



TRAVEL REDUCTION PROGRAM

Annual Report

2015

Maricopa County Air Quality Department

Travel Reduction Program

July 1, 2014 – June 30, 2015

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**CLEAN AIR
MAKE
MORE**

DRIVE HYBRIDS MORE CONSOLIDATE ERRANDS MORE RIDE PUBLIC TRANSPORTATION MORE USE ENERGY EFFICIENT APPLIANCES MORE
CARRY REUSABLE TOTE BAGS MORE CONSIDER SOLAR MORE RUN COLD WATER CYCLES MORE USE REUSABLE CONTAINERS MORE CONSERVE
ELECTRICITY MORE REDUCE WOODBURNING MORE RECYCLE MORE USE ELECTRIC LAWN AND GARDEN EQUIPMENT MORE REFUEL AFTER DARK MORE



Maricopa County

Air Quality Department

SUBJECT: Travel Reduction Program – Fiscal Year 2015 Annual Report

DATES: July 1, 2014 – June 30, 2015
ADEQ Contract No. - EV11-00065, Amendment 6

EXECUTIVE SUMMARY

During the Fiscal Year 2014-2015 (FY15) grant year, Maricopa County continued the Travel Reduction Program (TRP) and outreach efforts in support of the voluntary “Clean Air Campaign”. Results were gathered from detailed statistical summary reports from each employee and student site participating in the program. During FY15, there were 2,985 sites in the TRP representing 1,158 companies. This year, the survey was administered to over 796,000 commuters. In addition, the TRP Task Force, along with the TRP staff, reviewed and approved 1,162 trip reduction plans. The following report tracks and analyzes the commuting habits of employees and students in Maricopa County.

The TRP is continually identifying new sites required to participate in the program. This ongoing effort has resulted in 41 new employee and student sites incorporated into the TRP and completing their baseline year during FY15. While companies phased in and out of the TRP, the number of active sites remained approximately 2,950 throughout the year.

An aggregate analysis of the sites processed during FY15, for both employee and student participants, produced the following statistical results: 1) commuters in the TRP saved 11,392 tons of pollution by using an alternative mode of transportation; and 2) the TRP’s e-survey was used by more companies than ever before, an increase of 5.7% year-over-year.

The TRP has two forms of its online e-survey. Employers can choose either the intranet or internet version. Overall, 408 companies had their employees/students use the e-survey this year. Eleven companies programmed the intranet version onto their systems for their employees to use and 397 companies had their employees access the Maricopa County web-site for the internet form. Some of the larger companies used the intranet version, accounting for nearly one-tenth of all employees.

Companies that used the e-survey saved the TRP from providing over 463,000 paper forms; this was an increase of 8.6% more electronic surveys compared to last year. When the TRP first started administering the e-survey, its goal was to have a 35% usage by all employees. This year, 58% of TRP employees/students used the e-survey to complete their survey. In addition, student sites increased their use of the e-survey by 13% over last year.

MARICOPA COUNTY REGIONAL TRAVEL REDUCTION PROGRAM 2015 Annual Report

INTRODUCTION

During Fiscal Year 2015, 2,985 employment sites were processed by the Travel Reduction Program (TRP). Of all the sites, 41 were baseline (first year sites). The TRP produces a detailed statistical summary report for each employment and student site. This year, the program administered the survey to over 796,000 employees and students. In addition, the TRP Task Force, along with the TRP staff, reviewed and approved 1,162 Trip Reduction plans. The following report tracks and analyzes the commuting habits of employees and students in Maricopa County.

The 1988 Omnibus Clean Air Legislation laid the foundation for the Maricopa County TRP. Employers with 100 or more employees were required to (1) reduce the single occupancy vehicle rate (SOV) by 5% annually, (2) name a transportation coordinator, (3) provide trip reduction information to all employees and/or students, (4) conduct an annual trip reduction survey and (5) submit an annual trip reduction plan.

The Trip Reduction Ordinance (TRO) adopted by the Board of Supervisors in September 1992 became effective January 1, 1993. This ordinance expanded the TRP by requiring employers with 75 to 99 employees to participate. The 1993 ordinance also established a SOV floor of 60%, and it improved SOV rate and SOV target calculations.

The TRO was amended May 26, 1994 with the following changes effective July 1, 1994; (1) employer SOV reduction goals were increased from 5% for the first five target years to 10% (employers in their sixth and subsequent target years have a SOV target of 5% annually), (2) employers with 50 to 74 employees were incorporated into the program and (3) employers were given credit towards SOV reduction goals for using Reduced Emission Vehicles (REV).

In May 1996, the TRO was amended and ten Equivalent Emission Reduction (EER) measures were implemented. The ordinance became effective in July 1997. The EER ordinance measures allow for credit to be given to companies toward meeting their trip reduction goals by implementing alternative air pollution reduction strategies. These strategies are listed on a separate form and submitted with their trip reduction surveys on an annual basis.

In the first program year of the TRP, approximately 500 employers and 800 employment sites were affected by the TRP. The implementation of the 1993 TRO added 300 employers and 700 sites to the program. With the implementation of the 1994 TRO, there are currently over 1,100 employers and 2,900 sites participating in the TRP.

PROGRAM OVERVIEW

The TRP's operational functions are divided into two sections: Operations/Research Data Analysis and Plan Review/Monitoring.

Operations / Research Data Analysis

Operations section's primary responsibilities are: 1) coordinating survey delivery and processing data; 2) monitoring new employers for incorporation into the TRP; 3) tracking effected employers to ensure that questionnaires and other requirements are submitted on schedule; and 4) developing policies and procedures.

The Research Data Analysis section is responsible for analyzing survey data and generating summary analysis reports for each employment site; analyzing and measuring the overall impact of the TRP on reducing single occupant commutes; and producing quarterly, annual and special reports for internal and external requests. In FY15, the Research/Data Analysis section sent out 2,793 summary analyses for employers and schools. In addition, they completed reports and supplied statistical data results for employers, researchers, city planners, news affiliates and individuals.

Plan Review/Monitoring

The Plan Review/Monitoring section reviews and evaluates all submitted TRP plans to determine if proposed strategies and/or incentives are adequate to achieve targeted SOV reductions. There were 1,162 TRP plans that were reviewed and approved by the Task Force and staff during FY15.

The Plan Review staff also monitors employers to ensure that trip reduction plans are implemented accordingly. Monitoring activities include on-site visits and phone calls to employers. This year there were 612 monitoring phone calls and 711 site visits completed. Employers not in compliance with TRP's policies and procedures can receive a Notice of Violation (NOV). During FY15, 47 NOV's were issued to employers who did not meet the statutory requirements. Of those referred to the TRP Task Force for enforcement, all were withdrawn following compliance by the respective employer.

Valley Metro/ RPTA

Both the Maricopa County TRP and the Valley Metro/Regional Public Transportation Authority (RPTA) provide staff to coordinate the benefits of both the TRP and the Clean Air Campaign. The RPTA is a sub-contracted organization that provides training, technical assistance and promotional material to all affected organizations. During the past year, six Introduction to the Trip Reduction Program training classes were conducted with a total of 225 attendees. In addition, 17 in-person Transportation Coordinator Association (TCA) meetings were held across the Valley; 136 people attended. Twelve TCA webinars were held with a total of 86 in attendance. Over 12,000 technical assistance and consultative service contacts were made to Valley organizations. This year, RPTA facilitated 54 presentations and events for TRP employees, with approximately 4,546 employees in attendance. Now in its twenty-eighth year, awareness of the Clean Air Campaign continues to grow with the public.

ANNUAL REPORT METHODOLOGY

The Maricopa County Regional Travel Reduction Program's method for measuring employers' compliance with the program is based on an employer's current site year. This methodology allows for the aggregation of data by the current TRP program year. New employment sites are added on a continual basis. The total number of employees/students commuting patterns is measured to determine TRP's overall effectiveness on reducing single occupant vehicle trips and miles.

This year, aggregate data is only shown for the first program year (FY 1991) and the last five fiscal years. This is done to show how the TRP compares to the inaugural year and reflect the most recent trend of data. For purposes of maintaining consistency and tracking a company's historical data from one year to the next, data gathered for a company are based upon the company's anniversary date.

The regional calculation for the number of miles needed to generate one-pound of pollution, for an average vehicle, was 70.5 for the first and second quarters and 73.5 miles for third and fourth quarters of the fiscal year. This factor was used to calculate the amount of pollution saved annually in the program. The Maricopa Association of Governments (MAG) has provided the data, citing EPA's MOVES2010b for the first and second quarters and MOVE2014 for the third and fourth quarters as its source.

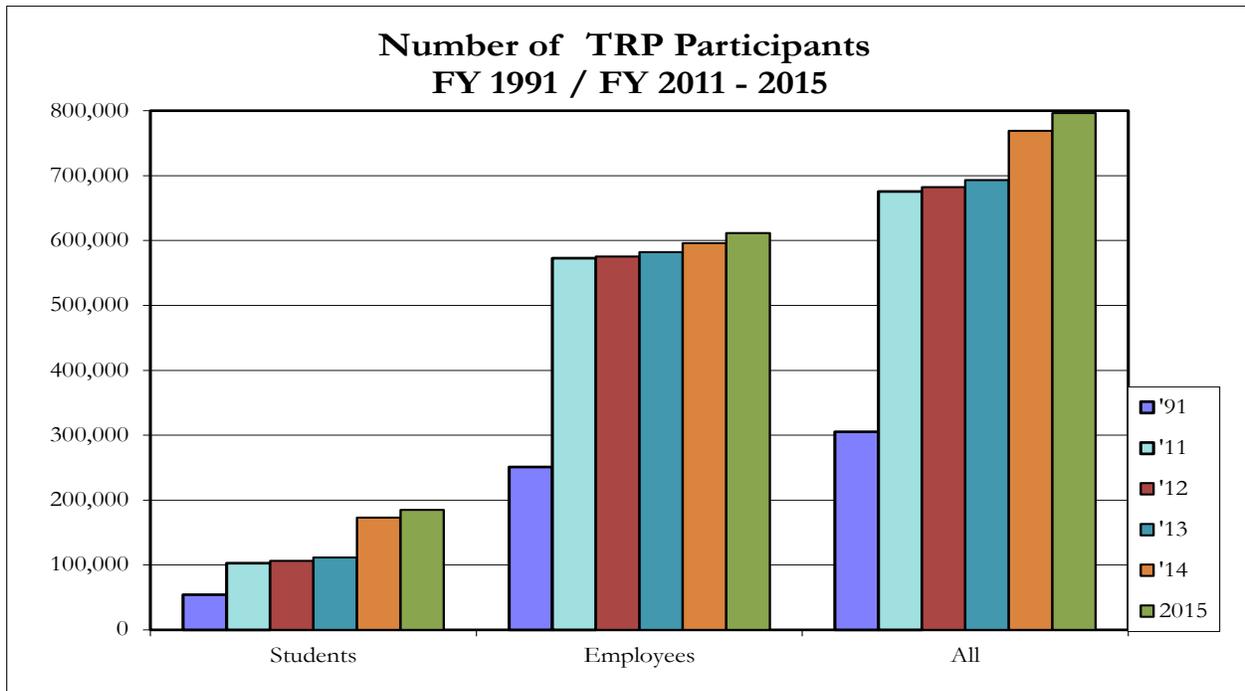
The staff members of the Maricopa County Travel Reduction Program and the Regional Public Transportation Authority (RPTA) work closely to the benefit of both the TRP and the Clean Air Campaign.

The FY15 Travel Reduction Program Final Report is highlighted with samples of program material, aggregate results of the annual survey, and the calculation methodology. Questions or comments should be addressed to the Maricopa County Air Quality Department, Travel Reduction Program, 1001 N. Central Ave. #550, Phoenix, AZ 85004.

NUMBER OF TRP PARTICIPANTS

The Maricopa County region affected by the Travel Reduction Program (TRP) has recorded continual growth since the inception of the program in 1989. TRP's overall participation has increased 161% since the first program year.

Based on current DES estimates for the Greater Phoenix-Glendale-Mesa metropolitan Area non-farm workforce, there are approximately 1,865,200 employees. TRP employees account for over 32.8% of those Maricopa County residents. In addition, 'Student' sites contribute another 184,761 participants to the overall population tracked by the TRP.



The number of all TRP participants has steadily increased each year of the program. When compared to DES estimates for non-farm workforce, TRP employees increased by 2.58%, while the DES workforce showed an increase of 2.49% from the previous year. The student count increased by 80% over the last four years, with a 7% this year alone. The number of student participants increased over the last two years, because the total student population for Arizona State University has been counted. This has resulted in dramatic changes in the response rates for the year when compared to the previous year.

Number of Participants

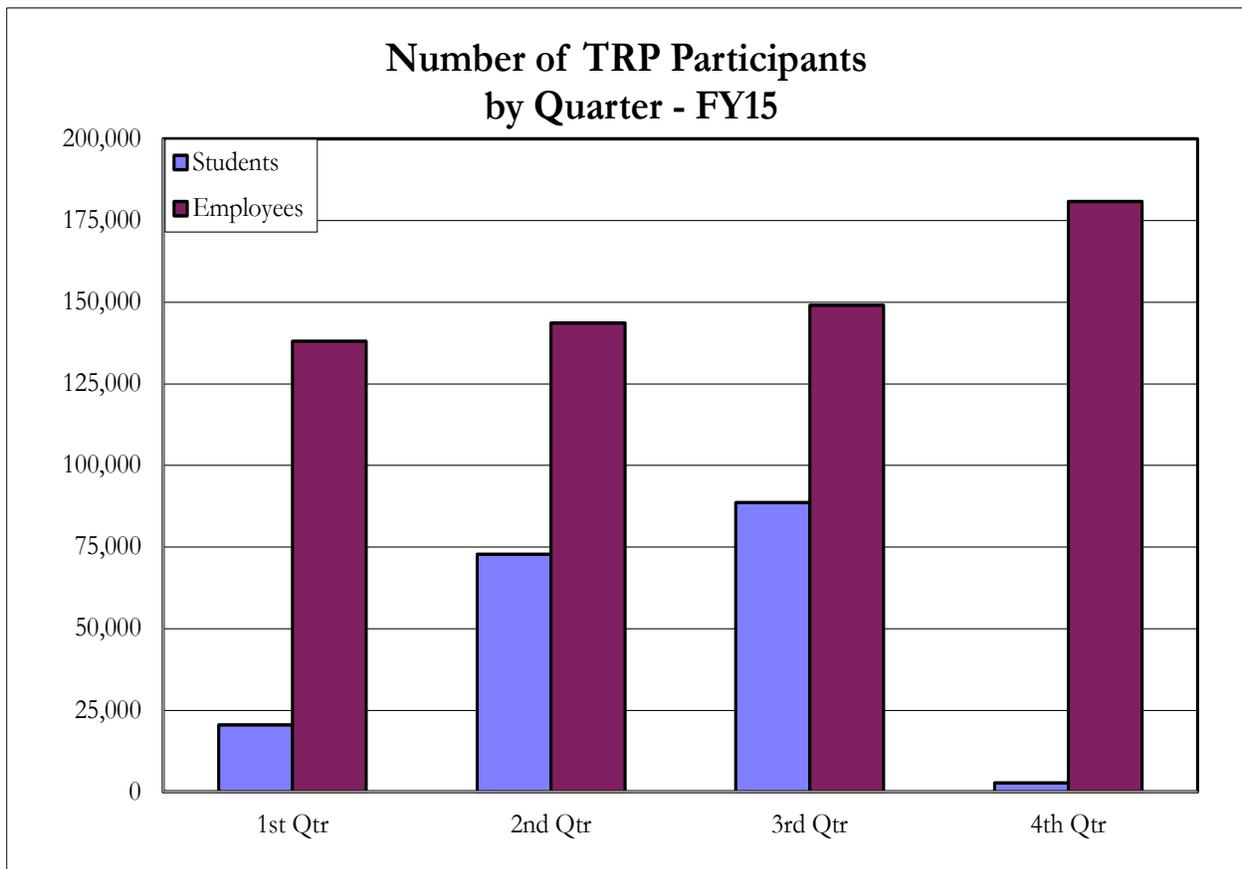
Site Type	FY 91	FY 11	FY 12	FY 13	FY 14	FY 2015
Students*	53,943	102,478	106,081	111,224	172,889	184,761
Employees	251,112	573,002	577,432	582,172	596,153	611,527
All	305,055	675,480	683,513	693,396	769,042	796,288

*Student population includes high school juniors and seniors, colleges, universities and vocational institutions.

TRP Participation by Quarter for FY 2015

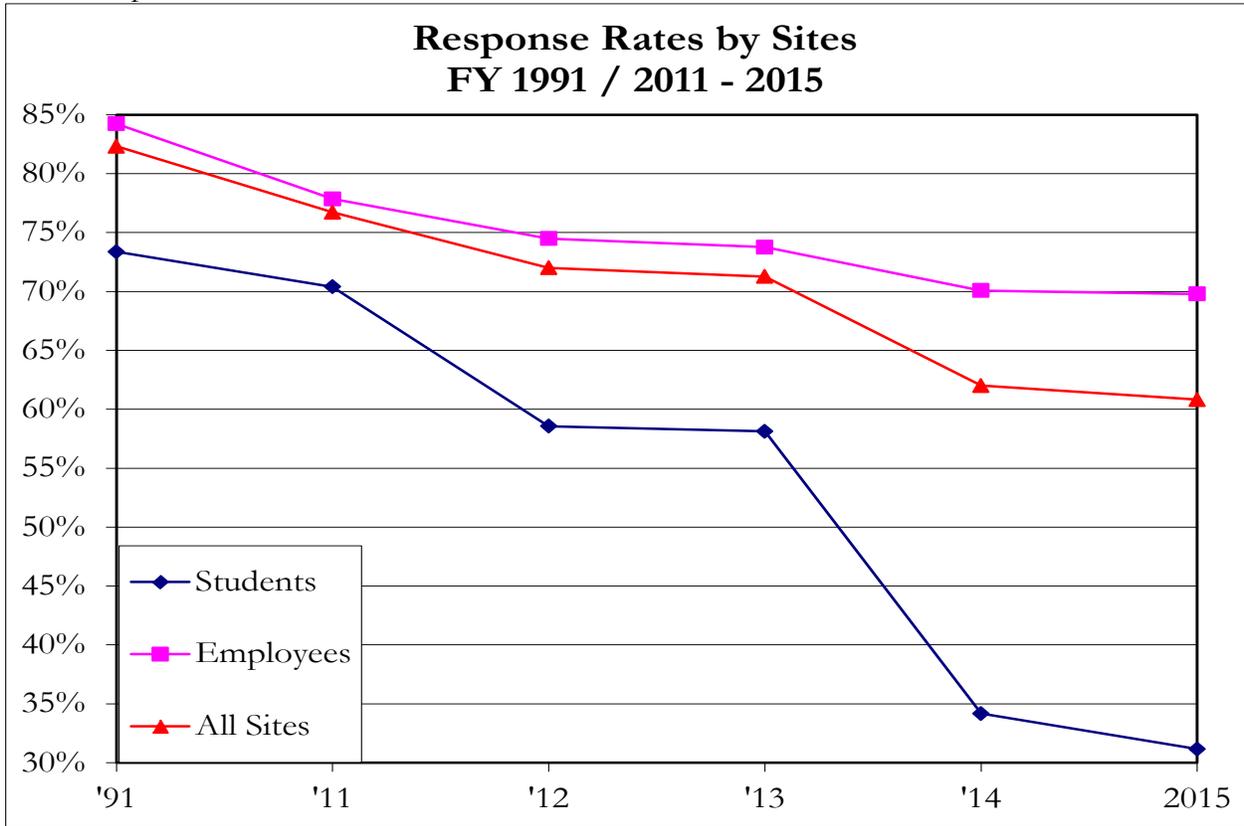
During the third quarter, the TRP surveyed many of the larger companies and high schools. Most secondary schools, which make up 39% of the student population, surveyed in the second and third quarters. This ensures that high schools, universities and colleges will receive their survey results before the end of the school year and have time to implement their TRP plan before the end of its current school year. For employees, the least amount of surveys administered was during the first quarter, which is traditionally lower because employees are taking time off during the summer vacation season.

Site Type	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total Year
Students	20,500	72,828	88,615	2,818	184,761
Employees	138,049	143,598	149,072	180,808	611,527
All	158,549	216,426	237,687	183,626	796,288



TRP RESPONSE RATES

During FY15, 2,985 sites were analyzed. This included 2,859 'Employee' sites and 126 'Student' sites. The TRP questionnaire was administered to 796,288 employees and students this year with an overall response rate of 60.82%.



The response rate is calculated by dividing the number of questionnaires completed by the number of the employees at the site. If the response rate for an employer is less than the required 60%, a company is directed to resurvey that site. The data collected by the TRP is very comprehensive, and is requested by numerous outside agencies and organizations for detailed analysis and reports.

The response rate for 'All' site types decreased for this year. The student response rate was lower than the employee response rate, 31.15% and 69.79% respectively.

Response Rates

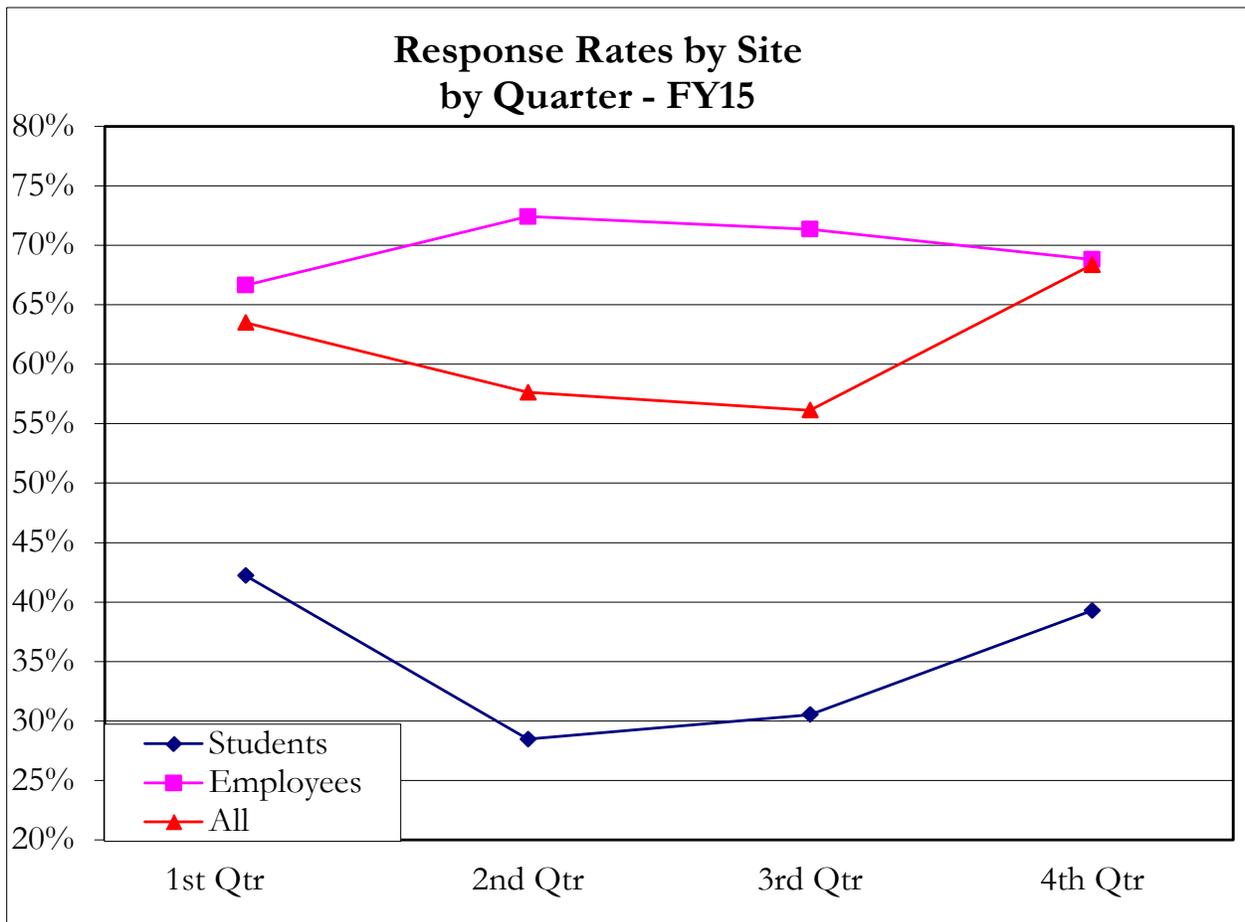
Site Type	FY 91	FY 11	FY 12	FY 13	FY 14	FY 2015
Students*	73.36%	70.39%	58.56%	58.13%	34.17%	31.15%
Employees	84.24%	77.85%	74.53%	73.77%	70.08%	69.79%
All	82.32%	76.72%	72.05%	71.26%	62.01%	60.82%

*Student population includes high school juniors and seniors, colleges, universities and vocational institutions.

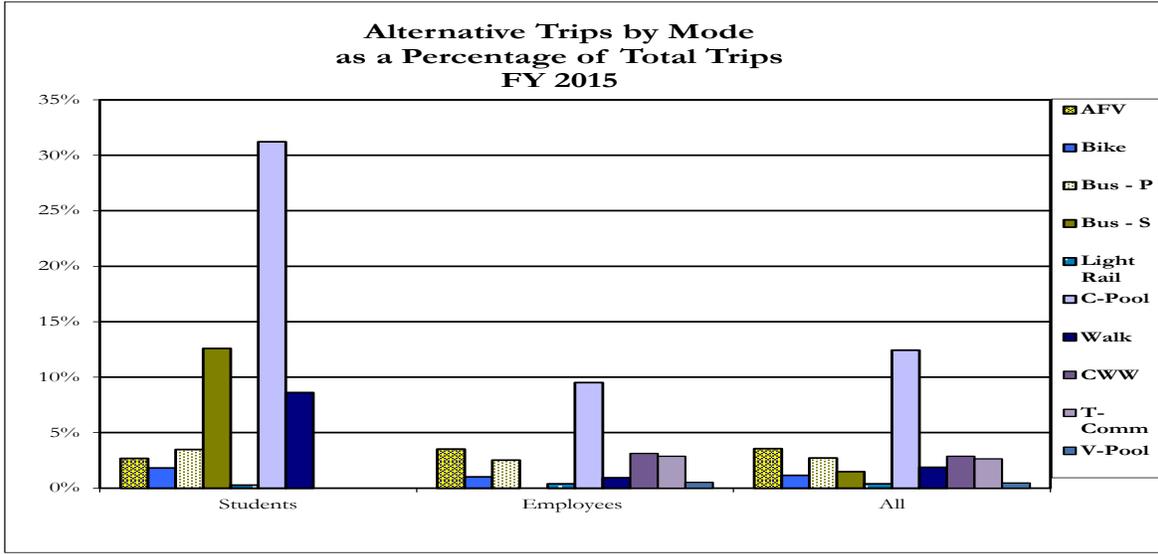
TRP Response Rates by Quarter for FY 2015

In FY15, the response rates fluctuated each quarter. Although there is no distinguishable pattern throughout the year, the fourth quarter had the highest response rates for ‘All’ sites. For ‘Employee’ sites, the second quarter had the highest response rates. ‘Student’ responses were their lowest during the second quarter, Arizona State University surveyed during this period and the overall numbers for students were recalculated during this year.

Site Type	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Current Year Average
Students	42.21%	28.47%	30.52%	39.28%	31.15%
Employees	66.65%	72.43%	71.35%	68.81%	69.79%
All	63.49%	57.63%	56.13%	68.35%	60.82%

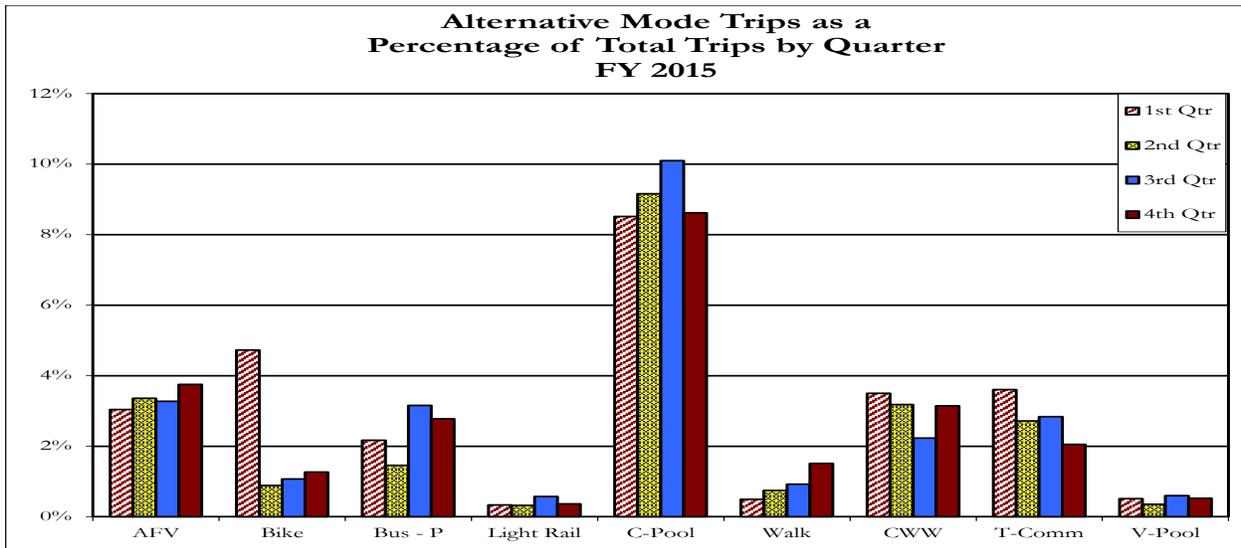


ALTERNATIVE MODE TRIPS



TRP participants continue to use alternative modes with more frequency each year. During this year, carpool usage continued to be the highest type of alternative mode used for ‘All’ site types. ‘Student’ and ‘Employee’ sites used carpooling as their primary alternative mode.

Students used carpooling for 31.2% of all their commuting trips. Other alternative modes used mainly by students were taking the bus (16.1%) and walking (8.6%). These three modes account for over 55% of commuting habits by students. Employees carpoled 9.5% of the time, while CWW accounted for 3.1% of alternative trips and using tele-commuting resulted in 2.9%.



Carpooling continues to be the highest percentage of trips taken by alternative mode users. The second and third quarters showed the largest use of carpooling. The two other alternative modes mostly used by commuters (compressed work week and tele-commuting) were used in the first quarter.

POUNDS OF POLLUTION

TRP participants continue to use alternative modes of transportation for 34.19% of their commuting miles. In FY15, for 'All' sites, pounds of pollution saved daily totaled 87,632 pounds per day.

There were multiple circumstances that affected the results of the amount of pollution saved by the program: 1) because of newer and environmentally cleaner vehicles on the road, the pounds of pollution factor was recalculated mid-way through the year from 70.5 to 73.5 miles per one-pound of pollution; and 2) the number of completed surveys returned by employers cause fluctuations in the aggregated results year over year.

Pounds of Pollution Saved by Mode

MODE	STUDENT SITES		EMPLOYEE SITES		ALL SITES	
	Miles Daily (Both - Ways)	Pounds of Pollution Saved Daily ¹	Miles Daily (Both - Ways)	Pounds of Pollution Saved Daily ¹	Miles Daily (Both - Ways)	Pounds of Pollution Saved Daily ¹
Generated SOV	325,938		9,697,980		10,023,918	
Saved						
AFV	21,744	390	460,106	7,712	481,850	8,102
Bike	4,917	81	45,215	748	50,132	829
Bus (Public)	23,630	432	331,718	5,324	355,347	5,756
Bus (School)	81,037	1,456			81,037	1,456
Carpool	293,615	4,999	1,747,125	29,386	2,040,741	34,385
Light Rail	2,376	40	40,617	660	42,993	700
CWW*			456,853	7,879	456,853	7,879
TeleComm*			546,804	9,472	546,804	9,472
Vanpool			1,108,312	18,558	1,108,312	18,558
Walk	14,838	248	15,618	247	30,456	495
Alternative Mode Total	442,157	7,646	4,752,368	79,986	5,194,525	87,632
Total Miles	768,095		14,450,348		15,218,443	

* Miles not driven

¹ To calculate the pounds of pollution saved daily, the "Miles Daily" was divided by 70.5 for the first and second quarters and 73.5 for the third and fourth quarters. Using the third and fourth quarters as an example, 73.5 is the number of miles driven needed to generate one pound of pollution using the most recent standards.

POLLUTION SAVED

TRP participants continue to save more pounds of pollution each year. This year alone, the amount of pollution potentially saved by the 796,228 employees/students responding to the survey was estimated at 18,090 tons. This was an increase of 5.8% from last year.

Total Pounds of Pollution Saved

Site Type	Pounds of Pollution Saved Daily	Tons of Pollution Saved Weekly ²	Tons of Pollution Saved Annually ³	Potential Tons of Pollution Saved by TRP Annually ⁴
Students	7,646	19.1	994	3,191
Employees	79,986	200.0	10,398	14,899
All ⁵	87,632	219.1	11,392	18,090

Pounds of pollution saved are calculated by dividing the miles that were not driven by commuters using an alternative mode of travel by 73.5. Seventy-three and five-tenths is the number of miles that is calculated to be driven in order to produce one pound of pollution.

Below is the equation to calculate one pound of pollution:

$$\begin{array}{ccccccc} \text{VOC} & + & \text{NO}_x & + & \text{CO} & + & \text{PM} & = & 1 \text{ lb. of pollution}^* \\ 7.26\% & & 8.58\% & & 84.03\% & & 0.13\% & & \end{array}$$

The on-road emissions model used to calculate miles per pound for Light Duty Gasoline Vehicles (LDGV) was updated this reporting period by the EPA. It officially replaced the previous emissions model, Motor Vehicle Emission Simulator (MOVES2010b), with the MOVES2014 model. The new model continues to calculate how many miles driven it takes to generate one-pound of pollution for a standard on-road vehicle.

For this reporting period the TRP conversion rate for Natural Gas vehicles is derived from the MOBILE6.2 model. Currently, the EPA is making adjustments to their model to calculate emission rates for Light Duty CNG Vehicles (LD NGV) and plan to release an updated version in the future. The LD NGV calculation is used to measure the credit amount given for commuters who select Alternative Fuel Vehicles (AFV) as their mode use.

² “Tons of Pollution Saved Weekly” is calculated by dividing the “Pounds of Pollution Saved Daily” by 2000, and then multiplying the result by the number of trips taken weekly by an average commuter, which is set to be five by the TRP, i.e. for students, (7,646/2000)* 5 = 19.1 tons.

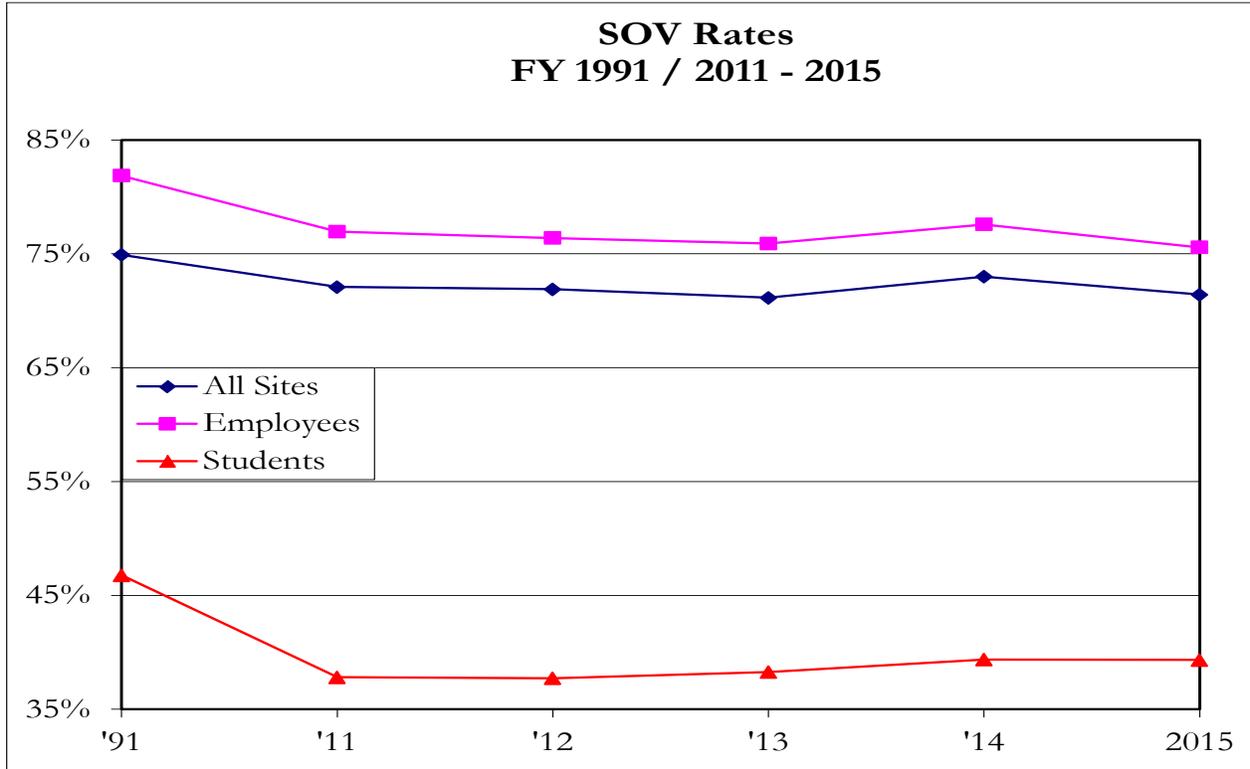
³ Weekly tons are then multiplied by 52 to calculate “Tons of Pollution Saved Annually”, 19.1 * 52 = 994 tons.

⁴ “Potential Tons of Pollution Saved by TRP Annually” is calculated by extrapolating out to the number of TRP participants who had the survey administered to them. The “Tons of Pollution Saved Annually” is divided by the response rate, i.e. 57,545 students answered the survey for a response rate of 31.15% (.3115); 994/.3115 = 3,191. All 184,761 TRP students could have saved 3,191 tons of pollution in FY15.

⁵ The numbers for ‘All’ site types is calculated by adding the totals from the ‘Student’ site and ‘Employee’ site rows.

SOV TRIP RATES

The Single Occupant Vehicle (SOV) trip and Single Occupant Vehicle Miles Traveled (SOVMT) rates indicate how well a company is doing at reducing employee/student trips and miles. In order for a company to achieve their reduction goal for the year it must meet or exceed either one of these target rates.



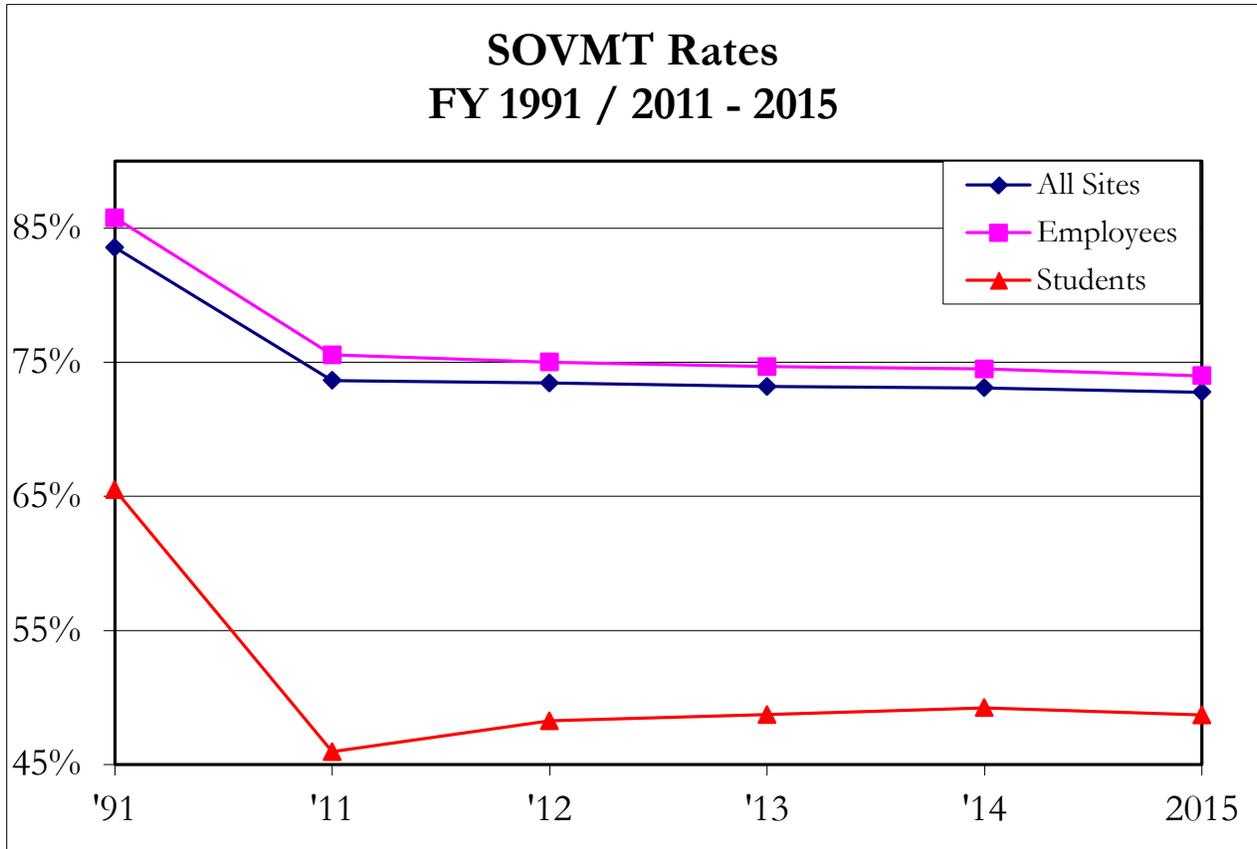
The SOV trip rate is calculated by dividing the number of SOV trips by the total trips taken for all commuters. This is also done separately for ‘Employee’ sites and ‘Student’ sites in order to compare their rate of change.

Single Occupancy Vehicle (SOV) Trip Rate

	Students		Employees		All	
		Change from Previous Year		Change from Previous Year		Change from Previous Year
FY 91	46.78%		81.86%		74.92%	
FY 11	37.82%		76.94%		72.09%	
FY 12	37.73%	-0.23%	76.38%	-0.72%	71.89%	-0.28%
FY 13	38.28%	1.45%	75.90%	-0.62%	71.15%	-1.02%
FY 14	39.37%	2.84%	77.58%	2.21%	73.00%	2.60%
FY 15	39.34%	-0.01%	75.57%	-2.59%	71.42%	-2.16%

SOVMT RATES

This year the SOVMT showed a decrease of 0.04% for 'All' sites when compared to last fiscal year. 'Student' and 'Employee' sites showed the following rate changes, -0.11% and -0.07% respectively.

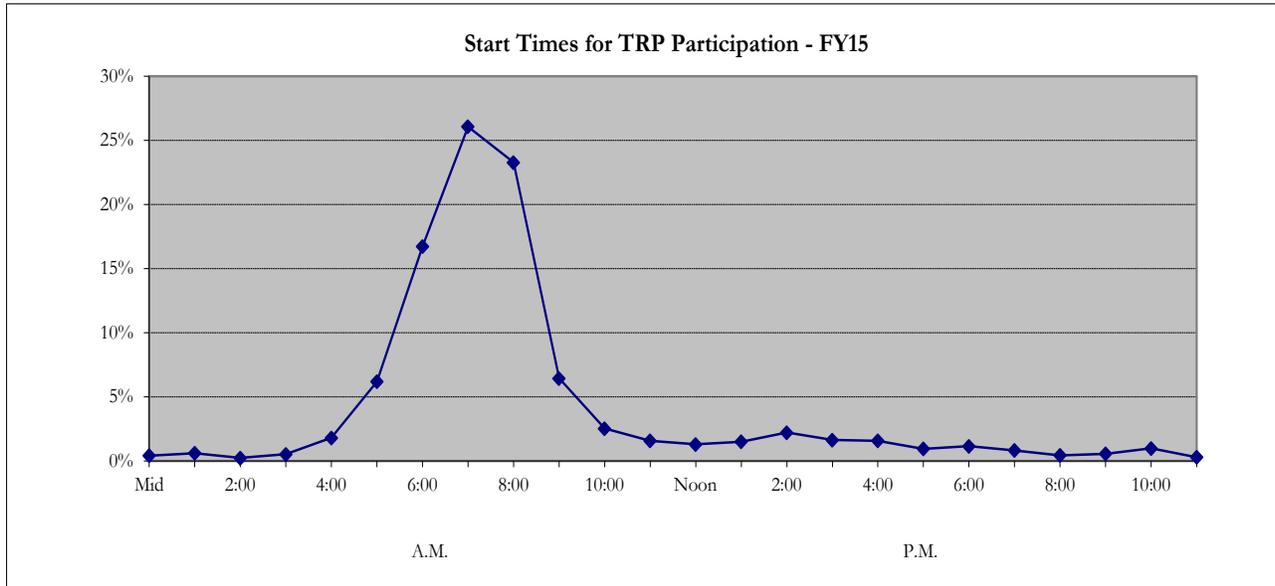


The SOVMT rate is calculated by dividing the number of SOV miles traveled by the total number of miles driven by all commuters. This is also done separately for 'Employee' sites and 'Student' sites in order to compare their rate of change.

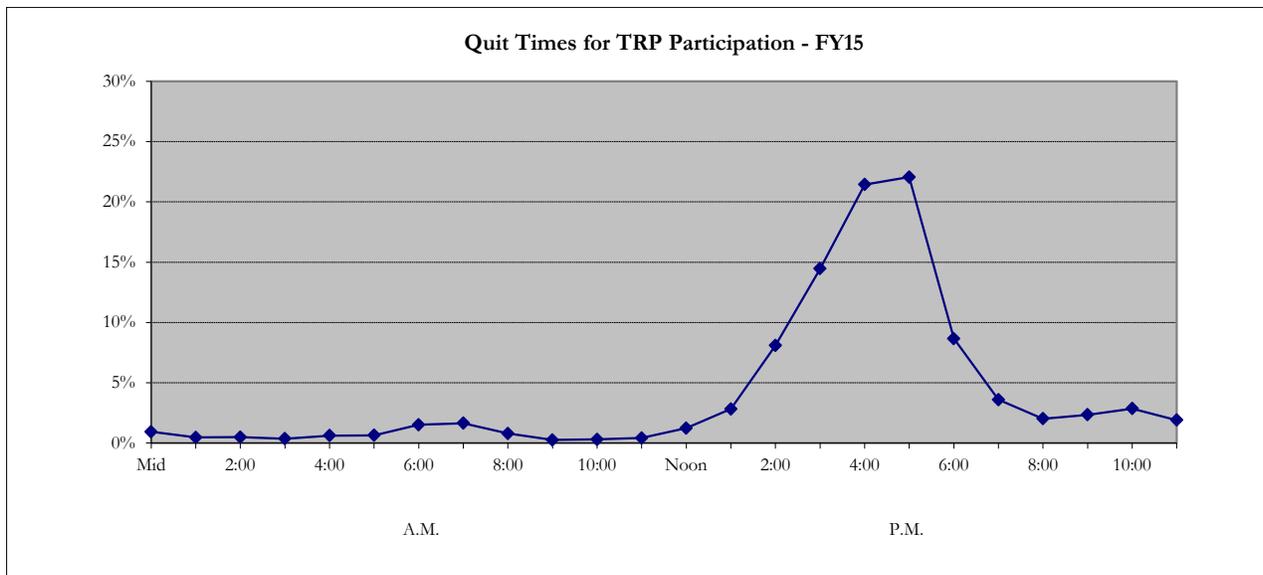
Single Occupancy Vehicle Miles Traveled (SOVMT) Rate

	Students		Employees		All	
		Change from Previous Year		Change from Previous Year		Change from Previous Year
FY 91	65.49%		85.78%		83.57%	
FY 11	45.95%		75.55%		73.64%	
FY 12	48.24%	4.98%	75.01%	-0.71%	73.46%	-0.24%
FY 13	48.72%	0.99%	74.68%	-0.43%	73.19%	-0.36%
FY 14	49.23%	1.04%	74.50%	-0.24%	73.09%	-0.13%
FY 15	48.69%	-0.11%	74.00%	-0.07%	72.77%	-0.04%

COMMUTING TO WORK

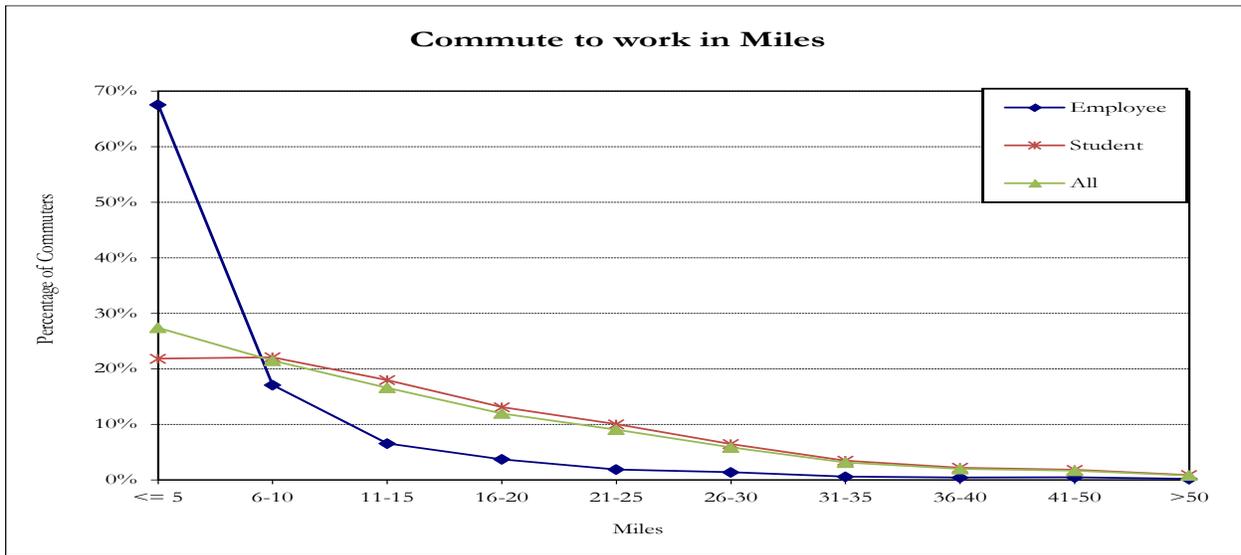


The peak hours for Maricopa County commuters traveling to work are between 5:00 a.m. and 9:00 a.m.; 72% of all commuters are on the road during this time. During the morning rush, the time between 7:00 a.m. and 8:30 a.m. is the most heavily traveled. There is also a second shift peak between 2:00 p.m. and 4:00 p.m. when commuters make their way to work.

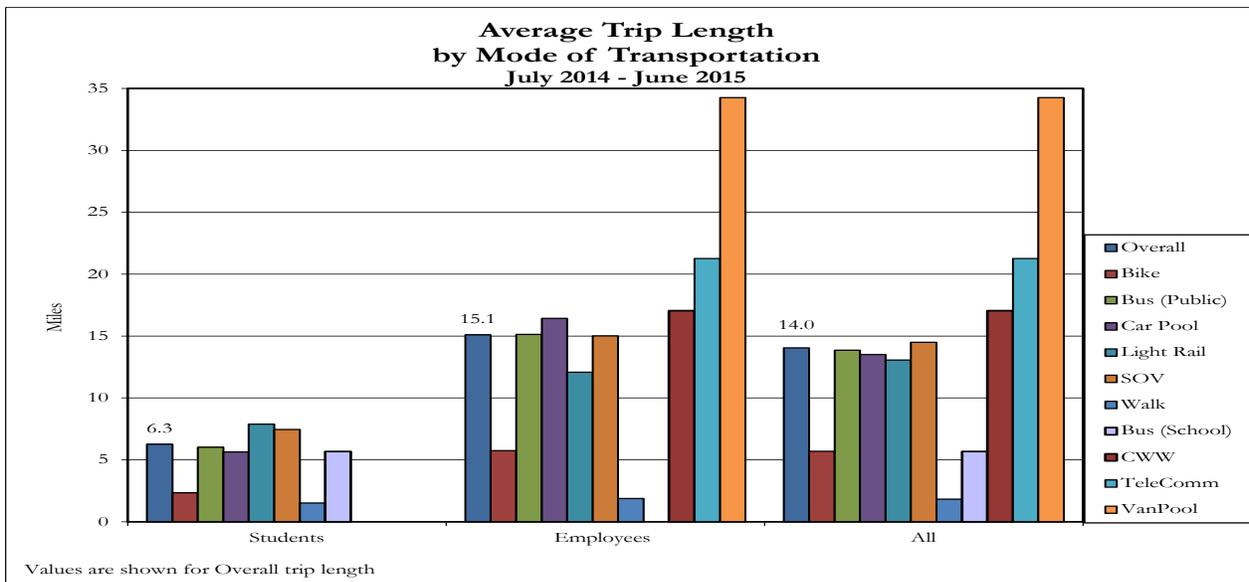


Conversely, quit times for commuters peak between 2:00 p.m. and 6:00 p.m.. Over 66% of all commuters are leaving the workplace during this time. However, the peak for departing workers is not as great as that of arrival times. This is caused by workers who complete their eight-hour shifts prior to the afternoon rush or those who put in extended hours. The time between 5:00 p.m. and 6:00 p.m. showed the largest numbers of commuters leaving from work.

HOW FAR IS THE COMMUTE?

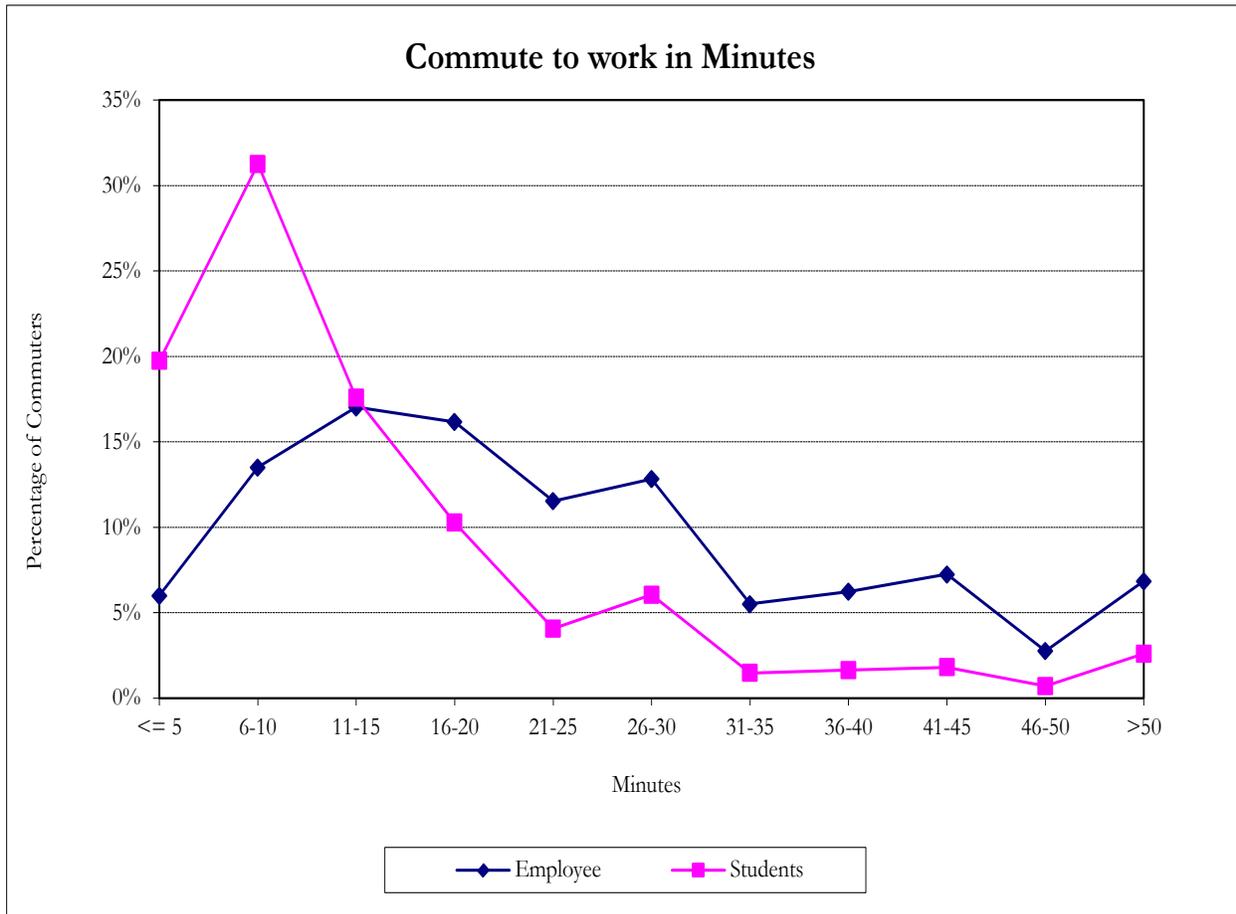


In FY15, the typical TRP commuter (employee or student) could have expected to drive, on the average, 13.9 miles one-way to work or school. While the average drive for an employee was 15.2 miles to work, students drove an average of 7.1 miles one-way to school. Overall, 27.4% of all TRP participants drive less than five miles to work/school. Another 43.5% of the commuters live between 11 and 30 miles from work. Over 7.6% of all commuters have a drive of over 30 miles.



The average trip length by mode split shows that employee trips on all accounts are longer than student trips. However, employees' longest commuting trips are taken using an alternative mode, not SOV's. The longest of these trips using alternative modes are vanpools (34.3 miles) and trips not taken (CWW's – 17.1 miles, and Telecommuting – 21.3 miles). This suggests that those commuters who live farthest from work are more likely to reduce the number days they drive into their worksite by using one of these alternative mode types as their commuting method.

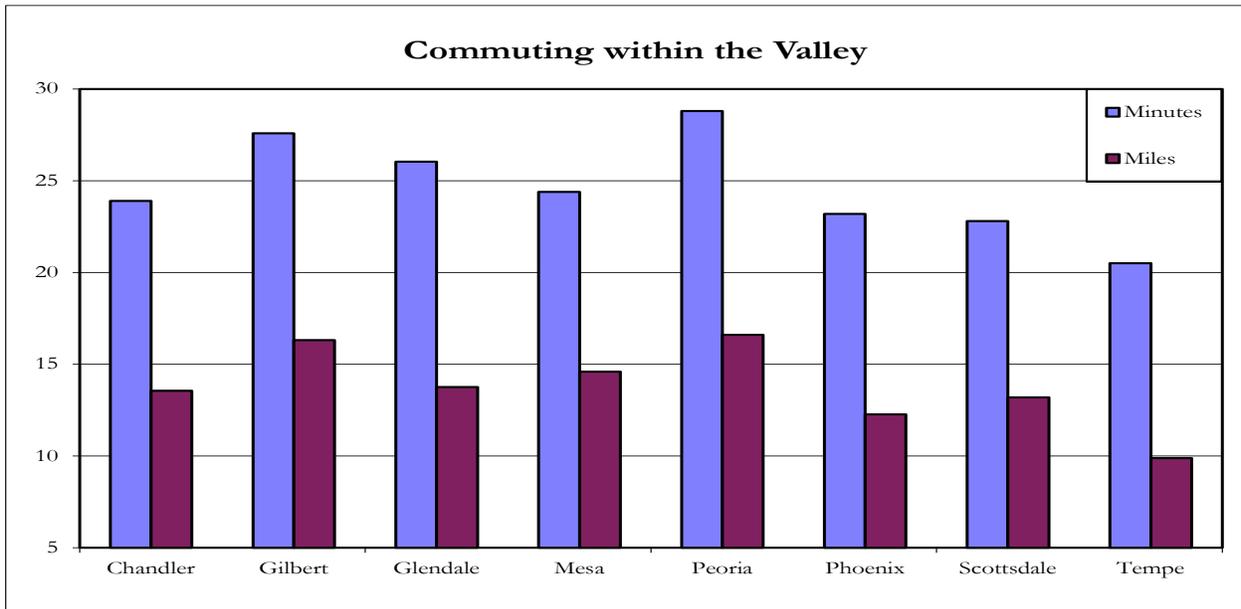
HOW LONG DOES THE COMMUTE TAKE?



Typically, TRP participants can expect to spend an average of 24.0 minutes commuting to work or school. Students take an average of 15.9 minutes to get to school, while employees average 24.7 minutes to get to their worksite.

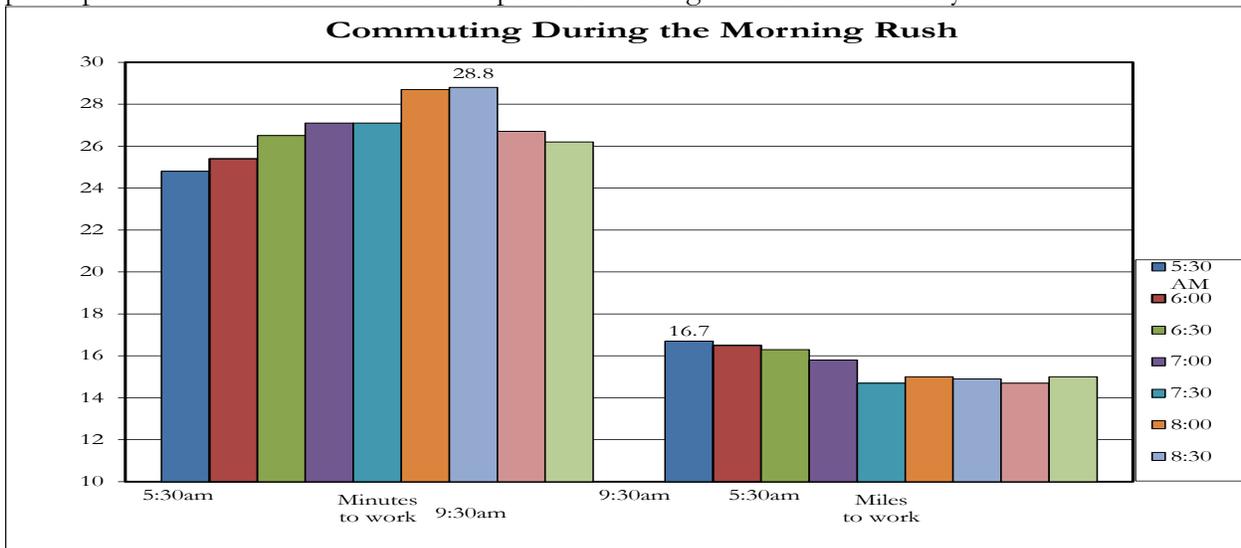
Approximately 56.2% of all commuters take less than 20 minutes to arrive at work/school. The largest group of all respondents is represented by those who take between 11 and 15 minutes to commute, while 25.9% of commuters take over 30 minutes or more to get to their worksite. Nearly, 28.6% of all employees take more than 30 minutes to arrive at their workplace. For students, 68.6% commute to school in 15 minutes or less.

VALLEY COMMUTING PATTERNS



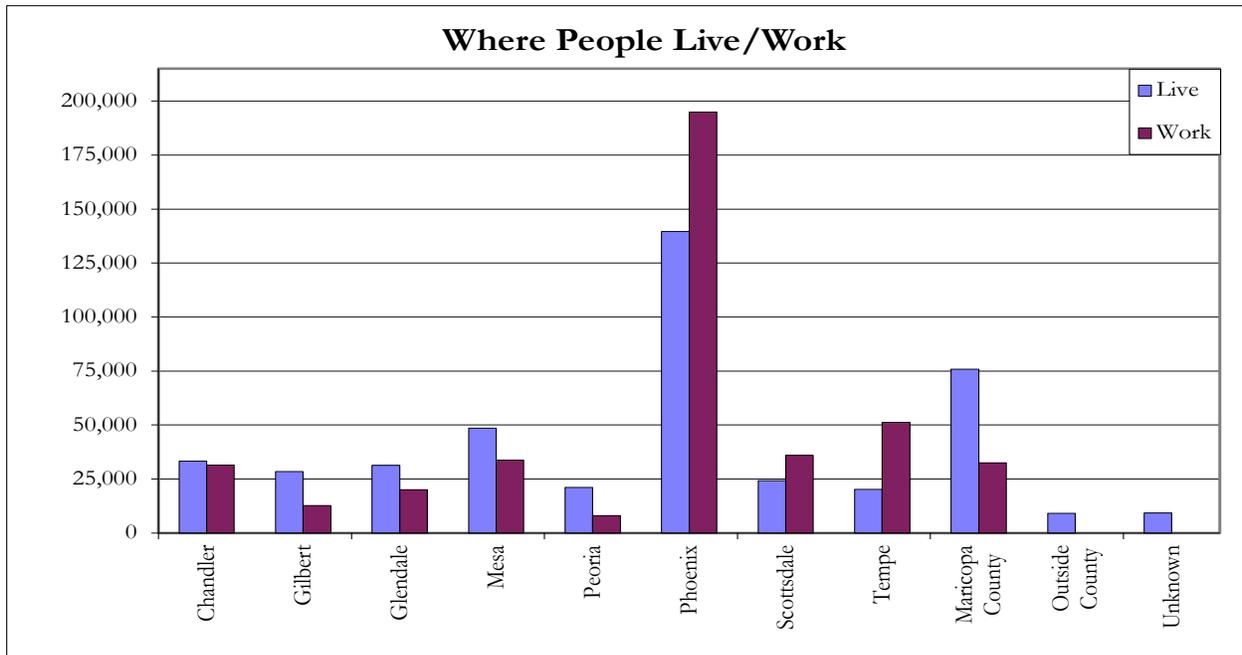
Of the eight largest municipalities in the Valley, the time and distance spent commuting to work can vary depending upon where one lives. For all communities, the time spent commuting correlates to the distance traveled to work.

The two Valley communities that have the longest commute in minutes and miles are Peoria and Gilbert. This may be that these commuters must travel outside of their area of residence to get to their worksite. With the exception of the City of Mesa, all these major cities found that their TRP participants distance traveled and time spent commuting increased from last year.



For Valley commuters, the morning rush is worse during the later portion of the commute. The average morning commute takes about 28.8 minutes and is 16.7 miles long, both increased from last year. A TRP commuter may experience, nearly a 29-minute drive if they begin work at 8:30 a.m., even though it is one of the shorter commute trips. It is also noted that those who have a longer distance to commute, depart for work earlier in the morning.

WHERE TRP EMPLOYEES LIVE COMPARED TO WHERE THEY WORK



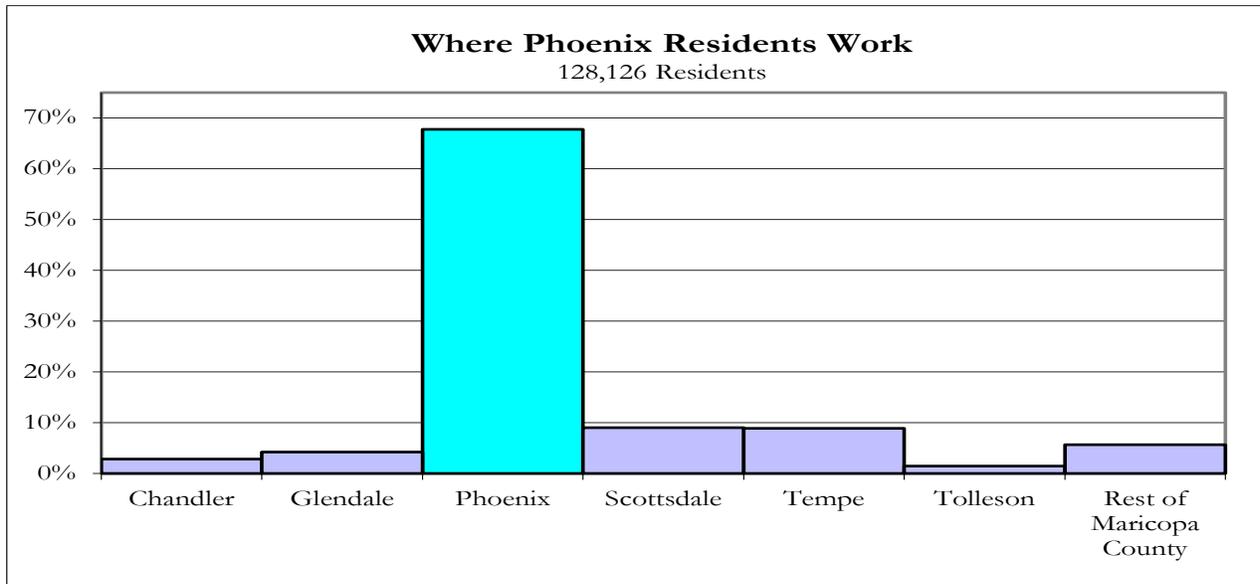
During FY15, 420,380 employees responded to the survey indicating their city of residence. For the purposes of this report, only those cities whose residents total 20,000 or more employees in the TRP for the year are listed.

As expected, the City of Phoenix is the largest contributor in both residents and number of employees in the workforce. While 139,627 residents live in Phoenix, 194,865 work within the city limits. Other cities that have a positive employee/resident ratio (more employees working in an area than live in that area) are Scottsdale and Tempe. This trend indicates that these cities have to accommodate more commuters coming into their communities during the rush hours. Additional use of alternative modes of transportation will be needed in order to reduce traffic congestion associated with commuters getting to their worksite.

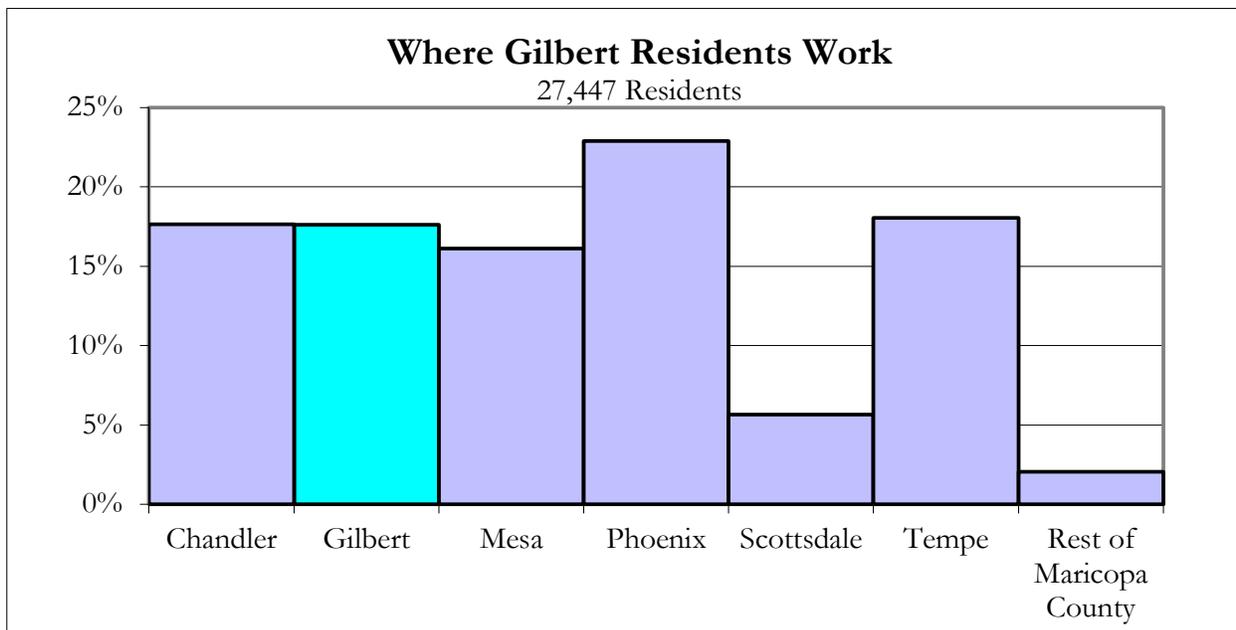
Conversely, all other major cities in the area have a negative employee/resident ratio (more resident live within the city, than work in that area). These communities also face the task of commuters returning to their residences. The Town of Gilbert shows true characteristics of a 'bedroom community'; while there are 28,499 residents in Gilbert who participate in the TRP, only 12,694 TRP participants work in Gilbert.

The following charts show two completely different examples of demographic trends here in the Valley. The city of Phoenix represents the typically large metropolitan area with major employers within the city limits, while the Town of Gilbert shows signs of being the suburban enclave where commuters live, but work in surrounding cities.

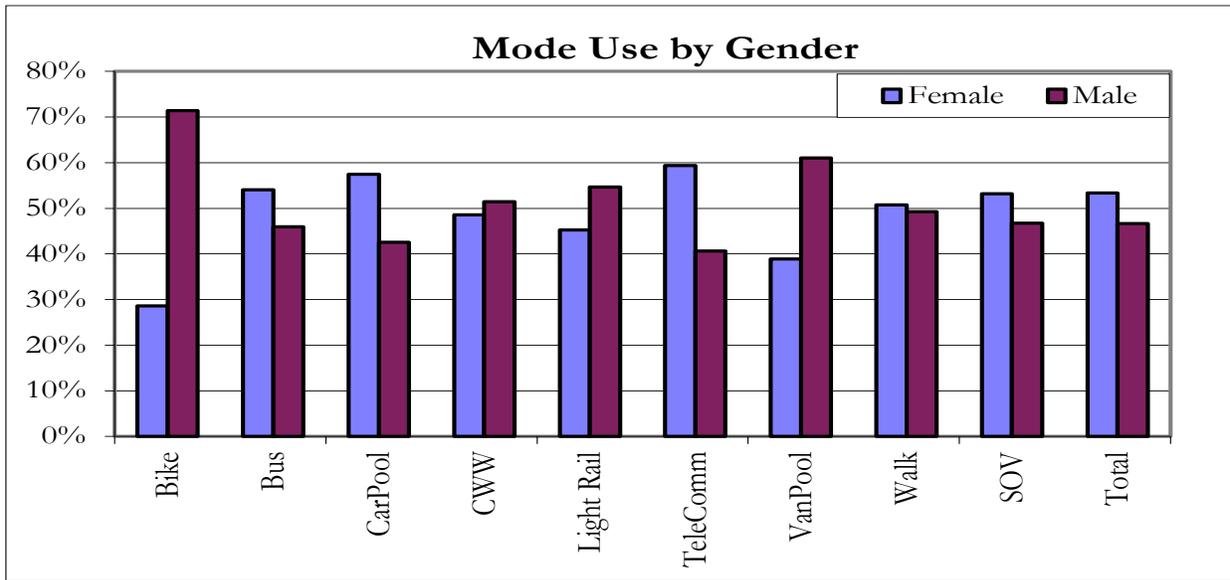
Of all Phoenix residents in the TRP, 67.8% (86,840) live and work within the city limits. Approximately 26.5% of all other Phoenicians work in adjoining major cities. While the rest of the city's residents work throughout the County, representing only 5.7% of Phoenix TRP residents.



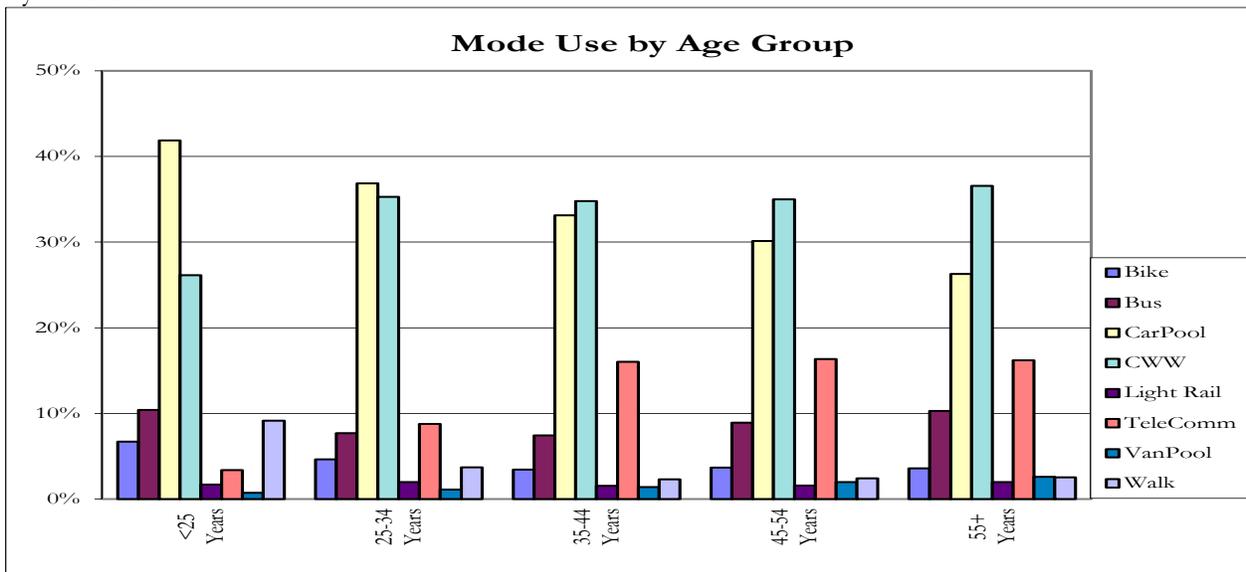
Representing the other side of commuter travel, the majority of the Town of Gilbert residents work in other cities in the Valley; over 82% work outside of Gilbert. Only 17.6% of the TRP participants (4,838) who live in Gilbert also work within the city limits. This indicates that Gilbert residents who participate in the TRP continue to seek work outside of the town, resulting in a true bedroom community. Comparatively, for the other major cities in Maricopa County, the average percentage of residents who live and work in the same city is approximately 34% for TRP participants. The Town of Gilbert is substantially below the average for other major cities in Maricopa County.



DEMOGRAPHIC DATA



For this year, over 404,000 TRP participants answered the optional question on gender. Females account for 53.4% of the total responses. While women show a higher percentage than men do of carpooling and tele-commuting, men are more likely to use bike and vanpool in larger numbers. The greatest disparity is represented by bicyclists. Men are more likely to bike to work than women, by a 3:1 ratio.



For those who responded to the optional question on age, the older the age group in TRP, the more likely the commuter will use vanpooling and compressed work week (CWW) as their alternative mode to get to their worksite. The younger age groups are more apt to use biking and walking when traveling to work. Those younger than 25 years old are more likely to use a bike, carpool, walk or bus than any other group and are the least likely to use telecommuting as an alternative mode by a greater disparity. The 35-44 year old group telecommutes more often than other groups. Those 55 years and older, typically use CWW or vanpools more than any other group.

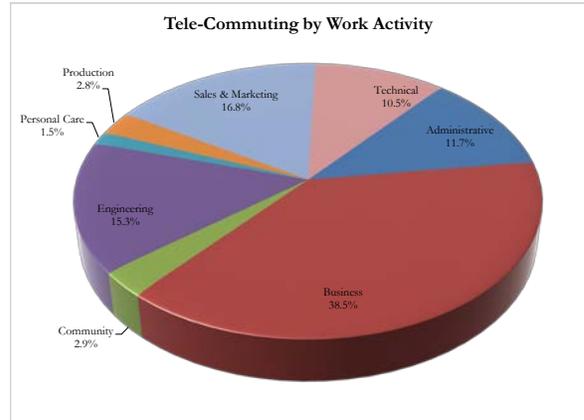
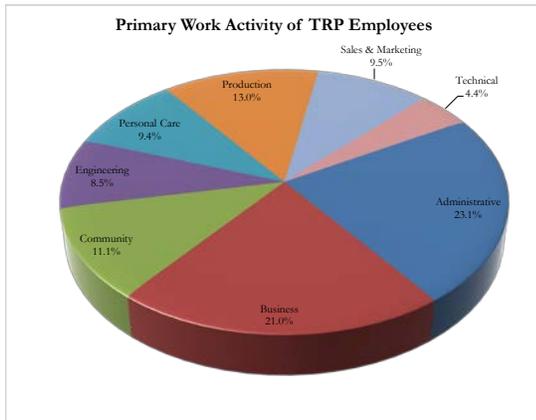
WORK ACTIVITY FOR TRP PARTICIPANTS

In recent years the TRP has monitored the work activity of employees by adding the following question. “What best describes your primary work activity on a regular basis?” The categories for work activity were chosen based upon demographic modeling tracked by the Maricopa Association of Governments (MAG). With a more detailed listing of each group described below. For brevity’s sake, all work activities are abbreviated on the pie charts.

Administrative	Administrative/Clerical/Retail
Business	Business/Financial/Professional
Community	Community Support/Teaching
Engineering	Engineering/Research/Design
Personal Care	Personal Care & Services
Production	Production/Construction/Transport
Sales & Marketing	Sales & Marketing
Technical	Technical Support

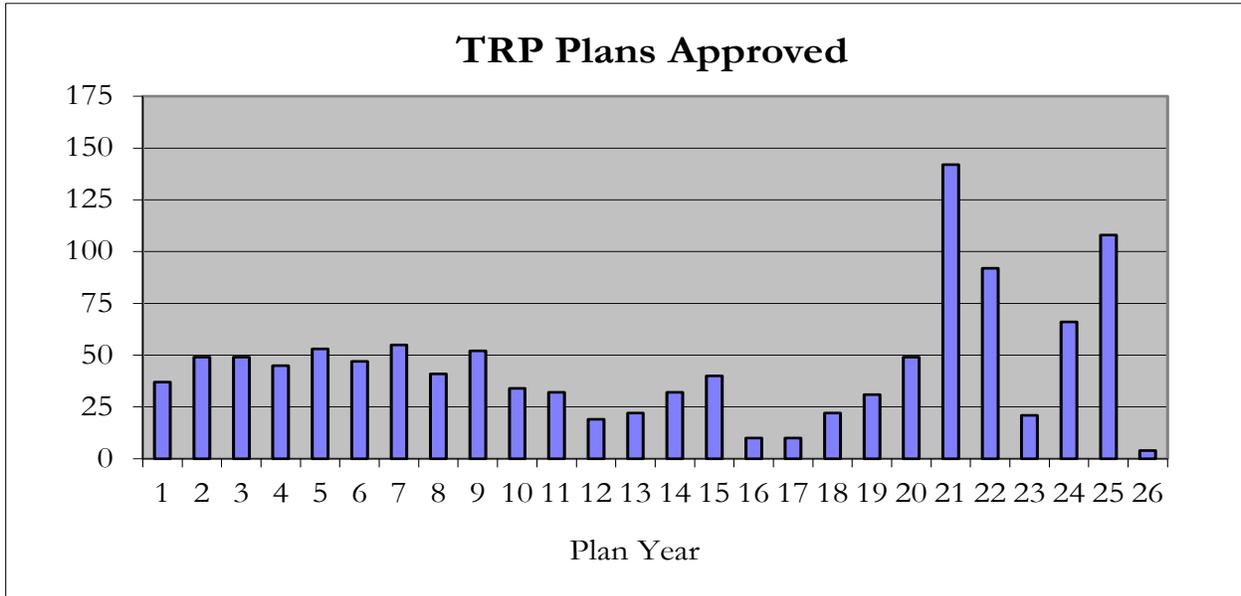
For an overall analysis of work activities by TRP employees, the chart on the left shows how commuters identify themselves in their jobs. Generally speaking, one of the largest number of respondents fall into the category of ‘Administrative’; over 23% of employees claim they perform some type of administrative function daily.

In order to give a contrast of what type of work activity an employee does and what type of alternative mode they may use, a side by side comparison is shown below. To limit charts and graphs, only one example of an alternative mode is shown, tele-commuting. Comparatively, 11.7% of all tele-commuters work an administrative job. This comparison makes perfect sense. Those in ‘Production’ and ‘Personal Care’ are less likely to have the opportunity to tele-commute, because their type of job does not allow for them to work from home.



TRIP REDUCTION PLANS

During Fiscal Year 2013-2015, the County received 1,072 plans and presented 1,162 plans to the Task Force for review and approval. Of those approved by the Task Force 47 of them were first year plans.



Monitoring

The TRP staff will follow-up with employer to confirm their approved plan has been implemented/documented. A substantial amount of monitoring occurs through written and verbal channels, with the balance accomplished by staff visiting the employer sites. During this year, 612 monitoring calls were made and 711 site visits were conducted. When an employer fails to implement or document one or more approved measure(s), staff will issue a 'Request for Documentation' (RFD) to resolve the matter. During this year, staff issued 408 RFDs.

Enforcement

Enforcement is initiated when an employer fails to respond to staff's outreach regarding a pending delinquency. Enforcement activities occurring during FY15 are as follows:

- Forty-seven (47) Notices of Violation (NOV) were issued for failure to submit a plan, supply documentation or appoint a Transportation Coordinator.
- No formal legal action was taken and no civil penalties were levied in FY15.

CONCLUSION

In FY15, the TRP is currently in its twenty-sixth year of operations. Analysis of the TRP data show that the employees/students participating in the TRP continue to be strong supporters of using alternative modes of transportation in order to get to work or school. The TRP has shown an increase in the number of trips saved and pounds of pollution saved this year.

A number of changes in methodology used to collect and calculate commuter miles, trips, modes and pollution saved impact this reporting period. The reporting outcome was affected by one or more of the following reasons: 1) credits for Alternative Fuel Vehicle (AFV) use were calculated for trips or miles driven. Full or partial credit was given to electric, hybrid and natural gas vehicles; 2) other external factors impacted commuter driving patterns, such as: the calculation factors used to determine how many miles are driven to produce one-pound of pollution. The regional miles/pound factor increased from 70.5 to 73.5; and 3) the number of completed surveys returned by employers cause fluctuations in the aggregated results year over year.

Alternative mode users in the TRP continue to support the program by showing a substantial amount of miles driven weekly in order to reduce Valley pollution. The total amount saved this year was 25.9 million miles weekly for alternative mode commuters. Carpool and vanpool miles accounted for 60.6% of all miles saved. The miles saved by TRP commuters resulted in 11,392 tons of pollution not being produced. Even though commuting distances and time traveled to the worksite have increased this year, TRP participants continue to make environmentally sound decisions by choosing to use an alternative mode in order to lessen their SOV trips.

The employees who participate in the program continue their support of the TRP as shown by a high survey response rate, 69.79%. Employee's contribution to the amount of pollution saved annually accounted for 91.2% in the TRP. The e-survey continued to be a successful format for TRP employers to survey their employees. The number of companies using the e-survey this year increased from 386 to 408, 56.5% of all employees used the e-survey this year.

The miles saved by alternative mode use for students resulted in 994 tons of pollution saved this fiscal year. In addition, this was the fourth year where students used the e-survey. The number of students filling out the web-based survey increased to 64.3% of all students. Since new high school driving-age students enter the TRP annually, RPTA's efforts to educate students on the program's environmental benefits represent an ongoing training opportunity. Educating students on the use of alternative modes to commute will only increase the probability that once the students are out in the workplace they will continue with their learned environmental commuting practices.

**COMPANIES PARTICIPATING IN THE TRIP REDUCTION PROGRAM
E-SURVEY PROCESS FY 2015**

Intranet	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Care1st Health Plan	235	235	1	\$124
City of Mesa	2,723	2,723	21	\$1,110
City of Phoenix	12,143	12,143	42	\$4,842
Fuji Films Electronic Materials	215	215	1	\$116
Maricopa Association of Governments	103	103	1	\$72
Mesa Air Group, Inc.	222	222	1	\$119
Perkins Coie	132	132	1	\$83
State of Arizona	20,530	20,575	50	\$8,165
Town of Gilbert	897	897	4	\$386
TRW Vehicle Safety Systems Inc.	391	391	1	\$186
U-Haul International	3,331	3,331	2	\$1,351
Verizon Wireless	1,484	1,484	3	\$619
TOTALS	42,406	42,451	128	\$17,171

Internet - Employees	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
AAA	229	229	1	\$122
AAA-AZ Operations Center dba CSAA	802	802	2	\$349
Abeinsa, EPC	100	100	1	\$70
Abrazo Advantage Health Plan	240	240	1	\$126
Abrazo Arrowhead Campus	478	720	1	\$220
Abrazo Health Care Regional Office	264	264	1	\$135
ADP, Inc.	265	265	1	\$136
Adreima	70	70	1	\$59
AECOM	55	55	1	\$53
AECOM - URS	113	113	1	\$76
Aero Design & Manufacturing	52	113	1	\$51
Aetna Medicaid Business Unit	1,856	1,856	6	\$766
AGIA Insurance Services	129	129	1	\$82
Airline Training Center AZ, Inc.	99	99	1	\$70
Alaska Airlines, Inc.	176	191	1	\$101
Albertsons Holdings, LLC	1,200	1,200	1	\$506
Alliance Beverage Distributing Company	79	200	1	\$62
Alliance Defending Freedom	148	148	1	\$89
Alliance Home Loans	93	93	1	\$68
AlSCO, Inc.	40	79	1	\$47
American Express	5,480	5,480	6	\$2,202
American Express Global Business Travel	140	140	1	\$86
American Family Insurance	296	296	1	\$148
American International Group	69	69	1	\$58
American Reliable Insurance Co.	199	199	1	\$110
American Traffic Solutions	498	498	2	\$228
APL, Ltd.	200	200	1	\$110
Apollo Group, Inc.	5,900	5,900	4	\$2,368
Apria Healthcare Group, Inc.	363	363	2	\$175

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
APSM Systems	50	163	1	\$51
Arizona Biltmore Resort	113	700	1	\$76
Arizona Cardinals	175	175	2	\$100
Arizona Central Credit Union	100	100	1	\$70
Arizona College	60	60	2	\$55
Arizona Coyotes Hockey Club	103	103	1	\$72
Arizona Diamondbacks	215	215	1	\$116
Arizona Grand Resort	100	673	1	\$70
Arizona Nutritional Supplements	126	512	3	\$81
Arizona Science Center	132	132	1	\$83
Arizona State University	12,585	12,585	5	\$5,017
Arrowhead Honda	124	124	1	\$80
Artesyn Embedded Technologies	235	235	1	\$124
ASM America Inc.	285	285	1	\$144
ASU Foundation	145	145	1	\$88
ATK - Integrated Weapons Systems Division	129	129	1	\$82
Autozone	350	350	1	\$169
Avesis	255	255	2	\$132
Avnet, Inc.	1,888	2,364	5	\$779
Axway, Inc.	229	229	1	\$122
Aztec Engineering	106	106	1	\$73
BAE Systems Support Solutions	170	295	1	\$98
Ballard Spahr LLP	61	61	1	\$55
Bank of America	6,562	6,562	6	\$2,631
Banner Health	15,009	15,009	15	\$5,977
Bard Peripheral Vascular	367	402	1	\$176
Barron Lighting Group	48	64	1	\$50
BBVA Compass	275	275	2	\$140
Beatitudes Campus	429	439	1	\$201

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Bechtel Corporation	367	367	1	\$176
Benchmark Electronics PT Division	112	112	1	\$75
Benson Systems	30	30	1	\$43
Best Western International, Inc.	878	878	2	\$379
Blackboard, Inc.	96	96	1	\$69
BLM National Training Center	68	68	1	\$58
Blood Systems	489	700	3	\$225
Blue Cross & Blue Shield of Arizona, Inc.	1,336	1,336	1	\$560
Boeing Co.	3,717	3,717	1	\$1,503
Brookline College	97	97	2	\$69
Bull Information Systems, Inc.	98	98	1	\$70
Cable One Inc. - Park Central	220	220	1	\$118
Cable One, Inc.- Corp Office	440	440	1	\$205
Camelback Inn dba J W Marriott	225	631	1	\$120
Caris Life Sciences	180	180	1	\$102
Cartwright School District	1,557	1,557	21	\$648
CBIZ MHM, LLC	82	82	1	\$63
CDW Direct, LLC	230	230	1	\$122
Celerion	220	220	1	\$118
Cemex	84	160	2	\$64
CH2M Hill, Inc.	93	93	1	\$68
Chandler Unified School Dist.	3,191	3,191	38	\$1,295
Charles Schwab & Co., Inc.	3,423	3,423	3	\$1,387
Choice Hotels International, Inc.	372	372	1	\$178
Chubb & Son/ Div of Federal Insurance	420	420	1	\$197
Cigna Healthcare of Arizona Inc.	1,705	1,705	8	\$706
Circle K Stores Inc.	355	355	1	\$171
City of Avondale	515	515	2	\$235
City of Chandler	1,545	1,545	5	\$643

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
City of El Mirage	57	57	1	\$53
City of Glendale	1,500	1,677	3	\$625
City of Goodyear	268	268	3	\$137
City of Scottsdale	2,246	2,246	8	\$921
City of Surprise	170	170	1	\$98
City of Tempe	1,302	1,302	5	\$547
Clear Call Solutions	289	289	1	\$145
CNA National Warranty Corporation	234	234	1	\$124
Colony American Homes	138	138	1	\$85
Comfort Systems USA - Southwest	80	80	1	\$62
Comtech EF Data	345	345	1	\$167
Consumer Cellular	335	335	1	\$164
Country Club at DC Ranch	25	110	1	\$41
Cox Communications, Inc.	1,438	1,438	1	\$601
Crafco, Inc.	67	67	1	\$57
Credit Union West	103	103	1	\$72
Cummins Rocky Mountain LLC	65	88	1	\$57
CVS/Caremark	3,135	3,135	5	\$1,273
CWT Phoenix Central TSC	120	120	1	\$78
CyraCom	624	624	1	\$278
Datasphere Technologies Inc.	104	104	1	\$72
DBL Distributing, dba Ingram Micro	78	78	1	\$62
DCMA - Phoenix	155	155	1	\$92
Deer Valley Unified School District	3,966	3,966	40	\$1,602
Deloitte & Touche LLP	71	71	1	\$59
Delta Career Education Corporation	300	300	1	\$150
Delta Dental of Arizona	75	75	1	\$61
Dept of Vet Affairs-Regional Office	488	488	1	\$224
Desert Schools Federal Credit Union	1,288	1,301	5	\$541

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Dickinson Wright	110	110	1	\$74
Dick's Sporting Goods	32	150	1	\$43
Diffusion Group LLC, dba Meltmedia	59	59	1	\$54
Dignity - Dell Services	75	75	1	\$61
Dignity Health	931	931	2	\$400
Dignity Health Mercy Gilbert Hospital	826	946	1	\$358
Dignity Health, dba Chandler Regional Medical	852	1,556	1	\$368
Dircks Moving Service	35	74	1	\$45
Direct Energy, dba First Call	425	425	1	\$199
Discount Tire Company	494	494	1	\$227
Discover Financial Services	2,818	2,818	1	\$1,147
District Medical Group	640	640	3	\$284
DLR Group	57	57	1	\$53
DMB Associates, Inc.	104	104	1	\$72
DriveTime	1,304	1,304	2	\$547
Dysart School	2,362	2,362	26	\$967
Early Warning Services	330	330	1	\$162
EDMC, OHE, dba Education Development	1,066	1,066	3	\$453
EDUPRIZE Schools, LLC	178	178	1	\$101
Edward Jones	829	829	1	\$359
Element Payment Services	96	96	1	\$69
Empereon Marketing	597	597	2	\$267
Empire Southwest LLC	789	814	2	\$343
Enghouse Interactive	64	64	1	\$56
Equity Fund Advisors.Inc.	308	308	1	\$153
Farm Bureau Mutual Insurance Co./FBL Fincl	54	54	1	\$52
Farmers / 21st Century Ins.	371	371	1	\$178
Fennemore Craig, P. C.	288	288	1	\$145
Fidelity National Information Services	200	200	2	\$110

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
First American Home Buyers Protection	237	237	1	\$125
First Solar	332	332	1	\$162
Five Star Quality Care - Pueblo Norte	29	156	1	\$42
Fluke Corporation	64	64	1	\$56
Food for the Hungry	72	72	1	\$59
Food Services of America	124	124	1	\$80
Four Seasons Resort Scottsdale	100	300	1	\$70
Freeport-McMoRan	701	701	1	\$309
Freescale Semiconductor Inc.	2,008	2,008	2	\$826
Gallagher & Kennedy P.A.	180	180	1	\$102
Garmin	147	147	1	\$89
GE Capital Solutions	200	200	1	\$110
General Dynamics AIS	449	449	1	\$209
General Dynamics Mission Systems	1,732	1,732	1	\$717
Glynlyon	170	170	1	\$98
GM - Arizona IT Innovation Center	515	515	1	\$235
GoDaddy.com	3,091	3,091	3	\$1,255
Goodmans, Inc.	57	57	1	\$53
Government Liquidation, LLC, dba Liquidity Svc	98	98	1	\$70
Govig & Associates	59	59	1	\$54
Grand Canyon University	2,864	2,924	4	\$1,166
Graybar Electric Company, Inc.	98	98	1	\$70
Great American Title Agency	63	63	1	\$56
Gruber Industries	42	85	1	\$47
HDR Engineering Inc	108	108	1	\$74
Health Net	185	185	1	\$104
Health Services Advisory Group	250	250	1	\$130
Healthways	325	339	1	\$160
Heat Software	85	85	1	\$64

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Higley Unified School District	892	1,109	13	\$384
Honeywell	8,213	8,213	5	\$3,285
HonorHealth	7,140	7,140	8	\$2,860
IASIS Healthcare Holding, Inc.	350	350	1	\$169
IBM Corporation	509	509	1	\$232
iCrossing, Inc.	70	70	1	\$59
IHC Administrative Services	155	155	1	\$92
iHeart Media Phoenix	148	148	1	\$89
Insight Direct Inc.	2,338	2,731	4	\$957
Institute of Supply Management	56	56	1	\$53
Integra Telecom of Arizona	96	96	1	\$69
Intel Corporation	11,268	11,268	2	\$4,495
International Cruise & Excursions, Inc.	1,346	1,346	1	\$564
International Paper	44	120	1	\$48
IPro Tech, LLC	139	139	1	\$86
J.W. Marriott Desert Ridge Resort & Spa	100	600	1	\$70
JDA Software Inc	353	353	1	\$171
Jennings, Strouss & Salmon, P.L.C.	96	96	1	\$69
Jones, Skelton & Hochuli	199	199	1	\$110
JPMorgan Chase	4,550	4,550	3	\$1,834
Kimley, Horn & Associates	160	160	1	\$94
Knight Transportation, Inc.	290	290	2	\$146
Kutak Rock LLP	80	80	1	\$62
Kyrene School District	2,121	2,121	26	\$871
Laureate Education, Inc.	179	179	1	\$102
Laveen Elementary School District	700	700	8	\$308
Le Cordon Bleu College	60	60	1	\$55
Legacy Insurance Services	97	97	1	\$69
Lewis Roca Rothgerber, LLP	215	215	1	\$116

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
LifeLock	448	448	1	\$208
Limelight Networks, Inc.	233	233	1	\$123
Litchfield Elementary School Dist.	1,141	1,141	14	\$483
Loan Depot	185	185	1	\$104
Londen Insurance Group, Inc.	272	272	1	\$139
Macerich	187	187	1	\$105
Macy's Logistics & Operations	99	368	1	\$70
Magellan Health Services	272	272	1	\$139
MAPFRE Insurance	240	240	1	\$126
Maricopa County Comm. College Dist.	4,298	4,298	16	\$1,734
Maricopa County Government	8,519	11,678	21	\$3,406
Maricopa Integrated Health Systems	1,850	2,133	1	\$764
Marshalls Distribution Center	129	594	1	\$82
MassMutual	340	340	1	\$166
Matrix Medical Network	314	314	1	\$155
Matson Navigation Company, Inc.	132	132	1	\$83
Mayo Clinic	5,605	5,605	3	\$2,252
McMurry, Inc.	85	85	1	\$64
MD Helicopters	264	264	1	\$135
MDS Communications Corporation	68	302	1	\$58
MedPlast Inc.	54	117	1	\$52
Medtronic Microelectronics Center	687	687	1	\$303
Mercer Human Resource Consulting	142	142	1	\$87
MGA	94	94	1	\$68
Michael Baker Jr., Inc.	82	82	1	\$63
Microchip Technology, Inc.	1,709	1,709	2	\$708
Microsoft Southwest	65	65	1	\$57
Midwestern University	620	620	2	\$276
Miraca Life Science	128	128	1	\$82

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Mitel	145	145	1	\$88
Mobile Mini	165	165	1	\$96
Morgan Stanley	129	129	1	\$82
Mutual Insurance Company of AZ	97	97	1	\$69
Mutual of Omaha Bank	275	275	1	\$140
National Bank of Arizona	220	220	1	\$118
Natural Partners	77	77	1	\$61
Naumann-Hobbs Material Handling, Inc.	43	108	1	\$48
Nautilus Insurance Company	248	248	1	\$129
New Times	127	127	1	\$81
New Vision, dba Vemma	224	224	1	\$120
NextCare	189	189	1	\$106
NMG Aerospace	142	142	1	\$87
Norwegian Cruise Line	350	350	1	\$169
Notre Dame Preparatory	100	100	1	\$70
NPL Construction	149	240	3	\$90
Oakwood Worldwide Sales & Service Center	265	265	1	\$136
Oasis Hospital	136	186	1	\$85
On Q Financial	104	104	1	\$72
OnePoint Patient Care	60	60	1	\$55
OPTUM	461	461	1	\$213
Orbital ATK	255	255	1	\$132
Orbital Sciences Corporation	1,213	1,213	2	\$511
O'Reilly Auto Parts	110	110	1	\$74
Origami Owl	205	365	2	\$112
Paradise Valley Unified School Dist.	3,452	3,452	45	\$1,398
Parsons Brinckerhoff	50	74	1	\$51
PayPal, Inc.	2,170	2,170	2	\$891
Pearson	526	526	1	\$239

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Pegasus Research Group LLC, dba Televerde	145	145	1	\$88
Pegasus Solutions	65	65	1	\$57
Peoria Nissan	63	165	1	\$56
Peoria Unified School Dist	3,717	4,023	41	\$1,503
Pepsi Bottling Group	115	603	1	\$76
Performance Software Corporation	101	101	1	\$71
Permanent General Companies	157	157	1	\$93
PF Chang's China Bistro, Inc.	224	224	1	\$120
Phoenix Children's Hospital	1,131	2,262	1	\$479
Phoenix Coca-Cola Bottling Company	235	500	1	\$124
Phoenix Country Day School	141	141	1	\$87
Phoenix Indian Health Service	1,256	1,256	2	\$528
Phoenix VA Healthcare Systems	1,562	3,124	1	\$650
Piedmont Airlines	359	359	1	\$173
PING Inc.	214	716	1	\$116
Pinnacle West Capital Corporation	5,110	5,110	9	\$2,055
Pointe Hilton Resorts	147	325	1	\$89
Polsinelli , P.C.	98	98	1	\$70
Pricewaterhouse Coopers	66	66	1	\$57
Prisma Graphic Corp.	106	177	1	\$73
Progressive Insurance Corp.	139	432	1	\$86
Prudential Group Insurance	85	85	1	\$64
PSCU	369	369	1	\$177
Pulte Home Corporation	210	210	2	\$114
Quarles & Brady	180	180	1	\$102
Quicken Loans	590	590	1	\$265
RED Development	60	60	1	\$55
Redflex Traffic Systems	199	199	1	\$110
Republic Services, Inc.	600	600	1	\$269

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Roman Catholic Church Diocese of Phoenix	110	110	1	\$74
RR Donnelley	363	363	1	\$175
Ryley Carlock & Applewhite	88	88	1	\$66
SagePoint Financial	148	148	1	\$89
Schenker, Inc.	100	100	1	\$70
Scottsdale Christian Academy	83	83	1	\$64
Scottsdale Cultural Council	77	77	1	\$61
Scottsdale Insurance Company	1,067	1,067	1	\$454
Scottsdale Resort & Conference Center	50	255	1	\$51
Sears Holding Mgmt Corp	505	505	1	\$231
Semiconductor Components Industries, dba On Semi	790	790	1	\$344
Senergy Petroleum, LLC	49	94	2	\$50
Shamrock Foods Company	536	1,317	3	\$243
Shasta Industries, Inc.	104	104	1	\$72
Sheraton Downtown Phoenix	100	325	1	\$70
SHPS Inc., dba Carewise Health Inc.	63	63	1	\$56
Sigma Alimentos., dba Bar-S-Foods	103	103	1	\$72
Silicon Valley Bank	239	239	1	\$125
Sitewire	61	61	1	\$55
SmartHealth, Inc.	325	325	1	\$160
Smith Food & Drug Stores - Fry's Food Store	13,140	13,140	94	\$5,237
SmithGroup JJR	115	115	1	\$76
Snell & Wilmer, LLP	421	421	1	\$198
Sodexo America, LLC	15	252	1	\$37
Sports and Entertainment Services., LLC	25	270	1	\$41
Sprouts Farmers Market	295	295	1	\$148
SRP	4,347	4,347	14	\$1,753
St. Joseph's Hospital	1,686	4,150	1	\$699
St. Mary's Catholic High School	57	64	1	\$53

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Standard Aero	53	53	1	\$52
Staples Inc.	70	201	1	\$59
Starwood Hotels & Resorts	250	250	1	\$130
State Bar of Arizona	97	97	1	\$69
State Farm Insurance	4,650	4,650	6	\$1,873
Stryker Sustainability Solutions	253	253	2	\$131
Sun Valley Lodge, Inc.	60	73	1	\$55
SunWest Federal Credit Union	65	65	1	\$57
SXC Health Solutions, Inc., dba Catamaran	250	250	1	\$130
Symphony Health Solutions	170	170	1	\$98
Take Charge America	105	105	1	\$72
Tempe School District	1,391	1,511	19	\$582
Tenet Health Care - Phoenix Baptist Hospital	34	620	1	\$44
Terros	180	180	2	\$102
Tessengerlo Kerley, Inc.	96	96	1	\$69
The Arizona Republic	1,109	1,109	2	\$470
The Art Institute of Phoenix	159	159	1	\$94
The Boulders	135	473	1	\$84
The Cavanagh Law Firm	85	85	1	\$64
The Endurance International Group	384	384	1	\$183
The Gap - Western Fulfillment Center	295	295	1	\$148
The Hartford	203	203	1	\$111
The Musical Instrument Museum	88	88	1	\$66
The Tech Group	705	705	5	\$310
The Westin Kierland Resort Spa	200	422	1	\$110
Tiedemann Globe	87	87	1	\$65
Tiffany & Bosco, P.A.	143	143	2	\$87
TLK Group	239	239	1	\$125
Tolleson Union High School Dist.	762	851	7	\$333

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Total Transit	380	380	1	\$181
Toyota Financial Service	497	497	1	\$228
Translational Genomics Research Institute	187	187	1	\$105
Travelers Insurance	120	120	1	\$78
Triumph Engines Tempe	93	93	1	\$68
TriVita	150	150	1	\$90
TSA (Homeland Security)	1,130	1,130	3	\$479
TSYS Acquiring Solutions	495	495	1	\$227
UA College of Medicine - Phoenix	199	199	1	\$110
United Dairymen of Arizona	50	250	1	\$51
UnitedHealth Group	3,718	3,718	9	\$1,504
University of Advancing Technology	81	81	1	\$63
Univision	61	61	1	\$55
US Air Force - Luke AFB	3,547	3,547	1	\$1,436
US Dept of Interior- Bureau of Indian Affairs	126	126	1	\$81
US Dept of Interior-Bureau of Reclamation	73	73	1	\$60
US Dept of Treasury-Internal Revenue Service	75	482	3	\$61
US Foods Tempe	535	535	1	\$243
USAA Phoenix Office	3,000	3,000	1	\$1,219
USDA Forest Service, Tonto National Forest	76	76	1	\$61
UTC Aerospace Systems	467	617	1	\$216
UTC Aerospace Systems (Hamilton Sundstrand)	576	576	1	\$259
Valley Metro RPTA	160	160	2	\$94
Valley of the Sun United Way	120	120	1	\$78
Vanguard	2,555	2,555	2	\$1,043
Virgo Publishing, LLC	99	99	1	\$70
Voya Investment Management	210	210	1	\$114
VZB Communications Services	81	81	1	\$63
Washington Elementary School District	1,886	1,886	21	\$778

Internet (con't)	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Wells Fargo and Company	9,535	9,535	20	\$3,809
West Business Services	324	324	1	\$159
West Valley Hospital	681	681	1	\$301
Western Refining	350	350	1	\$169
Western Regional Medical Center	681	681	1	\$301
Western Window Systems	50	230	1	\$51
Westin Phoenix Downtown	35	124	1	\$45
Willis of Arizona, Inc.	115	115	1	\$76
Wist Office Products	29	55	1	\$42
WorldatWork	108	108	1	\$74
Xerox Business Services, FKA ACS	97	97	1	\$69
Yelp Inc.	801	801	1	\$348
Yodle, Inc.	174	174	1	\$100
Young's Market Company of Arizona	172	273	1	\$99
	302,585	325,633	1,030	\$131,927

Internet - Students	Number of Employees using E-survey	Total Number of Employees	Sites E-surveyed	Savings Cost to TRP
Arizona College Total	311	311	1	\$154
Arizona State University Total	51,713	51,713	1	\$20,519
Deer Valley Unified School District	5,439	5,439	5	\$2,186
Dysart School	7,438	7,438	4	\$2,978
Grand Canyon University	900	900	1	\$387
Maricopa County Comm. College Dist.	39,863	39,863	14	\$15,825
Midwestern University	1,500	1,500	1	\$625
Paradise Valley Unified School Dist.	4,941	4,941	5	\$1,988
Phoenix Country Day School	115	115	1	\$76
The Art Institute of Phoenix	999	999	1	\$427
Tolleson Union High School Dist.	5,149	5,149	5	\$2,071
UA College of Medicine - Phoenix	200	200	1	\$110
University of Advancing Technology	360	360	1	\$173
	118,928	118,928	41	\$47,520

Intranet	42,406	42,451	128	\$17,171
Internet - Employees	302,585	325,633	1,030	\$131,927
Internet - Students	118,928	118,928	41	\$47,520
E-Survey Total	463,919	487,012	1,199	\$196,618

SURVEY FORM METHODOLOGY

Maricopa County Regional Trip Reduction Program
Fiscal Year 2014 - 2015

Introduction:

The Maricopa County Regional Trip Reduction Program (TRP) has completed its twenty-sixth program year. During FY15, the TRP modified its methodology to accommodate its latest version of the survey questionnaire. Each program year, new methodologies, procedures and definitions are implemented to improve the overall quality of the TRP.

Response Rate:

Employers and schools affected by the TRP conduct a trip reduction survey annually and are required to achieve a minimum response rate of 60% per site. The response rate is calculated based on the number of questionnaires returned to the TRP divided by the number of surveys requested. An employee site not achieving the minimum response rate is required to re-survey. If that site does not achieve the minimum response rate on the re-survey, the non-respondents are counted as single occupant commuters. Student sites do not have to re-survey if they do not achieve the minimum response rate, nor do they incur a statistical penalty for non-respondents.

Program Year:

The TRP's method for measuring employers' participation is based on the employer's site program year. This methodology permits the aggregation of employment sites based on program year.

For purposes of maintaining consistency and tracking a company's historical data from one year to the next, data gathered for a company is based upon the company's anniversary date. The anniversary date is less likely to fluctuate for a company than the summary analysis sent date. This allows TRP the capability to track the same companies and their results for any given time period with greater accuracy.

Valid Surveys:

Three questions from the TRP survey are necessary to constitute a valid questionnaire. A valid response to question #1 is used to verify that an employee reports to the worksite three or more days per week; question #3 validates the mode used by the commuter and calculates the SOV rate; and question #6 is needed to calculate the SOV miles traveled rate. Currently, the maximum one-way distances that exclude questionnaires from statistical analysis are:

Mode of Transportation

Maximum One-way Distance (Miles)

	Employees Site	Student Sites
Drive alone (SOV)	150	75
Carpool	150	n/a
Vanpool	150	n/a
Alternative Fuel Vehicle (AFV)	150	75
Bus (Public)	75	25
Bus (School)	n/a	25
Light Rail	35	25
Bike	50	10
Walk	10	6

Establishing SOV Targets:

SOV trip and mile targets are established to give employers their SOV reduction goals for the following year and in subsequent years. Effective July 1, 1994, employer’s annual SOV reduction goals increased from 5% to 10% for the first five target years. SOV targets for the sixth year and subsequent program years are 5% annually.

Site Analysis:

Two indexes, the SOV trip and SOVMT rates, are used to measure the amount of SOV reductions per employment/student site. SOV trips are calculated from question #1 and #3 on the TRP questionnaire. The formula for this calculation is:

SOV Trip Rates:

SOV Trips = Drive alone trips + Penalty trips₁

Total Trips = SOV trips + AFV trips +Carpool trips + Bus trips + Bike trips + Light Rail trips + Walk trips + Vanpool trips + Telecommuting trips + CWW trips

SOV Trip Rate = $\frac{\text{SOV trips}}{\text{Total trips}}$

Assumptions used in measuring the SOV trip rate are: 1) calculating SOV trip rate allows for changes (increase or decrease) in the work force population, 2) motorcycles are considered SOV trips since their emission standards are higher than automobiles and 3) factoring carpool and vanpool trips by the average vehicle occupancy (AVO) would adversely impact small companies.

1 Penalty trips are non-respondents on a re-survey that are counted as single occupant commutes.

The other index, the SOVMT rate is obtained by multiplying the number of one-way miles traveled to the worksite (question #6) by the modes of transportation (question #1 and #3). The total number of carpool or vanpool miles traveled weekly per site is factored by the AVO. The AVO is calculated from question #5 on the TRP questionnaire. The formula for computing the SOVMT rate is:

SOVMT Rate:

$$\text{SOVMT} = \text{Drive alone miles} + \text{Penalty miles}_1$$

$$\text{Total VMT} = \text{SOVMT} + \text{AFV miles} + (\text{Carpool miles}/\text{AVO}) + \text{Bus miles} + \text{Bike miles} + \text{Light Rail miles} + \text{Walk miles} + (\text{Vanpool miles}/\text{AVO}) + \text{Telecommuting miles} + \text{CWW miles}$$

$$\text{SOVMT Rate} = \frac{\text{SOVMT}}{\text{Total VMT}}$$

The assumptions used in calculating the SOVMT rate are: 1) SOVMT rate allows for changes in the work force population, 2) the SOVMT rate controls for changes in the location of employment sites and/or employee residence, 3) the SOVMT rate accounts for employees/students changing from an SOV mode of transportation to one of the main alternative modes of transportation (carpool, vanpool or bus), as well as employees/students changing to bike or walk modes of transportation and 4) factoring by AVO more accurately measures the amount of miles traveled in carpools and vanpools to the worksite.

Accounting for Telecommuting and Compressed Work Week Schedules:

Telecommuting trips measure the number of days per week a respondent works at home instead of traveling to the work site. Compressed work week schedules (CWW) measure the number of respondents working a 4-day week (10-hour work days), 3-day week (12 hour work days), alternating 3-day/4-day workweeks (36 hours one week, 48 hours the next week) and 80 hours in nine (9) days (9/80).

The assumptions used in accounting for CWW and telecommuting work schedules are 1) telecommuters and CWW employees are SOV commuters; and 2) CWW work schedules and telecommute trips are considered trips not taken; and 3) a commuter cannot live greater than 150 miles from their work site to be considered one of these types of alternative mode users.

1 Penalty miles are non-respondents that are counted as single occupant commutes.

Accounting for Alternative Fuel Vehicle trips and miles:

Alternative Fuel Vehicles (AFV) are given credit for trips and miles when a respondent selects a fuel type from question #4 on the survey. Credit criteria were initially calibrated with the assistance of Maricopa Association of Governments (MAG) and the Environmental Protection Agency (EPA). Credit for AFV types will be adjusted as criteria for the fuel type will be recalibrated each year.

The assumptions used in accounting for AFV trips and miles are: 1) AFV users are SOV commuters and 2) if another alternative mode was marked on the survey, credit is given to that mode.

Below is a current list of AFVs for this year that TRP gives credit for trips and miles to employers.

<u>Alternative Mode</u>	<u>Calculated Credit</u>
	<u>Jul 2014 – Jun 2015</u>
Electric	1.0
Hybrid (gas/electric)	0.453
Hydrogen	1.0
Natural Gas	0.453

The on-road emissions model used to calculate miles per pound for Light Duty Gasoline Vehicles (LDGV) was updated this reporting period by the EPA. It officially replaced the previous emissions model, MOBILE6.2, with the Motor Vehicle Emission Simulator (MOVES2010b) model, beginning January 2014. The new model continues to calculate how many miles driven it takes to generate one-pound of pollution for a standard on-road vehicle.

For this reporting period the TRP conversion rate for Natural Gas vehicles is derived from the MOBILE6.2 model. The EPA is still making adjustments to their model to calculate emission rates for Light Duty CNG Vehicles (LD NGV) and plan to release the final version using the MOVES2014 model. The LD NGV calculation is used to measure the partial credit amount given for commuters who select those AFV's that qualify using those modes.

Comparing Change in SOV Rates:

The SOV trip and SOVMT rates obtained in the current year are compared with the SOV rates obtained in the previous year for each employment/student site. Each employer and site is given an employer code and a site number that make it possible to compare sites from year to year. The SOV trip and SOVMT rates are compared annually by using the following formula:

$$\frac{\text{SOV Rate Current Year} - \text{SOV Rate Previous Year}}{\text{SOV Rate Previous Year}}$$

Aggregate Analysis:

Aggregate models used to measure the overall impact of the TRP on reducing SOV trips or SOV miles are very similar to the models used to measure employment sites. Aggregate analyses are performed for quarterly reports, year-end reports and special studies. The guidelines for including employee and student sites into aggregate analyses are: 1) an employee/student site must be available for all years under investigation and 2) affected sites are analyzed separately for employee and student populations.

Aggregate Models for SOV Rates:

SOV Trip Rate:

SOV Trips = Drive alone trips + Penalty trips

Total Trips = SOV trips + AFV trips + Carpool trips + Bus trips + Bike trips + Light Rail trips + Walk trips + Vanpool trips + Telecommute trips + CWW trips

SOV Trip Rate = $\frac{\text{SOV Trips}}{\text{Total Trips}}$

SOVMT Rate:

SOVMT = Drive alone miles + Penalty miles

Total VMT = SOVMT + AFV miles + (Carpool miles/AVO) + Bus miles + Bike miles + Light Rail miles + Walk miles + (Vanpool miles/AVO) + Telecommute miles + CWW miles

SOVMT Rate = $\frac{\text{SOVMT}}{\text{Total VMT}}$

Definitions:

Alternative Fueled Vehicle (AFV) - a motor vehicle that is a hybrid, electric, uses biodiesel, hydrogen or natural gas propane instead of conventional or diesel fuel.

Carpool - Rides shared in private automobiles by two or more people, on a continual basis, regardless of their relationship to each other or cost-sharing agreements. Vehicle can include, but not limited to, sedan-like vehicle, SUV or mini-van.

Commute Alternatives - Carpooling, vanpooling, making use of the public transit system, bicycling or walking as commute modes for traveling to and from work.

Compressed Work Week (CWW) - Management reschedules the normal five-day, forty-hour week to longer hours per day but fewer days per week.

High Occupancy Vehicle (HOV) - A motor vehicle occupied by two or more people.

Single-Occupant Vehicle (SOV) - A motor vehicle occupied by one person commuting to work/school. This definition also includes commuting to work on a motorcycle.

Telecommuting - The use of telecommunications technology to transport information rather than people to the work place. Generally speaking, telecommuting is simply working at the home instead of going to the work site.

Vanpool - The prearranged membership of a group whose members are picked up by a van at specific points and are taken to common or nearby employment sites, then returned to the pick-up point(s) after the end of the workday, usually for a monthly fare.

Vehicle Miles Traveled (VMT) - The total one-way distance traveled in miles by all motor vehicles of a specified group at an employment site.