

# PUBLIC WORKS CONNECTS YOU ALL AROUND AUSTIN



2011  
ANNUAL REPORT  
OF FUNDS AND PROGRAMS



## MESSAGE FROM THE CITY MANAGER

Austin continues to be a City on the move. We all take pride in our hometown's placement on numerous "top ten" and "best places" lists, but our quality of life is dependent upon much more than those specific characteristics. Achieving the vision of making Austin the most livable City in the country requires that we continue working to develop our programs, infrastructure, and planning efforts to meet the challenges of growth, without giving up those uniquely Austin characteristics we all cherish. The manner in which the resources you provide to us are used to achieve the City Council's vision is the genesis of my charge to all City agencies to be the "best managed" in the nation at what they do.

The Annual Report of the Public Works Department provides insight into one of your City government's most dynamic and successful agencies. The department is responsible for maintaining our transportation infrastructure, establishing standards for work performed in the City's right-of-way, delivering major projects under our Capital Improvement Program, and connecting our families safely and smoothly all around Austin. These requirements amount to an annual expenditure of approximately \$400 million, touching virtually every City service area. The proper use and accountability of this sum represents an enormous public trust, and the Annual Report provides an accounting for how this funding has been applied.

Public Works plays a role in our daily lives, and they strive to perform their business quietly and efficiently for us all. In those times when their presence is felt during construction in your neighborhood, along your route to work, or when you are out and about on the weekends, remember that these Public Works crews are busy putting your dollars to work, and "Connecting YOU – All Around Austin!"

A handwritten signature in black ink, appearing to read "Marc A. Ott". The signature is fluid and cursive, written over a light-colored background.

Marc A. Ott  
City Manager  
City of Austin, Texas

## PUBLIC WORKS ANNUAL REPORT FY2011 PURPOSE AND SCOPE

Your City of Austin Public Works Department is pleased to present its inaugural Annual Report. Our “behind the scenes” support of many City activities is a contributing factor to the high degree of trust and satisfaction Austinites have with the delivery of municipal services.

Our department’s motto, “Public Works Connects You - All Around Austin,” is a reflection of the breadth of our programs and the impact they have on our businesses and residents throughout the City as they go about their daily lives. Public Works is involved in almost every aspect of the delivery of our city services. Our engineers and project managers design and deliver new and modernized facilities, supporting the City’s public safety, parks and recreation, animal services, and libraries. We are engaged in infrastructure improvement projects aimed at maintaining and expanding our transportation, water and sewer, storm water, and flood control networks. Our neighborhood connectivity activities reach out to the community through providing improvements for motorists, pedestrians, and bicyclists to share the road safely, and provide crossing guards to help children safely get to and from school each day. Our Street and Bridge Operations make sure that you stay connected easily from one destination to the next, by maintaining our roadways to the best level possible.

Our Annual Report is intended to provide a complete accountability for our operations, and to meet reporting requirements set forth by the Austin City Council and City Manager. Public Works was responsible for approximately \$400 million in combined expenditures over the past fiscal year, and this report will help demonstrate how the funds you provided were used.

The report covers Fiscal Year 2011 (October 1, 2010 through September 30, 2011), and is organized by our major program activities. It is intended to show how taxpayer funds were allocated, while highlighting the diversity of our programs and services.

In many ways, the success of your Public Works Department is a reflection of the success of the city government as a whole. We strive to always provide excellence and transparency in our operations, and welcome all recommendations on how to improve. Thank you to the Austin community for your trust and support.



- 6 FINANCIAL OVERVIEW- SOURCES AND USES OF FUNDS**
- 8 SUPPORT SERVICES**
- 9 CAPITAL PROJECTS MANAGEMENT FUND**
  - 10 CAPITAL PROJECTS DELIVERY
  - 12 ENGINEERING SERVICES
  - 14 CAPACITY EXPANSION
  - 16 ACCELERATE AUSTIN PROGRAM
  - 18 NEIGHBORHOOD CONNECTIVITY PROGRAM
- 20 CHILD SAFETY**
  - 21 CHILD SAFETY PROGRAMS AND SERVICES
- 23 TRANSPORTATION FUND**
  - 24 STREET & BRIDGE OPERATIONS OVERVIEW
  - 26 BRIDGE MAINTENANCE & IMPROVEMENTS
  - 28 PAVEMENT MAINTENANCE & IMPROVEMENTS
- 30 SUSTAINABILITY IN PUBLIC WORKS**



## OVERVIEW

The Public Works Department (PWD) strives to implement creative, innovative and sustainable strategies to address the City's needs for mobility, safety, and facilities development that obtain the best value for the resources available. Here is a breakdown of where our funding comes from and how it is utilized.

Transportation Fund	2010-2011 Budget	2010-2011 Actual
Revenue	\$49,280,000	\$50,430,300
Transfers In	\$1,665,385	\$1,665,385
Requirements	\$48,015,967	\$42,485,912
<b>Capital Projects Management Fund</b>		
Revenue	\$23,885,500	\$23,463,195
Transfers In	\$0	\$0
Requirements	\$23,859,562	\$23,054,228
<b>Child Safety Fund</b>		
Revenue	\$1,517,500	\$1,565,600
Requirements	\$1,766,574	\$1,654,767
Expense Refunds	\$1,516,600	\$1,974,339
Grant Requirements	\$1,748,093	\$1,748,093
<b>Total Budget</b>	<b>\$76,983,539</b>	<b>\$70,917,339</b>

### THE PUBLIC WORKS TRANSPORTATION FUND

The Public Works Transportation Fund obtains revenue from the Transportation User Fee, Utility Cut Repair charges, the General Fund and miscellaneous other revenue.

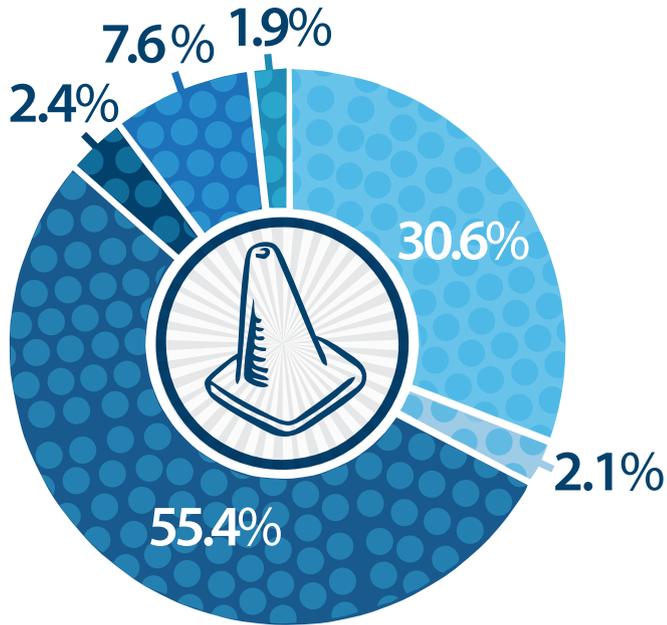
### THE CAPITAL PROJECTS MANAGEMENT FUND

The Capital Project Management Fund draws its revenue from the project team charging their direct staff time and an overhead rate to the capital projects that they manage for internal clients.

### THE CHILD SAFETY FUND

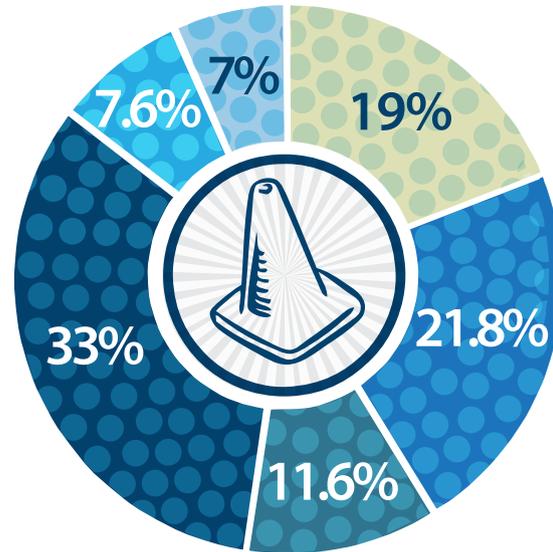
The Child Safety Fund receives its revenue from traffic violations in school zones and from vehicle licensing fees collected by Travis County for school zone safety programs.

## PWD-Sources of Funds



- Expense Refunds & Other
- Transfer User Fee
- Utility Cut
- Child Safety Fund
- CIP/Enterprise Project Charges
- General Fund

## PWD-Uses of Funds



- Street Preventative Maintenance
- Street Repair
- Minor Construction & Repair
- Transfer & Other Requests
- Capital Projects Delivery
- General Fund

Public Works' four primary service areas are: street and bridge maintenance and repair, design and delivery of Capital Improvement projects, neighborhood connectivity activities (including planning and construction of bicycle and pedestrian facilities) and implementation of the Child Safety Program (including school zone improvement projects and the provision of crossing guards for neighborhood schools).

## HUMAN RESOURCES

The Public Works Human Resources Office (HRO) supports employees throughout Public Works, Austin Transportation, Contract Management and Real Estate Services Departments. Their expertise in employee relations, compensation, employment services, departmental procedures and training are invaluable to delivering our programs and services throughout all three funds. Highlights for FY2011 include:

### ORGANIZATIONAL DEVELOPMENT: ON-LINE LEARNING

HRO has been instrumental in transitioning traditional stand-&-deliver training to an on-line and desktop learning environment, creating an environment in which employees are able to acquire the knowledge necessary to be effective team players. This has been critical to the success of the Department and has created opportunities for employees to maximize efficiency. On-line learning has reduced unnecessary travel by 1,770 miles driven - the distance from Austin, Texas to New York, New York.

### HIRE THE BEST

Starting with the end in mind, the first step to be successful is to hire well. With this focus, HRO re-structured the hiring processes in an effort to acquire top talent. From posting a job to welcoming a new employee, all steps are emphasized as critical, ensuring a good person-to-job match, and reaching the staffing levels necessary to provide services to our citizens.

## BUSINESS ENTERPRISES

Business Enterprises supports all three funds and their programs with financial management, asset management, performance measurement, construction quality services, safety programs and training, and administrative services. This group focuses on performance improvement through developing processes and tools to increase the efficiency of how we do our work. Highlights for FY2011 include:

### ELECTRONIC TIME

Support Services moved the Department from a paper to paperless system. This reduced administrative processing time and reduced the Department's cost on saved paper.

### ASSET MANAGEMENT – RIGHT OF WAY COORDINATION MEETING

The meetings provide a means to coordinate capital work and operational service plans to address our City's infrastructure needs across multiple departments and have identified over \$600,000 in cost efficiencies. This allows the City to focus on "Dig Once" opportunities that minimize the disturbance to neighborhoods, while providing them with the services they need.

### CAPITAL IMPROVEMENT PROGRAM INSPECTION LAPTOP FIELDING

Allowing a field-operations-focused group the ability for on-site document sharing and improved communications, this initiative has improved our capital construction quality management program.

The Capital Projects Management Fund (CPMF) is an internal service fund that accounts for the costs of delivering capital projects. This fund is used to charge project specific costs to the capital budget to ensure that the costs of the improvement are capitalized in accordance with all Generally Accepted Accounting Principles (GAAP). Land acquisition, design, construction, commissioning and warranty work costs for a capital project are all captured in this fund.



Our Project Management Division (PMD) manages the overall delivery of capital projects for a large majority of City departments. Most of these projects are in excess of \$500,000 and range up to over \$500,000,000.

The Division has approximately 50 full-time employees and is involved in the management of over 400 different Capital Improvement Program projects. In FY2011, PMD was responsible for capital project expenditures of approximately \$300,000,000.

Capital delivery has many projects advancing through our Project Management Division. Some of the highlights from FY2011 include:

- **COMPLETION OF THE ROY BUTLER PUBLIC SAFETY TRAINING FACILITY**

In January 2011, a grand opening accompanied the completion of the Public Safety Training Facility. This included renovation and additional construction of more than 50,000 square feet of classrooms and tactical training facilities, which gave a new collaborative home for our public safety agencies to train for excellence.

- **SIGNIFICANT PROGRESS ON CONSTRUCTION OF WATER TREATMENT PLANT #4**

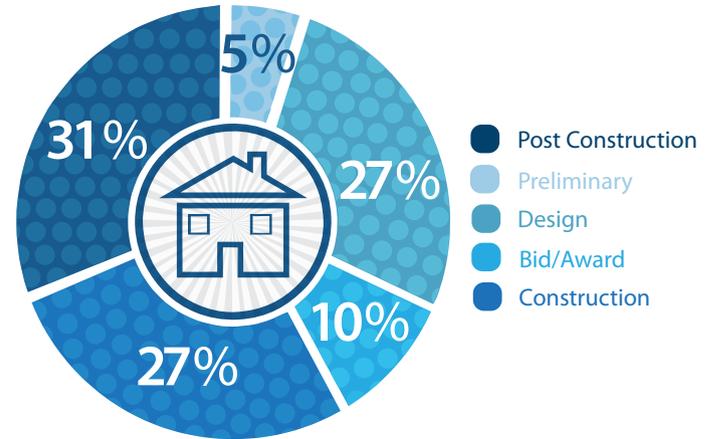
Water Treatment Plant #4 is the largest project that the City has managed in the last 10 years. The Public Works project management team has moved forward in FY2011 from designs and concepts to actual construction, such as the finalization of the Jollyville Transmission Main design, and procurement of the construction contractor. Most of the major components are also now under construction, and significant work has been completed on the Raw Water System, clear wells and clarifiers.





# CAPITAL PROJECTS DELIVERY

## TOTAL CAPITAL PROJECTS IN PUBLIC WORKS (BY PHASE)



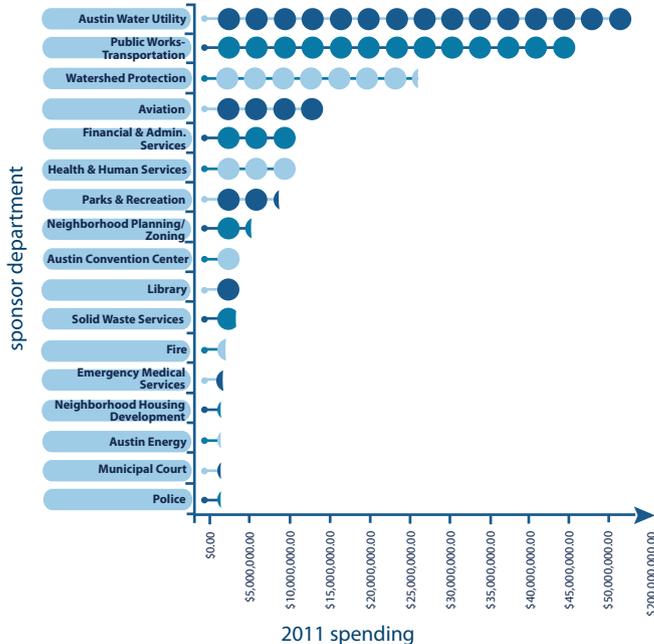
### CONSTRUCTION PHASE OF WALLER CREEK TUNNEL PROJECT

This year saw the beginning of construction on the Waller Creek Flood Control Project. The Tunnel will be almost one mile long and is 26 feet in diameter. The project is expected to be completed in 2014 and will take 28 acres out of the flood hazard zone, allowing development of these properties. Along with the tunnel construction, a new Parks and Recreation Department Boathouse began construction to accommodate the storm water lagoon of the new tunnel. It will be completed in December of 2011.

### RIBBON CUTTING CEREMONY FOR IH-35 MAKEOVER PROJECT

After decades of being a psychological barrier between East Austin and Downtown, the IH-35 intersection between Sixth and Eighth Streets was “stitched” together by the addition of parking lot improvements, a beautiful public art light display and inviting landscaping. The additional lighting helps add a safety element to the area while incorporating a unique and symbolic design aesthetic.

### FUNDING EXPENDITURES (BY AREA)



<p><b>The Project Management Division managed</b></p> <p><b>418</b> projects in FY2011</p> <p><b>Total construction costs of those projects</b></p> <p><b>\$1,901,698,200</b></p>	<p><b>Substantially completed projects in FY2011</b></p> <p><b>65</b> out of the 418 projects</p> <p><b>Project Management's total cost of services</b></p> <p><b>2.92%</b> of capital project spending in 2011</p>
---	---

In Public Works, our Engineering Services Division (ESD) serves as an in-house design consultant for the City. Our mission is to provide engineering services for development, support, and delivery of high-quality Capital Improvement Program projects that are responsive to the goals of our department, while supporting City initiatives.

We provide client departments with ready access to technical expertise in a variety of engineering disciplines. ESD consistently delivers work products that improve the City's infrastructure and meet Capital Improvement Program project needs. The scope of our work also includes preparing design deliverables that meet agreed upon project scope, schedule, and budget while implementing a Quality Management Plan on all of our projects.

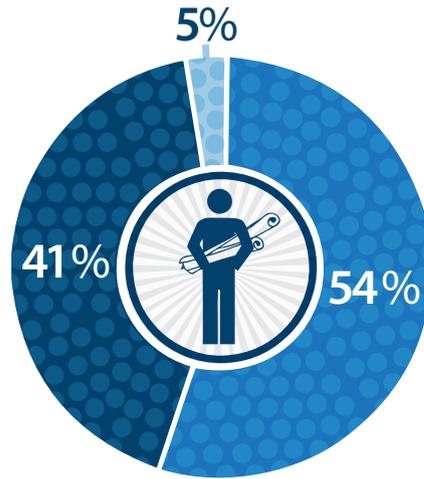
**Notable Engineering Services projects for the year include:**

- **BRAZOS STREET RECONSTRUCTION**

A long and busy section of downtown Austin, Brazos Street was a project with challenges and triumphs. As a 'Great Streets' Program reconstruction, many enhancements were made to the entire length of Right of Way, not just the street itself. Completed in October 2011, the street now marks a beautiful boulevard where mobility has options.

## Hours billed by ESD for FY2011

(by sponsor department)



- Austin Water Utility
- Public Works & Austin Transportation
- All Other Departments
  - Watershed Protection
  - Aviation
  - Economic Development
  - Austin Convention Center
  - Parks & Recreation
  - Emergency Medical Services
  - Financial & Admin. Services
  - Solid Waste Services
  - Austin Energy
  - Municipal Court
  - Neighborhood Housing Development

Total projects designed in FY2011

**53**

Engineering Services' total cost of services

**\$5,340,917.41**

or

**1.75%**

of capital projects FY2011 expenditures

### ● WESTGATE BOULEVARD IMPROVEMENT PROJECT

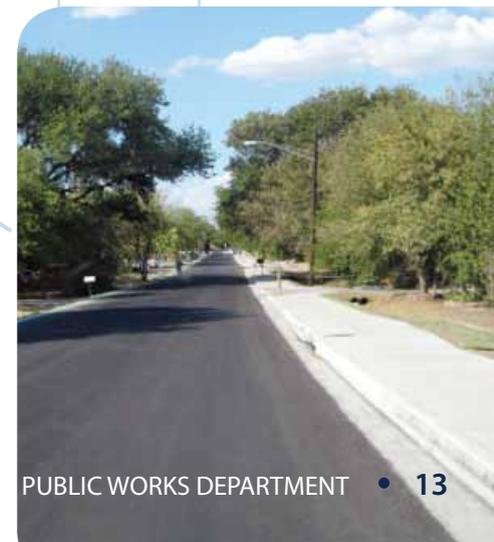
The Westgate Boulevard Improvement Project is the last project that the Engineering Services Division is managing from the aspect of construction management and marks a final frontier for the Division. The design was done in-house by ESD Team 3 and will be complete by the end of 2011.

### ● PLAINS TRAIL PROJECT

This project consisted of preliminary engineering, design and construction phase services within a tight schedule tied to TXDOT funding. The project reflects a "best managed" approach by its coordination with a variety of internal and external entities. This completed project truly transforms the neighborhood and provides children with a safe route to walk to school.

BEFORE

AFTER



## CAPACITY EXPANSION FOR AUSTIN

The Public Works Department continues to factor Capacity Expansion into the Capital Program, as a goal to increase the multi-modal capacity of our City's roadways and facilities.

The discussion of capacity expansion typically includes the construction of new roads and trails. PWD's Bicycle and Pedestrian Programs integrate ways to increase capacity alongside interval design and

project management professionals, and integrate partners in the Austin Transportation Department and Travis County. We are building new roadways by designing with all modes in mind, creating capacity and connecting Austinites all around the city.

Highlights of Capacity Expansion Projects in development during FY2011 include:

### 3RD STREET RECONSTRUCTION PROJECT

Designing in new capacity downtown, this full depth street reconstruction will include bicycle lanes, larger "Great Streets" sidewalks and streetscapes.

### LAVACA AND GUADALUPE STREET

Designing the relocation of utilities for these streets in anticipation of Great Streets and Rapid Bus projects.



### WILLIAM CANNON BRIDGE OVER ONION CREEK

Beginning construction in FY2011, a new three lane structure with sidewalks and bike lanes on East William Cannon Drive crossing Onion Creek will bring the total lanes on William Cannon to six, east of IH-35.



## INNOVATIVE TODD LANE DESIGN

Public Works will be reconstructing the existing two-lane roadway, providing a divided four-lane arterial roadway with bicycle lanes and the City's first full scale roundabout.



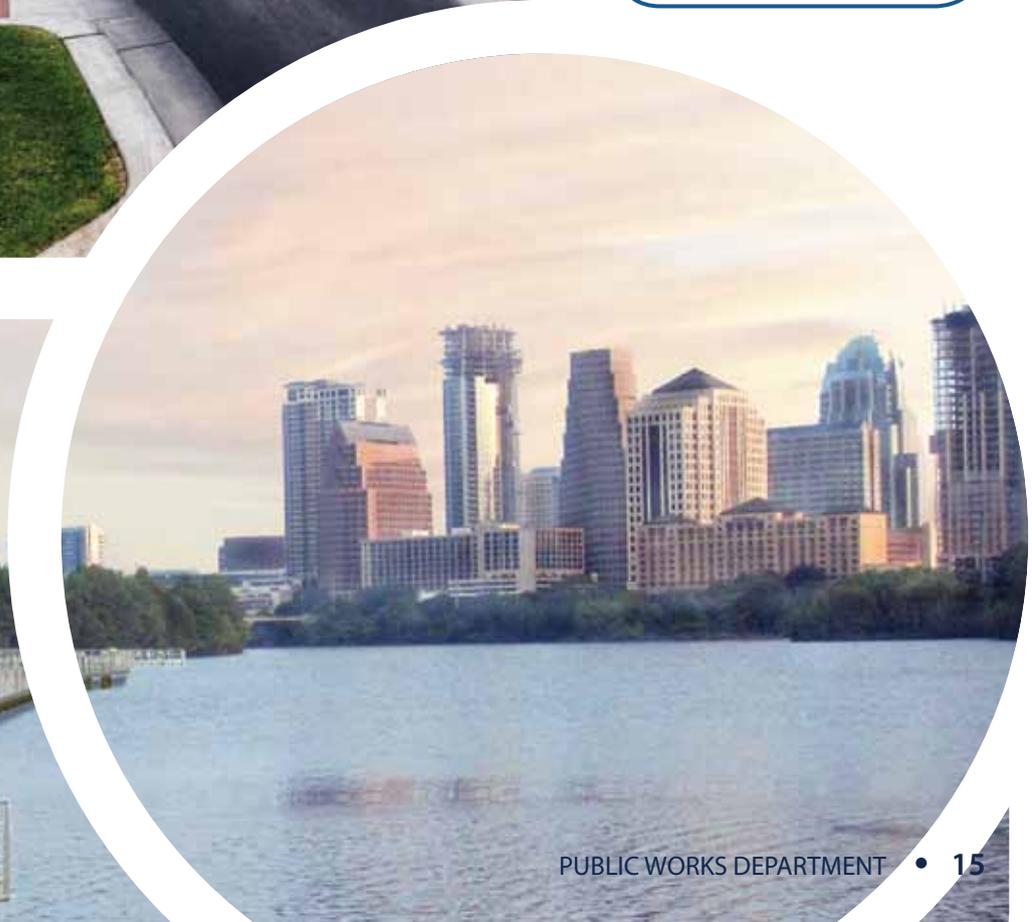
Austin voters approved

# \$90 MILLION

in bonds in 2010 for Capacity Expansion Projects, a program designed to enhance mobility and expand capacity in the region.

## LADY BIRD LAKE BOARDWALK PROJECT DESIGN

This project will improve connectivity through bridging the southeastern gap of the Lady Bird Lake hike and bike trail. The Boardwalk Trail at Lady Bird Lake will extend the hike and bike trail more than one mile from the east side of the Austin American-Statesman building to Lakeshore Park.



## ACCELERATE AUSTIN PROGRAM

The Accelerate Austin program was launched in March of 2009 with the goal of rapidly advancing the street reconstruction projects funded under the 2006 Bond Program. Proposition 1 of the 2006 Bond provided \$85 million for reconstructing roads and streets, and for improving, reconstructing, and constructing drainage facilities related to the roads and streets. As of October 2011, \$63 million has been obligated and \$43 million was spent on 37 projects of the \$72 million total Accelerate Austin program dollars.

### Highlights of the program in FY2011 include:

#### COMPLETION OF THE EAST 7TH STREET CORRIDOR RECONSTRUCTION PROJECT

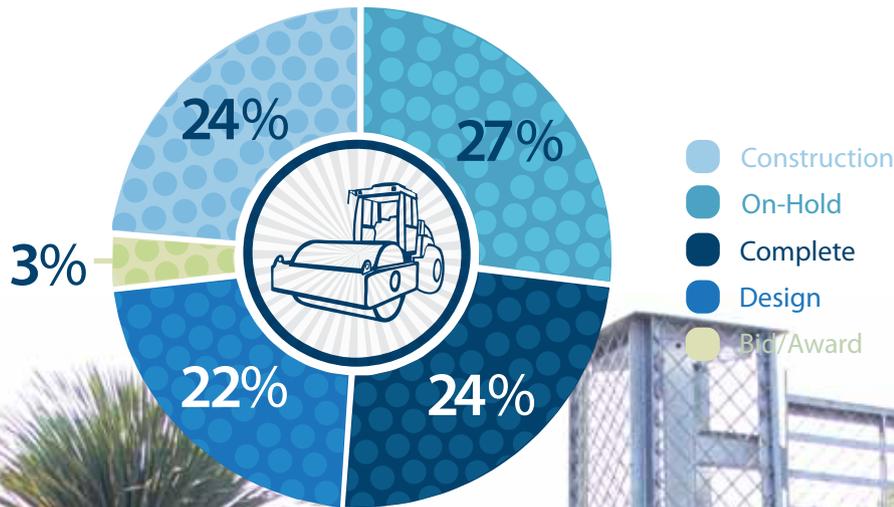
Always a proud cultural corridor, East 7th Street has now also become a beautiful gateway into Austin from the airport after a street reconstruction from Navasota to Pleasant Valley. Improvements include rehabilitation and installation of existing and new sidewalks, addition of pavers in the center turn lanes and crosswalks, street trees and landscaping, lighting and accessibility improvements and wayfinding Art in Public Places. The project completed approximately one month ahead of schedule.

#### COST SAVINGS CREATE POSSIBILITIES FOR OTHER AREAS

Accelerate Austin saw a \$2.5 million cost savings resulting from a favorable construction market. These funds were repurposed to perform more work in the pedestrian program, allowing Public Works to bridge a gap in funding between the 2000 Bond and 2010 Bond Programs. (No dedicated sidewalk funds were in the 2006 Bond Program). This continues work for contractors and Public Works that otherwise would not have been possible.



## ACCELERATE AUSTIN (PROJECTS BY PHASE)



**\$72 of the \$85 million dollars in 2006 Bonds for roadway improvements were allocated for the Accelerate Austin program. As of FY2011 all of it has been committed, and 90% has been obligated to projects.**

## NEIGHBORHOOD CONNECTIVITY PROGRAMS

The Neighborhood Connectivity Division (NCD) improves opportunities for safe multimodal transportation and encourages partnerships with communities within the City of Austin.

### THE PEDESTRIAN PROGRAM

The Pedestrian Program enhances mobility opportunities through implementation of the Sidewalk Master Plan/ADA Transition Plan.

NCD manages the Pedestrian Master Plan through generating sidewalk priority rankings to facilitate implementation of the plan and coordinating with other projects, such as street reconstruction, neighborhood planning, and park improvements. Funding allocation is coordinated for all sidewalk Capital Improvement Program (CIP) projects and Street and Bridge constructed projects and reported to management. Full project management services are rendered for the design and construction of pedestrian projects.

In addition to overall project management, the Pedestrian Program offers registered accessibility consulting as well as reviewing and making recommendations on sidewalk variances,

standard pedestrian detail variances, and pedestrian issues on CIP projects.

Citizen requests play an enormous role in PWD's work through response to needs regarding sidewalk installation and repair requests. Project Managers frequently make site visits to assess existing conditions relating to all sidewalk and ramp issue requests, working side-by-side with citizens to improve our network of accessibility and mobility.

### THE URBAN TRAILS PROGRAM

New in 2011, the program provides off-street bicycle and pedestrian facilities throughout Austin by partnering with the Parks and Recreation and Transportation Departments, and by implementation of specific new Urban Trails Projects. PWD's Street and Bridge Operations staff is also involved, assuming a greater role in maintaining these assets.

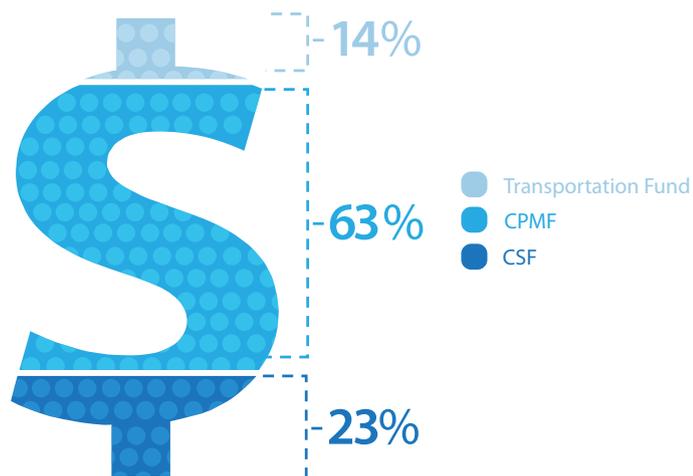
### NEIGHBORHOOD PARTNERING PROGRAM

Becoming fully implemented and funded in FY2011, the Neighborhood Partnering Program empowers neighborhoods through City-Community partnerships. By building relationships within communities, small scale projects flourish in neighborhoods through in-kind donations, sweat equity, and maintenance commitments by those involved.

### THE PUBLIC WORKS BICYCLE PROGRAM

The Public Works Bicycle Program enhances mobility opportunities through implementation of the City's Bicycle Master Plan. The City follows the "6 E's" approach to creating a safe city for bicycling (engineering, education, encouragement, evaluation, equity, and enforcement). The Bicycle and Urban Trails Programs will continue to provide sustainable transportation infrastructure to the citizens of Austin. Additionally, we will continue to coordinate with our Departments in the areas of education, encouragement, and enforcement.

### NEIGHBORHOOD CONNECTIVITY DIVISION BUDGET BREAKDOWN



# BIKE AND PEDESTRIAN

## Project highlights for NCD Programs for FY2011:

**COMPLETED** - an American Resource and Recovery Act funded bicycle and urban trail connector project at Loop 360 & US 183

**SOUTH CONGRESS AVENUE PROJECT** – created multiple facilities within a road maintenance project to enhance bicycle and pedestrian traffic flow and parking opportunities, while increasing safety

**CAMERON ROAD PROJECT** – a 2010 Bond Project which increased mobility options and traffic flow through a difficult corridor, traditionally geared toward motorists

**PFLUGER BRIDGE EXTENSION PROJECT** – The extension connects the original bridge to the north side of Cesar Chavez to enhance bicycle and pedestrian safety

Implemented approximately

**20 Miles**

of new and improved bicycle lanes.

Constructed

**2,750 Linear Feet**

of new urban trails.

Installed

**175,000 Sq. Ft.**

of new or upgraded sidewalks and 200 ADA ramps.

Installed

**4**

new innovative “best practice” Bicycle Parking Corrals.

Supported the installation of

**4.5 Miles**

of bicycle lanes and shoulders installed in other jurisdictions, partnering with TXDOT.





CHILD SAFETY FUND

The Child Safety Fund generates its revenue from vehicle registration costs and parking or traffic fines (in active school zones).

The revenue for this fund is used to pay the salary and associated costs for school crossing guards and school safety education. Capital improvements such as school zone activation lights, crosswalk markings and speed limit signage are also funded through the Child Safety Fund.



## CHILD SAFETY PROGRAM FUND

The Public Works Child Safety Program receives no general tax revenue, but instead is funded by fees from legislation passed in the Texas Legislature in 1991 to create a school crossing guard program for cities and counties. The Program uses these fees to provide:

- **CROSSING GUARDS**

Placing crossing guards at all warranted locations. This program is responsible for hiring and supervising more than 204 crossing guards near or in front of 88 schools.

- **EDUCATION**

Educating over 45,000 students a year in safe walking, biking, bus riding, and skating procedures.

- **SAFETY**

Facilitating the planning, developing and implementing projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of Austin's schools.



## The Child Safety Program highlights for FY2011 include:

### THE IDLE FREE ZONE - YOUNG LUNGS AT WORK

The Idle Free Zone - Young Lungs at Work initiative helps keep cars from idling near schools where children gather and breathe in the incredibly harmful exhaust, made worse by a cumulative effect. The Program conducted seven school audits in FY2011, keeping drivers in check for Young Lungs at Work.

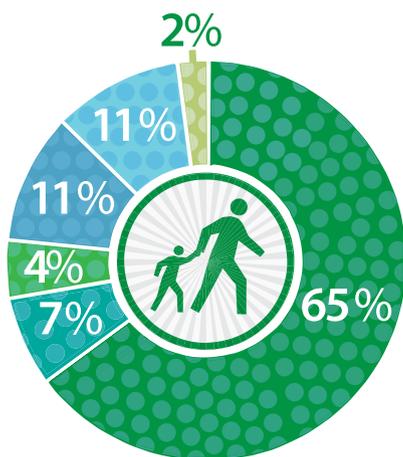
### DEFERRED PROSECUTION PROJECT FOR DRIVING OFFENSES COMMITTED IN A SCHOOL ZONE

Partnering with the Austin Police Department (APD) and the City of Austin's Municipal Court Prosecutors, the Child Safety Program began a Deferred Prosecution Project. APD stepped up their enforcement at 46 schools for drivers that were speeding or talking on their cell phones. Offenders are able to assist a crossing guard for two mornings instead of paying a fine, give a 5 minute PTA Presentation on Distracted Driving, or if they are under 21 they may write an essay/art project that can be used to prevent fellow students from risky distracted driving behaviors. Court costs are still paid by the offender.

### THE BIKE ON WEDNESDAY WALK ON WEDNESDAY

The Bike on Wednesday Walk on Wednesday, or BOW-WOW Campaign is an initiative to encourage kids to choose an alternate way to get to school safely. The Child Safety Program completed the program this year at nine different schools. Drawings are held after the 4th Wednesday for a gift certificate for a girl's and a boy's bike, as well as accessories including bike helmets, reflector lights, bike locks and pedometers.

## CHILD SAFETY PROGRAM EXPENDITURES



- Crossing Guards
- Safety Education
- School Zone Infrastructure Improvements
- Crossing Guard Administrative Costs
- Safe Bike & Walking Grant
- Other Requirements

## STATISTICS

### BACK TO SCHOOL BASH

The Child Safety Programs host an annual Back to School Bash with AISD each August, where students can receive backpacks, bike helmets and safety instruction before starting the new school year.

### BICYCLE RODEOS

In FY2011, the program hosted 10 Bicycle Rodeos at various schools, teaching kids how to bike safely, encouraging them to exercise more and find a safe alternate way to school.

### LARGEST NUMBER OF PARTICIPATION

Doss Elementary School has the largest number of students in the United States participating in a bike or walk to school program, which is tracked through a chip device in a bike helmet or backpack.

**The Transportation Fund** derives its funding from two main sources: the Transportation User Fee and the Utility Cut reimbursement revenue.



**The Transportation User Fee** is a monthly fee assessed to residents and businesses, based on the traffic levels generated by each dwelling unit or business. This monthly fee funds street maintenance and repair, annual street overlay and striping, and other activities necessary for keeping Austin's roadways in good condition.

**The Utility Cut reimbursement revenue** is revenue generated when the City must make repairs to a street that has been excavated for work that needs to be done to utilities located under the pavement. The revenue generated by the Utility Cut reimbursement is used solely to offset the costs of the roadway repairs needed.



## STREET AND BRIDGE OPERATIONS

The Public Works Transportation Fund derives revenue from the Transportation User Fee, Utility Cut Repair charges, the General Fund and miscellaneous other revenue. The fund helps maintain the transportation system in public rights-of-way and is comprised of:

- minor concrete repair and construction
- street preventative maintenance
- right of way maintenance
- bridge maintenance
- street repairs

Maintenance of the City's transportation network lies at the heart of a Public Works Department, and this is especially true in Austin. Street and Bridge Operations consists of the following: Bridge Maintenance, Minor Concrete Repair and Construction, Right of Way Maintenance, Street Preventive Maintenance, and Street Repairs. Over the past year, Street and Bridge Operations have expanded their reach, adding new mission areas like enhancement of the right of way, including tree planting and landscape maintenance, as well as maintenance of the City's multi-use trails. These activities are funded primarily from the Transportation Fund, with an annual operating budget in excess of \$40 million.

The City's Street and Bridge Operations are also tracking improvement of pavement conditions over a ten-year improvement program. At the beginning of FY2009, 27% of the City's streets were in poor or failed conditions. Public Works committed to improve the condition of our pavements to a state where greater than 80% were rated as satisfactory or better by the end of FY2018. At the end of FY2011, Street and Bridge was well ahead of schedule, with approximately 79% achieving the desired goal. Citizens of Austin have recognized the improvement – in the City-wide survey of resident satisfaction almost two-thirds of Austinites were satisfied with the condition of their neighborhood streets (compared to approximately 40% in peer cities nationwide).



Street and Bridge Operations is responsible for cleaning over

**1,000,000**

square feet of downtown sidewalks annually

Over

**95%**

of water used in cleaning operations is recovered

Preventive maintenance is applied to over

**10%**

of pavements City-wide annually

**705.8**

lane-miles of pavement treatments applied

Survey Results from the City's Satisfaction Survey:

**60%**

of Austinites are satisfied with streets

compared to

**40%**

nationwide

**95%**

of potholes were filled within 72 hours of reporting

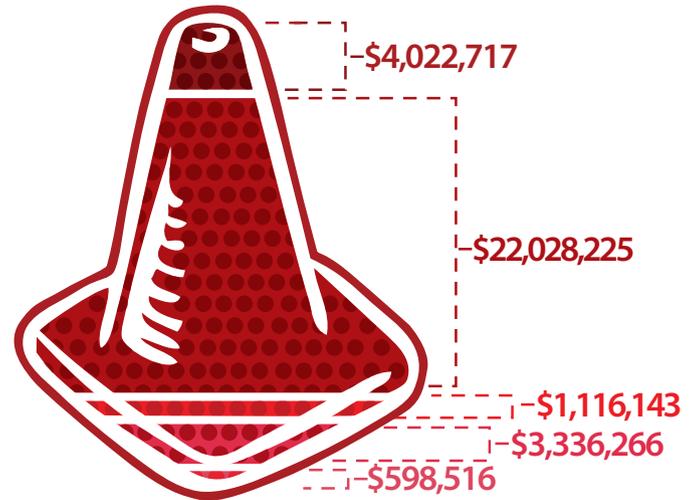
**95%**

of emergencies were taken care of within 24 hours of reporting

**99%**

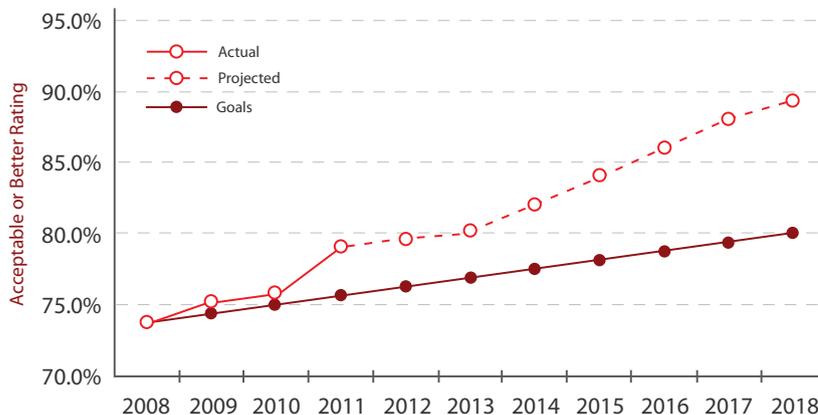
of City bridges are in good or excellent condition

## STREET & BRIDGE OPERATIONS (EXPENDITURES OF TRANSPORTATION FUND)



- Street Repair
- Street Preventative Maintenance
- Right-of-Way Maintenance
- Minor Concrete Repair & Construction
- Bridge Maintenance

## PAVEMENT CONDITIONS



Street and Bridge Operations are also committed to maintaining the right of way in an environmentally responsible manner. Asphalt millings, old concrete, and green wastes are collected and recycled either directly or indirectly. Water used in cleaning operations is collected, and reclaimed glass has been introduced as bedding material for sidewalks, parking areas, and light-use pavements. Emissions are being reduced through strict compliance with the City's anti-idling ordinance, integration of warm-mix asphalt into operations, and improved routing and coordination of work with other City agencies.

## BRIDGE MAINTENANCE AND IMPROVEMENTS:

### MAÑANA BRIDGE REPAIRS

The flood of September 2010 had deteriorated the bridge to an unacceptable condition and the existing corrugated metal pipe carrying the road was warped out of alignment with numerous holes and washed out back fill. The bridge is the only access to the neighborhood on a dead-end road and had to be replaced as an urgent project. Design was accelerated and a contractor was selected in conjunction with design completion. The design team worked with the contractor to implement a one-day replacement solution. Bridge footing and forms were built on the side, the road was closed and the bridge was replaced in just one Saturday. Following completion, Public Works partnered with the neighborhood on the aesthetic finishes applied to the bridge.

### DUVAL ROAD BRIDGE REPAIRS

The existing sidewalk on the Duval Road Bridge was very narrow, and the guardrail was installed in the middle of the sidewalk, making it unusable for pedestrians and bicyclists. School children were also unable to use the sidewalk safely. To resolve the problem, the lanes were shifted over by reducing the median width. The sidewalk was then widened and the guardrail was installed at the curb.

BEFORE



AFTER



BEFORE



## CHANNEL ROAD BRIDGE REPAIRS

The Channel Road Bridge was an old one-way bridge with metal frame, wood deck and piling. The wood piles had deteriorated to an unacceptable condition and the bridge was the lowest rated bridge in the City under the TXDOT bridge report. This bridge also provides the only access to the neighborhood. The design team worked on a pre-fab bridge solution that could be installed in one day over cast-in-place concrete footings. The footings were cast in place during daily bridge closures and plated over for traffic use. The deck was replaced during a full closure that lasted just one Saturday.

Bridges in the Austin area  
that are listed in good  
or excellent condition

**426**  
out of 427



AFTER

BEFORE



AFTER

## PAVEMENT MAINTENANCE AND IMPROVEMENTS

### SOUTH CONGRESS AVENUE MAINTENANCE PROJECT

In FY2011, Congress Avenue from Oltorf to Riverside was scheduled to be milled and paved. With coordination efforts, staff from the Austin Transportation Department, Austin Water Utility and several other Divisions within Public Works worked together to complete utility cut repairs and relocate private utilities before milling and paving Congress Avenue. After which, and as part of the coordination effort, Congress Avenue was striped and reverse angle parking was established. The project was completed ahead of schedule and the surrounding community praised City staff for a project well done.

### PLAINS TRAIL PROJECT

As part of a TXDOT Grant-funded project, crews from the Utility & Structures Division constructed sidewalks, curbs, and gutters after crews from Watershed Operations installed storm drains and inlets. After which, crews from the Pavement Operations Division milled and paved Plains Trail from Meadows Drive South to Kramer Lane. The project established a safe route to McBee Elementary for students located near the intersection of Kramer and Plains Trail.

### DALTON LANE REPAIRS AND IMPROVEMENTS

Initially reported as a pothole repair request by a citizen, it became apparent that the concrete culverts had separated, causing the road to collapse and create a cavity. The road was immediately closed to traffic, and crews from each Division within Street & Bridge Operations began making repairs. The culverts were repaired, concrete poured, guard rail installed, and the road was backfilled and paved.

The road was open to traffic in four days because all Divisions worked together to quickly resolve the problem.



# PAYEMENT MAINTENANCE & REPAIR



## STREET AND BRIDGE

## SUSTAINABILITY IN PUBLIC WORKS

The City of Austin continues to be a leader in implementing sustainable design guidelines. In 2000, Austin became one of the nation's first cities to require a Leadership in Energy and Environmental Design (LEED) Silver Certification for municipal buildings – both new construction and major renovations.

In 2007, as work began on the 2006 Bond Program, it became evident that small projects did not have sufficient scope or budget to absorb costs for LEED certification. As a result, the Austin City Council passed the Municipal Buildings LEED Resolution 20071129-045. This resolution directed the City Manager to develop criteria for achievement of highest optimal levels of sustainability for new construction, renovations and interior finish-outs, develop baseline sustainability criteria for non-LEED projects, develop building operations and maintenance standards, and secure budget and personnel to implement the resolution.

Concurrent with the above resolution, the Austin City Council passed the Green Infrastructure Resolution 20071129-046. It directed the City Manager to ensure implementation of commercial design standards, consultation with the Watershed Protection Department for innovative development opportunities, and present municipal projects to the Design Commission.

In 2007, the Interdepartmental Sustainability Working Group (ISWG) was formed and the Public Works Department has provided leadership to the group from the beginning. The ISWG ensures ongoing coordination with City departments for compliance with these two resolutions while maintaining documentation, and also prepares an annual report for the City Manager. Three reports have been prepared thus far including 2008, 2009 and 2010. The reports can be found online at <http://www.austintexas.gov/publicworks/sustainability>.



In FY2011, the following buildings achieved LEED Certification:

**LEED-GOLD**

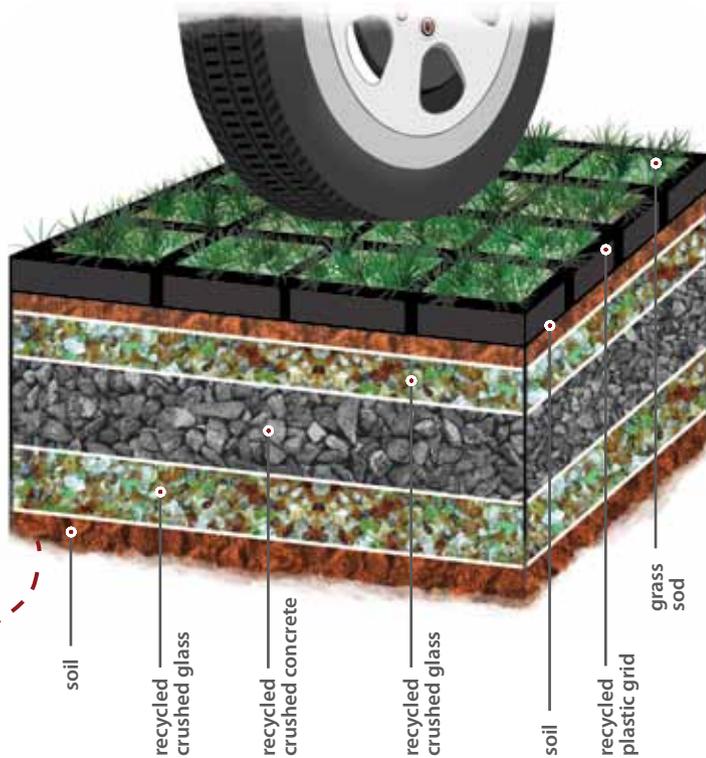
Avery Ranch Fire/EMS Station

**LEED CI-SILVER**

McBeth Recreation Center

In FY2011, the following are being considered for LEED Certification:

Public Safety Training Facility



## THE GREENING OF OUR OPERATIONS:

### 64 RAINEY STREET PROJECT

Our Street and Bridge Operations Division built a parking lot at 64 Rainey Street that reflects our commitment to adopting the Green philosophy. The lot was built using recycled crushed glass in conjunction with recycled crushed concrete and a recycled plastic grid. Using these materials, a six inch thick cross-section of green parking lot was made; from top to bottom – sod, sand, grid, soil and crushed glass. As a result, the parking lot acts to filter impurities out of water as it permeates the recycled materials.

### WARM-MIX ASPHALT

Street and Bridge Operations incorporated the use of warm-mix asphalt into its overlay operations in FY2011. Warm-Mix technology allows the producers of asphalt pavement material to lower the temperatures at which the material is applied to the road. The benefits of this approach include lower fuel consumption and reduced greenhouse gas emissions.



### RAIN GARDENS

Rain gardens, like the one installed at the Northwest Recreation Center, provide an alternative approach to addressing storm water run off.

