



METRO





METRO Light Rail Phoenix, Arizona

**Richard J. Simonetta
Chief Executive Officer**

June, 2009



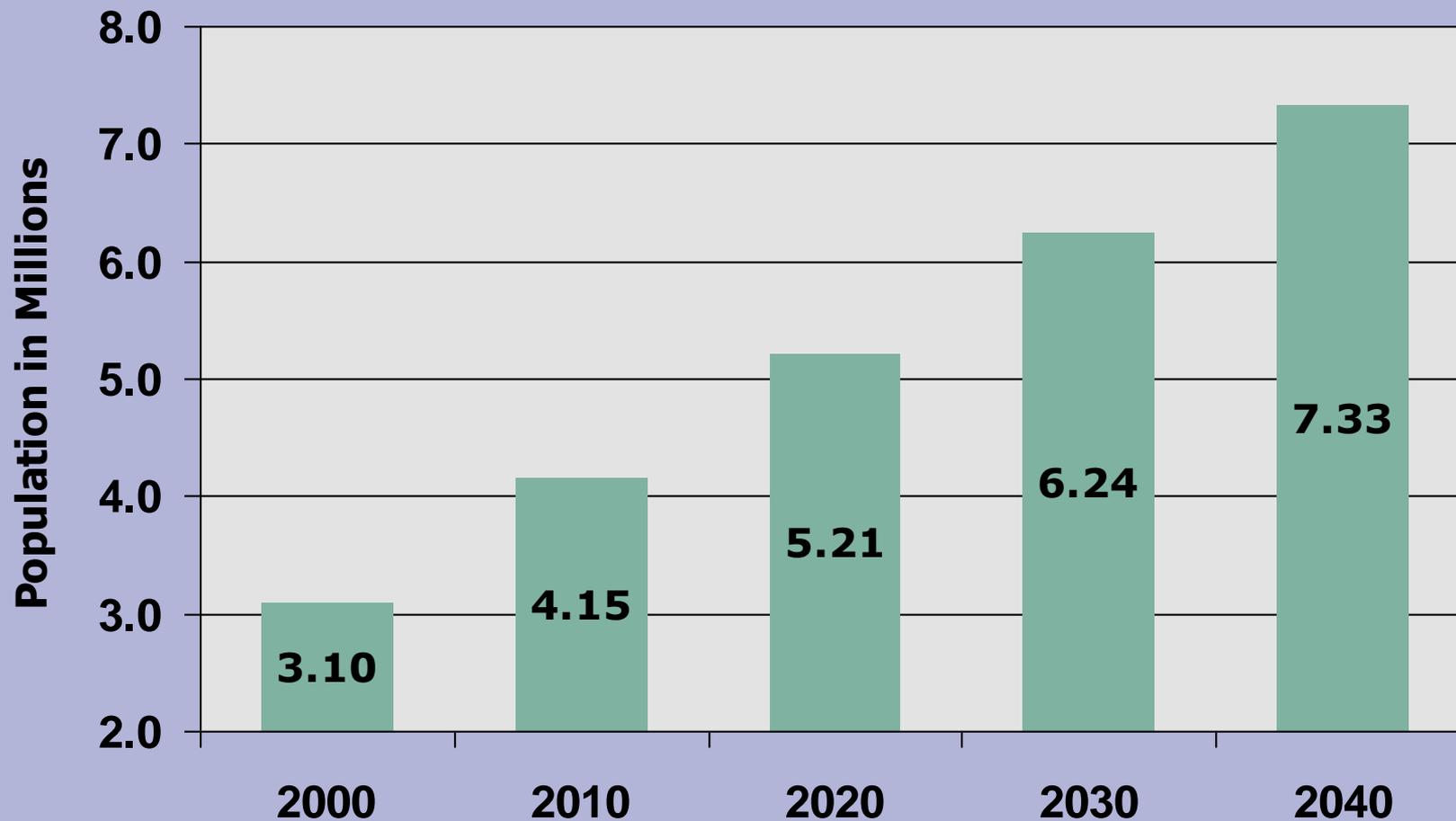
The Problem



- Maricopa County gains 1 million new people per decade.
- Infrastructure has not kept pace with growth.
- The Phoenix metro area has the 16th largest population in the country, but the transit system is only the 26th.
- Roadway construction will not keep up with population and travel growth.

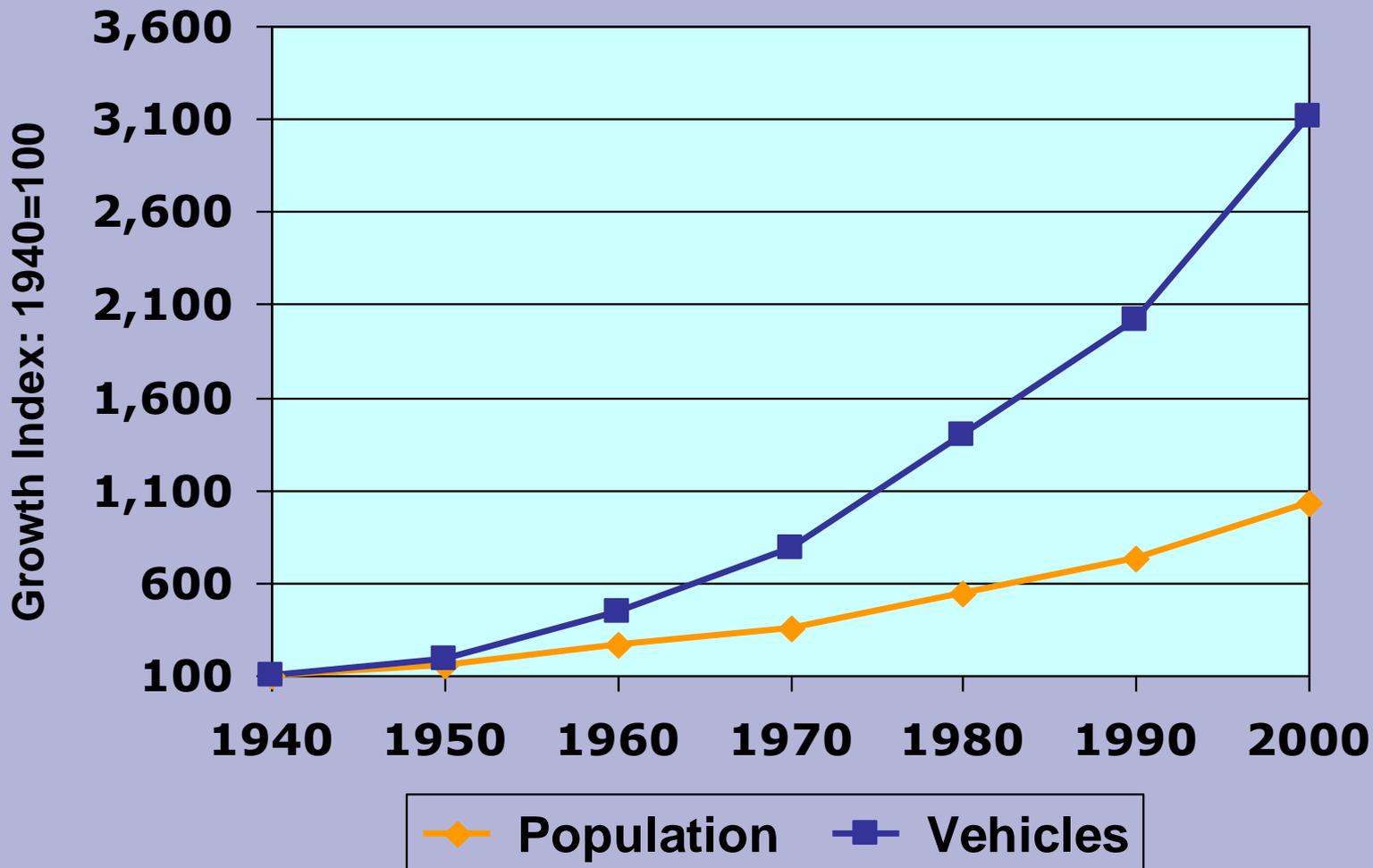


Continued Population Growth





Travel Increasing Faster Than Population





Light Rail Moves More People



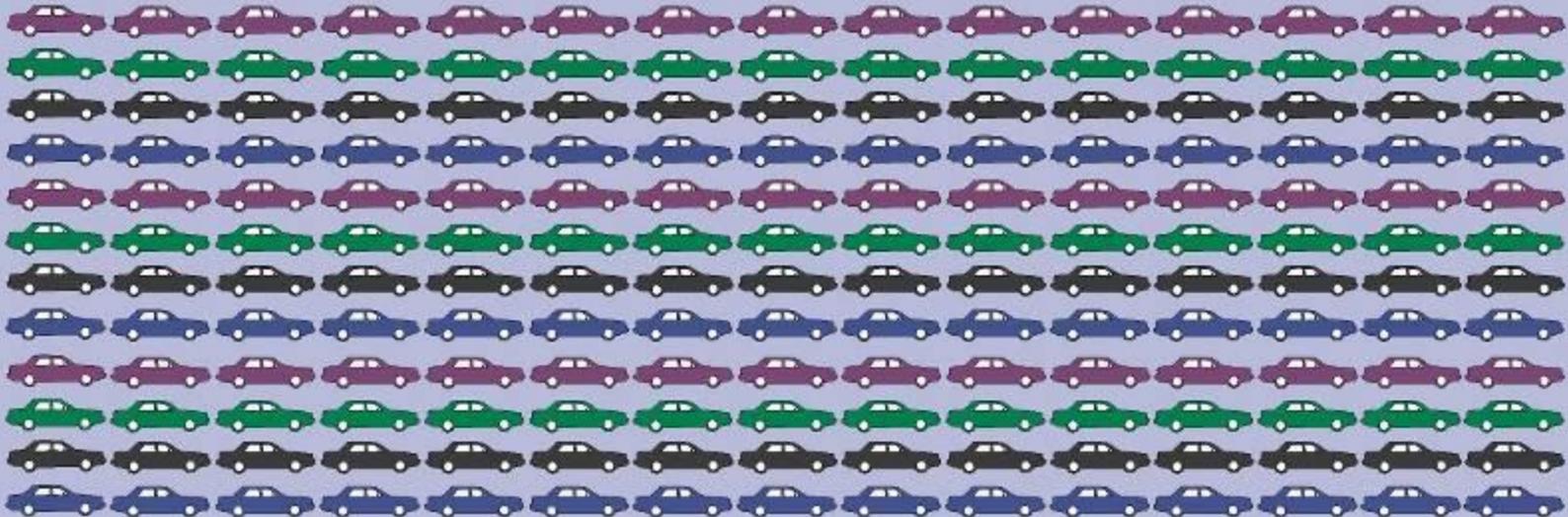
200 passengers in one light rail vehicle



600 passengers in a light rail train



200 passengers in five buses



200 passengers in 180 autos



Transit Election History

1989: ValTrans – Regional

1994: Proposition 400 – Regional

1996: Proposition 400 – Tempe

1997: Proposition 1 – Phoenix

1997: Proposition 1 – Scottsdale

1998: Question #1 – Chandler

1998: Quality of Life Tax – Mesa

2000: Proposition 2000 – Phoenix

2001: Proposition 402 – Glendale

2004: Proposition 400 – Regional



Regional Transit Agencies

- Maricopa Association of Governments (MAG)
 - Develops the Regional Transportation Plan
 - Travel demand forecasting
- Regional Public Transportation Authority (Valley Metro RPTA)
 - Operates regional bus service
 - Sub-regional planning and project development for bus services
- Valley Metro Rail (METRO)
 - Operates light rail system
 - Light rail/high capacity transit sub-regional planning and project development



Valley Metro Rail, Inc. METRO

- Formed in October 2002
 - Purpose - plan, design, construction and operate the METRO light rail system, including future extensions
 - Members include

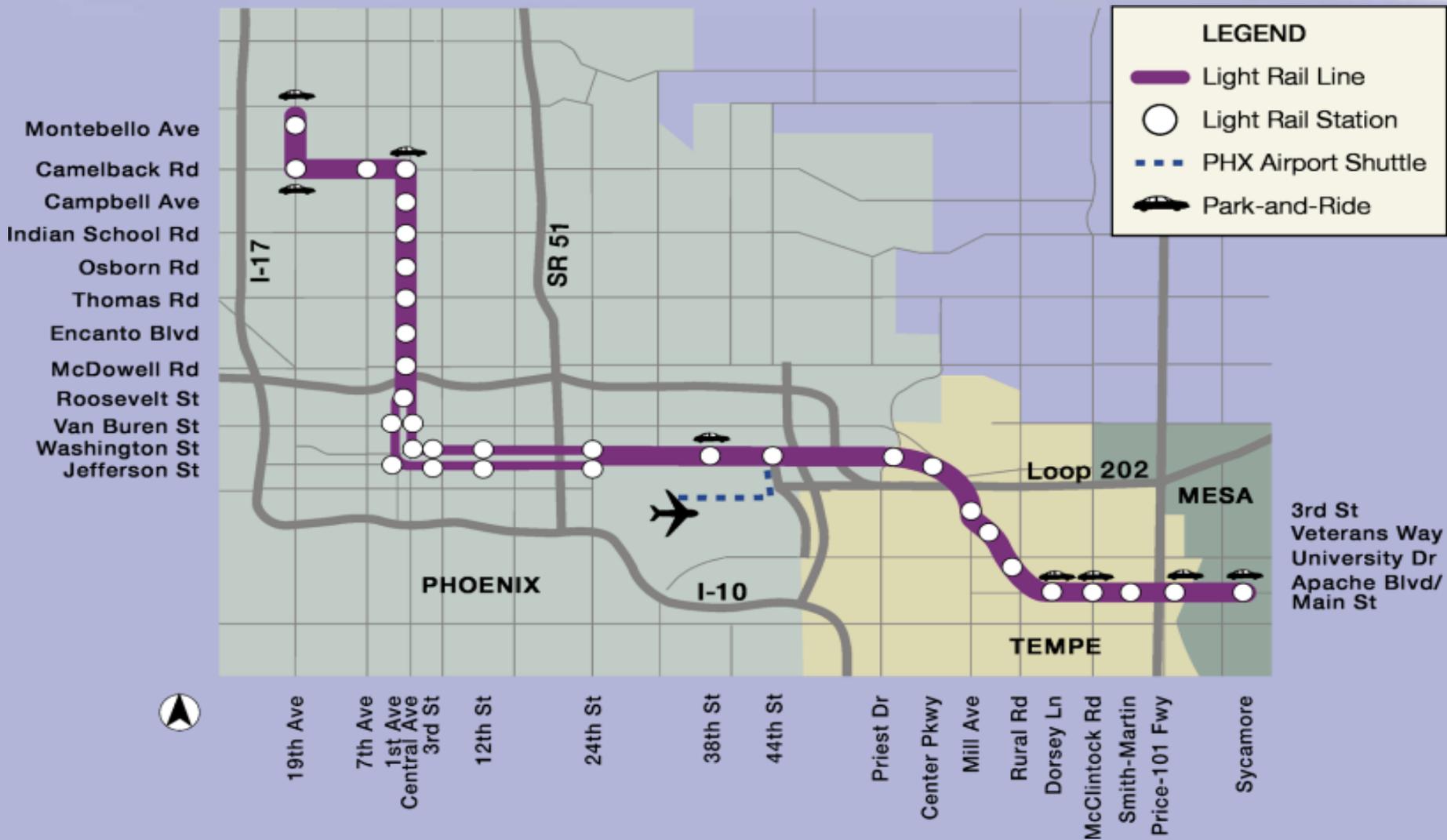


City of Phoenix





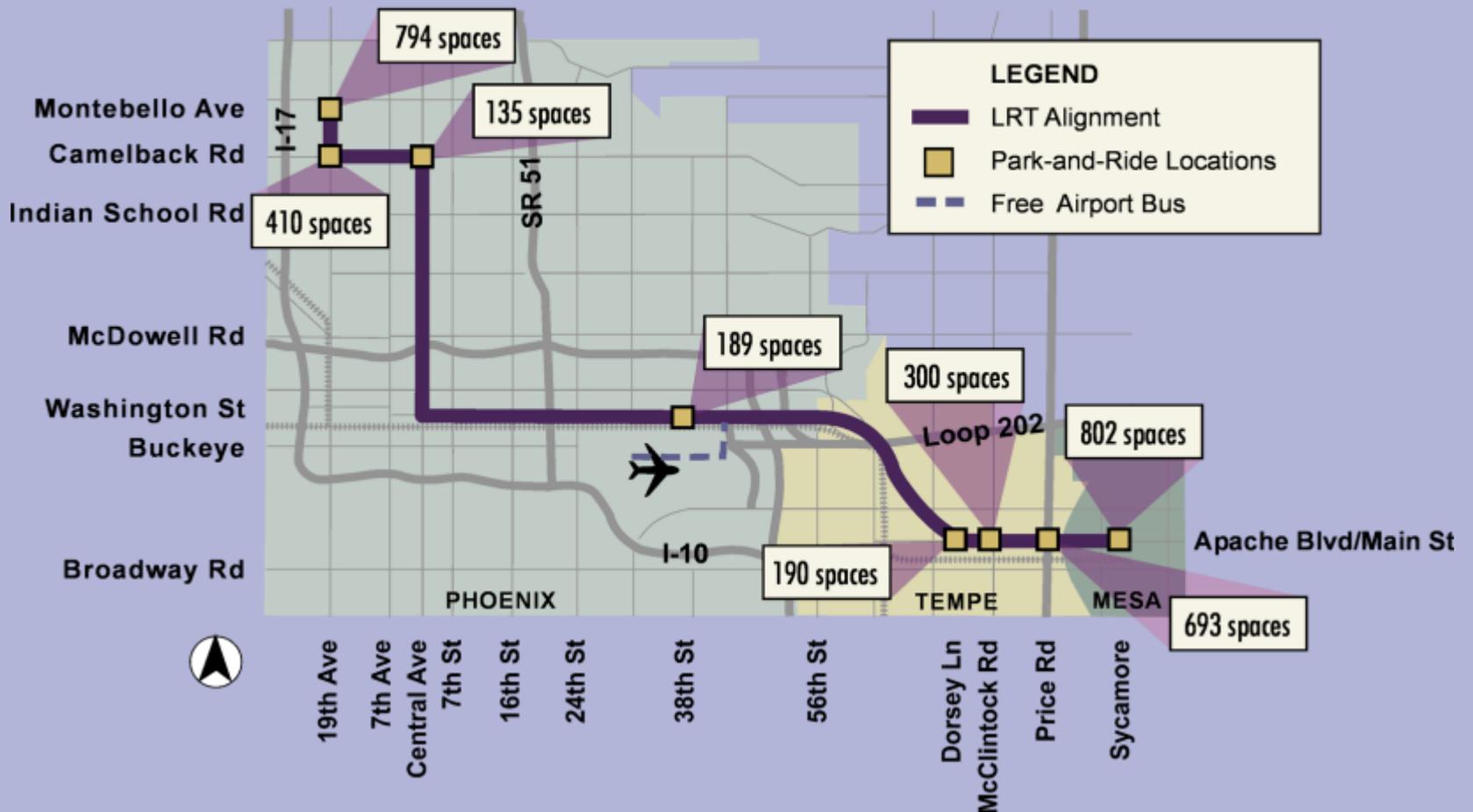
20-Mile Light Rail Line





Park-and-Ride Locations

3,513 Opening Day Park-and-Ride Spaces





Name The Train Contest 2003



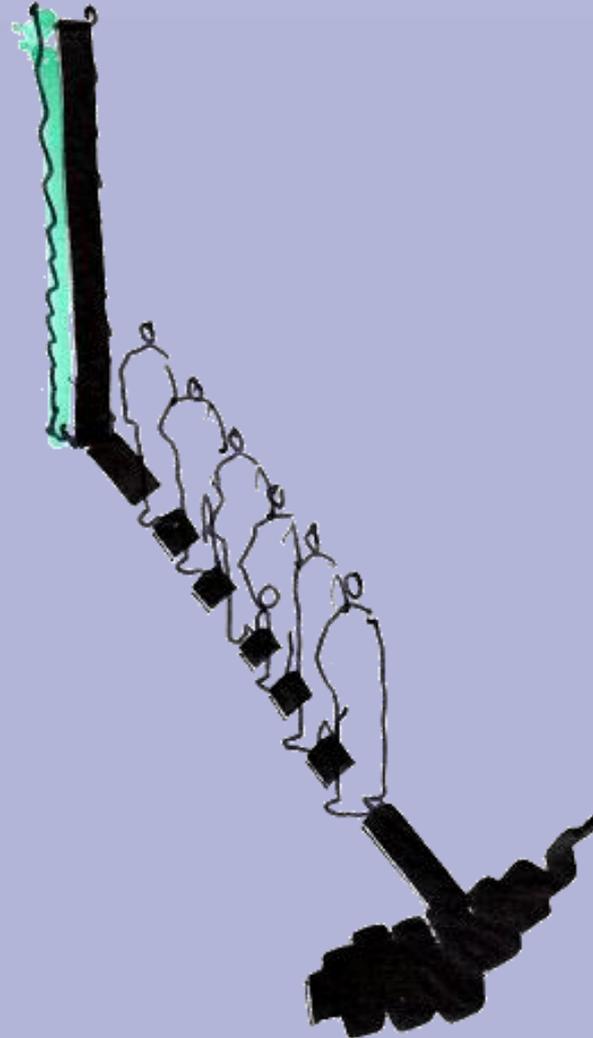


System Design Priorities

- **1st Shading and Cooling Strategies**
 - **Adjacent Pedestrian Areas**
- **2nd Station Design**
- **3rd Security**
- **4th Vehicle Design**
 - **Overhead Wiring**
 - **Maximizing Bus Connections**

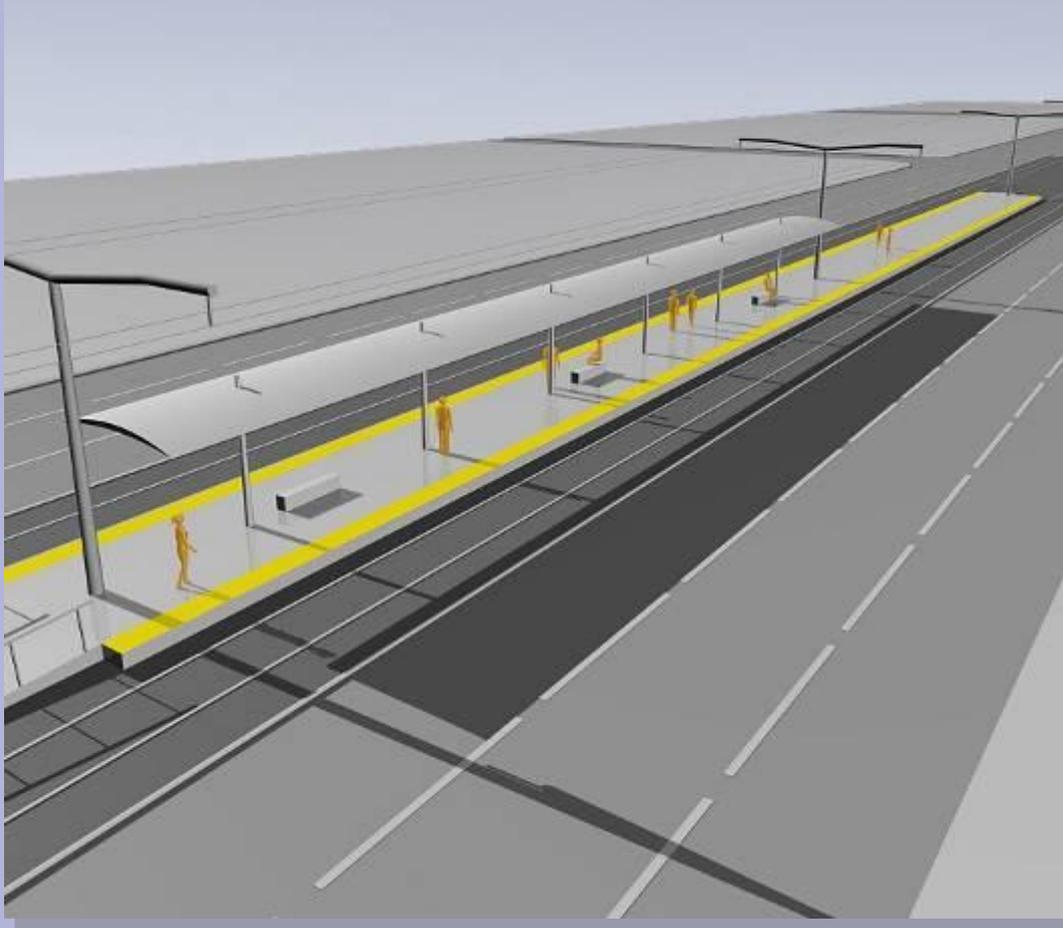


Climate Adaptation





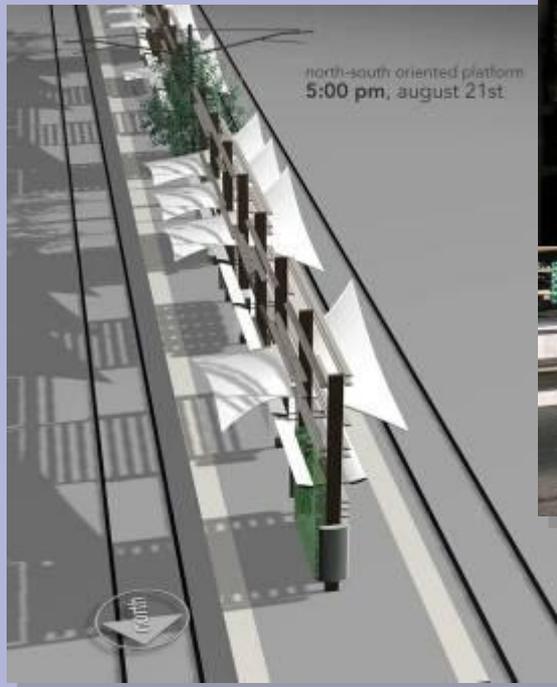
Traditional LRT Station Canopy



- Metal surfaces will overheat
- Lack of vertical protection
- Shade falls onto the street



“Cool Screen” Station





“Cool Screen” Station

- 28 stations
 - Louvers & tensile fabric maximize shade
 - Benches, art & plants
 - Chilled water fountains





Unique Art at Each Station



Apache and Dorsey



Central and Roosevelt

44th Street and Washington



1st Ave and Jefferson

19th Ave and Camelback





Town Lake Bridge Art



“Grand Award in Engineering Excellence”

**PBSJ / PGH Wong joint venture and sub-consultant Structural Grace from the Arizona chapter of the American Council of Engineering Companies –
September 2007**



Operations and Maintenance Center



“Public Works Project of the Year”

**by the Arizona Chapter of the American Public Works Association
– March 2008**



Security

Closed-Circuit Cameras

- Vehicle interior & exterior
- Station platforms
- Park-and-ride lots

Communications

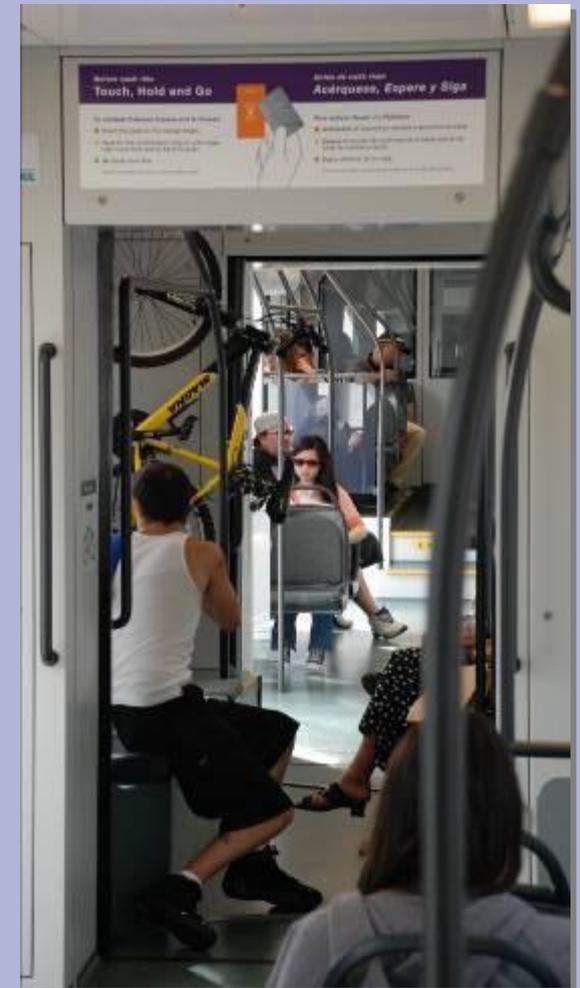
- PA on platforms and vehicles
- Passenger intercom on vehicles
- Emergency call boxes on platforms and PNRs





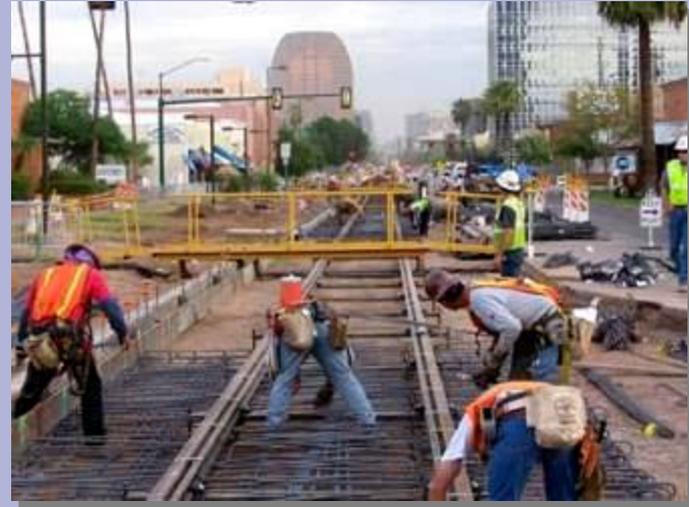
Light Rail Vehicle

- 50 Vehicles
- Heat reflective paint
- Low E, solar reflective windows
- Insulated car bodies to reduce cooling loss
- Bicycle racks, wheelchair accessible



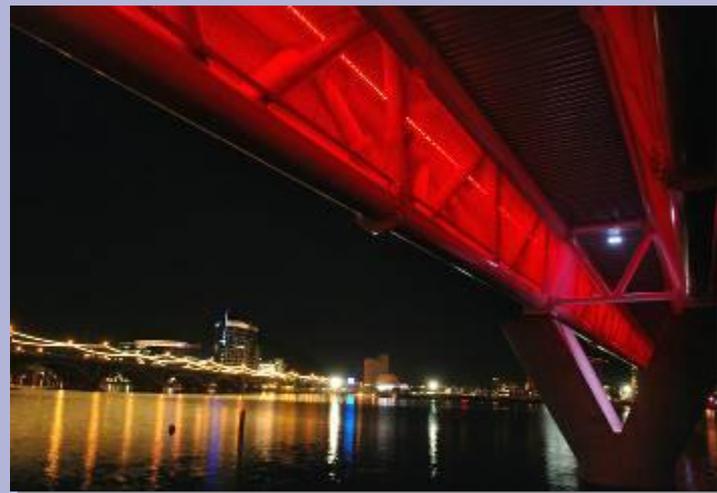


Street Construction



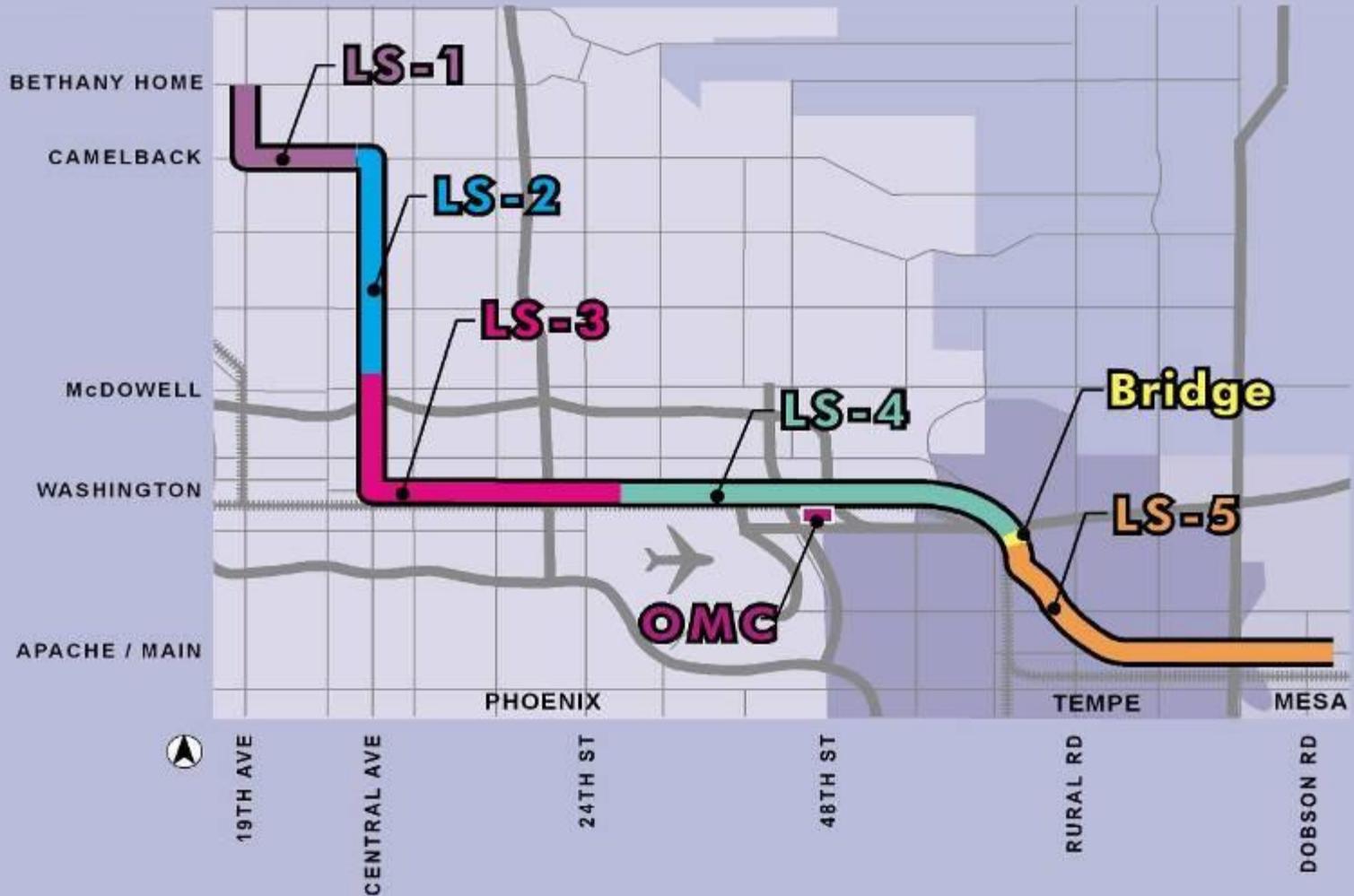


Town Lake Bridge Construction



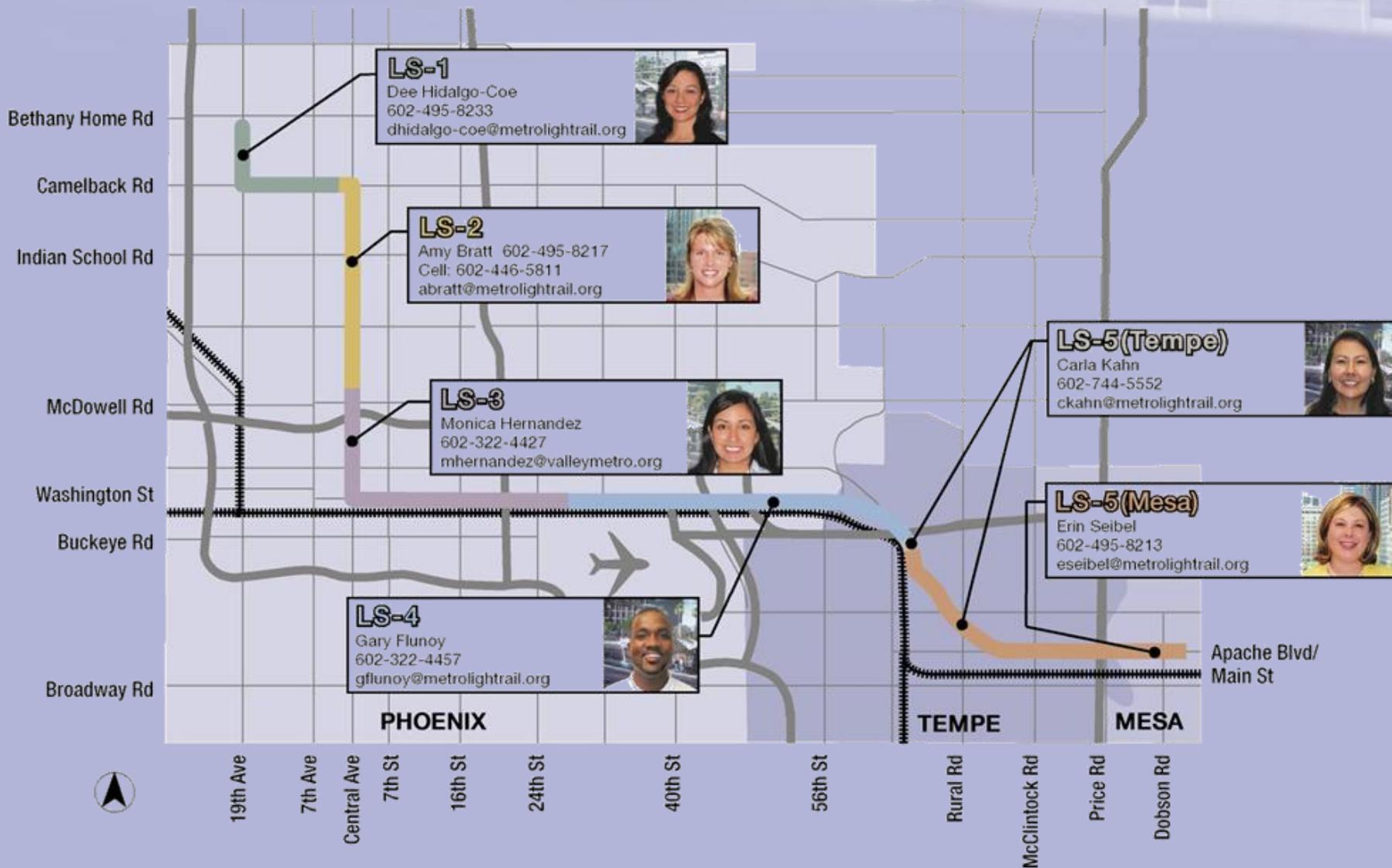


Construction Contracts





Community Outreach Team





Business Outreach

- METRO and city partners developed programs to assist local business's
- METRO MAX – discount shopping card for business along the alignment
- Courtesy signage provided to assist business with visibility



Visit businesses along the construction route.





Community Advisory Board

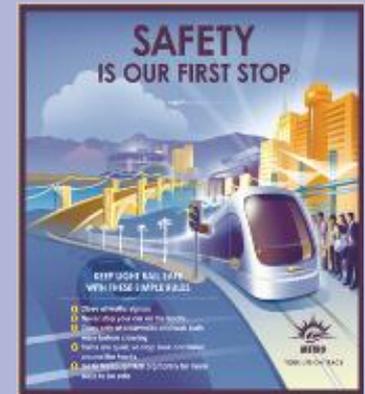
- CAB members serve as a voice for the community during light rail construction
- Met monthly to evaluate and discuss contractors performance for monetary incentive





Safety Campaign

- Billboard, Radio and TV ads run during testing
- Posters and brochures distributed throughout the Valley
- Award winning drivers safety video distributed to DMV and driving schools
- Public participation with safety slogan
“Watch you back stay off the tracks”





Media Preview Pass Day

December 26, 2008

- Approx. 3,000 stakeholders, VIP's, media, sponsors and community mascots attended
- Todd McFarlane creator and illustrator of Spawn designed art work for the preview pass
- Local United Way partnership





Appreciation Dinner

Held December 26 at new Downtown Phoenix Sheraton

- Speakers included Congressman Harry Mitchell, Shannon Scutari from Governor Napolitano's office, Leslie Rogers FTA Administrator, Region IX
- Included the "March of the Metro" commissioned by The Phoenix Symphony





Official Ribbon Cutting Ceremony

December 27, 2008

- Formal ribbon cutting ceremony held at Operations & Maintenance Center
- Comments from Secretary of Transportation Mary Peters





Grand Opening Day

- Successful debut
- Over 150,000 people in attendance
- 3 to 4 hour boarding wait



THE ARIZONA REPUBLIC
azcentral.com
\$1.50 • SUNDAY, DECEMBER 26, 2009

The long, unwinning road

WITH RARE PLAYOFF GAME, CARDS HOPE TO FORGE NEW PATH

By Bob McWhorter
The Arizona Cardinals have a chance to make history on Sunday when they take on the New York Giants in the NFC Wild Card game. The Cardinals have a chance to become the first team to win a playoff game since the 1985 season.

By Greg Morris
The Arizona Republic has a chance to make history on Sunday when it publishes its 100th anniversary issue. The paper has a chance to become the first newspaper to reach its 100th anniversary.

OPENING DAY

Light rail packed for grand debut

By Greg Morris and David Gonzalez
The Arizona Republic

When the state's employment rate hit a record low of 7.5 percent last month, many people were looking for ways to create jobs. One way to do that is to invest in infrastructure. The state has a chance to do that with the new light rail system. The system has a chance to become the first of its kind in the state.

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Employers busted by hiring law so far: 0

Thomas seeks new powers after state's quiet year

By Greg Morris and David Gonzalez
The Arizona Republic

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Cheerful crowds say long lines, nearly 4 years of construction worth wait

By John Roberts, Henry Herrera, Alan Cross and Ryan Rodriguez
The Arizona Republic

The first train left at the station at 10:00 a.m. and the crowd was cheering. The train was packed with people and the atmosphere was festive. The train was the first of its kind in the state and the crowd was cheering. The train was the first of its kind in the state and the crowd was cheering.

Israel bombs Gaza; more than 200 dead

By Charles Seckman and Amy Belton
The Arizona Republic

GAZA CITY, Gaza Strip — In a rare escalation of violence, Israel bombed Gaza on Sunday, killing more than 200 people. The bombing was the deadliest in Gaza since the start of the conflict in 2008. The bombing was the deadliest in Gaza since the start of the conflict in 2008.



City Celebrations

- **It All Starts Here – Mesa** featuring Grand Funk Railroad, classic car show, Fit City for kids, game truck and vendors
- **Destination Tempe - Tempe** featuring Roger Kline and the Peacemakers, “Go Green” Expo, face painters, clowns and vendors
- **Phoenix Rising – Phoenix** featuring the Phoenix Convention Center opening, Native American dancers, vendors and family activities





Awards

- **Southwest Contractor Awards**
 - **Arizona Best of 2008 in Transportation – Line Section 5**
 - **Engineering Design – Tempe Town Lake Bridge**
- **2008 Associated Minority Contractors of America - Community Service Award - Employer of the Year**
- **2008 Dreamer - Best Project in Downtown Phoenix Area Award**
- **2008 WTS Innovation in Transportation Award**
- **2009 AzTA Outstanding Transit Organization Excellence Award**
- **2009 Phoenix Community Alliance Center City Starr Award**



Operations

■ Operations

- Monday thru Thursday 4 a.m. – midnight
- Friday 4:40 a.m. to 3 a.m. (Sat)
- Saturday 4:30 a.m. to 3 a.m. (Sun)
- Sunday 4:30 a.m. to midnight

■ Frequency –

- Weekdays – 10 mins peak hours -20 mins off peak
- Saturday - 15 mins peak hours – 20 mins off peak
- Sunday and Holiday -20 mins all hours of day





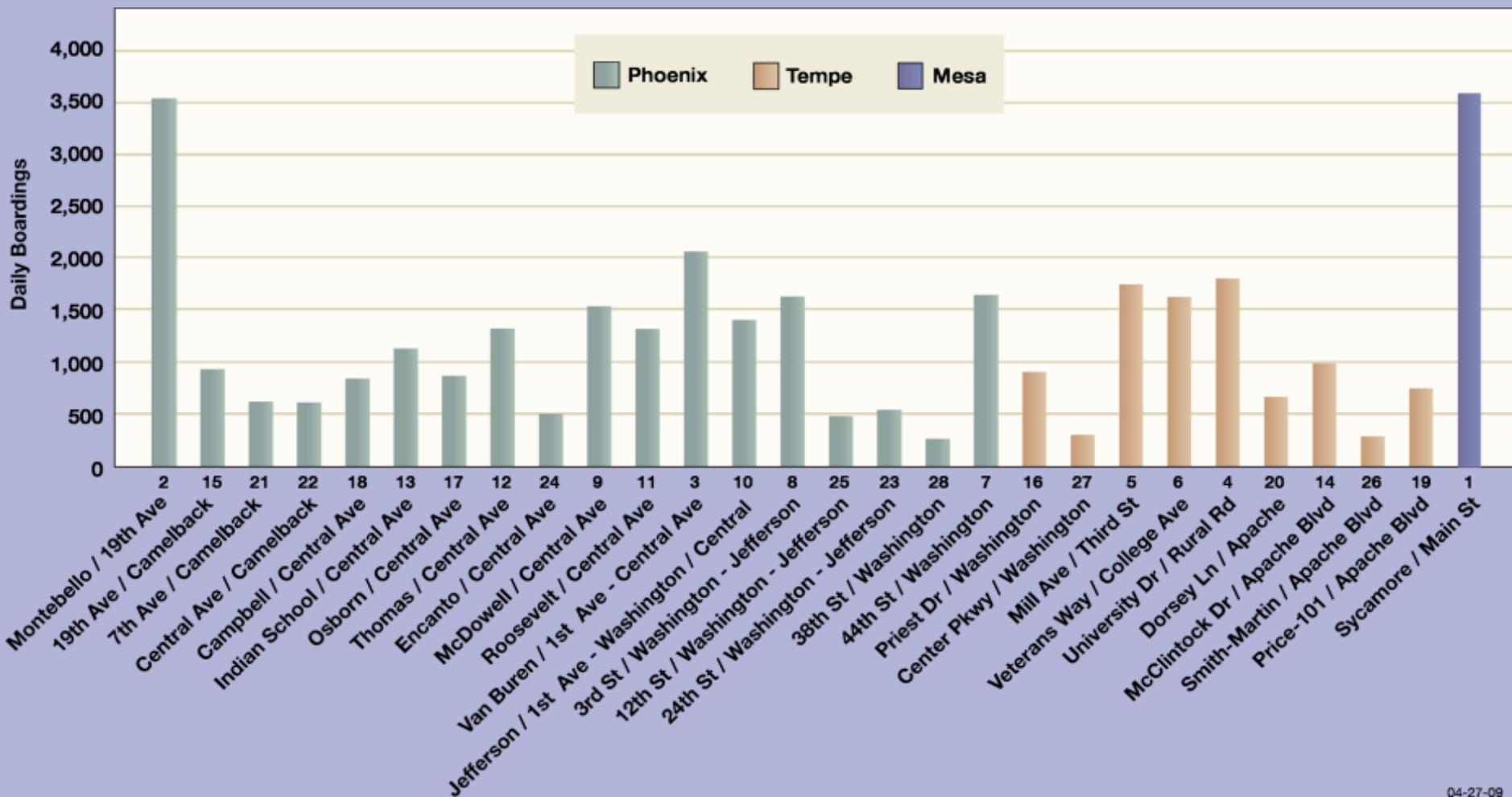
Ridership

	Forecast for End of Year 1	January	February	March	April	May
Average Weekday	26,090	30,582	35,277	34,376	37,232	33,553
Average Saturday	20,800	31,331	31,417	28,537	32,720	27,176
Average Sunday & Holiday	11,267	22,603	19,212	20,508	22,694	20,219
Total Monthly Riders		911,883	908,052	972,962	1,040,749	928,259



Average Ridership

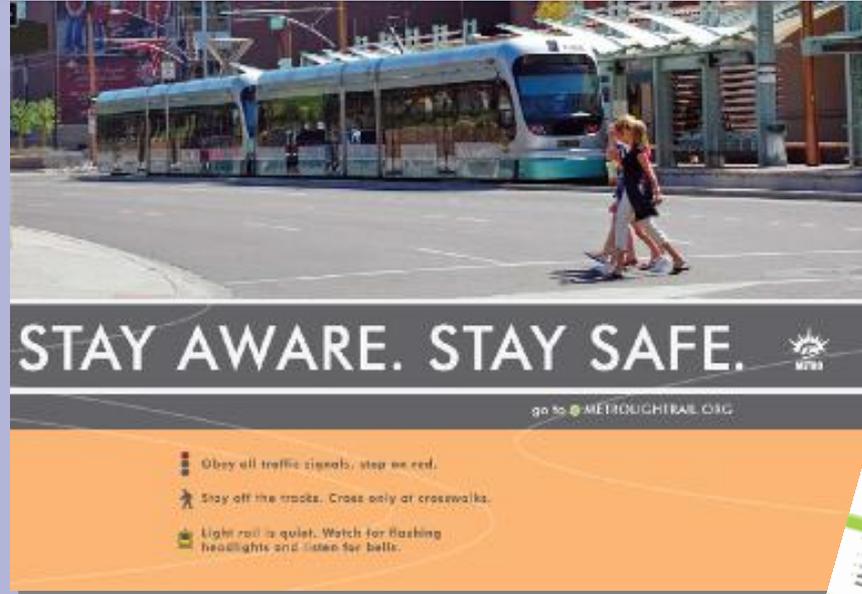
Daily Boardings By Station, First Quarter 2009





Information Improvements

- New safety posters at stations
- New bicycle safety brochures
- Updated maps in vehicles





Information Improvements

- Additional signage added
- Cigarette receptacles installed at each platform
- Warning message added to bottom of platforms





System Improvements

- Trains and station announcements
 - Number of announcements
 - Volume adjustment
- Train tracking





Proof of Payment System

- Valid fare required before boarding
- Passengers checked at random by fare inspectors
- Inspectors can tell if your pass has been validated
- Citations: \$50-\$500 to losing transit privileges





Fare Education Efforts

- Touch, Hold and Go signs on vehicles and fare vending machines
- Passenger assistance ambassadors

Before each ride
Touch, Hold and Go
Antes de cada viaje—Acérquese, Espere y Siga

To validate Platinum Passes and U-Passes

- Touch the pass on the orange target.
- Hold for the confirmation ding or until target light turns from yellow back to green.
- Go enjoy your ride.

Failure to validate can result in fines of \$50 to \$500.

Para activar Pases U y Platinum

- Acérquese al dispositivo naranja y aproxime su pase.
- Espere el sonido de confirmación o hasta que la luz amarilla cambie a verde.
- Siga y disfrute de su viaje.

Si no activa el pase, podría recibir multas de entre 50 y 500 dólares.





Fare Inspection Data

SYSTEMWIDE	JAN	FEB	MARCH	APRIL	MAY
Inspections Conducted	81,576	69,843	146,179	168,860	160,000
Passengers w/o Fare Media	319	281	277	220	287
Citations Issued	13	159	172	148	169
Fare Evasion Rate	0.39%	0.40%	0.19%	0.13%	0.18%
Ridership	911,889	908,000	972,962	1,044,135	928,259
Percentage Inspected	8.90%	7.69%	15.02%	16.17%	17.20%



Connecting ASU

- Students take classes from Tempe to downtown Phoenix
- U-Pass – students can use on both the train and bus
- Travel time approx 30 min between campus





Sky Harbor Connection

- 1200 people per day are taking METRO to airport
- Free shuttle stops at all terminals
- Runs 7 days a week / mirrors train schedule
- Phoenix Sky Train coming in 2013





Light Rail for Events

- 600 people in three-car trains
- 10-15% of venue attendees will ride
- Past events include NBA All-Star Event, New Years Eve Block party and ASU Graduation





USAC Ticketing Discussions

- Pilot program discussion between U. S. Airways Center and METRO
- Focus: Integrate METRO ridership into ticket sales for events at US Airways Center





Possible Revenue

- Train wraps, floor decals, display cases and parts of the station
- Selling system or station naming rights





Potential Future Improvements

- Shaded fare vending machines
- Adding additional fare vending machines
- Adding stand alone validators
- Shade canopies at park-and-rides





Development along 20-mile Route 2004 to Present

- **\$7.4 billion total investment along alignment (planned, under construction, or completed)**
 - **\$5.9 billion private investment**
 - **\$1.5 billion public investment**
- **17,000+ residential units**
- **9+ million square ft. commercial**
- **3,200+ hotel rooms**

\$1.4 billion

\$7.4 billion

Light rail investment Non-rail investments



Development along METRO: Residential

17,000+ New Units

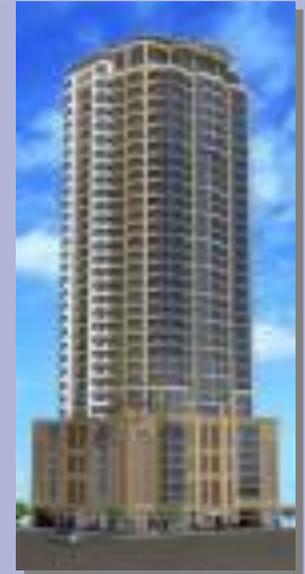
- Metro Manor
- Century Plaza
- Tapestry on Central
- Portland Place
- 44 Monroe
- Grigio Metro



Chateaux on Central



Centerpoint



44 Monroe



Tapestry on Central



Artisan Village



Metro Manor



Development along METRO Large Mixed-Use

Cityscape

- Central Ave. & Washington St.
- \$900 million project
- 1200 condominiums
- 2 boutique hotels (400 beds)
- 600,000 sf Class A office
- 250,000 sf retail/restaurant
- Groundbreaking Nov. 2007
- First phase open in 2009, project build-out in 2011



Cityscape



Hayden Ferry Lakeside

Hayden Ferry Lakeside

- Master-planned waterfront 17-acre site on Tempe Town Lake
- Office, Retail and Hotel Development—1M sf of Class A office
- Plaza-level restaurant / retail in three mid-rise towers and full-service hotel
- Residential Development—Approx. 438 luxury lakefront condos
- Currently under construction with 2009 completion date



Development along METRO Public Investment

- Translational Genomics Research Institute 2005
- Sheraton Downtown Phoenix October 2008
- Phoenix Convention Center December 2008
- ASU Downtown Campus 2006 – 2009
 - 15,000 students at completion
 - 1.5 million SF academic & support space
 - 4,000 student beds within 10 yrs



Sheraton Downtown Phoenix



ASU Downtown Campus



Phoenix Convention Center



TGEN



Development along METRO

Public/Private Investment: Grigio Metro

- Originally a surface park-and-ride lot
- City of Tempe engaged a private developer
- McClintock & Apache Blvd.
- Apache Blvd. redevelopment district
- 408 residential units
- 16,000 sf retail
- 300 park-and-ride spaces in an enclosed garage
- Under construction
- Completion Summer 2009





Downtown Phoenix 2005



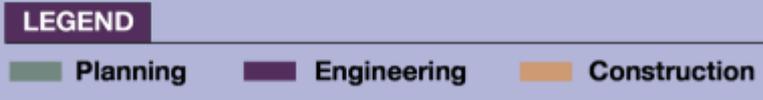
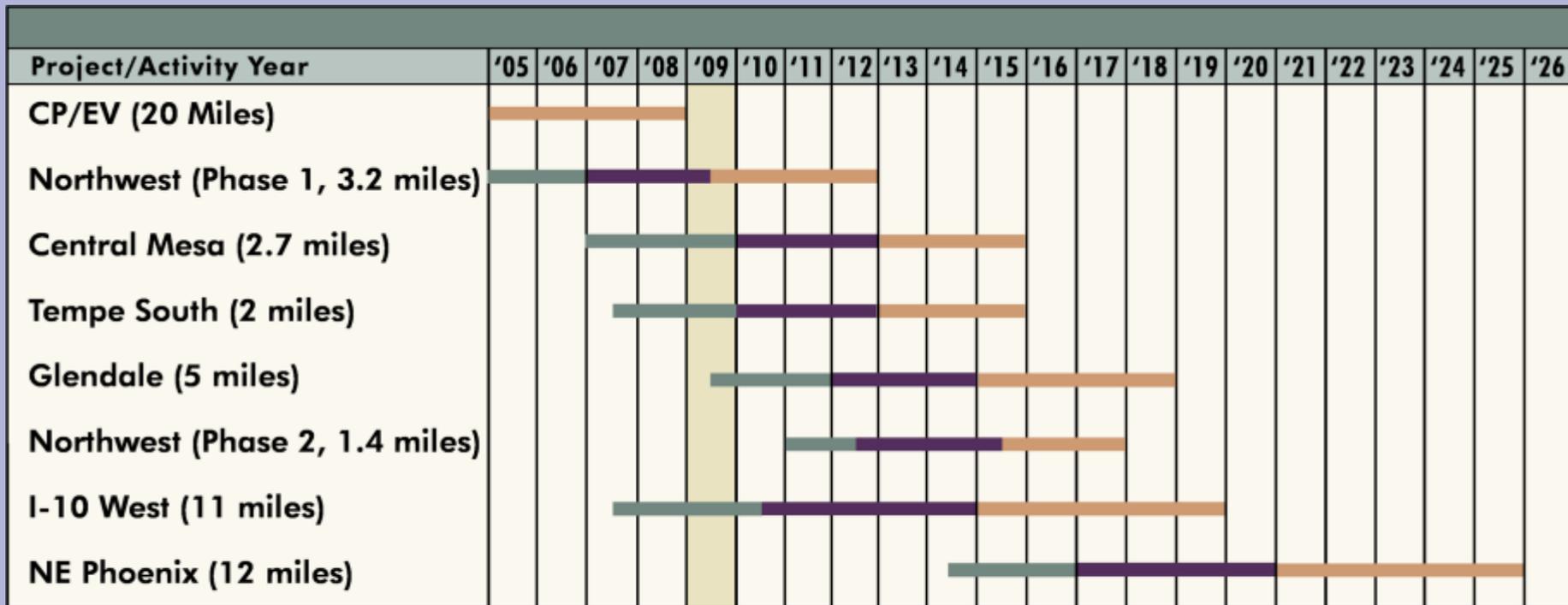


Downtown Phoenix 2009





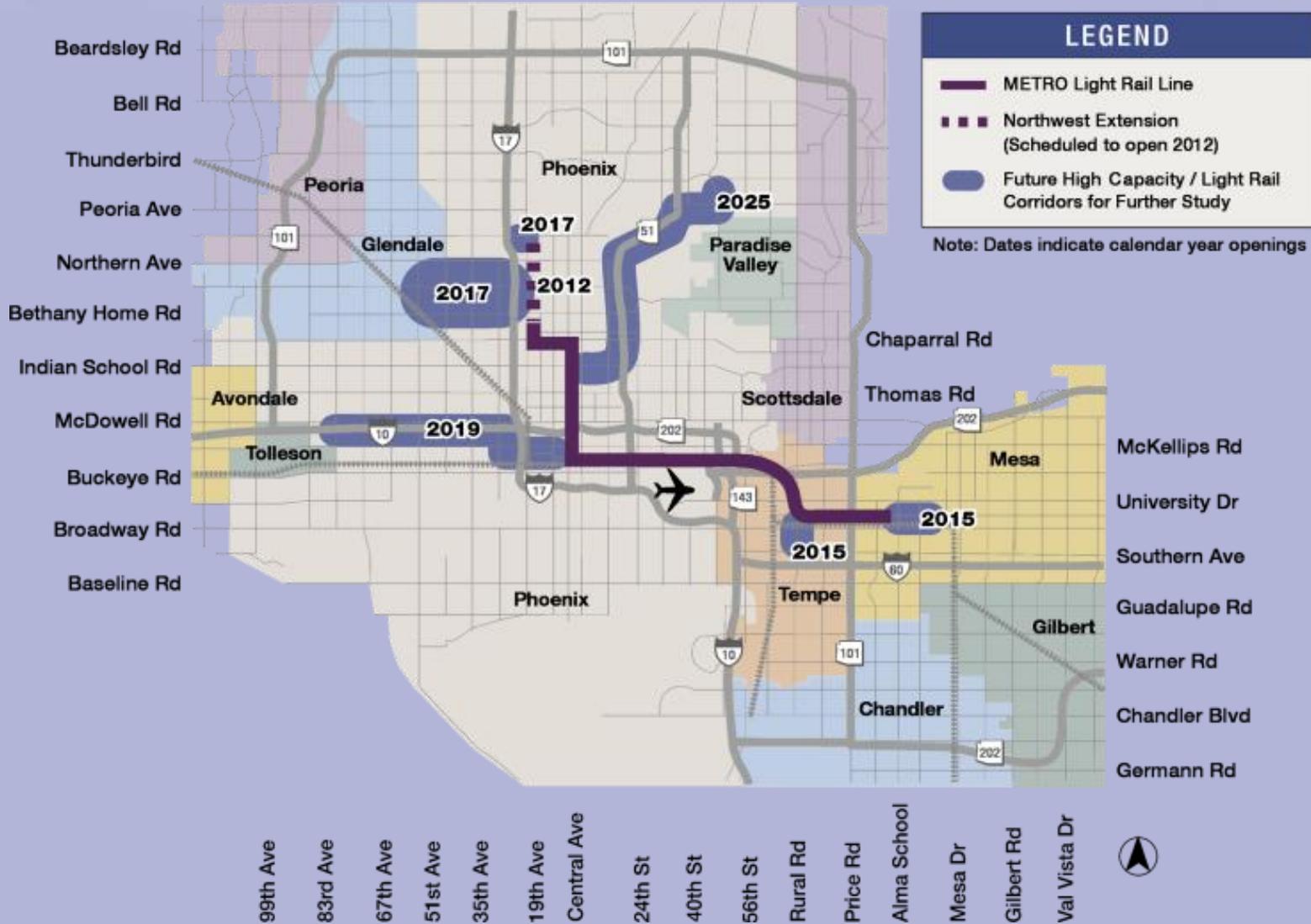
Future High Capacity / Light Rail Project Schedules



Note: Dates indicate calendar year



Future High Capacity / Light Rail 57-Mile System





METRO