



Street Talk

Pavement Managers Are Awarded Their Due

by Theresa Romell

A new tradition was launched by the Metropolitan Transportation Commission (MTC) at this year's July User Meeting. Our pavement management section hosted an awards luncheon to recognize Bay Area pavement managers' accomplishments. In response to the enthusiasm with which the awards program was received, we plan to make this an annual event.

The inaugural awards were divided into several serious and not-so-serious categories. Six awards honored jurisdictions and pavement managers for a job well done. The award for "Best Bay Area Roads" was shared by the city of Belvedere and the city of Los Altos. Those two jurisdictions, among the 102 Bay Area jurisdictions that utilize MTC's pavement management program (PMP) software, had the highest pavement condition index (PCI) score for their local road networks. The "Most Improved Roads" award was bestowed on the city of San Pablo. In the last few years, that city's PCI has risen from a score of 31 in 1997 to a score of 60 in 2001, representing the largest network PCI increase among all of the Bay Area jurisdictions.

Three "Power User" awards were presented, honoring John Barron of Fremont, Art Carney of Santa Rosa, and Henry Finch of Contra Costa County. This award recognizes individuals for their sophisticated use of their jurisdiction's pavement management system software. Where many pavement managers only use their software for periodic updates, these three know the program inside and out, and use it as the analysis tool it was designed to be.



Adele Ho, city of San Pablo: "Most Improved Roads"

(For more information on what it takes to be a "Power User," read the

follow-up article by John Hoang on page 2.)

In addition to the serious honors, we also presented several tongue-in-cheek awards. Some of these awards followed a reality TV theme, and included the "Fear Factor," "Survivor," "Who Wants to be a Millionaire?" and the "Weakest Link"

awards. A special award presented to Larry Lind of Los Altos, entitled the "Bug of the Year" award, had a humorous title but a serious aim. The award was given to Lind for his help in diagnosing a software bug in MTC's PMP. Thanks, Larry!



Larry Lind, city of Los Altos: "Best Bay Area Roads"

We launched the awards program because we at MTC felt that, in an area of city management that is more likely to get criticism than praise, it is especially important to recognize the accomplishments of pavement managers who are able to work wonders with the little they receive in the way of resources.

We are already thinking ahead to next year's honors, and anticipate calling on our users to help nominate next year's winners and choose titles for some of our more light-hearted award categories. Be on the lookout for more information on our Web site <www.mtcpms.org> as we get closer to the nomination period for the 2003 awards.

Inside:

- Power Users page 2
- Upcoming Events page 2
- Pavement Repair Strategies page 3
- P-TAP Meets Growing Demand page 3
- Software News and Information page 4

Learn All About GASB 34

Tech Transfer Seminar

Wed., Nov. 13 9 a.m.

See "Upcoming Events" for location

Power Users

by John Hoang

Since the inception of the MTC pavement management program (PMP) back in 1986, MTC's objectives have always been twofold: to help local Bay Area jurisdictions better maintain and manage their roadways, and to have one of the best pavement management system software applications around to do so.

The reason that the MTC PMP has been successful over the years and why it continues to be a success is because of strong support for the program — from MTC managers and staff; the conceptual developer, Dr. Roger Smith; the programmers (currently, our partners in Marion County and the Association of Oregon Counties); and most importantly, our users. Probably the most important element in the continued success of the MTC PMP is its users, and among them, the ones who are most influential in the development and improvement of the software are the “Power Users.”

In the computer field, a “Power User” is typically defined as someone who has considerable experience with computers and utilizes the most advanced features of an application. The “MTC PMP Power User Award” — presented this year at our first-ever awards program in July — is given to users who have demonstrated exceptional knowledge in the

utilization of the MTC PMP software over the years. Recipients are recognized for their ability to comprehend and maximize the software's capabilities, not just by “running” the program, but also by exploring all facets of the program's functions, questioning the validity of program outputs and results, and providing constructive feedback to the software developer, programmers and MTC.



Henry Finch, Contra Costa County

appreciates the support of the Power Users and their contributions to the continued development, refinement, and improvement of the MTC PMP software. We'd like to hear from more of our Power Users, and develop a corps of “Power Advocates” to promote pavement management and help link PMP results to program, policy and budget decisions.

Most regular end-users call our hot-



Art Carney, city of Santa Rosa

line support once in a while — maybe a few times a year — and ask questions on topics that range from problems with installing and running the program, to “How can I get this information?” and “How come I'm getting this error message?” Power Users, on the other hand, call us a few times a week, or even a day, and ask, “Why am I getting these results? I don't think they're correct,” or “I'm getting different values when I compare my numbers with previous calculations” or... well, you get the idea. These users have demonstrated the aptitude to use the program as it was designed and have read the User's Manual from cover to cover.



John Barron, city of Fremont

MTC has always valued the feedback we get from users and we continue to try to improve our software by fixing bugs and adding enhancements to better satisfy the needs of the users. MTC especially

Upcoming Events

November User Week events are all within four blocks of an Oakland BART station. See specifics below.

November 2002

Computer Training Workshop – Budget Analysis

Thursday, November 7, 9 a.m. to 4 p.m.
Alameda County Conference Center¹
125 - 12th Street, Suite 400, Oakland

Computer Training Workshop – Custom Report Wizard/ PMP Database Auditing

Friday, November 8, 9 a.m. to 4 p.m.
Alameda County Conference Center¹
125 - 12th Street, Suite 400, Oakland

Technology Transfer Seminar

Wednesday, November 13, 9 a.m. to noon
Elihu Harris State Building²
1515 Clay Street, Room 2, Oakland

General User Meeting

Wednesday, November 13, 1 p.m. to 4 p.m.
Elihu Harris State Building²
1515 Clay Street, Room 2, Oakland

User Training

Thursday, November 14, 9 a.m. to 4 p.m.
Lake Merritt Plaza,³ Claremont Room
1999 Harrison, Suite 1700, Oakland

¹ four blocks from Lake Merritt BART

² four blocks from 12th Street/City Center BART

³ four blocks from 19th Street BART

Pavement Repair Strategies Must Address Long-Term Needs

by Wes Wells

Congratulations are due to the city of Petaluma and other local jurisdictions making a concerted effort to upgrade their local road maintenance programs. Petaluma's city council, for example, has decided to allocate an additional \$15 million for road repairs over the next five years. This decision is a good first step toward an on-going, long-term effort to boost such funding.

To develop a multiyear approach to pavement rehabilitation and repair, local cities and counties can draw on MTC's pavement management program (PMP) for help. MTC's program provides the information jurisdictions need in order to make critical decisions such as which streets should be fixed, to what level and in what order, and what the effects of differing levels of funding would be on the road network's condition. An increase in road repair budgets must be evaluated in terms of its impact on current shortfalls, how effectively it begins to reduce the backlog of repairs, and how it affects the overall condition of the pavement.

Deciding What to Fix, When

Each city must address a number of critical issues in making decisions on how to allocate available resources in the most cost-effective manner.

Completely rebuilding only a few streets at very high cost is a "worst first" strategy that is not very effective. Scarce revenues, particularly when applied to a street system that has been neglected for years, need to be directed to lower cost repairs. Some streets, for example, don't need to be completely reconstructed, but can be repaired with lower-cost asphalt concrete overlays. Some streets might get by with spot repairs, such as filling potholes, or less expensive stop-gap repairs. Streets needing repair also might be prioritized by the amount of traffic they carry, so that some major routes might get reconstructed, while less traveled routes would get only spot or stop-gap types of repairs.

Coping With the Shortfall

But even with these kinds of strategies, other actions will be necessary. Some actions that could be considered by public works departments faced with a funding shortage include:

- Seeing if existing city revenues might be redirected from other programs. (Some cities, for example, spend more moneys sweeping streets than repairing them.)
- Exploring the possibility of establishing some kind of assessment district or other fee-based plan to raise additional funds.
- Looking at the streets recommended for various repairs by MTC's program, and then bringing the analysis from the "network" level to the "project" level. While the MTC system gathers data on pavement conditions at a level suitable for planning and budgeting decisions, major repairs need to be analyzed with more detail, to look at structural and sub-surface measures that might be needed. Many times, a spot repair or some low-cost preventive maintenance can effectively extend the useful life of a pavement.
- Presenting the impact of budget constraints on the overall condition of the road network through geographic information system maps and MTC PMP-produced "budget options reports." Decision-makers have to see clearly that deferring needed maintenance today bears consequences in future years. It's a case of "Pay a little now, or a lot more later!"



No, this is not really a photo of a city street in the Bay Area, but, who knows — if something is not done to start catching up with growing pavement repair backlogs, this could eventually become an accurate representation.

P-TAP Meets a Growing Demand

by John Hoang

As cities and counties recognize the importance of having a pavement management system (PMS) in place, MTC's Pavement Management Technical Assistance Program (P-TAP) is proving to be an increasingly valuable service for them.

Created in 1999 to assist smaller to medium-sized Bay Area jurisdictions in setting up or maintaining a pavement management system, P-TAP now serves larger cities and counties as well.

P-TAP utilizes federal Surface Transportation Program as well as local funds to provide consultant expertise to public works departments. The consultants help local jurisdictions assess pavement conditions, determine pavement needs, identify the impact of inadequate budgets on pavement conditions, establish optimum repair programs, determine how to allocate existing funds cost-effectively, and advocate for increased funding for pavement maintenance on both a local and regional level.

With 102 (soon to be 103) out of 109 Bay Area jurisdictions now using the MTC pavement management program (PMP), the program's focus is changing from implementing the MTC PMP and other PMS programs to maintaining them. P-TAP also assists cities and counties in linking the MTC PMP and geographic information system mapping capabilities, designing pavement rehabilitation projects, and preparing grant applications.

The current round of P-TAP projects, which began in June, is now in full swing. Most consultants have already finished their field inspections and are currently analyzing the results and preparing final reports. All projects are expected to be completed by the end of this year.

MTC plans to send out solicitations for P-TAP Round 5 projects in March 2003, and anticipates continuing P-TAP beyond Round 5, at a funding level of \$700,000 per year. All Bay Area jurisdictions are encouraged to apply for P-TAP assistance.

For more information about P-TAP, contact John Hoang at 510.817.3210 or by e-mail at <jhoang@mtc.ca.gov>.

Software News and Information

by Sui Tan

We're Moving...

...the MTC pavement management system (PMS) 7.5 database engine to the Microsoft SQL 2000 Server. As our users' database grows, Version 7.5 is fast approaching its database engine limitations. To serve this growing demand, MTC has adopted the MS SQL 2000 Server database engine technology, which is capable of handling up to 100 million terra bytes, is very reliable, and has the highest level of security available in the industry.

Data Migration

Once we release Version 8.0, the first thing our current users will have to do is to migrate their databases from Version 7.5 to 8.0. Data migration is a complex process that involves data cleansing as well as migrating.

The first step is to examine your current databases to fix any data entry errors. This is done by running the Audit Program over your database (i.e., pavemgt.mdb). This is essential for quality control: The Audit Program will identify data entry errors, list types of errors, and summarize them. Examples of common errors include orphaned roads and blanks (null) in Severity and Distress fields.

The second step is fixing the errors that have been identified. There are two ways to do this: 1) by editing records from Version 7.5, and 2) by editing records from the Access 97 database. Either way, fixing the database is very complicated. MTC will enlist our software developers and technical assistance program consultants for help.

Once all the errors are fixed, the clean database will be converted from Access 97 to Access 2000 before migrating to Version 8.0. The final step involves launching the Data Migration Program and SQL 2000 Server.

For quality control purposes, all migrated databases will go through a series of tests, such as running needs, scenarios, and reports in the Version

8.0 environment. Once it passes the tests, the database is successfully migrated.

Early Adopters Needed!

We are looking for a group of current Bay Area MTC PMS users who are interested in beginning the data migration process. The prerequisites are:

1. A computer with Windows 2000 or XP
2. Latest inspection data from either 2001 or 2002
3. Maintenance and repairs (M&R) completed and entered in the program for 2002
4. Be ready to upgrade to Version 8.0 within three months after its official release. This is important because once the database is migrated, the user will not be allowed to enter any more information on Version 7.5. Otherwise, the database would have to be audited and migrated again.

Call me at 510.817.3250 or e-mail me at <stan@mtc.ca.gov> if you are interested in being an early adopter, have any questions or need more information.

Status of Version 8.0

Version 8.0 will be undergoing the last phase of alpha and beta testing over the next two months. If there is no major showstopper, the first phase will be released this winter. Remember, Version 8.0 will only run on Windows 2000 and XP. The following is the tentative schedule for the phased release:

Version	Features	Tentative Schedule
8.0	<ul style="list-style-type: none">• Faster data processing• Enhanced reporting features• Expanded data capacity• More user friendly	Winter 2002
8.0.1	<ul style="list-style-type: none">• Event-based analysis	June 2003
8.0.2	<ul style="list-style-type: none">• Project selection, GASB 34 reporting	October 2003

Results of User Survey

Thank you to those of you who took our online survey on operating systems. Out of a total of 39 responses, 51 percent are running Win 2000 or XP and 49 percent running either NT or 9X.

Of the remaining 49 percent, more than 50 percent have indicated plans to upgrade to Win 2000 within one year. These responses show that more and more users are moving toward Win 2000 and XP. This is because, as the operating systems become stable and software developers are more confident writing software that runs on those operating systems, more new software becomes available to users.

With the adoption of Win 2000 and XP, Object-Oriented Programming and MS SQL, MTC hopes to achieve a long-term and stable system architecture that can support the ongoing development of the software far into the future.

A Guide to Preventative Maintenance

Want to learn more about preventative maintenance "best practices"? Dr. Roger Smith — Texas A&M University professor and "father" of MTC's pavement management system software — recommends a manual on that subject that you can download from the following Web site: <www.infraguide.ca/bestmunicipal.html>

Street Talk



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