Homework #1 Summary

John McNamara
Valley Metro
Unique Characteristics of Downtown

- Catlin Court Historic Neighborhood
- Historic buildings and other neighborhoods
- Festivals and events
- Small town feel
- Quaint shops and antique stores
- Walkable streets
Challenges

- Vacant storefronts and auto dealerships
- Perception of a dying community/downtown
- No clear identity or draw to attract visitors
- Businesses very sensitive to disruptions
- Inadequate parking
- Lack of large employment
- Traffic congestion along Glendale Ave.
Vision for Downtown

- Preserve ambiance
- Mix of businesses: retail, restaurants, entertainment, services, galleries, farmer’s market, movie theater
- Public park – place to host festivals and events
- Boutique housing
- Pedestrian oriented
How Can Transit Realize This Vision?

- Bring visitors to downtown
- Transport residents to employment
- Alleviate parking issues
- Enhance downtown (art, culture, food)
- Improve quality of life
- Reduce carbon footprint
- Promote greater density of land uses
Topics for More Information

- Economic development benefits of HCT
- Construction impacts on businesses
- Options for future expansion
- Environmental impacts
- Funding
- Statistics on existing mix of restaurants, businesses, etc. in downtown
- Economic outlook for local businesses
West Phoenix/Central Glendale Transit Corridor Study

Wulf Grote
Valley Metro
Future Transit System

[Map showing future transit system with dates and locations highlighted]

LEGEND
- Light Rail Extension
- Streetcar
- Future High-Capacity Transit Corridor For Further Study
- Valley Metro Rail

Note: Dates indicate anticipated calendar year openings
Background

- 2000: Phoenix Transit Tax
- 2001: GO Glendale Transportation Tax
- 2004: Proposition 400
Timeline


Planning  Project Development  Design  Construction  Project Completion
Goal of Planning Study

- Develop a recommendation
- What type of transit?
- Where to locate the route?
Study Process

Purpose
Identify routes that meet the purpose

LEVEL 1
Route
Are we connecting the right places?

LEVEL 2
Type & Route
What types of transit are best for the study area?

LEVEL 3
Type & Route
How do the different types of transit and route combinations compare?

Recommendation
Which type of transit and route are best?

Fewer Alignment Options and More Detailed Analysis Over Time
Public Input throughout Process
## Study Schedule

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<th>2013</th>
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<th>2014</th>
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<th>2015</th>
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Study Area and Transit Service Area
Level 1 Route Alternatives
Level 2 Route Alternatives
Level 3 Route Alternatives

Source: US Census, 2010
Population Density (2030)

Source: Maricopa Association of Governments, 2013
Employment Density (2010)

Source: US Census, 2010
Employment Density (2030)

Source: Maricopa Association of Governments, 2013
Zero and One Car Households

Source: US Census, 2010
Types of Transit

- Commuter Rail
- Light Rail Transit (LRT)
- Streetcar
- Bus Rapid Transit (BRT)
- Rapid/Express Bus
- Local Bus
- Circulator
- Paratransit
# Type of Transit Comparison

<table>
<thead>
<tr>
<th></th>
<th>Light Rail</th>
<th>Bus Rapid Transit</th>
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<tr>
<td><strong>Speed</strong></td>
<td>Higher</td>
<td>Higher</td>
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<tr>
<td><strong>Traffic Lanes</strong></td>
<td>Dedicated</td>
<td>Dedicated or shared</td>
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<tr>
<td><strong>Cost to Build</strong></td>
<td>$80 - $130 million per mile</td>
<td>$40- $70 million per mile</td>
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<tr>
<td><strong>Capacity</strong></td>
<td>200 per car (up to 3 connected)</td>
<td>90 per bus</td>
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<tr>
<td><strong>Cost to Operate</strong></td>
<td>$2.50 - $6.30 per passenger</td>
<td>$2.70 - $8.70 per passenger</td>
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</table>

Source: Valley Metro; August, 2012

*Source: 2010 National Transit Database. BRT data based on typical fixed route bus costs.*
## Estimating Ridership

How many riders are projected to use the new project if built?

<table>
<thead>
<tr>
<th></th>
<th>Glendale Ave</th>
<th>Camelback/ 43rd Ave</th>
<th>Camelback/ Grand/51st Ave</th>
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<tr>
<td>Project miles</td>
<td>5.0</td>
<td>7.0</td>
<td>6.4</td>
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<td>Daily riders (light rail)</td>
<td>5,238</td>
<td>8,249</td>
<td>7,912</td>
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<tr>
<td>Daily riders (bus rapid transit)</td>
<td>2,983</td>
<td>4,691</td>
<td>4,506</td>
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</table>
Economic Development Potential

- Analyzed potential effects on:
  - Land use and development
  - Population, employment and tax revenue
  - Vacant and underutilized properties

![Image of a building]
Economic Development Potential

Key Findings

- All alternatives create growth in employment and property value
- Light rail provides more growth opportunities than BRT
- Camelback options have the greatest positive impact on growth
- Glendale Ave. offers significant redevelopment opportunities
Public Outreach Activities

- 17 events
- 26 presentations
- 19 agency meetings
- 6 public meetings
- 5 surveys
- 73 total activities
Public Input to Date

- Camelback routes most popular
- Connection to Grand Canyon University
- Mixed feedback on Glendale Ave. routes
- Support potential for revitalization
- Concerns about downtown
Next Steps

- Focus on evaluating options in the downtown Glendale area
- CWG to make an advisory recommendation on the downtown options
- Develop a recommendation for the overall route and transit type in Fall 2015 based on planning studies
- Glendale and Phoenix City Councils to take action on a preferred route and transit type in 2016
Key Features of LRT and BRT
Fitting into Constrained Settings
Initial Downtown Routes

Joe Racosky
Valley Metro
Agenda for Presentation

- What is the Study Area context?
- What are key features of light rail transit (LRT) & bus rapid transit (BRT)?
- How do LRT and BRT fit in different settings?
- What are the initial downtown alignment alternatives?
What is the study area context?
Camelback Rd. at 33rd Ave.
Glendale Ave. east of Downtown
Glendale Ave. through Downtown
Palmaire Ave.
Lamar Rd.
Glendale Ave./Grand Ave. with BNSF
Glendale Ave. east of BNSF Railway
What are the key features of LRT & BRT?
LRT Vehicle
BRT Vehicle (Cleveland Healthline)
BRT Vehicle (Ft. Collins MAX)
Passenger Seating – LRT
Passenger Seating – BRT
LRT Station
BRT Station (Cleveland Healthline)
Station Features – Public Art
Station Features – Ticket Vending Machines
Station Features – Emergency Kiosk
Park & Ride at LRT Station
Light Rail Turning Radius
Station Length Comparison

Typical LRT Station

Typical BRT Station

55
How does it all fit in?
How does it all fit in?

Unconstrained conditions
Camelback Rd. – Before

12/8/1999
Camelback Rd. – After
How does it all fit in?

Constrained conditions
Washington St. – Before
Washington St. – After
Central Ave. – Before

12/7/1999
Central Ave. – After
Central Ave. – After
Main St. in Mesa – Before
Main St. in Mesa – After
Main St. in Mesa – Before
Main St. in Mesa – After
LRT in Downtown Tempe
LRT in Downtown Tempe
LRT on a One-Way Couplet

Phoenix
LRT on One-Way Street with Frontage Road

Phoenix

Phoenix
LRT in Street – No Auto Traffic

Dallas
Mixed Traffic Operations

San Francisco
Elevated LRT
LRT in Subway

Portland – under mountain

San Francisco - downtown
Initial Downtown Alignment Alternatives
Downtown Glendale Route Options
Downtown Glendale Route Options

Lamar Rd. & 55th Dr.

Legend:
- Lamar Rd & 55th Dr
- Future Route Options
- Arrows Indicate Direction of Traffic
Downtown Glendale Route Options

Glendale Ave.

Legend:
- **Glendale Ave**
- **Future Route Options**
- [ ] Future Route Option – BRT Only
- ▶◀ Arrows Indicate Direction of Traffic

City Hall

Park

Civic Center

Catlin Court
Historic Residential Neighborhood

East Catlin Court Historic District

Heart of Glendale
Downtown Glendale Route Options

Glenn Dr./Palmaire Ave. & 55th Ave

Legend:
- Glenn Dr/Palmaire Ave & 55th Ave
- Future Route Options
- Arrows Indicate Direction of Traffic
Downtown Glendale Route Options

Palmaire Ave. & 55th Ave

Legend:
- Dark Pink: Palmaire Ave & 55th Ave
- Gray Arrow: Future Route Options
- Black Double Arrows: Arrows Indicate Direction of Traffic

- Catlin Court Historic Residential Neighborhood
- Civic Center
- Heart of Glendale
- East Catlin Court Historic District
Downtown Glendale Route Options

Myrtle Ave./Palmaire Ave. & 55th Ave.
Downtown Glendale Route Options

Glenn Dr./Palmaire Ave. & 51st Ave.
Questions Answered Today

- What will happen throughout the CWG process?
- What is the timetable for the project?
- How will the project be paid for?
- Why downtown Glendale as a terminus?
- How can light rail fit onto Glendale streets?
- How do constraints limit our options?
- What is high capacity transit?
- How is light rail different from bus rapid transit?
- How is express bus service different?
Exercise #2

- Look for colored dot on your agenda to find your group
- Small group discussion to discuss and identify
  - Constraints
  - Opportunities
  - Options
Homework #2

Option 1: Tour downtown Glendale
Option 2: Ride light rail
Note observations, comments, questions
Take photos or mark notes on the maps provided
Return at CWG #3 on July 22 or submit online
CWG Website