

Appendix A



(This page intentionally left blank.)

Resident Survey Analysis

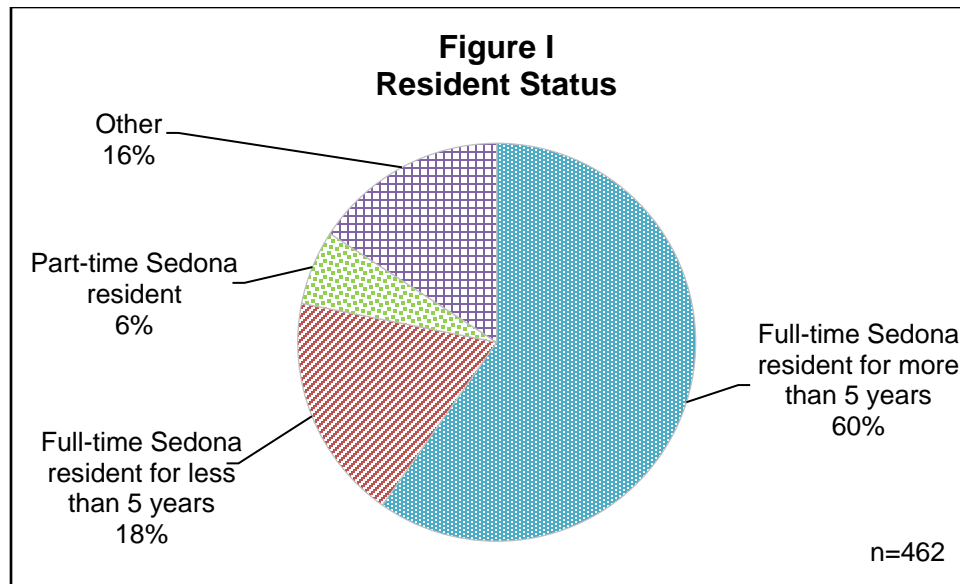
As part of the effort to obtain input from the community, a separate survey questionnaire was used for residents in the study area. The questionnaire was developed with input from City of Sedona staff and then distributed as widely as possible. The survey asked respondents to answer a series of questions about a new public transportation system serving the Sedona-Oak Creek Canyon area. The resident survey was available from August 27, 2018 through September 30, 2018, and is included in Appendix B.

SURVEY ANALYSIS

A total of 469 responses were received through the online questionnaire. The results of the resident survey will be discussed in the following section.

Resident Status

Respondents were asked to indicate if they were a full-time Sedona resident for more than five years, full-time Sedona resident for less than five years, part-time Sedona resident, or other. The results are illustrated in Figure 1. The majority of respondents (60 percent) indicated they have been a full-time Sedona resident for more than five years, followed by 18 percent of respondents who have been a full-time Sedona resident for less than five years. Approximately 16 percent of respondents indicated other, with the most common responses including being a resident of the Village of Oak Creek (eight percent of all respondents), resident of Cottonwood (two percent of all respondents), and resident of Cornville (two percent of all respondents).



Need for a Local Public Transportation System

Respondents were asked if they believe there is a need for a local public transportation system within Sedona, between Sedona and Oak Creek Canyon, and between Sedona and the Village of Oak Creek. As shown in Table 1, the majority of respondents indicated yes, that there is a need for a local public transportation in the three areas.

Location	Yes		No		Don't Know		TOTAL Responses
	Number of Responses	Percent of Respondents	Number of Responses	Percent of Respondents	Number of Responses	Percent of Respondents	
Within Sedona?	351	80%	59	13%	30	7%	440
Between Sedona and Oak Creek Canyon?	324	74%	65	15%	49	11%	438
Between Sedona and the Village of Oak Creek?	377	83%	47	10%	28	6%	452

Source: LSC Resident Survey, 2018.

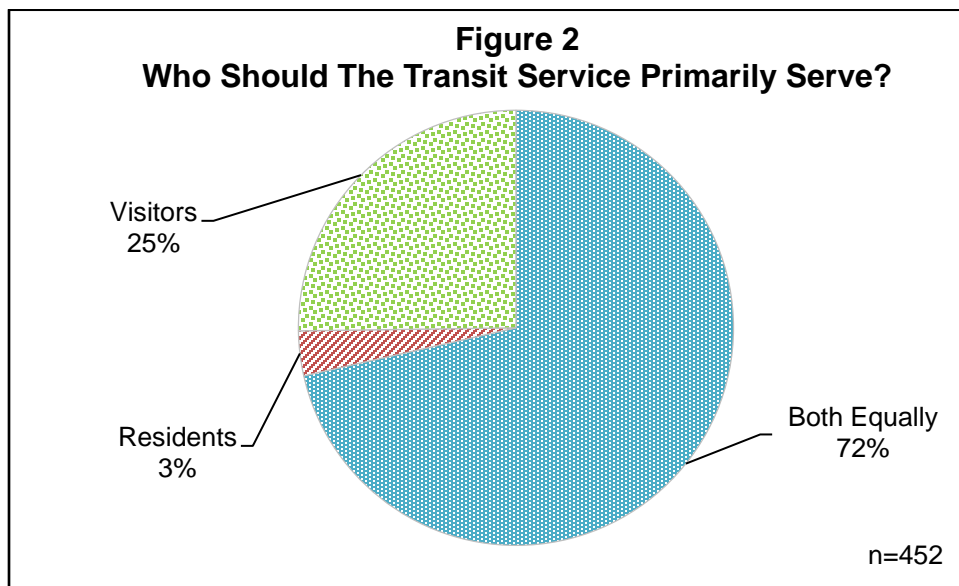
Approximately 80 percent of respondents said there is a need for a local public transportation system within Sedona, while 13 percent said there is not a need for a local public transportation system within Sedona and seven percent did not know.

Approximately 74 percent of respondents said there is a need for a local public transportation system between Sedona and Oak Creek Canyon, while 15 percent said there is not a need for a local public transportation system between Sedona and Oak Creek Canyon and 11 percent did not know.

Approximately 83 percent of respondents said there is a need for a local public transportation system between Sedona and the Village of Oak Creek, while 10 percent said there is not a need for a local public transportation system between Sedona and the Village of Oak Creek and six percent did not know.

Who Should the Transit Service Primarily Serve?

Respondents were asked who they think the transit service should be designed to primarily serve – residents, visitors, or both residents and visitors equally. As shown in Figure 2, almost three-quarters of respondents (72 percent) indicated that the transit service should primarily serve both residents and visitors equally. Approximately 25 percent of respondents said the transit service should primarily serve tourists and three percent of respondents said the transit service should primarily serve residents.



Potential Use of a Public Transit Service

Respondents were asked how likely they would be to personally use a transit service for four different types of trips: 1) for some trips within Sedona; 2) for trips to trailheads or recreation areas in Oak Creek Canyon; 3) for trips to trailheads

or recreation areas outside of Oak Creek Canyon; and 4) for trips between Sedona and the Village of Oak Creek. The results are presented in Table 2.

Approximately 27 percent of respondents indicated that they would be somewhat likely to use a public transit service for some trips within Sedona, followed by 26 percent who would be not very likely to use a public transit service for some trips within Sedona and 26 percent who would be very likely to use a public transit service for some trips within Sedona. Approximately 21 percent of respondents said they would definitely not use a public transit service for some trips within Sedona.

Approximately 31 percent of respondents indicated that they would be very likely to use a public transit service for trips to trailheads or recreation areas in Oak Creek Canyon, followed by 28 percent who would be somewhat likely and 23 percent who would be not very likely. Approximately 19 percent of respondents said they would definitely not use a public transit service for trips to trailheads or recreation areas in Oak Creek Canyon.

Approximately 32 percent of respondents indicated that they would be somewhat likely to use a public transit service for trips to trailheads or recreation areas outside of Oak Creek Canyon, followed by 27 percent who would be not very likely to use a public transit service for trips to trailheads or recreation areas outside of Oak Creek Canyon and 23 percent who would be very likely to use a public transit service for trips to trailheads or recreation areas outside of Oak Creek Canyon. Approximately 19 percent of respondents said they would definitely not use a public transit service for trips to trailheads or recreation areas outside of Oak Creek Canyon.

Approximately 32 percent of respondents indicated that they would be very likely to use a public transit service for trips between Sedona and the Village of Oak Creek, followed by 25 percent who would be somewhat likely and 25 percent who would be not very likely. Approximately 18 percent of respondents said they would definitely not use a public transit service for trips between Sedona and the Village of Oak Creek.

Table 2
Potential Use of a Public Transit Service

	Very Likely		Somewhat Likely		Not Very Likely		Definitely Would Not		TOTAL Responses
	Number of Responses	Percent of Respondents	Number of Responses	Percent of Respondents	Number of Responses	Percent of Respondents	Number of Responses	Percent of Respondents	
For some trips within Sedona?	114	26%	120	27%	117	26%	92	21%	443
For trips to trailheads or recreation areas in Oak Creek Canyon?	134	31%	124	28%	99	23%	82	19%	439
For trips to trailheads or recreation areas outside of Oak Creek Canyon?	101	23%	138	32%	117	27%	82	19%	438
For trips between Sedona and the Village of Oak Creek?	144	32%	112	25%	111	25%	83	18%	450

Source: LSC Resident Survey, 2018.

Likelihood of the Local Transit System Providing Benefits to the Community

Respondents were asked to rate how likely it is that a local transit system would provide the following six benefits to the community: 1) reduce traffic and congestion, 2) reduce parking demand, 3) improve the experience for visitors, 4) make it easier and safer for residents to get around, 5) make it easier and safer for visitors to get around, and 6) improve residential quality of life. Participants were asked to rate the benefits from one to five with one being definitely would not benefit the community and five being definitely would benefit the community. The results are presented in Table 3.

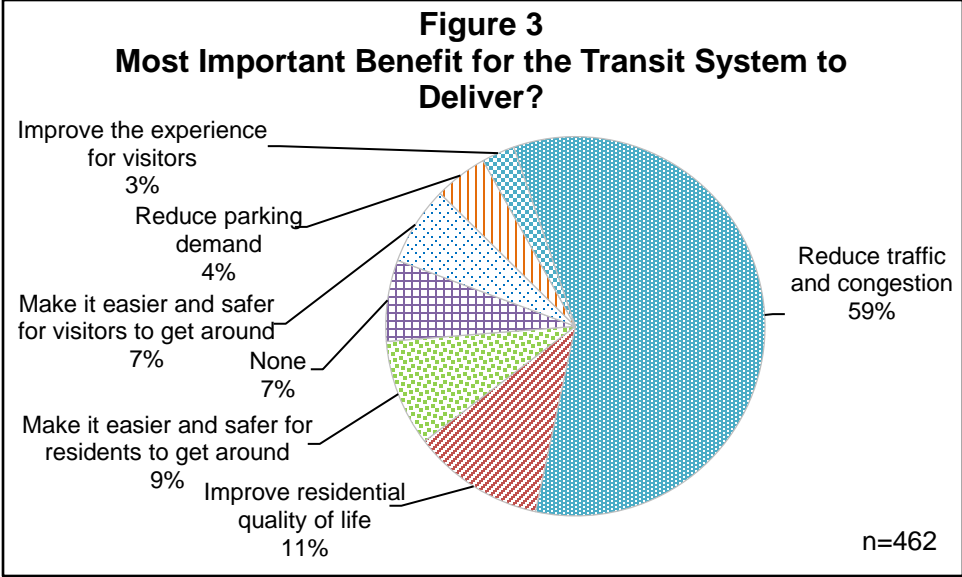
Benefits	Average Score
Make it easier and safer for visitors to get around	3.77
Improve the experience for visitors	3.65
Improve residential quality of life	3.61
Reduce parking demand	3.55
Make it easier and safer for residents to get around	3.54
Reduce traffic and congestion	3.53

Source: LSC Resident Survey, 2018.

The average scores of all six benefits were very similar, with 0.24 separating the highest and the lowest average scores. The benefits that received the highest average scores were make it easier and safer for visitors to get around (3.77) and improve the experience for visitors (3.65). The benefits that received the lowest average scores were reduce traffic and congestion (3.52) and make it easier and safer for residents to get around (3.54).

Most Important Benefit for the Transit System to Deliver

Respondents were asked which benefit is most important for the transit system to deliver. As shown in Figure 3, over half of respondents (59 percent), indicated that reducing traffic and congestion is the most important benefit for the transit system to deliver, followed by improving residential quality of life (11 percent) and making it easier and safer for residents to get around (nine percent).



Importance of Trip Types to Provide

Respondents were asked how important it is for the new transit system to provide the following four types of trips: 1) providing trips from Sedona north into Oak Creek Canyon; 2) providing circulation within Uptown Sedona; 3) providing circulation throughout the City of Sedona, including West Sedona; and 4) providing trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads. Participants were asked to rate the trips from one to five with one being not important and five being very important. The results are presented in Table 4.

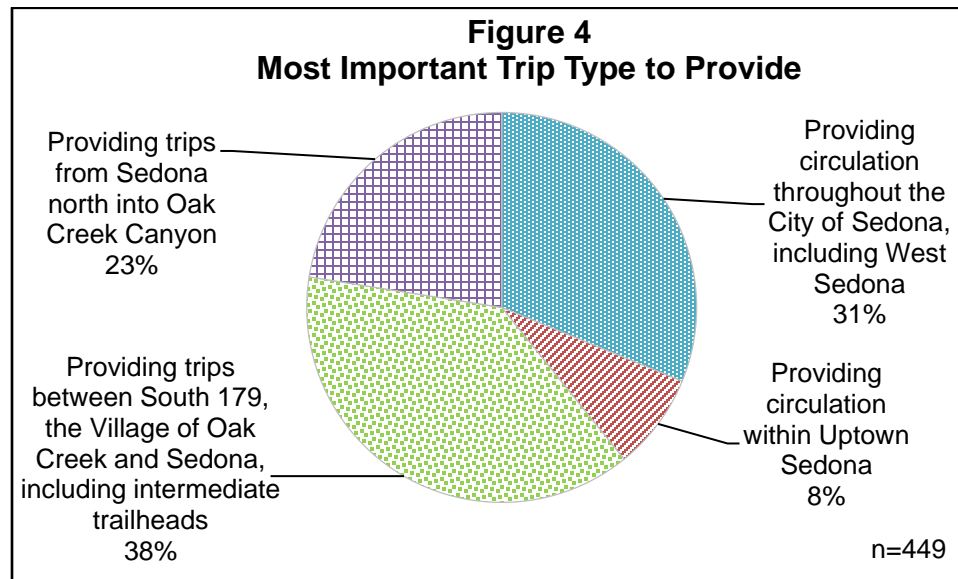
Table 4 Importance of New Transit System Trip Types	
Type of Trip	Average Score
Providing trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads	3.85
Providing circulation throughout the City of Sedona, including West Sedona	3.70
Providing trips from Sedona north into Oak Creek Canyon	3.43
Providing circulation within Uptown Sedona	3.33
<i>Source: LSC Resident Survey, 2018.</i>	

The average scores of the four trip types were very similar, with 0.53 separating the highest and the lowest average scores. The trip type that received the highest average score was providing trips between South 179, the Village of Oak Creek

and Sedona, including intermediate trailheads (3.85), while the trip type that received the lowest average score was providing circulation within Uptown Sedona (3.33).

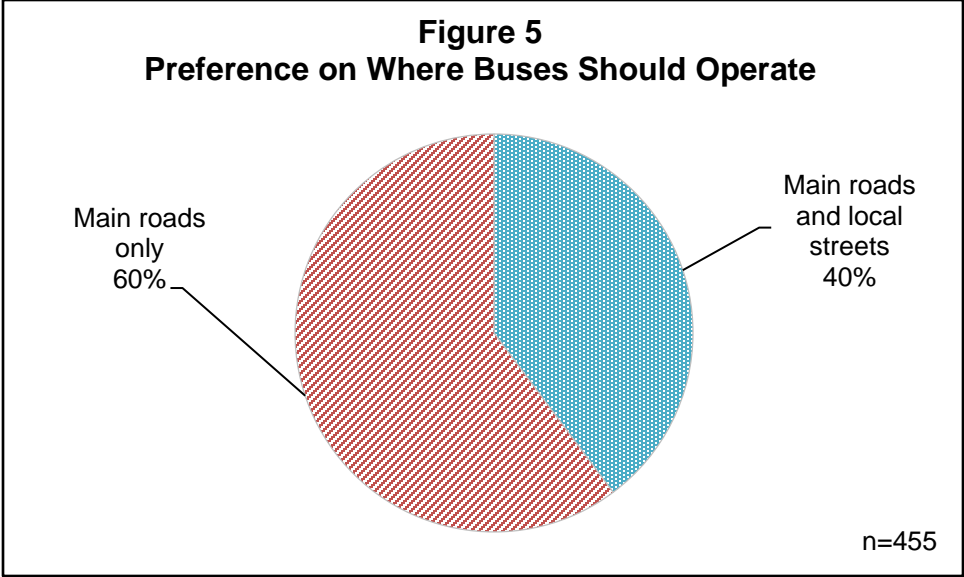
Most Important Trip Type to Provide

Respondents were asked which trip type is most important for the transit system to provide. As shown in Figure 4, approximately 38 percent of respondents indicated that it is most important for the transit service to provide trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads, followed by 31 percent of respondents who said that it is most important for the transit service to provide circulation throughout the City of Sedona, including West Sedona.



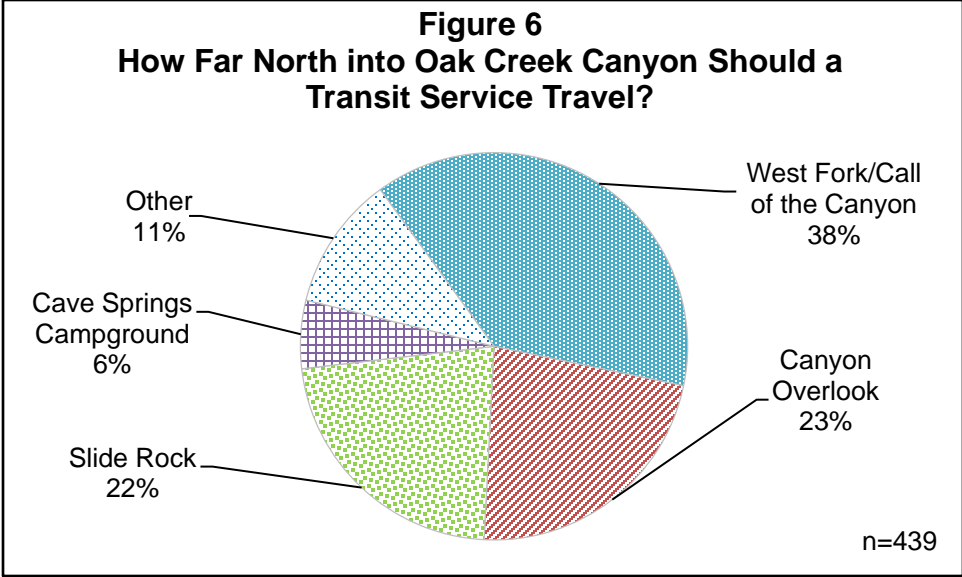
Preference on Where Buses Should Operate

Respondents were asked their preference on where the buses should operate – stay on the main state highways (179, 89A) only or use both main roads and local streets to serve neighborhoods and trailheads located off the state highways. As shown in Figure 5, approximately 60 percent of respondents said that buses should operate on main roads only, while approximately 40 percent of respondents indicated that buses should operate on main roads and local streets.



How Far North into Oak Creek Canyon Should a Transit Service Travel?

Respondents were asked how far north into Oak Creek Canyon should a transit service travel – to Slide Rock, to West Fork/Call of the Canyon, to Cave Springs Campground, to Canyon Overlook, or to some other location. As shown in Figure 6, the majority of respondents (38 percent) indicated that the transit service should travel as far north into Oak Creek Canyon as the West Fork/Call of the Canyon, followed by the Canyon Overlook (23 percent) and Slide Rock (22 percent). Approximately 11 percent of respondents indicated that the transit service should travel as far north into Oak Creek Canyon as some other location, with the most common responses including that the bus should not travel into Oak Creek Canyon (19 respondents, four percent of total responses) and Flagstaff (two respondents, less than one percent of total responses).



Importance of Factors That Would Make Transit Service Attractive

Respondents were asked how important each of the following six factors are for making the transit service attractive to residents and visitors: 1) service that runs every 15 to 20 minutes; 2) bus stops with amenities like benches, shelters, bus pull-out areas, and sidewalk connections; 3) ability of the bus to carry gear and bikes; 4) park and ride lots where riders can leave their cars; 5) attractive buses with drivers who are also tour guides; and 6) other. Participants were asked to rate the factors from one to five with one being not important at all and five being very important. The results are presented in Table 5.

Factors	Average Score
Other	4.31
Park and ride lots where riders can leave their cars	4.10
Service that runs every 15-20 minutes	4.10
Ability of the bus to carry gear and bikes	3.87
Bus stops with amenities like benches, shelters, bus pull-out areas, and sidewalk connections	3.75
Attractive buses with drivers who are also tour guides	2.68

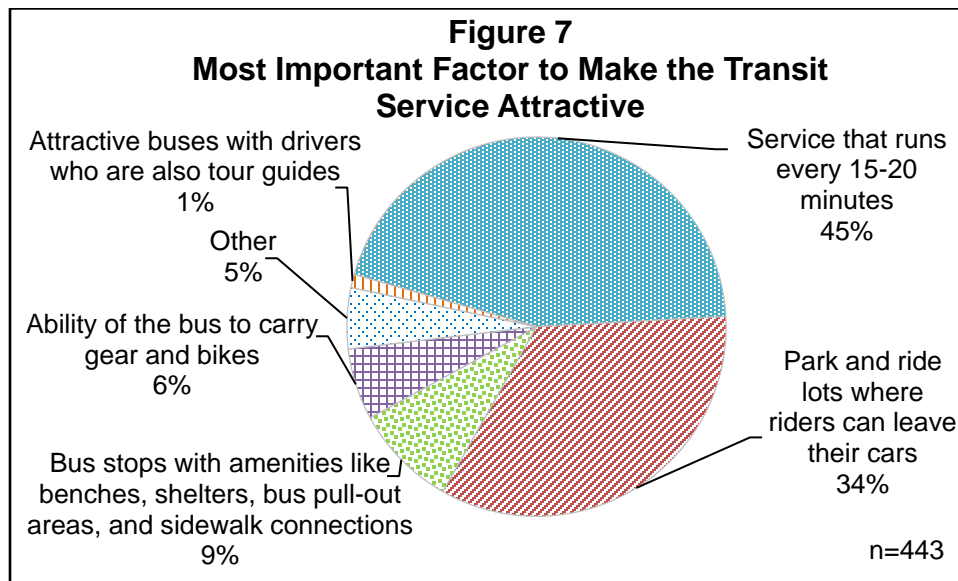
Source: LSC Resident Survey, 2018.

The factor that received the highest average score was other (4.31), while the factor that received the lowest average score was attractive buses with drivers

who are also tour guides (2.68). The most common responses for other included low-emission or clean buses (14 responses, 17 percent of all respondents), do not support transit in Oak Creek Canyon (seven response, nine percent of all responses), ability to transfer or connect with other routes (six responses, seven percent of all responses), bus stop locations at hotels (six responses, seven percent of all responses), helpful signage and information (five responses, six percent of all responses), and incentivize using transit (five responses, six percent of all responses).

Most Important Factor That Would Make Transit Service Attractive

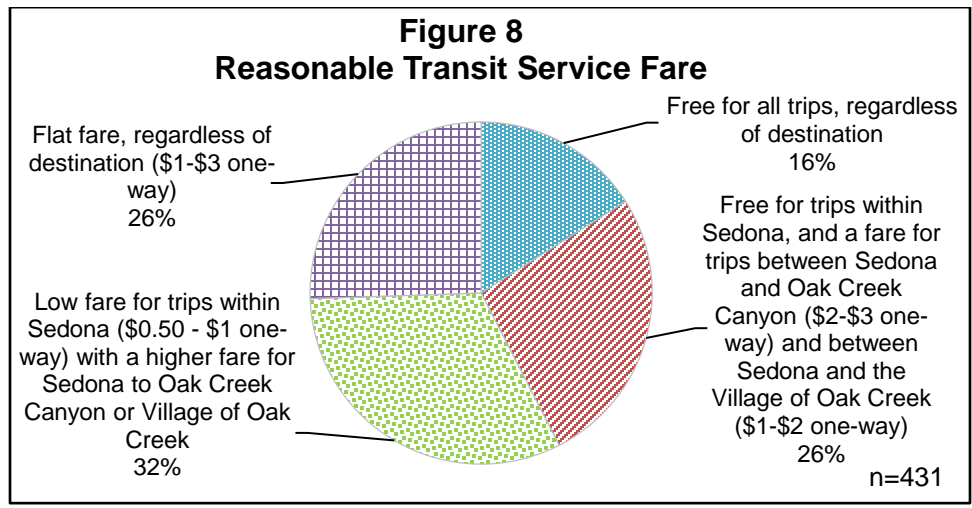
Respondents were asked which factor is most important for making the transit system attractive to residents and visitors. As shown in Figure 7, approximately 45 percent of respondents indicated that service that runs every 15 to 20 minutes is the most important factor for making the transit system attractive to residents and visitors, followed by park and ride lots where riders can leave their cars (34 percent).



Reasonable Transit Service Fare

Respondents were asked what a reasonable transit service fare would be: 1) free for all trips, regardless of destination; 2) free for trips within Sedona, and a fare for trips between Sedona and Oak Creek Canyon (\$2.00-\$3.00 one-way) and between Sedona and the Village of Oak Creek (\$1.00-\$2.00 one-way); 3) low fare

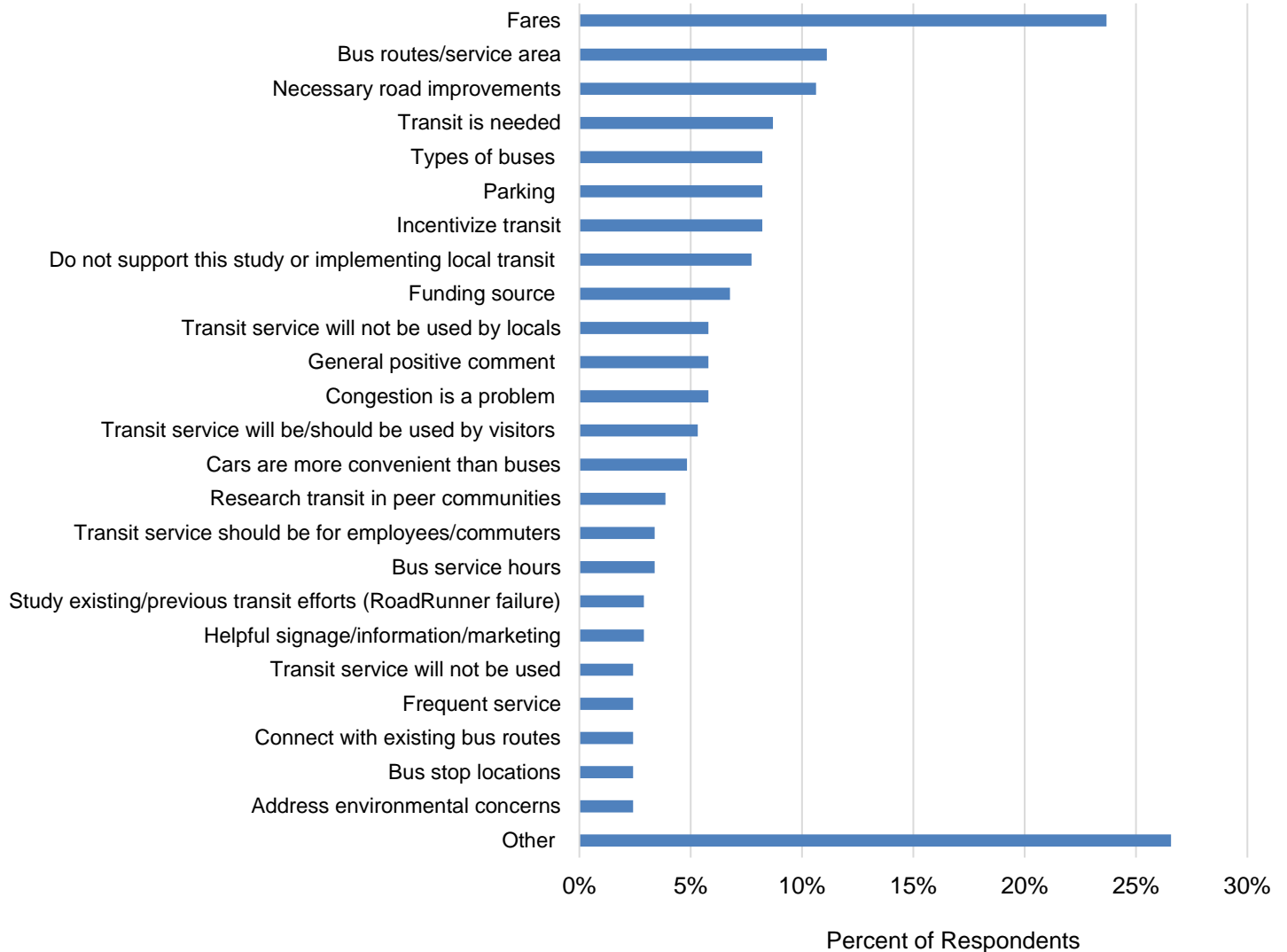
for trips within Sedona (\$0.50 - \$1.00 one-way) with a higher fare for Sedona to Oak Creek Canyon or Village of Oak Creek; or 4) flat fare, regardless of destination (\$1.00-\$3.00 one-way). As shown in Figure 8, approximately 32 percent of respondents indicated that a reasonable transit service fare would be a low fare for trips within Sedona (\$0.50 - \$1.00 one-way) with a higher fare for Sedona to Oak Creek Canyon or Village of Oak Creek. Approximately 26 percent of respondents indicated that a reasonable transit service fare would be free for trips within Sedona, and a fare for trips between Sedona and Oak Creek Canyon (\$2.00-\$3.00 one-way) and between Sedona and the Village of Oak Creek (\$1.00-\$2.00 one-way).



Additional Comments

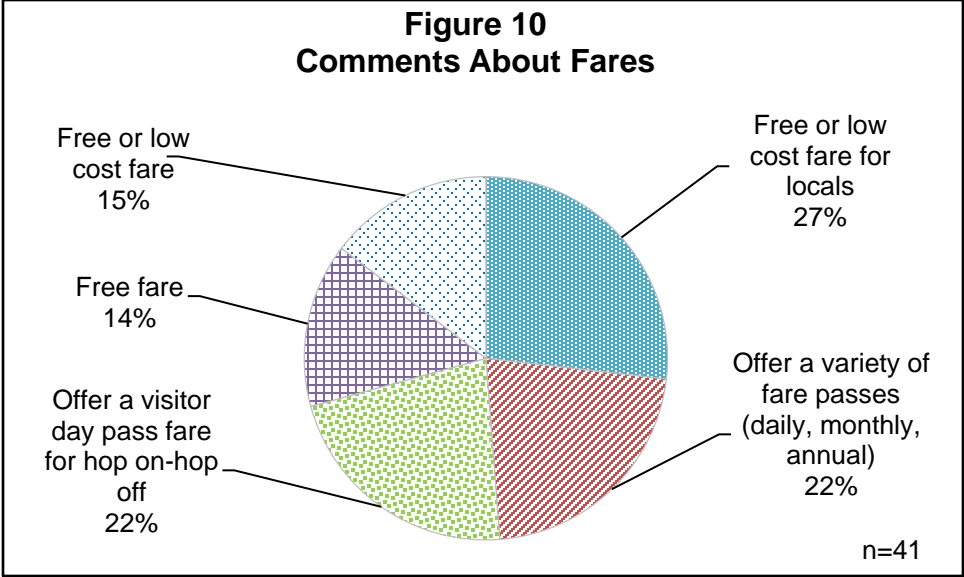
Respondents were asked to share any additional comments about a potential transit service at the end of the survey instrument. The individual comments can be read in full in Appendix C. Out of 469 total survey responses received, 207 respondents chose to write additional comments. General categories were used to group the comments based on the comments mentioned. If multiple subjects were addressed in one comment, the comment was counted in each of the relevant categories. Figure 9 categorizes the various comments received.

**Figure 9
Comment Categories**

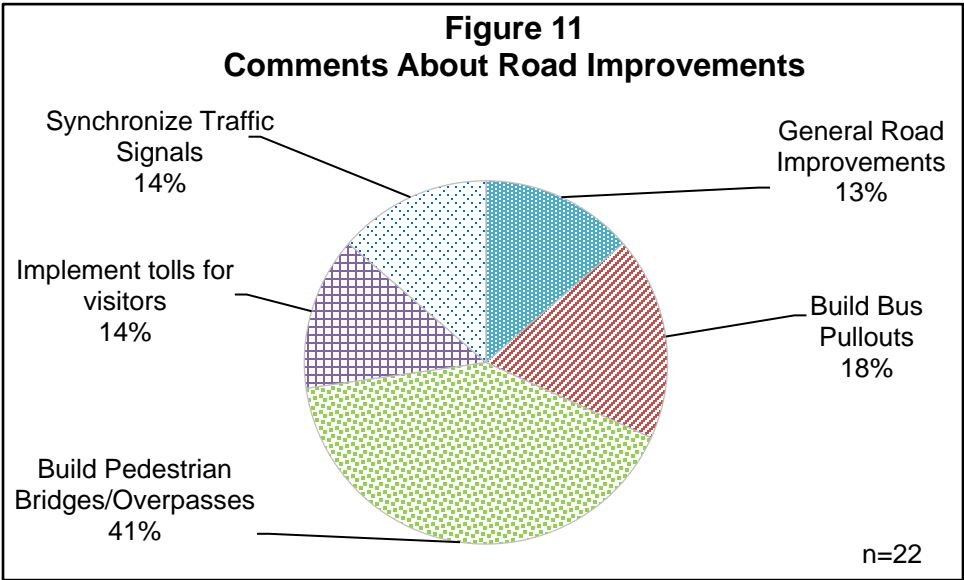


The most frequently received comments were regarding fares (24 percent), bus routes/service area (11 percent), and necessary road improvements (11 percent).

Of the comments received about fares, as shown in Figure 10, the majority were regarding a free or low-cost fare for locals (27 percent), followed by offering a variety of fare passes (daily, monthly, annual) (22 percent), offering a visitor day pass fare for hop on-hop off (22 percent), either free or low-cost fare (15 percent), and free fare (specifically) (14 percent).



Of the comments received about road improvements, as shown in Figure 11, the majority were regarding building pedestrian bridges and overpasses (41 percent), followed by building bus pullouts (18 percent), implementing tolls for visitors (14 percent), synchronizing traffic signals (14 percent), and general road improvements (13 percent).





(This page intentionally left blank.)



Resident Survey

The City of Sedona is studying the feasibility of implementing a new public transit system that could serve the Sedona-Oak Creek Canyon area. Please take a few minutes to give us your views:

1. Are you a ?

Full-time Sedona resident for more than 5 years

Full-time Sedona resident for less than 5 years

Part-time Sedona resident

Resident of nearby community (please specify):

2. Do you believe there is a need for a local public transportation system:

	Yes	No	Don't know
Within Sedona?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Between Sedona and Oak Creek Canyon?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Between Sedona and the Village of Oak Creek?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Who should the transit service be designed to primarily serve?

Visitors

Residents

Both Equally

4. How likely is it that you would personally use a transit service:

	Very Likely	Somewhat Likely	Not Very Likely	Definitely Would Not
For some trips within Sedona?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For trips to trailheads or recreation areas in Oak Creek Canyon?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For trips to trailheads or recreation areas outside of Oak Creek Canyon?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For trips between Sedona and the Village of Oak Creek?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5a. How likely do you think it is that a local transit system would provide the following benefits to the community?

	1 - Definitely Not	2	3	4	5 - Definitely Would
Reduce traffic and congestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduce parking demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve the experience for visitors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make it easier and safer for residents to get around	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make it easier and safer for visitors to get around	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve residential quality of life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5b. Of the options presented in question 5a, what is the most important benefit for the transit system to deliver?

<input type="checkbox"/> Reduce traffic and congestion
<input type="checkbox"/> Reduce parking demand
<input type="checkbox"/> Improve the experience for visitors
<input type="checkbox"/> Make it easier and safer for residents to get around

Make it easier and safer for visitors to get around

Improve residential quality of life

None

6a. There are four types of trips that the new transit system might provide. How important is each of these?

	1 - Not important	2	3	4	5 - Very important
Providing trips from Sedona north into Oak Creek Canyon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing circulation within Uptown Sedona	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing circulation throughout the City of Sedona, including West Sedona	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6b. Of the options presented in question 6a, which of these is the most important to serve?

Providing trips from Sedona north into Oak Creek Canyon

Providing circulation within Uptown Sedona

Providing circulation throughout the City of Sedona, including West Sedona

Providing trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads

7. Should buses stay on the main state highways (179, 89A) or use local streets to serve neighborhoods and trailheads located off the state highways?

Main roads only

Main roads and local streets

8. How far north into Oak Creek Canyon should a transit service travel?

Slide Rock
West Fork/Call of the Canyon
Cave Springs Campground
Canyon Overlook
Other (please specify): <input type="text"/>

9a. To make the transit service attractive to residents and visitors, how important would each of the following factors be?

	1 - Not important at all	2	3	4	5 - Very important
Service that runs every 15-20 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus stops with amenities like benches, shelters, bus pull-out areas, and sidewalk connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability of the bus to carry gear and bikes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Park and ride lots where riders can leave their cars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive buses with drivers who are also tour guides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please identify in question 9b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9b. Please indicate the "other" factor you evaluated in question 9a.

9c. Of the options presented in question 9a, which of these features is most important?

Service that runs every 15-20 minutes
Bus stops with amenities like benches, shelters, bus pull-out areas, and sidewalk connections
Ability of the bus to carry gear and bikes

Ability of the bus to carry gear and bikes

Park and ride lots where riders can leave their cars

Attractive buses with drivers who are also tour guides

Other (as identified in question 9b)

10. What would you consider as a reasonable cash fare for a new local transit service?

Free for all trips, regardless of destination

Free for trips within Sedona, and a fare for trips between Sedona and Oak Creek Canyon (\$2-\$3 one-way) and between Sedona and the Village of Oak Creek (\$1-\$2 one-way)

Low fare for trips within Sedona (\$0.50 - \$1 one-way) with a higher fare for Sedona to Oak Creek Canyon or Village of Oak Creek

Flat fare, regardless of destination (\$1-\$3 one-way)

11. Is there anything else you would like to tell us about a potential transit service?

12. If you'd like to be kept informed about public meetings and recommendations as this transit study moves forward, please provide your name and email address below.

Name:

Email Address:

Submit

(This page intentionally left blank.)



(This page intentionally left blank.)

Resident Survey Comments

1. Must have park and ride lots in VOC and west entry to Sedona—only way to reduce traffic is to reduce cars on road. Free if you park in one of these lots.
2. Daily fee, unlimited use, one charge for the entire day.
3. BUY 179 from ADOT - set up tolls for non-residents heading into town from 17. Year-round residents get free toll pass.
4. Deliver service at least through the dinner hours.
5. Keep within Sedona and stop trying to encroach other areas
6. It would be good for workers to be able to use that fits their schedules as well.
7. If there must be a fare, how about also having weekly/monthly/yearly discounted passes?
8. The traffic situation MUST BE ADDRESSED NOW!!! This sounds like a start.
9. Must be marketed! Allow time for this to succeed. Must promote to tourists; encourage them to leave their cars at their hotels and use public transportation. Buses must run regularly or on designated schedule if they are to be used.
10. I have been to other cities where I park my car at the hotel and jump on public transit to take me into the town. I thought it was a great idea and would think visitors would use this transit.
11. If drivers have to deal with fares the service WILL NEVER run on schedule! Traffic in Sedona is bad enough in regards to slowing down the scheduled service without adding people not having correct fare or not having it ready when the bus arrives. Trust me, people will not read signs reminding them to have exact change or their money ready. I should mention the fact that the buses will most likely be blocking the right lane in places where there is not a convenient pull-off for passenger loading which, of course, will add to the traffic congestion. For the VOC service have one dedicated bus running just from Hillside to the VOC and back. These VOC travelers can then pick up one of the Sedona shuttles from the Hillside drop-off. Otherwise if the VOC bus goes further into Sedona they will no doubt pick up passengers expecting to go to West Sedona and not the VOC. Also have two other buses just doing the Uptown-West Sedona-Hillside loop. There's no way the service will be able to run a 15-20 minute wait service if you don't have two in-town buses running preferably in opposite directions to accommodate, for example, Uptown visitors wanting to go straight to Tlaquepaque and not have to sit through the whole route through West Sedona and then to Tlaquepaque. FYI: I have worked for five transportation companies (3 public transportation bus companies, 1 airport shuttle company and 1 jeep tour company) in the last fourteen years and know what works and what doesn't.
12. Will not solve traffic problems.
13. I think the service at Zion is a good pattern.

14. Creating transit for employees of Sedona and VOC businesses e.g., hotels, biz, restaurants is VITAL.
15. 24-hour pass would be better than low fare within the city.
16. The transit system needs to be easy and no hassle I think passes where riders can step on step off again and again without fumbling for change is critical for visitors and locals to use the service often.
17. The fare would have to be less than people currently spend on fuel to encourage residents to use the service. For example, from the VOC to Sedona, I spend \$20 once every two weeks for eight round trips, or \$2.50 per round trip, so \$1 one-way would justify using the service, while \$2 one-way would not.
18. Instead of a per ride fare, have a daily fare to permit hop on/hop off experience.
19. If you price it equal to or higher than fuel costs, people will continue to use the convenience of their private vehicle.
20. It sounds good, but you need to analyze why the system failed in the past. Also what is the impact of weather: heat, monsoons. I think you overlooked one group which is hourly workers who might like to use it, especially if there were a monthly pass. The only thing is many of them live in Rimrock, etc. and would need to be bused in maybe in conjunction with normal working hours.
21. 179 should be double lane for some parts on one side and some other parts on the other way.
22. Oak Creek Canyon is overrun with parked cars, cars waiting for a space, and casual hikers who are too far from the nearest toilet. The Canyon experience is being ruined by the lack of traffic management.
23. Too much to list here. But thank you.
24. Important to have parking lots available at the 3 entrance points so they can truly "park and ride," one at VOC, one at Grasshopper Flats (West Sedona), and one before you go into Uptown, perhaps that eyesore of abandoned homes and hotels that the city owns. There should also be special passes for residents that would encourage use, and a "daily pass" so people can get on and off throughout the day, or even a "weekend pass" during high traffic weekends.
25. Should run between 8 am and 6 pm winter (Oct-Mar and 7 am and 7 pm other times. Should go to Chapel and to Cathedral Rock trail head off 179.
26. It needs to be established right away.
27. Make it easy for dummies to purchase tickets. There's nothing more frustrating than being in a foreign town or country and not being able to figure out the transit system. Machines for ticket sales should also offer change.
28. Let tourist taxes pay for shuttle service.
29. Central transfer stations to provide easy access to trailheads.

30. Quit spending public money advertising for tourists. Spend it on a cut-off from 179 to Oak Creek Canyon, bypassing Uptown. The traffic problem in Sedona is "Man Made."
31. People like their cars too much for this to be successful. They would rather sit in their own car during the inevitable traffic jams listening to their own music etc., there are better ways to address our traffic problems starting with the Red Rock Crossing bridge. Don't waste money on band-aids. Think big.
32. Identify a sustainable funding source before embarking on any new transit system. Use the experience of other communities of a similar demographic profile like Laguna Beach, CA that has a local system.
33. Reduced monthly fare for residents with a transit pass.
34. Residents unlikely to use transport but making it mandatory for guests with the pricing making it attractive.
35. They should not travel in residential areas if it all possible. Unless that residential area is a pass-through to a tourist site, then that can't be avoided. Smaller Transit should be used at larger Transit locations when traveling through residential zones. For example, a larger Transit can pick up in Village of Oak Creek drop at a smaller Transit pickup zone to take tourist through residential areas. The last thing we want is giant buses going down our streets.
36. The mass transit up Oak Creek Canyon would pose too many needs. Locations for disembarking, allowing enough space for safety. People standing on the highway in some instances for the next "bus." People who do not want to stop where the transit goes/stops, will be driving on their own anyway.
37. Just study all the other studies! Stop your study and do it!!!!
38. If it doesn't perform as expected what will the city do with it?
39. RESIDENTS WON'T USE. SHOULD SET UP A SYSTEM LIKE NATIONAL PARKS I.E., ZION.
40. Not going to work!
41. Connect with Links bus in West Sedona at Coffee Pot. Do not duplicate routes. Make it easy for people who work throughout Sedona and VOC to get to work cost-effectively and efficiently while leaving their cars out of high traffic problem areas. Offer late night services on the half hour so employees can use the transit service.
42. The current transit system (Roadrunner and Lynx) doesn't seem to have an abundance of ridership. Since we're paying for this survey/development of a new system I'd like to know what the consultant has to offer to make ridership more attractive to both residents and tourists. Running empty shuttles/busses just clogs up the system more!
43. It would definitely help with the troubles in the traffic circles.
44. Look at Springdale, Utah and Zion Canyon for excellent examples of local transit service.
45. Rather than building new roads and wrecking neighborhoods and natural scenery/wildlife in the process, this is THE SOLUTION.

46. A waste of money - just like the last attempt.
47. Must pay for itself from revenues over expenses.
48. How many people will really use it? I know I wouldn't.
49. The transit system should stay between Uptown and West Sedona only. Based on what I have seen having lived in Sedona and working in Flagstaff for 10 years is there will be little benefit to a transit system in Oak Creek Canyon. Hikers go out early in the morning and their return trip has little to no effect on the traffic problem in Uptown. The main traffic problem is pedestrian interference. Once you put up pedestrian overpasses and add additional parking lots a large part of the problem will dissipate.
50. The Chamber should pay for this.
51. The vehicles should be electric or hybrid electric/bio diesel.
52. Should be geared more towards visitors. Residents should be able to choose to use their cars at will in their own city where they pay taxes and will be supporting buses for the tourists!
53. Good luck getting that funded. As a local this should be funded by the tourist industry not my taxes.
54. May be difficult to get visitors to take advantage of transit service.
55. Look at Williamsburg for great tourist Park and Ride bus model. With adding bus transit then the proposed neighborhood connectors and Forest bypass road should be eliminated.
56. The distances within West Sedona and Uptown are small and where there seems to be the most congestion - so it seems that free fares and frequent trips would encourage tourists to leave their cars - similar to Zion and the Grand Canyon.
57. Examples of other places in other countries: Have visitors pay a one-time "vacationing tax" of a certain \$ amount per adult and 50% less per child, and finance a possibly free for all trips transit service.
58. We have a troll now. It sits in traffic during busy seasons like everyone else does. How are you going to REDUCE the drive-throughs to the G Canyon?
59. Fares: should offer economy passes for seniors, children and workers.
60. Residents of Oak Creek Canyon need to be considered. Residents should be able to buy discount passes. Hotels and timeshares should contribute. Probably Airbnb owners as well.
61. 24 ST AND CAMELBACK IN PHX BUILT A BEAUTIFUL UNDERPASS - BIKING GREENBELT ON 89A - SAFETY – BEAUTY.
62. Don't think people will use the service unless it runs fairly frequently, people don't want to give up the freedom of a vehicle for long waits for public transport, particularly in our heat.
63. The City must stop wasting money on this subject. Instead, build a new police facility!
64. It will merely cause more traffic problems, slower traffic and congestion when buses stop.

65. Use a daily wrist band system. Riders could get on and off as needed. Residents could purchase a monthly card.
66. Must be good for the environment.
67. Non-polluting vehicles that are quiet and do not create more noise and air pollution.
68. Keep buses relatively small 20 passengers max.
69. Please, consider monthly pass for residents, at reduced rate for frequent riders.
70. Paint an attractive local artist painted mural on both sides.
71. It needs to run long hours from early morning to late at night. Also, to maximize usability, good connections with existing system - Verde Lynx - is important.
72. Sedona already studied and implemented a transit plan with the RoadRunner many years ago. It was free and initially served Uptown, Hillside, Tlaqupaque, with very little ridership. Also, the service briefly expanded to include West Sedona, and even workers commuting from Cottonwood. The service eventually folded. Not sure what the incentive will be for people to park their cars, load coolers, camp chairs and supplies on a bus, ride in traffic to the canyon, unload, only do reload later all over again. How many cars will one bus take off the road? 5, 6, 10? You will need a lot of buses to have carrying capacity to make a dent in local traffic. Also, we know locals are too impatient to wait for a bus, they already drive too fast in a town that the longest commute is 10 minutes (20 from the village). I am so glad money got spent for another consultant/feasibility study for area transit and I am sure this program will launch despite it was tried and failed on a smaller scale before. Why build it once when you can build it a second time for twice the price.
73. The sound of buses is terrible. Are you talking about big buses? How about shuttles? Maybe I am delusional that that would help?
74. It is so important that this survey is including to / from the Village of Oak Creek. Please include a package rate for workers who need to use the service several times a week.
75. The transit service needs to be comprehensive and integrated to include as much of the Greater Sedona area as possible.
76. A State Grant would be nice.
77. Make it convenient for getting large numbers (tourists) to and from the over major attractions where parking is full. Residents need to use their cars for multiple stops at non-attractions: home to the Post Office, school, pharmacy, bank, grocery and home again. Bus service with all these stops for residents is not financially practical.
78. Please get this started as soon as possible!! :)
79. Residents will not use this as they have their own vehicles and will not want to deal with the bother of walking to and from transit stops, hauling stuff by hand, and waiting to be picked up and dropped off. Visitors are also not likely to use transit for the same reasons and also they will not be familiar with how the transit system works.

80. Day, week, month, or annual passes would encourage the use of public transit.
81. Because all the grocery stores and banks are so spread out in West Sedona, I don't know how a transit system would help locals.
82. NO TRANSIT SERVICE NEEDED.
83. Don't do it.
84. We tried this before. Buses ran empty for months on end. If you must do something, build bus stops and let private carriers service them.
85. Please use Hybrid or other high fuel-efficiency and low emissions transport vehicles
86. Transit isn't just about visitors. With an aging population, we need a transit system to help older people get around and especially people who may not be as safe driving as they once were.
87. I think it will be a flop. You have no parking.
88. The fare is a difficult, but important, consideration. We love that Zion charges nothing for its shuttles, and would love if Sedona charged nothing, too. But that may not be feasible. If a charge is necessary, PLEASE keep it low, say, \$1.00 per trip. That way, people have an incentive to use it. Incentive is everything!! In our car-dependent society, we have to have a very good reason to NOT use our cars. For the residents, we see the traffic/parking problem, but visitors will not necessarily know about it. They will think it's easier to use their cars, unless the fare is very low or free.
89. Whatever is done, it must be done with respect to our precious environment. Possibly a portion of Park-n-Ride fees be donated to trail and environmental projects. Sell annual passes to locals. Have environmental tour books about Sedona's history/mountains/flora/fauna/trails available for very nominal fee.
90. This is important for us to do. It is one of the few ways we can deal with traffic in Sedona.
91. Locals should have a lower fare than visitors.
92. Thank you for the survey!
93. This is an excellent idea and very much needed! Many Western towns; most people understand Sedona can get congested and offering this service will help improve their experience as well, especially if there are places to park where they can leave their car.
94. This might take awhile to catch on. Please stick with the plan as residents and tourists adopt new, healthier ways of enjoying Sedona the plan will benefit tourists and residents and bring the two populations together while sharing an improved Sedona experience.
95. Tourist traffic is a serious problem in Sedona, and is translating to real political battles. Given the Chamber receives money from the City to advertise and invite tourists to Sedona, money from tourism MUST directly support quality of life for residents in very visible ways. If not, we're going to have serious tourist v local and resident v hotelier/Chamber problems. The City Council should pay attention to this latest political season, and actively address these traffic

and tourism concerns in ways that don't always include costly consultants who end up writing reports that do not translate into improved quality of life.
96. Start small, Oak Creek first, no village.
97. It should use electric vehicles.
98. Please do not move forward with this idea. Focus on quality of life for residents.
99. I doubt it will attract tourists or residents. Driving one's own car more convenient, private, doesn't require waiting to be picked up or lugging gear except into and out of one's own car. The Red Rock Crossing option makes much more sense than another public transit system. (Whatever happened to Verde Lynx?)
100. This is not as high of a priority as Oak Creek Canyon access, but consideration for future expansion should also be given for access onto Dry Creek Rd, Red Rock Loop Rd, to Red Rock Crossing, and Red Rock State Park.
101. Go green.
102. Small buses, did we learn anything from the Roadrunner fiasco?
103. Hotels must enforce that visitors use the shuttles. They have the parking. How to enforce that visitors don't drive needs to be studied.
104. If you want residents to use it you may consider a card for free or reduced fare. Visitors should pay.
105. Yes. This is specifically for tourists. The investment should be in public transit, traffic light coordination, pedestrian crossings. DO NOT continue discussions or studies (wasting money) on neighborhood connector road or the Forest Road project. Keep the neighborhoods for the residents!! Listen and post accurate information - no pro-spin and print both sides of all opinions.
106. Research efficient, cost-effective systems in other cities, not only in the USA, and build a great system. Make Sedona a model for cull time living, and for tourists, instead of the thoughtless, chaotic mess it is now. Put quality of experience before private financial concerns. In that way, it will be successful, and therefore amenable to local businesses, as well as to riders. Thank you for moving on this. Our roads are unsafe now, and there is little time to waste.
107. I think that it is the number #1 best use for the Home Rule money that just got renewed...given the passions surrounding the election. If that isn't addressed immediately the Home Rule opponents will begin their next attack. The Chamber of Commerce should be clearly and publicly part of this plan AND share the costs. I have always watched and questioned the detrimental effects that C of Cs can have on all manner of communities: they start off helpful and eventually continue to help a lot of businesses but often impact negatively the quality of life for both visitors and residents. We are choosing to spend many more months elsewhere than we did just 5 years ago. We used to escape the heat but now it's much more. The End for now.
108. No one will use it.

109. It would be beneficial to study other areas where shuttles are utilized and successful.
110. Free important. at \$1 each, it costs a family of 4 \$8 RT. Gas is cheaper, and they came in a car. The temptation of cost and convenience over transit will keep people off the buses.
111. Just that it should be reliable and on-time!
112. (1) The City doesn't know what Sedona's carrying capacity is--this needs to be determined--and there are only two highways (SR 89A and SR 179). Traffic and crowds are a negative already, as is over-tourism. What if residents get a call telling us to evacuate because of a fire? It could happen. The Brins Mesa Fire started on a Father's Day Sunday at about 11:30 a.m. The cause was due to a human, probably a beggar's camp. Very luckily, there was little wind, if any. How many residents and tourists would be able to evacuate should a wildfire rage through the City on a windy day? We only have two highways and emergency vehicles need the right of way. Health, safety and welfare have been ignored by City Council, Staff, the Chamber of Commerce, the Lodging Council, and the Transportation Master Plan Update. (2) The Sedona AZ Community Livability Report 2017 found (Figure 10: Support for Growth Industries) that about 4 in 10 respondents supported increasing tourism or warehouse and distribution businesses. Why are three new hotels in the pipeline? Residents don't support them, there are health and safety problems already (Uptown, especially), and the City's carrying capacity is unknown. In addition, the .5% City sales tax increase effective last March 1st, the Transportation Master Plan Update and the SIM will not do the job needed and be out of date in a few years. (2) The City needs to address the needs of the local community over ignoring Health, Welfare and Safety issues.
113. Let's make it happen!
114. Low-income (elder) or all Residents could be eligible for some city reimbursement after a pre-set minimum expenditure for bus use in the first year - and perhaps afterward.
115. Hopefully you are looking at experiences of other similar cities. If it doesn't reduce traffic in the Canton and between VOC and Sedona it's a waste of money. And it should not substitute for other alternatives - i.e., a bridge across Oak Creek.
116. Give riders to the canyon a discount at Slide Rock for using the system! Discounts at local stores
117. Locals with ID showing they live in Sedona/VOC/Oak Creek should have a free annual pass.
118. Free admission to trails for those who ride the bus to the trailhead.
119. Free same day bus transfers.
120. Wrong.
121. It needs to be attractive enough for tourists to park their own cars in a lot and use the transportation.
122. Bus pullout lanes are critical. Otherwise, the system will only cause more traffic backups. An easy way to pay fare for locals would be nice, such as a year-long bus pass.
123. Free Passes for low income Sedona residents.

124. Most people are married to their cars. I don't think that the city should subsidize it.
125. The electric buses in Mesa are doing very well and the people seem to like the character of them.
126. Traffic is awful. Clogging up the canyon and streets with the addition of busses is an awful, ill planned idea. I don't see it reducing traffic. I see it adding to the problem and costing money.
127. Fares - sell a card that can be swiped on the bus for rides. This would make a fare below \$1 easier.
128. You are posing no answer to the transit problem. The carry capacity of vehicles will not decrease unless visitors are staged in out of city parking facilities and then bused throughout town. That addresses 89A in town but you have two other access points, one from Flagstaff and other from Sedona. Many European cities are now limiting tourist visiting since as with ours the quality of community life is being destroyed. Traffic is not the real problem but access to Sedona. The infrastructure is at capacity with water use, pollution, food services, etc. Drastic social issues must be addressed as to curving visitation but that won't happen owing to an amateur city council and mayor who have no training nor experience with civic planning. They don't even know how to address such issues.
129. Pick-ups at hotels and motels.
130. No transit system! NO TRANSIT SYSTEM.
131. I have seen no analysis of how and why the former Roadrunner transit system failed, and how and why this system will be different, and correct the former problems. Actively investigate (by interview) everyone involved in the "Roadrunner" design and "ostensible" failure, so many of the same mistakes. I'm personally one of the initial top 10 Roadrunner promoters, but not contacted. Forget resident utilization unless the system utilizes neighborhood incorporation. Getting into your vehicle to get to the bus is ridiculous!
132. This is a waste of time and money would not be used.
133. Free public transportation should be mandatory for ALL visitors (there are plenty of areas where parking lots could be developed with minimal destruction to the environment. Since we have one of the highest local sales tax rates in the nation, money should be diverted from other unnecessary projects in SIM to this.
134. Have central trailhead parking lots with transit to major trailheads at least early am, 12:00 pm and late pm
135. Residents will not drive to a park and ride lot on 179 and or 89A and then transfer to a bus. A big city solution that serves a commuting workforce. That is not Sedona. Close the canyon, ala Zion or install a bus lane to reduce travel time.
136. This service is a MUST! It's a wonder that people aren't killed walking on the narrow road in Oak Creek Canyon. The City and Coconino County should protect themselves from liability by providing this much needed service. Many National Parks require buses as transit to reduce traffic congestion and increase safety. People get used to it and it becomes the norm.

"No Parking" barriers are also used in National Parks to stop illegal parking and helps to enforce the transit system.
137. Should be daily passes only. Included free in hotel daily rate.
138. It's critical that we create safe and easily available transportation to avoid the Sedona/Oak Creek Canyon being "loved to death."
139. I would like to see more public transit from Phoenix to Sedona.
140. Transit system needs to focus 1) primarily on hotel/motel guests in West Sedona and VOC (80% of SR179 weekend traffic are visitors-Trans Master Plan p 16) and 2) on commuters. Shuttle system should be combined with Oak Creek Canyon reservation system, limited roadside parking and Dynamic Message Signage advising sight-seeing drive thru traffic to use I-17 to and from Flagstaff and that OCC campgrounds and day-use areas are FULL / NO PARKING AVAILABLE.
141. I'm glad our city is starting to tackle the idea of public transportation. In doing so I think it is imperative to remember and return to the fundamental point. This is about helping people connect to place(s); one has not simply arrived when they step off a bus. Other kinds of connections and infrastructure are imperative to a success public transit system. If a major goal is to reduce traffic/cars on our roads, the solution should not only reflect the goal but also function holistically in order to be successful rather than a band-aid. Taking the bus in combination with walking/riding a bike on a safe connecting path will need to be as easy/pleasing or easier/more pleasing than driving a car.
142. I do not believe locals will use this service based on the proposed route. I hope visitors will use it for the Canyon and maybe Bell Rock and Courthouse.
143. I have lived in Oak Creek Canyon for 10 years and this isn't just about traffic, we have so many sirens every day in the canyon and it is really dangerous living here now.
144. Zion National Park shuttle service is a great example!
145. Just 3 or 4 buses is not going to help much. You would need several. And I don't think it would cut down visitor congestion because they need their Cars to carry their things. Plus, most parking areas will get employees of uptown businesses towed. Residents have no security regarding this topic.
146. Have all hotels/motels/restaurants supply bus schedules
147. Park and Ride lots seem very important but I'd hate to see the environmental impact.
148. Ecologically sound buses/vehicles would be hugely important.
149. They need to do away with all parking along the side of the road in Oak Creek Canyon or this transit system will not get used there by visitors.
150. This is a waste of time and money. The survey was biased into showing a result that the politicians wanted
151. Some people want to be able to get around to their jobs into Sedona. The tourists that have cars don't seem to have much interest in getting to a place in the canyon. Most Day trippers

<p>will have a car full of camping/picnic gear along with multiple people and taking public transportation is just not suitable. Those who travel mostly with bikes or on foot need to have a way to get around. We need flashing re-routing signs on 17 for those coming up from the valley so they have options to get into Sedona from the west and not just 179.</p>
<p>152. Needs to be comprehensive enough in Oak Creek Canyon so that it does reduce congestion significantly, or it won't work. No baby steps here; take the time and implement a complete system well.</p>
<p>153. I know there is maintenance on buses and gas costs but a free system would entice visitors and older residents on a fixed income to use what could become a viable solution to getting around the Sedona/Village area. This would reduce traffic and help with pollution. If a fee were to be charged I think it should be a flat fee of .50 cents.</p>
<p>154. I think the transit service should be primarily for tourists who represent the largest percentage of cars in traffic jams. Also, the fares should be subsidized by BBB tax and the hotel and accommodation businesses except short term rental properties. All the amenities of 9a are important to make this work. I have seen it work in tourist towns in Europe like Chamonix and ski resorts in Austria. If it works well, then locals will be happy to use it too!</p>
<p>155. Putting buses into the mix, the buses won't be able to keep a schedule due to traffic (talk to trolley companies, and to Jeep companies) The current bus system is NOT used by locals why do you think locals will change their behavior (do you know the average age of a Sedona resident?) and use a new bus system? Stand at grocery store for a week, ask one simple question, as a resident would you use a local bus system instead of your car. Adding buses only makes traffic worse.</p>
<p>156. Running hop on/off service continuously would reduce congestion and would make use of the service more attractive. A more scheduled service is less attractive for residents because they would have to plan their day around the transit service. This type of service has been in use in Europe and is highly successful.</p>
<p>157. Please address the real issue of traffic which is the backups that having the roundabout made on 179 and the mess in Uptown Sedona after the curbs etc. were added. An alternate route onto Schnebly or Jordan or adding an overpass so that pedestrians can pass over 89a in Uptown Sedona or something else needs to be considered. I really don't think anyone would take the extra time needed to use public transportation when they can just use their own cars non the less pay for it. This is really bad idea. Please fix what you did by adding the roundabouts and the changes you made to Uptown Sedona.</p>
<p>158. Again, I would like to emphasize that we use clean transportation, electric vehicles.</p>
<p>159. First, someone get ADOT to synchronize the west Sedona lights and make them able to detect traffic. Maybe put strobes on the buses so they can control the lights. Now I would definitely use the transit service if buses came every 20 minutes or so and was not subject to traffic. But it is, so I predict all buses will be stuck in traffic and breaking schedules. There will be no incentive to take them, unless we think some up. I don't know if "free" is good enough. Maybe discounts in shops and restaurants for riders. Perhaps close the canyon on busy weekends, open only to locals and buses. Maybe restrict all canyon parking to pay lots. And uptown should be treated like a mall with all the parking nearby and easy. That opens up traffic lanes or more walking area. \$10 parking. Free if you have a receipt for at least \$10.</p>

<p>160. Free within Sedona would be a very strong inducement to locals and visitors, and low-cost to the canyon would be worthwhile for visitors IF (a) the park and ride included amenities such as shade, restrooms and perhaps some tourist info and (b) there is room on the bus to store gear under seats or overhead -- this is very important because people will want to carry backpacks, swimming stuff, etc.</p>
<p>161. We need more ways to safely bike through town.</p>
<p>162. No. But want to remind all that most uptown residences are against neighborhood connector roads and especially the Forest Road project. To reduce traffic add services like this, synchronized traffic lights and leave the neighborhoods to the property owners. Also, please publish accurate results of this survey - not a pro spin by omission of the opposing opinions as in previous SIM communications.</p>
<p>163. Love that we're looking into this! Thank you.</p>
<p>164. Transit between the growing VOC and Sedona is important to reduce congestion on the highways.</p>
<p>165. It sounds great but would not want it on my residential street.</p>
<p>166. Might be prudent to try one route before committing to all four potential routes.</p>
<p>167. This is a TERRIBLE IDEA.</p>
<p>168. ONLY charge fare if bus will take cashless payment – I will NOT carry cash</p>
<p>169. Good luck getting people to use it. People like the flexibility to come and go as they like, when they like. I am not a big city person so never used mass transit, so we will see.</p>
<p>170. This is needed and should work in conjunction with synchronized traffic lights and pedestrian bridges/crossings. The neighborhood proposals should be canceled immediately! Stop wasting funds on projects like Forest Road and make the investment on what will have the largest impact with the least cost involved. Also, ensure that complete and accurate information (like this survey and this comment) are reported accurately. Stop the leading statements like "some supported" and pro opinions. The city needs to share factual and truthful statements without a bias one-way or another.</p>
<p>171. Yes. This program needs to be free and easy to use. It should run alongside other low-cost activities like pedestrian bridges and coordinate traffic lights. Stop the neighborhood connector projects and studies like Forest Road. Leave neighborhoods to the residents!</p>
<p>172. Make sure folks don't need cash to get on. Please see above about giving local business the opportunity to market to the captive tourist audience on the bus.</p>
<p>173. This idea of local transit to alleviate traffic sounds good, BUT execution is everything and could make it a disaster for Sedona and residents! 1. Any transit service should use electric or natural gas technology to minimize environmental pollution. Diesel would be a disaster! 2. I don't want to see Sedona littered with big busses. Smaller electric powered shuttles are preferable. 3. There must also be adequate ridership to justify the cost and environmental impact, and ongoing analysis to justify and ensure it's being used adequately - if not used enough, schedules should be adjusted to longer intervals to facilitate rides with enough</p>

<p>passengers to justify the trip or be disbanded. For example, a bus running for 1-2 riders is a waste, needlessly causing pollution and increased traffic. 4. Transit service could easily make traffic worse without adequate ridership AND without turnout lanes. 5. The service must be free to encourage increased ridership. 6. IMHO a study of who rides in similar communities (visitors vs residents) and the types of locations frequented should be done. These decisions shouldn't be based on survey opinions, but on hard data. (For example, it sounds good to make Sedona more walkable and bikeable, but Sedona weather and demographics don't lend themselves to this being a reality. The vast majority of residents will never walk or bike to the store, etc. And these bike/walking paths are infringing on individual property rights and ruining Sedona's small-town look and feel in violation of the Community Plan.) Otherwise I think transit should be geared toward visitors, running between hotels and trails. Hotels should contribute toward the cost. There are not enough residents using transit to warrant the costs and impacts. 7. I would not care for bus stop benches littered along 89A and 179, these will end up being used for loitering by vagrants. 8. Keep busses off local connector roads.</p>
<p>174. Use latest technologies to help with pollution, noise, and other issues associated with public transportation- electric, etc.</p>
<p>175. It must provide real connections to places that people frequent, like supermarkets, movie theaters, trailheads.</p>
<p>176. The success of any transit system is whether people use it. People will use it if it takes them where they want to go and does so without a lot of waiting time. So bus frequency, followed closely by the bus route, are, in my mind, the most important factors.</p>
<p>177. Believe improved transit would be good for Sedona, but do not believe will address the real traffic issue. 80 to 90% of the time traffic is fine and it is what should be expected in a tourist town with limited road options. I don't see how improving the transit system significantly reduces the congestion going north on 179 or at the Y during crunch time. I have asked members of the council what is "success" with these transit projects. Have never received an answer that is measurable or quantified. My fear is that we will spend millions of dollars to save 10 minutes 20 times a year. Not worth the price and money could be used in better ways. I don't care that "tourists" pay for 60% of the cost as many like to point out.</p>
<p>178. The development of a Toll for use of Oak Creek Canyon Road 89A, beginning above the switchbacks or Canyon View parking area south into the Uptown area. Similar to the 17-mile drive on the Monterey Peninsula in Calif. There are several toll roads for scenic byways across the country, and Oak Creek Canyon is no different. Also, the scenic byway north of the Village of Oak Creek to Sedona constitutes another potential toll. As an example, a \$5.00 per car toll would generate significant revenue that could then be infused into a fund to maintain the roadways, remove trash, protect and enhance the environment/natural and cultural resources, etc.</p>
<p>179. Lodging industry should be required to provide transit or at least help subsidize</p>
<p>180. Pedestrian underpasses and bypasses for pedestrian safety.</p>
<p>181. This is two part -We Want to make it compelling for people to park and ride in either direction. How would we compel them? Free cost to park and low cost to ride? 1)If visitor is an overnight visitor they will have free parking at their rental/hotel-they could use public transportation- either in the form of bus/other alternatives -i.e., bikes. To compel them parking in a non</p>

<p>VRBO/hotel area should be expensive and time bound. 2) Day trippers should pay some sort of toll to drive through or they can park their car at a designated parking area and use the transit system at a low cost -like a National Park would do- like we already live in, right!</p>
<p>182. Getting cars off the road is the ideal solution. Park and ride from VOC and from outside west Sedona. Trailheads don't have enough parking and no one comes to Sedona to sit in traffic on the highway.</p>
<p>183. Check out various Colorado ski resort models, the one that runs through Zion National Park in Utah, plus considering some pedestrian-only areas in Uptown??</p>
<p>184. I don't think many residents will use it but tourists might if the fare is low and popular tourist sights are readily accessible.</p>
<p>185. More "\$ burden" on the tourists. Set it up like London where are you simply cannot bring your car into non-residential Uptown under any circumstance. The only vehicles would be trolleys, buses, etc. Love the possibilities. ASAP, please!</p>
<p>186. Thank you for doing this survey.</p>
<p>187. Tie-in with sustainability goal. Reduction of carbon emissions.</p>
<p>188. Next bus arrival time information at key stops.</p>
<p>189. Lots are a terrible idea. Let the pickups be at major hotels like AZ Shuttle does. Also, we NEED to connect VV School Rd. With Red Rock Loop Rd. That would decrease traffic and make first responders be able to navigate our city much better, safer and quicker.</p>
<p>190. There should be free or low cost "loop" service that goes by the hotels, major attractions and trailheads. Bus shelters are a must; nobody is going to stand outdoors in the heat waiting for a bus without some shelter.</p>
<p>191. Any transit service into Oak Creek Canyon must not further hinder traffic there. It should only have a few stops to the most popular places, with pull-outs that will allow traffic to flow and passengers to be safe. Small shuttle buses would be best.</p>
<p>192. Don't make trails like West Fork and Devil's Bridge more crowded.</p>
<p>193. Thanks</p>
<p>194. Paid parking at \$10 an hour in Uptown to help entice folks to use the trams. Residents exempt.</p>
<p>195. Use more trolleys.</p>
<p>196. Must find a way to limit traffic with extraordinarily high Oak Creek Canyon parking fee. (Also, please limit BBQ's along the side of the road - nuts!)</p>
<p>197. Small buses or shuttles only, if possible.</p>
<p>198. The main congestion is in Sedona.</p>

199. I think that it would help our community and there would be less people with fines also and it would help communities.
200. Park and ride incentives are important- easy cheap and often seem essential.
201. Needs to connect to existing transit operations.
202. Make sure it can accommodate commuters with a park and ride lot somewhere just outside of W. Sedona.
203. Needs to not be "studied" forever and happen now.
204. I would use to eat/drink in Sedona if it returned to Clarkdale.
205. Forget this idea - public transit can never pay for itself and will be subsidized by government.
206. Unless you force people to use it, it will be a waste of money. Tourists can get vouchers for a certain number of rides from the overwhelming number of hotels in town and the hotels should charge an in and out fee for their parking lots. Let's make it hard for tourists NOT to use the transit. This works in Yosemite and all around the world. We must protect Sedona from being loved to death and since people will not self-regulate, as the stewards of this town, we must regulate them.
207. Hotels need to be in on this. They need to highly recommend, as well as subsidize this service to their guests.

(This page intentionally left blank.)



(This page intentionally left blank.)

Chamber Business Survey Analysis

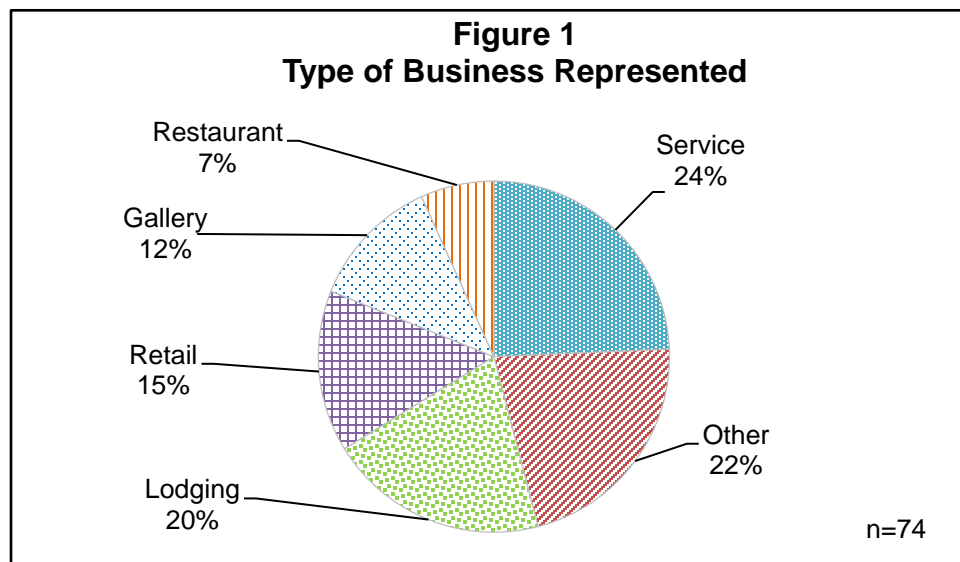
As part of the effort to obtain input from the community, a separate survey questionnaire was used for businesses in the study area that are part of the Sedona Chamber of Commerce and Tourism Board. The questionnaire was developed with input from City of Sedona staff and then distributed as widely as possible. The survey asked respondents to answer a series of questions about a new public transportation system serving the Sedona-Oak Creek Canyon area. The survey was available from August 27, 2018 through September 30, 2018, and is included in Appendix E.

SURVEY ANALYSIS

A total of 77 responses were received through the online questionnaire. The results of the chamber business survey will be discussed in the following section.

Type of Business Represented

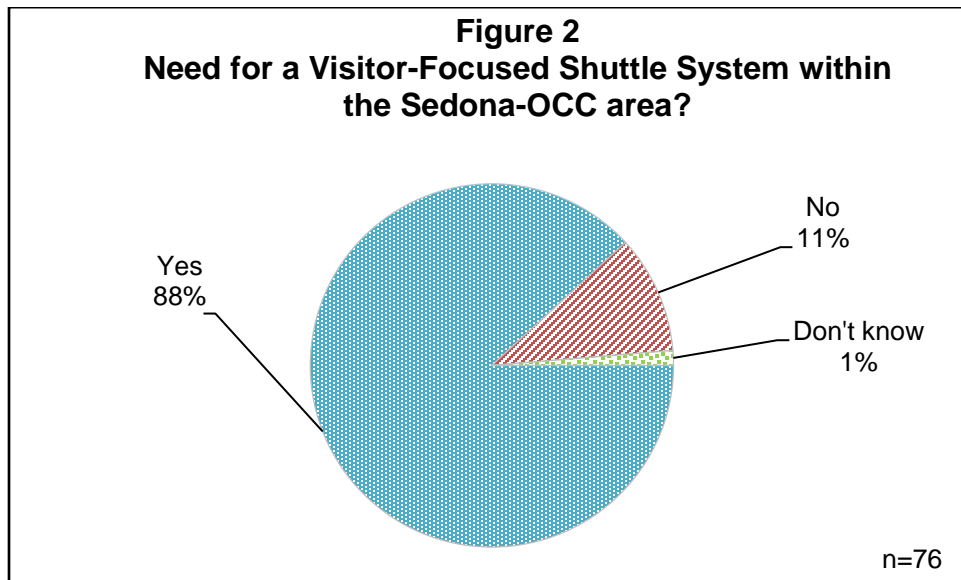
Respondents were asked to indicate what type of business they represent – lodging, restaurant, retail, gallery, service, or other. The results are illustrated in Figure 1. Approximately 24 percent of respondents were employed in the service industry, followed by other (22 percent), lodging (20 percent), retail (15 percent), gallery (12 percent), and restaurant (seven percent).



Of the respondents who selected other, the most common responses included non-profit organization (four responses, five percent of all respondents), resident (four responses, five percent of all respondents), volunteer (three responses, four percent of all respondents), and retired (two responses, three percent of all respondents).

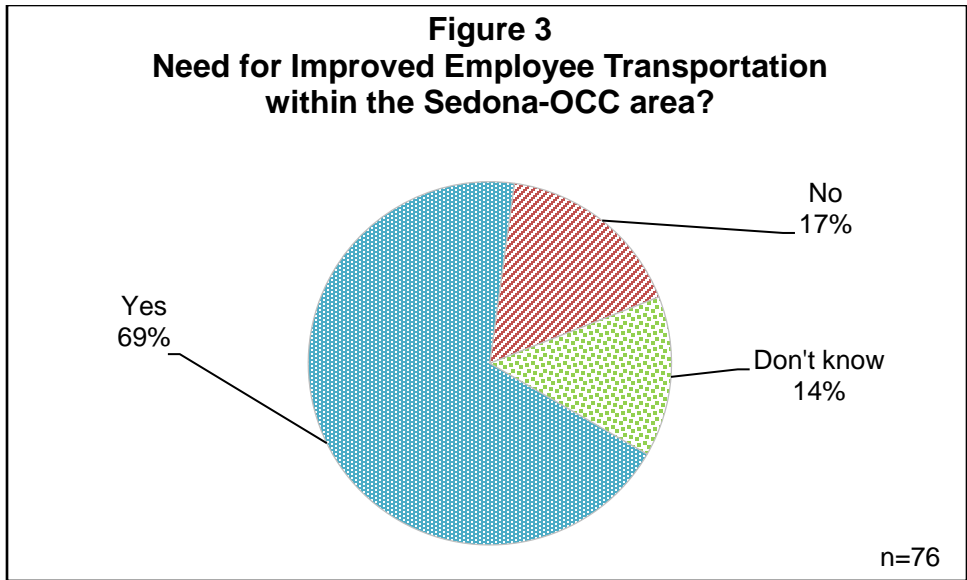
Need for a Visitor-Focused Shuttle System

Respondents were asked if they believe there is a need for a visitor-focused shuttle system within the Sedona-Oak Creek Canyon area. As shown in Figure 2, the majority of respondents (88 percent) indicated yes, that a visitor-focused shuttle system is needed within the Sedona-Oak Creek Canyon area.



Need for Improved Employee Transportation

Respondents were asked if they believe there is a need for improved employee transportation within the Sedona-Oak Creek Canyon area. As shown in Figure 3, the majority of respondents (69 percent) indicated yes, that improved employee transportation is needed within the Sedona-Oak Creek Canyon area.



Importance of Trip Types to Provide

Respondents were asked how important it is for the new transit system to provide the following four types of trips: 1) providing trips from Sedona north into Oak Creek Canyon; 2) providing circulation within Uptown Sedona; 3) providing circulation throughout the City of Sedona, including West Sedona; and 4) providing trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads. Participants were asked to rate the trips from one to five with one being not important and five being very important. The results are presented in Table 1.

Type of Trip	Average Score
Providing trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads	4.16
Providing circulation throughout the City of Sedona, including West Sedona	3.94
Providing trips from Sedona north into Oak Creek Canyon	3.35
Providing circulation within Uptown Sedona	3.19

Source: LSC Resident Survey, 2018.

The average scores of the four trip types are above 3.0 indicating respondents believe all four trip types are important. The trip type that received the highest average score was providing trips between South 179, the Village of Oak Creek

and Sedona, including intermediate trailheads (4.16), while the trip type that received the lowest average score was providing circulation within Uptown Sedona (3.19).

Likelihood of the Local Transit System Providing Benefits to the Community

Respondents were asked to rate how likely it is that a local transit system would provide the following six benefits to the community: 1) reduce traffic and congestion, 2) reduce parking demand, 3) improve the experience for visitors, 4) make it easier and safer for residents to get around, 5) make it easier and safer for visitors to get around, and 6) improve residential quality of life. Participants were asked to rate the benefits from one to five with one being definitely would not benefit the community and five being definitely would benefit the community. The results are presented in Table 2.

Table 2	
Likelihood of the Local Transit System Providing Benefits to the Community	
Benefits	Average Score
Make it easier and safer for visitors to get around	4.07
Improve the experience for visitors	3.99
Improve residential quality of life	3.96
Make it easier and safer for residents to get around	3.95
Reduce traffic and congestion	3.94
Reduce parking demand	3.87

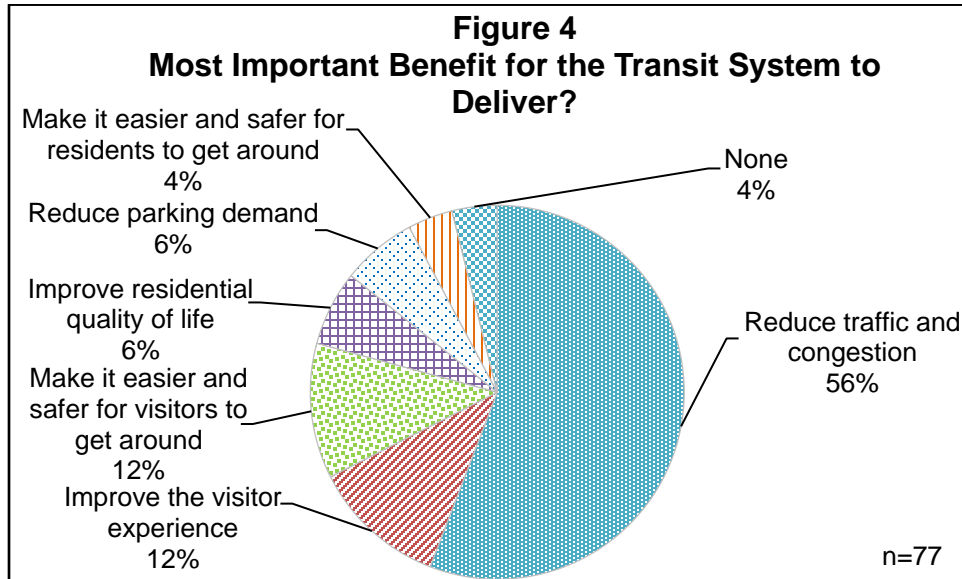
Source: LSC Resident Survey, 2018.

The average scores of all six benefits were very similar, with 0.20 separating the highest and the lowest average scores. All of the average scores were above 3.0 indicating respondents believe the local transit system will provide all six benefits to the community. The benefits that received the highest average scores were make it easier and safer for visitors to get around (4.07) and improve the experience for visitors (3.99). The benefits that received the lowest average scores were reduce parking demand (3.87) and reduce traffic and congestion (3.94).

Most Important Benefit for the Transit System to Deliver

Respondents were asked which benefit is most important for the transit system to deliver. As shown in Figure 4, over half of respondents (56 percent), indicated

that reducing traffic and congestion is the most important benefit for the transit system to deliver, followed by improving the visitor experience (12 percent) and making it easier and safer for visitors to get around (12 percent).



Importance of Factors for a Visitor Shuttle

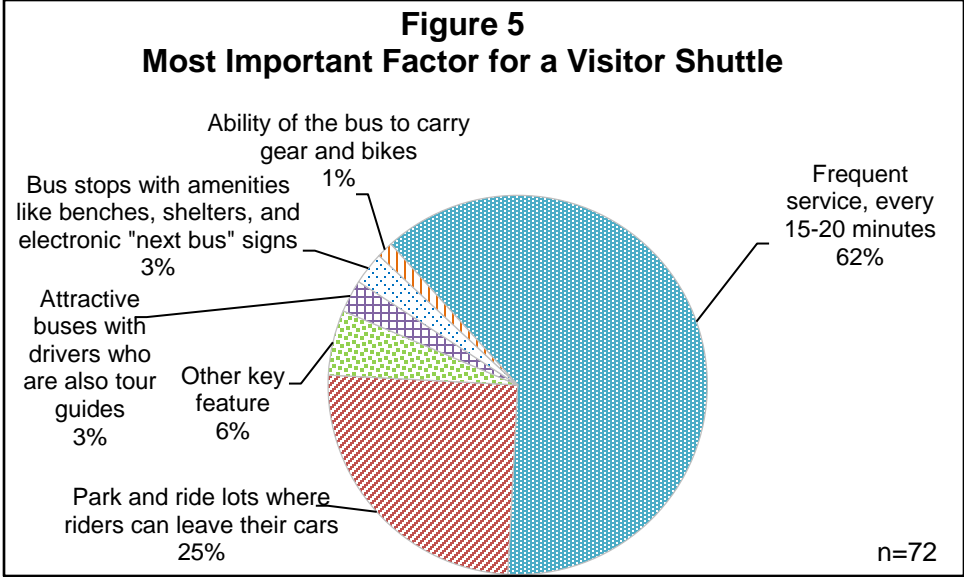
Respondents were asked how important each of the following six factors are for a visitor shuttle: 1) service that runs every 15 to 20 minutes; 2) bus stops with amenities like benches, shelters, bus pull-out areas, and sidewalk connections; 3) ability of the bus to carry gear and bikes; 4) park and ride lots where riders can leave their cars; 5) attractive buses with drivers who are also tour guides; and 6) other. Participants were asked to rate the factors from one to five with one being not important at all and five being very important. The results are presented in Table 3.

Table 3	
Importance of Factors for a Visitor Shuttle	
Factors	Average Score
Service that runs every 15-20 minutes	4.32
Other	4.27
Park and ride lots where riders can leave their cars	4.15
Bus stops with amenities like benches, shelters, bus pull-out areas, and sidewalk connections	3.83
Ability of the bus to carry gear and bikes	3.78
Attractive buses with drivers who are also tour guides	2.99
<i>Source: LSC Resident Survey, 2018.</i>	

The factor that received the highest average score was service that runs every 15 to 20 minutes (4.32), while the factor that received the lowest average score was attractive buses with drivers who are also tour guides (2.99). The most common responses for other included bus routes/service area (six responses, 23 percent of all respondents), low-emission or clean buses (five responses, 19 percent of all respondents), bus service hours (four responses, 15 percent of all respondents), and bus stop locations at trailheads (four responses, 15 percent of all respondents).

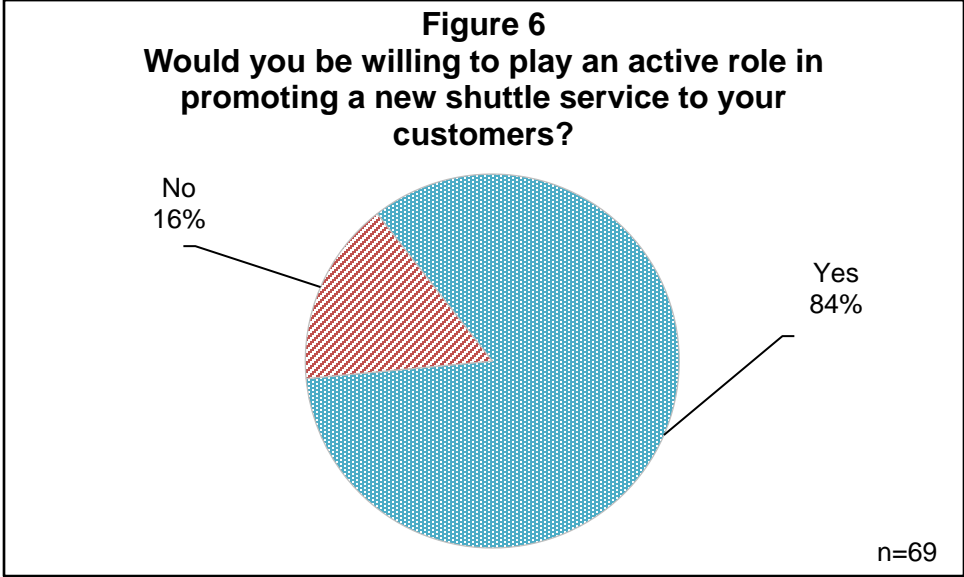
Most Important Factor that would Make Transit Service Attractive

Respondents were asked which factor is most important for a visitor shuttle. As shown in Figure 5, approximately 62 percent of respondents indicated that service that runs every 15 to 20 minutes is the most important factor for a visitor shuttle, followed by park and ride lots where riders can leave their cars (25 percent).



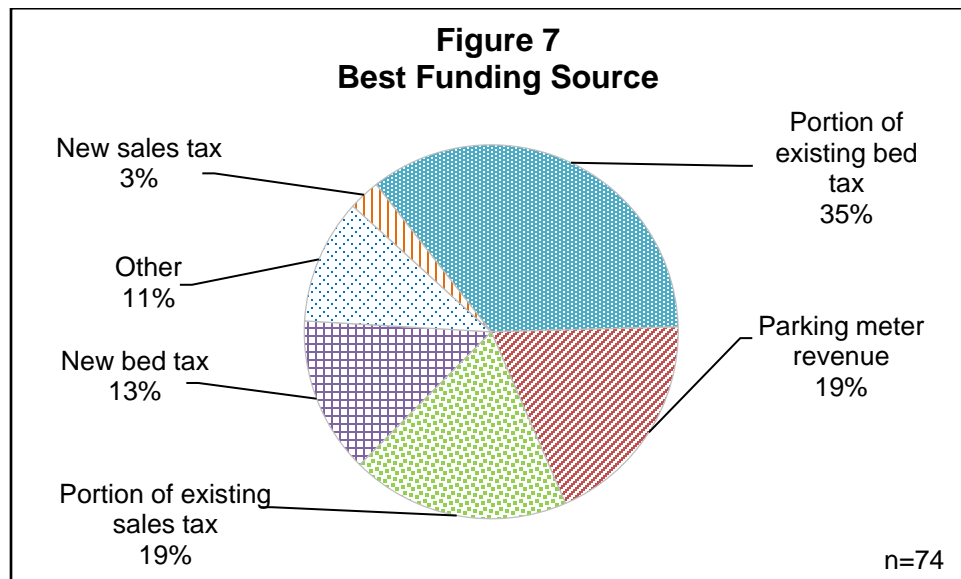
Willing to Play an Active Role Promoting New Shuttle Service

Respondents were asked if they would be willing to play an active role in promoting a new shuttle service to their customers via their front-line staff, literature distribution, on-line information, etc. As shown in Figure 6, the majority of respondents (84 percent) indicated they would be willing to play an active role in promoting a new shuttle service to their customers, while 16 percent of respondents indicated they would not be willing to play an active role in promoting a new shuttle service to their customers.



Best Funding Source

Respondents were asked what they believe the best funding source is for the transit service: 1) new sales tax; 2) new bed tax; 3) portion of existing sales tax; 4) portion of existing bed tax; 5) parking meter revenue; or 6) other. As shown in Figure 7, approximately 35 percent of respondents indicated that the best funding source for the transit service would be a portion of the existing bed tax, followed by parking meter revenue (19 percent), portion of the existing sales tax (19 percent), and a new bed tax (13 percent).



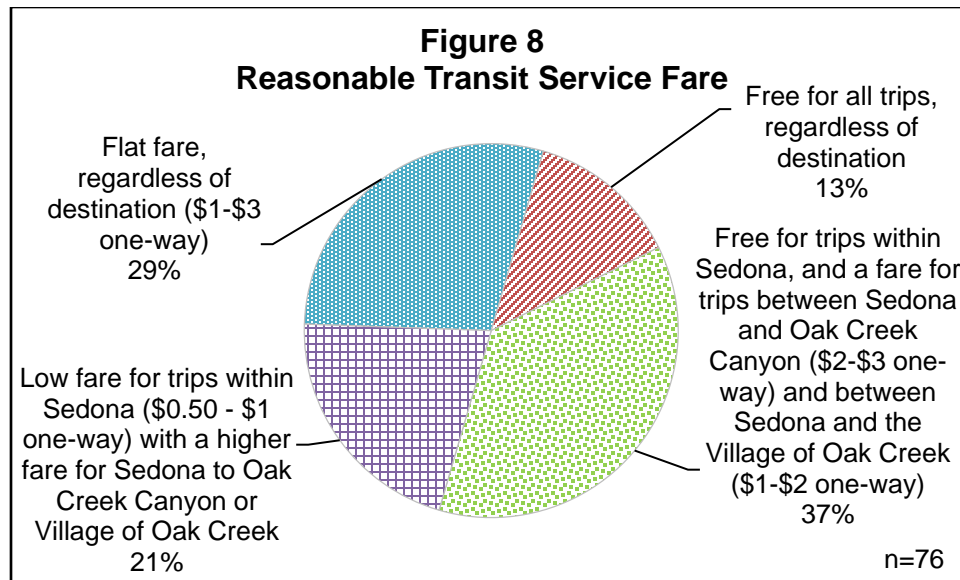
Additional Funding Sources to Consider

Respondents were asked what other sources of funding should be considered for a local shuttle service. As shown in Table 4, approximately 37 percent of respondents indicated that passenger fares should be an additional source of funding for a local shuttle service, followed by a new or existing bed tax (20 percent), and funding from hotels, the tourism industry, and the chamber of commerce (14 percent).

Table 4		
Additional Funding Sources to Consider		
Type of Funding	Number of Responses	Percentage of Total Respondents
Passenger Fares	18	37%
New/Existing Bed Tax	10	20%
Hotels/Tourism Industry/Chamber of Commerce	7	14%
Grants	6	12%
Parking Meter/ Park-n-Ride Lot Revenues	6	12%
New/Existing Sales Tax	6	12%
Other	4	8%
Advertising	2	4%
None	2	4%
TOTAL	61	124%
<i>Source: LSC Chamber Business Survey, 2018.</i>		

Reasonable Transit Service Fare

Respondents were asked what a reasonable transit service fare would be: 1) free for all trips, regardless of destination; 2) free for trips within Sedona, and a fare for trips between Sedona and Oak Creek Canyon (\$2.00-\$3.00 one-way) and between Sedona and the Village of Oak Creek (\$1.00-\$2.00 one-way); 3) low fare for trips within Sedona (\$0.50 - \$1.00 one-way) with a higher fare for Sedona to Oak Creek Canyon or Village of Oak Creek; or 4) flat fare, regardless of destination (\$1.00-\$3.00 one-way). As shown in Figure 8, approximately 37 percent of respondents indicated that a reasonable transit service fare would consist of free trips within Sedona, and a fare for trips between Sedona and Oak Creek Canyon (\$2.00-\$3.00 one-way) and between Sedona and the Village of Oak Creek (\$1.00-\$2.00 one-way). Approximately 29 percent of respondents indicated that a reasonable transit service fare would be a flat fare, regardless of destination (\$1.00-\$3.00 one-way).

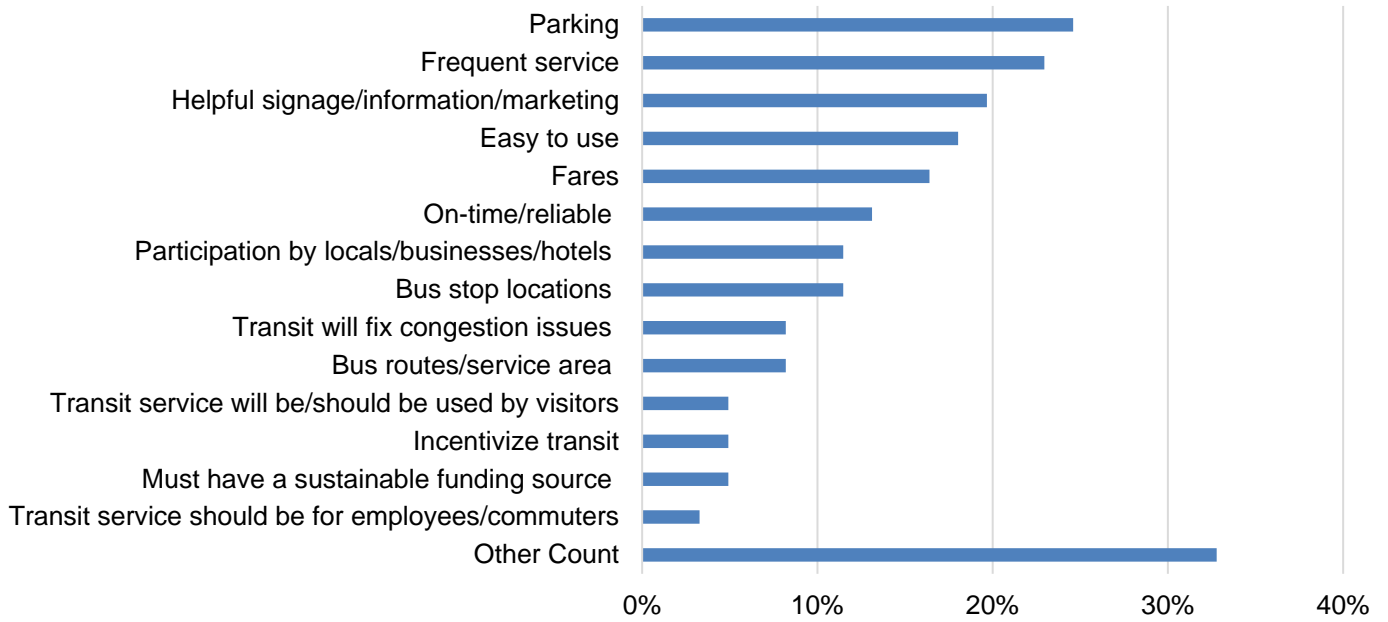


Most Important Factors for Implementing a Successful Public Transit Service within the Sedona-Oak Creek Canyon Area

At the end of the survey instruments, respondents were asked to share which factors they believe will be the most important in implementing a successful public transit shuttle service within the Sedona-Oak Creek Canyon area. The individual comments can be read in full in Appendix F. Sixty-one out of 77 respondents provided a comment with the factors they believe will be most important in implementing a successful public transit shuttle service within the Sedona-Oak Creek Canyon area. General categories were used to group the factors based on the comments received. If multiple factors were addressed in one comment, the comment was counted in each of the relevant categories.

Figure 9 categorizes the various comments received. The most frequently received comments were regarding parking (25 percent), frequent service (23 percent), helpful signage/information/marketing (20 percent), easy to use (18 percent), and fares (16 percent).

Figure 9
Most Important Factors for Implementing a Successful Public Transit Service within the Sedona-Oak Creek Canyon Area



(This page intentionally left blank.)

Appendix E



(This page intentionally left blank.)



Chamber Business Survey

The City of Sedona is studying the feasibility of implementing a new public transit system that could serve the Sedona-Oak Creek Canyon area. Please take a few minutes to give us your views:

1. Type of business you represent:

2. Do you believe there is a need for a visitor-focused shuttle system within the Sedona-Oak Creek Canyon area?

3. Based on your own business experience, is there a need for improved employee transportation within the Sedona-Oak Creek Canyon area?

4. There are four types of trips that the new transit system might provide. How important is each of these?

	1 - Not Important	2	3	4	5 - Very Important
Providing trips from Sedona north into Oak Creek Canyon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing circulation within Uptown Sedona	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing circulation throughout the City of Sedona, including West Sedona	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing trips between South 179, the Village of Oak Creek and Sedona, including intermediate trailheads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5a. How likely do you think it is that a local transit system would provide the following benefits to the community?

	1 - Definitely Not	2	3	4	5 - Definitely Would
Reduce traffic and congestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduce parking demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve the visitor experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make it easier and safer for residents to get around	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make it easier and safer for visitors to get around	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve residential quality of life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5b. Of the options presented in question 5a, what is the most important benefit for the transit system to deliver?

- Reduce traffic and congestion
- Reduce parking demand
- Improve the visitor experience
- Make it easier and safer for residents to get around
- Make it easier and safer for visitors to get around
- Improve residential quality of life
- None

6a. If you were designing an ideal visitor shuttle, how important would each of the following features be?

	1 - Not important	2	3	4	5 - Very important
Frequent service, every 15-20 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus stops with amenities like benches, shelters, and electronic "next bus" signs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability of the bus to carry gear and bikes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Park and ride lots where riders can leave their cars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive buses with drivers who are also tour guides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other key feature (please identify in question 6b)					

6b. Please indicate the "other key feature" you evaluated in question 6a.

6c. Of the options presented in question 6a, which of these features is most important?

Frequent service, every 15-20 minutes

Bus stops with amenities like benches, shelters, and electronic "next bus" signs

Ability of the bus to carry gear and bikes

Park and ride lots where riders can leave their cars

Attractive buses with drivers who are also tour guides

Other key feature (as identified in question 6b)

7. Would you be willing to play an active role in promoting a new shuttle service to your customers (via your front line staff, literature distribution, your on-line information, etc.)?

Yes

No

8. What is the best funding source for the transit service?

New sales tax

New bed tax

Portion of existing sales tax

Portion of existing bed tax

Parking meter revenue

Other

9. In addition to the funding source you selected in Question 8, what other sources of funding should be considered for a local shuttle service?

10. What would you consider as a reasonable cash fare for a new local transit service?

Free for all trips, regardless of destination

Free for trips within Sedona, and a fare for trips between Sedona and Oak Creek Canyon (\$2-\$3 one-way) and between Sedona and the Village of Oak Creek (\$1-\$2 one-way)

Low fare for trips within Sedona (\$0.50 - \$1 one-way) with a higher fare for Sedona to Oak Creek Canyon or Village of Oak Creek

Flat fare, regardless of destination (\$1-\$3 one-way)

11. What factors do you think will be most important in implementing a successful public transit shuttle service within the Sedona-Oak Creek Canyon area?

12. If you'd like to be kept informed about public meetings and study recommendations, please provide your name, business, and email address below.

Name:

Business:

Email Address:

Submit

(This page intentionally left blank.)

Appendix F



(This page intentionally left blank.)

Chamber Business Survey Comments

1. The schedule would need to be consistent and as timely as possible. With traffic congestion this is obviously going to be difficult to uphold.
2. Monthly passes at a reduced price for residents.
3. Getting the concerned authorities to authorize and implement the service.
4. Great PR, consistent support from the city and businesses.
5. Would only be used for sludge. Would only be feasible for Slide Rock and West Fork.
6. Electric vehicles, also to Cottonwood as many live there who have to work here.
7. Promoting it.
8. Telluride and Durango, Co have wonderful free transport...works for them!
9. Make it easy for visitors to use.
10. Frequency of start/stop times.
11. Consistency, the shuttles have to operate frequently.
12. Routine service, and advertising in all shops and galleries in Sedona.
13. 1. don't make visitors wait long to catch the bus 2. make sure there are clear instructions on how easy it will be to ride the bus. 3. more prices is just confusing, make it \$1.00 no matter where they go.
14. Dependability/Affordability.
15. Frequent service and user friendly.
16. Out of view parking, strategic drop off and pick up to not interfere with other traffic, other people or views.
17. Yes this is a possible solution. We need to have the customer to be the alternate winner.
18. Transportation for staff and travelers.
19. Park and ride shuttle from between VOC and Uptown MUST be able to bypass backed up traffic and arrive faster than driving. There must also be a second shuttle from Uptown into the canyon, so that the visitor does not need to drive their car to get into the canyon. (A specially-designed mini-shuttle could use the bike path along 179, or a near-ground-level tramway with seats could be used to transport people between VOC and Uptown.
20. Having the funds for a transit system.
21. The transit schedule and location/times of stops.
22. The Roadrunner system didn't work. Why would this?
23. Frequency of service.
24. No cost to users.
25. That locals know about bus, then help locals help out of towners.
26. Needs to be accurate on timing and easily accessible.

27. Ease of congestion, hospitality for guests and residents, better management of labor force, and accessible transportation.
28. Frequency, clearly marked shuttle stops, and free parking for visitors who want to use the shuttle.
29. Charge more than enough to sustain and maintain. Take your highest estimated operating costs and triple them. Divide them by the number of riders. That's the only realistic approach. If you have a surplus that will help fund expansions. If you are using ASU for any budget amounts be sure to multiply them by ten. They are the worst cost estimators in the world.
30. Stops at or near hotels, hiking trails, shopping and dining. Ability to ride all day for one fee.
31. Community engagement and participation of locals and especially tourism representatives (business owners, those that directly deal with guests and their comments and concerns regarding excessive traffic).
32. Simple, regular, reliable, and flat fare.
33. Time, frequency, pickup locations, cost.
34. That it actually serves to get people around completely and efficiently so that tourists and visitors alike can leave their vehicles behind. Coupled with bike-share program, and an increase in walkability (actual sidewalks), an increase in bikeability (wider, protected bike lanes), and a toll to travel through Sedona this could be the beginning of a multi-modal transportation plan that works. Light rail? Gondola?
35. More traffic for business in the area.
36. We need to motivate the visitor to use the service and NOT drive their car within Sedona/Oak Creek area. Parking along 89A in Oak Creek needs to be restricted and strongly enforced so that the only option is to use the buses. If the lot attendants (or electronic signage) communicated that there was NO PARKING AVAILABLE at popular destinations like Slide Rock then visitors would be motivated to park and ride rather than using their own vehicles. Also, signage at the intersections of SR 179 and I-17 should communicate delays for pass-through traffic. If the system was seen as easy-to-use, convenient, value-added (tour guides) etc., then I think the hotels would be happy to promote it to their guests as retailers would too. I know it is a huge up-front expense and will require a lot of coordination but our town is in dire need of this if it is thoroughly thought out and done right. If it is not, and fails, the City won't have an opportunity to try this for another 20 years.
37. Consistent regular service, lots of service to parking areas, promotion. Service to trails, parks, etc. in canyon itself and beyond will reduce traffic through traffic at the Y. A huge portion of traffic is just going through town to the canyon. Need to also reduce/enforce parking along road system to reduce congestion and convert people to riding the transit system to destinations within the canyon, which will reduce backup traffic in town as well once visitors understand how it works and see it in action.
38. Making sure people know how it works, timetables that are easy to understand, and seeing key members of Sedona i.e., Chamber Staff, City Council use it regularly.
39. A system focus to aid people who are disabled or unable to explore Sedona on their own.
40. Stops at hotels, galleries, grocery stores and trailheads.
41. Teamwork.
42. Just do it.

43. Education. Selling convenience and lower environmental impact. It's much more relaxing to ride than drive. One can actually look around without becoming a hazard. I've been driving myself around this place for over 30 years. I'd much rather catch an affordable ride.
44. Requiring fees in all canyon parking areas and allowing parking in the canyon only in designated parking areas.
45. Proper marketing.
46. Letting people know how easy to get on/off and view for those that can't/don't want to hike.
47. Reliability - parking - ease - a good route will be critical.
48. Frequent shuttles that can be used as a reliable transportation that goes everywhere within Sedona, or it won't be used.
49. Properly fund it, keep operations fast and cheap, properly promote it, and charge a lot for parking, and restrict parking at trailheads.
50. Comfortable waiting stations and frequent service.
51. STOP PARKING ON 89A! Only let shuttles into Slide Rock and West Fork.
52. Get some of the traffic out of Uptown, especially on the weekends.
53. Less congestion.
54. Making it free and stopping at trailheads and tourist sites.
55. Easy-to-understand maps with routes.
56. Transportation to trailheads, frequency, low cost.
57. Community buy in.
58. Advertising and ease of use, discouraging/preventing parking along roadway.
59. Traffic already moves at 10 mph below speed limit. A shuttle will possibly make this worse.
60. None. I don't believe it will be used enough to justify the cost. Bryce and Zion National Parks have shuttles during high traffic seasons but there are no outlets from the parks to other tourist areas. People going to Slide Rock Park can continue on to Flagstaff for more sight-seeing.
61. The AZDOT must not allow parking on the sides of 89A through Oak Creek Canyon. The Forest Service must not allow parking in their parking lots except for cars with disabled stickers and people staying at the campgrounds.

(This page intentionally left blank.)



(This page intentionally left blank.)

Incentivized Interviews

1. Where are you visiting from? Arizona Other US International
2. How long will you be staying in Sedona?
3. Number in your group?
4. Is this your first time in Sedona? First time Repeat Visitor
5. Is Sedona your primary destination or is this stop on a longer trip?
 Primary Longer (where else)
6. Did you arrive by car? Yes No (how)
7. What are you doing while you're here?
 Hiking Biking Sightseeing Shopping Dining Spiritual Other
8. Where will you be going while you're here?
 Uptown West Sedona Oak Creek Canyon Slide Rock State Park Village of Oak Creek
 Hiking/Biking Trails (what trails) Other Specific
9. Have you gotten advice about destinations from the hotel staff – concierge or front desk staff – or did you have everything planned before you came? (If planned) How did you do your travel planning?
10. How will they be getting around while you're here (driving, hotel shuttle, taxi/Uber, receiving a ride from a friend/relative, public transit, etc.).
11. When driving, how do you navigate – paper maps, Smartphone, instructions from staff?
12. Have you had any concerns or issues with traffic and parking? Are there places you've chosen not to go because of parking/traffic concerns?
13. If there was a convenient shuttle that connected their hotels with destinations in Sedona, Oak Creek Canyon and the Village of Oak Creek, would they use it instead of driving for some trips?
 - a. Would not having to deal with parking hassles be a factor in deciding to use a shuttle?
 - b. What kinds of trips/destinations would they use it for?
14. What characteristics would the shuttle need to have to be attractive to them?
 Frequency? Travel time? Hours? Proximity to hotel? Type of vehicle?
 Sheltered waiting area, other amenities? Room for gear on vehicle?
15. Would the shuttle need to be free or would you be willing to pay a fare?
16. Where would you want to get information about the shuttle?

Short Interviews - Tlaquepaque

1. Where are you visiting from? AZ Other State Local Resident

2. Are you staying in Sedona or just here for the day?

3. Where else are you visiting while you're here?

4. How are you getting around while you're here?

5. Any problems with traffic or parking?

6. If there were a shuttle

 a. From a park and ride lot along 179/89A

 b. From your hotel

 To places in Sedona and Oak Creek Canyon, do you think you'd use it?

7. What would make a shuttle attractive to you?

 Frequency Hours Destinations



(This page intentionally left blank.)

Trail Intercept Survey Questionnaire	Date: Location:			Date: Location:		
1) Where are they from? (specify)	<input type="checkbox"/> AZ	<input type="checkbox"/> State:	<input type="checkbox"/> Int'l:	<input type="checkbox"/> AZ	<input type="checkbox"/> State:	<input type="checkbox"/> Int'l:
2) What activity are they participating in? (observation)	<input type="checkbox"/> Hiking	<input type="checkbox"/> Mtn. Biking	<input type="checkbox"/> Equestrian	<input type="checkbox"/> Hiking	<input type="checkbox"/> Mtn. Biking	<input type="checkbox"/> Equestrian
3) What is the size of their group?	_____ people			_____ people		
4) Type of Visitor?	<input type="checkbox"/> Overnight Visitor	<input type="checkbox"/> Day Visitor	<input type="checkbox"/> Local Resident	<input type="checkbox"/> Overnight Visitor	<input type="checkbox"/> Day Visitor	<input type="checkbox"/> Local Resident
5) If OVERNIGHT, where are they staying?						
Hotel/Motel/Resort	<input type="checkbox"/>			<input type="checkbox"/>		
Airbnb/Rental Vacation Home	<input type="checkbox"/>			<input type="checkbox"/>		
Timeshare	<input type="checkbox"/>			<input type="checkbox"/>		
Private Home as a guest	<input type="checkbox"/>			<input type="checkbox"/>		
B&B	<input type="checkbox"/>			<input type="checkbox"/>		
Campground/RV Park	<input type="checkbox"/>			<input type="checkbox"/>		
Free Camping not in a campground	<input type="checkbox"/>			<input type="checkbox"/>		
6) If OVERNIGHT, what other activities are they participating in while in Sedona?						
Sightseeing	<input type="checkbox"/>			<input type="checkbox"/>		
Dining	<input type="checkbox"/>			<input type="checkbox"/>		
Shopping	<input type="checkbox"/>			<input type="checkbox"/>		
Other (specify)	<input type="checkbox"/>			<input type="checkbox"/>		
7) If OVERNIGHT, is Sedona their primary trip destination?	<input type="checkbox"/> Yes	<input type="checkbox"/> No - what is?		<input type="checkbox"/> Yes	<input type="checkbox"/> No - what is?	
8) How did they arrive in Sedona?	<input type="checkbox"/> Personal Vehicle	<input type="checkbox"/> Rental Vehicle	<input type="checkbox"/> Other:	<input type="checkbox"/> Personal Vehicle	<input type="checkbox"/> Rental Vehicle	<input type="checkbox"/> Other:
9) Where did they park – was it a problem? Ask for an explanation of the problem or ask about a specific problem i.e. “did you have difficulty finding a place to park” or “how long did you spend looking for a place to park”	<input type="checkbox"/>			<input type="checkbox"/>		
10) If OVERNIGHT, if there was a shuttle that connected Sedona/VOC hotels with this location, would they have left their car and ridden the shuttle to this location?	<input type="checkbox"/>			<input type="checkbox"/>		
11) Would they use a shuttle for other destinations? (i.e. restaurants, bars, shopping)	<input type="checkbox"/>			<input type="checkbox"/>		
12) IF DAY VISITOR, if there was a shuttle that connected a park and ride along 179/89A with this location, would they have left their car and ridden the shuttle to this location? Would not having to deal with parking hassles be a factor in deciding to use a shuttle?	<input type="checkbox"/>			<input type="checkbox"/>		
13) IF RESIDENT, if there was a shuttle that connected Sedona neighborhoods with this location, would they have left their car and ridden the shuttle to this location?	<input type="checkbox"/>			<input type="checkbox"/>		
14) Are they doing other hikes or bike rides while here? If so, where?						
15) What characteristics would the shuttle need to have to be attractive to them?						
Frequency - how often should a bus come?	<input type="checkbox"/>			<input type="checkbox"/>		
Cost - what might they be willing to pay?	<input type="checkbox"/>			<input type="checkbox"/>		
Bike racks/room for gear on the bus	<input type="checkbox"/>			<input type="checkbox"/>		
Hours	<input type="checkbox"/>			<input type="checkbox"/>		
Sheltered waiting area/ other bus stop amenities (specify)	<input type="checkbox"/>			<input type="checkbox"/>		
Is there a need for weekday service?	<input type="checkbox"/>			<input type="checkbox"/>		
Other (specify)	<input type="checkbox"/>			<input type="checkbox"/>		

(This page intentionally left blank.)



(This page intentionally left blank.)

MEMORANDUM

Traffic Simulation Modeling Results to Support Sedona Transit Plan

REVISED: November 19, 2019

Analysis Scope and Purpose

Kimley-Horn assessed the relative level-of service (LOS) and travel time benefits associated with potential transit and roadway improvements in Sedona, Arizona.

The scope of the analysis was limited to the following intersections:

- SR 179 / SR 179 (“Y”) roundabout
- SR 179 / Schnebly Hill Road roundabout
- SR 179 / Brewer Road roundabout
- SR 179 / Ranger Road intersection
- Potential extension of Ranger Road to SR 89A (transit-supportive roadway improvement)

Note that the analysis does not evaluate the benefits of transit service outside of the above-listed intersections, including through Uptown and Oak Creek Canyon.

Kimley-Horn prepared 19 modeling scenarios, with different combinations of roadway improvements, transit investment, and transit-supportive roadway improvements.

Roadway improvements evaluated in the modeling scenarios are based upon those defined in the *Sedona Transportation Master Plan*.

- SR 179 from Schnebly Hill roundabout to the Y is expanded to 2 lanes in each direction
- Schnebly Hill Road roundabout is expanded to 2 lanes
- A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk.
- Addition of separated eastbound turn lane towards southbound SR 179 at “Y”
- Addition of separated northbound turn lane towards Uptown at “Y”

Transit investments evaluated in the modeling scenarios are as described in *Sedona Transit Implementation Plan Preliminary Recommendations*, March 29, 2019, prepared by LSC Transportation Consultants, Inc.:

- Phase 1 of the transit plan includes core routes serving West Sedona, Village of Oak Creek, and Uptown along with shuttle service to three or four local trailheads.
- Phase 2 of the transit plan will add shuttle service to additional local trailheads in the Sedona area.
- Phase 3 of the transit plan adds a new route serving Oak Creek Canyon from a new intercept parking lot south of the Village of Oak Creek to a new intercept parking lot near Oak Creek Vista.
- Phase 4 of the transit plan will add express service to Slide Rock State Park from a new remote parking lot, eliminating private vehicle access to the park during the peak season.

Transit-supportive roadway improvements evaluated in the modeling scenarios are:

- Option 1: Extend Ranger Road northwest of Brewer Road to connect to SR 89A.
- Option 2: widening SR 89A eastbound for a bus-only lane, constructing a transit-only left turn signal at SR 179/Ranger Road to allow a bus to make a left turn.

Scenarios Overview

Scenario 1 represents current conditions.

Scenarios 2-8 each include roadway widening of SR 179 between Schnebly Hill Road and the “Y” and slip lanes at the “Y” consistent with the *Sedona Transportation Master Plan*. Scenarios 2-8 demonstrated improved mobility at study area intersections as compared to existing conditions. However, the modeling illustrated that the benefit is a result of the roadway improvements, and that significant congestion is essentially eliminated with construction of the full set of TMP roadway improvements. As such, the results did not now show meaningful additional benefits of transit service at study area intersections with the construction of the fully planned roadway improvements.

To increase understanding of the potential benefits of transit service to reduce congestion and improve mobility, if it is not possible to implement all of the roadway improvements identified in the TMP (and modeled in Scenarios 2-8), City of Sedona staff asked Kimley-Horn to prepare an additional set of model scenarios that reduce the level of assumed roadway improvements. Within these additional scenarios (Scenarios 9-12), SR 179 is not widened between Schnebly Hill Road and the “Y”.

Scenarios 9-12 reduce the level of roadway improvements. Within these reduced TMP improvements scenarios, *SR 179 is not widened between Schnebly Hill Road and the “Y”*. However, slip lanes at the “Y” are included in the improvements (eastbound right turn from SR 89A to southbound SR 179, and northbound right turn from SR 179 to eastbound SR 89A).

Scenario 13 has reduced roadway TMP improvements, both slip lanes at the “Y” (eastbound right turn from SR 89A to southbound SR 179, and northbound right turn from SR 179 to eastbound SR 89A), and Phase 1 and 2 transit improvements. Also included are Transit-supportive roadway improvements Option 1.

Scenario 14 has reduced roadway TMP improvements, both slip lanes at the “Y” (eastbound right turn from SR 89A to southbound SR 179, and northbound right turn from SR 179 to eastbound SR 89A), and Phase 3 and 4 transit improvements. Also included are Transit-supportive roadway improvements Option 1.

Scenario 15 has reduced roadway TMP improvements and limits the slip lane at the “Y” to the northbound right turn from SR 179 to eastbound SR 89A, and Phase 1 and 2 transit improvements. Also included are Transit-supportive roadway improvements Option 1.

Scenario 16 has reduced roadway TMP improvements and limits the slip lane at the “Y” to the northbound right turn from SR 179 to eastbound SR 89A, and Phase 3 and 4 transit improvements. Also included are Transit-supportive roadway improvements Option 1.

Scenario 17 has reduced roadway TMP improvements and limits the slip lane at the “Y” to the eastbound right turn from SR 89A to southbound SR 179), and Phase 1 and 2 transit improvements.

Scenario 18 has reduced roadway TMP improvements and limits the slip lane at the “Y” to the eastbound right turn from SR 89A to southbound SR 179), and Phase 3 and 4 transit improvements.

Scenarios 14, 16, and 18 included Phase 3 and 4 transit improvements. When modeling volume reductions associated with Phase 3 and 4 of the transit program, traffic volumes at the study area intersections were reduced such that they effectively eliminate congestion.

Each of these scenarios are summarized in **Table 1**.

Table 1. Scenarios Overview

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
1	Existing	None	Traffic volumes collected on Memorial Day weekend, 2019	None	None
2	TMP Improvements	<ul style="list-style-type: none"> SR 179 from Schnebly Hill roundabout to the Y is expanded to 2 lanes in each direction Schnebly Hill Road roundabout is expanded to 2 lanes A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. Addition of separated eastbound turn lane towards southbound SR 179 at "Y" Addition of separated northbound turn lane towards Uptown at "Y" 		None	None
3				Phase 1 and 2	None
4				Phase 3 and 4	None
5				Phase 1 and 2	Option 1
6				Phase 3 and 4	Option 1
7				Phase 1 and 2	Option 2
8				Phase 3 and 4	Option 2
9				Reduced TMP Improvements	<ul style="list-style-type: none"> Addition of separated eastbound turn lane towards southbound SR 179 at "Y" Addition of separated northbound turn lane towards Uptown at "Y" A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. Addition of separated eastbound turn lane towards southbound SR 179 at "Y" Addition of separated northbound turn lane towards Uptown at "Y" A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk Addition of separated northbound turn lane towards Uptown at "Y" A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk Addition of separated northbound turn lane towards Uptown at "Y" A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk Addition of separated northbound turn lane towards Uptown at "Y" A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk Addition of separated eastbound turn lane towards southbound SR 179 at "Y"
10	Phase 1 and 2	None			
11	Phase 3 and 4	None			
12	Phase 3 and 4	Option 2			
13	Phase 1 and 2	Option 1			
14	Phase 3 and 4	Option 1			
15	Phase 1 and 2	Option 1			
16	Phase 3 and 4	Option 1			
17	Phase 1 and 2	None			

<i>Scenario</i>	<i>Roadway Improvements</i>	<i>Roadway Improvements Description</i>	<i>Traffic Volumes</i>	<i>Transit Service</i>	<i>Transit-Supportive Roadway Improvements</i>
		<ul style="list-style-type: none"> A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk 			
18		<ul style="list-style-type: none"> Addition of separated eastbound turn lane towards southbound SR 179 at “Y” A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk 		Phase 3 and 4	Option 2

EXISTING TRAFFIC VOLUMES

The roundabout intersection of State Route 89A (SR 89A) and State Route 179 (SR 179) (the “Y”) and nearby intersections were modeled using VISSIM software and analyzed using traffic volume data collected on Memorial Day weekend, 2019.

Kimley-Horn collected bi-directional 24-hour counts on Sunday May 26 and Tuesday May 28 at the following locations:

- SR 89A west of Brewer Road
- SR 89A between Brewer Road and SR 179
- SR 89A east of SR 179
- Brewer Road south of SR 89A
- Ranger Road east of Brewer Road
- SR 179 south of SR 89A
- SR 179 south of Ranger Road

Additionally, Kimley-Horn collected peak hour TMC’s on Sunday, May 26, from 10:00 am to 4:00 pm at the following intersections:

- SR 89A and Brewer Road Roundabout
- SR 89A and SR 179 Roundabout (the “Y”)
- Brewer Road and Ranger Road
- SR 179 and Ranger Road
- SR 179 and Schnebly Hill Road Roundabout

Based on analysis of the collected traffic volumes and Traction travel-time data, the network peak hour for analysis was assumed to be 3:00 PM – 4:00 PM. It should be noted that this period was selected specifically because it represented the heaviest congestion (based both on volume and Traction travel times) in the southbound direction on SR 179.

VISSIM MODEL CONFIGURATION

Kimley-Horn utilized and updated the VISSIM model developed for the *Sedona Transportation Master Plan* (TMP). All models were updated with traffic volumes collected on Sunday May 26 in the 3:00-4:00 PM peak hour.

Volume reductions associated with added transit ridership were provided by LSC Transportation Consultants for Phase 1 and 2 transit investment, and Phase 3 and 4 transit investment. The volume reductions are included as Attachment 1.

MODELING SCENARIOS

The following exhibits illustrate the assumptions within each of these Scenarios.

Scenario 1: Existing Conditions.

<i>Scenario</i>	<i>Roadway Improvements</i>	<i>Roadway Improvements Description</i>	<i>Traffic Volumes</i>	<i>Transit Service</i>	<i>Transit-Supportive Roadway Improvements</i>
1	Existing	None	Memorial Day weekend, 2019	None	None

Scenario 2-8: Full TMP Improvements

<i>Scenario</i>	<i>Roadway Improvements</i>	<i>Roadway Improvements Description</i>	<i>Traffic Volumes</i>	<i>Transit Service</i>	<i>Transit-Supportive Roadway Improvements</i>
2	TMP Improvements	<ul style="list-style-type: none"> SR 179 from Schnebly Hill roundabout to the Y is expanded to 2 lanes in each direction Schnebly Hill Road roundabout is expanded to 2 lanes A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. Addition of separated eastbound turn lane towards southbound SR 179 at "Y" Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	None	None
3				Phase 1 and 2	None
4				Phase 3 and 4	None
5				Phase 1 and 2	Option 1
6				Phase 3 and 4	Option 1
7				Phase 1 and 2	Option 2
8				Phase 3 and 4	Option 2

Scenario 9: Reduced TMP Improvements

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
9	Reduced TMP Improvements	<ul style="list-style-type: none"> • A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. • Addition of separated eastbound turn lane towards southbound SR 179 at "Y" • Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	None	None

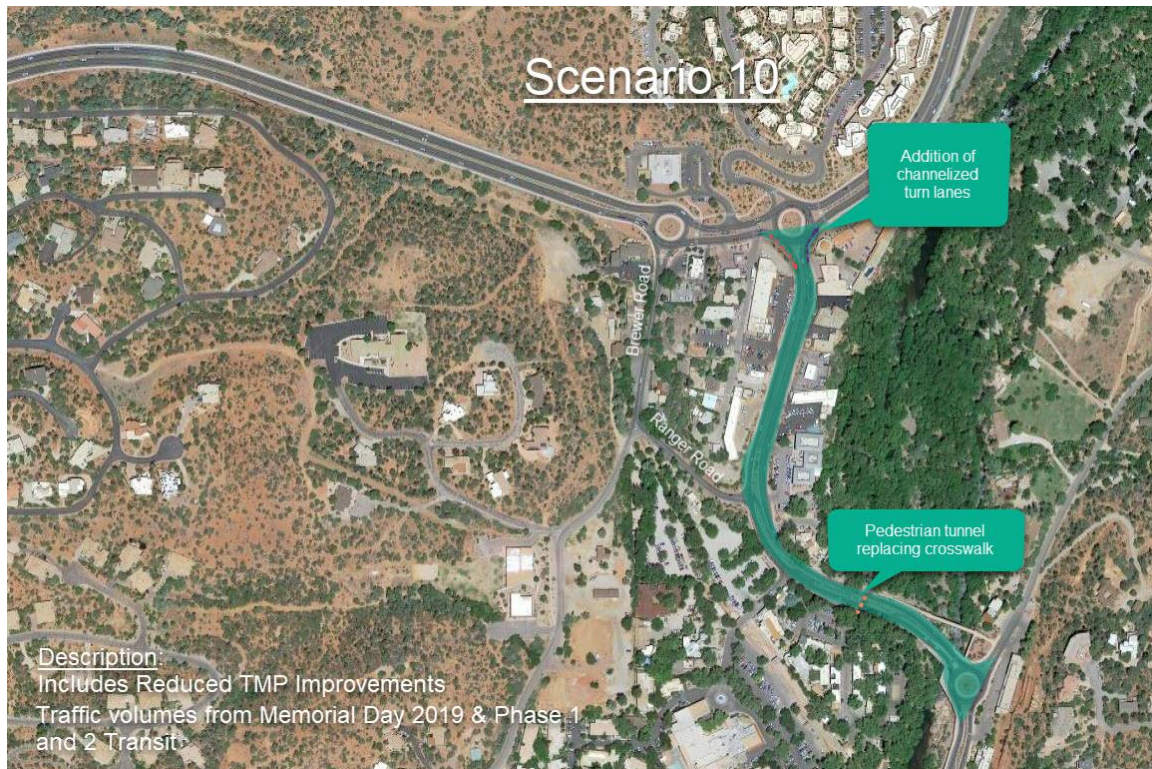
Figure 1. Scenario 9 Exhibit



Scenario 10: Reduced TMP Improvements and Phase 1 and 2 Transit Investment

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
10	Reduced TMP Improvements	<ul style="list-style-type: none"> • A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. • Addition of separated eastbound turn lane towards southbound SR 179 at "Y" • Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	Phase 1 and 2	None

Figure 2. Scenario 10 Exhibit



Scenario 11: Reduced TMP Improvements and Phase 3 and 4 Transit Investment

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
11	Reduced TMP Improvements	<ul style="list-style-type: none"> • A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. • Addition of separated eastbound turn lane towards southbound SR 179 at "Y" • Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	Phase 3 and 4	None

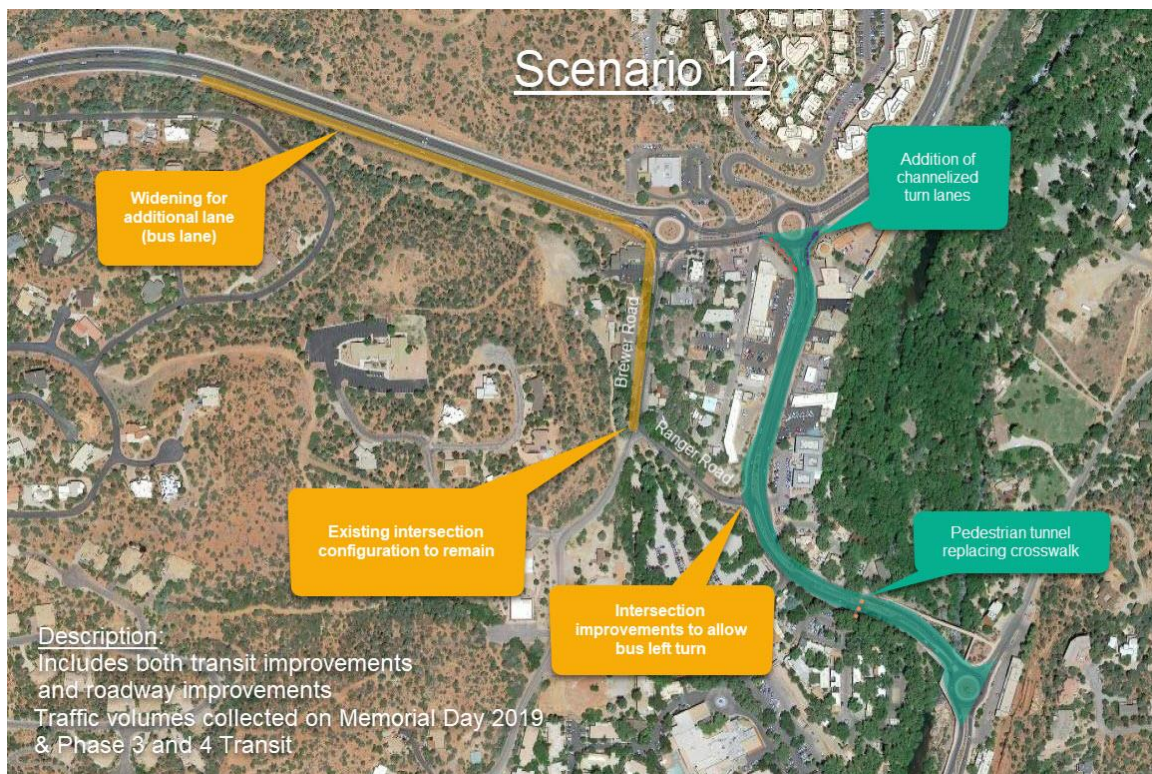
Figure 3. Scenario 11 Exhibit



Scenario 12: Reduced TMP Improvements, Phase 3 and 4 Transit Reductions, Transit-Supportive Roadway Improvements

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
12	Reduced TMP Improvements	<ul style="list-style-type: none"> A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk Addition of separated eastbound turn lane towards southbound SR 179 at "Y" Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	Phase 3 and 4	Option 2: Bus-only lane eastbound on SR 89A to Brewer Road, to Ranger Road; intersection improvements at Ranger Road/SR 179 intersection to allow bus left turn.

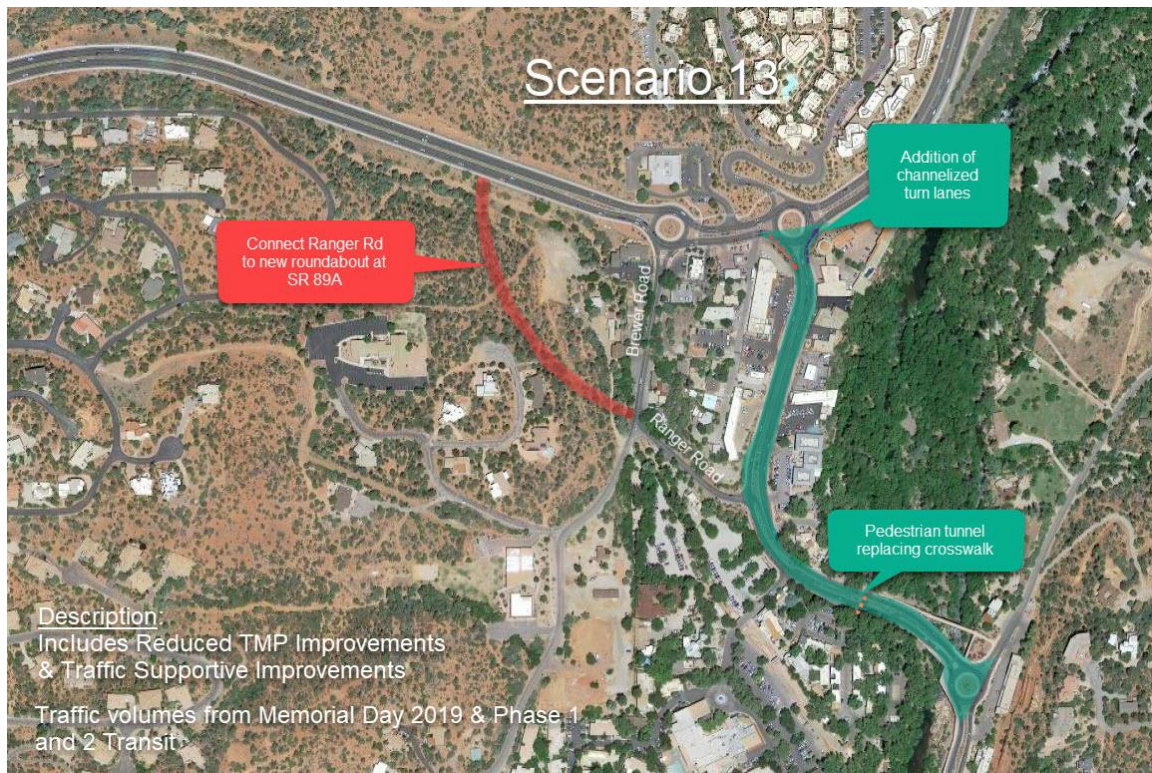
Figure 4. Scenario 12 Exhibit



Scenario 13: Reduced TMP Improvements and Phase 1 and 2 Transit Volume Reductions.

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
13	Reduced TMP Improvements	<ul style="list-style-type: none"> • A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. • Addition of separated eastbound turn lane towards southbound SR 179 at “Y” • Addition of separated northbound turn lane towards Uptown at “Y” 	Memorial Day weekend, 2019	Phase 1 and 2	Option 1: Connect Ranger Road to new roundabout at SR 89A

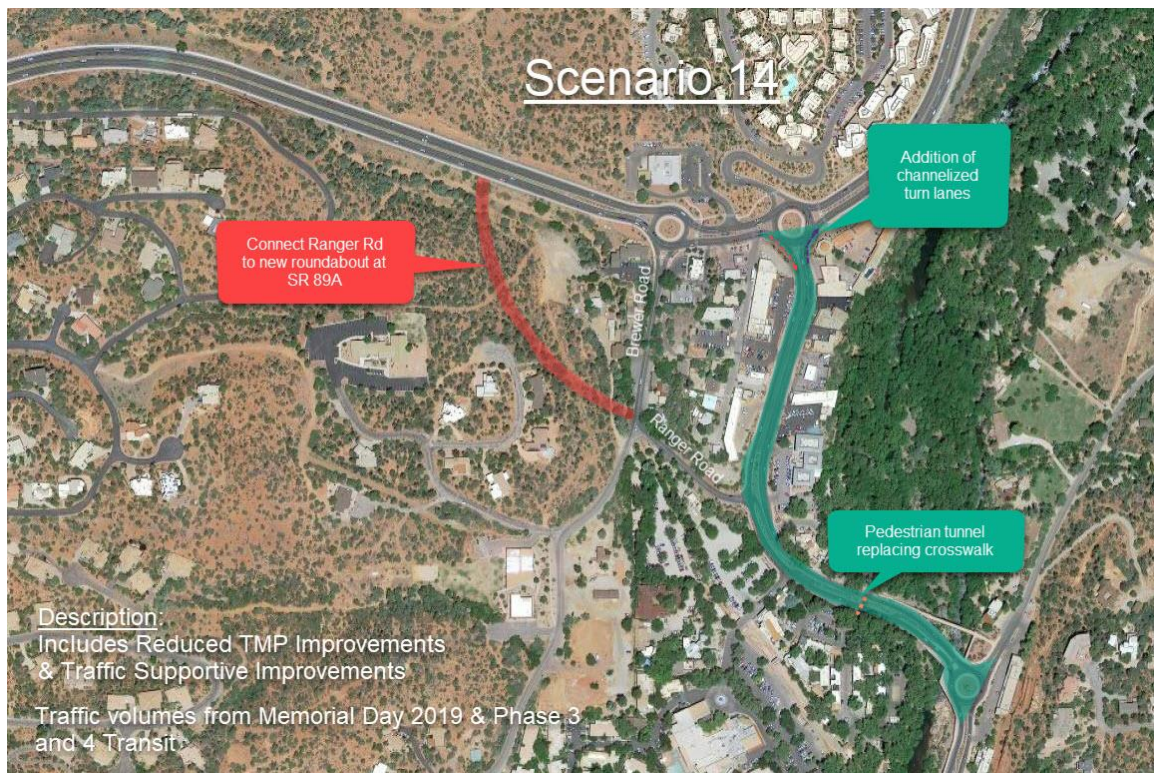
Figure 5. Scenario13 Exhibit



Scenario 14: Reduced TMP Improvements and Phase 3 and 4 Transit Volume Reductions

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
14	Reduced TMP Improvements	<ul style="list-style-type: none"> A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. Addition of separated eastbound turn lane towards southbound SR 179 at "Y" Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	Phase 3 and 4	Option 1: Connect Ranger Road to new roundabout at SR 89A

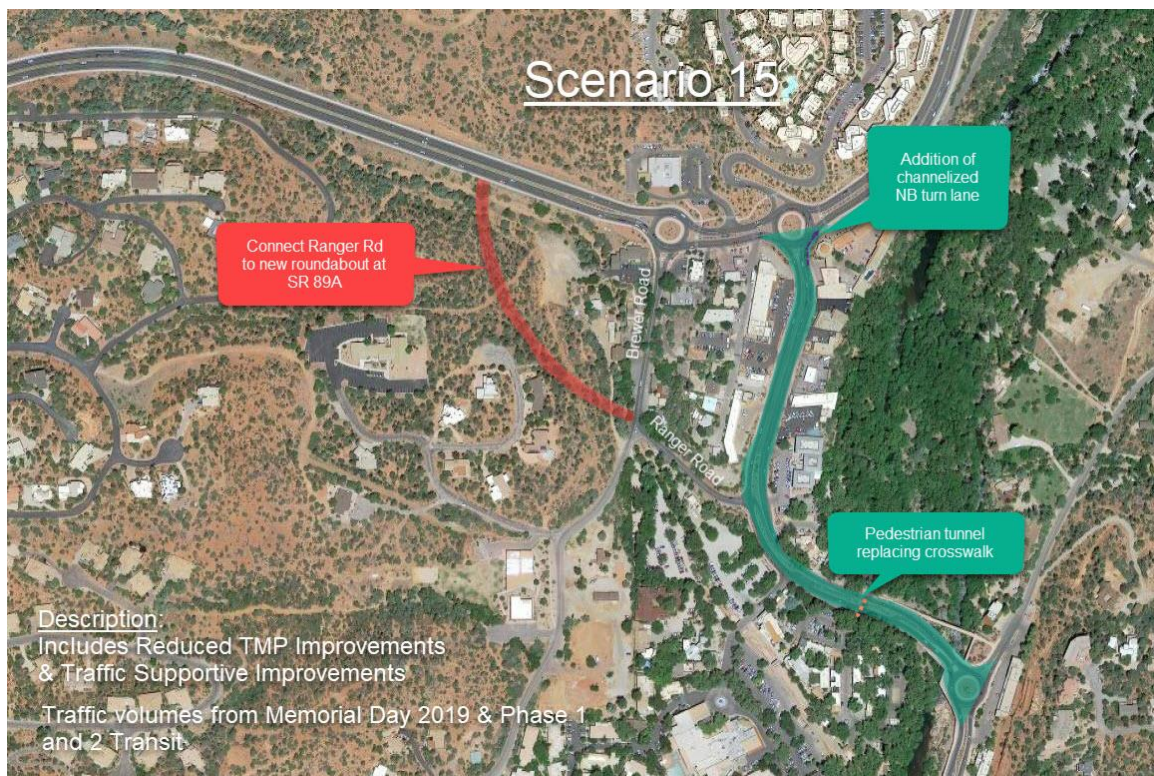
Figure 6. Scenario14 Exhibit



Scenario 15: TMP Improvements and Phase 1 and 2 Transit Volume Reductions.

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
15	Reduced TMP Improvements	<ul style="list-style-type: none"> A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	Phase 1 and 2	Option 1: Connect Ranger Road to new roundabout at SR 89A

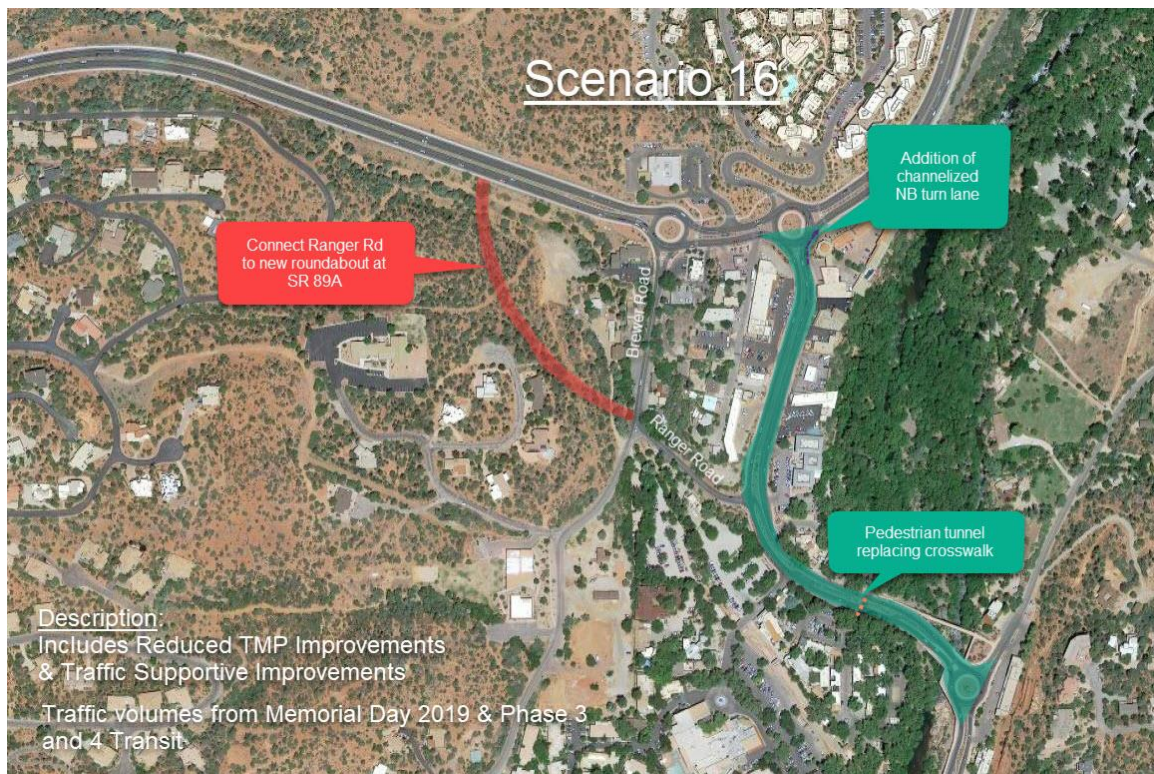
Figure 7. Scenario 15 Exhibit



Scenario 16: Reduced TMP Improvements and Phase 3 and 4 Transit Volume Reductions

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
16	Reduced TMP Improvements	<ul style="list-style-type: none"> A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk. Addition of separated northbound turn lane towards Uptown at "Y" 	Memorial Day weekend, 2019	Phase 3 and 4	Option 1: Connect Ranger Road to new roundabout at SR 89A

Figure 8. Scenario 16 Exhibit



Scenario 17: Reduced TMP Improvements and Phase 1 and 2 Transit Volume Reductions.

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
17	Reduced TMP Improvements	<ul style="list-style-type: none"> A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk Addition of separated eastbound turn lane towards southbound SR 179 at "Y" 	Memorial Day weekend, 2019	Phase 1 and 2	None

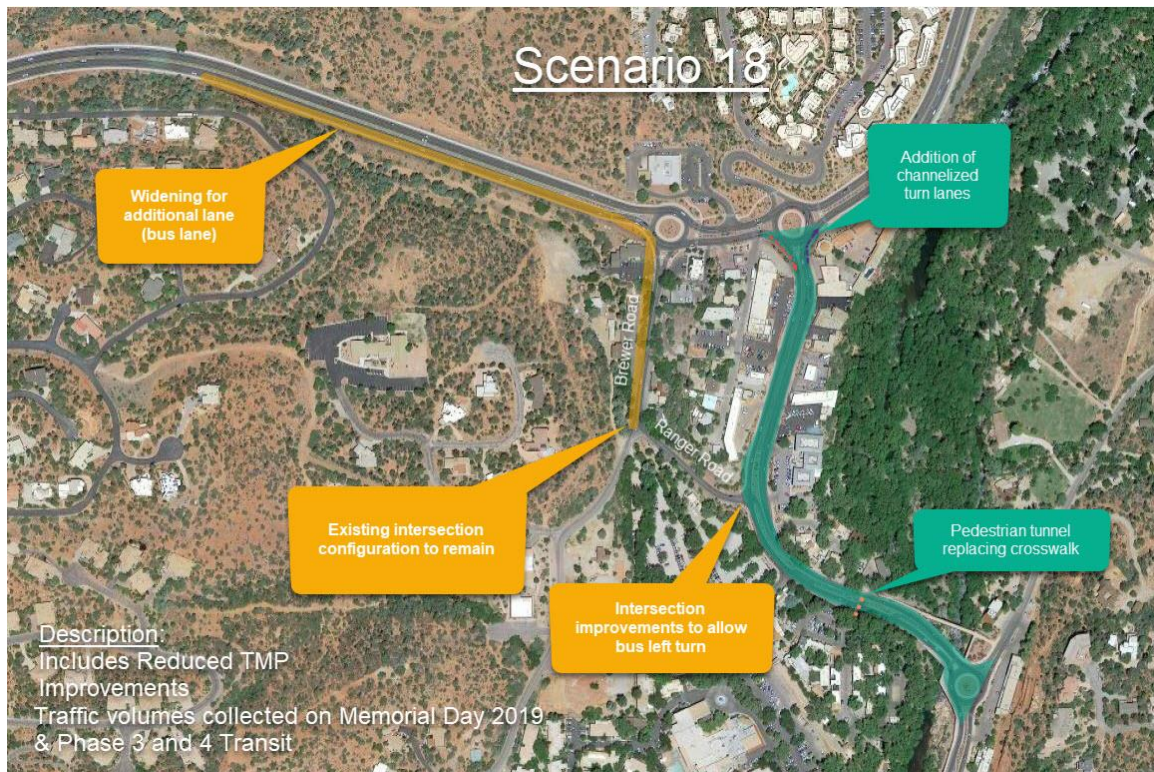
Figure 9. Scenario 17 Exhibit



Scenario 18: TMP Improvements and Phase 3 and 4 Transit Volume Reductions

Scenario	Roadway Improvements	Roadway Improvements Description	Traffic Volumes	Transit Service	Transit-Supportive Roadway Improvements
18	Reduced TMP Improvements	<ul style="list-style-type: none"> A pedestrian tunnel or bridge is added at Tlaquepaque, replacing the existing crosswalk Addition of separated eastbound turn lane towards southbound SR 179 at "Y" 	Memorial Day weekend, 2019	Phase 3 and 4	Option 2

Figure 10. Scenario 18 Exhibit



ANALYSIS RESULTS

Intersection Performance

The following tables (**Tables 2-7**) detail the LOS and delay experienced at each study intersection for the analysis scenarios.

Table 2. SR 89A and Brewer Road

Scenario	Measure	Approach				Intersection LOS (Delay)
		EB	WB	NB	SB	
1	LOS	F (98.8)	A (3.9)	F (100+)	-	F (63.0)
	Avg. Queue	615'	0'	140'	-	
2	LOS	A (4.7)	A (2.6)	C (18.5)	-	A (4.7)
	Avg. Queue	5'	0'	5'	-	
3	LOS	A (5.0)	A (2.5)	B (13.7)	-	A (4.6)
	Avg. Queue	5'	0'	5'	-	
4	LOS	A (4.7)	A (2.5)	B (14.3)	-	A (4.5)
	Avg. Queue	5'	0'	5'	-	
5	LOS	A (2.1)	A (2.3)	B (12.7)	-	A (2.8)
	Avg. Queue	0'	0'	0'	-	
6	LOS	A (1.9)	A (2.2)	B (11.6)	-	A (2.7)
	Avg. Queue	0'	0'	0'	-	
7	LOS	A (4.7)	A (2.5)	C(16.6)	-	A (4.6)
	Avg. Queue	5'	0'	5'	-	
8	LOS	A (4.4)	A (2.5)	B (15.5)	-	A (4.4)
	Avg. Queue	5'	0'	5'	-	
9	LOS	D (32.7)	A (3.4)	C (24.2)	-	C (19.9)
	Avg. Queue	235'	0'	5'	-	
10	LOS	C (16.5)	A (3.1)	C (17.2)	-	B (12.1)
	Avg. Queue	85'	0'	5'	-	
11	LOS	A (5.0)	A (2.6)	B (13.2)	-	A (4.6)
	Avg. Queue	5'	0'	0'	-	
12	LOS	A (4.8)	A (2.5)	C (16.6)	-	A (4.6)
	Avg. Queue	5'	0'	5'	-	
13	LOS	A (8.6)	A (2.6)	D (33.2)	-	A (9.4)
	Avg. Queue	30'	0'	10'	-	
14	LOS	A (1.9)	A (2.3)	B (12.1)	-	A (2.7)
	Avg. Queue	0'	0'	0'	-	
15	LOS	F (87.6)	A (4.6)	F (100+)	-	E (48.9)
	Avg. Queue	190'	0'	95'	-	
16	LOS	A (2.7)	A (2.2)	B (11.3)	-	A (2.8)
	Avg. Queue	0'	0'	0'	-	
17	LOS	C (22.7)	A (3.8)	C (16.6)	-	C (15.4)
	Avg. Queue	135'	0'	5'	-	
18	LOS	A (4.8)	A (2.6)	B (15.0)	-	A (4.7)
	Avg. Queue	5'	0'	0'	-	

As shown in **Table 2**, under Scenarios 2-8, the study area intersections all perform at LOS A. The implementation of the full set of TMP improvements essentially mitigates congestion.

As shown in **Table 2**, the roundabout intersection at SR 89A and Brewer Road currently operates at overall LOS E, with failing LOS on the east and northbound approaches. In Scenario 9, overall delay is reduced, and overall LOS B is attained. TMP improvements are expected to significantly reduce queuing at the "Y" intersection and along SR 179, reducing spillback queuing at the SR 89A and Brewer Road roundabout. Additional reductions in delay were achieved in scenarios 10-

12 through transit-related volume reductions, though returns are expected to be diminished compared to the TMP roadway improvements.

In Scenario 13, modeled with the eastbound right slip lane at the “Y”, the overall delay is 9.4 seconds with an eastbound approach delay of 8.6 seconds, and a LOS A for eastbound approach and intersection. The slip lane at the “Y” is removed in Scenario 15 and intersection delay is increased to 48.9 seconds with a LOS D. It also effects the eastbound approach changing to a LOS F with an average delay of 87.6 seconds. An eastbound slip lane at the “Y” achieves significant reduction in delay and queuing at the Brewer/SR 89A intersection, as it reduces spillback from the “Y”.

The northbound reductions in delay and queuing in Scenario 13, as compared to Scenario 15, are likely due to the slip lane at the “Y”, because of the reduction in spillback from the “Y” to the Brewer/89A intersection.

Table 3. SR 89A and SR 179 LOS

Scenario	Measure	Approach				Intersection LOS (Delay)
		EB	WB	NB	SB	
1	LOS	E (44.7)	C (18.1)	C (20.7)	E (36.6)	D (27.5)
	Average Queue	345'	35'	40'	10'	
2	LOS	B (10.9)	B (14.7)	A (6.5)	D (35.0)	B (11.5)
	Average Queue	35'	40'	5'	5'	
3	LOS	B (10.1)	B (13.7)	A (6.7)	D (31.2)	B (10.9)
	Average Queue	25'	35'	5'	5'	
4	LOS	A (4.6)	A (8.3)	A (5.5)	B (13.8)	A (6.4)
	Average Queue	5'	10'	0'	0'	
5	LOS	A (9.2)	B (13.4)	A (6.4)	C (24.8)	B (10.2)
	Average Queue	20'	35'	0'	5'	
6	LOS	A (4.5)	A (7.5)	A (5.6)	B (11.9)	A (6.1)
	Average Queue	5'	5'	0'	0'	
7	LOS	A (9.5)	B (12.9)	A (6.2)	D (33.5)	B (10.3)
	Average Queue	20'	30'	0'	5'	
8	LOS	A (4.5)	A (7.3)	A (5.7)	B (13.4)	A (6.2)
	Average Queue	5'	5'	0'	0'	
9	LOS	C (16.2)	B (11.6)	A (4.8)	E (36.1)	B (11.3)
	Average Queue	55'	25'	0'	5'	
10	LOS	B (14.6)	B (11.1)	A (4.7)	C (20.7)	B (10.5)
	Average Queue	40'	25'	0'	0'	
11	LOS	A (3.8)	A (7.7)	A (4.9)	B (11.1)	A (5.7)
	Average Queue	5'	10'	0'	0'	
12	LOS	A (4.2)	A (7.7)	A (4.8)	B (11.8)	A (5.8)
	Average Queue	5'	10'	0'	0'	
13	LOS	C (22.4)	B (13.1)	A (6.4)	D (32.0)	B (14.6)
	Average Queue	110'	25'	0'	5'	
14	LOS	A (5.1)	A (8.0)	A (5.8)	B (13.5)	A (6.6)
	Average Queue	20'	5'	0'	0'	
15	LOS	E (44.3)	B (14.7)	A (6.5)	E (36.2)	C (21.9)
	Average Queue	340'	25'	5'	5'	
16	LOS	A (8.8)	A (8.3)	A (5.8)	B (12.1)	A (6.6)
	Average Queue	25'	5'	0'	0'	

Scenario	Measure	Approach				Intersection LOS (Delay)
		EB	WB	NB	SB	
17	LOS	B (14.7)	B (13.9)	C (22.3)	C (24.5)	C (17.0)
	Average Queue	30'	35'	45'	0'	
18	LOS	A (4.4)	A (8.1)	B (12.8)	B (12.7)	A (8.4)
	Average Queue	5'	10'	10'	0'	

As shown in **Table 3**, the roundabout intersection at SR 89A and SR 179 currently operates at LOS C, with levels of service of D on the eastbound and southbound approaches. In Scenario 9, overall delay is expected to be reduced by 16.2 seconds, yielding a LOS B. As expected, the reductions in delay project to be most substantial on the eastbound and northbound approaches, where bypass right-turn lanes were modeled. Transit-related volume reductions modeled in Scenarios 10-12 also are anticipated to reduce delay, though only by 6 seconds compared to Scenario 9.

In Scenario 13, overall delay decreases by 12.9 seconds, as compared to the baseline Scenario 1, and improves to LOS B.

The reductions in delay are most noticeable in the eastbound and northbound directions where the right-turn slip lanes were modeled.

Scenario 15 (no eastbound slip lane) and Scenario 17 (no northbound slip lane), show that the Transit Phase 1 and 2 option has marginal effect on the correlating movement, having no change in the approach LOS and less than 2 seconds of delay difference than the Scenario 1.

Table 4. Ranger Road and Brewer Road

Scenario	Measure	Approach				Intersection LOS (Delay)
		EB	WB	NB	SB	
1	LOS	-	B (10.8)	E (39.7)	F (60.4)	E (46.9)
	Average Queue	-	5'	30'	110'	
2	LOS	-	A (8.8)	B (13.3)	A (0.4)	A (4.9)
	Average Queue	-	5'	10'	0'	
3	LOS	-	A (8.9)	B (12.5)	A (0.4)	A (4.7)
	Average Queue	-	5'	10'	0'	
4	LOS	-	A (9.3)	B (12.4)	A (0.4)	A (4.7)
	Average Queue	-	5'	10'	0'	
5	LOS	A (0.0)	A (1.7)	B (11.6)	A (8.3)	A (4.0)
	Average Queue	0'	0'	10'	0'	
6	LOS	A (0.0)	A (2.2)	B (11.5)	A (7.7)	A (4.0)
	Average Queue	0'	0'	10'	0'	
7	LOS	-	A (8.7)	B (12.3)	A (0.4)	A (4.6)
	Average Queue	-	5'	10'	0'	
8	LOS	-	A (8.9)	B (12.8)	A (0.4)	A (4.7)
	Average Queue	-	5'	10'	0'	
9	LOS	-	A (7.8)	C (20.7)	F (90.9)	F (59.2)
	Average Queue	-	0'	15'	190'	
10	LOS	-	A (8.5)	C (18.6)	F (60.4)	E (41.8)
	Average Queue	-	5'	15'	145'	
11	LOS	-	A (8.9)	B (13.1)	A (1.8)	A (5.6)
	Average Queue	-	5'	10'	0'	
12	LOS	-	A (8.9)	B (12.9)	A (0.4)	A (4.8)
	Average Queue	-	5'	10'	0'	
13	LOS	F (91.0)	A (1.5)	C (17.8)	B (10.0)	E (47.6)
	Average Queue	150'	0'	10'	5'	
14	LOS	A (0.0)	A (1.8)	B (11.5)	A (8.0)	A (3.9)
	Average Queue	0'	0'	10'	5'	
15	LOS	F (78.1)	A (1.4)	C (18.8)	B (11.7)	E (42.5)
	Average Queue	125	0'	10'	5'	
16	LOS	A (0.0)	A (2.1)	B (11.4)	A (8.1)	A (4.0)
	Average Queue	0'	0'	10'	5'	
17	LOS	-	A (8.3)	C (18.6)	F (66.8)	E (45.2)
	Average Queue	-	5'	10'	170'	
18	LOS	-	A (8.5)	B (12.9)	A (0.5)	A (4.7)
	Average Queue	-	5'	10'	0'	

Table 4 shows the level-of-service and average queues at the Ranger Road and Brewer Road intersection. The intersection currently operates at LOS E. Currently, Ranger road does not experience heavy delay, with a westbound LOS B whereas the north and southbound approaches along Brewer Road experience significant delay, with level-of-service of E and F. Delay on the north and southbound approaches is a result of spillback queuing from the SR 179 and Ranger Road two-way stop-controlled intersection. As such, even with the removal of the at-grade pedestrian crossing at Tlaquepaque, queuing is expected to extend upstream to Ranger Road's intersections with SR 179 and Brewer Road. With the heavier transit-related volume reductions modeled in scenarios 11-12, queuing on SR 179 is projected to be reduced to the extent that the intersection of Range Road and Brewer Road operates at overall LOS A.

Scenario 13 and 15 connect Ranger Road through to SR 89A at a new roundabout to the west of the existing Brewer/SR 89A roundabout. Vehicles that were originally traveling southbound on Brewer Road were rerouted to the new roadway connection, reducing delay and queuing on southbound Brewer Road.

Performance on the new eastbound Range connection on Ranger Road is a LOS F in both Scenarios 13 and 15. Reduction in delay on the westbound and northbound movements is likely associated with the Transit Phase 1 and 2 volume reductions. Overall, the new roadway connection has no significant effect on the overall LOS of the Range Road/Brewer Road intersection.

Table 5. SR 179 and Ranger Road

Scenario	Measure	Approach				Intersection LOS (Delay)
		EB	WB	NB	SB	
1	LOS	F (100+)	C (16.8)	A (0.8)	C (23.0)	C (24.0)
	Average Queue	225'	0'	0'	150'	
2	LOS	B (13.7)	B (12.8)	A (0.5)	A (0.1)	A (2.6)
	Average Queue	25'	0'	0'	0'	
3	LOS	B (13.0)	B (12.6)	A (0.6)	A (0.1)	A (2.5)
	Average Queue	20'	0'	0'	0'	
4	LOS	B (12.6)	B (11.9)	A (0.4)	A (0.1)	A (2.8)
	Average Queue	20'	0'	0'	0'	
5	LOS	B (14.6)	B (12.2)	A (0.5)	A (0.1)	A (2.8)
	Average Queue	25'	0'	0'	0'	
6	LOS	B (12.2)	B (11.5)	A (0.5)	A (0.1)	A (2.8)
	Average Queue	20'	0'	0'	0'	
7	LOS	B (13.6)	B (12.2)	A (0.5)	A (0.1)	A (2.6)
	Average Queue	25'	0'	0'	0'	
8	LOS	B (12.3)	B (10.7)	A (0.4)	A (0.1)	A (2.7)
	Average Queue	20'	0'	0'	0'	
9	LOS	F (100+)	C (18.5)	A (0.8)	D (33.9)	D (31.9)
	Average Queue	290'	5'	0'	310'	
10	LOS	F (100+)	C (18.3)	A (0.8)	D (29.8)	D (26.7)
	Average Queue	225'	5'	0'	270'	
11	LOS	D (28.0)	C (16.5)	A (0.7)	A (2.3)	A (6.6)
	Average Queue	55'	0'	0'	0'	
12	LOS	D (25.5)	C (15.8)	A (0.6)	A (1.9)	A (6.0)
	Average Queue	45'	0'	0'	0'	
13	LOS	F (100+)	A (8.6)	A (0.8)	E (43.6)	E (35.8)
	Average Queue	300'	0'	0'	420'	
14	LOS	C (17.8)	A (8.6)	A (0.6)	A (0.4)	A (4.0)
	Average Queue	30'	0'	0'	0'	
15	LOS	F (100+)	A (8.6)	A (0.7)	D (27.7)	D (29.1)
	Average Queue	285'	0'	0'	160'	
16	LOS	C (16.7)	A (8.6)	A (0.6)	A (0.4)	A (3.7)
	Average Queue	30'	0'	0'	0'	
17	LOS	F (100+)	C (18.0)	A (0.7)	D (31.1)	D (28.9)
	Average Queue	250'	5'	0'	280'	
18	LOS	D (26.3)	C (16.4)	A (0.6)	A (1.9)	A (6.2)
	Average Queue	45'	0'	0'	0'	

As shown in Table 5, the intersection of SR 179 and Ranger Road currently operates at an overall level-of-service C, with failing LOS on the stop-controlled eastbound approach. As noted, southbound SR 179 currently experiences queuing upstream of the at-grade pedestrian crossing at Tlaquepaque. While the crossing was not modeled in scenario 9, throughput on southbound SR 179 was increased due to the eastbound-right bypass lane modeled at the "Y" roundabout north of this intersection. This additional volume likely offset any delay reductions associated with the removal of the at-grade crossing. However, significantly less southbound traffic was modeled in scenarios 11-12 due to the introduction of Phase 3 and 4 transit reductions. As such, the LOS on the southbound approach and the overall intersection is expected to increase from LOS D to

A. Consequently, the stop-controlled eastbound approach is expected to experience a significant decrease in delay due to the reduced queuing along SR 179.

In Scenario 13, an increase in the southbound delay and queuing can be attributed to the eastbound right slip lane at the “Y” which improves vehicular flow through the “Y”.

Table 6. SR 179 and Schnebly Hill Road

Scenario	Measure	Approach				Intersection LOS (Delay)
		EB	WB	NB	SB	
1	LOS	-	F (100+)	F (69.2)	D (32.7)	F (52.7)
	Average Queue	-	35'	965'	590'	
2	LOS	-	B (13.9)	A (4.4)	A (3.7)	A (4.5)
	Average Queue	-	0'	0'	0'	
3	LOS	-	B (14.3)	A (4.3)	A (3.7)	A (4.5)
	Average Queue	-	0'	0'	0'	
4	LOS	-	A (7.5)	A (4.0)	A (3.4)	A (3.9)
	Average Queue	-	0'	0'	0'	
5	LOS	-	B (12.5)	A (4.4)	A (3.6)	A (4.4)
	Average Queue	-	0'	0'	0'	
6	LOS	-	A (8.4)	A (4.0)	A (3.5)	A (4.0)
	Average Queue	-	0'	0'	0'	
7	LOS	-	B (13.0)	A (4.4)	A (3.6)	A (4.5)
	Average Queue	-	0'	0'	0'	
8	LOS	-	A (6.9)	A (3.8)	A (3.2)	A (3.7)
	Average Queue	-	0'	0'	0'	
9	LOS	-	F (100+)	F (66.1)	E (36.3)	F (55.7)
	Average Queue	-	60'	905'	635'	
10	LOS	-	F (100+)	D (33.0)	D (33.0)	F (53.2)
	Average Queue	-	40'	610'	610'	
11	LOS	-	E (40.6)	B (14.5)	B (14.5)	C (18.4)
	Average Queue	-	10'	55'	55'	
12	LOS	-	E (35.7)	B (11.5)	B (11.5)	C (17.5)
	Average Queue	-	5'	30'	30'	
13	LOS	-	F (55.1)	F (72.8)	E (36.3)	F (52.6)
	Average Queue	-	15'	950'	705'	
14	LOS	-	E (36.6)	D (29.4)	B (11.5)	C (20.4)
	Average Queue	-	5'	95'	35'	
15	LOS	-	F (55.2)	F (72.3)	E (35.7)	F (52.1)
	Average Queue	-	15'	955'	650'	
16	LOS	-	E (38.0)	D (28.7)	B (11.3)	C (20.1)
	Average Queue	-	5'	90'	35'	
17	LOS	-	F (100+)	F (68.9)	D (33.7)	F (53.1)
	Average Queue	-	40'	895'	620'	
18	LOS	-	C (33.8)	C (21.4)	B (11.5)	C (17.1)
	Average Queue	-	5'	55'	30'	

The roundabout intersection of SR 179 and Schnebly Hill Road currently operates at a level-of-service D, with failing LOS on the west and northbound approaches. As the reduced TMP improvements do not increase capacity at the intersection in question, the roundabout is expected to operate similarly to the existing condition in scenario 9. With the reduction in north

and southbound vehicular volumes in scenarios 11-12, however, delay on the north and southbound approaches are expected to decrease, yielding an overall LOS B for the intersection.

There is minor fluctuation in the approach delay and average queue, and some noticeable change in LOS the southbound approach for Scenario 13 and 15 from C to D. An intersection LOS D is maintained with a delay difference of less than 1 second. Therefore, the eastbound right slip lane and the northbound left slip lane at the “Y” have a negligible effect to this intersection.

Table 7. SR 89A and Ranger Road Extension

Scenario	Measure	Approach				Intersection LOS (Delay)
		EB	WB	NB	SB	
13	LOS	A (5.0)	A (4.2)	B (18.5)	-	A (4.8)
	Average Queue	0'	0'	0'	-	
14	LOS	A (4.5)	A (4.1)	B (19.1)	-	A (4.6)
	Average Queue	0'	0'	0'	-	
15	LOS	B (15.3)	A (4.1)	E (40.1)	-	B (10.7)
	Average Queue	45'	0'	5'	-	
16	LOS	A (4.5)	A (4.2)	B (16.2)	-	A (4.6)
	Average Queue	0'	0'	0'	-	

An addition of a new roundabout on 89A west of the Brewer Road/89A roundabout functions at a LOS A with the eastbound right slip lane at the “Y”. With the slip lane removed (Scenario 15) it drops to a LOS B. The change in LOS is due to the increase congestion caused by the removal of the eastbound right slip lane at the “Y”.

Transit Travel Times

Transit travel times for routes near the “Y” during peak hour for each scenario were collected through VISSIM modeling. The results collected is represented in **Table 8**.

Table 8. Transit Travel Time Summary

Scenario	Measure	Route		
		EB SR 89A to "Y"	NB SR 179 to "Y"	WB SR 89A to "Y"
1	Travel Time (min)	3.5	4.3	0.6
2	Travel Time (min)	1.5	1.5	0.6
3	Travel Time (min)	1.5	1.5	0.6
4	Travel Time (min)	1.5	1.5	0.5
5	Travel Time (min)	1.9	1.5	0.6
6	Travel Time (min)	1.9	1.5	0.5
7	Travel Time (min)	1.5	1.5	0.6
8	Travel Time (min)	1.5	1.5	0.5
9	Travel Time (min)	2.2	3.7	0.6
10	Travel Time (min)	1.7	3.9	0.6
11	Travel Time (min)	1.5	1.7	0.5
12	Travel Time (min)	1.5	1.8	0.5
13	Travel Time (min)	1.9	4.0	0.6
14	Travel Time (min)	1.8	1.8	0.5
15	Travel Time (min)	1.9	4.2	0.6
16	Travel Time (min)	1.9	1.9	0.5
17	Travel Time (min)	1.5	3.0	0.6
18	Travel Time (min)	1.5	1.8	0.5

As shown in **Table 8**, travel-time related benefits are expected to be most apparent for buses traveling eastbound towards the "Y" roundabout from Airport Road and northbound from SR 179. With TMP improvements alone, nearly a minute of travel time per bus is anticipated to be gained. While Phase 1 and 2 transit volume reductions are not expected to significantly reduce travel times further, Phase 3 and 4 reductions could reduce travel times by another minute per bus in the east and northbound directions. It should be noted that travel time differences between scenarios 11-12 are negligible, indicating that a queue jump lane for transit vehicles would likely not provide significant value due to the reduced eastbound queues expected through TMP improvements.

Scenario 13 and 17 demonstrate significant travel time reduction due to the eastbound slip lane at the "Y", a product of reduction in queuing in the eastbound direction.

SUMMARY

The analysis shows the following:

1. Phase 3 and 4 transit service, with the associated traffic volume reductions, are projected to provide significant benefit to each study area intersection.
2. The transit-specific roadway improvements do not have a measurable impact on traffic mobility and congestion.
3. The transit-specific roadway improvements provide measurable benefits to transit travel time, as illustrated in Table 7.

Table 9. Summary

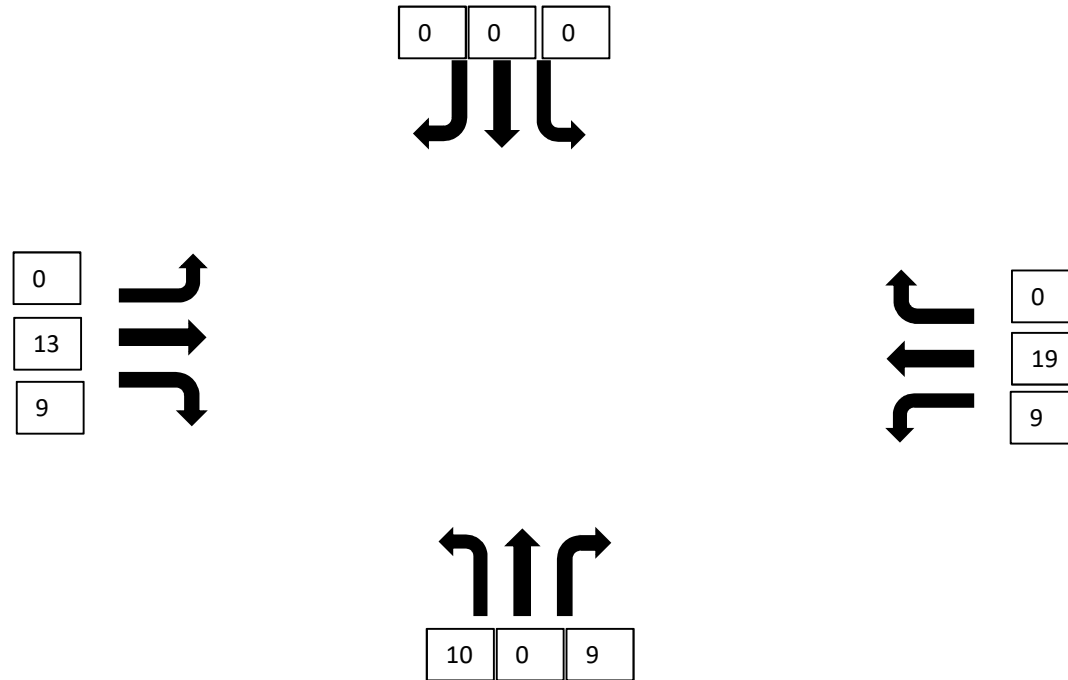
Scenario	Transit Service	Transit-Supportive Roadway Improvements	SR 89A and Brewer Road	SR 89A and SR 179	Ranger Road and Brewer Road	SR 179 and Ranger Road	SR 179 and Schnebly Hill Road	SR 89A and New Road
1	None	None	F (63.0)	C (27.5)	E (46.9)	C (24.0)	F (52.7)	-
2	None	None	A (4.7)	B (11.5)	A (4.9)	A (2.6)	A (4.5)	-
3	Phase 1 and 2	None	A (4.6)	B (10.9)	A (4.7)	A (2.5)	A (4.5)	-
4	Phase 3 and 4	None	A (4.5)	A (6.4)	A (4.7)	A (2.8)	A (3.9)	-
5	Phase 1 and 2	Option 1	A (2.8)	B (10.2)	A (4.0)	A (2.8)	A (4.4)	A (4.7)
6	Phase 3 and 4	Option 1	A (2.7)	A (6.1)	A (4.0)	A (2.8)	A (4.0)	A (4.6)
7	Phase 1 and 2	Option 2	A (4.6)	B (10.3)	A (4.6)	A (2.6)	A (4.5)	-
8	Phase 3 and 4	Option 2	A (4.4)	A (6.2)	A (4.7)	A (2.7)	A (3.7)	-
9	None	None	C (19.9)	B (11.3)	F (59.2)	D (31.9)	F (55.7)	-
10	Phase 1 and 2	None	B (12.1)	B (10.5)	E (41.8)	D (26.7)	F (53.2)	-
11	Phase 3 and 4	None	A (4.6)	A (5.7)	A (5.6)	A (6.6)	C (18.4)	-
12	Phase 3 and 4	Option 2	A (4.6)	A (5.8)	A (4.8)	A (6.0)	C (17.5)	-
13	Phase 1 and 2	None	F (54.2)	E (35.5)	F (82.0)	F (50.9)	F (59.2)	A (4.8)
14	Phase 3 and 4	Option 1	A (2.7)	A (6.6)	A (3.9)	A (4.0)	C (20.4)	A (4.6)
15	Phase 1 and 2	None	F (92.0)	D (32.5)	F (50.4)	E (44.9)	F (59.0)	B (10.7)
16	Phase 3 and 4	Option 1	A (2.8)	A (8.1)	A (4.0)	A (3.7)	C (20.1)	A (4.6)
17	Phase 1 and 2	None	C (15.4)	C (17.0)	E (45.2)	D (28.9)	F (53.1)	-
18	Phase 3 and 4	None	A (4.7)	A (8.4)	A (4.7)	A (6.2)	B (17.1)	-

ATTACHMENTS

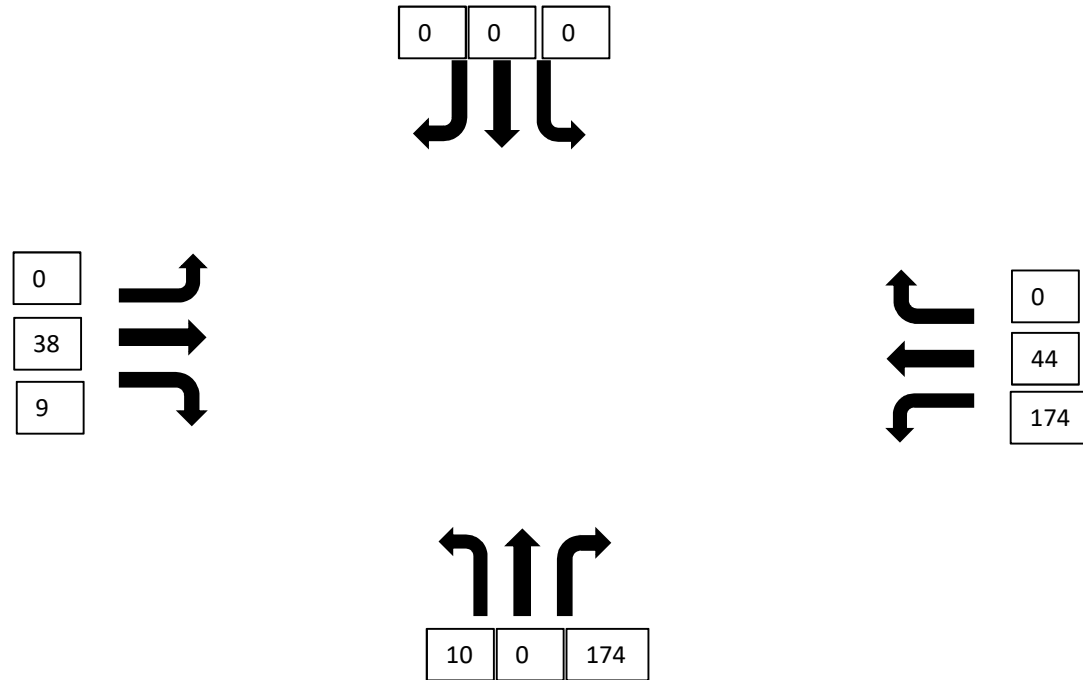
Traffic volume reductions

- Reductions due to Phase 1 and Phase 2 Transit
- Reductions due to Phase 3 and Phase 4 Transit

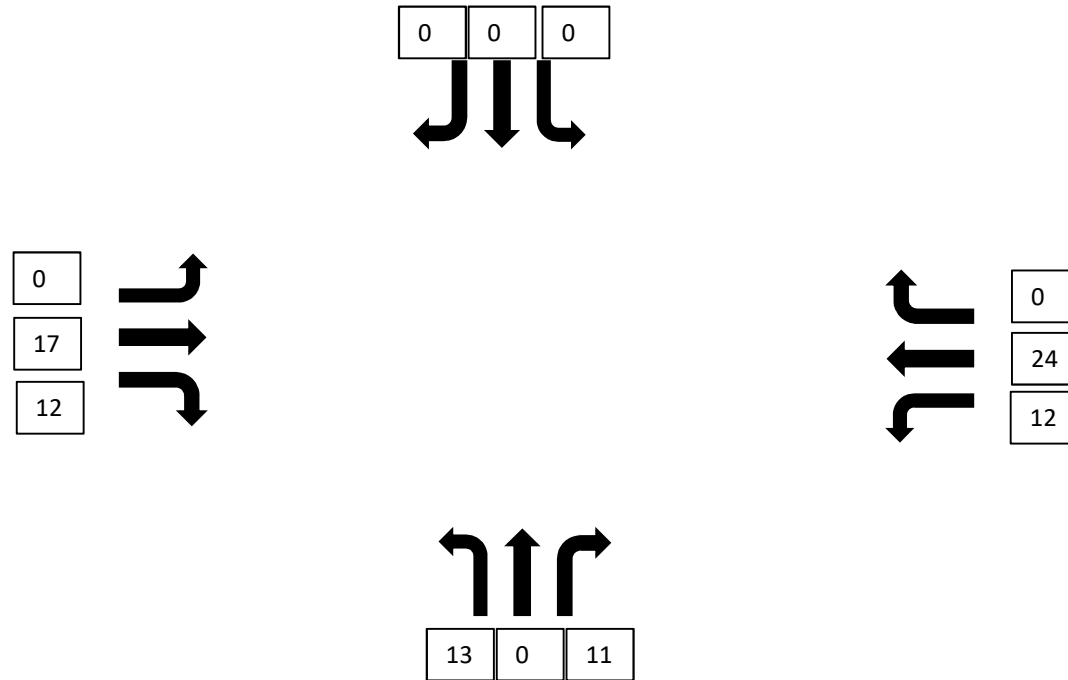
Model Run 3 Volume Reductions – Transit Phase 1 (Transit Phase 1 and 2)



Model Run 4 Volume Reductions – Transit Phase 2 (Transit Phase 3 and 4)



Model Runs 5 and 7 Volume Reductions – Transit Phase 1 (Transit Phase 1 and 2)



Model Runs 6 and 8 Volume Reductions – Transit Phase 2 (Transit Phase 3 and 4)

