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2006

From the Chair...

by Larry Lennon, P.E., AICP

First, let me wish each of you a happy, healthy and prosperous new year! It seems like only yesterday that I was writing my first Chair's Column. Now, it's time to prepare TPD's Annual Report.

As such, this is a good time to take stock of the Division's activities, celebrate our accomplishments and recognize those who have worked tirelessly during the past year to make it a success:

- Whit Blanton, Immediate Past Chair and still our busiest member, continues to show me the ropes, and promote TPD through his work with the Division's Council.
- Hilary Perkins, Vice Chair, ably represented the Division on TRB's Safety Conscious Planning Committee, and has developed an engaging program for APA's 2006 Conference.
- Larry Fabian, Secretary, and Dan Wong, Airports Committee Chair, continue to advance our Airports in the Region (AIR) Initiative, speaking at meetings throughout the country.
- Todd Ashby, Treasurer, working with National, has established a new bank account for the Division and put our records in order. Todd is also involved in arrangements for our upcoming business meeting at TRB.
- Noel Comeaux, Membership Committee Chair, and Ruth Steiner, Student Paper Competition Chair, continue their fine efforts to promote

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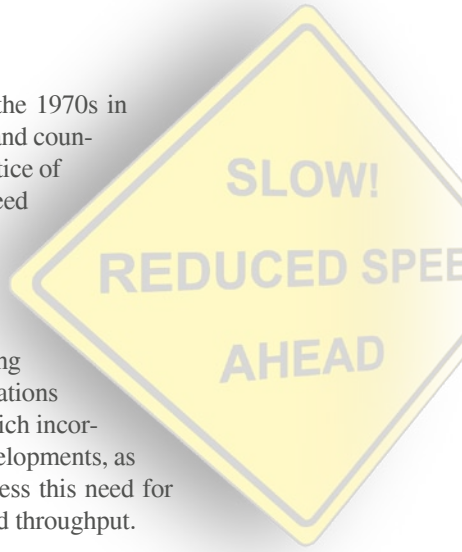
Traffic Calming

by Janet Jenkins, Eng-Wong, Taub & Associates



The first traffic calming programs in the U.S. began in the 1970s in Seattle, WA and Berkeley, CA. Today, many more cities and counties have developed traffic calming programs, yet the practice of comprehensive programs is still relatively rare. Planners need to understand the practice of traffic calming in particular, as many of its effects serve not only the goals of reducing traffic speeds and volumes, but also more general goals that planners often seek in communities: improved livability and sharing of the street by multiple users, including motorists, pedestrians, bicycles, as well as different populations such as children and the elderly. Both New Urbanism, which incorporates traffic calming features into the design of new developments, as well as the relatively new term "Complete Streets," express this need for streets to become about more than just vehicular speed and throughput.

But what is traffic calming? What does it really include and involve? What types of tools are used to calm traffic? What can traffic calming do? And what does it take to get these projects implemented? There is much written about traffic calming that provides insight into these questions. This article seeks to provide an overview and summary of some of this information for practitioners interested in traffic calming, or those new to its practice.

Traffic Calming Defined

Traffic calming refers to various transportation solutions intended to reduce vehicle speeds and volumes on a particular road. A concise definition is put forward by the Institute for Transportation Engineers (ITE) and distinguishes traffic calming from other transportation solutions such as route modification, traffic control, or streetscaping, stating "traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users."[1]

Fore! Median Crossing: median with pedestrian/golf cart refuge, located adjacent to a golf course

However, in practice, much that is referred to as traffic calming includes treatments originally envisioned outside the ITE definition, such as education and enforcement, physical barriers like diverters, or permanent alignment changes like street closures. Nevertheless, the idea that traffic calming should consist of self-enforcing physical measures to reduce traffic speed and volume, and increase street usage by groups other than motorists, is the common understanding

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of the practice. Some elements such as streetscaping are not typically viewed as traffic calming, but rather as an accompaniment to traffic calming techniques that may enhance the appearance of various treatments.

Goals and Objectives of Traffic Calming

The ITE and Federal Highway Administration (FHWA) websites provide information on what communities can hope to gain through traffic calming. Goals of calming traffic can include increasing quality of life, incorporating preferences of all street users, creating safe and attractive streets, helping reduce the negative effects of motor vehicles on the environment, and promoting pedestrian, bicycle, and transit use.[2] Objectives to achieve these goals can include encouraging citizen involvement, reducing vehicular speeds, promoting safe and pleasant conditions for all modes and users, improving the livability of neighborhood streets, improving real and perceived safety for nonmotorized users, and discouraging the use of residential streets by cut-through vehicular traffic.[3]

Road-narrowing median with traffic calming signage - *entry to traffic calming area. Median narrows the roadway to slow traffic.*

Another key source, ITE's *Transportation Planning Handbook*, highlights the potential impacts of traffic calming on everything from speed reduction to property value increase to crime reduction.[4] This source, as well as the Victoria Transport Policy Institute online encyclopedia, provides an overview of the studies showing the effectiveness (or lack of effectiveness) of different traffic calming techniques. [5]

The Traffic Calming "Tool Box"

There are many techniques that can be used in traffic calming, which are commonly referred to as the "tool box." Table 1 provides a list of traffic calming tools by category. Tools may fall into more than one category and be listed by different names as there is little consistency in naming across different jurisdictions. Although this list cannot be exhaustive of all possible techniques, it attempts to identify the most commonly used tools, such as speed humps, as well as newer tools such as chicanes (which slow traffic through "S" shaped curves), speed cushions (which intend fewer speed impacts to emergency vehicles than speed humps), and even gateway treatments (which slow traffic by highlighting a transition from one neighborhood to another). More detailed information on each of these tools is available in sources referenced in this article.

The use of these tools can be challenging, however. Although many of the cited resources provide a discussion of the uses and effectiveness of many of these solutions, general design standards (and even common name terminology!) do not exist for traffic calming tools in the same way they do for other roadway or highway designs. This presents each jurisdiction with another level of complication, making the planning and communication of a traffic calming program both more difficult and more important.

Crosswalk with signage - *bulbout narrows roadway for pedestrian crossing. Brick paver crosswalk and signage highlights crossing.*

Program Development

Most traffic calming resources emphasize the importance of establishing a programmatic and policy approach to traffic calming. Early programs in the U.S. taught practitioners that starting with clear policy statements and providing opportunities for significant public input or buy-in,

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A Planner's Guide to Fixed Guideway Electrification Projects

By Stephen A. Gazillo, AICP

Editor's note: This is the second half of an article about fixed guideway electrification. The first half of the article can be found in the November, 2005, newsletter and is available at the TPD website (www.apa-tpd.org)

This article sets out to highlight some of the major elements of fixed guideway and railroad electrification systems, and to point out what transportation planners should be aware of as they evaluate alternatives for new public transportation projects in their communities. While planners continue to debate the cost effectiveness of rail transit as a force in urban development and land use, in those cases where rail transit is a viable option, electrification inevitably is a factor, whether one is considering streetcars, light rail, heavy-rail, commuter rail or even BRT systems.

Part II - Environmental Considerations

Land Use Impacts

One of the immediate environmental impacts of new electrification systems on local land use might result when an interconnection with the local electricity grid is required to power the system. For larger intercity rail AC systems, this can involve construction of a connection with an existing high voltage substation or transmission line some distance from the proposed route, as well as siting and construction of new substations. Underlying this issue is cost. Contractors and utility companies try to avoid expensive underground interconnections if an overhead transmission line is possible. Interconnections are less of a problem for smaller light rail and DC powered systems requiring lower voltages. Overall, impacts to land use can require significant mitigation efforts, particularly for overhead lines.

From a broader perspective, and certainly the more significant long-term issue, planners must consider the impacts of the new electrified rail or transit service on urban and regional development patterns. The improved transit service brought about by an electrified system can affect land use over time. Development patterns and densities in Long Island, as an example, have been greatly impacted by the Long Island Rail Road (LIRR), where approximately 43% of the system is electrified. The ***Making the Land Use, Transportation and Air Quality (LUTRAQ) Connection*** project in Oregon, as well as similar work in other states, probes this subject in depth. The Danbury Branch Electrification Feasibility Study in Connecticut examines the potential impact of electrification on rail ridership from a number of perspectives. Resulting travel time savings from the use of self-propelled Electric Multiple Unit rail vehicles (EMUs) indicates there would be an incremental ridership gain due to electrification. This could impact land use patterns for a number of towns along the corridor if such service were implemented.

Tram in Orleans, France – typical example of streetscape improvement project in Europe tied to new Tram system project. Catenary wires, attached to the buildings and decorative poles, are barely visible against clear sky. Street was completely redesigned during tram project.

Planners should become informed of possible intent by transit agencies and municipalities to influence these impacts, such as by use of Transit Oriented Development (TOD) controls around rail stations, or regulation of low-density development (sprawl) in areas newly served by the rail transit system.

Effects of Low Frequency Electromagnetic Fields

Much research has been conducted regarding the effects of low-frequency electromagnetic fields (EMF) from high voltage transmission lines and related effects of rail electrification systems, especially high voltage catenary lines. EMF, which is produced by any energized electric line, has been the subject of many research efforts and publications. However, there is little consensus or proof that EMF from transmission lines or electrification systems has health impacts. Planners need to keep abreast of EMF research results and should be aware that this could be presented as an Environmental Justice and overall public issue, especially when determining the location of transmission lines and substations, and when the installation of energized catenary wires may be near residential uses.

see "Fixed Guideway", page 6

Attention TPD Members:

TPD business meeting and reception at **TRB** - see page 15 for details!

***Chair**, continued from page 1*

the Division's activities to the professional and academic communities.

- Glen Duke and, previously, Krishna Veeragandham, served as TPD's dedicated webmasters during the past year.
- Ruth Fitzgerald, Newsletter Editor, continues to publish APA's premier newsletter. TPD has become APA's expert on electronic distribution.

TPD Reception and Business Meeting at TRB Annual Meeting

The Transportation Research Board (TRB) will hold its 85th Annual Meeting in Washington DC from January 22 through January 26. The Meeting Announcement and Program are available at www.trb.org.

As usual, TPD will hold a reception and business meeting in conjunction with TRB. This year we will meet on Tuesday, January 24 from 5:30 to 7:30 PM at the Hilton Hotel in the Chevy Chase Room. All are invited.

In addition to reviewing TPD's 2005 activities and 2006 Work Program and Budget, we will have an opportunity to hear Todd Litman describe his new book ***Parking Management Best Practices*** (APA Planners Press).

2006 National Planning Conference

APA's 2006 National Planning Conference will be held in San Antonio, TX from April 22 through 26. Meeting Announcement and Program are available at www.planning.org.

TPD's two sessions are:

- Session S651: Sustainability in Public Transportation
  (Tuesday 4/25 at 4PM)
- Session S414: Planning it Safe
  (Sunday 4/23 at 10:30AM)

In addition, a TPD business meeting and reception will be held on Monday 4/24 from 6 to 9PM. Please join us to celebrate another year of accomplishment, see old friends and make new ones.

— Larry Lennon

***Traffic Calming**, continued from page 2*

create more implementable, defensible, and less controversial traffic calming projects. The 1999 study *Traffic Calming: State of the Practice* by Reid Ewing, lists lessons learned from Seattle, which still apply today[6]:

- Test complex area-wide treatments before implementing them permanently;
- Assess public support for the treatment;
- Conduct before and after studies of traffic impacts;
- Include traffic accidents among the impacts studied;
- Work with emergency services to address their concerns; and
- Opt for the most conservative designs that will do the job.

Road narrowing through striping and choker - *striping delineation and choker serve to narrow lanes and allow cars to back out of driveways.*

ITE's *Transportation Planning Handbook* provides step-by-step recommendations on establishing a comprehensive traffic calming program. The following key elements provide a start for thinking about traffic calming and how to establish a program in any jurisdiction[7]:

- Begin program development with a good definition of the problem and a review of local and state policies and programs. Then work to develop program objectives that can then be directed into policies and procedures. Examples of program objectives can include:
  - Direct through traffic to arterials;
  - Accommodate emergency vehicle access;
  - Enhance alternative transportation modes;
  - Minimize impact on transit; and
  - Establish standard project procedures.
- Develop policies and procedures addressing questions like the type of eligible street class, how staff will respond to public requests, the type of corrective measures allowed, and how to define the study area. Answering these questions early will allow for more clarity as the program unfolds.
- Determine the types of data that will be required for projects to move forward. Be prepared to collect traffic data before and after any project. Data could include traffic counts, origin-destination surveys, screenline counts, license plate surveys, etc.
- Determine if or how much traffic diversion is allowed as a result of treatments.
- Accommodate input and opportunity for agreement from emergency response services as traffic calming can impact response times.

Traffic-slowing bulbouts at intersection

- Determine funding mechanisms – many communities now require residents to fund a portion of all of the traffic calming improvements.
- Implement a public outreach program to involve local residents and to achieve majority (or supermajority) support for measures to be implemented. Some communities host meetings, or even require ballots or petitions before considering implementation of any measures.
- Determine how projects will be maintained once implemented. Although liability has not been

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***Traffic Calming**, continued from page 4*

shown to be a major issue, poor maintenance of installed calming devices is a liability risk.

Implementation and Evaluation

Once a jurisdiction has answered many of these questions, and a traffic calming project has been identified for study or implementation, the Victoria Transport Policy Institute recommends the following best practices guidelines for implementing traffic calming[8]:

- Involve experts familiar with the latest traffic calming resources and design standards;
- Consider a variety of traffic calming devices, rather than relying on a single type;
- Use traffic calming projects to support multiple objectives, including enhanced street aesthetics and improved walking and cycling conditions, as well as controlling traffic speeds;
- STOP signs should not be used as traffic calming devices;
- Devices new to an area should be implemented on a trial basis with adequate signing to assess the effect of the device; and
- Include adequate public involvement.

Finally, once a project has been implemented, it is useful to return after at least several months and assess its effectiveness. Many sources recommend the installation of temporary traffic calming measures to allow a community to assess effectiveness before spending the funds to permanently install the measures. This can be particularly useful as, should the desired effect not occur, the temporary installation can be adjusted to allow evaluation of different calming techniques. Information on the effectiveness of traffic calming programs across the U.S. can be found in a November 2005 *ITE Journal* article which revisits the 1999 *State of the Practice* referenced earlier.[9]

Conclusions

Many resources are available to help the practitioner understand and develop a traffic calming program. Creating clear policies with defined goals, objectives, and evaluation criteria helps develop an effective program. Providing for input from the public and emergency services, using temporary construction, and adequate project evaluation can create successful and supported traffic calming programs that may help a community achieve reduction in traffic speeds and volumes, as well as improve quality of life for all street users.

Janet Jenkins, AICP, is an Associate with Eng-Wong, Taub and Associates which specializes in traffic and transportation planning and engineering. Janet has over ten years of public and private sector experience and is leading the firm's transportation planning discipline. She is based in EWT's New York City office and can be reached at jjenkins@eng-wongtaub.com.

Table 1: The Traffic Calming Toolbox

Vertical Shift - Speed humps - Raised intersections - Raised crosswalks - Speed tables
Lateral Shift - Chicanes - Realigned intersections - Lateral roadway shifts/curb extensions - Alternate side parking - Back-in angled parking
Constriction - Neckdown (bulbout, intersection narrowing, corner bulges) - Chokers (pinch point, midblock narrowing, curb extension, midblock yield point) - Single lane angled slow point - Center island narrowing (midblock median, pedestrian refuge, median slowpoint/choker)
Circles - Modern roundabouts - Traffic circles (rotaries, intersection islands)
Route Modifications - Bike lanes - Full closures (cul-de-sac, dead end) - Half closures (partial, one-way, or directional closure) - Diagonal diverters (full diverter, diagonal road closure) - Median barriers (median diverter, forced turn island) - Forced turn island (channelizer, right-turn island)
Traffic Control Device - High visibility crosswalk - Speed clocks - Signage
Other Measures - Gateway treatments - Streetscaping

Footnotes:

1. Lockwood, Ian. ITE Traffic Calming Definition. ITE Journal, July 1997, p.22.
2. Ibid.
3. Traffic Calming – FHWA website. www.fhwa.dot.gov/environment/tcalm/part1.htm.
4. Institute of Transportation Engineers. Transportation Planning Handbook, Chapter 17, 1999.
5. Victoria Transport Policy Institute, Online TDM Encyclopedia, Traffic Calming, www.vtpi.org/tdm/tdm4.htm
6. Ewing, Reid. Traffic Calming: State of the Practice, Report No. FHWA-RD-135, Institute of Transportation Engineers under contract with U.S. DOT, FHWA, Washington, D.C., 1999.
7. Institute of Transportation Engineers. Transportation Planning Handbook, Chapter 17, 1999.
8. Victoria Transport Policy Institute, Online TDM Encyclopedia, Traffic Calming, www.vtpi.org/tdm/tdm4.htm.
9. Ewing, Reid, et al. "Traffic Calming Practice Revisited," ITE Journal, p. 22-27, November 2005.

***Fixed Guideway**, continued from page 3*

Air Quality

Electrification projects often involve a public health tradeoff. On the one hand, exhaust emissions are reduced within the right-of-way. However, power plant emissions from tall stacks that may affect the region are more dispersed, according to David Ernst, senior environmental planner with KM Chng Environmental. A careful, localized, all-inclusive analysis of emission creation and reduction has to be performed to get the full picture. Ernst has evaluated air quality impacts for numerous fixed guideway electrification systems across the U.S. The pollutants of most concern for transit projects usually are fine particulates and nitrogen oxides, and to a lesser extent volatile organic compounds, carbon monoxide and air toxics.

Strasbourg, France tram system with grass growing in right of way.

He notes that a direct comparison of vehicles from one system to another generally ranks diesel-electric locomotives in commuter rail operations with the highest level of particulate emissions, followed by Diesel Multiple Unit (DMU) equipment, buses and finally Electric Multiple Units (no vehicle-based emissions). Actual emissions are highly variable and are dependent upon the particular generation mix (fuel type and combustion technology) of the electric system powering the rail system. Direct comparisons should also take into consideration ridership and capacity. Regardless of the rail vehicle technology, the overall impact on regional emissions will depend on the system's ability to attract new riders, i.e., to induce a mode shift.

Given that the overall goal is to attract riders from their cars and onto rail or transit vehicles, planners should examine each project in terms of its net emissions impact. Ultimately, the net emissions impact (when examining the number of trains added minus the number of car trips reduced) depends on the ability to persuade people to ride the train instead of taking their car.

Noise and Vibration

Most electrified vehicles are significantly quieter than fossil fuel vehicles (diesel-electric locomotives, diesel buses, etc.). Electric Multiple Unit vehicles (self-propelled electric rail vehicles) have quick acceleration, quick deceleration and generate lower noise levels than other conventional fossil fuel types. Newer, rubber tire vehicle technologies are even quieter than conventional steel wheel equipment. Planners need to be aware that there may still be a need for noise mitigation, particularly where there has never been transit service. There are also other considerations when replacing diesel equipment with electric equipment that generates lower noise levels. When New Jersey Transit electrified its commuter rail service from Matawan to Long Branch along the Jersey shore, a significant safety campaign was required for all of the adjacent communities, particularly amongst schoolchildren. Quieter trains meant that there was a greater risk that residents and children playing in proximity would have far less warning of an oncoming train. The safety campaign proved effective and the electrified service has run successfully for nearly two decades.

Right - The "Twisto" rubber tire system in Caen, France, developed by Bombardier and installed by Spie Batignolles. Note the single track guideway and rubber tires. Vehicles can leave guideway in certain locations to service outlying communities, but such practice is limited and not seamless.

Visuals and Aesthetics

Numerous articles have been written regarding how to reduce the visibility of overhead contact systems for new electrified rail and fixed guideway systems. The most important lesson learned here is that

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E-CABS IN OUR FUTURE

by Larry Fabian, TPD Secretary

To creates a better urban future, we need a long list of tools and powers and professional leadership. High on the list of needs are better mobility tools than highways and parking that are today's reality. We need superior forms of public transport. To find the seeds of this future, go back to a project of the 1970s in the hills of Morgantown, WV, home of West Virginia University and a demonstration project of UMTA (predecessor of the Federal Transit Administration – FTA). It's an advanced transit concept dubbed PRT (personal rapid transit) that has proven itself into an everyday reality for students, staff, and visitors to this energetic academic community of just over 50,000.

A 30-year old version of PRT operates at West Virginia University.

Unfortunately, Morgantown is far out of the sight of the community planning and development fields. Officialdom in Washington – in the halls of Congress, the White House, and APTA – seldom talk about the 30-year old PRT. As a result, few planners – whether in City Hall, the local transit authority, or the MPO – know about the attractiveness of PRT service that is more like taxis than trolleys. Sadly – despite sincere searches for alternatives to sprawl -- our planning efforts proceed without awareness of the higher order land use configurations that PRT in its old and new variations can bring to future scenarios.

In designing a PRT, planners aren't confined to a line. Stations can be spaced closely together without slowing average speeds as is the case with buses, trolleys, light rail, and subways. PRT works as a network, not a line. And service between any origin and destination can be scheduled as a non-stop, non-transfer trip.

The Alden Seminar, October 2005

Last fall, some 50 transit experts and proponents gathered in Morgantown for the Alden Seminar to learn about the realities of PRT. No doubt they took home the idea that local citizens and leaders throughout the country – indeed, the world -- can take on bold developmental strategies with higher-order transit. PRT is far superior -- and with an unexplored dynamic all its own.

An ATRA member examines a vehicle at the Alden Seminar in West Virginia last October.

So fertile were the seeds planted by William L. Alden of Massachusetts when he designed the technology in the 1960s that was demonstrated in Morgantown, so impressive were the engineering and implementation of the Boeing Company of Seattle that built it in the 1970s, and since then so dedicated have been WVU staff who operate and maintain the 5-station, 3-mile PRT that its life has already been extended ten years beyond what it was designed for. Based on the smoothness and challenges of year-to-year operations, PRT Director Bob Hendershot confidently expects to get another twenty years. It will take funds and effort, and they have both.

The Morgantown PRT's computers and guideway heating were upgraded in the late 1990s. Work is underway on upgrading vehicle controls. Much has been written on the *Morgantown People Mover* – so named by Federal officials in the 1980s after their policies turned away from the high-

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The Bordeaux, France tram system applies an innovative traction power system developed by INNORAIL that replaces the overhead contact system with a power supply imbedded in pavement. Pedestrians can walk on the contact rail, as it is energized only when the tram vehicle passes over it. Vehicle is shown on left and traction power rail imbedded in cobblestone is shown on right. Reliability of the system has not yet been proven.

any efforts to accomplish this must be undertaken at the earliest planning stages of a project. Mitigation techniques employed include: reducing the number of poles through spacing and shared structures, camouflaging them with landscaping and trees, minimizing the number of trolleybus turns and carefully selecting pole types. The electric trolley bus (ETB) system is considered the least intrusive visually as it involves the fewest number of wires (although it is not ideal).

Impacts result not only from the overhead wires, but also from the transmission connections and supply substations. Mitigation techniques include underground lines and metal-enclosed and/or indoor switchgear in an architecturally pleasing building.

Planners need to keep in mind the subjectivity of aesthetics. Regardless of efforts to mitigate the visual impacts of catenary and trolley overhead systems, there will always be a physical intrusion in the landscape. At the same time, electrified systems have less smoke and odor, and the related improvements at stations can create visually appealing environments.

Safety

Historically, rail electrification was, in part, a response to the health and safety concerns regarding steam trains operating in the tunnels into New York. The greatest safety concerns with electrified rail typically involve inadvertent contact with energized wires. Guards and barriers are often provided in areas where the public might gain access to areas near live wires or equipment, and workers are trained in how to properly shut off and make safe the facilities they are working on. For the general public, the primary safety concerns are avoidance of contact with third rail systems (hence higher levels of security trackside) and avoidance of contact with overhead contact wires. Where the risk is greatest, such as on bridges over electrified rail, special fences and bridge barriers to block the view and prevent contact have been extremely effective in preventing accidents. Overall, there have been few occurrences of public injury due to accidents along electrified rail systems. Experimental systems, such as the ones currently in development in Italy and France and described elsewhere in this article, would allow a roadbed-installation of the contact system which is energized only as the train or vehicle passes over it.

Technological Advances

There have been several technological advances in rail electrification systems, with the most recent being the electrified "wireless" tram (light rail) by Innorail in Bordeaux, France (see image, top left). The system in Bordeaux is essentially a third rail system, but the third rail is imbedded in the pavement and can be walked on – it is energized only when the tram vehicle passes over it. Planners are excited at the prospect of a safe third rail system for in-street running vehicles. However, the Innorail system has not yet been proven, as the Bordeaux wireless tram has suffered from reliability issues.

Translohr rubber tire test vehicle, which is bi-directional, at the Lohr Industries test track in Obernai, France. System utilizes traditional catenary and traction power design and is planned or in service in Italy and France. Vehicles are modular units and are designed to operate completely in a fixed-guideway.

Other innovations include the rubber tire trams manufactured by Translohr (image, left) and Bombardier (lower image, page 6) and in service or in development in France and Italy. These systems operate in urban centers like a fixed guideway tram but with a single guide rail; in some instances they can operate off-line and run like buses to external locations. Future technologies also include low-speed Maglev systems, which utilize an elaborate guideway system with magnets to "elevate" the train above the rail. The high costs of these systems to date have limited their development and implementation.

In Europe, low floor trams utilize the technology of light rail transit with modern state-of-the-art design to create a much sleeker transit image, as the Strasbourg (top image, page 6) and Orleans (page 3) tram systems in France demonstrate.

Public Perceptions – A Personal View

During the past three decades, I have been involved in a number of different rail and trolley electrification projects. These range from efforts to help educate the public on the electrification of NJ Transit's North Jersey Coast Line commuter rail system from Matawan to Long Branch; to participation in the engineering and planning team engaged to perform design of

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Amtrak's new high speed rail electrification system between Boston and New Haven, CT; to a recent feasibility study examining possible re-electrification of the Danbury Branch of the New Haven Line in southwestern Connecticut.

When undertaking these projects, planners faced the same basic task: educating the public on the benefits of rail and trolley electrification systems. It is this process, more than any other, that will have a significant impact on the project's acceptance and probability of success. Listed below are some examples:

Observed Acceptance of Rail Electrification Systems

System	Population Density*	Observed Degree of Acceptance	General Comment
NJ Transit North Jersey Coast Line – Electrification from Matawan to Long Branch, NJ	Monmouth County: 1304 pop./sq. mile 510 housing units/sq. mile	High	Commuter rail service to Manhattan – high acceptance due to perceived benefit of significant travel time improvement with electrification
Amtrak High Speed Rail Electrification – Boston, Massachusetts	Norfolk County: 1627 pop./sq. mile 639 housing units/sq. mile	Medium	Intercity travel – opposition by adjacent homeowners due to perceived increase in train vibrations; general acceptance by community at-large
Amtrak High Speed Rail Electrification – Providence, Rhode Island	Providence County: 1504 pop./sq. mile 613 housing units/sq. mile	High	Intercity travel – high acceptance due to benefit of improved rail travel time to Boston or NY
Amtrak High Speed Rail Electrification – Coastal Connecticut Communities	New London County: 389 pop./sq. mile 166 housing units/sq. mile	Low	Intercity Travel – strong vocal opposition due to visual impacts and perception of electromagnetic field intrusion; lack of local benefits from the project (Acelas tend to run through this area without stopping)
Danbury Branch of the New Haven Line, Connecticut DOT and Metro-North Railroad	Fairfield County: 1410 pop./sq. mile 542 housing units/sq. mile	High	Commuter rail service to Manhattan – projected high acceptance due to perception of faster commute times to Manhattan

*Source: U.S. Census 2000

High Acceptance – defined as high level of support at public meetings and in media with little or no opposition

Medium Acceptance – defined as high level of support with some vocal opposition at public meetings and in media

Low Acceptance – defined as strong vocal opposition in media and at public meetings with low level of support

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"Remember the Alamo!"

...but don't forget to mark your calendars for APA's National Planning Conference in San Antonio, April 22-26, 2006

APA-TPD Airports Committee - Fostering Airport Land Use Compatibility Planning

Since its inception in 2003, one of the primary goals of the Airports Committee has been to examine the airfront phenomenon from a regional planning perspective and to build a bridge between airport planning professionals and those who are practicing in more traditional areas of the planning profession. In the past year, the Airports Committee has made steady progress in achieving this goal by being invited by Airports Council International – North America and the Federal Aviation Administration to speak about APA's Airports in the Region (AIR) initiative to study and make policy recommendations regarding the myriad of relationships between airports, their adjacent airfront districts, and the surrounding region that is served by the airport.

In December 2005, the Airports Committee chose to offer public support for fostering airport land use compatibility planning by submitting a letter to the Sacramento County (California) Board of Supervisors. In the December 2, 2005 letter, K.L. (Dan) Wong, AICP MITE, APA-TPD Airports Committee Chair, writes: "*While we are neither advocating nor denouncing proposals for either the Sacramento County airports or the proposed land use development projects, we believe that Sacramento County Airport System's current airport land use compatibility planning program presents a unique approach worthy of further evaluation and study to facilitate the balancing of airport development needs with land use developments in nearby communities.*" Full text of the letter is published in this newsletter on pages 12 and 13.

The Airports Committee continues to move forward in fostering airport land use compatibility planning by working with FAA on a new version of their Advisory Circular 150 on compatible land use and airspace. In addition, the Airports Committee has accepted an invitation to participate in the Transportation Research Board's Sixth National Aviation System Planning Symposium this coming May 17-19, 2006 in Daytona Beach, Florida. For information regarding the Symposium, please contact Seth Young of Embry-Riddle Aeronautical University at (386) 226-6723 or youngs@erau.edu.

For additional information regarding the activities of the Airports Committee, please contact K.L. (Dan) Wong, AICP MITE at dan.wong@flysfo.com

K.L. (Dan) Wong, AICP MITE is Chair of the APA-TPD Airports Committee. A professional transportation planner for the past 20+ years, he received a BA in Political Science/Public Service from the University of California, Davis and a MUP from San Jose State University.

Attention ALL Members!!!

WE REALLY NEED PEOPLE
TO PITCH IN!!
PLEASE HELP OUT!

2,006 in 2006

Transportation Planning Division – Membership Drive!

TPD is undertaking a creative drive to increase our membership. Our new membership committee will be led by Noël P. Comeaux, AICP. Preliminary ideas range from reaching out to other transportation professionals (e.g., freight rail and maritime industry personnel) to having TPD polo shirts!!!

We are looking for volunteers to help with:

- Survey – develop one to current members to understand additional needs
- Outreach – professional and public organizations as well as private firms
- Conferences – booth set up and attendance
- Ideas –think of creative ways to draw more members
- Annual student paper competition – assist with coordinating the request for and evaluating essays
- Writer – develop occasional articles highlighting existing members, or even a current issues or "gossip" column.

If you are interested, please contact Noël at noelpcomeaux@excite.com. Thank you!

***E-Cabs**, continued from page 7*

order thinking explicit in this advanced mobility concept. In Morgantown, it's known to students and townsfolk alike as the *PRT*.

The Alden Seminar was organized by ATRA in cooperation with WVU. ATRA will hold a day of meetings in San Antonio, Texas in cooperation with TPD at National. For details of this, contact Bob Dunning at cliff@oz.net.

The Numbers Are In

Here are the PRT's operating stats direct from WVU staff:

Year	Pax (m)	O&M ($m)	Staff	Availability
1980	3.0	2.2	72	96.0%
1985	2.5	2.2	63	98.9%
1990	2.4	2.6	64	99.0%
1995	2.0	3.1	61	99.1%
2000	1.9	2.9	56	98.8%
2005	2.1	3.0	51	97.5%

Ridership expressed in millions of passengers per year has fallen and risen slightly in almost direct proportion to WVU enrollment. Availability is quite impressive, but has fallen off somewhat in recent years due to aging parts and creeping obsolescence. There is reduced service on weekends, and none on Sundays due to lack of demand.

The PRT's technical staff has clung to the original design philosophy that Alden and Boeing brought to the project in the 1970s. In over thirty years, there hasn't been a serious accident between vehicles. Nor a serious injury.

Boldness Reappears

Meek before the cold shoulder of the U.S. transit establishment, PRT advocates have been largely silent over the last two decades. This is changing. Airport APM consultant John Champ sang the benefits of preventive maintenance based on his career with Westinghouse-ADtranz-Bombardier technologies, yet he declared PRT to be the "next obvious step in the evolution of APMs".

"True PRT can be done now!" proclaimed Bill Alden in his remarks toward the end of the seminar. Reminded of the Apollo Mission by the *can-do* spirit of WVU staff, he feels that it's "time for industry to step up and play its real role."

Marsden Burger, long affiliated with the German version of PRT that underwent extensive testing in the 1980s, suggested that it is counter-productive to put out standards for PRT. "We are in the middle of a large process," he explained. The standards are still in the future, the seeds of which were planted in the 1970s in Morgantown.

A CD with the Powerpoint presentations from the Alden Seminar is available from ATRA for $35. TPD members qualify for the same discounted price of $25 that ATRA members get. To order, send a check to "ATRA" to PO Box 220249, Boston MA 02122-0013. Or visit ATRA's website (www.advancedtransit.org) and order on line with a credit card.

ATRA MEETING ON PRT

Interested in innovative ways to provide high levels of public transport?

TPD members are welcome to attend technical meetings on high-order transit technologies known as **PRT** (personal rapid transit) organized by ATRA on **Sunday, January 22**, just prior to TRB in **Washington, DC**. They will take place at Booz Allen Hamilton offices in suburban Virginia VA. Reports of PRT developments from around the world will begin at 1pm, including presentations on:

- Heathrow Airport project/ Martin Lowson
- New Jersey policy study/ Paul Hoffman
- Vectus's Uppsala R&D/ Dawn Choe
- BART's Hacienda study/ Steve Raney

For comments or suggestions for the program, **contact ATRA secretary Stan Young** at young@ksdot.org. Additional information will be posted to **www.advancedtransit.org** as it becomes available.

Directions:
The ATRA seminar will take place in the Hamilton Conference Center, Room 2010, 8283 Greensboro Dr., McLean VA just off the Dulles Access Road (exit Route 7). Bus #427 from the West Falls Church station of the WMATA Orange Line stops in front of the building, but service may be scant on Sundays. ATRA hopes to organize carpooling for those who may need assistance. Telephone at Booz-Allen is (703) 902-5000.

American Planning Association – Transportation Planning Division

December 2, 2005

*Editor's note: Pages 12 and 13 contain the full text of the letter referenced on page 10 in the news article **APA-TPD Airports Committee - Fostering Airport Land Use Compatibility Planning.***

Supervisor Roger Dickinson
Chair
Sacramento County Board of Supervisors
700 H Street, Suite 2450
Sacramento, CA 95814

Dear Supervisor Dickinson:

We have recently been made aware of proposed land use developments that may have an impact on several airports owned and operated by the Sacramento County Airport System. As the Chair of the American Planning Association (APA) – Transportation Planning Division's (TPD) Airports Committee, I wish to briefly summarize the new Airports in the Region (AIR) initiative now being undertaken by APA's Divisions Council with the full support of the TPD and its Airports Committee.

The AIR initiative is a multi-year research and development program by APA's 18 divisions to study the myriad of interrelationships between airports, their adjacent airfront districts, and the region. Collaboration partners in this initiative include the Federal Aviation Administration (FAA), Airports Council International – North America (ACI-NA), American Association of Airport Executives (AAAE), and the American Society of Civil Engineers (ASCE). While the primary product will be reports that provide best practices guidance on airport and airfront district planning issues, the process will initiate new methods for collaborative airport planning between airport and other planning professionals.

FAA has recently undertaken initiatives to encourage airports to foster comprehensive airport land use compatibility plans with nearby governmental agencies with land use regulatory powers. APA, as a founding member of FAA's Airport Land Use Compatibility Committee, supports FAA in this initiative as airports, as well as their adjacent airfront areas, are now a regional gateway and emerging economic development center.

APA Transportation Planning Division – Airports Committee
c/o K.L. (Dan) Wong, AICP MITE
Landside Operations, San Francisco International Airport
Airport Mail Facility – PO Box 8097
San Francisco, CA 94128-8097

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www.apa-tpd.org

Supervisor Roger Dickinson
December 2, 2005
Page 2

While we are neither advocating nor denouncing proposals for either the Sacramento County airports or the proposed land use development projects, we believe that Sacramento County Airport System's current airport land use compatibility planning program presents a unique approach worthy of further evaluation and study to facilitate the balancing of airport development needs with land use developments in nearby communities.

If there are any comments or questions regarding this letter, please feel free to contact me at (650) 821-6512.

Very truly yours,

Original Signed By:

K.L. (Dan) Wong, AICP MITE
Chair, Airports Committee
Transportation Planning Division
American Planning Association

cc: G. Hardy Acree, Sacramento County Airport System
Larry Lennon, APA-TPD Chair

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Revised: 2-Dec-05

APA Transportation Planning Division – Airports Committee
c/o K.L. (Dan) Wong, AICP MITE
Landside Operations, San Francisco International Airport
Airport Mail Facility – PO Box 8097
San Francisco, CA 94128-8097

650/821-6512 Voice
650/821-6508 Fax
dan.wong@flysfo.com
www.apa-tpd.org

Employment Opportunities...

CHIEF PLANNING OFFICER
$120,477 to $180,715 (DOQ)
Los Angeles, California

Metro

The Public Transportation Services Corporation, a subsidiary of the **Los Angeles County Metropolitan Transportation Authority** (Metro), is seeking an astute planning executive to serve as the new Chief Planning Officer. Metro is one of the nation's largest providers of multi-modal public transit with more than 10,000 employees and a 2006 fiscal year budget of $2.86 billion. The Chief Planning Officer reports directly to the Chief Executive Officer and is responsible for county-wide transit planning, programming and policy analysis, and capital development. The Chief Planning Officer also has oversight management responsibility for 104 employees and a combined operating and capital budget of $772.5 million. The ideal candidate will have eight (8) years of senior management experience leading a multi-faceted planning operation in a multi-modal transportation working environment with multiple funding sources. In addition, candidates must be knowledgeable and professionally competent in one or more of the following areas: transportation planning, securing full funding grant agreements, environmental impact reports, highways, and goods movement. A bachelor's degree in Business/Public Administration, Urban Planning, Transportation Planning, or a related field is required. The filing deadline is **2/10/2006**. To apply, contact:

Lincoln & Associates
Executive Recruitment

James Lincoln, President-Lincoln and Associates
4555 West 4th Street, Suite 2, Los Angeles, CA 90020
Tel (323) 937-6838; Fax (323) 938-4039
james@lincolnrecruiting.com

Student Paper Competition

Deadline for Submissions: Wednesday, February 1, 2006

The Transportation Planning Division is looking for outstanding student papers on current transportation planning or policy issues. Our purpose is to recognize and reward work completed for courses in accredited masters and undergraduate planning programs. Please nominate and encourage your students to participate in APA's student paper contest. Winner will be announced at the APA National Conference in San Antonio in April.

The Prizes: Awards of **$600** and **$400**

Two awards will be presented: one for the best master's student paper with a $600 prize and another for the best undergraduate paper with a $400 prize. Winning papers (or summaries) will be published in TPD's newsletter. The TPD may also submit full versions of the winning paper for peer review and possible presentation at the Annual Meeting of the Transportation Research Board and for publication in APA's *Planning Magazine.*

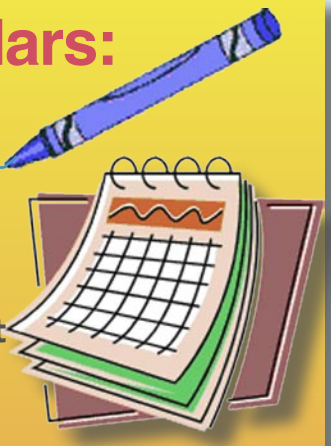
For more eligibility information, please visit http://www.apa-tpd.org/ and click on "Paper Competition".

Send submissions to: Ruth L. Steiner, Department of Urban and Regional Planning, University of Florida, 431 Architecture Building, P. O. Box 115706, Gainesville, FL 32611-5706; Phone: (352) 392-0997, ext. 431; Fax: (352) 392-3308; e-mail: Rsteiner@ufl.edu

TRB:

Mark your calendars:

JANUARY 24TH 2006



Please join us for our upcoming TPD business meeting and reception at TRB!

Date/Time:
January 24, 2006
5:30:00 PM - 7:30:00 PM

Hotel/Room:
Chevy Chase Room in the Washington Hilton

Updating Or Changing Your E-mail Address?

We are distributing the *Transportation Planning* newsletter electronically! Thus, it is essential that TPD members **keep their e-mail address in their APA record up-to-date.** All division members can now access their APA profiles and make changes online. These changes become effective ***immediately*** - mailed or faxed changes requiring manual entry will take longer to appear. To access your APA profile go to www.planning.org/myprofile. Enter your APA ID (from *Planning* magazine mailing label or invoice) and password (click on "create a new password" if you've forgotten it or do not have one). Send a message to Webmaster@planning.org if you need assistance.

DON'T DELAY – DO IT TODAY!

AICP TPD APA

Visit

www.apa-tpd.org

The transportation planner's resource for division activities, legislation and policy, publications, conferences and workshops, and much, much more!