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 **Construction status**

- Rail installation 88% complete
- Opening December 2008
- Civil construction ends
  - Dec 07 in Tempe
  - Feb 08 in Mesa
  - July 08 downtown Phoenix
  - Late summer rest of Phx
- Station – sig/com & PNR construction continues until opening



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 **Operations: Discussions**

- 10 minute headways daylight hours (not just rush hours)
- 20 minutes other times
- Hours: 5 a.m. to Midnight
- ASU students may push boardings to 32,000 daily instead of projected 26,000
- Looking at lease arrangements to handle PNR demand for opening day



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## Vehicle update



- All 50 vehicles will be here by end of November
- 18 are fully assembled




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## Vehicle testing is underway

Vehicles are being tested on Washington Street  
We'll move into west Tempe this spring




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## Stations



- 28 stations. All but five are in center of street.
- Louvers & tensile fabric maximize shade
- Benches, art, plants, drinking fountains




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**Stations are going up**

- Being erected now
- Art installation underway



Jefferson & First Ave



First Avenue & Van Buren

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**Economic Development in Phoenix  
2000 to present**

- \$5.7 billion total development investment within quarter-mile of Phoenix alignment
  - \$2.2 billion is public investment
- 5,500 residential units
- 7.8 million square feet commercial planned, under construction, or completed



**\$1.4 Billion**  
LR investment

**\*\$5.7 billion**  
Non-rail investments

\*Source: Phoenix Downtown Development Office

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**Safety: Testing & Education**





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## Testing in Tempe

- Expected start March 2008.
- From Washington & 44th Street to just short of Veterans Way / College Avenue.
- Sporadic, then daily over period of 60 days
- Slow-speed dead-wire pull ... then slow live-wire pull
- After that, we travel below posted limits (20 mph) for some time.




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## Formal safety plan for engineers

- Always: traffic signals or flagmen
- We sound the bell at newly opened intersection
- Testing is part of the process to educate the public about changing environment
- We work with the Police Dept
- Pedestrian safety a formal part of every testing activity




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## System safety design



- Guideway separated from traffic - no shared lanes
- Protected turn lanes: Green arrow only
- Slip ramps onto frontage roads are signalized
- Train approaching signals
- Station design discourages jaywalking
- Crosswalk countdown timers
- Energy-absorbing coupler cover

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## Vehicle safety design



- No-step vehicle entry
- 4 wheelchair spaces. With smooth stops, no tie-downs needed
- Doors must close for train to start
- 4 bike racks per vehicle




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## Safety Campaign for Public

- Public and private-sector partners help us distribute information: print – email – newsletters – employee notices.
- Media will help us get attention, but is not adequate for long-term.
- We are working with schools to reach children (districts, principals, SROs).
- Keys to effectiveness: Sustained & distributed through many channels




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## Light rail safety rules




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## Light rail safety: Driving

- Obey the traffic signals: Stop on red!
- Left turn on green arrow only.
- Light rail is quiet: listen for bells and look for flashing train headlights.
- Pedestrians use the crosswalk. Obey the crosswalk signals.
- Don't stop your car on tracks.
- Treat METRO power lines with the same respect you treat APS or SRP power lines.




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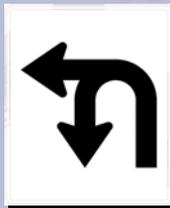
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## U-Turns with light rail

- There are 148 light rail intersections. U-turns are OK at all - except where specifically prohibited.
- There are 15 new signalized intersections to create more U-turns for business access.
- Left and U-turns on green arrow only. No solid greens: safer for everyone.




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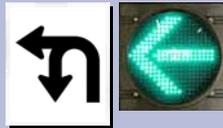
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## Making the U-turn

Signs and lane-markings show that U-turns are permitted on green arrow.



Train-coming sign & red light are displayed at same time. An additional safety measure.

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## U-Turns and Signals

- Drivers do not have to learn anything new. Obey the law ...
- Signage & lane markings are the most effective education.
- METRO and MVD work together: safety materials, Az driver's license exams.




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## Safety rules for kids

- Stop – look – and – listen.
- Use the crosswalk – obey the signals.
- Don't hang out near the tracks
- Walk bikes across the tracks using the crosswalk.
- No running on the station platform. Stay behind the yellow line.
- Parents – hold hands of little kids when near the tracks.




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## Kid Stuff




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### Kid Stuff

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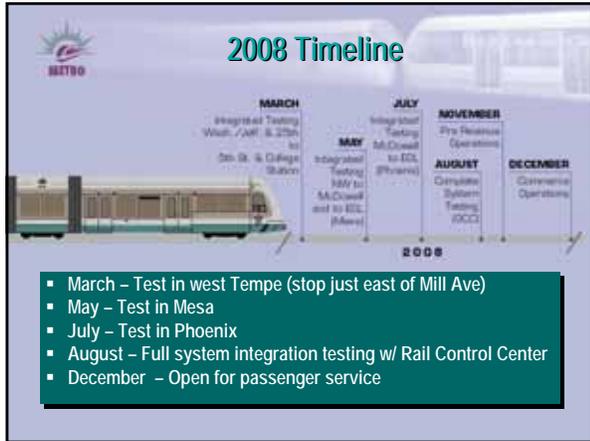
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### 2008 Timeline

MONTH	EVENTS
MARCH	Integrated Testing West Valley & 27th to St. G. & College Station
MAY	Integrated Testing MM to McDowell and to ECL (Roosevelt)
JULY	Integrated Testing McDowell to ECL (Phoenix)
AUGUST	Complete System Testing (OCC)
NOVEMBER	Pro Revenue Operations
DECEMBER	Commence Operations

- March – Test in west Tempe (stop just east of Mill Ave)
- May – Test in Mesa
- July – Test in Phoenix
- August – Full system integration testing w/ Rail Control Center
- December – Open for passenger service

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### Questions?

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602-744-5592

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