Arizona State University
Capital Center Campus

April 28, 2004
Station Location Selection

Marc Soronson,
Planning Manager
Why Did We Select This Corridor First?

- Corridor has highest travel demand
- High demonstrated bus ridership
- Highest employment concentrations
- Good residential base
- High student population
- Corridor contains most special event facilities
Downtown Alignments Considered

- Double-track Central
- One-way Central, One-way 1st Avenue
- One-way Central, One-way 1st Street
- Double-track 1st Street
Evaluation Criteria

- Ridership
- Bus connections
- Accessibility / service to activity centers
- Mobility
- System efficiency
- Engineering constraints
- Community development issues
- Cost
- Community input
Roosevelt & Central
2020 Programmed Bus Service
Roosevelt and Central Station
Van Buren and Central, 1st Ave. and Van Buren Stations
Van Buren and Central Station
1st Avenue and Van Buren Station
Central Station – 2020 Bus Service

**Legend:**
- LRT Alignment
- Curb Where Required
- LRT Station
- Bus Routes 0, 3, 7, 8, 10, 12, 15, 19, 28, 512, 560, 561, 570, Dash

**Preliminary:** Subject to change

**Note:** The Phoenix BRT Plan is currently being developed. Depending upon the plan recommendations, up to 5 BRT routes could operate on Central during the peak periods.

Washington and Central, 1st Avenue and Jefferson Stations

LEGEND

1. Central Station
2. Federal Building
3. Bank One Tower
4. Herberger Theater
5. Phoenix City Hall
6. Renaissance Square
7. Phelps Dodge Tower
8. Symphony Hall
9. County Court House
10. Patriot’s Park
11. Collier Center
12. Maricopa County Complex
13. America West Arena
Washington and Central Station
1st Ave. and Jefferson Station
Washington and Jefferson Station Alternatives

LEGEND
- LRT Alignment
- LRT Station Platform Alternatives
- Federal Building
- Bank One Tower
- Herberger Theater
- Renaissance Square
- Phelps Dodge Tower
- Symphony Hall
- Civic Plaza
- Arizona Science Center
- Renaissance Park Condominiums
- Historic City Hall
- Patriot's Park
- Collier Center
- Maricopa County Complex
- America West Arena
- Bank One Ball Park
- Civic Plaza East Garage
3rd St. and Washington Station
3rd St. and Jefferson Station
### Station Area Planning Process

<table>
<thead>
<tr>
<th>Stage</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Station Locations</strong></td>
<td>Initial</td>
<td>Proposed</td>
<td>Community Development Plan</td>
</tr>
<tr>
<td><strong>Station Area</strong></td>
<td>Identify Neighborhood or Redevelopment Area Plans</td>
<td>Integrate with Community Planning Concepts</td>
<td></td>
</tr>
<tr>
<td><strong>Station Design</strong></td>
<td>Inventory Existing and Future Conditions</td>
<td>Prepare Initial Design Concept for each Station Type</td>
<td>Prepare Design Guidelines</td>
</tr>
<tr>
<td><strong>Bus/Bike/Walkway Connections</strong></td>
<td>Identify Connection Opportunities</td>
<td>Prepare Initial Concepts for each Station Location</td>
<td>Prepare Concept Plans</td>
</tr>
<tr>
<td><strong>Public Involvement</strong></td>
<td>Conduct Community Workshop #1</td>
<td>Conduct Community Workshop #2</td>
<td>Conduct Community Workshop #3</td>
</tr>
</tbody>
</table>
Market Analysis Phase II

“Station Area Development Opportunities and Strategies”
Station by station market analysis

Updated Phase 1 market data including:

- Price and absorption or real estate
- Demographic and economic indicators
- Access and visibility
- Traffic count information
- Existing development activity
Identification of Opportunity Sites

- 70 sites identified for entire study
  - 2 sites for Roosevelt Station
  - 4 sites for Van Buren/Central Station
- Prepared 2 development opportunities for each site (conservative and more aggressive) based on 3 – 5 year horizon
### Definition of Building Prototypes

- **29 prototypes defined, including housing, retail, office, lodging, industrial & mixed use**

- **Used to develop illustrative programming**

#### Building Prototype Matrix

<table>
<thead>
<tr>
<th>Type</th>
<th>Photo/Illustration</th>
<th>Gross Density (du or FAR)</th>
<th>Min. Development Increment (du or sq ft)</th>
<th>Min. Site Area (acres)</th>
<th>Lot or Building Dimension Range (feet)</th>
<th>Unit Size Range (sq ft)</th>
<th>Number of Stories Range</th>
<th>Construction Type</th>
<th>Parking Requirement (TOD)</th>
<th>Parking Requirement (min. &amp; max.)</th>
<th>Parking Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Townhomes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Block</td>
<td></td>
<td>10 to 35 du/acres</td>
<td>8 du</td>
<td>0.25 acres</td>
<td>width: 20' to 40' depth: 45' to 100'</td>
<td>800 to 2,000</td>
<td>1 to 3</td>
<td>wood frame or concrete</td>
<td>NA</td>
<td>2 to 3 per du.</td>
<td>garage (off alley)</td>
</tr>
<tr>
<td>Courtyard</td>
<td></td>
<td>10 to 30 du/acres</td>
<td>12 du</td>
<td>0.4 acres</td>
<td>width: 20' to 40' depth: 40' to 50' green: 30' to 60'</td>
<td>800 to 2,000</td>
<td>1 to 3</td>
<td>wood frame or concrete</td>
<td>NA</td>
<td>2 to 3 per du.</td>
<td>garage (off alley)</td>
</tr>
<tr>
<td><strong>Multi-family housing (2 to 3 stories)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or 6plex w/tuck under parking</td>
<td></td>
<td>20 to 40 du/acres</td>
<td>40 du</td>
<td>1 acre</td>
<td>Building width: 40' to 75' depth: 35' to 45'</td>
<td>750 to 2,000</td>
<td>1 to 2 (within unit)</td>
<td>wood frame or heavy timber or metal frame</td>
<td>Senior: 0.5 bdm. Studio/1 bdm. 1/6 d 2 bdm. 1.5 bdm. 3 bdm. 1.75 bdm.</td>
<td>Senior: 0.6 bdm. Studio/1 bdm. 1/6 d 2 bdm. 1.5 bdm. 3 bdm. 1.75 bdm.</td>
<td>Surface and lock under garages</td>
</tr>
<tr>
<td>Courtyard</td>
<td></td>
<td>30 to 55 du/acres</td>
<td>40 du</td>
<td>0.75 acres</td>
<td>Lot width: 100' to 160' depth: 20' to 160' green: 30' to 60'</td>
<td>750 to 2,000</td>
<td>1 to 2 (within unit)</td>
<td>wood frame or structural steel or concrete</td>
<td>Senior: 0.5 bdm. Studio/1 bdm. 1/6 d 2 bdm. 1.5 bdm. 3 bdm. 1.75 bdm.</td>
<td>Senior: 0.6 bdm. Studio/1 bdm. 1/6 d 2 bdm. 1.5 bdm. 3 bdm. 1.75 bdm.</td>
<td>Surface and lock under garages or structural</td>
</tr>
</tbody>
</table>
“The purpose of this exercise was not to create definitive development plans, but rather to identify a range of development potential for each site that would then be subject to feasibility analysis”
Comparative Financial Feasibility

- Compared the cost of development with the value of the development
- Established baseline financial return for each development prototype
- A second round of refinement based upon initial findings improved and fine tuned the development programming (site plans and uses)
- Evaluated alternative parking configurations for residential uses
Comparative Financial Feasibility - Roosevelt Station Area

- Developments that achieved feasibility
  - Townhomes
  - Multifamily residential (2 to 3 story)
  - Housing over retail (3-4 stories)
  - Live/work townhomes
  - Retail (restaurant, bar, entertainment)
Comparative Financial Feasibility - Van Buren/Central Station Area

- Developments that achieved feasibility
  - Townhomes
  - Multifamily residential (2 to 3 story)
  - Live/work townhomes
- Others tested and not projected feasible
  - Mid-rise office (4 to 6 story)
  - High-rise office (7+ stories)
  - Retail (restaurant, bar, entertainment)
The first tier ranked broader characteristics of the station areas, including:

- Overall system importance
- Need to acquire land
- Size and development potential
- Strength of the market findings
- Specific interests or policy objectives of the cities
The second tier ranked more specific characteristics of the station areas, including:

- Development program feasibility
- Ability to enhance transit ridership
- Neighborhood compatibility
- Ease of property assembly
- Ability to catalyze additional development
- Ability to generate revenues for LRT capital costs
- Contributes to a cities tax revenues
Findings

- The top 12 development sites were defined, illustrated and summarized providing a tool to the cities, neighborhoods and development community

- Roosevelt and Van Buren sites were not in the top 12
Findings (Continued)

Central and McDowell (Site 1)

DEVELOPMENT SUMMARY

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
</tr>
<tr>
<td>Townhomes</td>
<td>63 units</td>
</tr>
<tr>
<td>Multi-Family (2-3 Stories)</td>
<td>149 units</td>
</tr>
<tr>
<td>Housing Over Retail (3-4 Stories)</td>
<td>27 units</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>239 units</strong></td>
</tr>
<tr>
<td>Parking Provided</td>
<td>404 spaces</td>
</tr>
<tr>
<td>Retail</td>
<td></td>
</tr>
<tr>
<td>Specialty Retail (Mixed-Use)</td>
<td>7,200 sf</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,200 sf</strong></td>
</tr>
<tr>
<td>Parking Provided</td>
<td>16 spaces</td>
</tr>
</tbody>
</table>
Findings (Continued)

Rural Road and University (Site 1)

DEVELOPMENT SUMMARY

<table>
<thead>
<tr>
<th>Category</th>
<th>Units/Space</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td></td>
</tr>
<tr>
<td>Multi-Family (2-3 Stories)</td>
<td>276 units</td>
</tr>
<tr>
<td>Multi-Family (4-6 Stories)</td>
<td>162 units</td>
</tr>
<tr>
<td>Housing Over Retail (4-6 stories)</td>
<td>99 units</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>537 units</strong></td>
</tr>
<tr>
<td>Parking Provided</td>
<td>806 spaces</td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td></td>
</tr>
<tr>
<td>Neighborhood Serving Retail (Mixed-Use)</td>
<td>36,900 sf</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36,900 sf</strong></td>
</tr>
<tr>
<td>Parking Provided</td>
<td>111 spaces</td>
</tr>
<tr>
<td><strong>Office</strong></td>
<td></td>
</tr>
<tr>
<td>Mid-Rise (4-6 stories)</td>
<td>128,000 sf</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128,000 sf</strong></td>
</tr>
<tr>
<td>Parking Provided</td>
<td>356 spaces</td>
</tr>
<tr>
<td><strong>Industrial</strong></td>
<td></td>
</tr>
<tr>
<td>Research and Development</td>
<td>74,200 sf</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74,200 sf</strong></td>
</tr>
<tr>
<td>Parking Provided</td>
<td>211 spaces</td>
</tr>
</tbody>
</table>
Findings (Continued)

Mesa Station (Full build-out)

DEVELOPMENT SUMMARY

Residential
- Townhomes .............................................. 41 units
- Multi-Family (2-3 Stories) ......................... 310 units
- Multi-Family (4-6 Stories) ...................... 109 units
- Housing over Retail (3-4 Stories) ........... 109 units
- Total ....................................................... 841 units
- Parking Provided .................................... 1144 spaces

Retail
- Neighborhood Serving Retail (Stand-Alone) .... 36,600 sf
- Neighborhood Serving Retail (Mixed-Use) ...... 112,900 sf
- Community Serving Retail (Stand-Alone) ...... 60,000
- Total ....................................................... 209,500 sf
- Parking Provided .................................... 633 spaces

Park and Ride
- Podium .................................................. 312 spaces
- Deck ..................................................... 446 spaces
- Total ....................................................... 758 spaces