



# PHX Sky Train All Aboard!

Arizona Pavement/Materials Conference  
Nov 14, 2013

Steve Grubbs

# Why Build the Train?

- Balanced Airport
- Clear Road Congestion
- Free -up Curb Space





# Grand Opening April 8, 2013



**OTUBOS!**

# Sky Train Vehicles (Driverless)

- **Description**

- Bombardier - Innovia APM 200 vehicles
- Quantity - 18 cars
- Weight – 32,000 pounds
- Capacity – 53 passengers
- Speed – Up to 38 mph

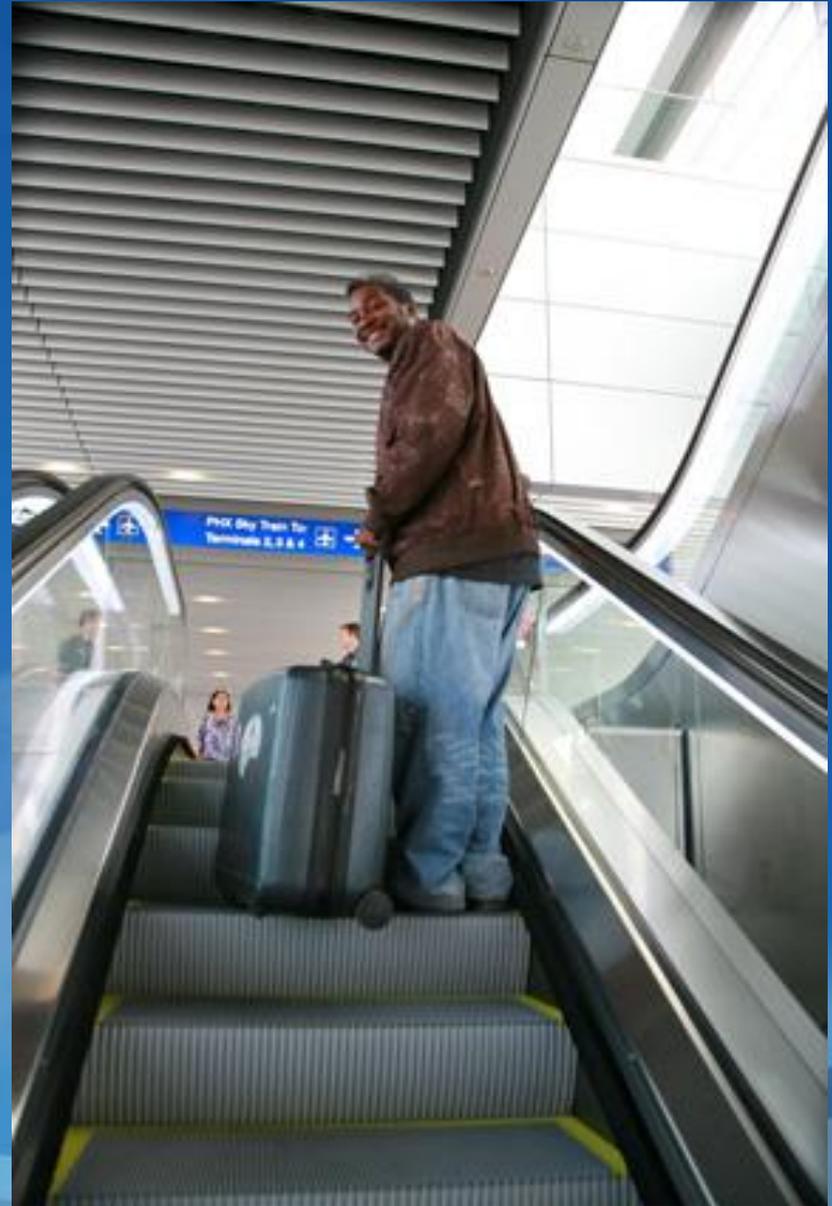
- **Vehicle Design Life**

- 25 years
- 2 million miles



# PHX Sky Train Service Levels

- Hours of Operation
  - 24 / 7 / 365
- Travel Time
  - 5 minutes - 44<sup>th</sup> St. Station to Terminal 4
- Frequency / Headways
  - Train arrives at station every 3 – 4 minutes during normal hours
- Tremendous passenger flow capacity
  - 2, 3, or even 4 car train configurations to meet future demand



# Train Stations

44<sup>th</sup> St. Station



East Economy Parking Station



Terminal 4 Station



**Gold**  
**LEED Certification**

# Services & Amenities: 44<sup>th</sup> St Station

- 24/7 Security
- Early Bag Check
- Boarding Pass Kiosks
- Drop-Off & Pickup Curb
- Cell Phone Lot
- Employee Parking
- Bike Racks & Lockers
- Short-Term Parking Meters
- METRO Ticket Machines
- Pet Area



# 44<sup>th</sup> St. Station



**Bike Lockers**

**Bike Racks**



# Services & Amenities: EEL Station

- 24/7 Security
- Economy Parking
  - Garage
  - Surface
- Circulator Vehicle
- Early Bag Check
- Boarding Pass Kiosks
- Family Friendly Parking
- Close ADA Parking
- Pet area



# Early Bag Check

- Serve 44<sup>th</sup> St. & EEL Stations
  - Since Train Opening
    - Over 70,000 bags checked
- ❖ Extend program to RCC and allow all airlines to participate



**Bags**



**U·S AIRWAYS**

# EEL Station Fun Facts

- EEL Concrete Cubic Yards: 3,375
- Total tonnage of structural steel: 165 tons

# Train over Taxiway



# Taxiway Romeo Fun Facts

- Taxiway R bridge is the only bridge in the world that carries a transit system over a Taxiway.
- About 70,000 cubic feet of concrete was used to build the bridge, which required delivery by nearly 300 concrete trucks.
- The columns on either side of the center span are 13' in diameter.
- The bridge has been compressed with 19 million pounds of post-tensioning force.
- The center span is 340' center-to-center of the piers.
- There are only 9 bridges in the State Bridge Inventory (of over 4700 bridges) with longer spans than the Taxiway R Bridge.

# T-4 Station Fun Facts

- Station square footage: 48,900 Sq. Ft.
- The station contains over 3 million pounds of structural steel.
- The station is supported by steel girders weighing as much as 65,000 pounds each, which span over the S2 to S3 concourse connector bridge.
- The concrete foundations are 8 feet in diameter and extend 115 feet below the ground surface.

# Performance Availability

- Monthly Availability Required = 99.5%
- System continues to meet performance availability requirements
- Availability to Date = 99.77%

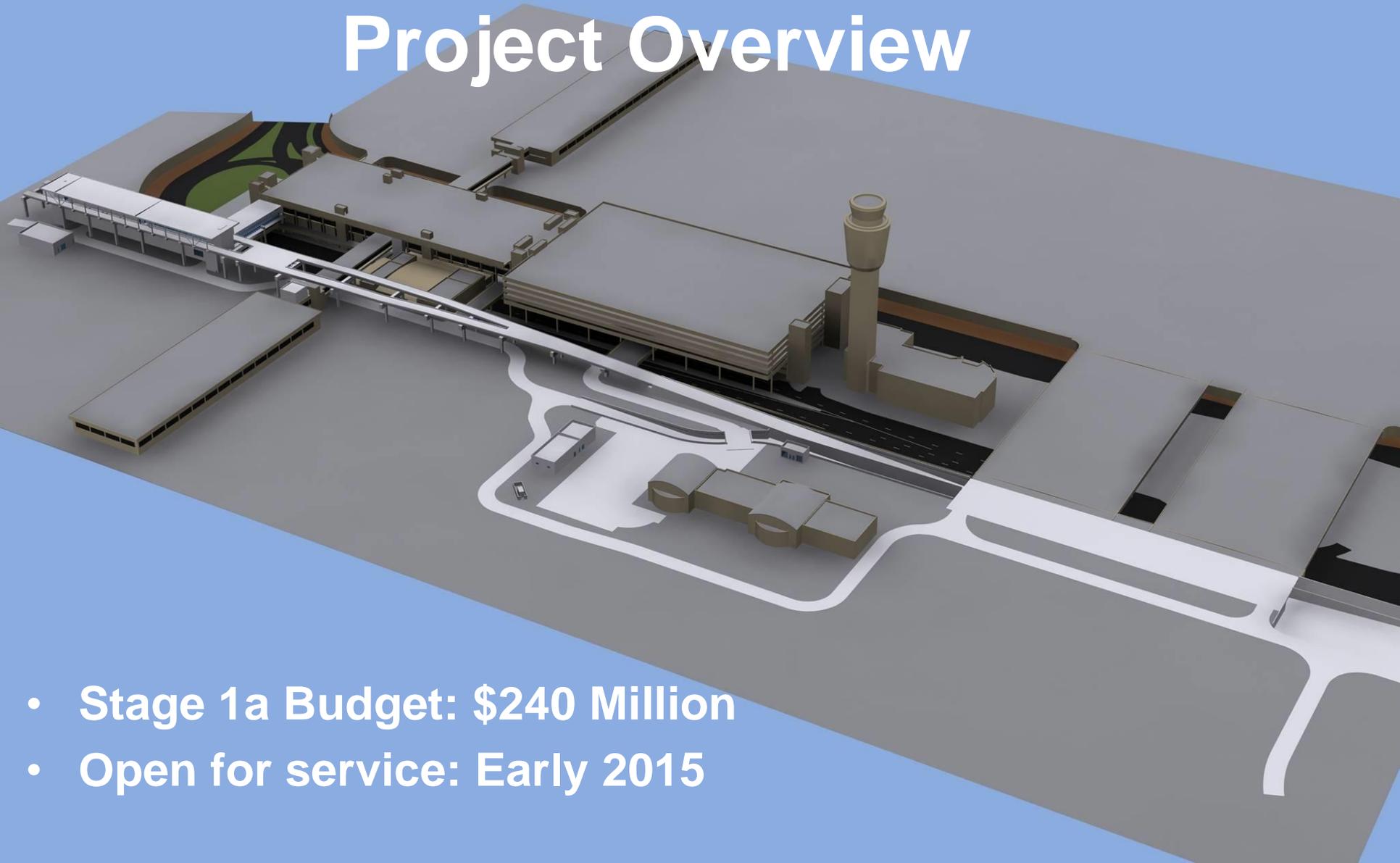


# Ridership

- Averaging 300,000 passengers per month
- Over 2 Million passengers since opening
- Exceeds original forecast by 30%



# **PHX** Sky Train Stage 1A Project Overview

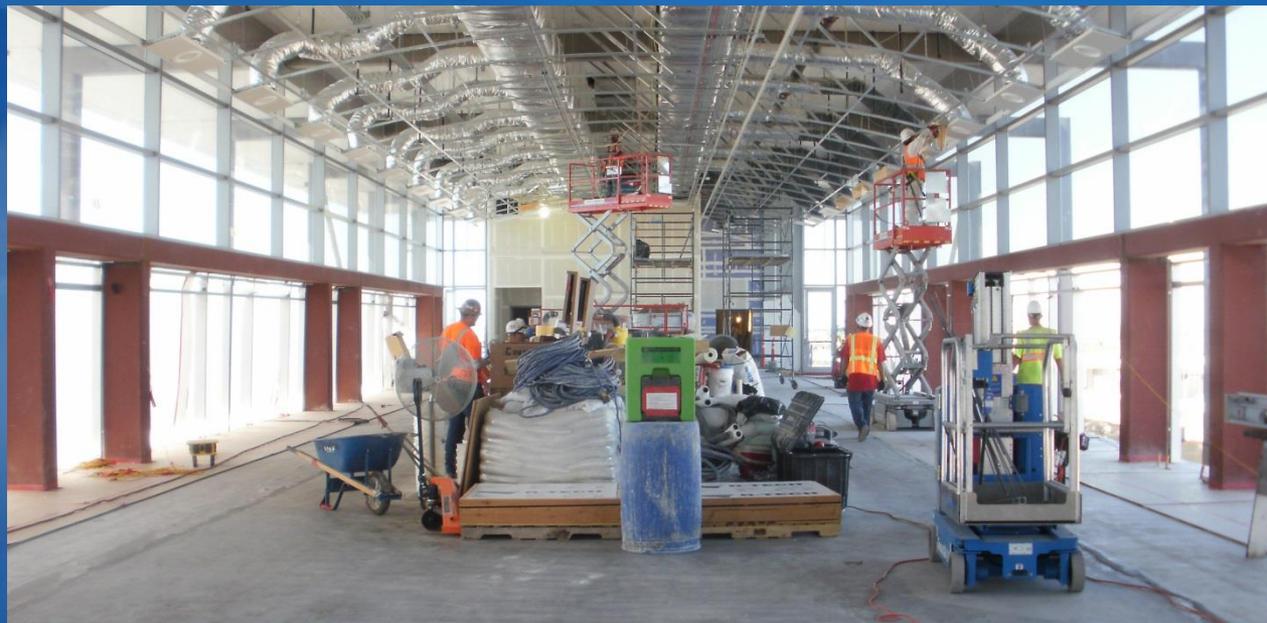


- Stage 1a Budget: \$240 Million
- Open for service: Early 2015

# Next Stop Terminal 3 Station



# Terminal 3 Station – Platform



# PHX Sky Train Stage 1A



# Terminal 3 Station – Pedestrian Bridge



# PHX Sky Train Stage 1A

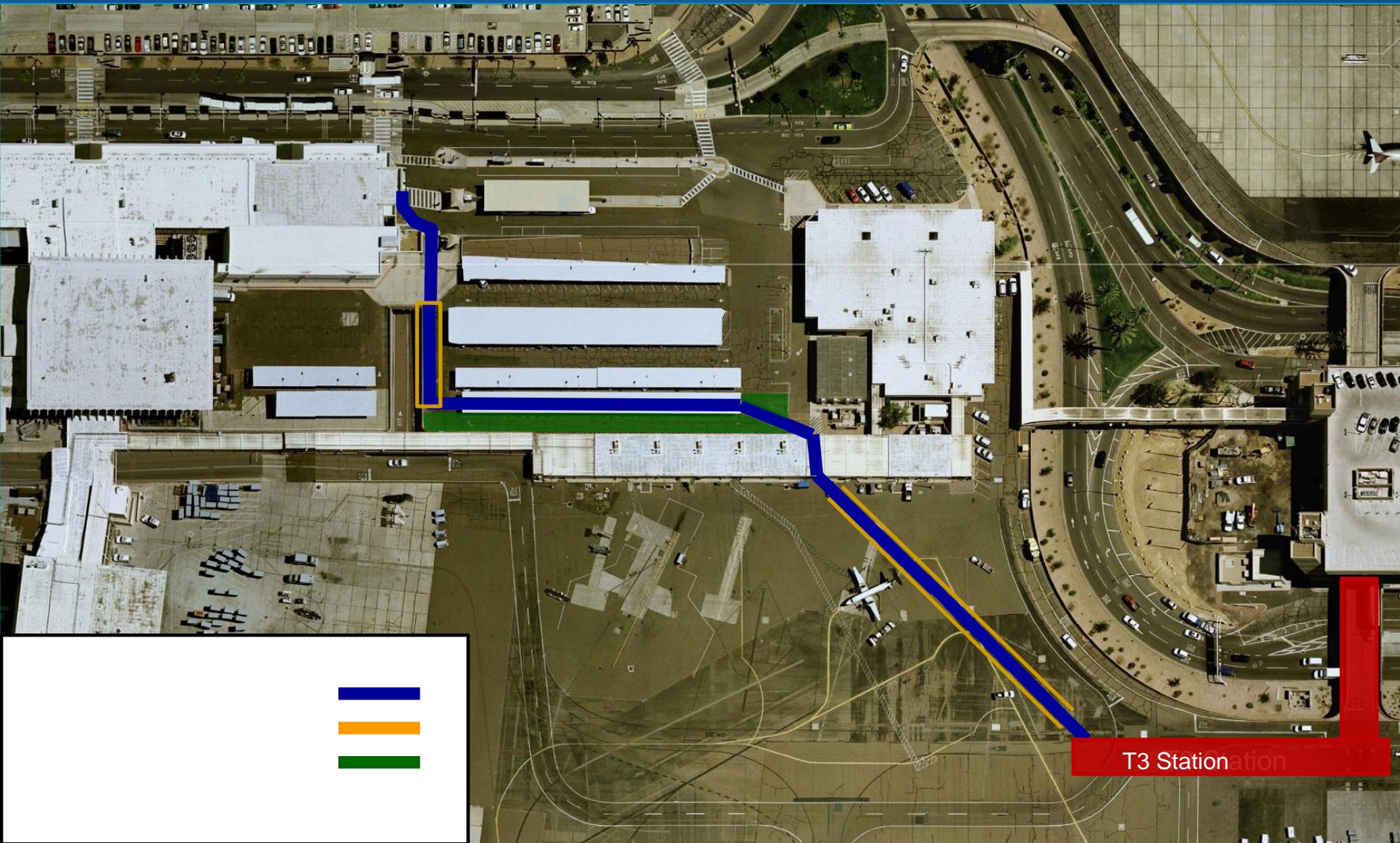


Elevated Guideway Section at Switch

# PHX Sky Train Stage 1A Terminal 3 Modifications



# PHX Sky Train Stage 1A Terminal 2 Walkway Connection



T3 Station

# PHX Sky Train Stage 1A

## Terminal 2 Walkway Connection



Looking forward to seeing you on the  
PHX Sky Train!

