APPENDIX VI
MOBILITY

Traffic Volumes

The following tables represent average daily traffic volume counts per year on specified roadways.

Table 8.1

EAST-WEST TRAFFIC VOLUMES							
Street	**1996**	**1998**	**2000**	**2002**	**2004**	**2006**	**% Change 1996 to 2006**
McDonald							
W. of Hayden	15,800	16,600	22,200	19,800	20,700	21,000	32.9%
Chaparral							
W. of Hayden	16,000	18,200	18,600	20,900	19,400	18,900	18.1%
Camelback							
W. of Hayden	22,000	19,300	21,700	21,400	21,800	20,300	-7.7%
Indian School							
W. of Hayden	28,200	24,500	36,200	36,600	30,900	41,600	47.5%
Thomas							
W. of Hayden	30,500	33,200	32,000	29,100	30,900	34,200	12.1%
McDowell							
W. of Hayden	48,100	39,200	33,000	37,200	35,200	34,400	-28.5%

Source: City of Scottsdale Transportation Department December 2008.

Table 8.2

NORTH-SOUTH TRAFFIC VOLUMES							
Street	**1996**	**1998**	**2000**	**2002**	**2004**	**2006**	**% Change 1996 to 2006**
Scottsdale (6 lanes)							
N. of McDowell	57,400	54,000	51,900	45,500	42,300	44,700	-22.1%
N. of Indian School	38,600	35,300	28,500	25,000	26,200	24,400	-36.8%
Hayden (6 lanes)							
N. of McDowell	59,100	50,600	30,500	27,000	32,200	30,300	-48.7%
N. of Indian School	63,400	63,200	41,700	30,000	33,200	29,500	-53.5%
Pima (2 lanes)							
N. of McDowell	26,000	7,500	3,000	6,100	4,600	4,900	-81.2%
N. of Indian School	31,600	19,200	5,400	7,600	9,600	12,300	-61.1%

Source: City of Scottsdale Transportation Department December 2008

Future Improvement Projects

The following Future Projects were identified in the 2008 Transportation Master Plan, and apply to the Southern Scottsdale area..

Pedestrian and Bicycle Enhanced Street
There are no off-street corridors south of McDonald Drive that can easily be used for east-west pathway connections. Several streets provide conditions that may allow for a significant improvement to the pedestrian and bicycle facilities along them. These streets are primarily half-mile collectors between the major arterials. They include: Roosevelt, Belleview, Oak, Osborn, Chaparral, and Jackrabbit. No specific recommendations are being made at this time but improvements could include wide sidewalks, bike lanes, shared-use paths, additional shade, and traffic calming. A detailed plan for each street would be developed with significant input from residents and businesses along each of the corridors.

Streetscape Projects/ Roadway Capacity Projects
Scottsdale Road – This project is to design and construct a six-lane major arterial cross-section along Scottsdale Road with landscaped median, turn lanes, bike lanes, sidewalks, curb and gutter, roadway drainage, and intelligent transportation system facilities.
Indian Bend Road – This project intention is to construct Indian Bend Road into a four-lane minor arterial with landscaped median, turn lanes, bike lanes, curb and gutter, new all-weather crossing of Indian Bend Wash and sidewalk on south side. A new multi-use path will be installed on north side to connect the Indian Bend path system to McCormick Railroad Park. Additional turn lanes will be constructed at the Scottsdale Road and Hayden Road intersections.

Pima Road – expand roadway to five lane section with turn lanes and sidewalk, coordinate with Salt River, Pima, Maricopa Indian Community (SRPMIC).

Transit Improvement Projects
The future transit improvement projects adopted in the 2008 Transportation Master Plan for the South Scottsdale CAP area are provided in Table 8.7 below.

Table 8.7: Short term Transit Improvement Options

SHORT TERM TRANSIT IMPROVEMENT OPTIONS				
			Headway	
Route	**Name**	**Improvement**	**Existing (Peak/Off-Peak)**	**Short Term (Peak/Off-Peak)**
Fixed Route Bus				
17	McDowell	Increase service frequency between 44th St and Scottsdale Road	30/30	15/30 to Scottsdale Road
Green	Thomas	Increase service frequency between 44th St and Scottsdale Road	20/30	10/20 to Scottsdale Road
41	Indian School	No change	15*/30	No Change
50	Camelback	Increase service frequency and service span between 44th St and Scottsdale Road	15/30/60	15/30 to Scottsdale Road
72	Scottsdale	Extend route to Thompson Peak Parkway and increase service frequency	15/30	15/15
76	Miller	No Change	30/30	No Change
81	Hayden	No Change	15/30	No Change
84	Granite Reef	Extend route north on Pima Road/92nd St to Via Linda and combine with Route 114. Increase service frequency and service span.	60/60	30/30
Neighborhood Circulator				
DT	Downtown Trolley	No Change	10	No Change
NC	Neighborhood Connector	Extend route to serve Skysong Transit Center	20	No Change

Source: HDR | S.R. Beard & Associates, 2007.

Future High Capacity Transit Improvements

The Regional Transportation Plan (RTP) includes funding for arterial bus rapid transit (BRT) on Scottsdale Road in 2016. The design and implementation of arterial BRT will be the subject of further regional study. In the interim, BRT funding could be used for the enhanced bus routes described in the previous section. The funding levels of the BRT is more akin to enhanced bus service.

Future Neighborhood Circulator Improvements
The mid-term planning horizon includes enhancements and expansions to the existing Neighborhood Circulator. Neighborhood Circulators will be considered for use in non-grid areas and in areas where urban development makes typical Fixed Route service cumbersome. Potential areas of use include residential areas north and east of Downtown, Indian School Park, McCormick Ranch, McDowell Mountain Ranch, Chaparral Park, DC Ranch, and in the area of Shea and 132nd Street. The specific routing has not been identified, and will be dependent on a public involvement process similar to other trolley improvements. Circulators will also be considered to replace Fixed Route service on routes that are deemed easier and more cost effective to operate as Circulators. No changes are proposed to the Downtown Trolley other than to make schedule and route adjustments, as needed.

Future Paratransit Improvements
The mid term transit improvement option includes the gradual expansion of paratransit services available in Scottsdale through the East Valley Dial-a-Ride. The East Valley Dial-a-Ride allows for a single service area and provides services for ADA-certified passengers, seniors, and passengers with disabilities. Dial-a-ride service will need to be expanded as new fixed route service is added in Scottsdale. ADA requires that complementary paratransit service be provided in all areas within three-fourths of a mile of fixed route bus service. It is not recommended that Scottsdale expand the Dial-a-Ride service area beyond what is required by ADA. Additional paratransit service would be more effectively provided through the expansion of the Cab Connection program.

Future Transit Facilities Improvements/Additions
The mid term transit improvement option includes a second regional park-and-ride, three HOV direct access connections in the Loop 101 corridor, and general passenger facility improvements.

Loop 101 HOV Direct Access (Scottsdale Community College)

A third full HOV direct access interchange is proposed in the median of the Loop 101 to serve Scottsdale Community College (SCC). This location will allow Loop 101 express bus service to provide efficient transfer opportunities to Downtown Scottsdale from SCC without having to deviate from the Loop 101 corridor. SCC will be served by Routes 41, 50, 76, and 84 as well as the East Loop 101 Connector and the Pima Express. There are two potential options:

- Construct a new HOV direct access connection at Jackrabbit Road with ramps to the north and south; or
- Construct a new HOV direct access connection at Camelback Road with ramps to the north and south.

Both of these options provide direct access to SCC and Pima Road and will require participation from the Salt River Pima-Maricopa Indian Community (SRPMIC).

High Capacity Transit

The long term transit improvement option could include the implementation of high capacity transit (HCT) in the City of Scottsdale. Several alignment options have been discussed for the South Scottsdale CAP area. The HCT technology for this corridor has yet to be determined and could range from bus rapid transit (BRT) to modern streetcar or light rail transit (LRT). It could also include a combination of technologies throughout the corridor. Potential HCT alternatives will be the subject of further study.

A conceptual level of discussion regarding HCT is included in Section 8.0 of the Transit Element. This discussion does not evaluate HCT alternatives, but rather discusses some of the opportunities and constraints of HCT alignments and technologies.

High Capacity Transit Alternatives

Potential high capacity transit (HCT) alternatives for the City of Scottsdale will be the subject of further study. In the meantime, this section includes a conceptual level of discussion regarding HCT. This discussion does not evaluate HCT alternatives, but rather discusses some of the opportunities and constraints of HCT alignments and technologies.

High Capacity Transit Technologies

Light rail transit (LRT), modern streetcar, and bus rapid transit (BRT) are the transit technologies that have been previously identified for implementation in Scottsdale. A brief overview of each of these technologies is described below.

Future Pedestrian and Bicycle Projects

The Transportation Master Plan recommends that all sidewalks and walkways shall provide a minimum of 6 feet travel space to accommodate pedestrians using assistive devices. This minimum width does not include additional space that may be required to accommodate landscaping and site furnishings where appropriate. This is intended to ensure compatibility with the recommendations of the Transportation Master Plan's Pedestrian Element and the Universal Design principles contained therein. The following listing incorporates the character types of rural, suburban, and urban as well as the pedestrian route network identification from the Pedestrian element:

- Sidewalks and walkways must provide a minimum travel space of 6 feet for rural areas identified on the pedestrian route network maps as low and medium low. A trail could replace a sidewalk or walkway in rural areas identified on the pedestrian route network maps as low.
- Sidewalks and walkways must provide a minimum travel space of 8 feet for suburban areas identified as medium or medium high.
- Sidewalks and walkways must provide a minimum travel space of 10 feet for suburban areas identified as high.
- Sidewalks and walkways must provide a minimum travel space of 10 feet for urban areas, except in urban areas identified on the pedestrian route network maps as high, where a minimum travel space of 12 feet must be provided.

Planned Pedestrian Improvements

The projects listed in Table 8.8 list the pedestrian improvements contained in the City of Scottsdale's Capital Improvement Program FY 2008-2012 (CIP). This list does not encompass all pedestrian or bicycle facility improvements that are planned as many improvements also occur with transit projects and in private developments.

Table 8.8: Southern Scottsdale Planned Roadway, Bicycle, and Pedestrian Improvements

Southern Scottsdale Planned Roadway, Bicycle, and Pedestrian Improvements

Project/Street	Project Description	Estimated Completion
74th St., Belleview to McDowell Road.	Improve pedestrian environment; add on-street parking.	Completed in 2007
Cross Cut Canal Shared-use Path System	Completion of the path system from the Tempe border to Indian School Road.	2008 (underway)
Indian Bend Road, Scottsdale to Hayden	Construct to four-lane minor arterial standards with landscaped median, turn lanes, bike lanes, curb and gutter, new all-weather crossing of Indian Bend Wash and sidewalk on south side. A new multi-use path will be installed on north side to connect the Indian Bend path system to McCormick Railroad Park. Additional turn lanes will be constructed at the Scottsdale Road. and Hayden Road. intersections.	2008 (underway)
Indian Bend Wash Shared-use Path System	Redesign and widen the Indian Bend Wash multiuse path system to 10-12 feet in areas where the path is currently 8 feet wide between McDowell and Camelback Roads. Improvements to existing grade-separated crossings and improved connections from side streets will also be considered.	2011
Indian School Road., Drinkwater Blvd. to Pima Road.	Construct driveway closures, new turn lanes, bus bays, and a landscaped median to maximize through capacity in the existing four travel lanes, relocate and widen sidewalks, where feasible, and add bike lanes.	2008 (underway)
McDonald Dr., Scottsdale Road. to 78th St.	Reconfigure and add turn lanes at McDonald/Scottsdale Road. and McDonald/78th St. Enhance pedestrian features in between the Arizona Canal and	Completed in 2008

Southern Scottsdale Planned Roadway, Bicycle, and Pedestrian Improvements

Project/Street	Project Description	Estimated Completion
	Miller/Cattletrack Road.	
McDowell Road., Scottsdale Road. to Granite Reef Road.	Add bicycle lanes and enhance sidewalks; add landscaping, site furnishings and pedestrian lighting.	2010
Scottsdale Road. between Roosevelt St. to Earll Dr. (Phase 1), and Earll Dr. to and Chaparral Road. (Phase 2)	Add bicycle lanes and widen sidewalks. Landscaping, shade, site furnishings, pedestrian lighting and crosswalk treatments will also be included.	2009 (underway)
Thomas Road., 64th St. to Pima Road.	Add bicycle lanes and widen sidewalks; add landscaping, shade and site furnishings. Consider additional turn lanes at intersections.	2010 (underway)

Source: City of Scottsdale Transportation Department