3.0 LOCATION ANALYSIS

In 2001, the City of Glendale Transportation Plan was prepared and adopted by the City Council. This plan was developed with the assistance of a 61-member committee appointed by the City Council with representation from throughout Glendale. The committee was referred to as the Citizens Advisory Committee for Transportation Issues or CACTI. In November 2001, the voters of Glendale passed a one-half-cent sales tax to fund a variety of transportation projects throughout the city that were derived from this plan.

Northern Avenue improvements were first suggested by members of CACTI during the development of the plan. Members of CACTI were concerned that the existing planned freeway and arterial system would not meet the needs of increased east/west travel across the core of the urban area. The Paradise Parkway, proposed as part of the original regional freeway program in 1985, was dropped from the program due to funding constraints and adverse impacts to existing developed areas. CACTI members suggested improvements to an appropriate east/west arterial corridor in Glendale resulting in a “parkway” with wider setbacks, more non-vehicular amenities, additional carrying capacity, and a higher degree of access control. The ballot measure approved in 2001 included major improvements to the Northern Avenue corridor and referred to it as a “super street.”

The Northern Avenue improvements are included in the regional transportation plan (RTP) prepared by MAG (the Metropolitan Planning Organization for the Greater Phoenix Metropolitan Area) and adopted by the MAG Regional Council on November 25, 2003. This was the basis for Proposition 400 approved by the voters of Maricopa County in November 2004. Proposition 400 extended the countywide half-cent sales tax to help fund the projects included in the MAG RTP including the Northern Avenue improvements.

3.1 SELECTION OF NORTHERN AVENUE CORRIDOR

The location for the corridor was originally selected by the CACTI committee and included in the Transportation Plan. The Purpose and Need included in Section 1.3 of this DCR includes information considered in this selection. In summary, Northern Avenue was chosen for special “super street” consideration because of the following reasons:

- Northern Avenue is one of only five continuous east-west arterials that extend from Grand Avenue to SR 303L/Estrella Freeway (Loop 303) and is one of the only two in the City of Glendale.
- Northern Avenue is the most centrally located between I-10 and Bell Road/SR 101L.
- Northern Avenue is a boundary street between Glendale and Peoria and between Glendale and El Mirage.
• Northern Avenue has less developed abutting property than other corridors.
• Glendale Avenue ends at Luke AFB (Litchfield Road) and does not continue through to SR 303L.
• Bethany Home Road is not continuous west of SR 101L/Agua Fria Freeway (Loop 101).
• Camelback Road is not centrally located between I-10 and Bell Road/SR 101L and adjacent land is more heavily developed.

Early in the study phase for this project, other alternative locations were considered. In particular, Olive Avenue (one mile north of Northern) was considered because it also extends from Grand to Loop 303, is a MAG Road of Regional Significance, and serves the White Tank Mountain Regional Park.

It was found that Olive Avenue has more intensively developed abutting property than Northern Avenue. Olive passes through the cities of Peoria and El Mirage rather than serving as a city boundary street as Northern does. A grade separation has been constructed for Olive Avenue at Grand Avenue/75th Avenue to facilitate east-west travel to I-17 but not from Olive to Grand. Connections between Olive and Grand or 75th avenues are less direct and very difficult to improve. Olive does not connect eastward to SR 51 (ends at Cave Creek Road). Accordingly, Northern Avenue was kept as the study corridor for the major “super street” project.

Like Northern Avenue, Olive Avenue will play a major role in the road system since it is one of few continuous roads (Bell Road is 5 miles north of Olive Avenue). Both Olive and Northern avenues should be upgraded to the maximum extent practical to serve the rapidly developing western portion of the metropolitan area.

3.2 ALTERNATIVE ALIGNMENTS FROM LOOP 303 TO DYSART ROAD

As the development of Northern Parkway progressed, Luke AFB expressed concern regarding the placement of an elevated grade separation structure at Northern Avenue and Litchfield Road due to its proximity to the end of the runways. Northern Avenue forms the northern boundary of Luke AFB west of Litchfield Road. The northern ends of the runways are near Northern Avenue. Representatives from Luke AFB requested consideration of moving Northern Parkway north of Northern Avenue to avoid potential conflicts with the flight path. At about the same time, MCDOT was conducting a study on Loop 303 including a connection to Northern Parkway. Based on the Luke AFB concern and the development of Loop 303, alternative alignments were developed between Loop 303 and Dysart Road.

Studies were performed and are documented in a Technical Memorandum dated June 28, 2004. The memorandum is included in Appendix A. Several alternative alignments were considered and evaluated and discussed with the stakeholder committee. The alignment chosen through this
process departs from the Northern section line west of Dysart Road, curves northward to the Butler mid-section line at Litchfield Road and generally follows the mid-section line westward to Loop 303. The basis for this selection is documented in the memorandum. The alternative alignments considered are summarized in Figure 3-1.

3.3 SOUTHERN ALTERNATIVE ALIGNMENT

At the public meeting held June 1, 2005, suggestions were made to consider an alignment that departed from Northern Avenue section line to avoid affecting existing neighborhoods between 103rd and 112th avenues. The suggestion was to align the future roadway south through undeveloped property from Dysart Road to 91st Avenue.

Alignments were sketched on aerial photography and field trips were made to view the activities in the general corridor. Any alignment north of Glendale Avenue would go through a major landfill and the police and fire training facility. Also, the Luke AFB wastewater facility located on the northeast corner of Glendale Avenue and El Mirage Road is a major obstacle to alignments north of Glendale Avenue. The Glen Harbor Industrial Park would also be adversely impacted by an alignment north of Glendale Avenue. Accordingly, it was determined that the only feasible alignment would have to lie on and south of existing Glendale Avenue between Glen Harbor Boulevard and El Mirage Road.

A graphical alignment was developed to determine feasibility and to provide a basis for determination of whether there were fatal flaws. Because the alignment would require motorists to travel considerable out of direction and most of the right-of-way would have to be purchased, it appears that the only logical concept for a roadway on this alignment is a fully access controlled grade separated highway. This potential roadway would extend from Loop 101 to Loop 303 and would have fully directional interchanges with both urban freeways. The alignment is shown in Figure 3-2.

The Southern Alignment has the advantage that it would avoid adjacency to several neighborhoods that abut Northern Avenue between 112th and 103rd avenues. Although only one house would be taken along the Northern Avenue alignment, the proximity of the proposed parkway to the neighborhoods has raised some concern among some residents regarding noise, air pollution and safety. The Southern Alignment would place the new parkway approximately 0.5 mile south of the nearest residential neighborhood.
FIGURE 3-1

ALTERNATIVE ALIGNMENTS CONSIDERED

Northern Parkway - Loop 303 to Grand Avenue

Alternative A Concerns
- Cuts diagonally through property
- Out of direction travel
- Deserves Loop 303 Northern Service Interchange with parkway interchange

Alternative B Concerns
- BNSF Railroad track along Olive Avenue
- Steep angle crossing at Litchfield Road
- Out-of-direction travel
- Combines Loop 303/Olive Avenue service interchange with parkway interchange

Alternative C Concerns
- Cuts diagonally through property
- Out of direction travel
- Combines Loop 303 Northern Service Interchange with parkway interchange

Critical Alternative Concerns
- Too close to Luke runways
- Parkway traffic volumes exceed Loop 303 interchange

Southern Alignment Concerns
- Very expensive
- Does not allow construction phasing
- Cuts diagonally through property with high development potential
- Alignment in Glendale Airport RPA
- System interchange at Loop 101 would require extensive modifications to Loop 101 and Glendale Avenue and northern Avenue ramps
- Out-of-direction travel
- Requires a bridge section
The Southern Alignment has the following disadvantages when compared to the Northern Avenue alignment.

- The cost of the Southern Alignment is approximately $100 million more than alignments along Northern Avenue.
- Due to the cost and freeway-nature of the Southern Alignment, revision to the MAG RTP may be required. Major changes would be needed to the current program.
- Due to out-of-direction alignment, larger segments need to be constructed together and some traffic may not be able to utilize the entire completed portion of the project.
- Property acquisition for the alignment would likely be difficult due to the property ownership.
- The alignment would lie in the Glendale Airport northern runway protection zone (RPZ) and would require special design features such as depressing the roadway and special lighting to minimize conflict with the flight path.
- The alignment would impact a groundwater recharge facility located in the Agua Fria River south of Glendale Avenue.
- The system interchange at Loop 101 would be between two existing service interchanges at Glendale and Northern avenues. Modifications to these existing interchanges would be needed and the system ramps would have to be braided with the service ramps. The new system interchange could adversely affect traffic flow on Loop 101 and as a minimum would require adding lanes and major modifications to Loop 101.

Because there is some specific public interest in the Southern Alignment, the concept was developed further and evaluated on an equal basis as the Northern Avenue alternatives in Chapter 4 of this report and through the environmental assessment process.