# It's All About

# The winners of the 2007 Quality & Productivity Awards.

Strategy Against Violent Environments near Schools - LA SAVES

CITY ATTORNEY; LAPD

Visually Enhanced Crisis Management

CONVENTION CENTER; LAPD; LAFD; EMERGENCY PREPAREDNESS

The Convention Connection

CONVENTION CENTER; AIRPORTS

Neighborhood Preparedness Ambassador Program (NPAP)

**EMERGENCY PREPAREDNESS;** NEIGHBORHOOD EMPOWERMENT

Waste Watchers

GENERAL SERVICES; CITY **A**TTORNEY

You've Got Mail! Automated Electronic Automotive Maintenance Management System Notification

GENERAL SERVICES

Inventors at Work GENERAL SERVICES

Remeter and Pay Less: Water Remetering Program

GENERAL SERVICES

Turning Software Into Hard Dollar Savings

GENERAL SERVICES; ITA

Road Warriors: Pioneering Vision with New Technology in Superpave GENERAL SERVICES; PUBLIC

Works

Step up to the Plate GENERAL SERVICES

San Pedro Bay Clean Air Action Plan

HARBOR

LAPD Kitroom Inventory Tracking System (KITS)

ITA; LAPD

**LIBRARY** 

City Council Web Video Connection

ITA; CITY CLERK

Downloads on Demand! E-Media at the Los Angeles Public Library

Office of Community Beautification Graffiti Abatement Program

PUBLIC WORKS

SMARTS<sup>©</sup> - An Innovative and Streamlined Design Approach for Secondary Sewer Renewal Projects (60 Mile Program)

PUBLIC WORKS

Sewer Odor Pressure Monitor – An Innovative Solution

PUBLIC WORKS

Assumption of All Street Lighting Maintenance from **DWP** 

PUBLIC WORKS

50/50 Sidewalk Reconstruction

PUBLIC WORKS

Blake Avenue and Oros Street Biofiltration Project

PUBLIC WORKS

Junior Inspectors/Reserve Investigator Program PUBLIC WORKS

### ■ Quality and Productivity Commission honors 22 projects and 12 Departments with its highest award. Projects are estimated to have saved the City \$11.3 million.

Photos by Angel Gomez, Member Services Manager, Garth Pillsbury, Department of Building and Safety, Sheri Mandel, Office of Chief Legislative Analyst

QUALITY, PRODUCTIVITY COMMISSION — The City of Los Angeles Quality and Productivity Commission presenting 22 projects and 12 city departments with Quality and Productivity Awards (QP Awards) at a luncheon event May 31 at the Millennium Biltmore Hotel downtown.

The awards recognize City employee teams for their initiative, creativity, teamwork, cost containment efforts and entrepreneurial spirit in providing a higher level of public services.

In total, the projects are estimated to have saved the City - and therefore the public -\$11.3 million.

This competitive award promotes professional and effective management practices, and is designed to recognize and showcase the City's achievements at improving the quality and efficiency of service delivery, while reducing public costs.

The host was consumer activist David Horowitz.

Here, Alive! lists the winners and showcases their projects.

Congratulations to all the winners, and thanks to Maria Ramos, Quality and Productivity Commission, for her assistance in producing this feature.



The awards luncheon gave winning projects the chance to present the scope and benefit they brought to the City. Here, the Strategy Against Violent Environments project is highlighted.



ITA was well represented at the awards luncheon. having won three awards. Here, the Turning Software Into Hard Dollar Savings project is highlighted.



The awards luncheon included entertainment.



## **Customer Service Awards**

PROJECT TITLE:

### **Convention Connection**

### **Convention Center Airports**



From left: Cyndi Del Poso, Monica Shelton and Agnes Ko. Not pictured: Phillip Hill and Greg Rosicky

The Convention Connection is a significant "add-on" to traditional coat and bag check services. Once a client checks out a local hotel, they often have several remaining hours of a convention to attend. Historically, the client would check their bags into our coat and baggage check area, and would retrieve the items for transit to LAX. With the Convention

Connection program, these bags are tagged and entered into a TSA-approved system on site at the Los Angeles Convention Center, and are transported securely to LAX and thereafter to the client's destination. Additionally, clients receive their airline boarding pass while on site at the Convention Center.

The Convention Connection program streamlines the airline client baggage movement process, makes airline travel easier and more enjoyable, and reduces congestion at LAX by eliminating the need for clients to conduct airline baggage checks to receive their boarding pass...and it's currently happening in Los Angeles - the only destination of choice for high-value, high-impact conventions!

PROJECT TITLE:

### **Downloads on Demand! E-Media at the Los Angeles Public Library**

DEPARTMENT\*

### Library



Back row, from left: Jeanne McKay, James Van Gerpen, Ani Boyadjian, Steven Newcomer, Matthew Mattson, Joyce Purcell, Anne Connor and Giovanna Mannino. Front: Peggy Murphy. Not pictured: Kris Morita and Frank Navarro.

The library now offers a growing collection of nearly 1,600 downloadable audio books, 300 videos and 400 music selections that are accessible online at the library's Website (www.lapl.org).

The library has long provided audiobooks, videos and music CDs that can be checked out. Media collections are generally in high demand, with a high turnover rate. In addition, audiobooks on CD or tape may have more than 20 CDs or tapes in a set, which means that the problem of missing or damaged pieces in a set are commonplace among libraries and stressful for patrons who must pay to replace lost or damaged items.

To check out e-media, patrons download the free software onto their personal PC. After browsing the collection and selecting a file, a valid library card is entered to download the title. Patrons can check out up to 10 titles at a time. After three weeks, the files expire and are automatically returned, eliminating any late fees, lost items or the need to return the item to the library.

Staff time is saved, as these are not physical items that need to be processed and shelved in the library. All transactions are automatic and electronic, which saves time for both the staff and patrons.

### **Assumption of All Street Lighting Maintenance** From the Department of Water and Power

**DEPARTMENT:** 

### **Public Works/Street Lighting DWP**



Front row, from left: Virginia Bacierto, Norma Isahakian and Carleen Marquez. Back: Ed Ebrahimian, Stan Horwitz, Kerney Marine, Christian Mosman and Kurt Sato. Not pictured: Jeffrey Ziliotto, Arthur Newborn, Greg Black (DWP), Greg Mathis (DWP) and Fred Villa (DWP).

The City's street lighting system consists of more than 220,000 streetlights. The Bureau of Street Lighting (BSL) is responsible for design, construction and maintenance of the City's street lighting system. Historically, normal maintenance (streetlight lamp and/or glassware replacement and cleaning), minor repair (two-person crews that perform temporary or limited repairs to streetlight components), night patrol activities (one-person crew that patrolled and reported streetlight problems), group relamping (two-person crews relamping incandescent systems on a scheduled basis), pole painting (two-person crew repainting streetlight poles) and acceptance tests (one-person crew inspecting completed street light construction performed by private contractors) were assigned to the Department of Water and Power (DWP) since the early 1900s. BSL has compensated DWP for these activities through the monthly billings for maintenance services.

However, maintenance responsibilities shared by two departments proved to be inefficient, ineffective and costly because of duplication of maintenance and repair activities. Communication between both agencies was ineffective and created repair turnaround time delays. Customer service suffered as a result of these inefficiencies. Customers who reported streetlight problems were confronted with dual agency reporting systems. The resulting con-

fusion added to the delay in the repair of the streetlight problem and made for customers dissatisfaction. A high percentage of the reported streetlight outages took from five to ten days to be repaired.

The Bureau of Street Lighting's (BSL) assumption of all streetlight maintenance functions from the DWP has resulted in a more efficient organization, one point of contact for al street lighting related calls, and enhanced customer service. Previously the maintenance duties were split between two entities so customers would be transferred to either the DWP or BSL, depending on the repair, consequently increasing the repair time. In addition, a single streetlight out may result in two departments responding due to a misdiagnosis of the repair needed. This maintenance transfer has resulted in the customer having one point of contact, one responsible party and a decrease in repair time.

### You've Got Mail! Automated Electronic **Automotive Maintenance Management System Notification**

DEPARTMENT:

### **General Services**



Goolsby and Leonard Walker. Not pictured: Joe Mancuso.

The Piper Technical Maintenance facility provides service to 64 different departments within the City by maintaining more than 1519 light trucks and automobiles. An important aspect of this service is an Automotive Preventative Maintenance Program (PM). The previous process of individually scheduling PMs and follow-up was grueling, time consuming and exhausting, which was inefficient and resulted in a backlog of overdue PMs and the increased potential for adversely affecting vehicle safety. The safety issues became even more critical with the addition of hybridand hydrogen-powered vehicles to our fleet.

To resolve the aforementioned issues, an Electronic PM Scheduling, Notification, and Follow-up System is now utilized to notify customers when PMs are due and to notify when vehicles are ready for pickup. Customer Survey Questionnaires are also provided by automated e-mail five days after the PM or other vehicle service is completed. This has proven to be a useful and effective tool for operational self-analysis in identifying areas for potential improvement in shop operations and customer service. Overdue weekly PM percentages have dropped from weekly highs exceeding 12 percent to far less than the Fleet mandated goal of 5 percent weekly and now frequently fall below 2.5 to 3 percent per week. Vehicle turn around time and time spent contacting customers has been greatly reduced, costly backlogs no longer exist, and an improvement in system efficiency is significant.



# Enhancing the Environment Awards



PROJECT TITLE:

**Waste Watchers** 

DEPARTMENT:

**General Services City Attorney** 



Team Members-Front row, from left: Martina White (GSD), Louisa Tan (GSD), Terry Martin-Brown (City Attorney's Office) and Theresa Torres (GSD). Back: Nick Pendor (GSD), Berry Saizon (GSD), Rocky Delgadillo (City Attorney), Bill Older (GSD), Larry Lopez (GSD) and Shane Avilez (GSD). Not pictured: Maria Ramos (GSD) and Marie De Vera Calamba (GSD).

The City plans to divert 70 percent of waste disposal by the year 2020 as a result of the California Integrated Waste Management Act of 1989 (AB939). Through the team work of GSD, Construction Division and the Office of the City Attorney, a "C&D debris" contract was developed and implemented, whereby the Division is presently diverting 100 percent of its debris to a Los Angeles Certified Recycling Center. This has helped the Division to achieve and exceed the City's 70 percent waste disposal goal and contributed to the protection of the Los Angeles community, environment and natural

This project has brought about other benefits to the process of responding to construction site crews' needs of debris disposal. Under the C&D contract, construction delays are minimized because debris disposal service can be done the same day it is requested since service availability and equipment prices have already been agreed upon between the Division and the vendor. With the reduction of construction delays, projects will not have to experience an increase in cost in order to meet construction deadlines. On the other hand, the contract also allows the Division to accurately monitor the tonnage of debris being diverted from the landfills. Invoices are being paid more quickly and accurately, which has resulted in Division/vendor confidence and the opportunity to take advantage of discounts offered under the contract.

### **Blake Avenue and Oros Street Biofiltration Project**

### **Public Works/Street Services**



Bureau of Street Services Team Members, from left: William A. Robertson, Paul Neal, Bob Garcia, Richard Barboza, Dennis W. Weber, Dean Harding, Ronald R. Olive and Nazario E. Sauceda.



Northeast Tree Team Members (Blake and Oros project partners), from left: Tom Dwyer, Carrie Sutkin, Holly Harper, Nidia

This project includes the modification of the intersection of Blake Avenue and Oros Street, the construction of four "Stormwater Gardens" along Oros Street, and a street-end Biofiltration portion at the dead-end of Oros Street. The intersection modification returned the area to its originally designed storm runoff capacity so as not to inundate the stormwater gardens and the streetend biofiltration system.

Each stormwater garden consists of a six-foot deep basin beneath a newly landscaped parkway called a bioretention planter. The streetend biofiltration consists of the installation of two new catch basins connected by PVC pipe to an additional six-foot deep subterranean gallery in Steelhead Park at the deadend of Oros Street. Additionally, the stormwater gardens and the streetend biofiltration system are interconnected by subterranean PVC piping.

This program was needed so that local municipalities can have viable data on the effects of water runoff. This data can then be applied throughout the City of Los Angeles and surrounding communities to improve the quality of groundwater and stormwater runoff into the Los Angeles River.

PROJECT TITLE:

### **San Pedro Bay Clean Air Action Plan**

DEPARTMENT:

### Harbor



Front row, from left: Kevin Maggay, Betsy Foley, Geraldine Knatz, Ralph Appy and Joy Crose. Back: Harold Messinger, Lisa Wunder and Paul Johansen. Not pictured: Christopher Patton, Eric Caris, Teresa Scognamillo and Julie Mean.

The San Pedro Bay Ports Clean Air Action Plan (CAAP) was developed jointly by the Ports of Los Angeles and Long Beach, in cooperation with the U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD), to define implementation strategies to meet shared air quality improvement goals. The plan includes measures for achieving emission reductions from various port operations over the next

The Ports recognize that their ability to accommodate the projected growth in trade will depend upon their ability to address adverse environmental impacts (and, in particular, air quality impacts) that results from such trade. The San Pedro Bay Ports are committed to expeditiously and constantly reduce the public health risk associated with port-related mobile sources, and implement a program within five years that will achieve this goal.



PROJECT TITLE:

### **Remeter and Pay Less: Water Remetering Program**

DEPARTMENT:

### **General Services DWP**



Front Row, from left: Chris Garcia (GSD); Michelle Moore (DWP); Kathy Fujiki (DWP) and Timothy Marxer (GSD). Back: Peter Inouye (GSD), Gregg Wilkins (GSD), Danny Arriaga (DWP), Ricky Glover (DWP) and Mike Avila (DWP). Not pictured: Ignacio Perez (DWP) and Dave Bennett (DWP).

The purpose of the project is to minimize the cost impact of rate changes instituted by the DWP by separating the domestic and irrigation usage at selected DRP locations to secure the lower, irrigation rate for the majority of the water used at the site. Also, where a facility does not meet the acreage requirement to qualify for the irrigation rate, the rate change impact is/will be mitigated by applying for a Sewer Service Percentage Adjustment on the water billed at Rate 31.

The two most difficult problems addressed were, securing adequate funding and coordinating the work of staff in three City departments.

The meter separation portion of the program is divided into phases to facilitate project management and funding control with limited staffing. Phase one consists of 11 meter separation projects. Phase one has an estimated annual cost savings of \$942,228. Phases two, three and four will accomplish approximately \$1 million in annual savings.

The program consists of 47-meter separation projects at 43 locations. Two locations, Hansen Dam and Hazard Park, require the installation of multiple irrigation meters to fully separate the irrigation usage from the domestic. Sewer Service Percentage Adjustments have been/will be applied for at all sites where the irrigation rate cannot be utilized.



# Inter-Agency Collaboration Awards



Strategy Against Violent Environments near Schools (LA SAVES)

**DEPARTMENT:** 

**City Attorney LAPD** 



From left: Lt Russ Wong (LAPD),Agent Art Flores (California Department of Corrections and Rehabilitation), Xiomara Flores Holguin (LA County Department of Children and Family Services), Tracy Webb(City Attorney's Office), Peter Shutan (City Attorney's Office) and Jack Sims (LA County Probation Department).

LA SAVES prioritizes the targets in and around LAUSD Safe School Zones and provides another level of protection for the children of Los Angeles. LA SAVES starts by identifying the felons on probation in the area around a target school, focusing on those convicted of violent crimes, and/or firearms and sex offenses. A computer search is then run to determine who on this list is currently wanted by the court. Once a target is identified, a strategy for arresting these wanted felons is implemented. By removing felons from our neighborhoods and from around our schools, we make our children safe and we make our community stronger.

In one LA SAVES operation, for example, three targets were arrested on warrants and one was gang member who was charged (in addition to his warrant case) with Possession for Sale of Methamphetamine. An illegally possessed knife was also found in his possession. Another offender was in violation of his probation for felony Spousal Abuse and had a machete and a replica AR-15 Assault Weapon and was arrested across the street from a city elementary school. In addition, two children were living in the house with the Methamphetamine in very unhealthy environments. This is a perfect example of why the Department of Children and Family Services (DCFS) was included as a partner. Their team is present for all LA SAVES operations and cares for any children and makes arrangements for their immediate placement, if necessary.

**Visually Enhanced Crisis Management** 

**Convention Center LAFD LAPD** 

**Emergency Preparedness** 



Back row, from left: John Shea, Allen Ward and Tom Fields. Front: Deputy Chief Lee Carter, Brad Atwell and Greg Lissow. Not pictured: Wallace Holcom, Ray Robertson, Ellis Stanley and Terrance Manning

The Convention Center's "Visually Enhanced Crisis Management" application is a self-contained computer- based technology that provides law enforcement and firefighting personnel the ability to rapidly review detailed archived site information, allowing them to "see through" doors, walls, and around corners. The images displayed by the application are embedded with a significant amount of related tactical information, providing a platform to improve the safety and effectiveness for teams that may need to enter and traverse the Los Angeles Convention Center under emergency conditions. The Convention Center is the first convention center "on the globe" with such technology. The Visually Enhanced Crisis Management application is an effective tool in support of planning, training, emergency deployment and business continuity.



**Turning Software Into Hard Dollar Savings** 

**DEPARTMENT:** 

**General Services** 

ITA



From left: Rita Khurana-Carwile (ITA), Christina Chang (ITA), Tom Kasowski (GSD), Carmelita Legaspi (GSD) and Maria Dolly

The purpose of this project was to realize cost savings by establishing a long-term annual contract for the purchase of Intel-based computer software and related support for general City business applications. The contract would be awarded to a reseller capable of supplying a full range of products and handling all of the City's software volume license master license and maintenance agreements, including all VLMs in place at the time of contract aware and any additional VLMs established by the City during the term of the contract. The contract should address all the needs and issues relevant to providing comprehensive Intel-based computer software needs and related support to all City Non-Proprietary Departments. For the past eight years, the City has been utilizing the State of California Contract, a government Alliance Program Agreement, for Intel-based software requirements. The City paid the State a 2.56 percent administrative fee for using this contract.

In 2005, the State of California changed the way it does business by establishing a tore Licensing Program (SLP) for major software manufacturers only that were made available on contract. The Store Licensing Program (SLP) of the State of California is a vehicle that any city, county or state agency or special district may use. By using SLP, the State has been charging the City an additional cost of at least 2.48 percent for State or administrative fees. This fee is applied to all agencies using the SLP contract including State-owned agencies. The SLP contract is not comprehensive and offers major software manufacturers only. City purchasing has been processing a large amount of one-time purchase requisitions from individual City departments for the non-contacted software products, which is a time-consuming and costly process. This problem was addressed by establishing a joint agency commodity contracting team represented by General Services Purchasing, ITA and the incumbent supplier. Many meetings and workshops were hosted by General Services Purchasing until efficient and effective specifications were developed and end user needs were identified. This information was used to develop and solicit bids through the competitive bidding process. An intensive and rigorous analysis for each bid was made. A comparative analysis of this award was made. The award was benchmarked with the suppliers contract with the County of Los Angeles, County of Fresno, State of California and the previous City of Los Angeles contract. This comparison clearly showed that the City contract offered substantial savings over those negotiated by much larger agencies with estimated future savings of \$3 million to \$4 million over the life of the contract and renewal option. The contract was awarded for five years with another five years of renewal options.

LAPD Kitroom Inventory Tracking System (KITS)

**DEPARTMENT:** 

ITA **LAPD** 



From left: Farshid Yazdi, Tony Gonzales, Omar Veloz, Anita McKeown, Jef Leifeste, Tim Riley, Van Horcher and Kamton Joe.

Prior to KITS, check-out/check-in activity was recorded on paper. Inventories were performed manually and also recorded on paper. These processes were slow and prone to error. The process of tracking down officers who failed to return equipment was also burdensome. To compound the problem, kitroom staff tends to be transient. Staff may be changed on a weekly or even daily basis. Comprehensive training is not possible and policies and procedures go unenforced. The end result was that expensive

KITS automates all aspects of LAPD kitroom operations.

Kitrooms are secured areas where various types of police equipment are stored. Kitrooms are found in all LAPD stations. There is a check-out/check-in process that occurs when shifts begin and end. Officers typically check-out cars, radios and weapons. Cell phones, cameras, and other miscellaneous items are sometimes checked-out as well. Reports are generated that document the checkouts and check-ins, and are permanently stored. In addition, a daily inventory report must be generated.



# Serving Communities Awards



PROJECT TITLE:

### **Neighborhood Preparedness Ambassador Program (NPAP)**

DEPARTMENT:

### **Emergency Preparedness Neighborhood Empowerment**



From left: Anna M. Burton, Carol P. Parks and Lisa F. Hayes.

The NPAP was developed to meet the goal of the Neighborhood Empowerment Academy, which is committed to empowering communities through subject matter experts and practitioners. The NPAP is one of nine subject matters and plays a significant role in helping to equip communities with the skills and tools needed if faced with a disaster.

Additionally, the NPAP teaches Neighborhood Council stakeholders and board members the importance of being prepared and the techniques needed to establish an effective Council emergency plan.

The NPAP has a citywide reach and the location of the program is varied to address access issues and to provide the opportunity for all Neighborhood Councils to attend. As a train-the-trainer program, the NPAP addresses all hazard (e.g., natural, technological and terrorism-related) preparedness, response, and short and longer-term recovery. Subject matter experts from City government and outside agencies conduct the training and include hands-on exercises to reinforce course material. Program topics cover persons with specific needs (e.g. non-English speaking, disabled, the elderly, persons at risk, children), and pets.

### **Office of Community Beautification Graffiti Abatement Program**

### **Public Works/Board of Public Works**



From left: Rosa Benavides, Morgana Lasco, Anna Ruiz, Esmeralda Ramirez, Maria Sheets, Thomas Corrales, Paul Racs, Virginia Valencia, Michael Espinosa, Gerry Valido, Sal Del Castillo and Robin Woo.

Office of Community Beautification is responsible for management and oversight of graffiti abatement activities and contracts, coordination of volunteer community beautification and clean-up efforts, the Community Beautification Grant (formerly called Neighborhood Matching Fund), educational outreach to elementary schools and various other programs focusing on the beautification of Los

Established in 1987 as Operation Clean Sweep and then under the Office of Community Beautification in 2005, OCB utilizes "3-1-1, One Call to City Hall" for its Graffiti Removal Hotline through which residents and businesses can report graffiti. Work orders are referred to community based graffiti removal organizations contracted through the Office of

Community Beautification. Work is performed using paint, chemical solvents and sandblasting. All services are offered at no charge to the public and funded by the City.

In fiscal year 2005-06, with a budget of almost \$7 million in the face of a citywide epidemic, OCB removed an all-time record of 25.9 million square feet of graffiti at more than 489,000 locations. By comparison, a two-foot wide line can be drawn from Los Angeles to New York at a length of more than 2,450 miles with paint to spare.

### 50/50 Sidewalk Reconstruction

### **Public Works/Street Services**



From left: William A. Robertson, Mark Simon, Steve Ortiz, Bela Gyimesi, Dennis W. Weber, Dean Harding, Ronald R. Olive and Nazario E. Sauceda.

The Bureau of Street Services and Councilmember Wendy Greuel have pioneered a program in which sidewalk repair can be completed within one year if a homeowner requests it and agrees to pay for half the work. Funding only allows for the Special Projects Division to complete a specified amount of miles to be repaired. Under this program, more sidewalks can be repaired, and constituents now have the ability to request sidewalk work within the year as long as they agree to pay for half of the

An estimated 4,500 miles of sidewalk require repair citywide, with an average funding level to take care of 64 miles; alternatives and innovations are necessary to do more. This program uses 50 percent of City funds along with 50 percent of private funds to create a partnership for repairing sidewalks at specific locations.

PROJECT TITLE:

### **Junior Inspectors/Reserve Investigator Program**

DEPARTMENT:

### **Public Works/Street Services**



Back row, from left:Tom Caraballo, Ron Jackson, Jerry Weir, Charles Boyd, Frank Martinez, Gary Harris and David Joiner. Front: Dortheney Henry, Timothy Walls and Karen Bowie.

The program was needed so that children can learn to keep their communities clean and reduce the blight that continues to be a lingering problem in the areas where these schools are located.

Each of the participating schools in this program (which runs from September through June) has 20 students for a total of 120 participants. Students report any violations (illegal dumping, illegal posting, etc.) or needs for service in their community (missing street signs, potholes, bulky item pick-up, etc.) write it down on their observations sheet, and then return it to the school coordinator.

For example, Barrett Elementary School in South L.A., is a college preparatory school that particiates in an annual neighborhood cleanup. During the cleanup, fourth- and fifth-graders go out in the streets to clean and display pride in their communities by keeping the streets and parkways around their school clean. With much negative publicity that the public schools receive, the majority of the public is unaware of the superior deeds that children exhibit in keeping their neighborhood clean. Investigators routinely praise this school as one of the most positive schools they have ever visited.





# Technological Innovations Awards



PROJECT TITLE:

**Inventors at Work** 

**DEPARTMENT:** 

**General Services** 



From left: Ben Baca, Brian Cunningham, Cary Ellsworth, Mike De Leon, Scott Cupp, Gus Vela, Glenn Robertson, Cris Goolsby, Brian Moen and Leonard Walker.

Fleet Services Mechanics saw the need to reduce costs and improve the efficiency in its daily shop operations. As a result of their ingenuity, two machines were designed and built to accomplish this goal.

### The Particulate Trap Cleaner

To improve the City's air quality, Fleet Services installed particulate trap filters in 551 of its diesel-powered trucks. These traps remove harmful particulate matter that is released in the exhaust of the diesel. These essentially eliminate the black smoke that is emitted from the trucks exhaust. The filter within the trap must be cleaned annually or every 60,000 miles to keep them at optimal operating condition. The manufacturer recommended cleaning procedures are to remove the center body from the exhaust system. Using compressed dry air on the outlet and a vacuum cleaner on the inlet side of the trap, air is blown through the filter allowing the vacuum cleaner to collect the ash. The blowgun is moved slowly over the filter surface directing air into each individual cell for better results. This process continues for approximately 40 minutes. The Particulate Trap Cleaning System was designed and built to automate this process while eliminating the exposure of airborne particulate matter to the employees.

### LNG Tank Vacuum Insulation Restoration

As part of the City's Clean Cities Program to improve air quality, 249 liquefied natural gas (LNG) powered refuse collection vehicles have been placed into service. LNG is a cryogenic, a highly refrigerated liquid at a temperature of -220 F and low pressure. Each LNG truck has an LNG tank to store the fuel. The inner tank is wrapped with multiple layers of insulation, which reflect heat from the tank. An outer tank encloses the wrapped inner tank and a vacuum is drawn between the walls. This combination of multilayer insulation and vacuum is called super insulation to keep the LNG at cryogenic state. Although the tank is very safe, with age and use the tank can lose the vacuum between the tank walls and lose its insulation effectiveness. This required the tank to be re-vacuumed at an annual basis by the vendor at \$925 per tank. A commercial vacuum unit is available for self-vacuuming the tanks but is expensive. Fleet Mechanics were able to design their own machine at a fraction of the cost and now perform the tank vacuum insulation restorations in-house.

### **Road Warriors: Pioneering Vision With New Technology in Superpave**

### **General Services Public Works/Street Services**



Insert: Richard Villacorta. Front row, from left: Tony Duong, Ann Kane, Elaine Lopez, Papkin Hovasapian, Kabew Kassew, Safnat Farag and John Kuo. Back: Ed Figueroa, Alex Chu, Jorge Esparza, Jesus Barajas, Ray Solomon, Leon Vayner and Cenicio Ulit.

The City of Los Angeles is the second largest metropolitan area in the United States, with nearly 12,000 kilometers of streets paved with hot-mix asphalt. Our professional philosophy at the City of Los Angeles is to approach materials engineering problems with a sound scientific approach. Throughout all phases of paving construction, a heavy emphasis is placed upon constant dynamic research, economical and suitable design, accurate testing, quality of materials, and proper construction. The Standards Division is the materials research and testing agency that serves these purposes. As a result, the City of Los Angeles has benefited from a successful asphalt concrete resurfacing program.

The City of Los Angeles does not depend on outside technology to determine what is the best procedure or specs that protect city interests. As a result, several groups and other government agencies have recognized Standards status as the leading agency and have requested our assistance in helping them get up to date. Recently, the County of Los Angeles has sent their Paving Engineers to our lab for some on site training. Knowledge and quality of work does not mean only saving money but also a better quality of life for our

PROJECT TITLE:

### **Step Up to the Plate**

### **General Services**



From left: Richard Malvino, John Griffin, Gonzalo Sarabia, Tracy Vu, Michael

"Step Up to the Plate" describes Publishing Services implementation of computer-to-plate (CTP) technology. CTP eliminates steps from the production cycle when preparing a job for printing. Previously we employed a Computer to Film (CTF) workflow, which consisted of five steps between having the copy in digital form to having it imaged on a plate; film imaging, film processing, stripping, contacting, and finally plate processing.

Typically, an order for color printing required an operator to preflight a customer file, then send that file to a high resolution film setter to make the required four color separation films needed for plate making. Those 4 films are positioned on clear plastic carriers and then exposed onto light sensitive metal press plates. The last step requires the plate to be processed to remove unexposed emulsion.

In a CTP process four of these steps are fully removed. Each step eliminated from the process reduces the overall time required to get plates to press. Not only were these steps time consuming, they were also very labor intensive. Labor is not only costly but by virtue of the human element, performance of these tasks leads to quality and consistency problems, reducing the steps involved in improved turnaround time and, as a result, lowered costs.

### **Los Angeles City Council Video Connection**

DEPARTMENT:

### ITA **City Clerk**



From left: Tony Ighani (ITA), Alina Cummings (ITA), Claudia Dunn (City Clerk), Frank Martinez (City Clerk), Karen Kalfayan (City Clerk), Terry Halberg (ITA), Maryam Abbassi (ITA), John Rago (ITA), Angeles Mojica (ITA) and Rod

On Nov. 22, 2005, a new service called the Los Angeles City Council Video Connection was launched at the Valley Municipal Center in Van Nuys, 20 miles north of downtown Los Angeles. The service consists of a high speed two-way audio/video link that connects San Fernando Valley residents with the downtown City Council Chambers at City Hall.

When a speaker is testifying from the remote Van Nuys location, they are seen on large video displays in the downtown Council Chambers, and heard over the chamber sound system. At the same time the speakers at Van Nuys can hear and see the Council Chambers on their TV monitors. This video conferencing system is also integrated with the network that broadcasts City Council meetings live on the municipal access cable channel (Channel 35)

and the live Internet Webcast, so that anyone watching the meeting can also see and hear speakers from the Van Nuys location.

While the system links one remote location with City Hall today, plans are under way to provide the Video Connection Service at other locations based on this project's success. Through this innovative project the City can connect its citizens more directly to the governmental processes, all throughout the vast City of Los Angeles.

PROJECT TITLE:

### SMARTS<sup>©</sup> - An Innovative & Streamlined **Design Approach for Secondary Sewer** Renewal Projects (60 Mile Program)

**DEPARTMENT:** 

### **Public Works/Engineering**



Front row, from left; Yafang Su, Angela Ung, Harshad Shah, Patricia Cheng, Tahir Upshur and Sayed Shah. Back: Majed Harb, Robert Nussbaum, Richard Pedrozo, Desmond Lew, Carla Rinehart, Elena Fuan, Chris Guerrero, Mina Azarnia and

The SMARTS<sup>©</sup> application and the streamlined design processes are needed to deliver projects that will rehabilitate 60 miles of sanitary sewers per year for fiscal year 2008-09 through 2013-14. It is estimated to be a \$75 million per year program.

This SMARTS<sup>®</sup> application utilizes GIS database of the exiting sewers, streets, and other infrastructures, organizes plans and maps, and links sewer condition CCTV video tapes so that engineers can perform several research functions without back and forth changing of media. The design processes are dovetailed to the SMARTS<sup>©</sup> so that steps are streamlined and important factors that may impact the design are reviewed early.

The SMARTS<sup>©</sup> application was copyrighted by City in October 2005. A presentation of the application at a November 2006 American Public Works Association GIS conference has received positive comments and many inquiries. This office is currently working with the City Attorney's Office to market the application to other agencies.

### Sewer Odor Pressure Monitor – An Innovative **Solution**

DEPARTMENT:

### **Public Works/Sanitation**



From left: Rafael Yanez, Vlad Lorenzo, Farah Lavergne, Ahmad Ghanem, Scott Hare, Adel Hagekhalil and Brent Lorscheider. Not pictured: Debbie Pham, Barry

The purpose of having an in-house odor pressure monitor equipment to have a tool to systematically evaluate the current odor control program, to conduct studies in strategic areas throughout the City, to identify causes of odors, and provide recommendations for improvements.

The concept of using the common equipment to measure air pressure as the odor pressure monitor started as the need arises. With a commitment of excellence to the community, through process of concept development and experiment and testing, the team finally developed a new innovative technique to "transform" the regular pressure monitor into the odor pressure monitor that would "survive" under the hostile corrosive environment due to high level of hydrogen sulfide generated from the wastewater.

This Innovative Odor Pressure Monitor product resulted in increasing in productivity and efficiency by reducing staff time in obtaining the contract each time testing is required, savings to the City of over one hundred thousand dollars annually in renting cost, increasing the collaborative team effort between managers and employees, and significantly improving customer services.