

Table 8 Scottsdale Airpark Improvement Opportunities Direct Connection to Loop 101					
Concept	Existing Conditions	Concept Description (Cost Estimate, if available)	Screening and Evaluation		
			Benefits	Impacts	
<p>STR-10 Northsight Boulevard/Thunderbird Road</p>	<p>The Airpark has neither a continuous internal circulatory roadway nor a central spine, making connection between the Airpark and Loop 101 via a free flow ramp operation difficult. However, there are opportunities for either a High Occupancy Vehicle (HOV) or general purpose ramp at both the Northsight Boulevard and Hayden Road interchanges that would improve access to the Airpark.</p> <p>Features of Northsight Boulevard/Thunderbird Road are:</p> <ul style="list-style-type: none"> • There is a west-side frontage road parallel to Loop 101 and connecting the Northsight Boulevard overpass with the Raintree Drive interchange. • Nearest interchanges are less than ¼ mile north at Raintree Drive and one mile south at Cactus Road. • The east/west street crossing Loop 101 is Thunderbird Road. West of Loop 101, Thunderbird Road curves into Northsight Boulevard. <p>The <i>Regional Transportation Plan</i> includes:</p> <ul style="list-style-type: none"> • Addition of both a general purpose lane and a HOV lane in each direction of Loop 101. • The planned Loop 101 HOV lane will provide for Bus Rapid Transit service, thus providing bus and car pool access. 	<p>A. New southbound general purpose ramps from Northsight Boulevard/Thunderbird Road and add new HOV direct access connection to the existing Raintree Drive interchange with ramps to the north and south.</p> <p>B. Construct a new HOV direct access connection at Northsight Boulevard/Thunderbird Road with ramps to the north and south (Figure 1). (\$53,900,000)</p> <p>C. Construct a pair of HOV direct access ramps from the south leg of Loop 101 to Thunderbird Road. (\$16,500,000)</p> <p>D. A pair of ramps could be added to the south leg of the Northsight Boulevard/Thunderbird Road overpass on Loop 101 to create a half diamond freeway interchange.</p>	<p>The <i>Regional Transportation Plan</i> improvements will increase both vehicular and transit capacity for travelers to reach the Airpark/Airport area.</p> <ul style="list-style-type: none"> • Concepts STR-10 (A), (B), (C) and (D) will increase and improve access to the eastern and western sides of the Airpark. • Concepts STR-10 (A), (B), and (C) would add travel time savings for transit/carpools in off-peak and additional general purpose capacity in the off-peak. • Concepts STR-10 (A), (B), (C) and (D) would add capacity to the south Loop 101 Airpark connections. 	<p>Concept STR-10 (A) and (D) would be very difficult to implement due to the right-of-way constraints in the southwest quadrant of the proposed interchange.</p> <ul style="list-style-type: none"> • The southbound on-ramp would have to change grade from the Thunderbird Road overpass to the elevation of the depressed freeway and merge into the southbound auxiliary lane. • Vehicles accelerating down the ramp may cause a noise impact to the adjoining residential parcels. 	Notes