

# City of Tempe Transit Survey January 2001

Prepared For:

City of Tempe

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# **Executive Summary**

The City of Tempe commissioned WestGroup Research to complete a telephone survey of Tempe residents in an effort to gain insights into perceptions about public transit, both among riders and non-riders. The survey was completed with 404 Tempe residents. The margin of error for this sample size is approximately ± 4.9% at a 95% confidence level.

# Perceptions of Public Transit

- > The term "public transit" is most likely to turn people's minds to thoughts of buses, light rail, trains or subways. Two of three (68%) Tempe residents say they initially think of buses when they hear the term "public transit."
- ➤ Slightly less than half of Tempe residents feel the public transit services in Tempe benefit everyone (45%). Rather, a majority of the respondents indicated the transit system only benefits certain factions of people, such as those without cars (26%), students (18%), or low-income residents (11%).
- When asked what they think non-rider perceptions of bus riders and buses are, bus riders most frequently mention a perception that poor people and kids are the most common passengers on the bus (mentioned by 25%). Riders also sense that people are uncomfortable on the bus (16%) or may have concerns about their safety while on (14%) or waiting for the bus (4%).
- ➤ Of the ten common excuses people have for not riding the bus, Tempe residents were most likely to agree with the statement that they simply prefer to drive their car (81%). However, the perception that riding the bus takes too long (56%) and that they need their car for business (50%) were also agreed upon by at least half of those who do not ride the bus.

# Current and Potential Use of Tempe's Transit System

- There appears to be an increase in the percentage of Tempe residents reporting to have ridden a bus in Tempe in the past year compared to 1998 (29% vs. 22%). The majority of this increase can be attributed to more "sampling" of the system over the past year compared to 1998 with 18% of residents reporting that they had ridden one to five times (up from 13% in 1998).
- ➤ Those who had not ridden a bus in Tempe within the past year were asked if they have ever ridden a bus in the Valley, 41% of which said that they had.
- ➤ Compared to 1998, Tempe residents who do not ride the bus are more optimistic about the ability of public transit to get them to and from shopping destinations, social/recreational activities, and work. Two-thirds of the non-riders believe there is local bus service to and from shopping destinations (66% up from 57% in 1998).

- Non-riders were asked to give specific circumstances that would make them consider taking a bus. The strongest consensus (22%) was that if their car would break down, they might consider using the bus. This is up from 14% in 1998. Additionally one in seven non-riders (14%) indicated that if the bus system was improved overall, they would consider riding more often.
- Approximately three-fourths of Tempe residents who have not ridden a bus in the past year (77%) say that taking the bus would affect their daily routine (vs. 70% in 1998). The most frequent concern among non-riders is that they would need more time for travel (52% up from 27% in 1998).
- Non-riders indicated, overall, the benefits of reduced traffic congestion (81% very + somewhat effective) and lowering air pollution (78%) are the most persuasive arguments to get people to use the bus instead of commuting by car. Saving money on gas and insurance as well as saving wear and tear on their car also were high, with 73% and 70% saying the arguments were at least somewhat effective in persuading people.
- As in 1998, Tempe non-riders are most likely to pick up the telephone if they want to find information about local bus services. Initially, they would be most likely to call Valley Metro (29%) or call the City itself (23%). However, the percentage who indicated they would call Valley Metro decreased significantly from 1998 to 2001, and the difference appears to be made up by a corresponding increase in the percentage who indicated they would look for information on the Internet (15% up from 2% in 1998).
- Residents who had ridden a bus in the past year were asked what they would tell someone if they were asked whether or not they should start riding the bus. The most common response was they would tell people to "give it a try" (28%). Approximately one in seven said they would indicate that the bus is cheaper than a taxi (15%) and that it is good for the environment (14%).

# **Rider Characteristics and Opinions**

- The percentage of riders who have ridden for more than one month but less than a year increased to 41% of the riders compared to 16% in 1998. In contrast, the percentage of riders who have been riding for less than one month or more than two years has decreased. This means that in the past year, Tempe has had some turnover in its ridership but is also keeping those who "sample" the system once or twice since the overall number of riders who have ridden in the past year has increased.
- Riders are most likely to indicate the reason they ride the bus is because it is convenient (44%). This is a significant increase compared to 1998 (21%). Approximately one-third of the riders continued to report they ride the bus because they do not have a car (37%).

- As in 1998, there are three consistent destinations that Tempe bus riders are heading for --work (31%), shopping (26%), and ASU (22%). In an increase from 1998, riders indicate they also use Tempe buses to go to recreational activities (16%).
- Approximately one-fourth of Tempe bus riders have taken the bus to Arizona Mills Mall (23%). The purpose of the majority of these trips was to go shopping (81%).
- As in 1998, a majority of bus riders surveyed say they do nothing other than look out the window while riding the bus (63%). Reading books (24%) or magazines/newspapers (14%) and talking to other riders (16%) are the most common activities besides looking out the window.
- ➤ Similar to 1998, if there were no transit services in Tempe, riders would make the needed trips by using other modes of transportation. Thirty-nine percent (39%) indicate they would drive themselves, while 16% report that they would get a ride from someone else.
- ➤ When they first rode the bus in Tempe, riders were most likely to ask a friend for information (22%) or look for a Bus Book (20%). Interestingly, 12% reported they received information about riding the bus from a television newscast.
- ➤ The Bus Book and the Valley Metro information line are the two main sources of information used by current riders to get information about bus schedules (37% and 14%, respectively).

# Tempe in Motion

- Approximately two in five Tempe residents have heard of "TIM," Tempe's transit, bike, and pedestrian program (38%). Approximately half (55%) of those aware of the acronym "TIM" could state that it stands for "Tempe In Motion."
- ➤ Residents who were aware of TIM, were most likely to have become aware through one of four sources television (23%), street banners (21%), print advertising (19%), or signs on the buses (18%).
- Three in five residents (60%) aware of TIM reported they had also seen advertising for TIM. Although almost half of those aware of advertising (47%) could not detail a message, those who were able to recall a message described ads that touted the benefits of taking the bus (13%) and using alternate modes in general (11%).
- > A slight majority of those aware of TIM advertising indicated the ads made them think more positively about the bus system in Tempe (54%). The remaining residents indicated the ads had no affect on their perceptions.

### Miscellaneous Issues

- As in 1998, residents feel that additional services in Tempe's transit system should advertised by using mass media sources. Television is the main source that most of the respondents agreed upon; 41% said that the City should use this medium.
- ➤ Similar to findings from 1998, approximately six in ten Tempe residents have access to a bicycle (58%), and approximately half of Tempe residents ride their bike at least three to five times a month (48%). It seems that most of the time, bicycles are ridden for the purpose of exercising (64%).

### Conclusions

- 1. The recent improvements to transit services in Tempe appear to have positively impacted ridership. There are significantly more residents using the bus in Tempe than in the County in general. There is evidence of a lot of "dabbling" with riding the bus. Apparently residents are trying out the expanded service to see if it works for them. The key, however, is to convert those who are trying out the service to regular riders.
- 2. However, there still are negative perceptions among non-riders that need to be overcome. The majority of residents do not believe that everyone benefits from having public transit available. Despite recent improvements, non-riders also still do not believe the bus can get them where they need to go without a significant disruption to their schedule.
- 3. Frequency of service and speed of service are big issues among riders and non-riders. These are the primary complaints of riders and the strongest perceptions of non-riders. Although recent improvements have helped, it is apparent that riders continue to see a need for improving the services in Tempe.
- 4. Reducing traffic congestion and wear and tear on vehicles along with improving air quality are the strongest messages to use in persuading residents to use public transit. However, it is clear that these arguments will not work until more improvements to the service take place and residents are convinced the system will work for them.

Table 28: Where Bike Riders Go

			2001 0	Gender	2001 Income	
	2001 (n=404)	1998 (n=401)	Male (n=200)	Female (n=204)	Under \$40K	Over \$40K
Exercise	64%	56%	62%	67%	54%	72%
Work/school	32	26	36	26	42	22
Store	14	24	14	14	23	6
Friend's house	5	6	5	3	9	1
Park	8	6	7	9	5	11
Library	1	4	-	2	2	-
Bike paths	1	3	1	-		1
Other	3	11	1	2	4	-
Don't know/not sure	2	1	2	2		4

<sup>56:1</sup> Where do you go when you ride your bike?

# B. Bicycle Usage

Similar to findings from 1998, approximately six in ten Tempe residents have access to a bicycle (58%), and approximately half of Tempe residents ride their bike at least three to five times a month (52%). Male residents are more likely than female residents to have access to a bike (68% vs. 48%) and are also more likely to ride it at least ten times a month (32% men, 19% women). As expected, younger residents are more likely to have access to a bike than residents over the age of 55 (68% vs. 38%) and also are more likely to ride it at least ten times a month (39% of those 18 to 34 vs. 17% of those 55 and older).

It seems that most of the time, bicycles are ridden for the purpose of exercising (64%). Approximately one-third (32%) use a bike to get to work; and only 14% use a bike to go to the store. Younger residents are more likely to report riding a bike to work/school (49% vs. 15% of those 55+). The same is true for those with household incomes less than \$40,000 (42% vs. 22% of those with higher incomes). Lower income residents also are more likely to use the bike to go to the store (23% vs. 6%).

Table 27: Access to and Frequency of Bike Use

	2001	1998	2001 (	Gender	2001 Age		
	(n=404)	(n=401)	Male (n=200)	Female (n=204)	18-34 (n=138)	35-54 (n=134)	55+ (n=124)
Have access to bike	58%	60%	68%	48%	67%	69%	38%
Never/occasionally	33%	35%	28%	40%	22%	38%	43%
Once or twice	13	16	15	11	10	17	11
Three to five times	17	14	13	22	16	16	21
Six to ten times	8	8	10	6	10	6	8
10+ times	27	26	32	19	39	21	17
Don't know/not sure	2	2	2	1	3	1	

54:1 thru 55-1 Do you have access to a bicycle that you can ride when you want to? How many times in a month do you ride your bike? (Among those who have a bike to ride.)

# VI. Miscellaneous Issues

# A. Advertising New Transit Services

As in 1998, residents feel that additional services in Tempe's transit system should be advertised by using mass media sources. Television is the main source that most of the respondents agreed upon; 41% said that the City should use this medium. Additionally, approximately one-third say that residents could be informed of the new service through mail (34%) or newspaper (33%).

In addition to the top three media, bus riders are more likely than non-riders to prefer radio (16%), flyers/newsletters (8%), and on the buses (10%). Women are slightly more likely to mention the newspaper (38% vs. 28% of men), whereas men are slightly more likely to mention the Internet (6% vs. 2%).

Younger residents are more likely to mention television (51%), radio (21%), and the Internet (6%). Older residents are more likely to mention the newspaper (44%), direct mail (38%), or inserts in the water bill (11%).

**Table 26: Introducing New Services in Tempe** 

				2001 Gender		s Riders
	2001 (n=404)	1998 (n=401)	Male (n=200)	Female (n=204)	Bus Rider (n=115)	Non Bus Rider (n=289)
Television	41%	32%	43%	39%	45%	39%
Direct mail	34	24	33	35	25	38
Newspaper	33	26	28	38	29	35
Radio	12	4	14	10	16	11
Insert in water bill	9	4	8	9	8	9
Flyer/newsletter	5	2	4	5	8	4
Information on buses	4	1	5	2	10	1
Internet/email	4	-	6	2	4	3
Utility bills in general	3	-	4	2	4	3
Bus shelters	2	-	2	2	6	-
At school	2	-	2	2	1	2
Other	5	6	6	6	5	6
Don't know/not sure	4	1	4	5	4	4

53:1 -- If new transit services are going to be introduced, what would be the best way for the City of Tempe to tell you about them?

# 3. Advertising Affect on Perception of Tempe Bus System

A slight majority of those aware of TIM advertising indicated the ads made them think more positively about the bus system in Tempe (54%). The remaining residents indicated the ads had no affect on their perceptions.

Table 25: Advertising Affect on Perception (Among those Aware of TIM advertising)

2001 (n=93)
54% 45%
1%

<sup>52:1 --</sup> How did the advertising affect your perception of the bus system in Tempe? Did it...

# 2. Advertising Message

Although almost half of those aware of advertising (47%) could not detail a message, those who were able to recall a message described ads that touted the benefits of taking the bus (13%) and using alternate modes in general (11%). A few residents were able to recall specific advertisements – the girl who decides to ride the bus rather than go in a low-rider (3%) and "happy people" taking the bus (2%).

Table 24: TIM Advertising Message (Among those Aware)

	2001 (n=93)
Benefits of taking the bus	13%
Promotion of using alternate modes	11%
Just "TIM"	8%
"Tempe in Motion"	4%
Girls opts for bus instead of low rider	3%
Happy people taking the bus	2%
Ease of taking the bus	2%
New buses that "kneel"	2%
A woman taking the bus	2%
Other	8%
Don't know	47%

51:1 -- What messages do you recall?

# C. TIM Advertising

# 1. Awareness and Source of Advertising

Three in five residents (60%) aware of TIM reported they had also seen advertising for TIM. Those most likely to be aware were those who had ridden the bus in the past year (71%), residents who are under age 55 (65%), and single residents (69%).

As with the general awareness of TIM, the most common source of awareness is television (mentioned by 48%). Street banners, print ads, and direct mail materials also are mentioned by at least 10% of those aware of TIM advertising.

**Table 23: Source of TIM Advertising Awareness** (Among those aware of TIM)

	2001 (n=154)
Aware of TIM advertising	60%
Source of Advertising	(n=93)
TV	48%
Street banner	15%
Print Ads	13%
Direct mail	10%
Radio	8%
Cinema/movie slides	2%
Mall kiosks	1%
Other	8%
Don't know	6%

49:1-50:1 -- Do you remember hearing or seeing any advertisements for TIM? Where did you see the advertising for TIM?

# B. Source of Awareness (Among those Aware)

Residents who were aware of TIM, were most likely to have become aware through one of four sources – television (23%), street banners (21%), print advertising (19%), or signs on the buses (18%).

Table 22: Source of TIM Awareness

(Among those aware)

	2001 (n=154)
TV	23%
Street banner	21%
Print Ads	19%
Signs on the buses	18%
Radio	7%
Direct mail	6%
Mall kiosks	3%
At work	3%
Word of mouth	3%
Bill inserts	2%
Internet	2%
Cinema/movie slides	1%
Other	4%
Don't know	13%

48:1 -- How did you hear about it? (Among those aware)

# V. Tempe In Motion (TIM)

# A. Awareness of Tempe in Motion

Approximately two in five Tempe residents have heard of "TIM," Tempe's transit, bike, and pedestrian program (38%). Current bus riders, residents under the age of 55, and those who have a college degree are most likely to be aware.

Approximately half (55%) of those aware of the acronym "TIM" could state that it stands for "Tempe In Motion." Men were more likely than women to know what the acronym stands for (65% vs. 44%). Not surprisingly, current bus riders also were more likely to accurately state the meaning (72% vs. 45%).

Table 21: Awareness of TIM

	2001 (n=404)
Total Awareness (Unaided + Aided)	38%
Unaided Awareness Aided Awareness	12% 26%
Meaning of TIM	(n=154)
"Tempe in Motion"	55%
Other	9%
Don't know	36%

45:1 thru 47:1 -- What is the name of Tempe's transit/bicycle/pedestrian program? Have you ever heard of TIM? IF YES: To the best of your knowledge, what does TIM mean or stand for?

# G. Finding Information about Bus Schedules

The Bus Book and the Valley Metro information line are the two main sources of information used by current riders to get information about bus schedules (37% and 14%, respectively). Once again, the Internet surfaces as an important source of information (mentioned by 8%).

Table 20: Bus Schedule Information (Among bus riders)

	2001
	(n=98)
Bus Book	37%
Call 253-5000	14%
Internet	8%
Friend	6%
Bus stop	5%
Work	4%
Bus driver/bus station	4%
Library	3%
Mail	2%
Family members	2%
School	2%
Newspaper	2%
Individual route maps	1%

41:1 – How do you get your information about bus schedules?

# F. Finding Information about Bus Service

When they first rode the bus in Tempe, riders were most likely to ask a friend for information (22%) or look for a Bus Book (20%). Interestingly, 12% reported they received information about riding the bus from a television newscast (this may reflect publicity about the special buses running for Cardinal and ASU football games).

The Valley Metro information line and drivers continue to be important sources of information about the transit system (mentioned by approximately one in ten riders). As seen earlier, use of the Internet for transit information has increased since 1998 (5% up from 1%). There were no meaningful demographic differences in responses to this question.

**Table 19: Bus Information** 

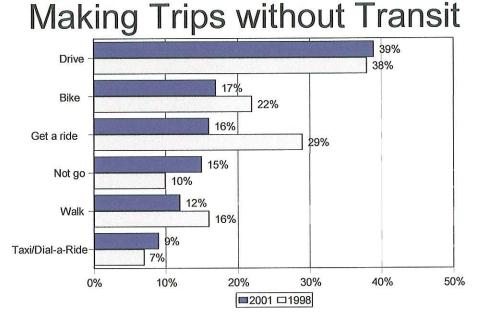
	2001 (n=115)	1998 (n=87)
Ask a friend	22%	23%
Look for Bus Book	20	22
Newscast	12	1
Call Valley Metro	11	26
Asked driver	10	12
Internet	5	1
Call City of Tempe	4	5
Family member	3	6
Library	2	5

40:1 -- How did you get information about transit services in Tempe for the first time you rode a bus in the city?

### E. Alternate Modes of Travel

Similar to 1998, if there were no transit services in Tempe, riders would make the needed trips by using other modes of transportation. Thirty-nine percent (39%) indicate they would drive themselves, while 16% report that they would get a ride from someone else. Some would resort to slower or less convenient transportation methods such as a bike (17%) or walking (12%). Fifteen percent (15%) said they would just not make their needed trips if there was no transit service available.

Those with a college degree are more likely to indicate they would drive themselves (52%), whereas those with a high school education or less are more likely to ride a bike (22%), walk (17%), or not go at all (22%).



**Table 18: Alternate Modes of Travel** 

			20	01 Education		
	2001 (n=115)	1998 (n=87)	HS or less (n=23)	Some college (n=50)	College degree (n=42)	
Drive myself	39%	38%	13%	40%	52%	
Ride a bike	17	22	22	20	12	
Get a ride from someone else	16	29	13	24	7	
Not go	15	10	22	12	14	
Walk	12	16	17	18	2	
Call a taxi/dial-a-ride	9	7	9	8	10	

39:1 -- How would you make the trips that you currently use the bus for if there were not transit service in Tempe?

### D. Bus Activities

As in 1998, a majority of bus riders surveyed say they do nothing other than look out the window while riding the bus (63%). These riders were most likely to be female (68%), have a high school education or less (74%), or are at least 55 years old (78%).

Reading books (24%) or magazines/newspapers (14%) and talking to other riders (16%) are the most common activities besides looking out the window. Riders who have a college degree are more likely than those with less education to read any type of materials (24% to 29%). On the other hand, those with a high school education or less are more likely to listen to music (17%).

Table 17: What Bus Riders Do on the Bus

			20	01 Educati	on
	2001 (n=115)	1998 (n=87)	HS or less (n=23)	Some college (n=50)	College degree (n=18)
Nothing/look out window Read a book Talk to other riders Read newspaper/ magazine Listen to music Talk to driver Work/study	63% 24 16 14 5 4 3	53% 24 12 14 5 2	74% 9 13 9 17 4	60% 28 18 8 4 2 6	60% 29 14 24 - 5

38:1 -- What do you do while riding the bus?

# 2. Travel to Arizona Mills

Approximately one-fourth of Tempe bus riders have taken the bus to Arizona Mills Mall (23%). As expected younger riders are more likely to have taken the bus to Arizona Mills (25% of those under 55 vs. 6% of those over age 55). Those with household incomes less than \$40,000 also are more likely to have been to the mall via the bus (29%).

The purpose of the majority of these trips was to go shopping (81%). The most frequently used routes were the 77, 56, 72 and 92.

Table 16: Arizona Mills (Among bus riders)

	2001 (n=115)
Ride Bus to AZ Mills	23% (n=26)
Route Taken	
77	30%
56	27
72	12
92	12
Others	27
Reason For Trip	
Shopping	81%
Work	8%
Other	15%

36:1 thru 37:1 Do you ever ride the bus to Arizona Mills? If YES: Which route do you use to get there? Why do you go there?

Table 15: Where Bus Riders Go

(Among bus riders)

				2001 Age	
	2001 (n=115)	1998 (n=87)	18-34 (n=59)	35-54 (n=37)	50+ (n=18)
Work Shopping ASU Recreational act. Visit friends/family Downtown Phoenix Errands Downtown Tempe Where need to go Dr. appointments School/college Home	31% 26 22 16 9 6 5 5 4 4	26% 24 25 7 10 - 10 2 1 6 4 1	34% 20 34 12 7 3 3 2 7 - 5	38% 32 8 13 8 11 8 11 - 8	6% 28 11 33 11 6 6 11 6 -

<sup>34:1 --</sup> Where do you go when you ride the bus?

# C. Travel Patterns

# 1. Travel Destination

As in 1998, there are three consistent destinations that Tempe bus riders are heading for --work (31%), shopping (26%), and ASU (22%). In an increase from 1998, riders indicate they also use Tempe buses to go to recreational activities (16%). Younger riders are more likely to report taking the bus to work (34%) or ASU (34%). Older riders and those with incomes of \$40,000 or more are more likely to take the bus to recreational activities (33% and 22%, respectively).

It is interesting to note that a few riders in 2001 (6%) indicated they also use the bus to get to downtown Phoenix. This destination was not mentioned at all in 1998.

# **Bus Rider Destinations**

(Among bus riders) 31% 26% Work 26% Shopping 22% 25% ASU 16% Recreational Activ. 9% 10% Visit friends and family 6% Downtown Phoenix 30% 35% 20% 25% 5% 10% 15% 0% ■2001 □1998

## B. Reasons Ride the Bus

Riders are most likely to indicate the reason they ride the bus is because it is convenient (44%). This is a significant increase compared to 1998 (21%). Approximately one-third of the riders continued to report they ride the bus because they do not have a car (37%). Similarly, 4% do not have a license to drive. Those most likely to indicate they ride because of convenience are those who are age 55 and older (56%), those with a college degree (57%), married riders (61%), and those with household incomes over \$40,000 (72%). As expected, those who ride because they do not have a car are under age 35 (48%) and are those with incomes under \$40,000 (57%).

Table 14: Reasons Ride the Bus

(Among bus riders)

			2001 (	Sender		2001 Age		
	2001 (n=115)	1998 (n=87)	Male (n=55)	Female (n=32)	18-34 (n=59)	35-54 (n=37)	55+ (n=18)	
Convenient Don't have car Protects environm. Don't have license Saves money Saves wear on car Other	44% 37 7 4 3 2 5	21% 30 2 2 2 2	47% 34 7 2 4 2 6	40% 43 6 8 - 2 4	41% 48 7 2 5 2	46% 35 8 3 -	56% 6 6 17 - 6 22	

<sup>33:1 --</sup> What is the main reason you ride the bus?

# IV. Rider Characteristics and Opinions

# A. Length of Use of Transit System

The percentage of riders who have ridden for more than one month but less than a year increased to 41% of the riders compared to 16% in 1998. In contrast, the percentage of riders who have been riding for less than one month or more than two years has decreased. This means that in the past year, Tempe has had some turnover in its ridership but is also keeping those who "sample" the system once or twice since the overall number of riders who have ridden in the past year has increased (see earlier section in report).

Women (40%), married residents (34%), and those who have graduated from high school or have less education (39%) are somewhat more likely to have been riding for two or more years. Men and those who earn incomes less than \$40,000 appear to be the newer type of rider. They are most likely to indicate they have been riding for four to six months (21% and 20%, respectively).

Table 13: Length of Use of Transit System (Among those who have ridden in the past year)

			2001 Gender		
	2001 (n=115)	1998 (n=87)	Male (n=68)	Female (n=47)	
Less than a month	9%	16%	7%	11%	
1 - 3 months	10%	6%	12%	8%	
4-6 months	15%	5%	21%	6%	
7 - 12 months	16%	5%	16%	17%	
1-2 years	17%	21%	21%	13%	
2+ years	29%	44%	21%	40%	
Don't know	4%	5%	3%	4%	

32:1 -- How long have you been using the transit system in Tempe?

# G. Advice for Potential Riders

Residents who had ridden a bus in the past year were asked what they would tell someone if they were asked whether or not they should start riding the bus. The most common response was they would tell people to "give it a try" (28%). Approximately one in seven said they would indicate that the bus is cheaper than a taxi (15%) and that it is good for the environment (14%). Approximately one in four indicated their advice would depend on the situation and who was asking the question (24%).

Other riders offered words of caution – make sure to leave enough time (6%), check routes and schedules (6%), verify where the bus is going before you get on (2%) and have your money ready (2%). Four percent (4%) of non-riders say they would suggest that others only use the bus as a "last resort."

Table 12: Advice for New Riders
(Among those who have ridden in the past year)

		2001 (	Gender
	2001 (n=115)	Male (n=68)	Female (n=47)
Give it a try	28%	26%	30%
Depends on the situation	24	28	17
Cheaper than a cab	15	13	17
Good for environment	14	13	15
Leave enough time	6	6	6
Check route and make a schedule	6	3	10
Use as last resort	4	4	4
Less stress	4	3	6
Make sure you know where bus is going	2	3	-
Have money ready	2	2	2
Bus provides good service	2	2	2
Other	5	4	4
Don't know/not sure	4	4	4

44:1 -- If someone asked you whether or not they should start riding the bus, what advice would you give them?

Table 11: Finding Information about Bus Services

(Among those who have not ridden a bus in the past year)

	2001	1998	2001 (	Gender		2001 Age	
	(n=289)	(n=314)	Male (n=132)	Female (n=157)	18-34 (n=79)	35-54 (n=97)	55+ (n=106)
Call Valley Metro/ bus system	29%	38%	20%	37%	20%	24%	38%
Call City of Tempe	23	26	28	18	20	24	24
Internet	15	2	22	10	23	19	8
Look for a Bus	14	17	8	19	13	21	10
Book							
Public Library	6	5	6	6	6	6	6
Yellow pages	5	7	7	4	6	8	2
Schedules at bus stops	5	=	6	4	6	6	4
Ask a friend	2	2	2	3	2	4	1
Bus Driver	1	2	2	1	5 <b>-</b>	-	3
ASU	1	1	2	1	2	1	-
Other	3	7	4	6	4	4	6
Don't know	8	-	8	8	10	4	10

31:1 -- If you were interested in riding a bus in Tempe, how would you go about getting information about the system?

# F. Finding Information

As in 1998, Tempe non-riders are most likely to pick up the telephone if they want to find information about local bus services. Initially, they would be most likely to call Valley Metro (29%) or call the City itself (23%). However, the percentage who indicated they would call Valley Metro decreased significantly from 1998 to 2001, and the difference appears to be made up by a corresponding increase in the percentage who indicated they would look for information on the Internet (15% up from 2% in 1998). Men and those under age 35 are more likely to indicate they would go to the Internet for information (22% and 23%, respectively)

Others felt that the Bus Book (14%), Yellow Pages (5%), and schedules at the bus stops (5%) would provide the information they needed. It is important to note, in 1998 bus stop schedules were not mentioned as an information option by any of the non-riders.

# Sources of Information about Bus Service

(Among those who have not ridden in the past year)

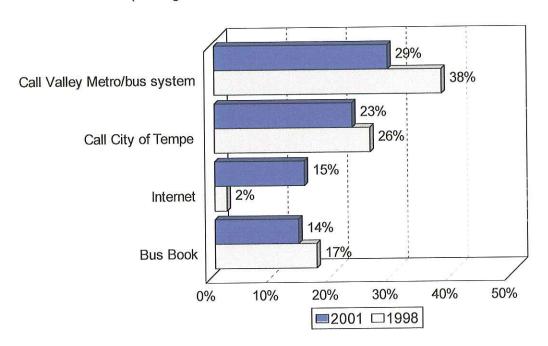


Table 10: Effectiveness of Reasons to Persuade Transit Usage

			2001 0	Gender		2001 Age	
	2001	1998	Male	Female	18-34	35-54	55+
	(n=289)	(n=314)	(n=132)	(n=157)	(n=79)	(n=97)	(n=106)
Less traffic congest.							
Effective*	81%	79%	77%	83%	80%	88%	74%
Not effective**	16%	18%	21%	12%	19%	8%	21%
Save wear / tear							
Effective	70%	77%	68%	71%	72%	75%	64%
Not effective	27%	21%	29%	26%	27%	23%	30%
Lowers air pollution							
Effective	78%	76%	75%	81%	81%	84%	72%
Not effective	17%	21%	17%	16%	13%	13%	22%
Save money							
Effective	73%	71%	70%	76%	80%	81%	63%
Not effective	23%	28%	26%	20%	20%	16%	30%
Bus is safer							
Effective	55%	55%	54%	55%	47%	58%	58%
Not effective	37%	40%	38%	37%	48%	33%	34%

<sup>21:1-26:1</sup> For each of the following benefits to riding the bus, please indicate how effective it would be in persuading you to ride the bus instead of using your current mode of transportation. Would it be very effective, somewhat effective, not very effective, or not at all effective?

<sup>\*</sup> Very + Somewhat effective \*\* Not very + Not at all effective

# E. Effectiveness of Persuasive Arguments

Non-riders indicated, overall, the benefits of reduced traffic congestion (81% very + somewhat effective) and lowering air pollution (78% very + somewhat effective) are the most persuasive arguments to get people to use the bus instead of commuting by car. This was particularly true of residents who are between the ages of 35 and 54 (88% and 84%, respectively).

Saving money on gas and insurance as well as saving wear and tear on their car also were high, with 73% and 70% saying the arguments were at least somewhat effective in persuading people. Saving money on gas and insurance, however, actually tied with reducing traffic congestion in terms of the percent of residents who felt that the benefit was "very effective" (47% for both). Those most likely to feel that saving money on gas and insurance is persuasive are those who have ridden a bus at some point in the past, but not in the past year (80% vs. 69%), residents under age 55 (80% vs. 63%), those with some college (79% vs. 69% of those with a college degree), and single residents (77% vs. 73%).

The weakest persuasive argument was that the bus is safer than driving. Slightly more than one-third of the non-riders (37%) felt this benefit was not very or not at all effective.

# Persuasive Arguments

Very + Somewhat Effective

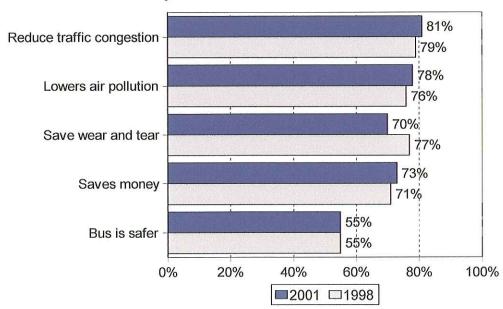


Table 9: Effects on Routine

				2001 Age				
	2001 (n=289)	1998 (n=314)	18-34 (n=79)	35-54 (n=97)	55+ (n=106)			
Would affect routine	77%	70%	85%	90%	60%			
Ways would effect	(n=223)	(n=220)	(n=67)	(n=87)	(n=64)			
Negative Impact					4.407			
More time for trip	52%	27%	58%	54%	44%			
Could not go/leave as please	12	8	6	20	8			
Change schedule to accommodate bus	11	6	8	9	17			
Plan ahead of time	10	2	13	7	11			
Don't go same place every day	8	6	3	7	14			
Can't depend on bus	4	3	8	3	+:			
Walk to and from destination	3	3	2	3	3			
Doesn't go where I need to	3	ı -	2	3	5			
Difficult if child care drop-off	3	=	2	6	-			
Couldn't carry a lot of things	2	1	-	5	2			
Positive Impact								
Makes day more routine	3%	1%	6%	2%	-			
Would make less errands	3	-	2	5	2			
More relaxing	2	1	2	1	2			

30:1 - Do you think taking the bus would affect your daily routine? In what way would this affect your routine? (Among those who said that taking the bus would affect their daily routine.)

# D. Effects on Daily Routine

Non-riders in 2001 were more likely than non-riders in 1998 to feel taking the bus would have an effect on their daily routine. Approximately three-fourths of Tempe residents who have not ridden a bus in the past year (77%) say that taking the bus would affect their daily routine (vs. 70% in 1998). Those under age 55 are significantly more likely to feel taking the bus would influence their routine (87%). In addition, college graduates (82%) and those with incomes above \$40,000 (83%) are also somewhat more likely to feel this way.

A wide variety of responses were given when those who indicated their schedule would be affected were asked to describe how using transit would impact them. The most frequent concern among non-riders is that they would need more time for travel (52% up from 27% in 1998). Others gave reasons indicating they felt they would be inconvenienced by riding the bus. For example, 12% said they would not be able to come and go as they like; 11% indicated it would be hard to adjust their personal schedule to fit the bus schedule; 10% complained they would have to plan ahead; and 8% felt it would be inconvenient because they do not travel the same place at the same time every day.

Non-riders under age 55 were more concerned than those over 55 about the additional time it would take to use the bus (56% vs. 44%). Those ages 35 to 54 were more concerned than others about being able to come and go as they needed to (20%).



Table 8: When Residents would Consider Taking the Bus

(Among those who have not ridden a bus in the past year)

				us Past ear		01 Educati	
	2001 (n=289)	1998* (n=401)	Has Ridden (n=118)	Never ridden (n=170)	HS or less (n=35)	Some college (n=111)	College degree (n=140)
If you buseled down	22%	14%	29%	18%	34%	20%	22%
If car breaks down			18	11	3	11	19
Better bus system overall	14	25 10	6	11	17	10	6
No other transp. available	9	9	8	8	6	8	9
If didn't own car	8	9	5	5	6	4	6
If unable to drive due to	3	-	3	ی	0	-	U
illness or injury Going to event with	4	3	6	4	3	6	4
parking problems	3	ans	2	4	_	1	5
Job closer to home	3	2	1	1	_	1	1
Convenience/faster	2	2	2	2	6	3	1
To go shopping	2	2	2	1	3	3	1
If bus ran 24 hours	2	-	3 2	1	3	3	2
If cheaper	1	_	2	1	_	1	1
If forced to	1	2	- 1	1	-	1	1 2
Daytime activity	1	2	1	2	-	- 4	2 2
If had better explanation of the bus system	2	2	1	4	-	4	2
Other	15	19	16	14	19	13	16
None/Wouldn't ride bus	13	12	8	16	14	19	7
Don't know/not sure	5	1	4	5	9	4	5

<sup>28:1</sup> Under what circumstances do you think you would consider taking the bus?

<sup>\*</sup>Asked of all respondents in 1998

# C. Circumstances for Taking the Bus

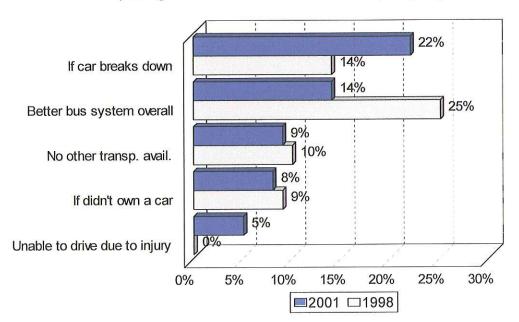
Non-riders were asked to give specific circumstances that would make them consider taking a bus. The strongest consensus (22%) was that if their car would break down, they might consider using the bus. This is up from 14% in 1998. This may be a sign that the transit system in Tempe is more often considered a viable transportation option than in the past. Those most likely to consider riding if their car broke down are those who have ridden a bus at some point in the past (29%), those under age 35 (37%), and those with a high school education or less (34%).

Additionally one in seven non-riders (14%) indicated that if the bus system was improved overall, they would consider riding more often. College graduates were the most likely to say they would consider taking the bus if the system were improved (19%).

Non-riders also cited other circumstances of desperation -- no other transportation available (9%), if they did not own a car (8%), if they were unable to drive do to injury or illness (5%). One in eight non-riders (13%) indicated they would not ever consider riding the bus. This was particularly true among those who have never ridden the bus (16%) and non-riders with some college education (19%)

# Circumstances that would cause residents to Consider Riding the Bus

(Among those who have not ridden in the past year)



## B. Awareness of Bus Services

Compared to 1998, Tempe residents who do not ride the bus are more optimistic about the ability of public transit to get them to and from shopping destinations, social/recreational activities, and work. Two-thirds of the non-riders believe there is local bus service to and from shopping destinations (66% up from 57% in 1998). Two in five believe they can get to and from school and/or social and recreational events (42% and 43%, respectively).

- Non-riders who have a high school education or less are more likely than those with more education to indicate they could take the bus to get to shopping destinations and recreational activities (80% and 57%, respectively).
- > As expected, non-riders under age 35 are more likely to believe they could take transit to school (61% vs. 26% of those who are age 55 and older).
- Men are more likely than women to believe there would be public transportation that would take them to and from social/recreational activities (50% vs. 38%).
- > Older residents are least likely to believe public transit is available to get them to and from any of the destinations.

**Table 7: Awareness of Bus Services** 

Selection of the National Selection				Sender	2001 Age		
Percent Responding Yes	2001 (n=289)	1998 (n=314)	Male (n=132)	Female (n=157)	18-34 (n=79)	35-54 (n=97)	55+ (n=106)
To and from	66%	57%	67%	65%	73%	72%	57%
shopping To and from school To and from social and recreational	42% 43%	44% 37%	42% 50%	41% 38%	61% 47%	45% 48%	26% 38%
activities To and from work	38%	34%	42%	34%	53%	41%	26%

27:1 -- From what you know, do you think there currently is local bus service that you could take to get...? (Among non-riders.)

Those who had not ridden a bus in Tempe within the past year were asked if they have ever ridden a bus in the Valley, 41% of which said that they had. Females (43%) were more likely than males (39%) to have done so, as were those over age 35 as compared to those under age 35 (46% vs. 30%, respectively). And those who had not ever ridden a bus in the Valley were asked if they have ever thought about riding the bus. Only 38% of these residents had considered doing so.

Table 6: Use of Buses in Valley

	2001	1998	2001 (	Gender	2001 Age		
	(n=289)	(n=314)	Male (n=132)	Female (n=157)	18-34 (n=79)	35-54 (n=97)	55+ (n=106
Have ridden in Valley	41%	38%	39%	43%	30%	45%	46%
Have thought about riding	(n=170) 38%	(n=189) 37%	(n=80) 29%	(n=90) 47%	(n=55) 40%	(n=53) 42%	(n=56) 32%

<sup>7:1</sup> and 8:1 - Have you ever ridden a bus in the Valley? (Among those who have not ridden a bus in Tempe in the past year.) Have you ever thought about riding the bus? (Among those who have not ridden a bus in the Valley.)

# III. Current and Potential Use of Tempe's Transit System

### A. Current Use of Public Transit

There appears to be an increase in the percentage of Tempe residents reporting to have ridden a bus in Tempe in the past year compared to 1998 (29% vs. 22%). Eight percent (8%) have ridden the bus more than 10 times in the past year. Those most likely to be riding the bus are men (34%), those under age 35 (43%), and those with a high school or less education (40%). All three of these main groups showed an increase of 5 to 10 points compared to 1998.

The majority of this increase can be attributed to more "sampling" of the system over the past year compared to 1998 with 18% of residents reporting that they had ridden one to five times (up from 13% in 1998).

Table 5: Frequency of Riding Bus in Tempe

			2001	Gender	2001 Education		
#Times	2001 (n=404)	1998 (n=401)	Male (n=200)	Female (n=204)	HS or less (n=58)	Some College (n=161)	College Grad (n=182)
1-5 times	18%	13%	20%	15%	19%	23%	13%
6-10 times	3%	2%	4%	2%	2%	1%	4%
11 - 20 times	1%	2%	1%	1%	:	1%	2%
20+ times	7%	5%	9%	5%	19%	6%	4%
None	72%	78%	66%	77%	60%	69%	77%

6:1 How many times have you ridden on a bus in Tempe in the past year?

# 2. Non-Rider Perceptions

Of the ten common excuses people have for not riding the bus, Tempe residents were most likely to agree with the statement that they simply prefer to drive their car (81%).

However, the perception that riding the bus takes too long (56%) and that they need their car for business (50%) were also agreed upon by at least half of those who do not ride the bus. Men and those under age 54 were particularly likely to indicate they need a car for work (61% and 58%, respectively). Younger residents also were more likely to indicate they feel it takes too long to use the bus (63%; particularly those age 35 to 54, 68%).

One-third indicate they do not know how to use the bus (35%) and service is not frequent enough (35%). One in five believe that bus stops are not safe (20%). This is particularly true of those under age 35 (32%).

Table 4: Reasons for Not Riding Bus (Among those who have not ridden a bus in the past year)

			2001 (	Gender	2001 Age		
% Agree	2001 (n=289)	1998 (n=314)	Male (n=132)	Female (n=157)	18-34 (n=79)	35-54 (n=97)	55+ (n=106)
					Divinester nations	SCHOOLSOMERS	100 80000
Prefer car	81%	80%	79%	82%	82%	77%	84%
Takes too long	56	59	56	54	57	68	42
Need car for	50	52	61	41	54	61	38
business							
Don't know how to	35	32	35	35	42	29	37
use bus							
Not frequent	35	54	36	34	34	36	34
enough							
Bus stop far away	30	32	34	27	29	29	32
Bus stops not safe	20		21	18	32	16	15
Buses are dirty	7	12	9	4	13	5	3
Buses not safe	8	11	6	10	11	6	8
Don't like people	7	8	7	6	13	4	5
on bus							

9:1-20:1 -- People tell us different reasons why they do not ride the bus. You may or may not think the statements are true for you. I will read you several statements, and would like you to tell me which ones you agree are reasons you do not ride the bus.

Table 3: Perceptions of Riding the Bus

(Among those who have ridden the bus in the past year)

		Gender		
% Mentions	2001 (n=115)	Male (n=68)	Female (n=47)	
Poor people and kids ride	25%	28%	21%	
Not comfortable with	16	9	26	
riders on bus				
Buses are not safe	14	9	21	
Service not frequent	12	7	19	
enough				
Buses are dirty	11	12	11	
Takes too long	10	10	11	
Buses are inconvenient	7	7	6	
Buses are not reliable	4	3	6	
Confusing system	4	6	2	
Bus stops are not safe	4		8	
Stops too far away	2	3	-	
Buses are reliable	2	2	2	
Other	8	10	4	
Don't know	25	26	23	

41:1 - People who do not ride the bus have perceptions of buses and bus riders that may or may not be true. Based on your experience which perceptions can you think of?

# C. Perceptions of Riding the Bus

# 1. Rider Perceptions

When asked what they think non-rider perceptions of bus riders and buses are, bus riders most frequently mention a perception that poor people and kids are the most common passengers on the bus (mentioned by 25%). Riders also sense that people are uncomfortable on the bus (16%) or may have concerns about their safety while on (14%) or waiting for the bus (4%). Women are significantly more likely than men to indicate discomfort and concerns with riding and waiting for the bus.

Convenience is also considered to be an issue by many riders – service is not frequent enough (12%), it takes too long (10%), its confusing (4%), and the buses are not reliable (4%).

# Perceptions of Riding the Bus

(Among those who have not ridden in the past year)

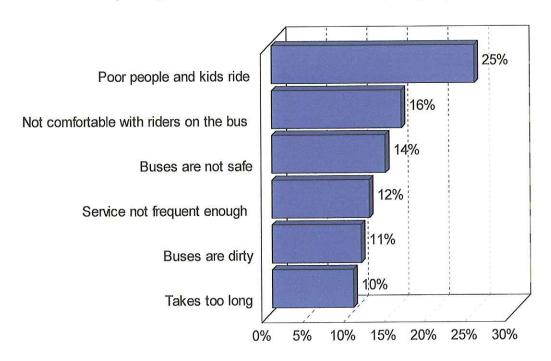


Table 2: Those Who Benefit from Tempe Public Transit

				2001 Age	
Those who benefit	2001 (n=404)	1998 (n=401)	<35 (n=138)	35-54 (n=134)	55+ (n=124)
Everyone People without cars Students at ASU Poor/low income people Elderly People who can't drive Young people Business people Working class Environment Disabled population Tempe residents/taxpayers No one	45% 26 18 11 10 9 7 4 2 2 1	43% 31 15 14 8 7 4 5 2 - 3 2	44% 23 23 11 4 8 4 1 1 1 1	53% 28 15 11 5 9 10 7 3 1 1	38% 22 15 11 23 10 12 3 2 3 2
Other	5	18	5	4	6

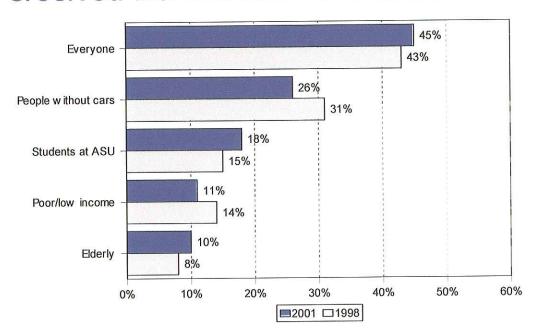
<sup>5:1</sup> In your opinion, who benefits from having public transit in Tempe?

# B. Perception of Beneficiary of Transit

Slightly less than half of Tempe residents feel the public transit services in Tempe benefit everyone (45%). Rather, a majority of the respondents indicated the transit system only benefits certain factions of people, such as those without cars (26%), students (18%), or low-income residents (11%). Bus riders are slightly more likely to say transit benefits everyone (57% compared to 40%) and non-riders are somewhat more likely to say transit benefits those without cars (29% vs. 23% of riders). Residents with a college degree or those with incomes over \$40,000 are also more likely to indicate that everyone benefits from public transit (49% and 51%, respectively).

Residents ages 35 to 54 are more likely to say that public transit is a benefit for everyone (53% vs. 44% of younger residents and 38% of older residents). Those age 55 and older are more likely to say transit benefits the elderly (23%) and young people (12%). Residents who have blue-collar occupations are more likely than those in white-collar occupations to feel people without cars benefit from public transit (33% vs. 18%).

# Perceived Beneficiaries of Public Transit



# II. Perceptions of Public Transit

# A. Top of Mind Images

The term "public transit" is most likely to turn people's minds to thoughts of buses, light rail, trains or subways. Two of three (68%) Tempe residents say they initially think of buses when they hear the term "public transit." An additional 10% are reminded of light rail, 5% of trains, and 4% of subways. The reference to light rail or monorail is up slightly from 1998 (6% to 10%). All other percentages are comparable to those reported in 1998.

It is interesting to note the significant decrease in the percentage of residents who indicated a first response of the system being "inadequate" (down to 4% from 18% in 1998). This may mean the service improvements that have happened over the past three years are being noticed. However, perceptions of a less than ideal system remain with small percentages of the residents mentioning routes not being well planned (2%), empty buses (2%), not enough buses (2%), etc.

**Table 1: Images of Public Transit** 

			2001 (	Sender	2001 Bus ridership	
	2001 (n=404)	1998 (n=401)	Male (n=200)	Female (n=204)	Bus Rider* (n=115)	Non Bus Rider (n=289)
Buses	68%	66%	66%	70%	70%	67%
Monorail/Light rail	10	6	12	8	9	10
Trains	5	10	4	6	7	4
Inadequate bus system	4	18	4	3	5	2
Subways	4	6	4	3		5
Routes not well planned	2	4	4	3	2 5	3
Reduces traffic congestion	2	4	1		4	1
Not enough buses	2	4	1	2	2	2
Empty buses	2	_	2	2 2 2 2 3	1	3
Trolleys	2	2	2	2	2	1
Mode of transportation	2	2	1	3	1	2
Good for environment	2	-	3	1	4	1
Taxi's		2	2	2	3	1
People waiting for buses	2 2	2 2	2	2 2 2 2	3	2
Roads/freeways	2	_	2	2	1	2
Inconvenient times	1	4	1	2	3	1
Waste of money	1	2	1	1	-	1
Don't know/nothing	9%	3%	11%	7%	4%	11%

<sup>4:1</sup> What is the first image that comes to your mind when you hear the words "public transit"? What other thoughts?

<sup>\*</sup>Bus rider is defined as someone who has ridden in the past year

The only noticeable difference in the demographic characteristics of the sample from 1998 to 2001 is an increase in the percentage of single residents in the sample.

One in five households reported a teenager living there and of these households with teens, 46% indicated their teenagers use the city bus to get around.

More than three-fourths of the residents have access to the Internet or at least access to email.

**Table B: Demographics** 

	2001 (n=404)	1998 (n=401)
Marital Status		
Married	48%	50%
Single	52%	47%
Teenagers in HH	20%	na
Teens ride city bus	46%	na
Internet Access	78%	na
Occupation		
Professional/Technical	30%	26%
Retired	16%	15%
Student	15%	8%
Craftsman/trade/laborer	8%	10%
Manager/proprietor	7%	11%
Housewife/househusband	6%	7%
Sales	5%	5%
Clerical	3%	8%
Unemployed/disabled	3%	3%
Service worker	3%	6%
Refused	4%	3%

**Table A: Demographics** 

	2001 (n=404)	1998 (n=401)
Gender		
Male	50%	50%
Female	50%	50%
Years Lived in Tempe		
<1 year	10%	8%
1-2 years	13%	12%
3-5 years	15%	20%
6-10 years	14%	17%
11 - 20 years	13%	16%
20+ years	34%	26%
Age		
18 - 34	34%	33%
35 – 49		32%
50+	1	35%
Average	44.9	44.7
Education		
Some high school	3%	4%
High school graduate	12%	13%
Some college	40%	36%
College graduate	26%	27%
Post graduate	19%	18%
No answer	1%	2%
Income		
<\$20,000	15%	12%
\$20 - \$40,000	21%	29%
\$40 - \$60,000	18%	19%
\$60 - \$80,000	10%	12%
\$80 - \$100,000	7%	6%
\$100,000+	10%	8%
Average	\$53,500	\$48,600

# Introduction

# A. Background

The City of Tempe commissioned WestGroup Research to complete a telephone survey of Tempe residents in an effort to gain insights into perceptions about public transit, both among riders and non-riders. This report analyzes the data collected by the survey and, where appropriate, compares responses of the residents by meaningful demographic variables as well as to data from a study conducted in July of 1998.

Random calls of Tempe residents were made from WestGroup's Interviewing Center in Phoenix, Arizona in the month of January 2001. Households were selected by means of random digit dialing according to Tempe zip codes. An RDD methodology effectively includes all residential telephone numbers regardless of listing. Newcomer households and as many as 50% of some subgroups are not listed in published directories. The importance of the RDD methodology is in its ability to provide a true random sample of the population.

The survey was completed with 404 Tempe residents. The margin of error for this sample size is approximately  $\pm$  4.9% at a 95% confidence level. Cross tabulations of the data collected in this survey are included under separate cover.

# B. Demographics

A demographic review of the survey respondents shows that an equal proportion of males and females are represented. Approximately half (50%) of the residents are married. The average age was 44.9 and the average household income reported was \$53,500. Education levels of the respondents are somewhat higher than found across the Valley as a whole; 87% say that they have had at least some college education. However, this is likely due to the location and influence of Arizona State University. Overall, the sample is very similar to the 1998 sample. The tables on the following page gives a more detailed summary of these characteristics.