GBNRTC

Newsletter for the GREATER *BUFFALO-NIAGARA* REGIONAL TRANSPORTATION COUNCIL
Metropolitan Planning Organization For Erie and Niagara Counties

Progress on synchronization of signals

The GBNRTC is collaborating with the City of Buffalo and the New York State Department of Transportation (NYSDOT) to introduce the region's first Traffic Signal Optimization Program.

It would fine tune the timing of traffic lights, according to time of day, speed limits and traffic volumes, to the point where commuters could travel non-stop along the major corridors without being delayed by red lights while at the same time safeguarding bicyclists and pedestrians.

According to Stephen Szopinski, a principal transportation analyst with GBNRTC, it would be the first program of its kind in Western New York. Szopinski will be manager of the program, which will be developed by Fisher Associates, under a $400,000 grant from the federal CMAQ (Congestion Mitigation and Air Quality Improvement) program.

Hal Morse, executive director of the GBNRTC, noted that improvement of signalization has been "a major concern in Western New York for many years" and the optimization program would help toward setting a long-term framework for improvements throughout the region.

He also noted that there are at least 50 projects involving signals in the two-county region in the current Transportation Improvement Program (TIP).

The initial focus in the "optimization program" with Fisher Associates has been on three city-owned corridors: Clinton Street, between Michigan Avenue and the City Line with 25 signals; Main Street, from Goodell Street to Humboldt Parkway, 19 signals; and Elmwood Avenue, between Tupper Street and the City Line, 39 signals.

Also targeted, in the agreement with Fisher Associates, as funding becomes available, are these corridors:

City owned — Hertel Avenue, 11 signals, from Delaware to Main; Jefferson Avenue; 20 signals, Clinton to Main.

State owned — Sheridan Drive, 25 signals, Grand Island Boulevard to North Forest Road; Niagara Falls Boulevard, 14 signals, Eggert Road to Niagara County Line; Main Street, 15 signals, Bailey Avenue to Interstate 290; Delaware Avenue, 15 signals, Nottingham Terrace to Interstate 290; Walden Avenue, 5 signals, Interstate 90 to Union Road.

Erie County owned — Ridge Road, 6 signals, Route 219 to Seneca Street.

Under the optimization program, there will be separate timing, based upon traffic flows, for the a.m. peak, the mid-day peak and the p.m. peak, according to Szopinski. "Right now," he said, "each signal operates on its own little timer and doesn't care about the signal two blocks away or three blocks away or anywhere else. This will change all that, so that they are all tied together as you travel along.

"So if you start, let's say, at Clinton and Michigan, you should be able to get all the way out to the city line, if you travel the speed limit, without stopping for any signals."

According to the agreement with Fisher Associates, which has its head-

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quarters in Rochester, "One of the most important steps in the Traffic Signal Optimization Program will be the creation of an existing condition model that accurately represents the actual traffic and pedestrian flow on the roadway.

"This will be accomplished through the use of existing traffic signal timing information and detector information from the GBNRTC's Synchro model and traffic signal controller sheets, as well as the traffic counts, travel run data and traffic flow characteristics, queues and speeds obtained during the traffic counts."

Other projects include collaboration by the Niagara International Transportation Technology Coalition (NITTEC) on improvement of signals on other Buffalo corridors.

Athena M. Hutchins, NITTEC engineering manager, said, "The City of Buffalo installed a central signal software system at NITTEC for specific scenario based operation of signals along specified corridors to respond to incident and weather events. The corridors include Niagara Street, South Park Avenue, Genesee Street and William Street. Additional projects have been initiated by either the City of Buffalo or the NYSDOT to add additional corridors. These include segments of Delaware Avenue, Walden Avenue, Main Street, Bailey Avenue and Michigan Avenue."

An inventory by the GBNRTC had revealed that Erie and Niagara Counties have 1,782 traffic signals owned and maintained by 35 different jurisdictions or agencies. NYSDOT and the City of Buffalo are the largest owners.

"Area-wide upgrading and coordination of signalization systems" is a major goal of the regional Long-Range Transportation Plan.

Earlier this year, The Buffalo News carried a story on drivers complaining about "traffic lights that cause delays and waste gas" and "too many signals in areas that don't need them." Doug Miller of North Buffalo, identified as a crusader for a more efficient system, was quoted as saying, "I'm tired of spending 15 minutes to travel two miles."

GBNRTC selected for one of four U.S. pilot programs

The U.S. Department of Transportation (USDOT) has selected the GBNRTC to conduct a pilot program to work with the trucking industry to develop an innovative roadway pricing system for trucks that could reduce traffic congestion in the region in ways that could serve as a model for the state and nation.

The 90-290 interchange for example has been described, on the basis of 2004 statistics, as "the worst freight bottleneck in the country," causing "about 1.7 million hours of annual truck delay, costing about $55 million per year." Trucks "account for 24 percent of vehicles traveling through this interchange," according to USDOT.

"A series of designs will be tested using actual data from trucking firms," according to the GBNRTC application. "… We will use advice from several trucking firms and from national leaders to develop a structure that could begin full-scale field tests in the near future. We hope to develop a system that could be implemented not only statewide in New York, but also one that could be expanded nationally."

Two other recent federal grants for pilot programs on innovative pricing of traffic lanes went to the Twin Cities Area (St. Paul-Minneapolis) of Minnesota, and another was for a roadway pricing project in the San Francisco Bay Area. Other grants are expected. And the University of Iowa

Public Policy Center has undertaken a federally funded testing of an on-board computer system for a mileage-based tax involving 1,500 drivers in six cities. In Europe, such systems reportedly have made significant improvements in congestion in such cities as London and Stockholm.

The federal grant of $717,000 to the GBNRTC for the initial design phase of the program here will be matched by $180,000 from private-sector technology partners, identified as Calmar Telematics, based in Syracuse, and Delcan Corporation, based in Markham, Ontario. Both are recognized for leadership in transportation planning, technology and management.

"We plan to limit participation at this (design) stage to four New York based trucking firms," according to the application. "We expect these fleets will include a mix of more than 500 heavy trucks, combination trucks and delivery trucks. These firms will play an important role in advising about the impacts of a truck based VMT (Vehicle Miles Traveled) fee and about how best to structure a truck VMT fee.

"We view developing a partnership with truck fleets as a key part of making this effort more than a pretty report that sits on a shelf. While we are excited at the prospect of our proposal expanding to form the basis of a national system, it is paramount to build consensus by getting the details right."

Supporters of the GBNRTC program include the Capital District Transportation Committee, which is the Metropolitan Planning Organization (MPO) for the Albany-Schenectady-Troy region, and the Binghamton Metropolitan Transportation Study, the MPO for the bi-state Binghamton area.

"Freight movements to and from Canada and the Boston area and many parts of the Northeast United States travel along I-90/I-290 interchange" and many of the trucks that use a Niagara River crossing "also use I-90 to Syracuse and Albany and I-81 through Binghamton, affecting both our supporting agencies," the GBNRTC application noted.

Another partner is the New York State Energy Research and Development Authority (NYSERDA), "a potential source," along with other supporters, "of funds for later phases of this work," which would involve field tests and full implementation at the state level. Field tests could begin in 2010 and a "full-scale regional or multi-state application might be possible in the 2011-2013 timeframe."

"An explicit goal" in the initial design phase, using real data to test alternative fee structures, would be for the fee structure "to be revenue neutral," with "no negative impacts on equity." There would be an emphasis on "higher rates during times and locations with congestion."

"Many truck owners are likely to prefer VMT-based fees since they are much simpler and thus less expensive than taxes such as the ton-mile tax used in New York State," according to the application. "We expect important benefits to the trucking industry.

"We will work closely with representatives from the New York State Department of Taxation and Finance and their counterparts within the New York State DOT to specify the current mix of taxes that apply to motor carriers."

The cost of the "considerable paperwork burden" the current system imposes on the state and the truckers would be calculated and an alternative VMT fee would be designed to "generate the same level of revenue as the current tax code."

A VMT fee system would involve use of satellite tracking devices, global positioning system (GPS) technology, to record how far and when the vehicle is driven.

An Advisory Panel will monitor the program. Its membership includes Hal Morse, executive director of the GBNRTC; as well as representatives of the American Association of State Highway and Transportation Officials (AASHTO), the Interstate-95 Corridor Coalition, NYSERDA, NYSDOT, New York City Transportation Department , and the Oregon DOT, which has pioneered a VMT program.

Growing support for driver fees down the road?

Driver fees based upon Vehicle Miles Traveled (VMT) are increasingly suggested as the ultimate answer to the financial challenges, as well as congestion issues, facing the nation's transportation system.

Perhaps the most recent support for a VMT tax was in a report entitled "A New Vision for U.S. Transportation Policy," produced by the National Transportation Policy Project (NTPP) at the Bipartisan Policy Center (BPC), which was established in 2007 by former U.S. Senate Majority Leaders Howard Baker, Tom Daschle, Bob Dole and George Mitchell to "promote solutions that would … achieve real progress."

Other support has come from two national commissions, as well as the Brookings Institute, the Transportation Research Board (TRB), American Association of State Highway and Transportation Officials (AASHTO), National Cooperative Highway Research Program, National Chamber Foundation, University of Iowa, and the Oregon Road User Fee Tax Force..

Their research suggests that road-user fees may be a

more realistic source of federal transportation revenue than continued reliance on the 18.4 cents per gallon of the federal gas tax and 24.4 cents diesel tax. Other possibilities suggested, in conjunction with a VMT tax, include more tolls, higher registration fees, a carbon tax based upon the volume of carbon dioxide emitted by the vehicle, along with. a greater focus upon area and state funding.

The reports typically acknowledge that "the VMT tax is still years away from practical implementation here in the U.S," as it was phrased in a report by the Brookings Institute. And "in the immediate term the federal gas tax should be raised – at least to keep pace with inflation."

Nevertheless, both the Obama Administration and Congress have been reluctant to increase the fuel tax, although the rate has not been raised in 20 years. It has been the mainstay of federal funding for surface transportation, but its role has been eroded by soaring construction and maintenance costs, a decline in driving by some Americans, a shift to more fuel-efficient vehicles and the promotion of alternative fuels for the future. More money is coming out of the tax than is going into it.

The government had to transferred billions from the general fund to cover a shortage in the transportation fund.

In February, the National Surface Transportation Infrastructure Financing Commission, which was created by Congress, estimated a transportation funding gap of nearly $400 billion in 2010-15 that would grow to about $2.3 trillion through 2035.

Although the commission proposed an increase in the fuel tax to secure the Highway Trust Fund in the near term because of "the hole we have dug for ourselves," it suggested that the fuel-tax system "is likely to erode more quickly than previously thought" and proposed that the government "commence the transition to a new, more direct user-charge system as soon as possible."

A year earlier, the National Surface Transportation and Revenue Study Commission, also created by Congress, had made a similar suggestion for a VMT tax but acknowledged that "strategies must be explored to reduce the risks of evasion, protect privacy and keep administrative costs as low as possible."

Transportation Secretary Ray LaHood has suggested that the government may have to resort to a VMT tax, but the White House and members of Congress have tended to distance themselves, at least for the present, from any VMT tax .

A Brookings report concluded: "While the VMT tax is still years away from practical implementation here in the U.S., it is an idea whose time has come. The federal government can continue to study its feasibility through pilot projects."

According to the Brookings Institute, "There are many benefits," including "better allocation of revenues (based on the roads used), better allocation of costs (vehicles damaging to infrastructure such as heavy trucks could be assessed at a greater fee), and better allocation of resources (higher fees could be charged based on time of day and congestion levels)."

LaHood indicated that a VMT user tax would involve the use of satellite tracking devices, global positioning system (GPS) technology, to record how far and when motorists drive and would assess a fee based on those travel habits. This has raised privacy issues. "Many motorists are sensitive about government agencies knowing when and where they travel," noted the 2008 report to Congress by the national revenue study commission.

"Systems must be developed to minimize the amount of unnecessary information that is sent to tax-collecting entities, while providing a way for motorists to verify that they have been charged correctly Potential evasion is another significant issue that must be resolved.

"… There currently is no consensus on the specific technologies that should be used to implement a VMT fee… More information is needed on specific strategies to reflect weight, and axle configuration on wear and tear…"

The bipartisan NTPP project, chaired by two Democrats and two Republicans and monitored by a broad cross section of professionals and economic and research interests, makes the point that "public revenue collection can enhance the performance of the system when users more directly understand and bear the full cost of the infrastructure they use" through "well-designed user- based fees."

Another conclusion was that "distribution of federal revenues should promote both accountability and net increases in sustainable state and local revenue sources" and "road tolls, in particular, offer the added benefit that either public or private entities can bond against the projected revenue stream – thus providing an up-front source of capital to improve or expand existing networks."

By contrast, "simply relying on general funds further obscures the true cost of the transportation system to users and does nothing either to promote efficient use of the system or to address critical societal objectives with respect to energy, the environment and reduced congestion."

Particular support was expressed for "a new user-based freight fee" that would be "applied to projects that have clear benefits for freight transport." The fee "should reflect the full range of the freight network and the burden each mode imposes on public infrastructure, as well as the relative fuel efficiency and/or greenhouse gas emissions of different modes of freight transport."

But the main thrust of the NTTP report was a need for "fundamental reform that moves us to a performance based system" with a much stronger emphasis on accountability to "supplant narrow individual purposes in transportation policy."

Buffalo's CarShare program flourishing

Buffalo's CarShare program, which began in late spring, already had about 100 participants by the end of summer and its managers say the count could easily double by year's end, with growing numbers signing up each week.

Headquarters for the program is at 14 Allen Street. As of this writing, it was offering public use of seven fuel-efficient cars, six Toyota Yaris and a Corolla, situated at parking hubs in the Allentown, Buffalo-Niagara Medical Campus and Elmwood areas.

Mike Galligano, fleet manager, said that expansion was directed toward the Elmwood Village and the South Campus of the University at Buffalo and "as soon as possible we want to get into areas on the East Side and the West Side where people don't have cars."

Most of the participants, he said, sign up under a "Buffalo Roamer" plan, which means they use the car more than 5 hours a month, with monthly dues of $20, plus $5 per hour and 20 cents per mile when they use one of the cars.

Other options include a "Buffalo Settler" plan, for infrequent use, with $5 monthly dues, plus fees of $8 per hour and 20 cents a mile when using a car, and a "BCS. for Business" plan, a "sensible alternative to a company car or fleet," with $30 monthly dues for three employees ($5 for each additional employee), plus $5 per hour and 20 cents per mile.

"A wide range of people sign up," said Galligano, "from the environmentally conscious to families that have one car and need an extra car sometimes for here and there trips and to people with no car who need it to get around.

"I had an interesting case a couple weeks ago with a guy who rides his motorcycle everywhere but needs a car once in a while when it rains or when he gets some groceries."

One of the participants, Ivan Moehrle, who lives in the Elmwood area, said the program offers "the most economical way of transportation, when public transit is not suitable, for example when visiting family members who live in the city outskirts."

A retired millwright, he works part-time for Dunkin' Doughnuts, and also uses CarShare to go to ballroom dances and art shows. "It's a great program especially in a city where there's often a parking problem," he said. "And it's good for the environment, with all those people using a few cars."

Photo from Buffalo CarShare.org

LaVerne Peakes said she budgets about $100 to $150 a month to use CarShare for about 15 hours a month. "I find it so affordable and convenient to my house," she said. "Besides errands and shopping I have used the cars to go on interviews and to meet friends for dinner. I am participating because it is not in my best interest to purchase a car right now, but I do still have a need for a vehicle.

"Furthermore, I love that I can make reservations (on the CarShare web site) from my Blackberry (cell phone) and the money comes out of my account and then I show up at the car I have selected and 'fob in.'"

Kelly Ganczarz, a UB graduate student in urban and regional planning who lives in Allentown, said, "Buffalo CarShare has allowed me to avoid the high costs of car ownership while still providing access to a private car when I need one. I have access to school via the Metro line and most amenities are within walking distance.

"For the occasional trip outside the area there is nothing easier than reserving my CarShare on line, walking to the site, and driving to my destination and it is incredibly easy for someone as busy as myself."

Beverly Mclean, a UB faculty member, said CarShare provided a cost-effective way for her to balance her reliance on public transit. "It helps me occasionally to make multiple trips in one day – for example to the university, Broadway Market and downtown — without spending hours on public bus and light rail."

The fleet manager, Galligano, said the Yaris cars are of different varieties, from two-doors to four doors. "Our next vehicle purchase is going to be a truck," he added "We had a poll among a number of our members and most indicated they could use a truck maybe once in a blue moon to pick up something big from Home Depot or a couch or something like that."

Galligano, like Creighton Randall, director of the program, has a Master's Degree in urban planning from UB. Justin McCabe, an associate, has a Bachelor's Degree in environmental design from UB.

The program is sponsored by the Wellness Institute of Greater Buffalo and supported by the New York State Energy Research and Development Agency (NYSERDA), the New York State Department of Transportation (NYSDOT)and Toyota Financial Services. Hal Morse and Timothy Trabold of the GBNRTC are board members.

The program web site is www.buffalocarshare.org and the telephone number is 898-0850.

GBNRTC cited for collaborative role in city plans

The GBNRTC has been honored for its collaborator role in two 2009 awards on strategic urban design for the City of Buffalo.

The agency was among the partners cited in a Charter Award by the Congress for New Urbanism (CNU) at its annual conference in Denver, Colorado, to Mayor Byron Brown for a set of urban plans produced by the Urban Design Project at the University at Buffalo's School of Architecture and Planning under the leadership of Robert Shibley

Other partners included Buffalo Place, Inc., and the Olmsted Park Conservancy. The Buffalo entry won in competition with 125 plans submitted "by some of the best planners and urban designers in the world". The entry comprised four documents: The Queen City in the 21st Century (city's comprehensive plan); The Queen City Hub, Volumes 1 and II (regional action plan for downtown); Queen City Waterfront (waterfront corridor initiative), and the Olmsted City (Olmsted Park System Plan for 21st Century).

The GBNRTC was also cited for its collaborative role with the UB School of Architecture and Planning and others in a presentation of a 2009 Comprehensive Planning Award by the Western New York Section of the American Planning Association for the Olmsted City plan.

GBNRTC employee awarded scholarship

Lora Cunningham, a recent graduate of the University at Buffalo's School of Architecture and Planning, has been awarded a $500 scholarship from the New York Upstate Section of the Institute of Transportation Engineers to help her in getting a Master's Degree.

She was employed in 2009 as a GBNRTC technician, who was in charge of the summer traffic count program, before undertaking work on a Master of Science degree in a joint program with Clemson University and the College of Charleston.

The award was based in part on a personal essay she wrote on President Barack Obama's position paper on "Strengthening America's Transportation Infrastructure." Here is her essay:

> "President Barack Obama's position paper on Strengthening America's Transportation Infrastructure covers a vast range of topics related to transportation. The most important issue addressed in this paper is strengthening the core infrastructure within the United States. The best way to make long-term improvements to America's highways, railways and airports is through the development and redevelopment of our high-speed freight and passenger rails.
>
> "America's roadways are disintegrating, its bridges are crumbling, and the environment is wasting away. Perhaps the solution to improving our transportation networks and America's effect on the atmosphere, is not th rough the widening of roads, hybrid cars, and more surface parking lots, but by creating more high-speed rail lines and reinventing the way people travel cross-country by rail. Instead of constantly increasing the burden placed on roadways, lightening the daily traffic load would be more beneficial in the long run. People need to be given an appealing alternative to driving their own vehicle to work, school, and for daily errands.
>
> "Light- rail systems, subways, commuter trains and trolleys do require an enormous commitment; the initial monetary investment for one of these transportation systems is enough for many cities to choose to stick with repaving their roads. However, if people had a way to walk a few blocks down their street and be able to access a subway to take them to school, work and to the grocery store, the burden on street infrastructure would be drastically lessened.
>
> "Many cities already have public transportation options in place; the problem is they do not serve the city's population the way they need it. Education and public input is the way for both the public and those sponsoring a project to gain knowledge on how public transit works or needs to work. The reason some public transit is under utilized is not because people do not want to use it; they simply do not know how to or feel uncomfortable doing so. The stigma that only those who do not own a vehicle use public transit needs to be erased. Public transit needs to become the preferred option for people to travel.
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> "If President Obama wants to have lasting changes on America, making public transit a top priority would be the way to do it. New public transit infrastructure takes a visionary to see how it will change a country. The long time line need not be the deciding factor for people. When Frederick Law Olmsted created a design and planted sapling trees in Central Park back in the 1850s, he had to have a vision of how the park would look once fully grown, a century later. It is faith in future populations to utilize the positive decisions made today that will help turn around the destruction America is inflicting on our planet. If these serious changes never step out of the planning stage, it may not be a bright future."

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PRESORTED STANDARD
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Meeting Calendar

Planning and Coordinating Committee (PCC)

meetings begin at 9:30 A.M.

November 4 **Erie County**
95 Franklin Street
Buffalo, New York

December 2 **New York State Department of Transportation**
100 Seneca Street
Buffalo, New York

January 6 **Niagara Frontier Transportation Authority**
181 Ellicott Street
Buffalo, New York

Policy Committee

Meeting dates and times are subject to change: please call (716) 856-2026 for confirmation.

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