



# **Arizona State University Capital Center Campus**

April 28, 2004

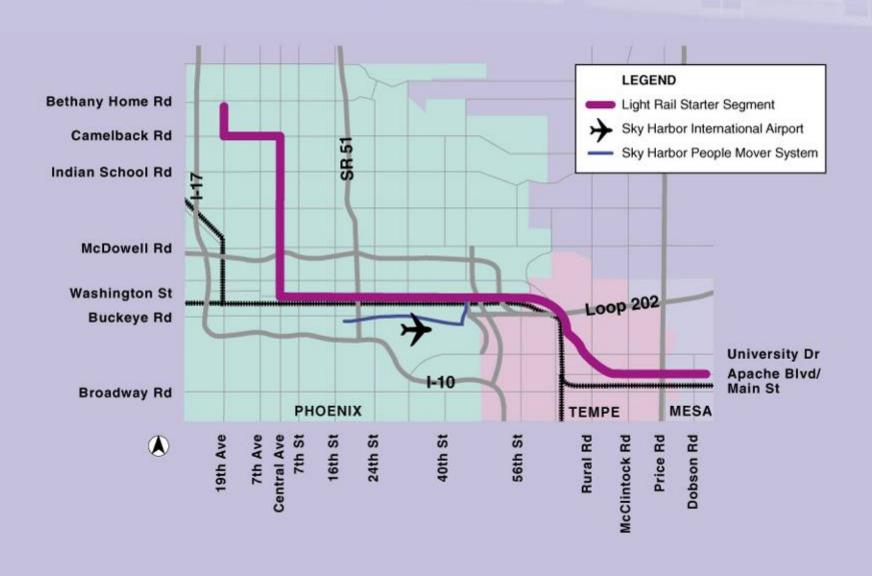


### **Station Location Selection**

Marc Soronson, Planning Manager



### Light Rail Starter Line





### 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



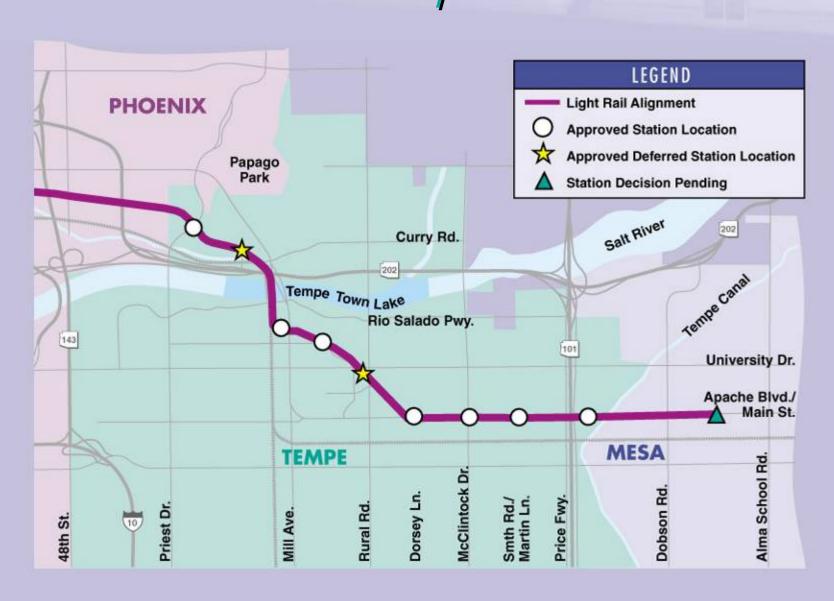


### Light Rail Route & Station Locations Phoenix





## Light Rail Route & Station Locations Tempe & Mesa





### **Downtown Alignments Considered**

- Double-track Central
- One-way Central, One-way 1<sup>st</sup> Avenue
- One-way Central, One-way 1st Stree
- Double-track 1st Street



### **Evaluation Criteria**

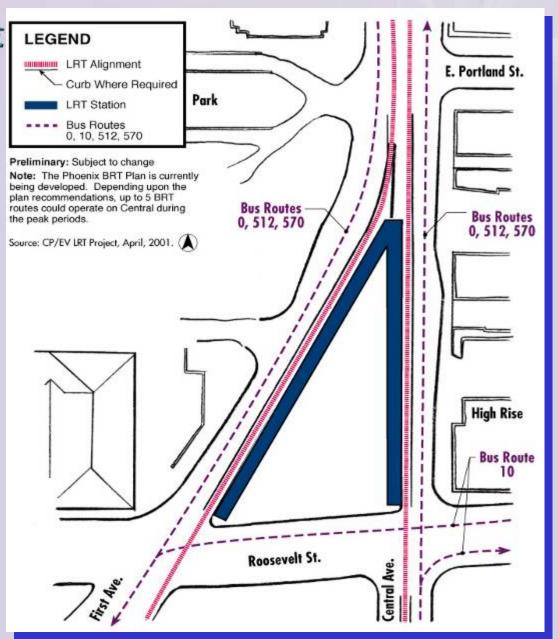
- Ridership
- Bus connections
- Accessibility / service to activity centers
- Mobility
- System efficiency
- Engineering constraints
- Community development issues
- Cost
- Community input



### **Roosevelt and Central Station**







# Roosevelt & Central

2020 Programmed Bus Service

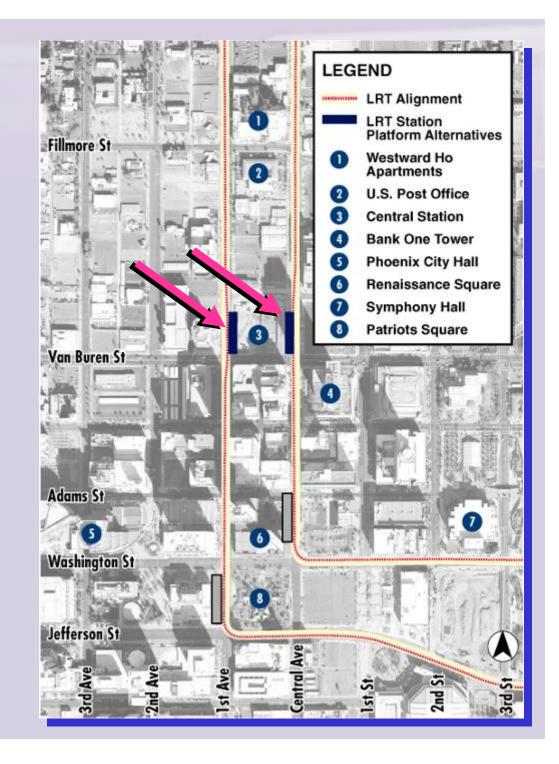


### **Roosevelt and Central Station**





Van Buren and Central, 1<sup>st</sup> Ave. and Van Buren Stations





### Van Buren and Central Station



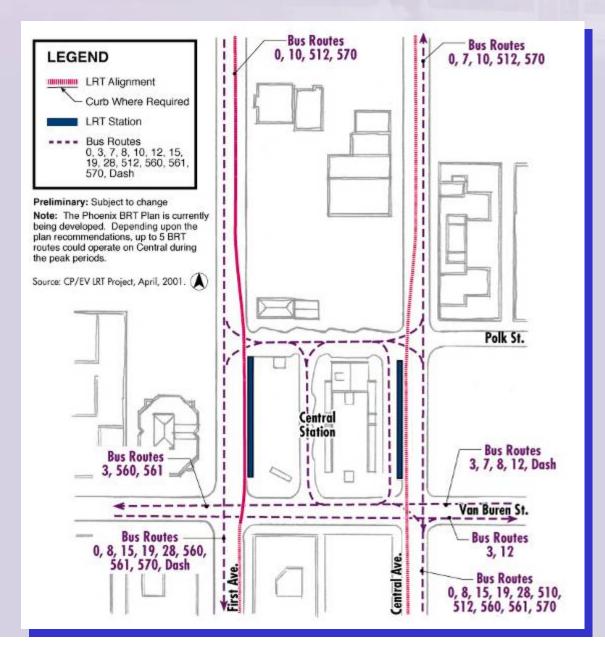


### 1st Avenue and Van Buren Station





### Central Station - 2020 Bus Service





# Washington and Central, 1st Avenue and Jefferson Stations

**LEGEND** 

----- LRT Alignment

Alternatives

Central Station

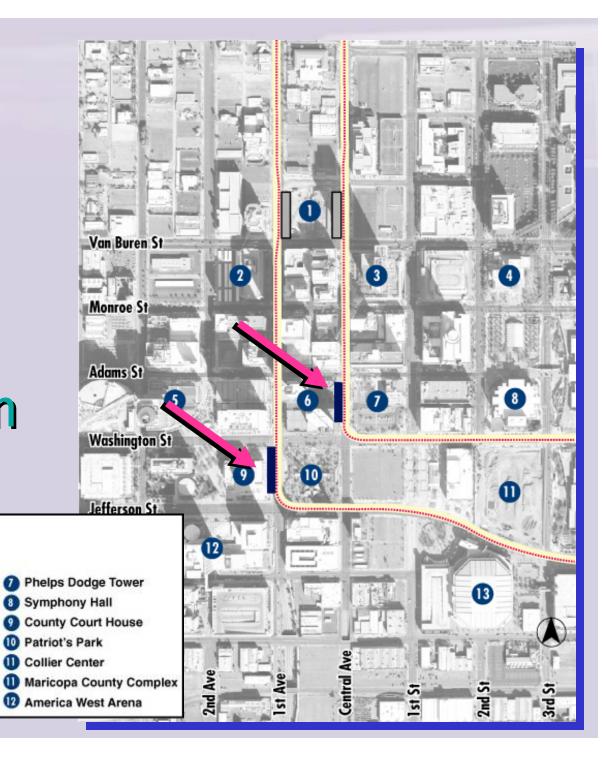
Federal Building

Bank One Tower Herberger Theater

**Phoenix City Hall** 

Renaissance Square

LRT Station Platform



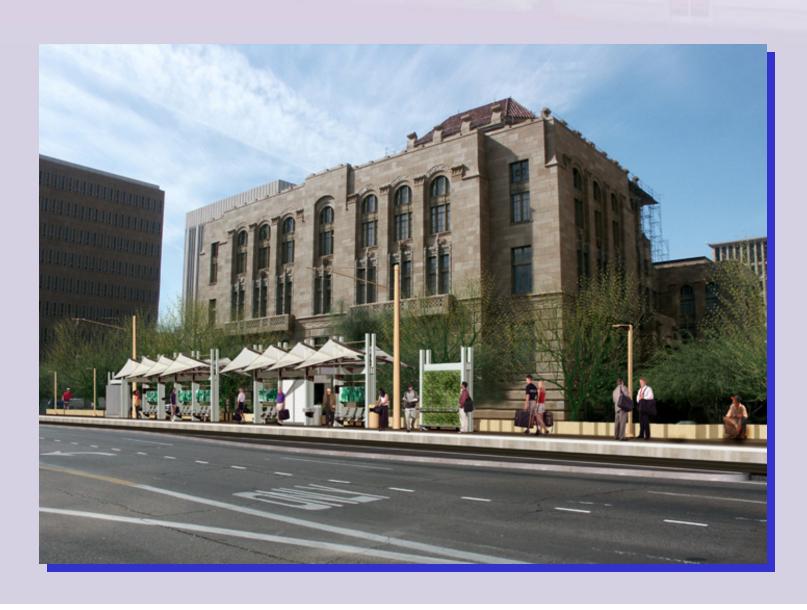


### Washington and Central Station



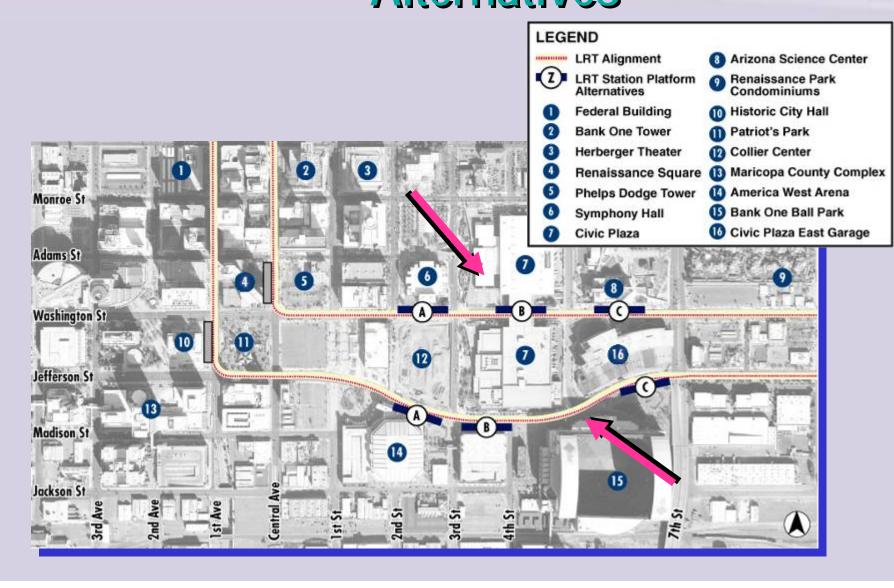


### 1st Ave. and Jefferson Station





### Washington and Jefferson Station Alternatives



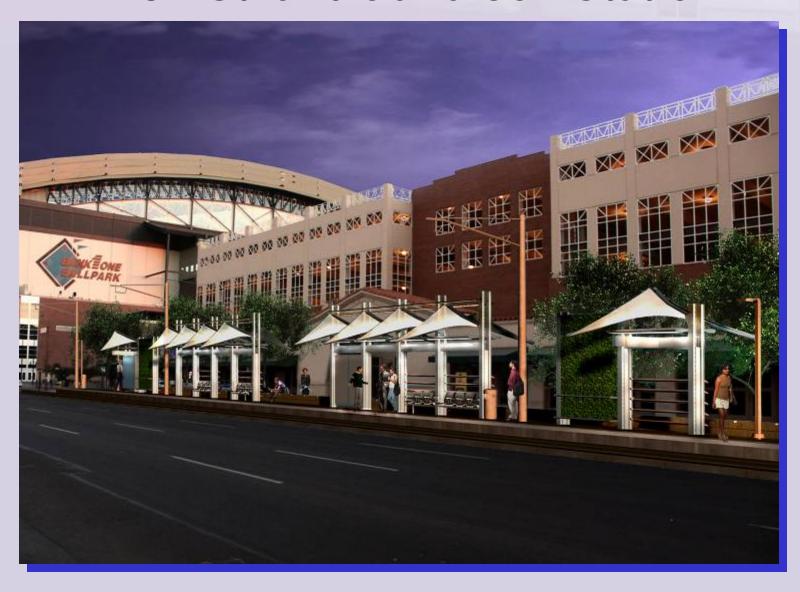


### 3<sup>rd</sup> St. and Washington Station



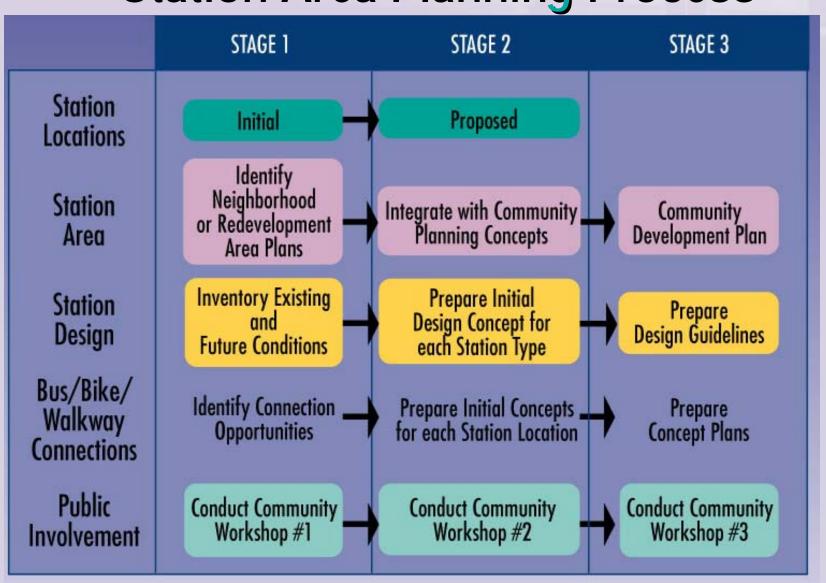


### 3<sup>rd</sup> St. and Jefferson Station





### **Station Area Planning Process**







# 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

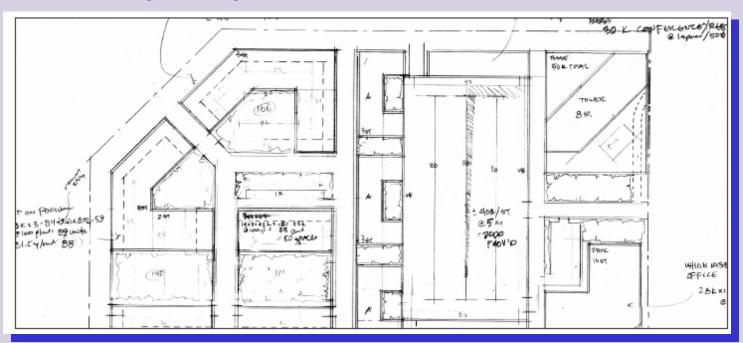
| Туре                                | Photo/<br>Mustration | Gross<br>Density<br>(du/ac or<br>FAR) | Min.<br>Development<br>Increment<br>(du or sq.ft.) | Min.<br>Site<br>Area<br>(acres) | Lot or Building<br>Dimension Range<br>(feet)                          | Unit Size<br>Range<br>(sq. ft.) | Number of<br>Stories Range | Construction<br>Type                             | Parking<br>Requirement<br>(TOD)  | Parking<br>Requirement<br>(min. & max.)                                    | Parking Type                                    |
|-------------------------------------|----------------------|---------------------------------------|--|---------------------------------|---|---------------------------------|----------------------------|--|--|--|---|
| Townhomes                           | OH C                 |                                       |  |                                 |   |                                 |                            |  |  |  |   |
| Standard Block                      |                      | 10 to 35<br>du/acre                   | 8 du   | 025<br>acres                    | width: 20 to 40'<br>depth: 45' to 100'                                | 800<br>to<br>2,000              | 1 to 3                     | wood frame or<br>concrete block                  | NA.  | 2 to 3 per du.   | garage (off allay)                              |
| Courtyard                           | A PLAN               | 10 to 30<br>dufacre                   | 12 du  | 0.4 acres                       | width: 20 to 40'<br>depth: 40' to 50'<br>green: 30' to 60'            | 800<br>to<br>2,000              | 1 to 3                     | wood frame or<br>concrete block                  | NA.  | 2 to 3 per du.   | garage (off alley)                              |
| Multi-family housin                 | n (2 to 3 stories)   |                                       |  |                                 |   |                                 |                            |  |  |  |   |
| 4 or 6 plex w/tuck under<br>perking |                      | 20 to 40<br>du/acre                   | 40 du  | 1 acre                          | Building<br>width: 40 to 75'<br>depth: 35' to 45'                     | 750<br>to<br>2,000              | 1 to 2<br>(within unit)    | wood frame some<br>heavy timber or meta<br>frame | Senior: 0.5/bed<br>Studio/f.bdmr: 1/du<br>2.bdmr: 1.5/du<br>3.bdmr+: 1.75/du | Senior: 0.6/du<br>Studio/1bdmr: 1/du<br>2 bdmr: 1.5/du<br>3 bdmr: 1.75/du  | Surface and buck-under<br>garages               |
| Courty and                          |                      | 30 to 55<br>du/acre                   | 40 du  | 0.75<br>acres                   | Lot<br>width: 100 to 160'<br>depth: 120' to 160'<br>green: 30' to 60' | 750<br>to<br>2,000              | 1 to 2<br>(within unit)    | wood frame some<br>structural steel or<br>conc.  | Senior: 0.5/bed<br>Studio/fibdm: 1/du<br>2 bdm: 1.5/du<br>3 bdm: 1.75/du     | Sentor: 0.6/du<br>Studio/fbdm: 1.25/du<br>2 bdm: 1.5/du<br>3 bdm+: 1.75/du | Surface and tuck-under<br>garages or structured |

BUILDING PROTOTYPE MATRIX



### **Illustrative Development Programming**

 "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)



# Ranking of Station Areas and Opportunity Sites

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



# Ranking of Station Areas and Opportunity Sites

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



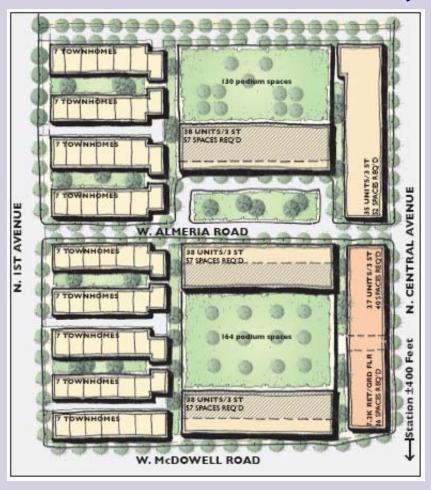
### **Findings**

- 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

| Residential                       |            |
|-----------------------------------|------------|
| Townhomes                         | 63 units   |
| Multi-Family (2-3 Stories)        | 149 units  |
| Housing Over Retail (3-4 Stories) | 27 units   |
| Total                             | 239 units  |
| Parking Provided                  | 404 spaces |
| Retail                            |            |
| Specialty Retail (Mixed-Use)      | 7,200 sf   |
| Total                             | 7,200 sf   |
| Parking Provided                  | 16 spaces  |



### Findings (Continued)

Rural Road and University (Site 1)





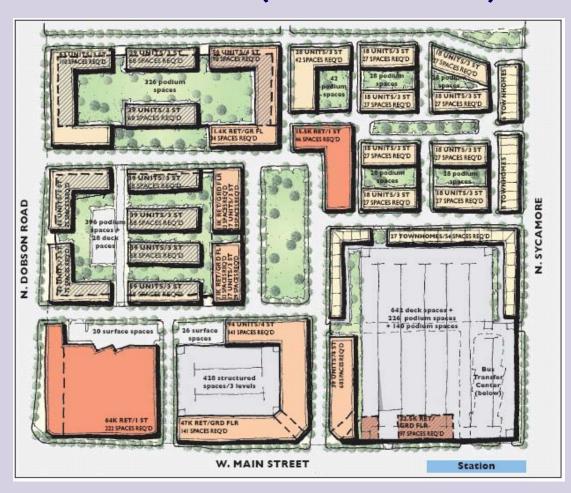
| DEVELOPMENT SUMMARY                                    |
|--|
| Residential       Multi-Family (2-3 Stories)           |
| Retail         Neighborhood Serving Retail (Mixed-Use) |
| Office   |
| Mid-Rise (4-6 stories)128,000 sf                       |
| Total128,000 sf  |
| Parking Provided356 spaces                             |
| Industrial   Research and Development                  |



### Findings (Continued)

Park and Ride

#### Mesa Station (Full build-out)





......312 spaces ......446 spaces .....**758 spaces** 

