



# Project Details

- Alignment length: 3.9 miles
- 18 stops
- OMF located south of 8<sup>th</sup> St
- 8 modern streetcars
- Peak/off-peak headways:
  - \* 10/20 minutes
- 2010 ridership estimate: 3,600 per weekday
- Capital cost: \$196 million

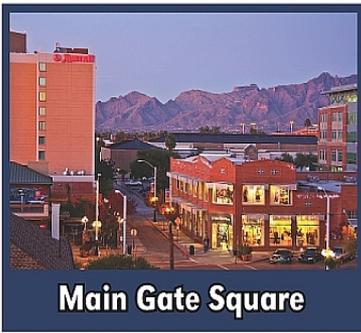




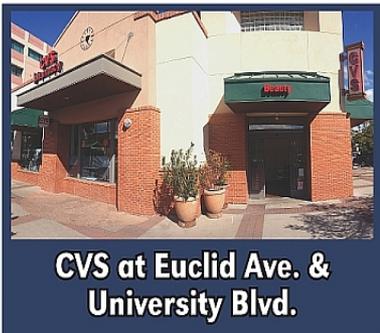
**MAP LEGEND**

- Sun Link Streetcar Route
- Stop
- Maintenance & Storage Facility
- Luis G. Gutierrez Bridge





**Main Gate Square**



**CVS at Euclid Ave. & University Blvd.**



**Underpass at Warren Ave.**



**BIO5 Institute**



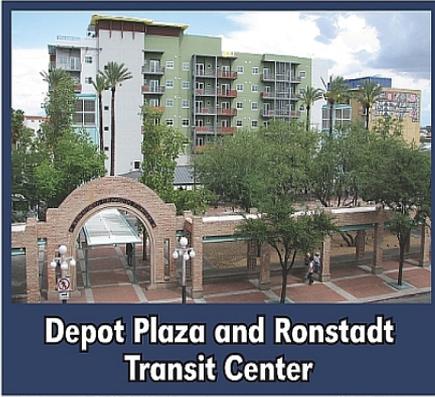
**Nob Hill Businesses**



**Arizona Health Sciences Center & University Medical Center**

# Destinations & Connections along the Sun Link Streetcar Route

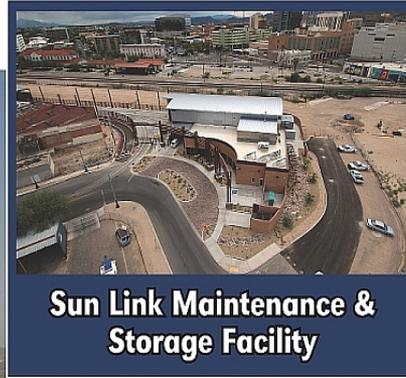




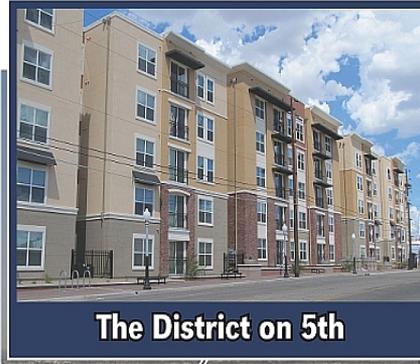
**Depot Plaza and Ronstadt  
Transit Center**



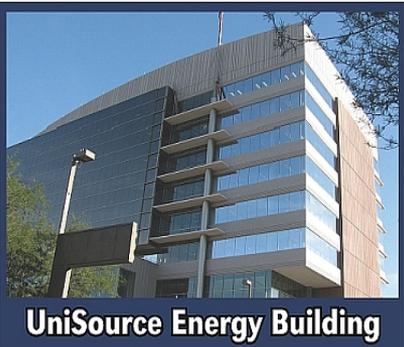
**Rialto Block**



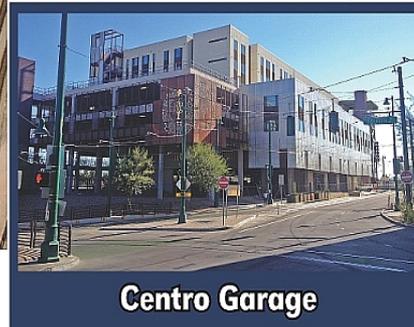
**Sun Link Maintenance &  
Storage Facility**



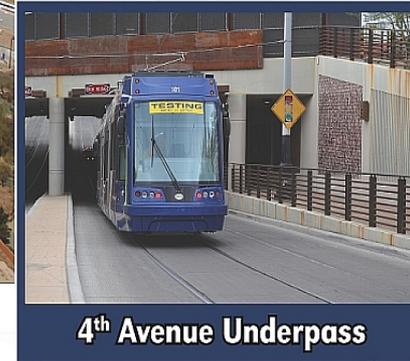
**The District on 5th**



**UniSource Energy Building**



**Centro Garage**



**4th Avenue Underpass**

# Destinations & Connections along the Sun Link Streetcar Route





**Streetcar & Sentinel Peak**



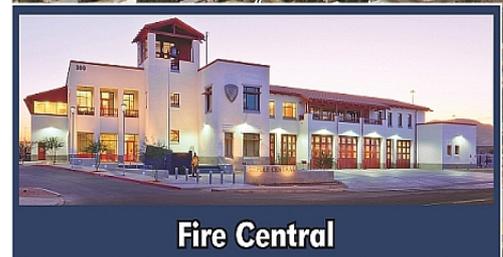
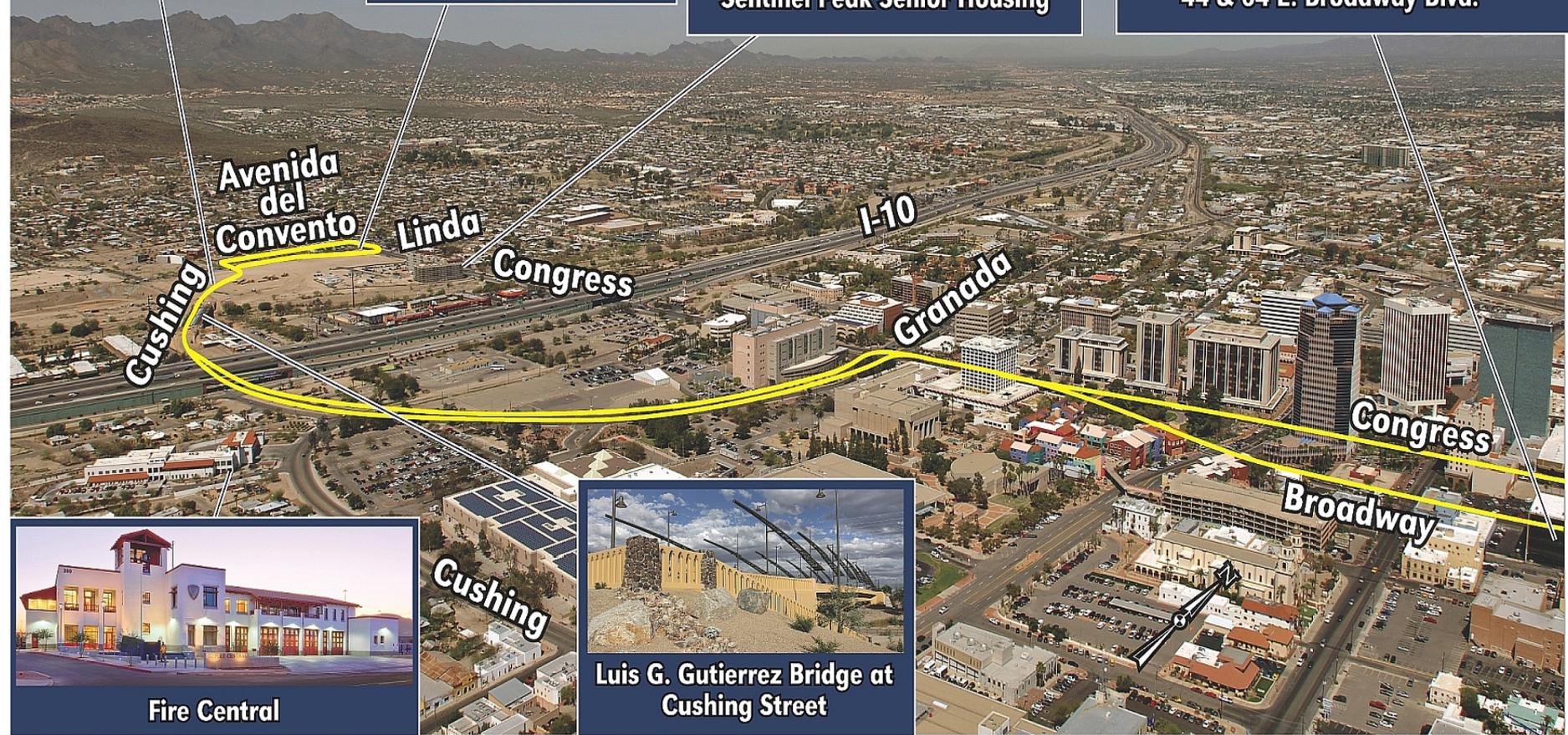
**Mercado San Agustín**



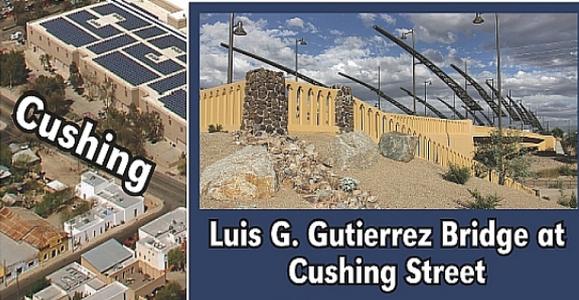
**Sentinel Peak Senior Housing**



**44 & 64 E. Broadway Blvd.**



**Fire Central**



**Luis G. Gutierrez Bridge at Cushing Street**

# Destinations & Connections along the Sun Link Streetcar Route



# Project Timeline

## Secured TIGER Grant Funding

- TIGER Grant Signed – February 2010

## Completion of Design

- 100 percent Design Plans Submitted – September 2011

## Start of Construction

- April 2012

## End of Construction

- October 2013

## Delivery of First Car

- August 2013

## On-Street Testing

- September 2013

## Delivery of Final Vehicle

- May 2014

## Pre-Revenue Preparation

- June 2014

## Revenue Service Operations

- Target Date – July 25, 2014

## Streetcar Facts

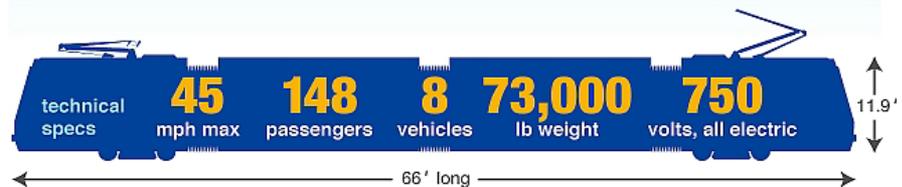


### Did you know?

- Each Vehicle is Bi-Directional
- Passenger Doors Open on Both Sides
- ADA Compliant
- Stand Onboard with Your Bike
- Connects to Sun Tran & Cat Tran
- 30 Year Service Life

**2013** First vehicles arrive in Tucson & begin testing

**2014** Passenger service begins in summer 2014



# Park Once, Then... Tour The Four

## Shop, Dine, Play & Explore!

### Four Districts:

- University/Main Gate
- 4<sup>th</sup> Avenue
- Downtown
- Mercado District
- More than 15,000 parking spaces throughout the route!



# Economic Development

- 500 Construction Jobs
- Will add 1,500 + Long term jobs
- \$800 million plus in private/public investment along corridor to date
- Attracted 50 + new restaurants, bars and cafes in the downtown area
- Stimulating new housing – 1300 “roof tops” to date
- Connects neighborhoods and commerce
- Triggers redevelopment and long term community investment



# Project Construction

## Overall Construction

- Substantial Completion October 21, 2013

## Track Installed

- 6.7 miles track installed

## Overhead Contact System (OCS)

- Poles: 511 OCS Poles installed
- Contact Wire: 38,307 feet of wire installed

## Traction Power Subsystems (TPSS)

- 5 substations installed
- The contractor, BBRI, is currently completing punch list items for final acceptance



# Operations & Maintenance Facility (OMF)

- Hub of Sun Link streetcar operations, communications, repair maintenance, and personnel
- Features:
  - 3 high profiles, enclosed service bays for streetcar repair and maintenance
  - A master control and communications center
  - High pressure wash for exterior streetcar cleaning and interior detailing
- Energy Efficient, Green Facility
  - Design and Site orientation provides natural lighting
  - On-site rainwater harvesting basins
  - Solar water and heating
  - Expected to receive a Leadership in Energy and Environmental Design (LEED) New Construction Silver Rating



# Luis G. Gutierrez Bridge

- 320 feet long spanning the Santa Cruz River
- Provides connection from downtown to historic west site
- Only multi-modal bridge facility in the state that accommodates vehicles, pedestrians and fixed rail transit
- Project included: a new roadway and bridge, asphalt concrete pavement, sidewalks, utility relocations and improvements, floodwalls, street lighting and more
- Extensive public art created by artist, Brenda Semanick



# Vehicle Production

## Tucson Vehicles:

- 101 arrived August 30, 2013
- 102 arrived October 16, 2013
- 103 arrived February 4, 2014
- 104 arrived January 7, 2014
- 105 at 60%
- 106 arrived March 18, 2014
- 107 at 70%
- 108 at 50%

## Current Activities Include:

- Completion of production and factory testing of vehicles 107, 105, & 108
- Vehicle function testing of vehicles 101 - 104
- Vehicle acceptance testing in Tucson of vehicles 101 – 104



# Vehicle Testing

## Getting a Sun Link Streetcar Ready for Passengers



- 1 Preliminary track** & systems testing at OIW/United Streetcar
- 2 Streetcar delivery** to Tucson's Sun Link Operations & Maintenance Facility (OMF)
- 3 At the OMF**
  - Minor assembly
  - Power substation testing
  - Stationary systems interface & communications check
- 4 Tow streetcar along rail** to check:
  - Clearance perimeter
  - Visibility
  - Overhead connections
- 5 Ongoing personnel training:** operations, command center, mechanics, drivers
- 6 Controlled low speed** tests along track:
  - Overhead electrical
  - Vehicle & traffic signal interface
- 7 Controlled high speed** tests along track:
  - Brakes & signals
  - Use sandbags to simulate passengers
- 8 First responder drills**
  - Document maintenance & operations procedures
  - Finish testing of OMF equipment



### Final streetcar testing

Each streetcar must be tested for 500 km (310.6 mi) with no failure in the last 100 km (62.1 mi) as part of the final vehicle acceptance by Sun Link



# Vehicle Testing



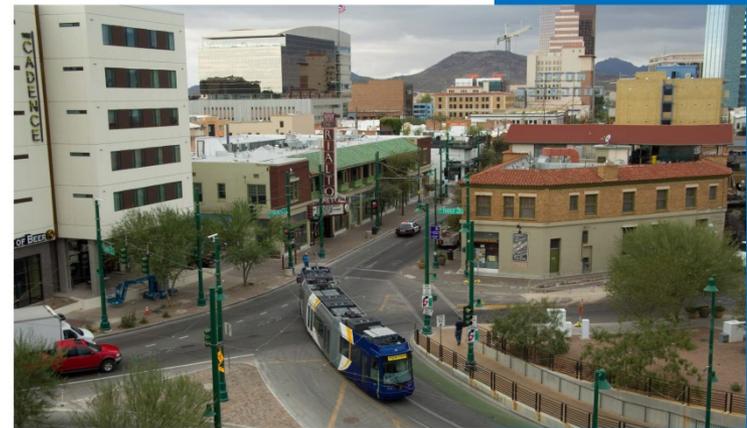
# Operational Details

- 3 surveys administered
  - UA Students: 4/29/2013
  - UA Students, Faculty and Staff: 11/13/2013
  - Business Owners: 11/23/014
- Each survey polled respondents regarding their interest in the system, operational hours, and other important preferences
- Results are being analyzed to help finalize the operational details of the system

Work in Progress

January 2, 2013

## Sun Link Streetcar Business Survey



A survey conducted on behalf of the City of Tucson & the Regional Transportation Authority



**RTA** Regional Transportation Authority **SUN LINK**

illumina consulting  
in Coordination with  
Kaneen Advertising and Public Relations



**RTA**  
Regional Transportation Authority



**SUN LINK**

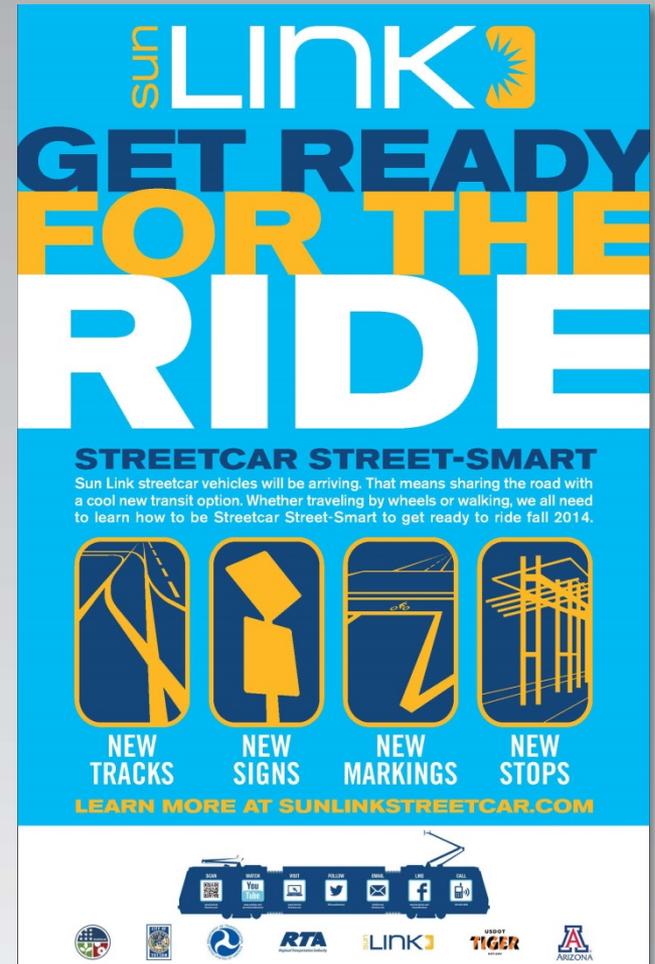
# Public Art



# Public Safety Education Campaign

## “Streetcar Street-Smart”

- Objectives:
  - Prepare the community for the “streetcar experience”
  - Set stage for vehicle arrival and testing
  - Create awareness about our new street environment with the streetcar in the mix
  - Inclusive (universal) safety awareness across multiple modes: bicyclists, pedestrians, motorists, ADA public



# Questions?

For more information:

SCAN



SunLink  
Streetcar.com

WATCH



youtube.com/  
SunLinkStreetcar

VISIT



SunLink  
Streetcar.com

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