

Wiehle Avenue and Reston Parkway Station Access Management Study
Traffic and Roadway Issues
May 17, 2007

Many of the roadways in and around the Reston Avenue and Wiehle Avenue station areas are currently experiencing congestion problems, not only during weekday commuting periods, but also during mid-day and weekend periods. Natural traffic growth due to increasing population and employment in the region, as well as in the study area, can be expected to exacerbate this situation in the future.

The large planned parking garage at the Wiehle Station will attract transit related park and ride users, which while an inducement to use the Metrorail system, will create an added peak surge of traffic in the Wiehle station area.

Bus service in and around the station areas is currently subject to the same congestion as automobiles, which can discourage bus usage and inhibit transit mode share.

Apart from these traffic challenges, our profile of existing conditions reveals an inadequate network of facilities for non-motorized modes – both pedestrian and bicycle.

The overall transportation infrastructure environment is constrained by available right-of-way and existing development patterns. In effect, users of all modes are competing for limited space. There is not enough capacity for autos, buses, pedestrians and bicyclists to all operate under “free flow” conditions in the station areas.

Finally, modal operations are interrelated and improvements to one mode, e.g., additional travel lanes, can have a negative effect on pedestrian and bicycle travel.

As redevelopment takes place, opportunities may arise to modify and enhance the roadway networks around the two stations. This could include new roadways to provide connections that do not now exist and enhancements to existing roadways. Potential roadway design elements could include:

- Pedestrian facilities
- Bicycle lanes
- Landscaped medians
- On-street parking
- Grade-separation of major intersections
- Dedicated bus lanes
- Additional auto travel lanes
- Wide streetscaped sidewalks

ROADWAY VISION

As the study team moves forward with development and evaluation of improvement alternatives, it is critical that an overall vision for the station areas be agreed upon. For example, it may be argued that the vision for the station areas is one that provides ready and safe access for bus and non-motorized modes, even at the expense of auto traffic.

Issue 1: Trade-offs between modes in station influence areas

Which modes should have priority?

- Auto
- Pedestrian/bicycle
- Bus
- Kiss and ride

Considerations:

- Expanded intersections can be detrimental to non-motorized mobility
- Bus priority and/or dedicated bus lanes
- Access to the Wiehle parking garage
- Kiss and ride access

Issue 2: Roadway design vision for influence areas

What should the local road system look like?

- Wiehle Avenue
- Reston Parkway
- Sunset Hills
- Sunrise Valley
- Local streets
- Driveways

Considerations:

- Expanded local grid system can improve access
- New connector roads across DIAAR (e.g., Soapstone Connector, Town Center Parkway – Edmund Halley connection)
- Desirable cross-sections by roadway type
- Multiple driveways/access locations
- Streetscaping elements
- Road diets