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1.0 INTRODUCTION

The Northwest Sun Cities Transit Implementation Plan was initiated in December 2018 to develop a comprehensive understanding of the transportation needs of the unincorporated communities of Sun City and Sun City West. The product of developer Del E. Webb, Sun City and Sun City West are Census Designated Places (CDP) and retirement communities designed for active adults 55 years and older. Located approximately 20 miles northwest of downtown Phoenix, the communities have a combined population of 64,085 as of 2017. This plan will determine the demand for transit services in the Northwest Sun Cities and identify service concepts that meet the unique needs of the community. This technical memorandum documents existing conditions in the study area and includes a review of previous studies, an analysis of demographics, identification of activity centers, an inventory of existing transit services and performance, and a summary of transit survey results. Each of these components is explored in detail in the following sections.

The project study area is illustrated in Figure 1.
Figure 1. Study Area
2.0 REVIEW OF PREVIOUS STUDIES

A review of previous studies was conducted to identify recommendations relevant to the Northwest Sun Cities Transit Implementation Plan. A brief description of each study is provided below. A summary of relevant recommendations from each study is provided in Table 1.

MAG / Northwest Valley Local Transit System Study (2013)

The Northwest Valley Local Transit System Study (NWVLTSS) evaluated existing and future transit conditions in the Northwest Valley sub-region of the Metropolitan Phoenix area and recommended transit service options for the short-, mid-, and long-term planning horizons. Recommendations with particular relevance to the Sun Cities area include: combining Route 571—Surprise Express and the Grand Avenue Limited; implementing several new circulator routes; extending local routes 138—Thunderbird Rd, 170—Bell Rd, and 90—Dunlap Ave/Cave Creek Rd; and implementing local bus service in the 83rd Ave corridor. Additional details on the recommendations can be found in the final report.

Valley Metro / Peoria Transit Implementation Plan (2015)

The Peoria Transit Implementation Plan took the transit concepts identified in MAG’s NWVLTSS and further defined those relevant to the City of Peoria. The implementation plan identified two services as priorities: the extension of Route 83—83rd Ave and a new neighborhood circulator route. Both of these recommendations have been implemented in the years since the study was completed.

Valley Metro / Grand Avenue Transit Feasibility Study (2017)

The Grand Avenue Transit Feasibility Study evaluated and identified short-, mid-, and long-term transit options for the Grand Avenue corridor between Surprise and Downtown Phoenix. The primary recommendations include: consolidate and reconfigure Route 571—Surprise Express and Route 573—West Glendale Express (short-term); implement a new limited-stop all day service (mid-term); and commuter rail along the Burlington Northern Santa Fe (BNSF) rail line from Wittman to Downtown Phoenix (long-term).

MAG / Regional Commuter Rail System Study Update (2018)

The MAG Regional Commuter Rail System Study Update further analyzed and revised the results of the original study completed in 2010. The study evaluated four individual commuter rail lines (Grand, Kyrene, Estrella and San Tan) and two combined corridors (Grand/Kyrene Line and Estrella/San Tan Line). Of particular relevance to the Sun Cities area, the Grand/Kyrene line, which would operate along Grand Avenue from Wickenburg to Downtown Phoenix before heading south to Wild Horse Pass and I-10, was projected to have the highest ridership with over 10,000 boardings per day. In contrast to the 2010 study, the update recommended implementing both lines (Grand/Kyrene and Estrella/San Tan) at the same time instead of in phases. The study also outlined several potential funding mechanisms and governance structures that could be utilized to successfully implement and manage the proposed commuter rail system. Additional details on the on the study recommendations can be found in the final report.
City of Surprise Transit Feasibility Study (2018)

The Surprise Transit Feasibility Study was initiated in December 2017 to develop a comprehensive understanding of the City’s current and future transit needs. The study recommended a series of transit improvements over both the short-term (2019-2025) and long-term (2026-2035) planning horizons that would bring additional transit services either within or in close proximity to the Northwest Sun Cities study area. These include the extension of local Route 170—Bell Rd and Route 138—Thunderbird Rd, the implementation of two new circulator routes and one local route, and additional trips on Route 571—Surprise Express. As there are currently no local or regional funds available to implement the service recommendations, the study stressed the need for the city to identify a dedicated, sustainable funding source for transit services.
### Table 1. Summary of Recommendations from Previous Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Recommendation</th>
</tr>
</thead>
</table>
| **Northwest Valley Local Transit System Study (2013)** | **Short-Term Recommendations**  
Establish an intergovernmental cooperative agreement among Northwest Valley communities to handle administrative and funding responsibilities.  
Combine Route 571—Surprise Express and Grand Avenue Limited and add mid-day service.  
Create six local circulator routes including a Sun City/Youngtown route and a Sun City West route. |
|                                                 | **Mid-Term Recommendations**  
Extend Route 138—Thunderbird Rd to Surprise.  
Extend Route 170—Bell Rd to Surprise. |
|                                                 | **Long-Term Recommendations**  
Implement local bus service in 83rd Ave corridor.  
Extend Route 90—Dunlap/Cave Creek Rd along Olive Ave and north to 111th Ave and Peoria Ave. |
| **Peoria Transit Implementation Plan (2015)**    | Extend Route 83—83rd Ave from Camelback to Arrowhead Towne Center (implemented in October 2017).  
Implement new circulator route in the areas bounded by Bell Rd, 75th Ave, Happy Valley Rd, and 99th Ave (Peoria-on-the-Go (POGO) route began operation in April 2019). |
| **Grand Avenue Transit Feasibility Study (2017)** | **Short-Term (2020)** - consolidate and reconfigure Route 571—Surprise Express and Route 573—West Glendale Express.  
**Mid-Term (2026)** - implement new limited-stop all day service from Surprise to Downtown Phoenix. |
|                                                 | **Long-Term (2035)** - commuter rail along the BNSF rail line from Wittman to Downtown Phoenix. |
| **Regional Commuter Rail System Study Update (2018)** | Implement both the Grand/Kyrene (53.7 miles) and Estrella/San Tan (61.4 miles) commuter rail lines. Routes would operate at 30-minute frequencies during peak periods and 120-minutes during midday hours.  
Establish rail access agreement with UPRR and BNSF railway  
Determine appropriate governance structure for managing, designing, constructing and operating the proposed system.  
Secure funding for commuter rail system which would likely include a combination of federal, state, regional, local and private funding sources. |
| **Surprise Transit Feasibility Study (2018)**    | **Short-Term Recommendations**  
Extend Route 170—Bell Rd from Arrowhead Towne Center to Citrus Rd.  
Extend Route 138—Thunderbird Rd from Banner Boswell Medical Center to Cotton Lane.  
Implement new Greenway Rd circulator that would operate from Bell Rd and R H Johnson Blvd to Willow Canyon High School. |
|                                                 | **Long-Term Recommendations**  
Implement new Bullard Ave circulator that would operate from the Banner Del E. Webb Medical Center to Cactus Rd and Reems Rd.  
Add two additional inbound and outbound trips to Route 571—Surprise Express  
Implement new local route on Litchfield Rd from the Banner Del E. Webb Medical Center to Lower Buckeye Rd |

*Source: Valley Metro, 2019*
3.0 DEMOGRAPHICS

This section documents study area demographics using available data from the Census Bureau’s American Community Survey (ACS) and Maricopa Association of Governments (MAG). As summarized in Table 2, the demographic makeup of the study area is substantially different than that of the County. In particular, the study area concentration of minority and poverty populations is a fraction of that of the County. However, its share of senior and disabled populations is far greater than that of the County, indicating a community with specialized transportation needs.

Table 2. Select Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun City</td>
<td>39,000</td>
<td>7.3%</td>
<td>9.1%</td>
<td>32.8%</td>
<td>75.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Sun City West</td>
<td>25,085</td>
<td>2.9%</td>
<td>6.8%</td>
<td>28.4%</td>
<td>82.8%</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>64,085</strong></td>
<td><strong>5.6%</strong></td>
<td><strong>8.2%</strong></td>
<td><strong>31.1%</strong></td>
<td><strong>78.4%</strong></td>
<td><strong>6.0%</strong></td>
</tr>
<tr>
<td>Maricopa County</td>
<td>4,155,501</td>
<td>43.7%</td>
<td>15.7%</td>
<td>11.0%</td>
<td>14.1%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Note: Percentages for poverty and disabled populations are based on different total populations (non-institutionalized population and population for whom poverty status is determined, respectively).

Source: 2013-2017 American Community Survey 5-year estimates

A review of housing characteristics also highlights some substantial differences between the study area and the County. As summarized in Table 3, the study area has a higher vacancy rate than that of the County (20 percent vs 12.4 percent). However, a much larger share of vacant housing units in the study area are used for seasonal, recreational, or occasional purposes than in the County (66 percent vs 39.1 percent). This is indicative of the large snowbird population that lives in the study area on a seasonal basis.

Table 3. Select Housing Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Total Housing Units</th>
<th>Occupied Housing Units</th>
<th>Vacant Housing Units</th>
<th>Vacant for Seasonal, Recreational, or Occasional Use</th>
<th>Vacant Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun City</td>
<td>29,217</td>
<td>79.7%</td>
<td>20.3%</td>
<td>63.5%</td>
<td>36.5%</td>
</tr>
<tr>
<td>Sun City West</td>
<td>18,762</td>
<td>80.5%</td>
<td>19.5%</td>
<td>70.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>47,979</strong></td>
<td><strong>80.0%</strong></td>
<td><strong>20.0%</strong></td>
<td><strong>66.0%</strong></td>
<td><strong>34.0%</strong></td>
</tr>
<tr>
<td>Maricopa County</td>
<td>1,699,628</td>
<td>87.6%</td>
<td>12.4%</td>
<td>39.1%</td>
<td>60.9%</td>
</tr>
</tbody>
</table>

Source: 2013-2017 American Community Survey 5-year estimates

---

1 The term “snowbird” refers to seasonal travelers, usually retirees, who migrate to areas with warmer climates during the winter months.
Existing demographics in the study area have been mapped to illustrate the geographic distribution of various demographic categories. The categories are illustrated using density, which is a better indicator for transit analysis. Figures 2 through 11 show current demographic conditions in the study area for the following categories:

- Existing population density
- Future population density (2040)
- Existing employment density
- Future employment density (2040)
- Population below poverty density
- Minority population density
- Zero-auto household density
- Persons with disabilities density
- Population Over 64 Density
- Cumulative transit propensity

The cumulative transit propensity map, which combines all of the demographic categories, indicates the areas of highest transit need in Sun City are primarily adjacent to Grand Ave, though pockets of higher need are also present along the Bell Rd and Peoria Ave corridors. Similarly, the areas of highest transit need in Sun City West are adjacent to Grand Ave.
Figure 2. Existing Population Density

Source: 2013-2017 American Community Survey 5-year Estimates
Figure 3. Future Population Density (2040)

Source: MAG, 2019
Figure 4. Existing Employment Density

Source: MAG, 2017
Figure 5. Future Employment Density (2040)

Source: MAG, 2019
Figure 6. Population below Poverty Density

Source: 2013-2017 American Community Survey 5-year Estimates
Figure 7. Minority Population Density

Source: 2013-2017 American Community Survey 5-year Estimates
Figure 8. Zero-Auto Household Density

Source: 2013-2017 American Community Survey 5-year Estimates
Figure 9. Disabled Population Density

Source: 2013-2017 American Community Survey 5-year Estimates
Figure 10. Population over 64 Density

Source: 2013-2017 American Community Survey 5-year Estimates
Figure 11. Cumulative Transit Propensity

4.0 EXISTING ACTIVITY CENTERS AND LAND USE

Activity centers are sites that act as common origins and destinations for transit trips. These include regional shopping centers, educational facilities, medical facilities, civic facilities, etc. Existing activity centers in the study area are illustrated in Figure 12 (note: activity centers in the immediate vicinity of the study area are also included).

Existing and future land use in the study area is illustrated in Figures 13 and 14. Both of these land use scenarios are identified by Maricopa Association of Governments (MAG), with existing representing 2017 land use and future representing build-out land use conditions and having no particular date assigned.

Much of the existing land use in the study area is single-family and multi-family residential (55.4 percent and 13.5 percent respectively) with commercial, public, and industrial uses distributed along the arterial roadway network. These land use patterns remain consistent in the future scenario.
Figure 12. Activity Centers

- Community Facilities
  1. Fairway Library
  2. Sun City West Library
  3. Sun City Library
  4. Sun Cities Area Historical Society
  5. Sun City West Visitor Center
  6. RH Johnson Recreation Center
  7. Kuentz Recreation Center
  8. Palm Ridge Recreation Center
  9. Beardsley Recreation Center
  10. Youngtown Library
  11. Sun Bowl Amphitheater
  12. Mountain View Recreation Center
  13. Fairway Recreation Center
  14. Banner Olive Branch Senior Center
  15. Lakeway Recreation Center
  16. Sundial Recreation Center
  17. Bell Recreation Center
  18. Maricopa Recreation Center

- Hospital/Medical Center
  19. Banner Del E Webb Medical Center
  20. Banner Bowden Hospital
  21. Northwest Veterans Affairs Health Care Clinic
  22. Plaza Del Rio Medical/Business Park
  23. Trillium Specialty Hospital
  24. Laronde Center
  25. NextCare Urgent Care

- Public Facilities
  26. USPS - Sun City
  27. USPS - Sun City West

- Shopping Centers
  28. Grand Village Center
  29. Surprise Pavilions
  30. Surprise Marketplace
  31. Surprise Towne Center
  32. Albertsons Shopping Center
  33. Crossroads Towne Center
  34. Fry’s Shopping Center
  35. Bash’s Shopping Center
  36. Grand Avenue Shopping Center
  37. Fry’s Shopping Center
  38. Sun Bowl Plaza
  39. Safeway Shopping Center
  40. Arrowhead Shopping Center
  41. Youngtown Shopping Center
  42. Thunderbird Plaza Shopping Center
  43. Laronde Shopping Center
  44. Greenway Terrace
  45. Sun City Promenade
  46. Sun Shadow Square Plaza
  47. Bell Camino Center
  48. Belmar Plaza
  49. Bash’s Shopping Center
Figure 13. Existing Land Use

Source: MAG, 2017
Figure 14. Future Land Use

Source: MAG, 2017
5.0 EXISTING TRANSIT SERVICE

This section documents existing transit services in the study area and summarizes their operating characteristics and key performance statistics. The existing transit network is illustrated in Figure 15.

5.1 Inventory of Transit Services

Local Bus

The study area is currently served by two local routes: Route 106—Peoria Ave and Route 138—Thunderbird Rd. Route 106 operates from the Sunnyslope Transit Center at 3rd St and Dunlap Ave in Phoenix to 105th Dr and Santa Fe Dr in Sun City. The route operates at 60-minute frequencies on weekdays with no service operating on Saturday or Sunday. Outside the study area (east of 99th Ave and Peoria Ave), the route operates at 30-minute frequencies on both weekdays and weekends.

Route 138 operates from Thunderbird Rd and 32nd St in Phoenix to 105th Dr and Santa Fe Dr in Sun City. The route operates at 30-minute frequencies on weekdays both within the study area and neighboring communities. Frequencies are reduced to 60 minutes in the study area on the weekends, while the rest of the route remains at 30 minutes.

Local bus fares are $2 for a one-ride pass and $4 for a day pass. Passes are also available in 7-day ($20), 15-day ($33), and 31-day ($64) packages. Reduced fares are offered to seniors age 65 and over, and to people with disabilities: $1 for a one-ride pass, $2 for a day pass, 7-day ($10), 15-day ($16.50), 31-day ($32).

Express Bus

There is currently one express route that operates within the study area, the Route 571—Surprise Express. Route 571 operates from the Surprise Park-and-Ride at Bell Rd and 134th Ave to downtown Phoenix via Grand Ave in the inbound direction and 1-10/Loop 101 in the outbound direction. The Surprise Express is a weekday-only service and provides four inbound trips to downtown Phoenix in the morning and four outbound trips to Surprise in the afternoon. While the route operates through Sun City, there are no stop locations within the study area. Passengers can board at one of two locations – the aforementioned Surprise Park-and-Ride or the shared-use park-and-ride at the Walmart Supercenter at Thunderbird Rd and 129th Ave.

Express bus fares are $3.25 for a one-ride pass and $6.50 for a day pass. 31-day passes are available for $104.

Neighborhood Circulator

While there are no circulators currently operating with the study area, the recently implemented Peoria-on-the-Go (POGO) route serves the area just east of the study area in neighboring Peoria. The POGO is a bidirectional loop route that provides connections to major destinations such as the Arrowhead Towne Center and the Peoria Sports Complex. The route operates weekday-only service at 30-minute frequencies.

POGO is a free service, so no fare or fee is charged.
Figure 15. Existing Transit Network

Source: Valley Metro, 2019
ADA Paratransit

ADA paratransit service is a shared-ride, door-to-door service (mandated by the Americans with Disabilities Act of 1990) provided to people with disabilities who are not able to use traditional fixed-route transit service. The Federal Transit Administration (FTA) requires that, at a minimum, ADA complementary paratransit be provided within 3/4 of a mile of a bus route or rail station, at the same hours and days, for no more than twice the regular fixed route fare. Paratransit services are currently available to all qualified passengers within Sun City/Sun City West boundaries. However, the service area is scheduled to revert to the federally-mandated minimum (e.g. within 3/4 of a mile of fixed route service) on October 1, 2019. Additional information on Valley Metro paratransit services is available on the program website.

Ridechoice Service

Valley Metro’s RideChoice program provides discounted on-demand service 24 hours per day, 365 days per year to persons with disabilities using taxi services and ride hailing services. To be eligible for the program, passengers in the Northwest Sun Cities area must be certified as ADA-paratransit eligible, and provide proof of residency within a participating community. Wheelchair accessible service is available at no additional charge.

In October 2018, Valley Metro launched an enhanced RideChoice service for qualified participants. The redesigned program provides more service and more transportation options, including additional wheelchair-accessible vehicle providers and the ride-hailing service Lyft. Under the new fare structure, users pay $3 per one-way trip up to 8 miles in length and $2 for each mile after that. The monthly trip limit also increased from 16 to 20 one-way trips for any purpose, and from 40 to 50 one-way trips for work or medical purposes. Effective in August 2019, Uber has joined the program as a provider, and Lyft has ceased to participate. Additional information on the RideChoice program is available on the program website.

Vanpool

Valley Metro’s vanpool program is another service available to Sun City and Sun City West residents. Under the vanpool program, Valley Metro provides a group of six to fifteen people with a van to use for commuting purposes. One qualified participant volunteers to be the driver, and each rider pays a monthly fare that covers the lease, fuel, maintenance, and insurance costs of the van. Additional information on Valley Metro’s vanpool program is available on the program website.

Other Transportation Services

In addition to the services described above, there are some specialized transportation services that operate within the study area. These options are summarized in Table 4. A complete list of transportation providers in the MAG region is available on their Connect-a-Ride website. Additional resources are available on the Northwest Valley Connect Transportation Services page.
Table 4. Additional Transportation Services

<table>
<thead>
<tr>
<th>Agency and Address</th>
<th>Service</th>
<th>Hours of Operation</th>
<th>Fare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benevilla</td>
<td>Volunteer service for transporting seniors to medical appointments</td>
<td>8 a.m. - 4:30 p.m. Monday - Friday</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16752 N. Greasewood St</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surprise, AZ 85374</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwest Valley Connect</td>
<td>Volunteer service providing local transportation to seniors and disabled individuals for medical and general purpose trips</td>
<td>8 a.m. - 5 p.m. Monday - Friday</td>
<td>Variable</td>
</tr>
<tr>
<td>PO Box 9303</td>
<td></td>
<td>10195 W. Coggins Dr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sun City, AZ 85351</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sun City Community Assistance Network (SCAAN)</td>
<td>Non-profit volunteer service</td>
<td>7 a.m. – 5 p.m. Monday - Friday</td>
<td>Not available</td>
</tr>
<tr>
<td>10195 W. Coggins Dr</td>
<td></td>
<td>Sun City, AZ 85351</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sun City Express</td>
<td>Van/car service to Sky Harbor International Airport</td>
<td>24 hour service</td>
<td>Variable</td>
</tr>
<tr>
<td>11541 W. Bell Rd #105</td>
<td></td>
<td>11541 W. Bell Rd #105</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surprise, AZ 85378</td>
<td></td>
</tr>
</tbody>
</table>

Source: MAG; Northwest Valley Connect, 2019

5.2 Operating Characteristics

Service hours and frequencies for existing transit services operating within the study area or in close proximity are summarized in Table 5.

Table 5. Transit Service Hours and Frequencies

<table>
<thead>
<tr>
<th>Route</th>
<th>Weekday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Service Span</td>
<td>Frequency</td>
<td>Service Span</td>
</tr>
<tr>
<td>Local Routes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 106—Peoria Ave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Study area</td>
<td>4:30 a.m. - 9:30 p.m.</td>
<td>60</td>
<td>No service</td>
</tr>
<tr>
<td>• Outside study area</td>
<td>4 a.m. - 12:45 a.m.</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Route 138—Thunderbird Rd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Study area</td>
<td>5 a.m. - 10:15 p.m.</td>
<td>30</td>
<td>5:45 a.m. - 9:30 p.m.</td>
</tr>
<tr>
<td>• Outside study area</td>
<td>4-1 a.m.</td>
<td>30</td>
<td>5 a.m. - 3 a.m.</td>
</tr>
<tr>
<td>Express Routes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 571—Surprise Express</td>
<td>4 a.m. peak-period trips</td>
<td>No service</td>
<td>4 p.m. peak-period trips</td>
</tr>
<tr>
<td>Routes in Vicinity of Study Area</td>
<td>POGO</td>
<td>6 a.m. - 7:30 p.m.</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Valley Metro, 2019
5.3 Transit Performance

Ridership data for existing transit service is provided in Valley Metro’s monthly and annual ridership reports. Average weekday boardings, total monthly boardings, daily revenue miles, and boardings per revenue mile for each route are summarized in Table 6.

Table 6. Existing Transit Performance

<table>
<thead>
<tr>
<th>Route</th>
<th>Average Daily Boardings</th>
<th>Monthly Boardings</th>
<th>Daily Revenue Miles</th>
<th>Boardings per Revenue Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Study Area</td>
<td>Route Total</td>
<td>Study Area</td>
<td>Route Total</td>
</tr>
<tr>
<td>Local Routes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 106—Peoria Ave</td>
<td>107</td>
<td>2,153</td>
<td>2,352</td>
<td>47,368</td>
</tr>
<tr>
<td>Route 138—Thunderbird Rd</td>
<td>-</td>
<td>1,680</td>
<td>-</td>
<td>36,973</td>
</tr>
<tr>
<td>Express Routes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 571—Surprise Express</td>
<td>-</td>
<td>132</td>
<td>-</td>
<td>2,959</td>
</tr>
</tbody>
</table>

1 This measure is reported as boardings per trip for express bus services.
2 The Valley Metro ridership reports do not provide Sun City ridership for Route 138.
Note: POGO ridership not included here as route began operations in April 2019 and data is not yet available.

Source: Valley Metro Ridership Report, April 2019

In addition to the fixed-route services described above, an analysis of the ADA paratransit trips in the study area was also conducted. There were over 10,000 ADA paratransit trips that originated in the study area in FY 2019, with an average trip length of 6.6 miles. As illustrated in Figure 16, the most common destination city/jurisdiction for trips that originated in the study area was Sun City (44.9 percent), followed by Sun City West (15.9 percent) and Phoenix (14.4 percent).

The ADA paratransit trip origins and destinations were also mapped to illustrate the locations in which they were primarily concentrated. As illustrated in Figure 17, the locations in the study area with a high concentration of trip origins include the Banner Del Webb and Banner Boswell Medical Centers, the intersection and surrounding areas of Del Webb Blvd and Thunderbird Blvd, and the area around Bell Rd and 99th Ave. As illustrated in Figure 18, the destinations for these trips are primarily concentrated within Sun City and Sun City West, with select locations in Surprise, Peoria, and Phoenix appearing as common destinations, though in lower concentrations.
Figure 16. Destination Cities for ADA Paratransit Trips in Study Area (FY 2019)

Source: Valley Metro, 2019
Figure 17. ADA Paratransit Trip Pick Up Locations in Study Area

Source: Valley Metro, 2019
Figure 18. ADA Paratransit Drop-off Locations

Source: Valley Metro, 2019
5.4 Planned Transit Services

Valley Metro’s Short Range Transit Program (SRTP) identifies service change concepts for regional and local fixed-route services over a five-year planning horizon. The SRTP is updated annually and is divided into two planning phases: Production Years (years 1-3) and Development Years (years 4-5). Service change concepts programmed in the Production Years have committed funding and an implementation schedule. Service change concepts in the Development Years have no funding committed and may require further analysis and discussion.

The FY 2019 SRTP includes three services in the Development Years that would operate within the study area or close proximity. These services include the extension of Route 170—Bell Rd and Route 138—Thunderbird Rd to the Surprise Civic Center (FY 2022 and 2023 respectively) and the implementation of a new circulator in Surprise (FY 2023). The planned transit services are illustrated in Figure 19.
Figure 19. Planned Transit Services
6.0 TRANSIT SURVEY

As part of the study, a survey was created to understand the current transportation habits and needs of Sun City and Sun City West residents. The survey was available digitally via Survey Monkey from March through May 2019, and hard copies were distributed at community events. In total, 1,544 valid self-selected surveys were collected as a result of these efforts. Some key findings of the survey include:

- 76 percent of respondents were full-time Sun City/Sun City West residents, and 24 percent were part-time residents.
- The largest share of respondents (54 percent) had one vehicle available at their household, with an additional 35 percent reporting 2 vehicles. Only 3 percent of respondents indicated they had no vehicles available at their household.
- The trip purposes that the largest share of respondents indicated they travel to “very often” (7+ times per week) or “often” (5-7 times per week) were shopping (33 percent) and recreation/social (31 percent).
- The predominant transportation method among survey respondents was driving an automobile, with 82 percent indicating they drive “very often” or “often”. Driving a golf cart was the next closest response, with 21 percent of respondents indicating they did so “very often” or “often.”
- A majority of survey respondents (63 percent) indicated they had used transit before.
- The most common concern survey respondents had with using transit was that service was not close enough to their origin/destination (53 percent), followed by those that had no current concerns (42 percent) and those who were unsure of the current transit routes and schedules (38 percent).
- The location that the largest share of survey respondents indicated they would be interested in accessing via transit was Downtown Phoenix for special events (57 percent). The next most common responses were local destinations (e.g. dining, retail, medical, recreations centers, etc.) within 5 miles (50 percent) and local destinations farther than 5 miles (50 percent).

The full survey results are summarized in Figures 20-26. The survey instrument is included in Appendix A.
Figure 20. Survey Results: Question 1

ARE YOU A CURRENT SUN CITY OR SUN CITY WEST RESIDENT?

- Yes, full-time: 24.4%
- Yes, part-time: 75.6%

Figure 21. Survey Results: Question 2

HOW MANY WORKING VEHICLES ARE AVAILABLE AT YOUR HOUSEHOLD?

- 0: 35%
- 1: 54%
- 2: 6%
- 3+: 1%
- No response: 2%
Figure 22. Survey Results: Question 3

How many times per week do you travel to the following locations?

- Workplace/volunteer place:
  - Very often (7+ times): 7%
  - Often (5-7 times): 14%
  - Sometimes (3-4 times): 19%
  - Rarely (1-2 times): 14%
  - Very rarely (< 1 time): 15%
  - No response: 31%

- Other work-related:
  - Very often (7+ times): 3%
  - Often (5-7 times): 8%
  - Sometimes (3-4 times): 9%
  - Rarely (1-2 times): 28%
  - Very rarely (< 1 time): 21%
  - No response: 31%

- Medical:
  - Very often (7+ times): 2%
  - Often (5-7 times): 4%
  - Sometimes (3-4 times): 5%
  - Rarely (1-2 times): 10%
  - Very rarely (< 1 time): 10%
  - No response: 28%

- Personal business:
  - Very often (7+ times): 6%
  - Often (5-7 times): 10%
  - Sometimes (3-4 times): 16%
  - Rarely (1-2 times): 26%
  - Very rarely (< 1 time): 23%
  - No response: 38%

- Shopping:
  - Very often (7+ times): 10%
  - Often (5-7 times): 10%
  - Sometimes (3-4 times): 19%
  - Rarely (1-2 times): 23%
  - Very rarely (< 1 time): 19%
  - No response: 43%

- Dining out:
  - Very often (7+ times): 5%
  - Often (5-7 times): 15%
  - Sometimes (3-4 times): 31%
  - Rarely (1-2 times): 14%
  - Very rarely (< 1 time): 21%
  - No response: 32%

- Recreation/Social:
  - Very often (7+ times): 10%
  - Often (5-7 times): 10%
  - Sometimes (3-4 times): 21%
  - Rarely (1-2 times): 13%
  - Very rarely (< 1 time): 22%
  - No response: 31%
Figure 23. Survey Results: Question 4

**HOW MANY TIMES PER WEEK DO YOU USE THE FOLLOWING TRANSPORTATION METHODS IN ARIZONA?**

- Drive a vehicle like a car, truck, or motorcycle
  - Very often (7+ times): 10%
  - Often (5-7 times): 19%
  - Sometimes (3-4 times): 16%
  - Rarely (1-2 times): 7%
  - Very rarely (<1 time): 3%
  - No response: 1%

- Drive a golf cart
  - Very often (7+ times): 11%
  - Often (5-7 times): 10%
  - Sometimes (3-4 times): 12%
  - Rarely (1-2 times): 7%
  - Very rarely (<1 time): 4%
  - No response: 1%

- Ride with family or friends
  - Very often (7+ times): 15%
  - Often (5-7 times): 16%
  - Sometimes (3-4 times): 28%
  - Rarely (1-2 times): 8%
  - Very rarely (<1 time): 5%
  - No response: 1%

- Walk
  - Very often (7+ times): 21%
  - Often (5-7 times): 33%
  - Sometimes (3-4 times): 33%
  - Rarely (1-2 times): 10%
  - Very rarely (<1 time): 1%
  - No response: 2%

- Ride with a free volunteer driver service
  - Very often (7+ times): 19%
  - Often (5-7 times): 18%
  - Sometimes (3-4 times): 21%
  - Rarely (1-2 times): 18%
  - Very rarely (<1 time): 9%
  - No response: 1%

- Use personal mobility device
  - Very often (7+ times): 10%
  - Often (5-7 times): 20%
  - Sometimes (3-4 times): 9%
  - Rarely (1-2 times): 3%
  - Very rarely (<1 time): 2%
  - No response: 1%

- Ride a bicycle
  - Very often (7+ times): 0%
  - Often (5-7 times): 0%
  - Sometimes (3-4 times): 0%
  - Rarely (1-2 times): 0%
  - Very rarely (<1 time): 0%
  - No response: 1%

- Use a taxi or car service
  - Very often (7+ times): 19%
  - Often (5-7 times): 19%
  - Sometimes (3-4 times): 17%
  - Rarely (1-2 times): 13%
  - Very rarely (<1 time): 3%
  - No response: 1%

- Use a service like Uber or Lyft
  - Very often (7+ times): 18%
  - Often (5-7 times): 18%
  - Sometimes (3-4 times): 17%
  - Rarely (1-2 times): 13%
  - Very rarely (<1 time): 4%
  - No response: 1%

- Use paratransit services
  - Very often (7+ times): 19%
  - Often (5-7 times): 19%
  - Sometimes (3-4 times): 19%
  - Rarely (1-2 times): 19%
  - Very rarely (<1 time): 19%
  - No response: 19%
Figure 24. Survey Results: Question 5

**HAVE YOU EVER USED PUBLIC TRANSPORTATION?**

- Yes: 63%
- No: 35%
- No response: 2%

Figure 25. Survey Results: Question 6

**INDICATE ANY GENERAL CONCERNS WITH USING THE BUS AS A FORM OF TRANSPORTATION**

- Unsure of how to ride the bus: 10%
- Unsure of current bus service schedules and routes: 38%
- Disability prevents me from using the bus: 4%
- Mobility device makes it difficult to use the bus: 3%
- Service hours don’t work with my schedule: 15%
- Service is not close enough to my starting / ending point: 53%
- Safety concerns while riding or waiting for the bus: 12%
- Service is too expensive: 2%
- No current concerns: 42%
Figure 26. Survey Results: Question 7

IF ADDITIONAL TRANSIT SERVICES COULD BE ADDED TO YOUR AREA, WHERE WOULD YOU BE INTERESTED IN TAKING IT TO?

- Local destinations < 5 miles: 50%
- Local destinations > 5 miles: 50%
- A different city center: 47%
- Nearby transit centers: 43%
- Downtown Phoenix (retail/medical/personal errand): 33%
- Downtown Phoenix special events: 57%
7.0 NEXT STEPS

This technical memorandum documented the existing conditions within the Northwest Sun Cities study area. The data summarized throughout this document will be utilized in the next phase of the project which includes developing service options for consideration.
APPENDIX A. SURVEY INSTRUMENT
Northwest Valley
Sun Cities Transit Implementation Plan Survey

1. Are you a current resident of Sun City or Sun City West?
   □ Yes, full-time  □ Yes, part-time  □ No

2. How many working vehicles (cars, trucks or motorcycles) are available to your household?
   □ 0 □ 1 □ 2 □ 3 □ 4+

3. How many times per week (on average) do you travel to the following locations?

<table>
<thead>
<tr>
<th>Location</th>
<th>Very Often (7+ times)</th>
<th>Often (5-7 times)</th>
<th>Sometimes (3-4 times)</th>
<th>Rarely (1-2 times)</th>
<th>Very Rarely (&lt;1 time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your usual workplace/volunteer place</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other work-related location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical (doctor’s visit, appointment, pharmacy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal business (bank, post office)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation/social (movies, sports, park, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. How many times per week (on average) do you use the following transportation method(s) in Arizona?

<table>
<thead>
<tr>
<th>Method</th>
<th>Very Often (7+ times)</th>
<th>Often (5-7 times)</th>
<th>Sometimes (3-4 times)</th>
<th>Rarely (1-2 times)</th>
<th>Very Rarely (&lt;1 time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive a vehicle like a car, truck or motorcycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive a golf cart</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ride with family or friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ride with a free volunteer driver service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use a personal mobility device, like an electric scooter or wheelchair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ride a bicycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use a taxi or cab service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use a service like Uber or Lyft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ride public transportation like a bus or light rail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use paratransit services like Dial-a-Ride or RideChoice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Have you ever used public transportation?  □ Yes  □ No

6. Indicate any general concerns with using the bus as a form of transportation.  
(Please check all that apply.)

□ I have no current concerns with using the bus
□ Bus service is too expensive for me
□ I have safety concerns while riding or waiting for the bus
□ Bus service is not close enough to my starting/ending point
□ Bus service hours don’t work with my schedule
□ My mobility device makes it difficult for me to use the bus
□ My disability prevents me from using the bus
□ I’m unsure of current bus service schedules and routes
□ I’m unsure of how to ride the bus
□ Other: ____________________________

7. If additional public transportation could be added near your residential area, you would be interested in taking it? (Please check all that apply.)

□ Local destinations near your immediate area, such as dining, retail, medical or recreation centers within 5 miles
□ Local destinations outside of your immediate area, such as dining, retail, medical or recreation centers farther than 5 miles
□ A different city center outside of your residential area, such as El Mirage, Glendale, Peoria, Surprise or Youngtown
□ Nearby transit centers so you can connect with the greater Valley Metro system, such as the transit center at Arrowhead Mall
□ The downtown Phoenix area for retail, medical or personal errands
□ The downtown Phoenix area for special events, dining or recreation

8. What are the nearest major cross streets to your Arizona residence?

________________________

9. Your name and email address:

Name___________________________________________

Email Address____________________________________

10. May we email you in the future regarding Valley Metro or public transportation news?  □ Yes  □ No

If returning this survey by mail, send to:

Valley Metro
Attn: Sun Cities Survey
101 N. 1st Ave., Suite 1400 • Phoenix, AZ 85003