Private Initiative to Improve Seattle's Transportation

Will Use New Technology

An interesting initiative named Challenge Seattle is underway. Challenge Seattle is a private sector initiative led by many of the region’s CEOs who are working to address issues the city faces. It is the belief that these issues are significant enough to determine the future for Seattle’s economy and its families. Challenge Seattle is led by former Washington Gov. Chris Gregoire and is comprised of businesses including Alaska Airlines, Amazon, Bill and Melinda Gates Foundation, Boeing, Chateau St Michelle, Costco, Expedia, JP Morgan Chase, Madrona Venture Partners, Microsoft, Nordstrom, PATH, Puget Sound Energy, REI, Starbucks, and Weyerhaeuser and Zillow.

Challenge Seattle is not limited to transportation. It is founded on the simple premise of making the communities in Seattle better. The focus is on four goals where private sector leaders believe they can make the necessary impact:

- To support educational programs that prepare students for the well-paying jobs that the Seattle region offers;
- To tell the Challenge Seattle story to the rest of the world;
- To support a broad and resilient economic base that gives Seattle residents diverse job opportunities;
- And to use Seattle’s strengths in technology and innovation to create a transportation system that is a model for the country.

Challenge Seattle has outlined a transportation vision for 2035 and it will take the general public working together to bring that vision to fruition. The following immediate steps will be taken:

Step 1 - Create a Mobility Innovation Center in partnership with the University of Washington to explore and test emerging transportation technologies. The Mobility Innovation Center will take on specific projects, with the goal of

"Gamification” Used to Address Urban Mobility

Winners of Ford’s Smart Mobility Challenges Provides Interesting Apps

A new app named Jaunt that helps people save money, make friends, and alleviate congestion by connecting with others for trips by car, bicycle, and public transport was announced as the winner of Ford’s “Smart Mobility Challenge.” SelfieGo came second with an app that gets commuters on their bikes and on foot with a selfie challenge. Third place went to Flux, an app designed to alleviate congestion through bringing gamification to traffic jams. The event took place at the Mobile World Congress, in Barcelona, Spain, last month.

Gamification is the concept of applying game mechanics and game design techniques to engage and motivate people to

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USDOT Moving Ahead in Addressing Autonomous Vehicle Guidelines and Rulemaking for Safety-Related Aspects

Public Meetings to be Held in Washington DC and California

Google Places Pressure for Approval of Its Autonomous Vehicle

Earlier this year, the U.S. Department of Transportation (USDOT) invited input from the motor industry to provide comments on how to safely accommodate autonomous vehicle on U.S. roads in a timely manner. Comments have been received. A significant submission came from Google, who would like to see a process put in place soon to allow a company that shows its autonomous vehicle meets safety requirements be able to market and sell the vehicles.

To facilitate industry and public input, the USDOT is moving ahead with a pair of public meetings this spring to gather input to help develop guidelines for the safe deployment of automated safety technology. The first meeting, to be held in Washington, D.C., will gather information on a series of issues related to safe operation of automated vehicles as part of National Highway Traffic Safety Administration’s (NHTSA) efforts to provide manufacturers with operational guidance.

At this meeting, NHTSA is seeking public input on those aspects of automated vehicle (AV) systems that would benefit from operational guidelines. For example, of high importance to the Agency is information on the roadway scenarios and operational environments highly automated vehicles will need to address and the associated design and evaluation processes and methods needed to ensure that AV systems can detect and appropriately react to these scenarios such that a high level of safety is assured when these systems are deployed on US roadways.

Also of interest would be input on aspects of automated vehicle technology that may not be suitable or ready for guidelines. For these areas, information would be useful on alternative approaches to assure safety.

The meeting will also be webcast live, and a link to the actual webcast will be available through http://www.nhtsa.gov/Research/Crash-Avoidance/Automated-Vehicles. The second public meeting, will be held on the West Coast (California). Details for that meeting will be announced in a separate Federal Register (FR) Notice.

On the operational guidelines, Transportation Secretary Anthony Foxx said earlier this month, “We are witnessing a revolution in auto technology that has the potential to save thousands of lives.”

“In order to achieve that potential, we need to establish guidelines for manufacturers that clearly outline how we expect automated vehicles to function – not only safely, but more safely – on our roads.”

These operational guidelines are one of five NHTSA initiatives Foxx announced in January at the North American

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Miami MPO Investigating the Application of Reversible Lanes on Arterials

Freeways Not Included

At the request of elected officials, the Miami-Dade Metropolitan Planning Organization has initiated a study to determine if there are suitable locations to apply reversible lanes on arterials in the Miami metropolitan area. The consultants Gannett Fleming, Inc. have been selected to conduct this study and the initial results are expected to be available towards fall this year.

Presently data collection is being conducted. Traffic volumes (and associated directionality), the period of time congestion is present during the morning peak and/or the evening peak, the distance over which the congestion is present, the presence of medians, and other factors will be used to select a short list of locations for further feasibility analyses. If possible, two locations will be selected for implementation as pilot/demonstration projects according to Jesus Guerra, Deputy Director of the Miami-Dade MPO.

Mr. Guerra provided the following list of main tasks to be performed as part of this study:

- Conduct a system-level analysis using key variables such as directional split, level of service, access characteristics, logical termini and other factors.
- Make a qualitative assessment including a cost-benefit analysis for the selection of the two corridors for more details assessment.
- Develop up to three alternatives for each selected corridor.
- Identify estimated costs for the implementation of the reversible lanes along the selected corridors.
- Recommend improvements on adjacent and/or intersecting roadways to ensure feasibility of identified alternatives.
- Develop renderings for the selected alternatives.

The Miami urban area is generally in the top ten urban areas in terms of level of congestion.

For more information, contact Carlos Roa, Project Manager, tel. (305) 375-4507, email: croa@miamidadempo.org

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USDOT Moving Ahead in Addressing Autonomous Vehicles

International Auto Show in Detroit, which also include:

- President Obama’s budget proposal for a 10-year, $3.9 billion investment in advancing autonomous vehicle technology, including large deployment pilots in communities around the country.
- Working with states to develop model state policy.
- Using NHTSA’s existing authority to interpret current regulations, and offer limited exemptions from those regulations, in pursuit of advances that could increase safety.
- Determining what new regulatory tools and authorities might be required to meet NHTSA’s safety mission in an era of rapidly changing technology.

What is also relevant is what NHTSA released recently - an initial assessment of current Federal Motor Vehicle Safety Standards that identifies key challenges in full deployment of automated vehicles. The report, prepared by USDOT’s Volpe National Transportation Systems Center, found that there are few existing federal regulatory hurdles to deployment of automated vehicles with traditional designs and equipment to accommodate a human driver. But the report found that there may be greater obstacles to vehicle designs without controls for human drivers, such as a steering wheel or brake pedals. The Volpe Center produced the report at the request of NHTSA and DOT’s Intelligent Transportation Systems Joint Program Office.

“The Volpe Center report is a great first look at current the standards, and it highlights the need for the actions Secretary Foxx outlined in January,” said NHTSA Administrator Mark Rosekind.

“It also shows there are few current restrictions on some automated vehicle concepts, which highlights the need to establish clear expectations for their safe operation. At the same time, for other vehicle designs, the agency has more work to do to ensure the safety of new innovations, and we look forward to learning more from stakeholders as we start that work.”

For more information on the latest policy, go to: http://www.nhtsa.gov/Speeches and select the March 16 speech.
Concessionaire for SH 130 in Texas Files for Bankruptcy

Lower than Projected Traffic Cited as Main Reason

SH 130 Concession Company, LLC, owned by the Spanish company Cintra and San Antonio-based Zachry American Infrastructure, has filed for Chapter 11 protection in the Western District of Texas. SH 130 Concession Company has outstanding debt obligations of well over $1 billion. SH 130 Concession Company will continue to operate their 41 mile toll section concession of SH 130. This is the latest in a series of toll revenue forecasts that are significantly lower than the eventual realized toll revenue due mainly to a lower than projected level of future economic activity.

The SH 130 Concession Company provided the following information about the SH 130 toll lanes:

- Total length of SH 130 is 91 miles within which the new toll “segments” 5 and 6 constructed from Seguin, TX to Austin, TX is 41 miles.
- The improvements provided are 17 miles of continuous non-tolled frontage roads from north of Mustang Ridge through CR 218 south of Lockhart (all of segment 5 and part of segment 6); and a minimum of two tolled main lanes in each direction for the 41 miles.
- The total Investment is approximately $1.35 billion, including right of way acquisition, utility relocation, improvements to connecting streets/roads and construction.
- The SH 130 Concession Company, LLC is a company formed by Cintra and Zachry American Infrastructure that works in collaboration with the Texas Department of Transportation to finance, develop, design, construct, operate and maintain segments 5 & 6 of SH 130.
- Segments 5 & 6 are a continuation of the northern segments of SH 130 – from Georgetown in Williamson County to Mustang Ridge in southeast Travis County – that began opening to traffic in segments in late 2006. With segments 5 & 6 completed, SH 130 is a 91-mile toll way in central Texas.
- The SH 130 Concession Company will continue to maintain and operate segments 5 & 6.
- The speed limit on SH 130’s section 5 and 6 is 85 mph – the highest in the U.S.
- The state owns the 41-mile section of the SH 130 facility and leases the right to operate and maintain it through its Facility Concession Agreement with SH 130 Concession Co. This agreement remains in place and will continue to protect the public interest during these proceedings.
- The filing will have no financial impact on the state of Texas. The 41-mile southern section of the SH 130 toll road was built by SH 130 Concession Co. without any money from the state, and the state is not liable for any of the concession’s debt.
- The facility opened in the fall of 2012. Alfonso Orol, CEO of SH 130 Concession Company said “they will continue to operate the facility as usual during the bankruptcy proceedings.” “No layoffs are planned and all vendors will be paid per usual during the proceedings.” “Presently the concession continues to discuss a debt restructuring deal with its lenders in order to strengthen the facility’s capital structure and make it sustainable long term.”

He added “there is no set timeline for how long the proceedings will take. SH 130 Concession Co. hopes to be able to announce a resolution in the coming months.”

Concerning the low traffic volumes when compared to the estimated volumes, Mr. Orel said “the traffic projections for the SH 130 facility were done prior to the last recession, which suppressed commercial and private traffic in the region for many years. More recently traffic is increasing year after year as predicted — including a 15 percent increase in 2015 — and the company expects that trend to continue.”

For more information, contact Kate Morton, Columbus Communications, at (512) 291-6491, and visit website: http://www.mysh130.com/.
Altamonte Springs, Florida, To Subsidize Car Sharing Service

Pilot Program Underway

Altamonte Springs, a small city with a population of 43,000, located in the Orlando metropolitan area of Florida, is the first city in the U.S. to subsidize a private car sharing company in order to try and provide a more effective transportation service. Uber was selected (non-competitively) to receive the subsidy. The subsidization started on March 21, 2016 with the City providing 20% of the cost on all Uber trips that have both an origin and destination within the Altamonte Springs boundaries.

Part of the reason for starting the subsidy is to try and increase ridership on SunRail, a 32-mile commuter rail system serving the greater Orlando area. For this reason, the Uber subsidy is slightly higher (25%) for trips to and from the Altamonte area than the Uber subsidy serving the greater Orlando area.

The present Uber subsidy arrangement is a one-year $500,000 pilot program. The City’s objectives for the pilot program are to:

- Help alleviate traffic congestion by promoting ride-sharing through Uber.
- Improve connectivity to regional transit.
- Meet changing transportation needs of the community.

- Offer flexible transportation options.
- Assess ways that technology and ride-hailing can be utilized to meet future transportation needs.

Frank Martz, Altamonte Springs’ city manager believes the Uber services is more suitable in their city considering its mostly lower density development with a few substantial activity centers. He believes the overall convenience, the speed, as well as the flexibility of the service will work well in his city, asserting that a “one size fits all” transit service is not ideal, at least in Altamonte Springs.

The pilot program is not designed for persons on wheelchairs and is not using any federal funds. If the one-year pilot program is considered a success, a competitive process will be embarked upon to select the car-sharing company that will best serve the city.

For more information, visit http://www.challengeseattle.org/

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Private Initiative To Improve Seattle's Transportation

delivering solutions (for prototype or practice) within a six to nine month timeframe.

Step 2 - Agree on a commitment by major employers to reduce the percentage of their employees commuting to work via single-occupancy vehicles. The goal is for no more than 35 percent of employees to commute via single-occupancy vehicles by 2035.

For the transportation vision, metrics for success have been identified in the areas of safety, reliability, equity and environmental impact.

Challenge Seattle believes that an effective transportation system is one that asks what is best for the user; for their mobility, and also their convenience, affordability and quality of life. Putting the user at the center of transportation planning and decision-making will point to solutions that will be embraced and adopted – and make a real impact. Gathering input from citizens will be key to developing and implementing a transportation system that works. Employers working to reduce single-occupancy vehicle commutes will gather input from employees to inform programs and initiatives. The Mobility Innovation Center will take an inclusive approach, evaluating social science implications of emerging technologies, in addition to technical aspects.

Challenge Seattle has engaged a team of transportation experts to provide insights into the region’s current challenges, strategies for addressing those challenges and examples of best practices from across the country and around the globe. These experts have helped shape Challenge Seattle’s vision for the future of transportation and the strategies recommended.

To bring the vision to life, Challenge Seattle will use its members’ expertise in technology and innovation and pursue collaboration with experts in other areas. As the Mobility Innovation Center tackles specific projects, the cross-sector center will bring together the best talent and expertise from the business, government, and education sectors. They will use applied research and the very best practices from around the globe to address challenges.

It is also recognized that the effort requires all parties in Seattle to work together. Local transportation entities, including King County Metro, Sound Transit, Seattle DOT and Washington State DOT will be essential partners in the implementation efforts. The role of each agency will vary over time, as different solutions and strategies are evaluated.

For more information, visit http://www.challengeseattle.org/
Transportation Tort Liability: Case in Review

Lack of Traffic Signal and Lost Accident Records Play a Role in Judgement Against DOT

In 2001 a woman, making an eastbound approach to the intersection of Suger Plantation Parkway and LA 1 in Louisiana, was killed in a vehicle accident after coming to a complete stop at the stop sign of this approach. After the woman made the stop, she inched forward to be able to see past a vehicle traveling southbound along LA 1 in the right-turn lane to be able to make her left turn. She inched forward, encroaching into the LA 1 southbound through lanes and was struck fatally by a through vehicle on LA 1. Twenty accidents occurred at the same intersection over the previous two years. Half of these accidents were similar to the women's with motorists attempting to make a left turn from the eastbound approach at the unsignalized intersection.

Plaintiffs, the deceased woman’s daughters, alleged the State of Louisiana through the Department of Transportation and Development (DOTD) was negligent for failing to install a traffic signal or an alternative traffic control device at the intersection prior to the fatal accident. DOTD responded by filing a motion for summary judgment in which it argued it owed no duty to the deceased driver due to her gross negligence in entering the intersection when she lacked a clear view of approaching traffic, which they contended was the sole cause of the accident.

DOTD also filed a motion requesting that the trial court exclude evidence relating to how DOTD collected and catalogued information, including accident crash reports concerning traffic accidents occurring at the subject intersection from July 2005 through June 2012. After the accident it had become apparent that twenty-nine accident reports for the site had been miscataloged, resulting in DOTD having only two accident reports for the subject site on its database.

The trial court denied both DOTD’s motions and found DOTD forty percent at fault in causing Plaintiffs’ damages. DOTD appealed, arguing the trial court abused its discretion in denying the motion regarding the collection and cataloging of crash reports; erred in denying the motion for summary judgment; and the jury was erroneous in its fault allocation.

The Court of Appeal affirmed all three trial court judgments. Regarding the collection of data, it found that DOTD had failed to meet the requirements to trigger a Section 409 evidentiary privilege exclusion. It also noted that the miscataloging of accident reports had compromised a 2009 traffic study at the subject intersection, requested and paid for by a local developer concerned at the number of accidents at the site, because when the traffic engineer hired to undertake the study requested the intersection’s accident history, DOTD produced only two reports rather than the thirty-one crash reports that should have been provided from the database.
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**Transportation Tort Liability**

Regarding the motion for summary judgment, the Court noted that it had reviewed the entire record as required of an appellate court, and had considered this motion alongside that of the DOTD’s assignment of error allegation regarding the determination of fault and allocation of damages.

DOTD argued that the cause-in-fact of the accident was the driver entering the intersection when she lacked a clear view of approaching traffic, and this constituted gross negligence and was the sole cause of the accident. Therefore DOTD contended it owed no duty to the driver. Further, that the jury’s allocating it forty percent fault was a result of evidence that had been miscoded as crash reports, which created a non-existent independent theory of negligence against DOTD.

The Court of Appeal noted that DOTD was not a guarantor of the safety of all motorists under every circumstance. However, its duty extended not only to prudent drivers, but also to motorists who may slightly exceed the speed limit or become momentarily inattentive. It found that because the driver had come to a complete stop at the stop sign, then inched forward attempting to check for oncoming vehicles, her negligence did not rise to the level of gross negligence. Although she inadequately performed her duty to inspect for oncoming vehicles, she had not exhibited a total want of care and diligence. Therefore she was a member of the class of motorists to whom DOTD owed a duty.

Further, it held that the trial court had not erred when it found that the subject intersection had a defect creating an unreasonable risk of harm. DOTD had actual or constructive notice of the defect and a reasonable time to correct the defect but had failed to do so, and the defect was a cause of the accident.

Plaintiffs had not alleged any defect in the geometric design of the intersection, but that it was unreasonably dangerous because at the time of the accident it was not controlled by a traffic signal, despite the large number of accidents that had previously occurred there. They presented evidence that DOTD had been approached by the local mayor, chief of police and a developer about installing a traffic light at the intersection, and the developer had even paid for a traffic study at the site. However DOTD had concluded a traffic light at the intersection was not warranted.

At trial evidence was presented regarding whether, prior to the accident, the intersection had met the requirements for consideration of a traffic light under Warrant 7 of the Manual on Uniform Traffic Control Devices (MUTCD). The requirements are: an adequate trial of alternatives to a traffic light that failed to reduce crash frequency; five or more crashes within a twelve-month period; and traffic volumes on both the main- and minor-street approaches meeting minimum volume requirements.

DOTD conceded the requirement of five crashes susceptible to correction within a twelve-month period had been met, but there was no consensus on traffic volumes. Plaintiffs’ traffic engineering expert argued that the traffic volume requirement would have been met if DOTD used both future traffic volume projections included in the 2009 traffic study and a discretionary variance allowing lower traffic volume counts in rural areas involving high speed roadways. However, DOTD’s traffic operations engineer testified that DOTD only used actual traffic volumes.

The Court of Appeal held that since the first requirement, that remedial or alternative measures to a traffic light should be tried to improve the safety of the intersection, Warrant 7 had not been satisfied. It also noted that even had all the requirements been satisfied, installation of a traffic light was still not mandated by the MUTCD.

Nevertheless it held that, based on the totality of the evidence, the intersection was defective as it presented an unreasonable risk of harm and DOTD failed to correct the defect within a reasonable time.

The Court of Appeal noted that DOTD’s own expert traffic engineer had described the problem with the intersection as being the difficulty motorists encountered attempting to cross the multiple traffic lanes, not their failure to obey the stop sign. It also noted Plaintiffs’ expert’s argument that right-angle crashes were of greater concern because they typically resulted in much higher levels of injuries and fatalities.

Further, Plaintiffs’ expert, DOTD’s own traffic engineer, and the civil engineer who conducted the 2009 traffic study, had all agreed that the full accident data would have raised red flags that some sort of safety improvement should be implemented at the site.

It noted that both Plaintiffs’ and DOTD’s expert traffic engineering experts had suggested ways the safety could have been improved and crossing crashes reduced, including by channelization of vehicles or even a traffic sign restricting motorists from attempting a crossing maneuver. DOTD’s expert argued that even without a physical barrier, a restrictive sign may have been effective because most motorists obey traffic signs and when they do not, it tended to be when no one was around, which reduces the danger of a crash.

Therefore the Court found that on the totality of the evidence, DOTD had breached its duty of care to the motoring public by failing to take corrective action to improve the intersection’s safety by installing additional signage or by taking other measures.

The Court of Appeal also found no error in the jury’s conclusion that the accident was the result of multiple causes, i.e. the driver’s actions were not the sole cause-in-fact of the accident, as alleged by DOTD. It held that the unreasonably dangerous condition of the intersection was also a substantial factor in bringing about the accident. Indeed the Court found that the evidence suggested the driver was not a reckless motorist and was likely to have complied with any additional traffic control devices or measures implemented by DOTD to reduce the crashes occurring at the intersection.

Finally, it held that as DOTD took no action whatsoever to improve the safety of the intersection, the continued hazardous condition of the intersection presented a great risk of harm to the motoring public at large. Therefore it found the jury’s allocation of fault was reasonable.
UK Active in Implementing and Considering Alternative Traffic Calming Measures; Is Removing Traffic Signals a Good Idea?

Implementation of 20 mph Speed Limit Areas in Cities Gaining Traction

Consideration and implementation of traffic calming measures in Britain has been increasing considerably over the past few years. Speed limit areas of 20 mph have been implemented in about 50 locations—towns and cities—thus far.

The UK Local Government Information Unit (LGiU) has been active in promoting the 20 mph speed areas. In 2013 they issued briefings on 20 mph neighborhoods. The main components of the briefings are as follows:

- “The implementation of 20 mph limits over a larger number of roads, should be considered where mean speeds at or below 24 mph are already achieved over a number of roads.
- To achieve compliance there should be no expectation on the police to provide additional enforcement beyond their routine activity, unless this has been explicitly agreed.
- A reinforcement of the role planners have to create environments that consider the needs of the most vulnerable users first: pedestrians, then cyclists, then public transport users, specialist vehicles like ambulances and finally other motor vehicles.
- Given the existing evidence on the benefits of lower vehicle speeds for pedestrians and cyclists, area-wide 20 mph limits must inevitably be considered as one of the ways to prioritize vulnerable road users.”

A national survey of British residents found that the majority (73%) are in favor of 20 mph for residential roads. This is not surprising. There are a number of benefits as documented by the LGiU:

- Fewer deaths and injuries: A person is seven times more likely to survive if she/he is hit by a car travelling at 20 mph rather than 30 mph.
- An increase in physical activity: Bristol found that reducing speed limits led to a mean increase of 23% for walking and 21% for cycling.
- An increase in local economic activity. So far evidence shows that pedestrians spend two to six times more in local shops than people arriving by car.
- A better quality of life for local people. Slowing traffic down makes walking and cycling more attractive, and can increase social interaction as people become more visible on streets and footpaths.
- A reduction in accidents. In addition to a reduction in the severity of accidents, research shows that a reduction of one mile per hour in existing low speed areas leads to 6 percent fewer collisions.
achieve their goals. Game mechanics are the techniques used to reward activity among customers, employees, or other users. Typical mechanics are points, leaderboards, badges, and challenges.

Gamification has proven to be an effective way to solve real-life problems in many areas, and the learnings from the challenge could lead to innovative solutions and new approaches to integrating urban transport, as well as encouraging positive commuter behavior.

“Game developers have an impressive track record in taking new ways of looking at real-world problems and coming up with fresh solutions, and that is exactly what we wanted to tap into for the Ford Smart Mobility Game Challenge,” said Ken Washington, vice president, Ford Research and Advanced Engineering.

“Jaunt is the perfect example of just such a disruptive approach. Avoiding busy routes by connecting travelers to share trips could help to reduce congestion through ride-sharing, and makes lives better by helping people to enjoy journeys more – whether travelling by car, bicycle, public transport, or on foot.”

Jaunt was developed by Ilya Zarembsky and Betsy Medvedovsky, in New York. The Jaunt app enables users to both create journeys and join those created by others for faster journeys or more scenic routes. An interactive map enables users to filter available “jaunts” by transport mode, location, and trip time, and discover more about their fellow travelers. Sharing trips, the use of different traffic modes, and motivating travelers to use alternative routes will help ease the pressure on main traffic routes and improve the flow of traffic in city areas.

SelfieGo, from Scotland, uses a GPS-enabled map that shows the optimal route to take selfies at a city’s major attractions, and enables users to share them on social media. The idea is to make travel on foot and by bicycle more interesting. Flux, from Germany, turns traffic jams into a game by encouraging drivers to maintain a steady speed using graphics projected on the windscreen, helping traffic move more smoothly and preventing accidents.

Ford Smart Mobility is the company’s endeavor in connectivity, mobility, autonomous vehicles, customer experience and data and analytics. Its goal is to look for new and innovative ways to solve global transportation issues and is an important component of Ford’s transformation into an automotive and mobility company. Earlier this month Ford Motor Company announced the creation of Ford Smart Mobility LLC, a new subsidiary formed to design, build, grow and invest in emerging mobility services. It will have operations in Palo Alto, California, and Dearborn, Michigan.

For more information, contact Volker Eis, Sustainability Communications, Ford of Europe, tel. +49(0)221 901 9096, email: veis@ford.com.

Recently there have been calls from elected officials to “switch off” traffic signals at some intersections to reduce congestion. An experiment on switching off two traffic signals was conducted in Bristol, England in 2010. The level of congestion decreased, but the city council did not proceed to keep the traffic lights switched off due to concerns from blind and disabled groups and the cost of the physical changes to the sites. In response to recent questions from the Urban Transportation Monitor, traffic engineers at the City of Bristol said “whilst there was a reduction in delays at the sites (the two intersections where traffic lights were switched off), pedestrians, particularly more vulnerable road users, felt intimidated by traffic and did not feel safe. Therefore, it was decided to switch the signals back on and leave them operating as they were before the trial.”

They added “signals are typically installed to control traffic at busy and complex junctions which are not part of a complex network, it is difficult to see how this concept would work in a busy city center network where queues from one intersection often block other junctions.” “Where traffic signals are switched off careful consideration needs to be given to what replaces them, otherwise the end result will be traffic dominating the space and pedestrians feeling intimidated, which is what happened in this situation.”

“If the intersection is not redesigned to change driver and pedestrian perception then cars will naturally dominate what is essentially a normal road intersection.”

“Remodeling junctions in this way is generally more expensive than a set of traffic signals and not necessarily a viable alternative in a lot of cases.”

“Traffic signals also help vulnerable road users such as the partially sighted, elderly, and parents with young children, to cross the road safely at busy locations.”

For more information, contact Alison Butts, Public Relations Officer, Bristol, tel. 0117 357 4307, or 07467 335741, email: alison.butts@bristol.gov.uk
This Month’s Survey Results (Survey 1)

Ethics in the Transportation Profession

The Urban Transportation Monitor conducted a nationwide survey earlier this month to obtain opinions from practicing transportation engineers on various ethical situations. Questionnaires were sent via email to transportation professionals and 806 opened the email. A total of 58 responses were received, for a response rate of 7.2%. Respondents had an average of 29 years working experience.

Adaptations from actual case studies cited in Opinions of the Board of Ethical Review, published by the National Society of Professional Engineers (NSPE), were described in the survey; respondents were asked to make a judgment on whether each situation was ethical or not.

It should be recognized that all the information of a particular case could not be included because of space limitations. However, we endeavored to include all the relevant facts.

The purpose of the survey was to see how uniform opinions among practicing transportation professionals are with regard to ethical issues and how their opinions compare with those of the NSPE’s Board of Ethical Review. When giving an opinion about a particular case, the Board explained its reasoning behind its opinion. That discussion is not included in the survey results published here, but can be found on the NSPE website at www.nspe.org.

The Board requests that the following statement be included regarding its opinions:

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SITUATION 1

Consultant A works for a transportation consulting firm, WXY, which performs professional consulting services for both private and governmental clients. Consultant A is working on a project for a private development company, Company X. The consulting fees on the project have exceeded the estimated budget amount agreed to between the consulting firm WXY and Company X. Consultant B, Consultant A’s direct supervisor at WXY, advises Consultant A to charge his future time on the project for Company X to the budget of Company Y, which was well under budget. Although the consulting services for Company X and Company Y are not related, neither Company X nor Company Y are a governmental agency, the budgets involved do not relate to any public funds, and it is not anticipated that the additional charges will cause WXY to exceed its budget with Company Y.

**Question 1a:**

*Would it be ethical for Consultant A to charge his time for Company X to the budget of Company Y?*

**Survey results:**

Respondents who answered yes: 7%
Respondents who answered no: 93%
Respondents with < 20 years experience who answered yes: 7%
Respondents with > 20 years experience who answered yes: 8%

**Typical comments from respondents who answered yes:**

- Only if it does not increase the fee charged to company Y.
- I am assuming the contract is lump sum and both contracts will not exceed their budgets at the end if Consultant A charges to Company Y.
- Assuming hours charged will be billed hours, hours should be charged and billed to project on which the work was done. Fee should be re-negotiated.
- Both pots of money, notwithstanding their sources, are part of Company WXY asset which is a for-profit business entity. It would have been unethical if the act adversely affected the quality or completion of Company Y project. Company WXY is entitled to spend its "profit" to offset "loss". In that light, Consultant A's action is not unethical.

**Typical comments from respondents who answered no:**

- It is unethical to charge time to another company for work that is performed on a different unrelated project.
- If WXY is billing Company Y for that time it's not okay. If it's under a lump sum contract and no additional cost is incurred to Company Y, then I do not see a problem.
- Work performed was not to the benefit of Company Y.
Ethics in the Transportation Profession (continued)

- That would be fraudulent.
- The work is not being done for Company Y and should not be charged to Company Y's project.
- Didn't do work for Company Y
- The correct solution is to discuss the budget overage with Company X. If Company X can't or won't pay then Company WXY has to eat the cost - and should better estimate the work in the future.
- Charging one client for work done for another client on an unrelated project is clearly unethical. If you can't get the work done within budget, either explain to the client why his work cost more than anticipated or just don't charge him.
- You should be charging to the project you are working on. This is essentially false record keeping.
- Presuming Company Y is not a party to WXY's contract with Company X, charging time worked on Company X's project to Company Y would be a violation of WXY's contract with Company Y.
- Consultants should be paid for their time on a project, public or private, and owners should pay for that time. There should be a good justification for exceeding the budget and the consultant should let the client know as soon as possible. Were additional service required? Source of funding, public or private, should not enter the conversation.
- Separate companies & separate budgets. Time for each project for each company shall have a clean accounting for tasks performed by project by for each company. This eliminates entangling billing and thus accounting for the projects and to the Companies. Consultant A should suggest to supervisor B that accounting for Company X and Company Y be separate, even though directed by a supervisor, Consultant A is responsible for their own actions.
- Company Y should not be charged for work not related to their project regardless of budget.

**Opinion of the Board of Ethical Review:**

*It would be unethical for Consultant A to charge his time for Company X to the budget of Company Y.*

**Main conclusions of the Board of Ethical Review:**
The Board is troubled by the invoicing practices of WXY. Based on the facts, there does not appear to be any justification for assigning consulting services charges attributable to work on behalf of Company X to the budget of Company Y. Without further justification under the facts present, the Board can only assume that these charges are at a minimum a misrepresentation and could constitute fraudulent activity. It is wholly immaterial that these charges do not involve a governmental agency, or that the budgets involved do not relate to any public funds, or that it is not anticipated that the additional charges will cause the WXY Consulting to exceed its budget with Company Y. Such practices are unacceptable regardless of whether they involve private clients or public agencies.

**Question 1b:**

*Was it ethical for Consultant B to direct Consultant A to charge Consultant A’s time for Company X to the budget of Company Y?*

**Survey results:**

Respondents who answered yes: 4%
Respondents who answered no: 96%
Respondents with < 20 years experience who answered yes: 0%
Respondents with > 20 years experience who answered yes: 4%

**Typical comments from respondents who answered yes:**

- I am assuming the contract is lump sum and both contracts will not exceed their budgets at the end if Consultant A charges to Company Y.
- Both pots of money are part of Company WXY asset to leverage, including offsetting incurred "loss" from other projects.

**Typical comments from respondents who answered no:**

- The supervisor is intimidating the employee and encouraging unethical conduct in an attempt to show profit on a project that was mismanaged or estimated incorrectly. The supervisor is obligated to lead by example and educate their subordinates on all ethical matters.
- If WXY is billing Company Y for that time it's not okay. If it's under a lump sum contract and no additional cost is incurred to Company Y, then I do not see a problem.
- Knowingly charging another company for work that does not directly benefit that company is wrong.
- The work is not being done for Company Y and should not be charged to Company Y's project. Consultant B is attempting to get around the fact that the company or the group has a workload management problem which needs to be addressed. He is trying to maintain chargeability/utilization percentages rather than addressing the actual problem.
- Consultant B should be setting a better example as a supervisor and providing more appropriate solutions to the problem. Ultimately, what Consultant B is suggesting is fraud.
Ethics in the Transportation Profession (continued)

Opinion of the Board of Ethical Review:
*It was unethical for Consultant B to direct Consultant A to charge Consultant A’s time for Company X to the budget of Company Y.*

Main conclusions of the Board of Ethical Review:
Consultant A should express his strong concerns to Consultant B. If Consultant A is not convinced that Consultant B is operating in an ethical and legal manner, Consultant A should disassociate from WXY, that is resign, in order to remove his name from possible unethical and illegal actions by WXY. Further, Consultant A must bring his concerns to the proper authorities, such as the state attorney's office.

SITUATION 2
Transportation Professional A, part of a research team that prepares and publishes an academic paper on transportation demand forecasting, is a member of a transportation technical society. Transportation Professional A learns of an upcoming technical society conference and prepares an abstract of the paper to present at the conference. Transportation Professional A completes the abstract of the research and submits the abstract to the technical society, including Transportation Professional A’s name in the abstract, but not the other members of the research team. Transportation Professional A does include a copy of the research paper which includes the names of all members of the research team. The abstract will be published in the technical conference proceedings. Transportation Professional B, who led the research team, learns of Transportation Professional A’s actions and complains to Transportation Professional A that Transportation Professional A’s failure to include the other members of the team in the abstract was unethical and that Transportation Professional B and not Transportation Professional A should make the presentation at the conference.

Question 2a:
*Was it unethical for Transportation Professional A to fail to include all of the members of the research team in the abstract?*

Survey results:
Respondents who answered yes: 83%
Respondents who answered no: 17%
Respondents with < 20 years experience who answered yes: 100%
Respondents with > 20 years experience who answered yes: 67%

Typical comments from respondents who answered yes:
- Yes, by omitting the other team member names from the abstract, the TPA is taking credit for other's work.
- While not all of them would be required for the presentation they all need to be given credit.
- Should give credit where credit is due and not take credit in the abstract for the work of others on the team.
- Every team member should have been included - even though TPA submitted the research paper with all their names, only the abstract will be published. Credit needs to be given to all members of the research team.
- Research is intellectual property and those who partake in the project/research should be properly credited. TPA has the right to present as part of the research team, but should give proper credit.

Typical comments from respondents who answered no:
- While it was probably a poor choice, Transportation Professional A is the author of the abstract and should be listed as the author, not Transportation Professional B. Credit for the research should be clearly given for all the researchers.
- A wrote the abstract with plans to present it at the conference. All that would be necessary is to acknowledge the other members of the research team in the presentation. It is also audacious of B to insist on making the presentation when B didn't write the abstract.
- The research stands independent of the conference proceedings as published report. Conference presentations reporting research results constitute subsequent professional activity drawing on the principle report. Transportation Professional A would be compelled to fully cite the entire research team as part of the presentation.
- He is submitting abstract as the presenter. He included all the team members in the paper which will be published with the proceedings.
- Transportation professional A wrote the abstract. He acknowledged the other researchers by submitting the report indicating their participation. Also it was unclear whether transportation professional B was a member of the society. While it might have been discourteous to his colleague, it was not unethical.

Opinion of the Board of Ethical Review:
*It was unethical for Transportation Professional A to fail to include all of the members of the research team in the abstract.*
Main conclusions of the Board of Ethical Review:
The Board is of the view that Transportation Professional A has an obligation to seek an immediate clarification, understanding, and resolution with Transportation Professional B and the other members of the research team regarding the authorship of the energy research paper abstract. Transportation Professional A should take immediate steps to resubmit the abstract to include all members of the research team as agreed upon by the team.

Question 2b:
Was it ethical for Transportation Professional A to propose to present at the technical society conference?

Survey results:
Respondents who answered yes: 50%
Respondents who answered no: 50%
Respondents with < 20 years experience who answered yes: 47%
Respondents with > 20 years experience who answered yes: 51%

Typical comments from respondents who answered yes:
- Yes, Transportation Professional A (TPA) has the right to perform a presentation at a conference as long as he gives all team members credit for their contributions. It is unethical for TPA to insinuate that he solely conducted the research. The abstract should include the names of the team leader and the other pertinent team members. The TPA has an obligation to give the team leader an opportunity to lead the presentation.
- Sure, as long as proper credit and permission from the research team was provided.
- I don't think it's unethical to present however TPA would need to recognize all members of the research team in the presentation.
- TPA has every right to present, but should have the abstract peer reviewed and approved for presentation. The project team should also be credited.
- Transportation Professional A can present at the conference but should recognize the contributions of others that worked on the project.
- Not unethical so long as he receives the permission of the other contributors and gives them proper credit.
- As leader of the team, Professional A should be the presenter while properly crediting others.
- He took the initiative to prepare an abstract.

Typical comments from respondents who answered no:
- A was not the team leader, and therefore would not be considered the primary author of the paper documenting the research. A should have coordinated with B before proposing to present at the conference.
- No, since he did not make the other members of the technical society aware of his intent.
- Without approval of the other research team members, Transportation Professional A gives the impression that he has authority to represent the entire research team and its findings.
- No. Not without first clearing it with the research team leader.

Opinion of the Board of Ethical Review:
It was unethical for Transportation Professional A to propose to present at the technical society conference without first consulting with Transportation Professional B.

Main conclusions of the Board of Ethical Review:
Transportation Professional A should yield to Transportation Professional B the opportunity to take the lead in making the presentation at the upcoming technical society conference, or offer to make a joint presentation. The Board noted, however, that Transportation Professional B apparently sought to improperly use his role as the team leader to assert the right to solely present the team's research results at the conference.
Ethics in the Transportation Profession (continued)

SITUATION 3
Transportation Engineer A is an assistant director of the Department of Transportation at Somecity. As part of his job, Transportation Engineer A is involved in selecting and hiring transportation engineering consultants for projects in Somecity. These projects may involve local, state, and federal funds. Transportation Engineer A also works part-time as an independent consulting transportation engineer and has teamed with Transportation Engineer B on federal and state-funded projects in another city in the same state.

Question 3:
Is it ethical for Transportation Engineer A to work with Transportation Engineer B as a consultant on federal and state funded projects under these circumstances?

Survey results:
Respondents who answered yes: 55%
Respondents who answered no: 45%
Respondents with < 20 years experience who answered yes: 64%
Respondents with > 20 years experience who answered yes: 51%

Typical comments from respondents who answered yes:
- As long as he is not part of the selection team awarding that particular contract.
- As long as Somecity knows that they are working on other projects and that it is not a detriment to their work AND it is not work for Somecity.
- It's fine for them to work together on projects in another city, as long as T.E. A isn't selecting and hiring T.E. B for projects in Somecity. If T.E. B wants to submit to work on a project in Somecity then T.E. A has to recuse him/her self from the selection process.
- As long as Transportation Engineer A's employer at Somecity has agreed to allow Engineer A to do work outside the city on their own time.

Typical comments from respondents who answered no:
- The Transportation Professional A (TPA) has a high level position, selecting and hiring consultants that he could potentially be teaming with or competing against in other cities. It could easily be construed that the TPA selected a particular consultant in return that this consultant chose the TPA as a sub-consultant on project outside of the City.
- Transportation Professional A should disclose his working relationship with Transportation Professional B.
- No, because A's presence on the team may influence a prospective client who hopes to work for A's employer.
- Engineer A should recuse from consultant selection of Engineer B.
- It can be construed as a conflict of interest
- There's no information as part of this scenario that would be a conflict of interest. If engineer A was writing a grant for competing money that could be awarded to either city that could be an issue
- While in reality, it may be best for TE A to use TE B because of qualifications and experience in working together, appearances would dictate that this not happen

Opinion of the Board of Ethical Review:
Based on the limited facts presented, it was unethical for Transportation Engineer A to work with Transportation Engineer B as a consultant on federal and state projects.

Main conclusions of the Board of Ethical Review:
Transportation Engineer A's working with Transportation Engineer B as a consultant on federal and state-funded projects could create the appearance of a conflict of interest. Before Transportation Engineer A undertakes any work as an independent consultant, Transportation Engineer A must advise and secure the permission of the appropriate authorities in Somecity; and because the work in question involves local, state, and federal resources, Transportation Engineer A must also make absolutely certain that his actions are consistent and in conformance with applicable local, state, and federal procurement laws and conflict-of-interest provisions as well as with state engineering licensure laws and regulations.
SITUATION 4

Transportation Professional A is a consultant working for XYZ Consultants. Transportation Professional A's supervisor, Transportation Professional B, is vice president of XYZ Consultants. Transportation Professional B asks Transportation Professional A to develop a written scope of work for a study for a client. Transportation Professional A drafts the scope of work memorandum and sends the memorandum to Transportation Professional B and Transportation Professional B's assistant for review. Approximately a month later, Transportation Professional A receives a courtesy copy of an e-mail from Transportation Professional B, along with a version of Transportation Professional A's memorandum as revised by Transportation Professional B, with Transportation Professional A listed as the sole author. Transportation Professional A objects to Transportation Professional B making the changes to the memorandum without Transportation Professional A's knowledge or consent. Transportation Professional B replies that the memorandum was "not as strongly stated as it should have been" and implies that Transportation Professional A is "making a big deal about nothing."

Question 4:
Was it ethical for Transportation Professional B to make the changes to the memorandum without Transportation Professional A's knowledge or consent?

Survey results:
Respondents who answered yes: 39%
Respondents who answered no: 61%
Respondents with < 20 years experience who answered yes: 46%
Respondents with > 20 years experience who answered yes: 37%

Typical comments from respondents who answered yes:
- While it may be ethical for a supervisor to make changes to TP A's work, TP B should have discussed the memo w/ TP A to understand why the memo was written as it was.
- As long as the substance of the memo isn't altered to the extent of changing the meaning, or the document isn't stamped by a P.E., this is within the normal scope of a supervisor's duties.
- A scope of work is a product of the company, not a person. It is not like an article or paper. I assume multiple people normally would work on and get approval for a scope of work from a company.
- It may be ethical for him to modify the proposed scope of work as a V-P of the company, but out of professional courtesy he should have discussed it with Professional A before submitting it to the prospective client--especially since there does not appear to have been an immediate deadline that would have precluded such a discussion.
- Ultimately Professional B is responsible for delivering the scope of work. Would have been nice to share the changes, but not necessary.

Typical comments from respondents who answered no:
- The edits should have been approved before the memo was issued.
- As the VP, T.P. B is entitled to make changes but then should have sent the memo out under their name not T.P. A's name. Otherwise, T.P. B should have discussed the changes with T.P. A.
- A should get credit for his work. Modifications require his consent.
- You do not revise the professional work of others without coordinating the changes with them
- Transportation Professional A cannot be forced to accept Professional B's version of his memorandum. It behooves Transportation Professional B to share the edited version of the memorandum with Transportation Professional A for his concurrence/feedback before sending it out. A sole author is someone accepting full responsibility/credit for the content of a document.

Opinion of the Board of Ethical Review:
It was unethical for Transportation Professional B to make the changes to the memorandum without Transportation Professional A's knowledge or consent while still listing Transportation Professional A as the sole author.

Main conclusions of the Board of Ethical Review:
It is the Board's view that regardless of whether Transportation Professional A was a subordinate of Transportation Professional B, professional respect would suggest that Transportation Professional B had an ethical obligation to first advise and consult with Transportation Professional A regarding Transportation Professional B's changes to Transportation Professional A's work, particularly because Transportation Professional B attributed the work solely to Transportation Professional A.
This Month’s Survey Results (Survey 2)

Urban Transportation Patents

Urban transportation-related patents are filed on a regular basis at the U.S. Patent and Trademark Office in Washington, DC (http://patents.uspto.gov). The Urban Transportation Monitor searched the Patent Office's database and identified urban transportation-related patents that were filed from June 2011 to the present. Characteristics of selected patents are described on the following pages.

Personal propulsion device with hands free control
United States Patent 9,114,695

An improved personal propulsion device that imparts thrust directly to the user when operating a human powered vehicle to improve mobility thereof. The device allows hands free control of thrust magnitude and direction so both hands can grasp and control bicycle handlebars and brakes, watercraft paddles, ski poles or other apparatuses. In another embodiment, the device can be attached directly to the vehicle. The device can be provided with a collapsible shrouded propeller assembly comprising a shroud made up of interlocking panels that are each removably attached to the end of an elongated strut, with each the struts being pivotally and/or telescopically disposed relative to the propulsion mechanism. The panels can be slidably engaged with the struts. A gradiently flexible garment can be worn by a user and utilized with a gradiently flexible fairing attached to the user and a bicycle to improve aerodynamics when riding the bicycle.
Chainless electric bicycle
United States Patent  9,216,792

The electric bicycle includes a battery, a generator to generate voltage by operation of pedals, and a pedal load adjustment unit to adjust pedal load applied to the pedals by controlling voltage generated from the generator and used to charge the battery. The pedal load adjustment unit includes plural capacitors configured to be charged with the voltage generated from the generator and plural switches configured to operate alternately so that the voltage generated from the generator is discharged to the capacitors to charge the capacitors and the voltage stored in the capacitors is discharged to the battery to charge the battery.

High occupancy vehicle lane enforcement system using an information system for reduced false positives
United States Patent  8,760,317

An upstream vehicle detection system captures images of a vehicle as it travels through a high occupancy vehicle (HOV) lane or high occupancy vehicle tolling (HOT) station and generates an hypothesis as to whether the vehicle is complying with HOV or HOT rules based on image analysis. A database of historical information about various vehicles’ compliance with HOV or HOT rules is consulted to determine whether the vehicle has previously been identified as a potential violator and pulled over by law enforcement as a result. If the vehicle was previously pulled over by law enforcement and determined to be complying with HOV or HOT rules (a false positive), then the violation hypothesis may be weighted in favor of not pulling the vehicle over.
Urban Transportation Patents (continued)

Versatile electric bicycle systems
United States Patent  9,168,975

A versatile electric bicycle that is configured to be easily adapted to accommodate various needs and requirements. In certain embodiments, the foregoing may provide features and/or models that are configured to be easily adapted to accommodate parts of varying dimensions, different seating configurations, and/or particular laws and regulations of different jurisdictions.

A computer-readable, non-transitory storage medium having a computer program stored thereon for causing a suitably programmed mobile computing device to process by one or more processors computer-program code by performing a method for controlling a maximum power output of a motor of a vehicle when the computer program is executed on the suitably programmed mobile computing device, the vehicle comprising an electric bicycle, moped, motor assisted cycle, or motorcycle, the method comprising: determining, by a geolocation system of the mobile computing device, a geographic location representative of a geographic position of the vehicle; accessing, by the mobile computing device, an electronic database comprising maximum power output regulation data; determining, by the mobile computing device, based on the geographic location and the maximum power output regulation data, a power output limit related to the geographic location; and transmitting, from the mobile computing device to a control system of the vehicle, data that enables the control system to limit a maximum power output of the motor of the vehicle to the determined power output limit.

Triple rail PRT transportation system
United States Patent   8,807,048

A personal rapid transit (PRT) system that comprises a very economic triple rail topology for bi-directional urban personal transport. All the ramps are implemented always on the one side of the tracks for the sake of the narrow urban spaces accommodation. In order to achieve fast speed direction changes and a non compromised passenger security, the ramps are implemented as parallel lines to the corresponding tracks, and the vehicles do not use any wheel steering or electromagnetic heads. Instead, a landing wheel gear is implemented, and all the wheels are synchronized by speed before touching the rails. The vehicle’s center of masses is constantly maintained to be found in most cases in one plain with the guideways. In case of emergencies, a special “anti-fall down” security system keeps the vehicle on the rails. The vehicles are capable of making all kind of turns by utilizing the highly compact Direction Change Connector. The PRT control system is implemented as three layer hierarchical system that consists of fault-tolerant processor nodes only, and utilizes two channel (with a hot reserve) wireless communications between the layers.
Method for analyzing traffic flow at an intersection
United States Patent 9,218,739

A method for assisting a driver includes determining that a host vehicle and first and second surrounding vehicles are approaching an intersection on at least two different road segments; determining when the first and second vehicles have stopped at the intersection; determining when the first and second vehicles proceed through the intersection; and identifying an actual order-of-progression of the first and second vehicles through the intersection. Simultaneously or sequentially with determination of the actual order-of-progression, attempting to determine a present geographic location of the host vehicle and consulting an on-board database to attempt to identify a regulatory order-of-progression for the present geographic location. If the regulatory order-of-progression is identified, the driver is advised regarding the regulatory order-of-progression. If the attempt to identify the regulatory order-or-progression is not successful, the driver is advised regarding the actual order-of-progression.

System and method for traffic control
United States Patent 9,165,462

A system and a method for controlling traffic, the method comprising: when a sensing terminal sends a wireless signal, the intensity of the wireless signal sent by the sensing terminal is determined by wireless sensor nodes (101) located on both sides of a road, and the determined intensity is passed to an information processing module (102); the information processing module (102); the information processing module (102) controls the state of a traffic light according to the change in the intensity determined by the wireless sensor nodes (101). By means of the present application, the state of pedestrians crossing the road can be automatically determined, and the traffic light can be automatically adjusted, so as to ensure the safety of pedestrians effectively.
REQUESTS FOR PROPOSALS

1. Travel Demand Model Maintenance and Development
Agency: Duluth-Superior Metropolitan Interstate Council (MIC)
Deadline: April 14, 2016 by 4:30 p.m.
Contact: Rondi Watson, email: rwatson@ardc.org
Website: http://www.dsmic.org/default.asp?PageID=10
Description: The Duluth-Superior Metropolitan Interstate Council (MIC), a division of the Arrowhead Regional Development Commission (ARDC), is seeking responses from qualified consulting firms to provide ongoing maintenance and development of the MIC’s travel demand model for use in its short-term and long-range transportation planning activities. The MIC is the designated Metropolitan Planning Organization for the Duluth, MN – Superior, WI urbanized area. It is the MIC’s intention to select one successful respondent to deliver these services throughout 2016-2019. The selected Consultant will be working with planning and GIS staff upon request and under the direction of the MIC Director. All proposals are due to the MIC office by 4:30 PM local time on Thursday, April 14, 2016. The Federal Transit Administration (FTA) will be providing federal assistance in an estimated total amount of $120,000. Federal funding will be at 80% of the total cost of the project. The Catalog of Federal Domestic Assistance (CFDA) number is 20.505.

2. Transportation Demand Management - Rideshare Consultant
Agency: The Mid-Ohio Regional Planning Commission (MORPC)
Deadline: April 11, 2016 at 12 pm (ET)
Contact: Dan Sheehan, email: dsheehan@morpc.org
Website: http://regionalcouncils.org/press/219-rideshare-consultant-rfp
Description: Transportation Demand Management - Rideshare Consultant
The Mid-Ohio Regional Planning Commission (MORPC), a representative agency of the Ohio Association of Regional Councils (OARC), is requesting proposals from firms to provide professional services for assistance and guidance in selecting an efficient, cost-effective, and robust platform that will perform public ridematching services for several regions throughout the State of Ohio. The consultant will assist OARC agencies by conducting a feasibility study that will produce a RFP that adequately solicits the services of an interactive ridesharing platform. The consultant will then help OARC agencies select a platform that emphasizes quality rideshare transportation options, while simultaneously incentivizing the many multi-modal transportation options an individual may choose when traveling. In effect, the platform shall produce outcomes associated with Transportation Demand Management (TDM) by helping to reduce the vehicular demand on congested roadways by means of encouraging alternative modes of transportation to the Single-Occupant Vehicle (SOV). The technology must be scalable to include use by all OARC members and their respective metropolitan areas, in addition to other public transportation providers, such as mobility managers.

Agency: Maricopa Association of Governments (MAG)
Deadline: April 8, 2016 by 12 noon
Contact: Sarath Joshua
Description: The Maricopa Association of Governments (MAG) is requesting proposals from qualified consultants for a project that would develop a Systems Management and Operations Plan for the MAG planning area. The project will perform a comprehensive study, generate recommendations, consult with all affected agencies and produce a plan that would provide guidance for making future investments and improving the safety, efficiency and reliability of the region’s transportation system. The project will be completed in a maximum of 16 months from the date of the notice to proceed at a cost not to exceed $300,000. Detailed proposal requirements may be obtained by contacting the MAG Office at the address indicated below or may be downloaded from http://www.azmag.gov, then “RFPs and RFQs.

4. Technical Support for SVRT Phase II Travel Forecasting
Agency: Santa Clara Valley Transportation Authority (VTA)
Deadline: April 11, 2016 by 5 p.m.
Contact: Tim Willson, email: tim.willson@VTA.org
Website: www.VTA.org
Description: Santa Clara Valley Transportation Authority (VTA) seeks proposals from qualified firms to provide Technical Support for SVRT Phase II Travel Forecasting Services. Parties interested in obtaining a copy of this Request for Proposals may do so by accessing the VTA website at www.VTA.org. All parties are asked to register on the website so they may be automatically notified of any changes to the RFP document. Request a copy of this RFP by email to Tim Willson, VTA Contracts Administrator at tim.willson@VTA.org.

5. Metro Green Line Extension / Orange County to Los Angeles International Airport Connectivity Study
Agency: Southern California Association of Governments (SCAG)
Deadline: April 20, 2016 by 10 a.m.
Contact: Sandee Scott, Sr. Contracts Administrator, email: scotts@scag.ca.gov
Website: http://www.scag.ca.gov/business/index.htm
Description: RFP Number: 16-039 The Southern California Association of Governments (SCAG), in cooperation with the Cities of Norwalk and Santa Fe Springs, the Los Angeles County Metropolitan Transportation Authority (Metro), and the Orange County Transportation Authority (OCTA), is seeking proposals to prepare a transportation planning study to improve transit connectivity between Orange County (OC) and Los Angeles International Airport (LAX). Specifically, the purpose of this study is to investigate the feasibility of an extension of the Metro Green Line from its existing eastern terminus at the I-605 freeway in Norwalk to the Norwalk/Santa Fe Springs Metrolink Station. This 2.8 mile Light Rail Transit (LRT) extension would complete a critical link in the regional rail transit network and provide an important inter-modal connection between the Metro Rail system and the Metrolink commuter rail system, and potentially future California High Speed Rail. It would also benefit inter-county travelers, provide an important alternative to driving, and support regional, state and federal goals for greenhouse gas reduction.
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<thead>
<tr>
<th>DATES</th>
<th>CONFERENCE AND SPONSOR</th>
<th>CITY</th>
<th>VENUE</th>
<th>MAIN TOPICS</th>
<th>WEBSITE/CONTACT INFO</th>
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<tr>
<td>April 18-21</td>
<td>6th European Transport Research Conference, sponsored by the Transport Research Arena</td>
<td>Warsaw, Poland</td>
<td>National Stadium</td>
<td>The theme of this biennial conference is “Moving Forward: Innovative Solutions for Tomorrow’s Mobility.” TRA2016 Conference will contribute to innovation in sustainable mobility for Europe, by bringing together all the stakeholders of the transport system. It seeks to reflect the multidisciplinary nature of the transport sector and, for this reason, addresses all stakeholders in both the public and private sectors and all professionals, regardless of their roles (researchers, practitioners, designers, constructors, operators, administrators, policy makers etc.).</td>
<td><a href="http://www.traconference.eu/">http://www.traconference.eu/</a></td>
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<td>April 18-20</td>
<td>Design-Build In Transportation (DBIA)</td>
<td>Charlotte, NC</td>
<td>Charlotte Convention Center</td>
<td>Network with all the major players and design-build teams who will be in attendance. Reach Public and Private Owners and the entire Design-Build Team: •Chief Engineers, Purchasing, Contracts, and other key officials from State DOTs, and the Federal Highway Administration, plus from Bridge, Toll, Rapid Transit, Rail, Port, and Airport Authorities A high percentage of owner attendees from all segments of the transportation industry, including representation from over 80% of the state Departments of Transportation. All the major players who deliver major civil infrastructure projects •Senior Level Executives – Consulting and Environmental, Civil, Bridge, Transportation, Safety, Quality, and Cost Engineers, Designers, Airport and Port Officials, Planners, Contractors, Specialists, and Solution Providers</td>
<td><a href="https://www.dbtranspo.com/">https://www.dbtranspo.com/</a></td>
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<td>April 23-24</td>
<td>Transit Vehicle Technology and Their Impact on Sustainable Transport TVT 2016</td>
<td>Rome, Italy</td>
<td>N/A</td>
<td>The workshop will showcase various transit vehicle technologies and operations that have significant impact on the sustainable development of urban environment. The occasion will bring together researchers, practitioners, and decision makers from all over the world to explore the interaction between transportation, especially urban transit, and nature and built environment, energy consumption and society values.</td>
<td><a href="http://www.vehits.org">www.vehits.org</a></td>
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<td>April 25-27</td>
<td>MENA Transport Congress &amp; Exhibition (UITP and RTA)</td>
<td>Dubai, Abu Dhabi</td>
<td>Dubai Convention Center</td>
<td>Topics include public transport for fast growing cities; public transport governance and funding; public transport quality and image; public transport management and employment; public transport and energy; school transport</td>
<td><a href="http://www.uitp-mena.com/">http://www.uitp-mena.com/</a></td>
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<td>May 1-4</td>
<td>6th Transportation Research Board Conference on Innovations in Travel Modeling</td>
<td>Denver, CO</td>
<td>N/A</td>
<td>The event will facilitate sharing information and experiences on current models and modeling research. The conference will also explore the integration of social factors, land-use, transportation supply, and technology into the modeling process.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/172989.aspx">http://www.trb.org/Calendar/Blurbs/172989.aspx</a></td>
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<td>May 1-4</td>
<td>North American Travel Monitoring Exposition and Conference (NATMEC)</td>
<td>Miami, FL</td>
<td>Hyatt Regency, Miami</td>
<td>North American Travel Monitoring Exposition and Conference (NATMEC) provides an opportunity for traffic monitoring professionals to exchange and share information related to the collection, management, and use of monitored traffic data in all application. Attendees will be able to network with local, state, and federal representatives; industry representatives; and vendors of equipment and software. NATMEC is the premier venue for sharing experiences on effectively monitoring traffic flow, whether for operational decision making, planning, or program or performance management.</td>
<td><a href="http://www.cvent.com/events/natmecev/">http://www.cvent.com/events/natmecev/</a></td>
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<tr>
<td>May 4-6</td>
<td>15th Transportation Research Board International Conference on Managed Lanes</td>
<td>Miami, FL</td>
<td>N/A</td>
<td>The workshop explores planning, design, and operations of managed lanes as well as emerging research needs related to integrating managed lanes into the transportation system.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/172007.aspx">http://www.trb.org/Calendar/Blurbs/172007.aspx</a></td>
</tr>
</tbody>
</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.
<table>
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<tr>
<th>DATES</th>
<th>CONFERENCE AND SPONSOR</th>
<th>CITY</th>
<th>VENUE</th>
<th>MAIN TOPICS</th>
<th>WEBSITE / CONTACT INFO</th>
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<tr>
<td>May 17-19</td>
<td>Transportation Research Board co-sponsors Road Safety on Five</td>
<td>Rio de Janeiro, Brazil</td>
<td>N/A</td>
<td>The conference provides an international platform to exchange knowledge on road safety and safe mobility. This conference will focus on safety and health associated with road transportation.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/172451.aspx">http://www.trb.org/Calendar/Blurbs/172451.aspx</a></td>
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<tr>
<td>May 22-25</td>
<td>International Parking Institute (IPI) Conference and Expo</td>
<td>Nashville, TN</td>
<td>N/A</td>
<td>The IPI Conference and Expo is the largest educational and networking event for parking and transportation professionals in the world. Traditionally, more than 2,600 attendees gather for the four days for meetings, keynotes, leadership discussions, networking awards, special events, tours of parking facilities and an exhibit hall with more than 235 exhibitors.</td>
<td><a href="http://www.parking.org/meetings--events/pi-conference--expo.aspx">http://www.parking.org/meetings--events/pi-conference--expo.aspx</a></td>
</tr>
<tr>
<td>May 24-26</td>
<td>American Association of State Highway and Transportation Officials Spring Meeting</td>
<td>Des Moines, IA</td>
<td>Des Moines Marriott</td>
<td>The AASHTO Annual Spring Meeting offers transportation executives the opportunity to network and share the latest in industry policies and innovations. Hosted by the home state of the AASHTO President, this meeting includes informational sessions on relevant industry topics.</td>
<td><a href="http://mmsd.transportation.org/meetings--registration/">http://mmsd.transportation.org/meetings--registration/</a></td>
</tr>
<tr>
<td>June 1</td>
<td>International Scientific Conference on Mobility and Transport</td>
<td>Munich, Germany</td>
<td>Oskar von Miller Forum</td>
<td>The mobil.TUM 2016 serves as a platform for practitioners and researchers to meet and exchange their observations, experiences, and explanations. International keynote speakers will animate the debate on core ideas and theories. The meeting aims to provide inspiration for future research directions and the implementation of successful solutions for sustainable urban mobility.</td>
<td><a href="http://www.mobiltum.vt.bgu.tum.de/home/">http://www.mobiltum.vt.bgu.tum.de/home/</a></td>
</tr>
<tr>
<td>June 11-12</td>
<td>ITS America 2016 San Jose (ITA America)</td>
<td>San Jose, CA</td>
<td>San Jose McEnery Convention Center</td>
<td>Altering or creating new intelligent transportation systems technologies; policy issues around security; infrastructure of things; seamless payment systems, billing, customer relationship management, identity, network management</td>
<td><a href="http://itsamerica2016.org/">http://itsamerica2016.org/</a></td>
</tr>
<tr>
<td>June 14-16</td>
<td>2016 International Symposium on Enhancing Highway Performance: 7th International Symposium on Highway Capacity and Quality of Service; 3rd International Symposium on Freeway and Tollway Operations</td>
<td>Berlin, Germany</td>
<td>N/A</td>
<td>The symposium will focus on the latest research and international improvements in highway and transportation capacity, quality of service, and freeway and tollway operations. The symposium is co-sponsored by the Transportation Research Board.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/171256.aspx">http://www.trb.org/Calendar/Blurbs/171256.aspx</a></td>
</tr>
<tr>
<td>June 26-29</td>
<td>American Society of Civil Engineers 2016 International Conference on Transportation and Development</td>
<td>Houston, TX</td>
<td>N/A</td>
<td>The conference co-sponsored by the Transportation Research Board will enable attendees from around the world to discuss transportation and development projects ranging from airports to rail to highways and multi-modal facilities. The conference will consider all aspects of development from planning through design and construction to operations.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/172452.aspx">http://www.trb.org/Calendar/Blurbs/172452.aspx</a></td>
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<tr>
<td>June 26-29</td>
<td>2016 Western Association of State Highway and Transportation Officials (WASHTO) Annual Meeting</td>
<td>Laramie, WY</td>
<td>N/A</td>
<td>The Western Association of State Highway and Transportation Officials holds its annual meeting.</td>
<td><a href="http://www.washto.org">www.washto.org</a></td>
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<td>July 6-7</td>
<td>3rd International Conference on Access Management (TRB, SAICE)</td>
<td>Pretoria, South Africa</td>
<td>CSIR Conference Centre, Pretoria</td>
<td>The conference is designed to help stimulate continued world-wide improvements to access management state of the art. The conference will focus on the latest research, policies, innovative practices, safety, and operational effects related to access management. Specific areas to be addressed include access management concepts; road systems and classification; interaction with land use planning; geometric design considerations; and more.</td>
<td><a href="http://www.accessmanagement.info/Event/2016-intl-conference-s-africa">http://www.accessmanagement.info/Event/2016-intl-conference-s-africa</a></td>
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<tr>
<td>July 11-12</td>
<td>11th National Conference on Transportation Asset Management, organized by the Transportation Research Board</td>
<td>Minneapolis, MN</td>
<td>N/A</td>
<td>The conference is expected to cover a broad range of topics on surface transportation modes of interest to agencies in the early stages of implementation of asset management as well as agencies that are in later stages of the implementation process.</td>
<td><a href="http://www.trb.org/Calendar/Blurbs/171403.aspx">http://www.trb.org/Calendar/Blurbs/171403.aspx</a></td>
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<td>July 22-25</td>
<td>National Association of Counties (NACo) Annual Conference and Exposition</td>
<td>Long Beach, CA</td>
<td>N/A</td>
<td>The Annual Conference provides county officials with a great opportunity to vote on NACo’s policies related to federal legislation and regulation; elect officers; network with colleagues; learn about innovative county programs; find out about issues impacting counties across the country; and view products and services from participating companies and exhibitors.</td>
<td><a href="http://www.naco.org/events/nacos-81st-annual-conference-exposition">http://www.naco.org/events/nacos-81st-annual-conference-exposition</a></td>
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<tr>
<td>July 30-Aug. 3</td>
<td>2016 ACT International Conference</td>
<td>Portland, OR</td>
<td>Hilton Portland &amp; Executive Tower</td>
<td>Wide range of transportation demand management, transportation options, mobility on-demand, shared use mobility, public policy, and commuter transportation services</td>
<td><a href="http://www.actconf.org/index.cfm">http://www.actconf.org/index.cfm</a></td>
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<tr>
<td>Sept. 11-14</td>
<td>American Public Transportation Association’s Annual Meeting</td>
<td>Los Angeles, CA</td>
<td>N/A</td>
<td>The American Public Transportation Association holds its annual meeting.</td>
<td><a href="http://www.apta.com/mc/Pages/Future.aspx">http://www.apta.com/mc/Pages/Future.aspx</a></td>
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<tr>
<td>Sept. 12-15</td>
<td>&quot;Pro Walk-Pro Bike-Pro Place&quot; Conference</td>
<td>Vancouver, Canada</td>
<td>N/A</td>
<td>The premier conference in North America for walking and bicycling professionals from the public and private sectors. The 19th Pro Walk/Pro Bike/Pro Place in Vancouver is expected to draw 1,000 city planners, transportation engineers, public health advocates, elected officials, community leaders, and professional walking and bicycling advocates.</td>
<td><a href="http://www.pps.org/walkbikeplaces2016/">http://www.pps.org/walkbikeplaces2016/</a></td>
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<tr>
<td>Sept. 26-28</td>
<td>International Conference on Demand Responsive Transportation</td>
<td>Breckenridge, CO</td>
<td>The Village at Breckenridge</td>
<td>The conference will provide an opportunity for paratransit professionals from around world to discuss ideas and trends in the areas of technology and communication, industry partnerships, service concepts, innovation, Americans with Disabilities Act compliance, health and wellness issues, and performance measurement.</td>
<td><a href="http://www.cvent.com/events/international-conference-on-demand-responsive-transportation-paratransit-from-dial-a-ride-to-techno/event-summary-4552d4ee285da4c3e97a233dc1e32c7e1.aspx">http://www.cvent.com/events/international-conference-on-demand-responsive-transportation-paratransit-from-dial-a-ride-to-techno/event-summary-4552d4ee285da4c3e97a233dc1e32c7e1.aspx</a></td>
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