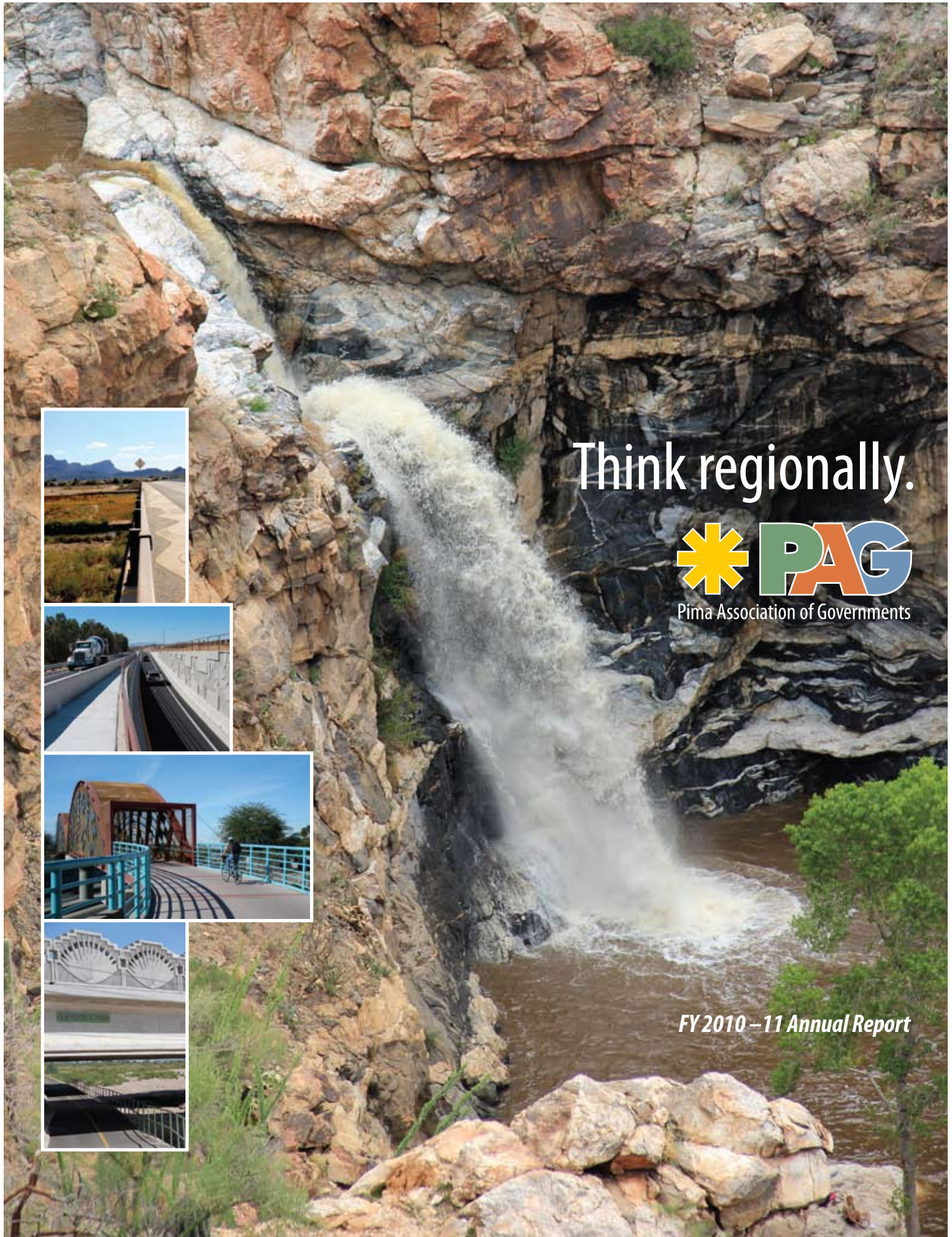


Think regionally.



Pima Association of Governments

*FY 2010 – 11 Annual Report*





## 2011 Regional Council

*Town of Oro Valley Mayor*  
**SATISH HIREMATH**  
 PAG Chair

*City of South Tucson Mayor*  
**JENNIFER ECKSTROM**  
 PAG Vice Chair

*Pascua Yaqui Tribe Vice Chairman*  
**ROBERT VALENCIA**  
 PAG Treasurer

*Town of Sahuarita Mayor*  
**DUANE BLUMBERG**

*Tohono O'odham Nation Chair*  
**NED NORRIS JR.**

*Town of Marana Mayor*  
**ED HONEA**

*Pima County Board of Supervisors*  
**RAMON VALADEZ**

*City of Tucson Mayor*  
**ROBERT WALKUP**

*AZ State Transportation Board*  
**STEVE CHRISTY**



*Pima Association of Governments*  
**GARY G. HAYES**  
 Executive Director



## Message from the Chair

As a Council of Governments, Pima Association of Governments (PAG) works with its member jurisdictions and the tribal nations to coordinate regional planning in the areas of transportation, the environment, energy and data development.

Why is it important to think regionally? The critical decisions which shape our region's future are made by many people. As a region, we retain that small-town feel which enables us to know one another well. We care about one another. We want our region of nearly 1 million people to put its best foot forward. When we think regionally, we are able to look beyond self-interests and focus on what is best for our entire region in the long term.

During FY 2010-11, Pima Association of Governments worked to:

- Improve its regional transportation project programming process with expanded Transportation Improvement Program (TIP) Policies and Procedures, which encourage fiscal constraint in order to leverage limited financial resources. The TIP project development process also incorporates congestion management strategies and analysis to reduce congestion across the region.
- Bring together the Regional Water Assessment Task Force to facilitate wastewater planning under the federal Clean Water Act and to build

awareness of the many benefits of rainwater harvesting.

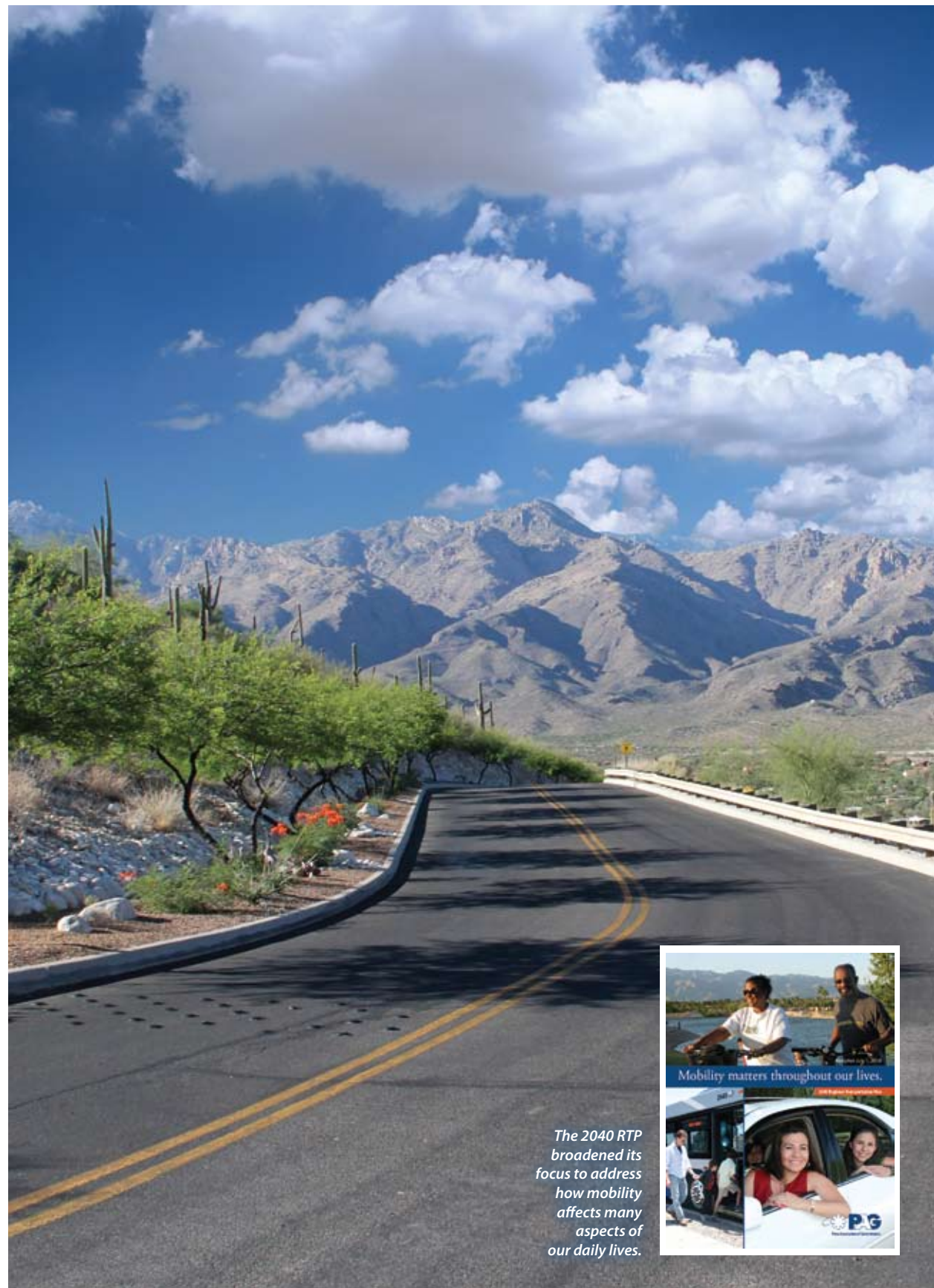
- Make extensive use of Census 2010 data to create new population estimates and long-range travel demand and land use forecasts for the region.
- Support technical elements of the Imagine Greater Tucson regional visioning and planning initiative, including development of a future land use trends scenario, scenario mapping workshop exercises and tools, and scenario performance indicators.
- Continue partnering with our neighbors in Pinal and Maricopa counties to coordinate planning along the Sun Corridor, between Phoenix and Tucson.

As a metropolitan planning organization, Pima Association of Governments remains committed to thinking regionally as we coordinate with our members to prepare for growth and develop strategic and efficient infrastructures.

Think regionally.

— Satish Hiremath, *Mayor of Oro Valley*

— Regional Council Chair, Pima Association of Governments



*The 2040 RTP broadened its focus to address how mobility affects many aspects of our daily lives.*

## Regional Planning



*Bicycle, pedestrian, transit and roadway needs are incorporated in both the 2012-2016 TIP and the 2040 RTP.*

### Transportation

#### Mobility matters throughout our lives

Pima Association of Governments' Regional Council adopted the 2040 Regional Transportation Plan on July 1, 2010, with a new focus on congestion management, considerations for sustainability and the environment, and recognition of the need for more alternative transportation options. The plan identifies needs that would cost more than \$32 billion through the year 2040. Transportation revenues through 2040, however, are projected to be \$18.3 billion, a shortfall of approximately \$14 billion. PAG recognizes the need to identify and develop new sustainable transportation funding sources.

The long-range plan, which must be updated every four years to meet federal requirements, is available online. Copies and presentations about the 2040 RTP are available upon request.

The 2012-2016 Transportation Improvement Program,

approved on June 9, 2011, was crafted using new TIP policies and procedures, including the integration of congestion management strategies and applications and an enhanced focus on fiscal constraint in order to leverage the region's limited financial resources. The 2012-2016 TIP programs over \$1.5 billion in local, regional, state and federal funding sources.

Interest in special needs transportation continues to grow. Fifteen applications were submitted to PAG last year for the Federal Transit Administration's 5310, 5316 and 5317 programs, which expand transportation options for older adults, persons with disabilities and low income individuals who need to get to work. Results are expected in December 2011. In 2010, PAG facilitated the award of 20 vehicles valued at \$746,000, through the 5310 program, and in 2009, applicants were awarded 25 vehicles valued at \$1,001,800.

## Regional Planning



### Bicycle and pedestrian projects adding up

For the first time, PAG hosted the statewide Transportation Enhancement applications review process in October 2010. In the past year, ADOT awarded \$4,469,373 to the PAG region for seven TE projects focused on bicycle and pedestrian infrastructure.

Five Safe Routes to School projects received \$1,582,414 in spring 2011 to support projects that will make it safer for children to walk or ride their bikes to school.

PAG hosted a public forum in May 2010 with Andy Clarke, president of the League of American Bicyclists, in order to gain more insight on improving the region's bike friendliness in its quest to become a platinum level Bicycle Friendly Region. This designation would mean the region's bicycle planning effort is one of the best in the country.

In order to enhance bicycle and pedestrian planning options, PAG coordinated the 3rd annual bicycle count and pedestrian count in October 2010. Compared to the previous year, the data indicate there was a substantial increase in cycling activity.

Through its first five years, the Regional Transportation Authority funded a number of regional bicycle and pedestrian improvements as part of its 20-year, \$2.1 billion multi-modal transportation plan. To date, the RTA has funded 120 miles of bike lanes and multi-use paths, with another 20 miles currently in design or under construction. Additionally, the RTA has funded 75 miles of sidewalk, with another 180 miles currently in design or under construction.

### Sun Rideshare campaign recognized

PAG's commuter program, Sun Rideshare, was awarded a Gold Addy from the Tucson Advertising Federation at the 30th annual Addy Awards Ceremony

on Feb. 19, 2011, for the "Break-up with your Car" ad campaign and infomercial.

Firehouse Pictures produced the ad campaign with the help of Sun Rideshare staff, PAG employees and a few dedicated commuters. Addy Awards recognize and reward creative excellence in the art of advertising with gold being the highest level awarded.

### RTA moves into second phase

The Regional Transportation Authority, which is managed by PAG, moves into its second phase, FY 2012-16, and expects that nearly a dozen roadway projects will be either nearing completion or starting construction in the coming year.

Through the end of its first five-year period, the RTA completed 420 projects and initiated 10 of 11 roadway projects (the bid opening of the 11th project occurred Aug. 11). Three roadway corridors have been completed, including the Twin Peaks Interchange and Road (formerly Camino de Mañana) in Marana, and the Interstate 19 Frontage Road, between Continental and Canoa roads, in Green Valley. Phase 1 of Sahuarita Road, between I-19 and La Villita, and the Houghton and Old Vail Road intersection, part of the Houghton Road project, also were completed.

Work is rapidly being finished on three other corridor projects, including La Cholla Boulevard, between Ruthrauff and River roads, Tanque Verde Road, from Catalina Highway to Houghton Road, and La Cañada Drive, between Ina Road and Calle Concordia. These three projects will be concluded early this fall.

In May 2011, the RTA issued \$151 million in municipal bonds to accelerate the delivery of second period RTA roadway projects, take advantage of the favorable bid climate and provide much needed local construction jobs.

The bonding occurred on the heels of a project review of RTA first period (FY 2007-2011) projects that led to several policy and best practice recommendations, including one to establish a value analysis review of all major projects in order to keep projects within scope and offer the public the greatest benefit for its tax-funded investment. The first project to go through the exercise was Houghton Road and the process identified \$47 million in potential savings and a recommendation to accelerate project delivery. The total project cost estimate for Houghton Road is \$180 million. The RTA subsequently reviewed the Grant Road, Oracle to Swan, and Valencia Road, Alvernon

## Regional Planning



Way to Wilmot, projects, and identified a potential combined savings of approximately \$60 million.

Other best practices implemented after the project review include the requirement for jurisdictions to provide project charters prior to the commencement of project design, RTA Board review of projects at the conclusion of the project planning process, and the establishment of funding caps for "soft costs," such as planning and administration.

During its first five years, the RTA also completed 78 transit projects, including expanded evening and weekend service, increased service frequencies, neighborhood shuttle service and a new bus storage and maintenance facility. Last year, the RTA's Sun Shuttle neighborhood transit service was recognized by the Arizona Transit Association (AzTA) for its increased ridership.

Design of the Modern Streetcar is nearing completion with utility work under way and construction of the streetcar rail expected to begin in early 2012. The \$196.8 million project is co-managed by the City of Tucson and the Regional Transportation Authority.

### Identifying a plan for sustainable growth

PAG contracted with Imagine Greater Tucson for a novel regional visioning initiative in order to support sustainable planning. Imagine Greater Tucson conducted community conversations across the region in late 2010 and identified nine regionally shared values. Imagine Greater Tucson, a public/private partnership, also presented a land use map showing a trends scenario of how the region will look in the future based on existing policies and decision-making patterns. The public attended workshops in spring 2011 to provide feedback to establish alternative scenarios, which will be presented in early 2012. Ultimately, a preferred scenario and a vision built on the shared values will be produced with strategies identified for implementation, along with performance measures.

## Environment

### Tracking air quality progress continues

Greenhouse gas emissions' inventories of community and government operations in the City of Tucson and eastern Pima County were updated in the past year with new data, and the report is available online. PAG staff worked with the jurisdictions and provided data and evaluated measures to reduce greenhouse gas emissions. These resources provided the jurisdictions with information to assist in their planning efforts. In January 2011, PAG's article titled "Tracking Greater Tucson's Carbon Footprint" was published in the *Journal on Environmental Management Arizona*, showing regional greenhouse gas emissions sources and trends.

Modeling and analysis of carbon monoxide emissions from on-road vehicles was conducted by Air Quality Planning staff to meet federal transportation planning requirements for the 2012-2016 Transportation Improvement Program.

PAG's Air Quality Planning staff continued to monitor the proposed changes to the U.S. Environmental Protection Agency's public health and welfare standards for ozone. More stringent ozone standards could place the region at risk for a nonattainment designation with potential costly consequences to reduce pollutant levels in the region. The current proposal to strengthen the ozone standards was withdrawn on Sept. 2, 2011, and a future review of the standards is scheduled for 2013. Given that elevated ozone levels currently occur in the Tucson region, PAG's Air Quality Planning staff will continue to monitor levels and promote actions to reduce pollution.

### Building awareness of water resources

The annual stormwater pollution prevention program developed a new look for its 2011 public outreach campaign. The program, coordinated by PAG through its Stormwater Management Working Group, continues to build upon past successes. The slogan, Clean Water Starts With Me, continues from recent campaigns and the updated design used in posters, ads and online incorporates graphic elements that tie in with other regional campaigns. For more information on the award-winning campaign, please visit [www.PAGstorm.com](http://www.PAGstorm.com)

In addition to facilitating wastewater planning under

## Regional Planning



Tammy Tepper-Cunningham of ECOTality shows Jerry Asher, EV vehicle enthusiast and promoter, how to use the Blink charging station.

the federal Clean Water Act and building awareness about the multiple benefits of rainwater harvesting, PAG is working to help the region shape its efforts to achieve a sustainable water future by participating in the Regional Water Assessment Task Force. In August 2011, the Task Force released a report summarizing initial stakeholder input gained through PAG's Think-Tank process, an Internet-based software tool to leverage group collaboration and intelligence. The report makes recommendations for potential steps forward.

### Energy

#### Clean Cities revs up news on electric vehicles

In October 2010, PAG's Clean Cities program unveiled a map of planned electric vehicle charging unit locations as part of its EV infrastructure support in conjunction with The EV Project. The project is a \$99.8 million agreement made in October 2009 between the U.S. Department of Energy and ECOTality North America to deploy the infrastructure in advance of the arrival of new electric vehicles, including the Nissan LEAF. In June 2010, the project was granted an additional \$15 million by the U.S. Department of Energy. Partner matches bring the value of The EV project to approximately \$230 million.

The charging station locations are planned to correspond to areas of high travel demand and to minimize range anxiety. The all-electric LEAF, for example, has a 100-mile range on a charge, while the Chevy Volt has an electric range of 35 miles before switching to gas power.

Clean Cities supported the Nissan Drive Electric Tour on its December 2010 stop in Tucson at the 4th Avenue Winter Street Fair with then-University of Arizona President Robert Shelton becoming the first person in Tucson to drive a Nissan LEAF.

The first Blink residential charging station was installed in March 2011 at the home of Doug Mance, who was the first consumer in the Tucson test market to receive a Nissan LEAF.

#### Solar field promotes best practices

The Energy program is managing the new Southern Arizona Solar Standards Board, which was established by a group of local solar installers in January 2011 with initial funding support from Tucson Electric Power Co. The nonprofit board for solar energy installers in southern Arizona is helping to promote best practices in the solar electric/hot water industry and provide consumer education and protection. More information is available at [www.solarstandards.org](http://www.solarstandards.org)

## Technical Services

### GIS and Orthophotography

#### Expecting more precise imagery and indicators

In the past year, PAG's GIS Services staff supported technical elements of the Imagine Greater Tucson regional visioning and planning exercise including: development of a future land use trends scenario, scenario mapping workshop exercises and tools, and scenario performance indicators.

The 2011 regional orthophoto project acquired 2,137 square miles of six-inch imagery in April 2011. Lidar remote sensing technology was used to collect imagery in 560 square miles of new area previously not acquired in the 2008 project. An additional 27 square miles of higher density lidar products were collected to assess large area habitat monitoring capabilities of this type of data. Public and private sector planners use this data to determine such things as inventory infrastructure and land use projects.

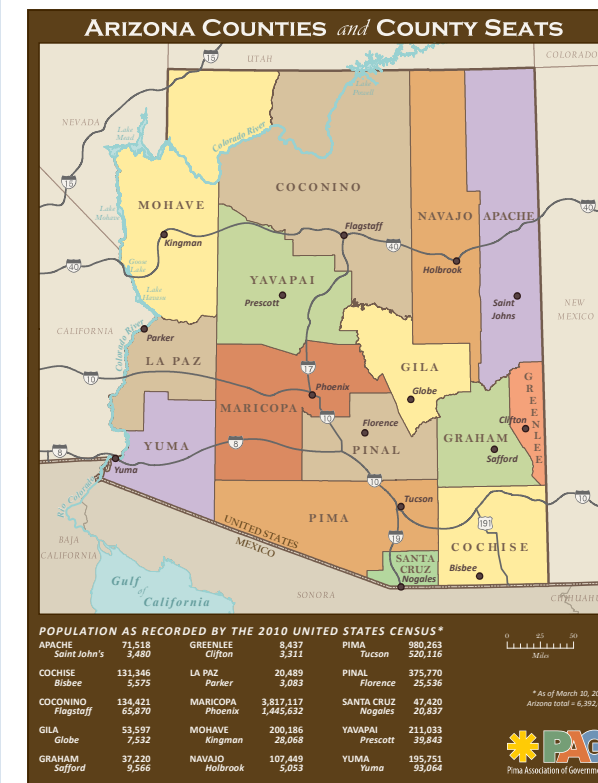
### Modeling

#### Upgrades to PAG models continue

In the past year, PAG's modeling staff has worked with the State of Arizona to examine different forecast methods and is working to obtain additional local data for PAG's SAM land use model. This will support future forecasts of socio-economic growth used for regional transportation plan updates or mid-term census reporting. Staff has calibrated the model using InfoUSA employment data, the Pima County assessor's parcel database and transportation networks.

Modeling staff also developed a new external travel model, which is built from data collected in the 2008-2009 External Travel Study designed to analyze external travel patterns. External travel components of the model measure trips coming into the region and ending either inside or outside of the region. The model will attempt to measure to what extent these trips make use of our local roadways. Data are obtained by conducting surveys on the major roads coming into the region via cameras photographing vehicle license plates and matching inbound plates to outbound plates.

Modeling staff also improved the travel demand model by re-delineating traffic analysis zones



### Data

#### Census 2010 data to guide new forecasts

Pima County grew at a rate of 16.2 percent during the past decade, but the total population of 980,263 was well below Arizona and U. S. Census Bureau estimates of 1.02 million in 2009. In May 2011, the Census Bureau published demographic profiles of Arizona cities and places, with detailed age, race and household characteristics. The Census 2010 data tables are now available online at [www.2010.census.gov](http://www.2010.census.gov).

PAG's Data Services staff will make extensive use of Census 2010 data, including initial redistricting data released in March 2011. The data provide counts of total population and voting age population by race and Hispanic/Latino origin. The data also include the number of housing units and vacancies down to the block level. Census 2010 data will be used to create new population estimates and long-range travel and land use forecasts for the region.

Data Services staff provides support for PAG programs and responds to general public inquiries for demographic information.

## Technical Services

to prepare it for the upcoming 5-year Census Transportation Planning Program. The CTPP is a national effort to work closely with the U.S. Census Bureau to match TAZ boundaries with census geography. This allows easier access to the demographic data needed for the model and also allows PAG to obtain certain data at an aggregate level that would otherwise be unavailable due to privacy issues.

Modeling staff worked with Maricopa Association of Governments in the past year on a joint project to develop a new-generation travel model, referred to as the activity-based model. Phase I of the project is completed and primarily focused on the model framework design. The second phase is under way.

Traffic counts were collected at about 400 locations for the 2010 annual traffic count program. This information was used to develop a traffic volumes map and calibrate the PAG travel demand model which supports regional planning efforts.

Modeling services were provided for the 2012-2016 Transportation Improvement Program and the Title VI analysis; a downtown traffic impact study; an area traffic study for Hughes Access; the Tangerine corridor traffic study, and other studies and projects.

### Pima Association of Governments FY 2010-2011 Operating Statement



REVENUES:		
20.8%	Local	\$ 1,330,130
6.5%	State grants and aid	412,495
72.7%	Federal grants and aid	4,640,816
<b>Total revenues</b>		<b>\$ 6,383,441</b>

EXPENSES:		
DIRECT PROGRAM COSTS:		
	Personnel services	\$ 3,132,985
	Professional services	1,206,348
	Travel	24,513
	Occupancy and utilities	147,899
	Equipment and maintenance	57,604
	Depreciation	2,714
	Office	42,342
	Conferences, meetings, and memberships	39,452
	Other	177,304
<b>Total program costs</b>		<b>\$ 4,833,161</b>

INDIRECT & ADMINISTRATIVE COSTS:		
	Personnel services	\$ 1,153,068
	Professional services	177,939
	Travel	8,866
	Occupancy and utilities	226,775
	Equipment and maintenance	18,588
	Depreciation	43
	Office	36,673
	Conferences, meetings, and memberships	12,502
	Other	47,778
		<b>1,682,232</b>

**Total expenses \$ 6,515,393**

**Change in net assets (\$131,952)**

**Net assets at beginning of year \$ 147,185**

**Net assets at end of year \$ 15,233**

front cover: Tanque Verde Falls, Reddington Pass

inset photos:

Twin Peaks Overpass, Marana

I-19 Frontage Road and Ramp, Green Valley

Basket Weave Bridge, Tucson

La Cholla Bridge, Tucson



Sahuarita Road, between Interstate 19 and La Villita, was dedicated on Jan. 20, 2011, with this pedestrian underpass jointly funded by the Sahuarita Unified School District and the Town of Sahuarita. The first phase of the RTA roadway improvement project also received RTA and regional funds.

## About PAG

PAG's mission is to help promote good decision making for the region by providing accurate data and encouraging consensus among its members and the public.

## Members

PAG has a nine-member Regional Council comprised of elected representatives from local, state and tribal governments.

Pima County

City of South Tucson

City of Tucson

Town of Marana

Town of Oro Valley

Town of Sahuarita

Pascua Yaqui Tribe

Tohono O'odham Nation

Arizona State Transportation Board

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**Tucson Clean Cities**

**Clean Water Starts with Me**

**Sun Rideshare**

See us on:



Pima Association of Governments

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**PAGregion.com**