takes products – such as databases and web tools – and pre-integrates them in a framework for government or business use. A key part of the framework deals with roads and transportation. “We are partnering to bring Telvent’s software and traveler information systems to IBM’s framework,” he explained. “We are not using a customer as a beta test site.” Vick, the director and product manager for Telvent Smart Mobility - Traffic, said that that small cities and military bases, for example, are underserved and therefore are among the potential targets. “These places have transportation and traffic control needs, but do not have large budgets and staffs,” Vick said. “We are trying to offer a pre-integrated solution to add value without significant cost.”

Based on IBM’s Government Industry Framework and Telvent’s SmartMobility management suite, solution components include IBM Cognos, IBM Traffic Prediction Tool, and DB2, and Telvent products such as MIST, SmartNET, Telvent SmartMobility Tolling, Telvent SmartMobility Parking and Integrated Corridor Management (ICM).

There are several advantages to this new approach. “We think we can deliver functionality with a lower risk of having to integrate products and tools from disparate vendors, particularly vendors of software, and a functional advantage in transportation management and information,” Vick said. He added that IBM has a traffic prediction tool and core competencies in data management and information analytics, and together with Telvent will offer a solution that will enable users to proactively manage potential problems of rapidly increasing congestion. “We also think it is a lower total cost approach — even though it is a turnkey practice,” he said.

It is too soon to estimate the cost of implementation, Vick said. But he noted that IBM and Telvent are in talks with several potential customers with significant traffic management needs including on activity center in a major urban area and a large entertainment complex.

According to IBM, the solution can integrate and analyze data traffic control, road sensors, bus schedules, real-time GPS location and IBM’s advanced analytics. For example, a small city could tap data from GPS devices in sensors embedded in the roadway. It could analyze the information with sophisticated algorithms to predict traffic jams around a special events or large construction projects before they happen. By predicting where traffic jams will be in, say, an hour, drivers could be automatically notified ahead of time, multiple alternate routes could be suggested, and public transportation schedules could be shifted to better handle demand. A large university would be able to anticipate and plan around local constraints on its traffic network like traffic incidents, a football game or unexpected loss of capacity by adjusting bus scheduling, parking information, readjusting traffic signals or re-routing traffic flow. Also, cities could use a wireless system that monitors the availability of parking spaces.

The U.S. Department of Transportation estimates that combining the best practices in operational strategies, such as incident management and optimization of traffic signal control, can reduce total urban travel delay by 500 million hours per year. The new transportation management and analytics system from IBM and Telvent is an affordable solution that provides real-time visibility across the entire transportation network and the ability to manage operations and assets in a more integrated way.

“Real-time visibility across a entire transportation network is key to better traffic management regardless of the size of the area or population, said Ignacio Gonzalez, Telvent chief executive officer. “We will be combining our expertise to give small urban areas transportation operators a cost-effective way to manage the unique mobility issues that they face, helping them improve operational performance, get more capacity out of their existing transportation networks and improving travelers’ experience.”

For more information, please visit [www.ibm.com/smarterplanet](http://www.ibm.com/smarterplanet) and [www.telvent.com](http://www.telvent.com), or contact Sara Deleka Galligan, IBM Media Relations at (415) 545-6715 or Stephanie Trow, Telvent Communications by e-mail at strow@tunheim.com.
This Month’s Survey Results (Survey 1)

Characteristics of Real-Time Bus/Train Arrival Information Systems

Last month, *The Urban Transportation Monitor* conducted a survey to obtain information from organizations who developed and/or marketed Real-Time Bus/Train Arrival Information Systems. Information was obtained from four organizations. The results of the survey are published here.

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Characteristics of Real-Time Bus/Train Arrival Information Systems: Contacts

<table>
<thead>
<tr>
<th>Name of System/ Contact Name/ Organization Name</th>
<th>Telephone/ E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trapeze Traveler Information Public Transit &amp; Demand Response Product Enquiries Trapeze</td>
<td>USA (480) 627-8400 Canada (905) 629-8727 <a href="mailto:info@trapezegroup.com">info@trapezegroup.com</a></td>
</tr>
<tr>
<td>Routeshout Tim Quinn, Executive Vice President RouteMatch Software, Inc.</td>
<td>(404) 253-7846 <a href="mailto:tim.quinn@routematch.com">tim.quinn@routematch.com</a></td>
</tr>
<tr>
<td>Mentor MyRide™ Chris Pettigrew, Transit Product Manager Mentor Engineering Inc.</td>
<td>(403) 777-3760 ext. 238 <a href="mailto:cpettigrew@mentoreng.com">cpettigrew@mentoreng.com</a></td>
</tr>
<tr>
<td>NextBus Thomas Noyes, Director of Business Development NextBus, Inc.</td>
<td>Cell: (415) 350-8865 <a href="mailto:tnoyes@nextbus.com">tnoyes@nextbus.com</a></td>
</tr>
</tbody>
</table>
## Characteristics of Real-Time Bus/Train Arrival Information Systems

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>What is the name of your real-time arrival information system?</td>
<td>Trapeze Traveler Information</td>
</tr>
<tr>
<td>Organization marketing and/or developing system?</td>
<td>Trapeze</td>
</tr>
<tr>
<td>Pricing structure of system?</td>
<td>Based on number of peak fixed route vehicles.</td>
</tr>
<tr>
<td>What type of AVL technology do you require/recommend?</td>
<td>GPS</td>
</tr>
<tr>
<td>How does your system predict real-time arrival information?</td>
<td>Using the real-time AVL adherence status reported from the vehicles, it predicts future stop based arrival information using various definable parameters to increase accuracy and reliability.</td>
</tr>
<tr>
<td>What information can your system provide to passengers?</td>
<td>Waiting time until next bus, current time, route number, service disruptions, final destinations of arriving bus, date.</td>
</tr>
<tr>
<td>How is your information provided to passengers?</td>
<td>Dynamic message signs, Internet, cell phones, IVR, mobile applications.</td>
</tr>
<tr>
<td>What level of accuracy do you generally maintain in predicting the arrival time of a bus or train?</td>
<td>Stop based predictions to the nearest minute.</td>
</tr>
<tr>
<td>How is power typically provided to your real-time display signs at stops and stations?</td>
<td>Typically agencies supply direct power to the signs, but alternative energy signs (solar, wind, etc.) are becoming more prevalent.</td>
</tr>
<tr>
<td>How much customization do you accommodate in your system?</td>
<td>We work with every client to ensure the solution makes sense for their unique needs.</td>
</tr>
<tr>
<td>Please indicate the factors that determine the implementation time of your system and what period of time it typically takes to implement.</td>
<td>The availability of AVL data, client requirement definition, system design, validation of data and installation permits for wayside Signage. Two - 12 months depending on the expanse of the system.</td>
</tr>
<tr>
<td>What advice would you provide to a transit agency considering the implementation of a real-time bus/train arrival information system?</td>
<td>Integration with your other back office software (scheduling, operations, paratransit) can offer you a much richer solution for your customers. Also important to consider who your riders are and what mediums (signs, Internet, mobile applications, etc.) will be of most benefit to them. Be prepared to continue quality assurance as it relates to data preparation.</td>
</tr>
<tr>
<td>What kind of user assistance and technical support is provided after the implementation of a system?</td>
<td>24/7 support, e-learning, an annual user conference, regional workshops, user forums, access to system health checks, informative customer communications through monthly newsletters.</td>
</tr>
<tr>
<td>How many organizations in the U.S. and Canada use your system?</td>
<td>More than 200</td>
</tr>
<tr>
<td>How many organizations in countries other than the U.S. and Canada use your system?</td>
<td>More than 200</td>
</tr>
<tr>
<td>How long has your system been available?</td>
<td>We have been providing traveler information software for over 10 years.</td>
</tr>
<tr>
<td>What improvements to your software are you planning over the next year or two?</td>
<td>We are constantly striving for improvement to accuracy, but also see tremendous potential in mobile devices as the computing platform of the future. Another area of focus is emphasizing ADA community concerns.</td>
</tr>
<tr>
<td>What do you consider to be the main strengths of your software?</td>
<td>Easy to use, customizable, continuous innovation. Our open modular system design gives agencies the flexibility to easily add to their real-time information system.</td>
</tr>
<tr>
<td>What do you consider to be the main strengths of your system?</td>
<td>Accuracy, integration, reliability, dedicated 24/7 support, continuous innovation. Furthermore accurate information to the public for such scheduling techniques as routes at the end-of-line and other real-time schedule adjustments.</td>
</tr>
<tr>
<td>What do you consider to be the main advantages of bus/train arrival information to transit agencies?</td>
<td>Improved rider satisfaction and higher ridership as a result of reduced uncertainty when accessing the transit system and the ability to reduce individual waiting time.</td>
</tr>
</tbody>
</table>
Characteristics of Real-Time Bus/Train Arrival Information Systems

<table>
<thead>
<tr>
<th>What is the name of your real-time arrival information system?</th>
<th>RouteShout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization marketing and/or developing system?</td>
<td>RouteMatch Software, Inc.</td>
</tr>
<tr>
<td>Pricing structure of system?</td>
<td>Investment in real-time transit traveler information systems is a function of the types of media and outlets transit systems wish to push to their consumers. The RouteMatch RouteShout TIS platform supports real-time information through public web portals, bus stop and/or transfer center signs and displays, SMS text message, e-mail notification, traditional phone system interactive voice response, and kiosks. Based on an agency's requirements and local demographics, the costs can vary in range. The most cost-effective method to publish scheduled and real-time information to riders is through basic SMS text messaging, smartphone applications and mobile websites. Apart from standard charges by cellular providers, the RouteShout application is free of charge to passengers who use it on their cellphones, smartphones, tablets or the Internet to access real-time arrival times. The most important factor is the accuracy of the real-time data and predictive arrival information which requires precise vehicle tracking systems capable of supporting published and open APIs.</td>
</tr>
<tr>
<td>What type of AVL technology do you require/recommend?</td>
<td>GPS</td>
</tr>
<tr>
<td>How does your system predict real time arrival information?</td>
<td>The system uses a combination of real street network data, real-time GPS information and predictive analysis algorithms to pull, convert and push real-time arrival times to passengers.</td>
</tr>
<tr>
<td>What information can your system provide to passengers?</td>
<td>Dynamic message signs, Internet (<a href="http://www.routeshout.com">www.routeshout.com</a>), cell phones, smartphones (e.g. iPhones and Androids) and tablets (e.g. iPads), SMS text messaging, interactive voice response.</td>
</tr>
<tr>
<td>What level of accuracy do you generally maintain in predicting the arrival time of a bus or train?</td>
<td>Our real-time predictive arrival algorithms are very accurate and integrate both real-time GPS information as well as actual real world travel conditions to predict route and bus arrival times. The accuracy is in the 95% to 98% accuracy level assuming we receive accurate GPS information. Overall, passengers have been satisfied with the speed and accuracy of getting real-time information. Some fluctuation may occur depending on GPS coverage areas and data availability.</td>
</tr>
<tr>
<td>How is power typically provided to your real-time display signs at stops and stations?</td>
<td>RouteMatch recognizes that power delivered to bus stops and stations via traditional methods can be a logistical challenge, and costly. That is why RouteMatch is focused on alternative, more energy efficient means of providing real-time traveler information through the RouteShout platform and IVR technologies.</td>
</tr>
<tr>
<td>How much customization do you accommodate in your system?</td>
<td>Although RouteShout is a turnkey solution for many agencies, RouteShout is highly customizable for agencies requiring additional modifications. For example, graphics can be modified, and call scripts and workflow can be re-engineered, in a seamless manner. Since the RouteShout TIS system is a platform, it is productized and modular to allow systems to pick and choose the multiple outputs to push real-time data. This could include bus signs, transfer center displays, travel kiosks, web sites, SMS text, smartphone applications, and digital voice phone systems. RouteMatch can easily package a single modules or all modules for easy configuration and rollout. All systems are maintained and improved upon on an ongoing basis and customer feedback input drives our product development priorities.</td>
</tr>
<tr>
<td>Please indicate the factors that determine the implementation time of your system and what period of time it typically takes to implement.</td>
<td>For most agencies, RouteShout takes no more than one hour to install, with an easy &quot;drag and drop&quot; management interface. All that is required is an Internet connection, and data source. Key factors that impact implementation time frames include how an agency would like to push to real-time information to its riders. Basic SMS text messaging for real-time information and subscription alerts to fixed route can be configured very quickly. More advanced and physical hardware traveler information systems usually require installation and, sometimes, architecture and engineering services, requiring multiple weeks of implementation time.</td>
</tr>
<tr>
<td>What advice would you provide to a transit agency considering the implementation of a real-time bus/train arrival information system?</td>
<td>Determine and clearly understand your ridership demographics, your budget, and the most appropriate real-time dissemination method that impacts the largest percentage of riders wanting real-time information. University systems may opt to focus on SMS text messaging and smartphone apps where other systems may determine that physical sign displays in major transfer centers may create more value. Audience, budget, architecture, and ongoing maintenance of the system should be considered. A major item to consider is scalability. Many vendors supply a single method for traveler information; however, a partner that can supply multiple methods and options may be more scalable for your future needs and technology growth.</td>
</tr>
<tr>
<td>What kind of user assistance and technical support is provided after the implementation of a system?</td>
<td>RouteMatch provides 24/7/365 customer support to all of our customers through a customer contact center located in our Atlanta, GA headquarters. Users can call, e-mail, chat, or login to our customer support web site to receive assistance and support for any of their RouteMatch solutions.</td>
</tr>
<tr>
<td>How many organizations in the U.S. and Canada use your system?</td>
<td>51-200</td>
</tr>
<tr>
<td>How many organizations in countries other than the U.S. and Canada use your system?</td>
<td>1-10</td>
</tr>
<tr>
<td>How long has your system been available?</td>
<td>RouteShout has been available since 2008. It was acquired by RouteMatch Software in January 2011.</td>
</tr>
<tr>
<td>What improvements to your system are you planning over the next year or two?</td>
<td>RouteMatch is continually improving and refining its core functionality and bases this on the input received from both our customers and their ridership. Making real-time transit information ubiquitous is our goal.</td>
</tr>
<tr>
<td>What do you consider to be the main strengths of your software?</td>
<td>Real-time arrival information made easy; one platform for all rider communications that will grow with ridership, routes and technology needs; turnkey and quick - can be deployed within days; works with all scheduling technologies; one stop for easy administration; extensive reporting and data analysis tools; API is available for 3rd party access and development; hosted or on-premise; revenue generating capabilities via mobile advertising.</td>
</tr>
<tr>
<td>What do you consider to be the main strengths of your system?</td>
<td>RouteShout's strength lies in its ability to help transit agencies with, or seeking, fixed route or paratransit operations, with real-time arrival times. There is little management and additional resources required. Since it is a platform, it can easily help transportation agencies connect to operational software. When combined with RouteMatch's fixed route management tools and analytical engine, transit agencies can pull logistical data, and convert it into information meaningful to travelers.</td>
</tr>
<tr>
<td>What do you consider to be the main advantages of bus/train arrival information to transit agencies?</td>
<td>Increases passenger adoption and creates a more positive user experience. Having arrival times at pick-up or while en route readily available through a cell phone, iPad, etc. via text messages or web portal can influence a rider's route choice, time commitment, and mode of transportation. Helps transit agencies save money and time. Timely passenger communication lowers risk of no-shows, and also helps reduce the number of inbound calls from passengers seeking schedules, or inquiring about delays caused by weather, events or other disruptions. It lets transit agencies get the most value from their existing GTFS data and to convert it to meaningful passenger information. Agencies can make the most of their previous investments. Provides additional funding sources for agencies via mobile marketing. Real-time traveler information signage and alerts create additional funding sources through advertising.</td>
</tr>
</tbody>
</table>
Characteristics of Real-Time Bus/Train Arrival Information Systems

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>What is the name of your real-time arrival information system?</td>
<td>Mentor MyRide™</td>
</tr>
<tr>
<td>Organization marketing and/or developing system?</td>
<td>Mentor Engineering Inc.</td>
</tr>
<tr>
<td>Pricing structure of system?</td>
<td>Various options to accommodate either capital or operating budgets.</td>
</tr>
<tr>
<td>What type of AVL technology do you require/recommend?</td>
<td>GPS</td>
</tr>
<tr>
<td>How does your system predict real time arrival information?</td>
<td>The on-board system is constantly monitoring a vehicle’s progress as it passes through time points and stops. Deviations to the</td>
</tr>
<tr>
<td></td>
<td>schedule are reported in real-time to the agency. Updates to bus departure information at future stops are immediately retrieved by</td>
</tr>
<tr>
<td></td>
<td>Mentor MyRide through web service calls from the agency’s server.</td>
</tr>
<tr>
<td>What information can your system provide to passengers?</td>
<td>Waiting time until next bus, current time, route number, service disruptions, final destinations of arriving bus, date, current</td>
</tr>
<tr>
<td></td>
<td>passenger capacity, locations of all bus stops (along with visual ‘street views’ of each stop), predicted departure times for each</td>
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<td>vehicle to their next 3 destinations, predicted departure times of the next three vehicles (for each route) passing through any given</td>
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<td>stop, customized SMS, and e-mail alerts at user-configurable times (providing departure information).</td>
</tr>
<tr>
<td>How is your information provided to passengers?</td>
<td>Dynamic message signs, Internet, cell phones, smart phones. 当然可以，这取决于您所提供的信息类型。</td>
</tr>
<tr>
<td>What level of accuracy do you generally maintain in predicting the arrival time of a bus or train?</td>
<td>Typical accuracy is 1-2 minutes.</td>
</tr>
<tr>
<td>How is power typically provided to your real-time display signs at stops and stations?</td>
<td>Standard power connection is typical, however solar options are available depending on the sign choice.</td>
</tr>
<tr>
<td>How much customization do you accommodate in your system?</td>
<td>Color schemes, logos and whether to show or hide certain functionality from a user interface perspective. Users can also choose to</td>
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<td></td>
<td>simply use the real-time web services to pull data into their existing site.</td>
</tr>
<tr>
<td>Please indicate the factors that determine the implementation time of your system and what period of time it typically takes to implement.</td>
<td>Factors which influence implementation time include: Number, location and availability of existing architecture for wayside sign</td>
</tr>
<tr>
<td></td>
<td>deployment. Does an agency want to incorporate the data only into their existing sites and create their own user interface, or do they use the standard solution? Factors which influence implementation time include: Number, location and availability of existing architecture for wayside sign deployment. Does an agency want to incorporate the data only into their existing sites and create their own user interface, or do they use the standard solution? Existing GPS-based CAD/AVL infrastructure and if this is in place already. An agency can expect anywhere from a day or two of software installation and training to a 4-8 month process depending on availability of all the prerequisites.</td>
</tr>
<tr>
<td>What advice would you provide to a transit agency considering the implementation of a real-time bus/train arrival information system?</td>
<td>When budget is a concern, ensure they consider the cost/benefit of the number of wayside signs they deploy as these are often a more</td>
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<td>costly part of the solution. Almost everyone has a cell/smart phone and can access the SMS or mobile website functionality.</td>
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<td>Garbage in, garbage out: you must be diligent in ensuring that the electronic schedule matches the actual schedule. Schedule changes</td>
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<td>must be maintained and addressed or inaccurate information will be delivered to riders and they will lose trust in the system.</td>
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<td></td>
<td>Real time bus/train arrival systems should be part of a much larger technology deployment plan. The value of deploying a real-time</td>
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<tr>
<td></td>
<td>bus/train arrival system in conjunction with a proper CAD/AVL solution is that it will ensure agencies are more efficient at managing</td>
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<td>their operations and improving on-time performance rather than just reporting on it.</td>
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<tr>
<td>What kind of user assistance and technical support is provided after the implementation of a system?</td>
<td>Our clients always have direct 7x24 access to the team of engineers that implemented their system.</td>
</tr>
<tr>
<td>How many organizations in the U.S. and Canada use your system?</td>
<td>1-10</td>
</tr>
<tr>
<td>How many organizations in countries other than the U.S. and Canada use your system?</td>
<td>1-10</td>
</tr>
<tr>
<td>How long has your system been available?</td>
<td>Mentor Engineering has been in the fleet management business since 1988. Our fixed-route product has been on the market for 6 years; our passenger information component has been available for about 2 years.</td>
</tr>
<tr>
<td>What improvements to your system are you planning over the next year or two?</td>
<td>Enhanced web client functionality, further passenger information development to include tailored agency-wide notifications to</td>
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<td>individual riders, and further developments on our transfer station sign functionality.</td>
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<td>What do you consider to be the main strengths of your software?</td>
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<td>transit agencies. Once deployed, MyRide dynamically pulls information from the CAD/AVL system, so changes to the schedule only need</td>
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<td>to be made in one place.</td>
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<tr>
<td>What do you consider to be the main strengths of your system?</td>
<td>Mentor MyRide™ makes real-time and static schedule information available to passengers anytime they want it, no matter their location. The mobile web site allows easy access to information from any smart phone device. Passengers can get instant real-time bus departure information through the website or by SMS. The integration with Google Maps allows passengers to plan their trips easily from start to finish and gain a visual reference for their route. By updating MyRide with real-time GPS information supplied by the buses as they run their routes, passengers have accurate, detailed information about the immediate location of vehicles, bus capacity, and the times of the next buses passing through their stop. Passengers can also set up customized email or SMS alerts and notifications for their specific routes and buses they use so up-to-the-minute transit information is always at their fingertips. MyRide takes the guesswork out of using transit for passengers and helps agencies provide better customer service.</td>
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### Characteristics of Real-Time Bus/Train Arrival Information Systems

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>What is the name of your real-time arrival information system?</td>
<td>NextBus</td>
</tr>
<tr>
<td>Organization marketing and/or developing system?</td>
<td>NextBus, Inc.</td>
</tr>
<tr>
<td>Pricing structure of system?</td>
<td>Pricing is primarily based on number of units and size of the fixed route system (number of routes and number of bus stops). Pricing is also based on the options purchased. The software is provided through the Software as a Service (SaaS) model with a yearly subscription fee.</td>
</tr>
<tr>
<td>What type of AVL technology do you require/recommend?</td>
<td>GPS</td>
</tr>
<tr>
<td>How does your system predict real time arrival information?</td>
<td>Predictions are created using a patented algorithm. The algorithm takes into account the current position, heading, and speed of the vehicle, along with historical travel times and published timetables (if provided). The system understands that travel times are different depending on time of day and day of week (for example, travel times at noon on Monday are very different from travel times at 8am on Thursday).</td>
</tr>
<tr>
<td>What information can your system provide to passengers?</td>
<td>Waiting time until next bus, current time, route number, service disruptions, final destinations of arriving bus, date, passenger alerts, informational messages, maps of live bus locations, passenger loads.</td>
</tr>
<tr>
<td>How is your information provided to passengers?</td>
<td>Dynamic message signs (both LED and LCD), Internet, cell phones (and landline phones through a telephone IVR system, smartphone applications, XML data feeds, integration with area 511 systems, SMS text messaging.</td>
</tr>
<tr>
<td>What level of accuracy do you generally maintain in predicting the arrival time of a bus or train?</td>
<td>Plus or - 1 minute, 90% of the time and + or - 2 minutes 95% of the time.</td>
</tr>
<tr>
<td>How much power typically provided to your real-time display signs at stops and stations?</td>
<td>It can be either 110V/120V AC or 12V DC (solar powered).</td>
</tr>
<tr>
<td>How much customization do you accommodate in your system?</td>
<td>Extensive customization can be accommodated in the NextBus system. This includes both the way information is provided to the passengers as well as back-end integrations with 3rd party software packages and on-board hardware integration with 3rd party vehicle hardware (fareboxes, headsigns, MDTs, automatic passenger counters, engine telemetry, automated voice annunciation systems, etc.). Custom websites, dynamic message signs, and software integration is quite common with NextBus customers.</td>
</tr>
<tr>
<td>Please indicate the factors that determine the implementation time of your system and what period of time it typically takes to implement.</td>
<td>Main factor is the number of vehicles to be equipped with hardware and the number of routes to be configured. Other factors include the options required and any additional engineering work for customization of the passenger interfaces or back-end hardware and software integrations. Implementation can be as short as 4 weeks or as long as 6 months.</td>
</tr>
<tr>
<td>What advice would you provide to a transit agency considering the implementation of a real-time bus/train arrival information system?</td>
<td>Try before you buy if possible! NextBus offers very low cost pilot projects on a portion of the transit system. Not all RTPIS systems are created equal and NextBus provides the most comprehensive suite of passenger information modes in the industry.</td>
</tr>
<tr>
<td>What kind of user assistance and technical support is provided after the implementation of a system?</td>
<td>Customer support is available 24/7/365 for any problems or questions. In addition, extensive online help files and information is available. NextBus ensures that customers are thoroughly trained before the roll out of the system.</td>
</tr>
<tr>
<td>How many organizations in the U.S. and Canada use your system?</td>
<td>51-200 (NextBus has more RTPIS customers than all other vendors combined).</td>
</tr>
<tr>
<td>How many organizations in countries other than the U.S. and Canada use your system?</td>
<td>1-10</td>
</tr>
<tr>
<td>How long has your system been available?</td>
<td>Since 1996</td>
</tr>
<tr>
<td>What improvements to your system are you planning over the next year or two?</td>
<td>Enhanced mobile applications, improved prediction algorithm, additional hardware options on-board the vehicles.</td>
</tr>
<tr>
<td>What do you consider to be the main strengths of your software?</td>
<td>The ability to provide extensive software customization (including 3rd party software integration).</td>
</tr>
<tr>
<td>What do you consider to be the main strengths of your system?</td>
<td>The combination of factors: the most comprehensive suite of passenger information modes, the best pricing in the industry, and the ability to provide extensive software and hardware customization (including 3rd party software and hardware integration).</td>
</tr>
<tr>
<td>What do you consider to be the main advantages of bus/train arrival information to transit agencies?</td>
<td>For passengers: Dramatic reduction in passenger complaints, increased ridership (especially among riders who normally drive themselves), increased ease of trip planning (especially among overlapping transit agencies), and overall improved knowledge of the transit system. For agencies: Ability to closely monitor driver performance, accident analysis, ridership metrics, operational performance metrics (headways, schedule adherence, etc.), and the dramatic reduction in capital and operating costs related to customer service and processes that are automated through the NextBus system (on board next stop announcements, passenger counters, etc.).</td>
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This Month’s Survey Results (Survey 2)

The Use of Social Media by Transportation Agencies

Last month, *The Urban Transportation Monitor* sent survey questionnaires to transportation professionals to obtain information and opinions on the application of social media by their transportation agencies. Surveys were sent to 500 cities, counties, transit agencies, MPOs, and state DOTs. Altogether 43 responses were received, for a response rate of 10%. The results of the survey are published here.

Which of the following social media platforms/tools do your agency use on a continuous basis?

<table>
<thead>
<tr>
<th>Social media platforms/tools</th>
<th>Percentage of Respondents</th>
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</thead>
<tbody>
<tr>
<td>Twitter</td>
<td>51%</td>
</tr>
<tr>
<td>Facebook</td>
<td>54%</td>
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<tr>
<td>YouTube</td>
<td>37%</td>
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<tr>
<td>LinkedIn</td>
<td>11%</td>
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<tr>
<td>Myspace</td>
<td>0%</td>
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<tr>
<td>Blogs</td>
<td>26%</td>
</tr>
<tr>
<td>Other</td>
<td>51%</td>
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</table>

What is Twitter used for? (Responses listed in order of frequency provided.)
- Brief communications of news including local news, transportation- or transit-related news, and discussions of specific topics.
- Service alerts regarding weather, route adjustments or detours, construction updates, etc.
- Direct communication with customers regarding rider questions, customer feedback, etc.
- Sharing updates on projects, construction, and specific studies such as a Corridor Study.
- Marketing, public relations and brand-building.
- Fun stuff such as contests and promotions.
- Upcoming events and meeting notices.
- Communicating transportation-related news with specific groups of customers, such as "Clean Commute" followers.
- Pass sales.
- Business partnership information.

What is Facebook Used For? (Responses listed in order of frequency provided)?
- Announcements, updates and alerts regarding service, detours, construction and transportation-related meetings.
- Marketing and public relations, including community and brand building.
- Communication with riders and non-riders about special events and public meetings that the transportation authority is participating in or holding.
- Brief news updates including transportation and local news.
- Information about contests or special promotions.
- Direct communication with customers including feedback or a fan page for consumer comments.
- Explanatory posts about transit-related routes, and schedule information and services.
- Items of interest to riders and "influencers" such as air quality information, general transportation savings and other facts.
- Relevant links to other community interests (sustainability/environmental, regional transportation topics).
- Weather and other "emergency" communications.
- Pass sales.
- University bus & sustainable transportation communications.
- Business partnership information.
- Information about what's new at the transportation agency.
- Biweekly activities update.
The Use of Social Media by Transportation Agencies (continued)

What is YouTube Used for? (Responses listed in order of frequency provided.)
- To post and share videos or visual descriptions of transportation service or routes.
- Promotions, marketing and outreach especially regarding transportation projects and programs.
- News including transportation agency and general town news.
- Educational videos (how to use tickets, how to board bikes, etc.).
- To tell stories including employer partner stories, "clean commuter" stories and testimonials.
- To link to other transit or safety videos.
- To post and share videos that highlight the transportation organization's purpose.
- Hosting videos that are played on our main website.
- High school and college campus events or interview.
- Planned usage: interviews with planners and interns during data collection and field work.
- Construction updates and meeting notices.

What is LinkedIn Used for? (Responses listed in order of frequency provided.)
- Maintaining company profile/presence on the site.
- Business networking for some employees.
- Planned usage: professional networking.
- Recruiting

What is a blog used for? (Responses listed in no particular order.)
- Highlighting important topics and stimulating discussion.
- Allowing riders a forum to air opinions and ask questions.
- Providing a forum for sharing more in-depth information with the public and for getting feedback.
- Providing responses to media inquiries.
- Explaining policies, decisions and programs in greater detail and directly to customers.
- Planned usage: opportunity to educate and dialog with the public.
- Posting passenger notices that are not considered urgent.
- Customer engagement, public relations, news, and community and brand building.

What other social media platforms/tools do you use? (Responses listed in order of frequency provided)
- E-mail - opt-in list serve e-mails for routine service notices, special promotions, weather and other "emergency" communications; e-mail alerts to notify passengers that sign-up about service changes and detours; e-mail subscription by route or project with regular updates.
- Flickr - For sharing photographs of transportation agency and community projects and for posting current and historic agency photos.
- RSS Feeds - general information dissemination.
- Animoto - to aid in our visual outreach, we share photos put to video and music that depict events and activities throughout the year, etc.
- nuAlerts - for simultaneous dissemination of bulletins to registered e-mail, Facebook, Twitter and LinkedIn accounts.
- CodeRED - Phone specific area of an issue usually on an emergency basis.
- SMS Text Messaging - used for route and schedule information (route specific).
- Website - technical appendix to the blog site with more detailed info about our plans and studies, as well as information about our Policy Board meetings.
- Comment boards - on our website to collect citizen responses to specific items (such as plan alternatives) or general comments.
- Mindmixer - used to conduct virtual town hall exercises that allow participants to enter and evaluate different proposals.
- Foursquare - customer engagement, location-based messaging (not real time), community and brand building.
- Formspring - receive user questions with opportunity for in-depth explanations.
- Hootsuite: This tool allows us to monitor what is being said about us on the social networks and we can respond directly to our audience via the correct medium.
- Scribd: to post planning and other documents.
- Groupon - Considering use for discounted passenger fares.
- City website, newspaper, radio and TV (and their websites), and advance project signs.
- E-newsletter - general information dissemination.
- Vimeo - video-sharing website.
The Use of Social Media by Transportation Agencies (continued)

What do you consider to be the most effective social media platforms/tools for your agency for reaching primary audiences/stakeholders? (Responses listed in order of frequency provided)

- Facebook
- Twitter
- email
- e-newsletters
- local newspapers
- website

What do you consider to be the most effective social media platforms/tools for your agency for getting a message/information out to as large a percentage of the public as possible? (Responses listed in order of frequency provided)

- Facebook
- email
- website
- Twitter
- newspaper

What do you consider to be the most effective social media platforms/tools for your agency for getting a message out as quickly as possible? (Responses listed in order of frequency provided)

- Twitter
- Facebook
- email
- radio

What do you consider to be the most effective social media platforms/tools for your agency for obtaining feedback from primary audiences/stakeholders on a specific project? (Responses listed in order of frequency provided)

- Facebook
- Twitter
- Website
- email

What do you consider to be the most effective social media platforms/tools for your agency for providing ongoing information to the public that might not be very time-sensitive? (Responses listed in order of frequency provided)

- website
- Facebook
- Twitter
- Blog
- YouTube
The Use of Social Media by Transportation Agencies (continued)

What do you consider to be the main advantages of using these social media platforms/tools? (Responses in no particular order.)

- Important content that speaks to our priorities can be shared, and the content won’t get buried on our website and distract from important service information that people need the most.
- By using social media we are able to constantly engage our customers as well as overall community members who are interested in our services. It allows us to send out our message to either the overall audience, or send out separate messages geared at different audiences, all for a very low cost.
- Social media allows us to get important updates to the community on the Corridor Study we are conducting right now, and to garner vital support for the project from multiple stakeholders and community members.
- One important point to remember is: The discussions about transportation and our services are going to take place with or without us, so it is in our best interest as an agency to participate and listen to those discussions.
- By using social media networks, we are able to further extend the reach of our customer service while quickly responding to complaints, service requests, questions on routes and more - and most importantly, we are responding in the correct mediums in which our customers & audience are actively participating.
- There’s definitely a difference in reaching the demographic of “youth” who are more attuned to using and communicating with electronics (cell phones, internet). At the same time there’s an upswing in the general population using electronics for communication. And with that in mind, the ability to post current information about our transit system and its services and allow the public to keep up-to-date in a timely fashion is truly a change in how we manage and communicate that information.
- We’ve had the local media more and more turn to these outlets for updates, and they seem through then their own Twitter and other outlets to relay our messages in a more timely manner.
- Quick ability to update especially when information changes rapidly; easy to use when not at a computer (through smart phones); can quickly deal with questions and issues without escalating (or tying up additional resources, like Customer Service phone line); ability to reach many people at once; viral nature of information (riders and community members can help us by passing info along); ability to monitor conversations about the agency.
- It is how a many people communicate so it is important to use these mechanisms as a way of performing outreach. Since some of these can also act as means of soliciting feedback, they are important for taking ‘temperature reads’ but not good for getting statistically significant information.
- They allow us to communicate directly with customers and get immediate feedback.
- They give customers a way to cut through the bureaucracy to get information or make service requests.
- Using social media allows us to reach people where they are communicating rather than expecting them to come to our website or subscribe to our news releases.
- It makes us seem more “hip” to the public; we have a huge student population.
- Efficient use of technology (from a cost perspective) while providing immediate information to stakeholders.
- It is an excellent tool to communicate with the public in real time, concerning road closures, road work, meetings etc., and also an easy way for citizens to report issues such as potholes, downed signs, etc.
- These platforms create a community-based forum for real-time discussions. I think the customers appreciate this. Being able to publicly respond to users and address misinformation is also an advantage.
- Reach a population that does not normally follow/participate in planning process.
- Reaching the public - and your most engaged stakeholders, e.g., policy board and/or technical advisory committee members in the online spaces where they hang out. If done right, it’s an opportunity for two-way communication, to dialog, clarify points, and answer questions.
- Social media provides useful communications and outreach programs to ensure the public has easy access to transportation information.
- Mindmixer has been very valuable in reaching an audience that would not normally be involved in planning conversations. It allows people to participate from their home at any time of the day or night.
- It is an inexpensive way to communicate in a more informal setting to people who have asked for the information.
- Social media offers another set of tools in the communications tool chest. It is another way to move our message directly to customers. Some social media channels, like Twitter, offer a relative immediacy and a push capability that passive outlets lack. We also see a lot of pull through by other social media outlets and that helps spread our message. Finally, customers expect to interact with us in the social space so we need to be there to meet expectations.
- A low cost way with broad distribution to diverse audience.
The Use of Social Media by Transportation Agencies (continued)

What do you consider to be the main pitfalls or disadvantages of using these social media platforms/tools? (Responses in no particular order.)

- Avenue for community to be hateful and not productive; it can be time-consuming; speed with which inaccurate information can be spread; content disappears quickly.
- The main disadvantages would include only being able to share information with those who have accounts with the various social media platforms, and dealing with the potentially huge number of inquiries the County would receive if we allowed citizens to submit requests/complaints via these social media platforms.
- I know many professionals are worried about the transparency. However transparency allows us to be viewed as trusted sources, providing valuable content. By participating, even if we are responding to criticism, we are showing that we are a company that cares about our customers and the community we operate in.
- The only possible negative I can think of results from many agencies not understanding how to correctly use the social media platforms so they are used ineffectively and money/time can be wasted. Social media is only 1 tool in the toolbox, and can not be effective without linking with other "traditional" forms of media.
- Feedback from the "public" is not clearly distinguishable when it comes to negative comments. Or how to judge the perspective of one individual versus a concern voiced that has larger implications.
- Responding back in a timely fashion can be a challenge, especially given the nature of social media being in the 'here and now.'
- Currently there's no easy way to 'target market' our service area. Social media tends to be a shotgun approach and learning how to use it effectively does take time.
- We've declined to use Twitter due to several reasons -- the character limitations are too severe to yield useful messages, and I find most of the inane (at best) or profane (common) "dialogues" that take place in the Twitter community to be pointless.
- Since the platforms are available 24/7, riders may expect immediate answers or assistance 24/7. That's not realistic given our limited staffing.
- The anonymity of the Internet means that sometimes rider comments on Twitter, blogs, etc. are not constructive and are just mean-spirited.
- Basing trends or input solely on the responses from social media solicitations may give an incomplete picture as it does not necessarily represent a complete sample of the population.
- Need to sift out responses unrelated to the issue at hand.
- There is a significant risk of alienating your audience if you do not use these tools properly and do not respond promptly to incoming messages. It could add to the negative perception of your agency as an unresponsive bureaucracy.
- We have 810 Twitter followers and only 175 Facebook friends - a VERY small percentage of our ridership.
- Allowing social media into the office workplace has potential to be abused by employees.
- Keeping up with the next fad.
- Our information technology department feels social networking is a distraction and compromises our network. We are forbidden from using any social networking media.
- Sound bits of information can't tell the story. It must be supported with other communication messaging.
- Difficulty measuring effectiveness.
- Have to really keep it up with news/information or it becomes stale and useless.
- Social media only addresses a certain segment of the population. It's easy to focus on the social media to the exclusion of traditional outlets, i.e., local newspapers, TV and radio.
- Engaging in social media requires a shift in tone and perspective. While one of our goals is to establish our expert status, we also need to learn to write differently, i.e., adopt a less formal tone.
- We have not had very good participation on Twitter and Facebook, and YouTube has gotten only moderate hits. We have much better participation with Mindmischer, comment boards and alerting people via our extensive email list.
- The casual nature can create situations that need to be carefully dealt with.
- Possibility of being misunderstood, or providing incorrect information.
- The resource requirements can grow quickly unless there's a clear plan for keeping things under control and in perspective relative to other work.
- Only reaches web-enabled community. Language is mainly in English. (We need Chinese and Spanish). Dialogue is too fast for staff to keep up.
The Use of Social Media by Transportation Agencies (continued)

Is your agency planning increased use of these social media platform/tools in future?

Percentage of respondents who responded "yes:" 86%
Percentage of respondents who responded "no:" 14%

Reasons provided for responding "yes" (Responses listed in no particular order.)

- We consider ourselves to be nimble and will adapt our approach as the platforms mature, change, grow.
- We are planning on putting to use the social media strategy created by our employee and integrating social media as a vital component of our marketing mix and customer service.
- There's definitely a growing interest and demand for getting transit information from the internet. In that regard we're still tooling up and putting more time into training staff to maintain and create more items for our various social media outlets. We are exploring other social media tools to see if there are any that could help us distribute traffic advisories and other timely information to stakeholders.
- Yes, we're slowly but surely building our followers and will use social media tools as much as possible.
- We are planning a full social media integration into our agency website structure.
- We have been using all these tools in our current update of the comprehensive plan/LRTP, and intend to incorporate them in other ways in the future
- Instead of replacing a planner, we have hired a planning assistant who will focus (half-time) on coordinating public involvement efforts and implementing our social media strategy.
- We are looking at better ways to use Facebook, Twitter and YouTube.
- We expect the overall use of social media platform/tools to grow as that has been the trend with followers/likes, etc. We have no specific plans to increase or change our use of these platform/tools.
- We plan an overhaul of our website and include the incorporation of YouTube, Vimeo, and an agency blog for media materials. Each major project/mode will have a social media component. We will be using more applications for the project development.

Does your agency apply a specific policy or guide on how these social media platforms/tools should be used?

Percentage of respondents who responded "yes:" 86%
Percentage of respondents who responded "no:" 14%

Comments received by respondents. (Responses listed in no particular order.)

- Vulgar or offensive language is prohibited and these posts are immediately deleted.
- We have a social media team that forms guidelines. They are the main people handling our social media outreach.
- The communications match the tone and wording of our "regular" web site, and our written communications (shortened when necessary to meet character limitations). We don't generally get terribly "informal" on the Facebook.
- We have base Twitter hours set and will deviate from those as needed. Additionally, as our Twitter feed is run by marketing, there is a limit to what kind of service information is available through the account. (For example, marketing doesn't normally have details on out-of-service buses.) So, in some instances, riders are referred to the Customer Service phone line for more assistance.
- There are controls put in place by our Community Relations Department. These communications must go through them to be filtered for content.
- The city has a policy directive for Twitter, Facebook and YouTube usage.
- Right now it is controlled by one group to assure the information sent out is appropriate.
- There are no set guides in place. However, these methods are used more to disseminate information than to solicit information.
- Six respondents said policy or guidance is being considered or developed. Comments included: we will be developing one as a first step to implementing a social media strategy; we are doing some research on this; we are in the process of developing one; we have a draft communications guide that we follow for all communication; we have multi-disciplinary teams and inter departmental projects where multiple agencies are managing the project.
The Use of Social Media by Transportation Agencies (continued)

How has the use of social media changed the amount of staff time as it relates to the media and the public? (Responses are in no particular order.)

- Vulgar and offensive language is prohibited in both comments and shared links.
- The strategy we will be following outlines the key social media platforms we should be using, how to best use them to communicate our various messages, and identifies free or low-cost tools to monitor these networks. The team that was recently set up will identify the different people/departments who should be monitoring and responding via the networks and allow them to respond appropriately without needing constant executive approval. Social media is meant to be quick or in real-time, so we have identified the correct people to put the messages out there representing our agency.
- Twitter hours currently match office hours (M-Th 8 a.m. - 4:30 p.m., Fri 8 a.m. - 4 p.m.), though our Twitter staffer will often sign off later than 4/4:30 p.m. and will tweet during off-hours if special service announcements need to be made.
- No personal use responses to be related directly to topic. Department Heads or above in organization chart to be respondent (or designee).
- The use of social media tools within the agency must be approved by the Office of Communications.
- It will address who should respond/post on these platforms, response timeframes and goals.
- As part of the city of Charlotte, our policy does NOT allow the public to post comments on social media sites. Thus we do not have a Facebook site since all it would be is a replication of our website. The same is true for sites such as Four Square.
- To ensure that Orange County Transportation Authority's (OCTA) e-communications are carried out responsibly, with strategic value, and appropriately reflecting the OCTA brand.
- No personal usage, messages must be appropriate, videos must have approval of director, only certain staff have the username and password information, may not log in under your personal username.
- Marketing manager drafts communication, approved by director of planning and marketing and the general manager.
- On the public side we have comment policies. On the corporate side we had a set of existing Internet use and external communication policies that we apply to social channels.
- It essentially states the users are responsible for their content and that they are representing the agency whenever they post; that they should disclaim their role as an agency employee; and that they need to remember that whatever they post can easily and readily be re-distributed with or without their consent.

How has the use of social media changed the amount of staff time as it relates to the media and the public? (Responses are in no particular order.)

- I was hired in July 2010 to create and manage social media pages for our transit district. I consult with two others from my department on certain content questions or site design, but day-to-day management is primarily my responsibility.
- Since we use social media as only one component of our media relations/PR, it has added a bit of time. However, by dedicating certain time slots each day to social media, we believe will be able to cut down on excessive time spent on social media. Overall, social media allows us to share our media updates or other news, contests, etc. quickly and that message can be shared with a very wide network.
- You have to gear up, train and be involved with social media on a regular and sometimes constant basis (service updates for example during inclement weather). While it only takes a few minutes to update information, our marketing division needed to assign staff to specific daily tasks in order to maintain our presence on these websites.
- The repurposing of messages, and disseminating them over a range of outlets, has added minimal time for the staff, rather just redirecting time that might have been sent trying to get “media releases” out in another way.
- In many instances, it has provided an alternative to calling the Customer Service phone line.
- Using meta-tools like nuAlerts has allowed us to take advantage of social media without too much added increase in work as one post allows us to broadcast our message over several platforms at once.
- Increased staff time due to ease of public assess and volume of inquiries, responses, and information exchange opportunities.
- I'm the only one who does it, and it does not take up too much of my time.
- Social media has become an added component to all media, marketing and communication campaigns and activities. It is not an option, but not a key component to every message.
- It has required perhaps 0.20 FTE of staff time, plus we are getting free services from a consultant for whom we are beta testing the software.
- We have a Community Relations Department so they handle a bulk of the social media work.
- It has increased staff time to push information through multiple channels.
- It has added very little since we cannot engage in two-way conversation. It still is a one-to-many communication mechanism.
- I think it takes more time to do the regular work and then make sure there is something fresh on Facebook on a regular basis.
- We have dedicated a staff member to this task about half-time. For the rest of our staff, the shift is not so much the amount of time spent, as the fast turnaround time now required - to respond to blog comments, for example, within the same workday.
- It will be determined. However, the tremendous preparation for open houses and public meetings is very time-consuming. Sending out a message is much quicker.
- One percent of External Affairs staff time is spent on social media efforts.
- It does take some time to manage the social media activities. We have added an intern position to help.
What advice can you provide to transportation agencies contemplating the use of social media platforms/tools?

- I believe social media pages require time and commitment. Users can quickly determine whether a page or feed is regularly tended to or if it has periods of little output. Start with Twitter and Facebook. The two sites link well together and can allow the user to generate regular content with less work.
- Don't just jump in and create pages without first developing a strategy and identifying a person/team to handle your social media. Also, since most marketing drives people to your website-make sure you have valuable content on the website that is actually geared towards your audience, instead of using complicated/technical transportation lingo. Great marketing starts with great content.
- It’s reflective of the times we live in. If you want to stay relevant to how people (and the community you serve) are interacting and communicating you need to adapt to the electronic tools that are now more prevalent than ever before. If done correctly and maintained it can help make the transit system more transparent and accessible to the public. It will help to improve and address a range of "quality of service" items that your transit system has direct control of and can be proactive in addressing.
- Depending on your customers, and the reality of your market (income, access to computers or wireless devices, levels of literacy and English proficiency) don't get too wound up in social media except as an add-on to things like your solid phone-based customer service or printed communications. While this may engage a small market segment in a largely low-income, transit dependent urban community the traditional on-bus or at-stop printed communications may reach the majority of your customers more consistently.
- It’s extremely important to manage expectations - for something like Twitter, agencies should let riders know when they’ll be monitoring the account and responding to inquiries.
- These platforms have to be managed; particularly those that allow people to post to your site. To that end, they will be more human resource intensive but may also allow access to markets that other methods will miss.
- Assign a staff person to monitor so as to respond and/or provide timely information exchanges.
- I think many agencies are too cautious when it comes to using social media tools. There is a tremendously upside to adopting the methods of communication that are now commonplace in the general public and I encourage transportation agencies to use the tools that fit their needs, keeping mind there are risks associated with not employing them properly.
- Start small so you can manage it. Keep communication lines active (don't go silent for weeks on end). Follow up on feedback from customers.
- Do not be afraid of publicly voiced complaints. It is an opportunity to show the public that you are present and available as well as address consumer responsibilities and misinformation.
- Be careful on what information is put out and make it useful or people will stop using it.
- Walk before you run. Develop carefully. Staffing oversight is a must.
- Utilize social media in the context of your Public Involvement Plan and an overall strategic communications plan. Take time to define your goals instead of a "hey, let's start a Facebook page" approach. Consider hiring a social media or marketing consultant to get this initiative underway, to identify best initial strategies and to provide feedback and staff coaching. A first step is to encourage (or even require!) staff members to get an idea for how Social media works by engaging in it - by subscribing to RSS feeds on topics of interest, reading and responding in online forums outside of the work realm. A goal of this engagement is to start to listen in to local conversations: for example, we're learning by listening to local non-transportation blogs that people are very interested in developing on- and off-street bike trails, as well as the development of passenger rail. They also responded very favorably to a recent increase in evening/weekend transit service.
- Develop a purpose statement and policy. Develop a marketing/communications plan with clear goals and objectives.
- Make it manageable and manage expectations of public if intent is to respond to comments.
- Proceed slowly and make sure the person posting the information has clear guidelines and that someone from senior management oversees the process to ensure accuracy and consistency of the message.
- Tone is important: be honest and straightforward; deliver what customers need.
- It must be part of an integrated communication program. You need to be ready and able to respond and control messaging. One key issue is the rate and frequency of correspondence and information. Sites get stale quickly so need to weigh the effectiveness of each tool. Be ready to hear all sorts of feedback. What you do with that feedback can determine how the community participates in future social media efforts. People tend to be quite direct and opiniated on social media sites, so it is necessary to determine whether you can handle one way or two way communication. Social media brings people from the community that normally does not participate, if used well it can be a great outreach supplement.
## CONFERENCES

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Description</th>
<th>Capacity</th>
<th>Fee</th>
<th>Fee Details</th>
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<tbody>
<tr>
<td>Feb 13-17</td>
<td>ATSSA Annual Convention and Traffic Expo</td>
<td>Phoenix, AZ</td>
<td>The program and exhibits are dedicated to issues and products related to all aspects of temporary traffic control and roadway safety.</td>
<td>3,000</td>
<td>$595 m</td>
<td><a href="http://expo.atssa.com/register.asp">http://expo.atssa.com/register.asp</a></td>
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<tr>
<td></td>
<td></td>
<td>Phoenix Convention Center</td>
<td></td>
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<td>$745 nm</td>
<td><a href="mailto:meetings@atssa.com">meetings@atssa.com</a></td>
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<td>$245 public official</td>
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<tr>
<td>Feb 22-23</td>
<td>Transportation and Highway Engineering (T.H.E.) Conference</td>
<td>Urbana-Champaign, IL</td>
<td>The conference is an opportunity to learn about the latest innovations. Up to 10 Professional Development Hours (PDHs) will be offered for attending the conference.</td>
<td>N/A</td>
<td>By Feb. 16: $85</td>
<td><a href="http://www.theconf.com/register.php">http://www.theconf.com/register.php</a></td>
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<tr>
<td></td>
<td>(Jacobs Engineering Group, Inc., 2IM Group, LLC, IL DOT, IL Association of County Engineers, Association of Highway Engineers, IL Center for Transportation)</td>
<td>Illinois Union Building, University of Illinois</td>
<td></td>
<td></td>
<td>After: $95</td>
<td>Carol Czajkowski (217) 333-9672 <a href="mailto:cczajkov@illinois.edu">cczajkov@illinois.edu</a></td>
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<tr>
<td>Feb. 22-24</td>
<td>3rd Urban Transport World 2011 – Australia (The Tipping Point Institute)</td>
<td>Sydney, Australia</td>
<td>This summit will focus on transport policies, rail projects, road projects and urban transport strategies. Topics will include how to: improve city livability through better transport strategies; achieve better coordination and integration between urban planning and transport delivery; increase patronage on public transport through technology and innovation; create a plan now that factors in population growth and the need for economic prosperity.</td>
<td>N/A</td>
<td>$3,865 - 3-day package</td>
<td><a href="http://www.terrapiinn.com/2011/utw/index.stm">http://www.terrapiinn.com/2011/utw/index.stm</a></td>
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<tr>
<td></td>
<td></td>
<td>Sydney Convention &amp; Exhibition Centre</td>
<td></td>
<td></td>
<td>$2,965 - 2-day package</td>
<td>Vanessa Riley +61 2 9021 8949 <a href="mailto:vanessariley@terrapiinn.com">vanessariley@terrapiinn.com</a></td>
</tr>
<tr>
<td>Mar 6-8</td>
<td>IBTTA Legislative Conference</td>
<td>Washington, DC</td>
<td>Transportation infrastructure operators and the toll industry are facing a new world in project finance, transportation revenue, environmental mandates, and safety/security concerns. This forum will address the breadth of these issues.</td>
<td>N/A</td>
<td>$775 m</td>
<td><a href="http://www.ibtt.org/Events/eventdetail3.cfm?ItemNumber=4789">http://www.ibtt.org/Events/eventdetail3.cfm?ItemNumber=4789</a></td>
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<td></td>
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<td>Capitol Hill</td>
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<td>$1075 nm</td>
<td>Mark Muriello <a href="mailto:mmuriello@panynj.gov">mmuriello@panynj.gov</a></td>
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<tr>
<td>Mar. 8</td>
<td>ITS Minnesota 17th Annual Meeting &amp; Information Exchange</td>
<td>St. Paul, MN</td>
<td>ITS Minnesota invites you to join us for the 17th Annual Meeting &amp; Information Exchange on Tuesday, March 8, 2011. Don’t miss this great opportunity to hear the latest information on current ITS topics and emerging research as well as make valuable industry contacts. This year’s keynote presentation entitled “ITS and Innovation for a Safe and Efficient Transportation System” will be presented by Commissioner Tom Sorel, Minnesota Department of Transportation. For program information and to register online, visit the ITS MN website, <a href="http://www.itsmn.org">www.itsmn.org</a>. If you have any questions or would like additional information, contact Nicole Freese (612-624-3708) <a href="mailto:cceconf5@umn.edu">cceconf5@umn.edu</a></td>
<td>N/A</td>
<td>By Feb. 22</td>
<td><a href="http://www.itsmn.org">http://www.itsmn.org</a></td>
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<tr>
<td></td>
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<td>Continuing Education and Conference Center, University of Minnesota, Saint Paul campus</td>
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<td></td>
<td></td>
<td>Westin Downtown</td>
<td></td>
<td></td>
<td>$380 m</td>
<td>Kristen Monaco, TRF (562)985-5076 <a href="mailto:ProgramVP@trforum.org">ProgramVP@trforum.org</a></td>
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<td></td>
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<td></td>
<td>$500 nm</td>
<td>Sue Hendrickson (701)231-7766 <a href="mailto:info@trforum.org">info@trforum.org</a></td>
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<td></td>
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<td>J.W. Marriott</td>
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<td></td>
<td>$1175 nm</td>
<td>Program: Meredith Slesinger (202) 496-4860 <a href="mailto:M.lesinger@apta.com">M.lesinger@apta.com</a></td>
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<td>Registration: Adam Martin (202) 496-4845 <a href="mailto:amarting@apta.com">amarting@apta.com</a></td>
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</table>

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.
Mar 13-16  **First T&DI Congress (ASCE)**  
Chicago, IL  
Holiday Inn Chicago Mart Plaza  
The First ASCE Transportation & Development Congress will discuss integrated strategies focusing on smart development and the efficient multi-modal movement of people and goods to support the economic pulse of the nation and the world.  
N/A  
By Mar 9: $645 m  
$795 nm  
After: $745 m  
$895 nm  
[www.tandi.org/events](http://www.tandi.org/events)

Mar 16-18  **2011 Joint Rail Conference: Shared Corridors, Shared Interests (ASME, ASCE, IEEE, AREMA, TRB)**  
Pueblo, CO  
Pueblo Convention Center  
JRC 2011 will address all aspects of rail transportation and engineering research. With American Recovery and Reinvestment Act funding for rail as backdrop, it will focus improving services on the U.S. railroad network. It will explore railroad infrastructure, rail equipment, signal and train control engineering, service quality and operations research, planning and development, and safety and security.  
N/A  
By Mar 1: $350 m  
$480 nm  
After: $425  
$555  

Mar 18-20  **International Conference on Traffic and Transportation Engineering (IACSIT, IEEE)**  
Dubai, United Arab Emirates  
Hilton Hotel  
The conference is aimed at fostering dialogue between universities and the industry on traffic and transportation engineering.  
100  
$400 m authors  
$400 student authors  
$450 nm authors  
$300 - listeners  
[www.iaccte.org](http://www.iaccte.org)

Mar 21-23  **Traffic Safety Conference (Texas Transportation Institute, Center for Transportation Safety)**  
Austin, TX  
Hilton Austin Airport Hotel  
This conference will address all aspects of Texas traffic safety. Breakout sessions will cover innovations in safety, commercial and freight operations, and engineering for law enforcement, among others.  
N/A  
$150 - in advance  
$250 - on site  
[http://tti.tamu.edu/conference/s/traffic_safety11/](http://tti.tamu.edu/conference/s/traffic_safety11/)

Mar 22-23  **8th International Workshop on Intelligent Transportation (Hamburg University of Technology, Smartmicro, IEEE Communications Society – Germany Chapter)**  
Hamburg, Germany  
Hotel Hafen Hamburg  
WIT 2011 Workshop will focus on new developments in the field of transportation systems, sensor concepts and communication technologies.  
N/A  
€320  
[http://wit.tu-harburg.de/](http://wit.tu-harburg.de/)

Mar 24-26  **ITE Texas District Annual Spring Meeting**  
Ft. Worth, TX  
Hilton Ft. Worth  
Meeting starts with highway products group exhibits, and options include a visit to Burlington Northern Santa Fe Railroad Corporation operation center and corporate headquarters, an engineering ethics seminar, and a one-day workshop with FHWA staff on the value and techniques of roadway safety audits.  
N/A  
By Mar. 11: $225 m  
$110 m retired  
$325 nm  
After: $275 m  
$160 m retired  
$375 nm  
[http://www.texitle.org/springm eeting/](http://www.texitle.org/springmeeting/)

Mar 27-29  **National Conference on Highway Safety Priorities (Lifesavers)**  
Phoenix, AZ  
Phoenix Convention Center  
Premier national highway safety meeting in the United States dedicated to reducing the tragic toll of deaths and injuries on our nation’s roadways.  
1,800  
By February 11: $350  
After: $450  
[http://www.lifesaversconferen ce.org/index.html](http://www.lifesaversconference.org/index.html)

Mar 28-30  **Fare Collection Workshop (APTA)**  
Miami, FL  
Hilton Miami Downtown  
Forum provides an in-depth opportunity to explore the latest developments in revenue practices, systems standards, fare policy and equipment for the transportation market.  
N/A  
By Feb. 11: $425 m  
$975 nm  
After: $475 m  
$975 nm  
[http://www.apta.com/mc/201 1/Pages/FareCollection.aspx](http://www.apta.com/mc/2011/Pages/FareCollection.aspx)

Mar 29-31  **TransiTech (APTA)**  
Miami, FL  
Hilton Miami Downtown  
TransiTech offers hands-on workshops focusing on information technology, traveler information, and intelligent transportation systems issues affecting public transportation systems.  
N/A  
$475 m  
$975 nm  

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<th>Details</th>
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<tr>
<td>Apr 10-14</td>
<td>59th World Congress and Exhibition (UITP)</td>
<td>Dubai, United Arab Emirates</td>
<td>The theme of the Congress is &quot;Boosting Public Transport: Action.&quot;                                                                                                                                         N/A</td>
<td>By Nov. 30: €1,300 m €1,750 nm&lt;br&gt;By March 15: €1,600 n €2,100 nm&lt;br&gt;After: €1,950 n €2,500 nm</td>
<td><a href="http://www.uitpdubai2011.org/congress/home/">http://www.uitpdubai2011.org/congress/home/</a></td>
</tr>
<tr>
<td>Apr 12-14</td>
<td>International Transport Research Conference</td>
<td>Pinang, Malaysia</td>
<td>The theme is &quot;A Road Map for Safer Mobility.&quot; The conference is being held in conjunction with the 5th Malaysia Universities Transport Research Forum Conference. It will cover current scientific and operational issues as well as innovative and sustainable solutions.</td>
<td>N/A</td>
<td>$250 - international participant&lt;br&gt;RM 500 – Malaysian participant</td>
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<tr>
<td>May 1-4</td>
<td>4th International Economic Development</td>
<td>Charleston, WV</td>
<td>This conference concentrates on the linkage between transportation and economic development. It will focus on issues related to the economy, global concerns and financial constraints, and the emerging transportation needs of business and economic development communities at local, regional, state, national and global levels.</td>
<td>N/A</td>
<td>$250&lt;br&gt;Gerard Baxter&lt;br&gt;<a href="mailto:gbaxter@jnt.com">gbaxter@jnt.com</a></td>
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<td>May 8-12</td>
<td>13th National Transportation Planning</td>
<td>Reno, NV</td>
<td>This forum will focus on issues and challenges related to the economy, global concerns and financial constraints; the emerging transportation needs of business and economic development communities at local, regional, state, national and global levels. Subjects/perspectives will include public and private sectors; academic, practitioner and policy issues; theory, concepts and operational tools; and all modes of transportation and their relationship to economic development.</td>
<td>N/A</td>
<td>By April 7: $295 by mail&lt;br&gt;$305 online&lt;br&gt;After: $325 by mail&lt;br&gt;$360 online</td>
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<tr>
<td>May 17-20</td>
<td>3rd International Conference on Roundabouts</td>
<td>Carmel, Indiana</td>
<td>Conference covers wide range of roundabout issues including roundabout status and future, U.S. and international safety experience, design issues, simulation and visualization, control issues, economic and environmental issues, pedestrian issues, bicycle issues, capacity, mini roundabouts and a road diet, issues with blind pedestrians.</td>
<td>N/A</td>
<td><a href="http://www.TRB.org/Conferences/Roundabout2011.aspx">www.TRB.org/Conferences/Roundabout2011.aspx</a>&lt;br&gt;Gene Russell&lt;br&gt;<a href="mailto:geno@ksu.edu">geno@ksu.edu</a>&lt;br&gt;Michael T. McBride&lt;br&gt;<a href="mailto:mmbcbrie@carmel.in.gov">mmbcbrie@carmel.in.gov</a>&lt;br&gt;Richard Pain&lt;br&gt;(202) 334-2964&lt;br&gt;<a href="mailto:rpain@nas.edu">rpain@nas.edu</a></td>
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<td>May 18-20</td>
<td>&quot;Building Bridges&quot; Women’s Transportation</td>
<td>San Francisco, CA</td>
<td>This, the 3rd annual conference will address the problems arising from higher passenger numbers and changes in government policy. It will also focus on the need to drive and deliver innovative public transport solutions in rail to ensure future mobility and sustainable growth in our world class cities.</td>
<td>N/A</td>
<td>By Feb. 25: $2,304.50 AUD&lt;br&gt;<a href="http://www.informa.com.au/conferences/transport/rail/urbanrail">http://www.informa.com.au/conferences/transport/rail/urbanrail</a></td>
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<tr>
<td>May 18-20</td>
<td>Performance Measurement for Transportation</td>
<td>Irvine, CA</td>
<td>WTS is an international organization dedicated to the advancement of women in transportation. The forum examines technical, policy, financial, and political aspects of transportation issues in all sectors.</td>
<td>300-400</td>
<td><a href="http://www.wtsinternational.org">www.wtsinternational.org</a>&lt;br&gt;Margaret Mullins&lt;br&gt;(202) 955-5085&lt;br&gt;<a href="mailto:mmullins@wtsinternational.org">mmullins@wtsinternational.org</a></td>
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<td>May 22-25</td>
<td>Bus &amp; Paratransit Conference (APTA)</td>
<td>Memphis, TN</td>
<td>The Conference will provide a forum for the exchange of technical, policy, planning, and administrative information. The conference will focus on research, design, operation, safety, evaluation, and practical experience related to the roundabout form of intersections.</td>
<td>N/A</td>
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REQUESTS FOR PROPOSALS

1. Environmental Impact Report (EIR) for the Metropolitan Transportation Plan (MTP) 2035 Update
Agency: The Sacramento Area Council of Governments (SACOG)
Deadline: 2011-02-22 17:00
Contact: Greg Chew, Senior Planner, (916) 340-6227, gchew@sacog.org
Description: SACOG is seeking a consultant to provide services related to the Environmental Impact Report for the MTP 2035 Update.
Website: http://www.sacog.org/rfp/interested.cfm?subid=392&rfp=93

2. Travel Demand Model Consultant Services
Agency: Spokane Regional Transportation Council (SRTC)
Deadline: 2011-03-07
Contact: RFP packages are available by emailing contact.srtc@srtc.org or calling 509/343-6570 and providing a contact name, company name, address, telephone, and email. The package will be emailed back to you.
Description: The Spokane Regional Transportation Council (SRTC) is issuing a Request for Proposals (RFP) for consultant services to assist in the refinement of the regional travel demand model transit elements. SRTC is seeking proposals from qualified firms or individuals that are experienced in the preparation, modification, calibration, and validation of a regional travel demand model using VISUM. Qualified proposers should be familiar with the Federal Transit Administration’s New Starts and Small Starts programs and have extensive knowledge of public transportation modeling practices.
Website: http://www.srtc.org/model_consultant_services_rf.html

3. 2010 California Household Travel Survey (CHTS) Augment
Agency: Southern California Association of Governments (SCAG)
Deadline: 2011-03-02 12:00 (Pacific)
Contact: Ranjini Zucker CPA, MBA, Senior Contracts Administrator, Southern California Association of Governments (SCAG), 818 W. Seventh Street, 12th Floor, Los Angeles, CA 90017 Phone: (213) 236-1877, Fax: (213) 236-1825, e-mail: zucker@scag.ca.gov.
Description: The purpose of the CHTS is to update the statewide database of household socioeconomic and travel behavior used to estimate, model and forecast travel throughout the State. The 2010 CHTS will be a household and diary survey, which will provide data on regional trip activities and inter-regional (long-distance) trips for use in the statewide model and regional travel demand models. This data will address both weekday and weekend travel.

4. Refine the Regional Travel Demand Model and Air Quality Post Processor
Agency: Metroplan
Deadline: 2011-03-08
Contact: Mr. Casey R. Covington, CARTS Study Director, Metroplan, 501 W. Markham, Suite B, Little Rock, AR 72201. Phone: (501) 372-3300 (hearing impaired may dial 711), E-mail: covington@metroplan.org.
Description: Metroplan, the council of local governments and metropolitan planning organization (MPO) based in Little Rock, Arkansas, requires the services of qualified transportation planning consultants to refine the Regional Travel Demand Model and Air Quality Post-Processor.
Website: www.metroplan.org or contact:

5. Knoxville Regional Travel Demand Forecasting Model
Agency: Knoxville Regional Transportation Planning Organization (TPO)
Deadline: 2011-02-24 16:00
Contact: Michae D. Conger, P.E., Senior Transportation Engineer, Knoxville Regional TPO, 400 Main Street, Suite 403, Knoxville, TN 37902. Phone: (865) 215-3813, Fax: (865) 215-2068.
Description: The Metropolitan Planning Commission (MPC) on behalf of the Knoxville Regional Transportation Planning Organization (TPO) is soliciting proposals from firms, joint ventures and/or partnerships (hereinafter referred to as “Proposer”) to prepare an update to the Travel Demand Forecasting Model for the Knoxville Region. MPC and TPO staff will be responsible for administering the contract.

6. Request for Research Proposals
Agency: Mineta Transportation Institute, San Jose State University
Deadline: 2011-5-16
Contact: Karen Philbrick, Ph.D., Research Director, e-mail: karen.philbrick@sjsu.edu, tel. (408) 924-7562
Description: Proposals will receive priority consideration for funding if they fit within one of MTI’s 8 research areas of emphasis and/or relate to a Caltrans strategic research question. Similarly, priority is given to projects that can be completed within a 12-month period.
MTI’s Research Areas of Emphasis: Safety and security of transportation systems

Interrelationships among transportation, land use, the environment, and the economy (including climate change and CO2 reduction)
Financing of both public and private sector transportation improvements
Transportation decision-making and consensus building
Transportation planning and policy development
Intermodal connectivity and integration
Sustainability of transportation systems
Collaborative labor-management issues and strategies
Caltrans Strategic Research Questions:
Mobility
M1 Data: How can we improve/enhance data collection and interpretation across modes?
M2 Integrated Corridor Management: How can we optimize movement through a corridor?
M5 Travel Demand Management (real time): What are the most effective real-time strategies to influence travel demand?
M6 Travel Demand Management (system elements): What transportation system elements and land use options are most effective in reducing travel demand by enhancing choices?
Goods Movement
M8 Goods Movement: How can we improve goods movement to generate jobs, increase mobility and relieve traffic congestion, improve air quality and protect public health, enhance public and port safety and improve quality of life?
Safety
SF1 Design/Construction: What design features and construction standards can be utilized to improve highway safety?
SF4 Proactive Safety: What can be done to avoid collisions?
Climate Change
ST6 Climate Change: How can strategic growth planning be advanced through addressing climate change adaptations and mitigations?
Infrastructure
ST9 Transportation Infrastructure: How can we optimize the performance of our transportation infrastructure?
In addition, MTI prefers to fund proposed research that responds to the strategic objectives of the U.S. Department of Transportation. For more information on these agencies’ strategic research objectives, please visit the following sources:
U.S. Department of Transportation: http://www.dot.gov/about.html
Research and Innovative Technology Administration: http://www.rita.dot.gov/publications/transportatio rd_t strategic_plan
Federal Railroad Administration: http://www.fra.dot.gov/Pages/225.shtml
Website: http://www.transweb.sjsu.edu/MTIPortal/research/RFPForms.html

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