



The Tucson Modern Streetcar

A growing, land-locked campus of more than 40,000 students, faculty and staff. A historic downtown district seeking to revitalize historic buildings. Neighborhood residents needing to reach both destinations, located 3.9 miles apart.

Looking to connect important, but fragmented segments of its city, Tucson, Ariz. is turning to streetcars. It's a contemporary solution to a classic challenge: how to move people efficiently and reliably while also improving economic conditions along the way.

A Thoroughly Modern Streetcar

The Tucson Modern Streetcar project is a 3.9-mile fixed transit system that will connect the City of Tucson's major activity centers including The University of Arizona, the Arizona Health Sciences Center, Downtown Tucson, the 4th Avenue Shopping District, Main Gate Square and the Mercado District, a redevelopment area west of Interstate 10. The City of Tucson has finished the design phase and will begin construction of the Modern Streetcar line in the next few months. Construction of the Cushing Street Bridge – a vital multi-modal link in the streetcar project – began in July 2011. When complete, the modern

streetcar project will include 18 stops, seven modern streetcar vehicles and a maintenance and storage facility.

Oregon Iron Works, Inc./United Streetcar, LLC is currently manufacturing Tucson's streetcar vehicles, among the first batch of streetcars to be manufactured in the U.S., in nearly 60 years. Streetcar vehicles will be accessible and ADA-compliant, with low-floor door levels, multiple doors, and bridge plates for easy wheelchair and stroller access. Not only do the streetcar's features make travel easier for people with disabilities, but easier access improves customer service for all riders. On-site vehicle testing is slated for 2012, with revenue operations starting in late 2013.

Chandra Brown, President of United Streetcar said, "United Streetcar is immensely honored to be the chosen supplier of the City of Tucson's modern, made in America, streetcars. These streetcars will be a wonderful addition to the City."

The \$196 million Modern Streetcar project is funded through multiple federal sources and the Regional Transportation Authority (RTA) plan, approved by Pima County voters in 2006. In February 2010, the City of Tucson was awarded \$63 million in Transportation Investment Generating Economic Recovery (TIGER) Discre-

tionary Grant funding, Arizona's only TIGER award in round one. This streetcar project is co-managed by the City of Tucson and the RTA.

"Regional collaboration is critical to the success of a transit project of this complexity and scale," said Shellie Ginn, Tucson Modern Streetcar Program Manager for the city of Tucson. "When complete, the Tucson Modern Streetcar will be an important component of our regional transportation system."

The project will not only connect major activity centers, it will trigger public and private development and foster redevelopment of existing urban spaces. It will also improve regional transit service and offer easy connections for bus riders, bicyclists and pedestrian, while offering a sustainable transit option that will reduce automobile carbon emissions and mitigate traffic congestion in Tucson's most densely populated areas.

Economic Reality

The city of Tucson estimates that approximately 100,000 people live within a half-mile of the streetcar route, making the area ripe for Transit Oriented Development (TOD) – a development pattern that caters to transit riders and pedestrians by

emphasizing the creation of compact, walkable, urban areas and easy access to multiple transit options. Tucson recognizes these principles and is actively engaged in neighborhood and land-use planning that supports TOD in the areas that will be served by the modern streetcar.

Transit Oriented Development can provide a great deal of economic benefits including urban revitalization, the creation of public/private partnerships, additional sales tax revenue, increased accessibility to employment centers and entertainment venues, and increased property values. It can also provide a number of community health benefits as well, such as improved access for cycling, reduction in automobile-related carbon emissions, and improved pedestrian walkways.

According to Tucson Mayor Bob Walkup, the Modern Streetcar project is a critical component to downtown revitalization, will strengthen the partnership between the University of Arizona and the region, and holds the promise of, "cranes in the sky."

In fact there has been more than \$300 million in public and private investment associated with downtown projects along the streetcar line in the last 36 months. Some examples of these projects include:

- 4th Avenue Underpass – A major

infrastructure project linking Fourth Avenue Shopping district with downtown Tucson.

- Providence Service Corporation Building – In an effort to inspire urban revitalization, Providence Service Corporation bought and completely remodeled a downtown building to add to their corporate headquarters. The building is mixed-use, offering office space on the second and third floor and residential lofts with roof deck patios on the top floor.
- Mercado San Agustín – Tucson's first public market, constructed by the Gadsden Company in the westside's Mercado District. The newly-opened Mercado is within steps of a planned streetcar stop.
- UniSource Energy Building – An energy efficient, solar-powered nine story office building on a two-acre lot in downtown Tucson. It will boast 170,000 square feet of office space and house more than 400 employees. The ground floor will have retail space and underground parking with nearly 600 spaces. Slated to open later this year.
- Plaza Centro Garage – Opened earlier this month, the art-infused parking garage will not only provide an additional 378 parking spaces to downtown Tucson, but will also include 20,000 square feet of retail space and 8,000 square feet of

office space. Additionally, three stories of student housing with 170 beds will be built atop the garage complex.

- Martin Luther King Building – This \$23 million publicly-funded renovation project was completed in October 2010. The six-story mixed-use building provides affordable housing for low income, senior, and disabled populations as well as commercial and retail space.
- Tucson Fire Central Building – The 67,000 square-foot building was built to blend in with the historic barrios that surround the downtown area. This innovative building utilizes the most energy efficient materials available and includes a firefighter museum and memorial park.

The Modern Streetcar project has created jobs during design, and will create even more jobs during construction and operation. The city of Tucson has projected that 1,200 new jobs will be created as a direct result of project construction and that an additional 1,650 related jobs in more than 19 industries will be created as a result of construction activities. An estimated 1,480 long-term regional jobs are projected to be created as a result of the streetcar operating in the corridor.

Supporting business and economic development is critical to this project. Before and during the streetcar's con-

A rendering of Peach Properties' El Presidio student living complex.



The University of Arizona's downtown facility is located in the historic Roy Place Building.

struction phase, the RTA will provide free consulting services to qualifying businesses within a quarter mile of the route through the MainStreet Business Assistance program.

The MainStreet program representatives and consultants provide information, facilitate communication and offer individual and group business consulting services. This program is funded by the RTA as a part of the plan approved by voters in May 2006; approximately \$10 million is directed to the MainStreet Program to help businesses potentially affected by road improvement projects outlined in the RTA plan.

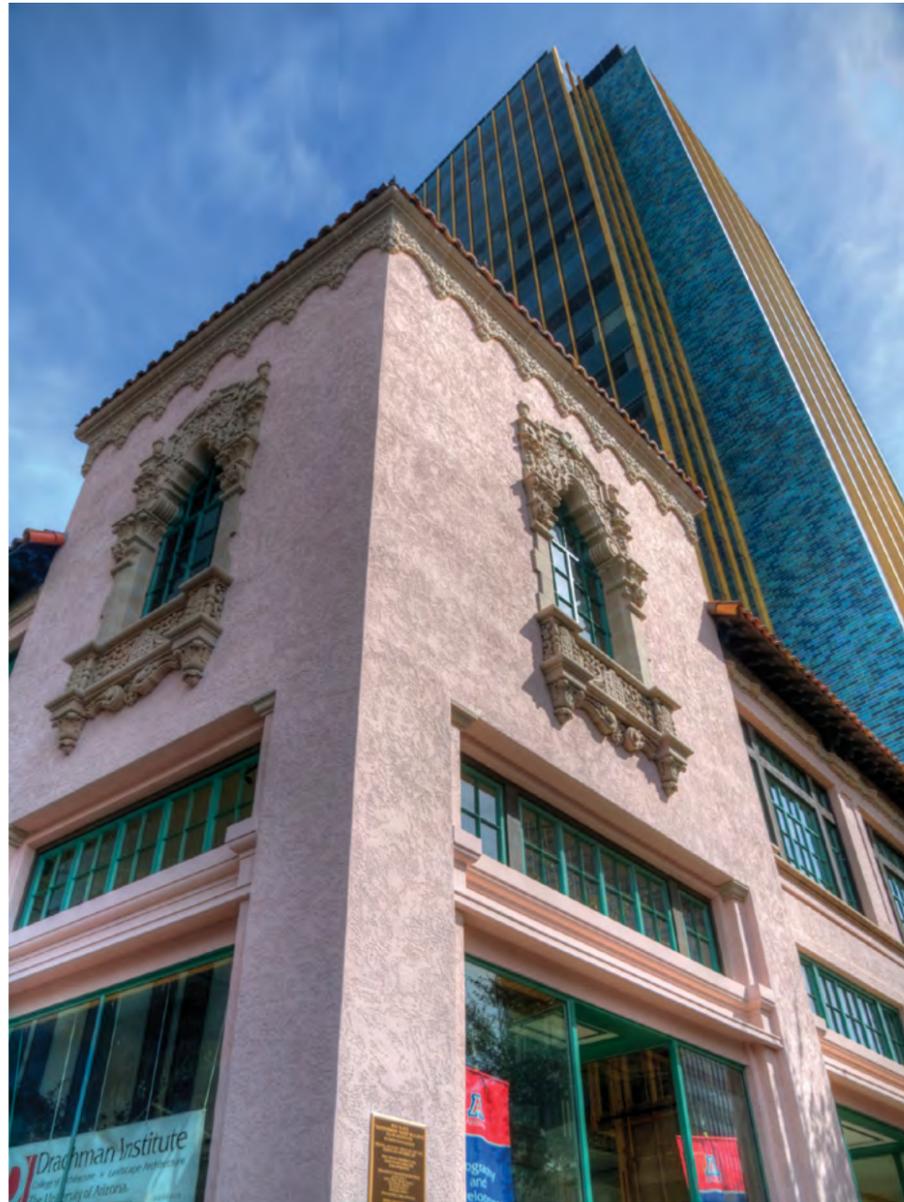
Expanding the Reach of Downtown to Students

The University of Arizona (UA) is the largest stakeholder along the Modern Streetcar route. With 11,600 employees, the UA is the region's largest public employer.

The Modern Streetcar project will allow the university to extend its campus into nearby downtown areas. The UA has grown to nearly 38,000 students and does not have land available nearby to build new classrooms and student living complexes.

According to UA Parking and Transportation Director David Heineking, "The streetcar will allow our land locked university to expand to new areas. It will provide our students, faculty, and staff the opportunity to easily explore downtown Tucson. It will allow students to live, work, dine, shop, and entertain themselves along the streetcar route, all within minutes of the campus."

Currently, the UA has opened a privately-funded National Institute for Civil Discourse and a set of classrooms in the downtown area utilizing existing buildings to promote urban redevelopment. UA Downtown, located on the southeast corner of Pennington Street and Stone Avenue, celebrated its opening earlier this month. This historic building serves the College of Architecture and Landscape Architecture (CALA) and the Drachman Institute.



Future plans call for the College of Social and Behavioral Sciences (SBS) to operate several programs downtown. The UA has also created public-private partnerships that will lead to the construction of two mixed-use student living complexes. These student living complexes will be situated directly along the streetcar route and will bring approximately 1,000 students to the area by the fall semester of 2013. In addition to delivering riders to the streetcar, the route's presence around the UA campus community will produce a transit-rich environment, where students are accustomed to utilizing transit on a regular basis, establishing habits that can last into professional careers.

When complete, the electric street-

car system will be integrated with the University's CAT TRAN system and the region's Sun Tran bus system, with a one-fare, easy swipe payment option. Since the adoption of the 2003 Campus Master Plan, the UA has a comprehensive campus sustainability plan that incorporates sustainability into all planning, design, and building activities on campus. All substantial capital or operating programs are now reviewed by the UA regarding the project's energy, water, and local infrastructure impact. The UA fully endorses the Modern Streetcar as the preferred transit investment to meet its existing and future transportation demands.

Mayor Walkup has stated that the UA and downtown – linked by the

Modern Streetcar – will bring together Tucson's centers of energy, and will allow students and faculty to get from the main campus to the downtown branch in minutes without driving and parking. Additionally, Mayor Walkup noted that the influx of students into the downtown area will spur economic recovery through investment and jobs.

The Modern Streetcar team, in conjunction with the UA, has undertaken a social media and e-marketing campaign to reach out to the student and transit dependent population. This campaign includes e-blasts, e-vites to events, and the launching of a Twitter and Facebook group page. Additionally, QR codes will be added to printed materials to link to the project website. This type of campaign allows the project team to reach out to the technologically-oriented student population and furthers the UA's goals of environmental sustainability as it dramatically reduces the need for printed marketing materials.

This article was prepared by the Tucson Modern Streetcar Team.

A rendering of Oasis Properties' student living complex.



The Tucson Modern Streetcar project stretches 3.9 miles from the Arizona Health Sciences Center to the Mercado District, serving the University of Arizona and downtown Tucson along its route.

