

District 6 ITE Manuscript: Celebrating Bike-to-School 2012 in Phoenix, Arizona

Submitted by:

Michael J. Cynecki, PE, FITE, Lee Engineering, LLC, 3033 N 44th St, Suite 375, Phoenix, AZ 85018, 602-443-8476, mcynecki@lee-eng.com (Corresponding author)

Donald Cross, Phoenix Street Transportation Department, School Safety Coordinator, 200 W Washington St, 6th Fl, Phoenix, AZ 85003, 602-534-2020, donald.cross@phoenix.gov

Joseph Perez, Phoenix Street Transportation Department, Bicycle Coordinator, 200 W Washington St, 6th Fl, Phoenix, AZ 85003, 602-534-2020, joseph.perez@phoenix.gov

ABSTRACT

An active lifestyle is important for the health of the members of our community. An important way to encourage a healthier way of life is to promote walking and bicycling activities, and to assure these activities can be done safely. Phoenix is actively working to promote walking and bicycling and has been directing their effort towards creating life-long habits of active lifestyle choices with school-age children. In addition to encouraging more bicycling, increasing bike safety and increasing bike helmet use are also major goals. In 2010 there were 458 bicycle crashes with motor vehicles in Phoenix, resulting in 410 injuries to bicyclists and 8 fatalities. Furthermore, 22 percent of the bicyclists involved in these motor-vehicle crashes were age 17 years or younger. May 9, 2012 was designated as the first-ever National Bike to School Day by the National Center for Safe Routes to School in partnership with the League of American Bicyclists. Yet, 2012 marked the second year that Phoenix participated in bike-to-school activities. This paper will describe the 2012 bike-to-school activities in Phoenix which consisted of 23 pre-ride bicycle safety assemblies, twelve bike-to-school group rides, and five bicycle rodeos.

INTRODUCTION

The purpose of this paper is to encourage other communities to become involved in bike-to-school activities and provide ideas on how to make these activities interesting, educational, and fun for students, parents, and school officials.

Phoenix has more than 1.5 million residents, making it the largest city in Arizona and one of the largest cities in the nation. An active lifestyle is important for the health of Phoenicians. An effective way to encourage people to experience a healthier way of life is to promote more walking and bicycling, and to assure it can be done safely. Phoenix was largely built around motor-vehicle transportation, and has not often received accolades for having high proportions of walkers and bicyclists. While there are more than 4800 miles of streets in Phoenix, the amount of bikeways has grown to about 650

miles, including 383 miles of on-street bike lanes as well as 39 bridges and tunnels for bicyclists and pedestrians. The climate and terrain are nearly ideal for promoting bicycling and there have been some major strides towards making it easier and safer to walk and bike in recent years.

The easiest population to reach for encouraging an active lifestyle is school children. Children can be vulnerable when mixed in with motor-vehicle traffic and the education and encouragement they receive can help to develop lifelong safety and independence skills.

Increasing bicycle safety is a major goal. In 2010 there were 458 bicycle crashes with motor vehicles in Phoenix, resulting in 410 injuries to bicyclists and 8 fatalities (1). Furthermore, 22 percent of the bicyclists involved in these motor-vehicle crashes were age 17 years or younger. These statistics do not include the injuries from bike collisions with fixed objects or other bicyclists/pedestrians, or those who fell while riding their bikes. A detailed study of 2007 bicycle collisions in Phoenix found that helmet use or non-use was reported in only 42.6 percent of the bicycle crashes with motor vehicles. When helmet usage was reported, only 11 percent of bicyclists were wearing helmets and fewer than 4 percent of all child bicyclists involved in motor-vehicle collisions were reported as wearing a bike helmet (2).

2012 BICYCLE ACTIVITIES AT SCHOOLS

The National Center for Safe Routes to School, in partnership with the League of American Bicyclists, designated the first-ever National Bike to School Day on May 9, 2012 (3). Yet, 2012 marked the second year that Phoenix promoted and celebrated Bike-to-School activities. In 2011, Phoenix held 16 school assemblies to encourage bicycling and to teach bike safety, eight bike-to-school rides, and sponsored two bicycle rodeos at schools. Plans for 2012 were intended to build on the success of the prior year and encourage more schools, parents, and students to become involved.

The Phoenix bike events consisted of 23 school assemblies directed at bicycle safety and encouraging more bicycle riding, 12 organized bike-to-school rides, and five bicycle rodeos. The events were too numerous and extensive to organize for one day or even one week. Instead the 2012 events spanned the period from April 23 to May 11.

There are over 500 schools in Phoenix with about 435 schools serving grades K – 8 which are organized in 25 different school districts. Students in grades 4 to 8 are the primary audience for the bike-to-school events.

All elementary and middle school principals were contacted to explore their interest in hosting or participating in the bicycle events. In several cases, the principals of the participating schools were avid bicycle riders or bike advocates. A few of the schools already had a high number of students who bike to school. These events represented a chance to provide bicycle safety education, properly fitting helmets, and an opportunity to encourage other students to ride their bike to school.

Bicycle Rodeos

Unlike the 2011 bike rodeos, the 2012 rodeos were held on a weekday after school hours (typically 3 to 5 p.m.) which allowed parents to participate with their children. The rodeos were organized and staffed by the city's School Safety and Bike Coordinators, Police Community Action Officers (CAO's), Phoenix Fire Department Fire Pals, and representatives from St. Joseph's Hospital and Phoenix Children's Hospital. The bike rodeos were held in four stations: (1) a bike riding course set up by the police, (2) safety education, (3) bicycle maintenance and repair, and (4) interactive bike safety games with low-cost prizes distributed to students having correct answers.

The bike rodeo course was set up on the basketball court at each of the schools using chalk, cones and portable signs brought out by the police. Before any student was allowed to ride the rodeo course, they were required to wear a bike helmet. A student without a helmet was provided one. Ill-fitting helmets were either adjusted for a proper fit, or the student was given a new helmet.

Parents were invited to participate in the rodeos. The parents especially appreciated the bicycle inspection and maintenance station to assure that the bikes were in good condition and the students could be taught proper care for their bicycles. Bicycles were inspected and minor maintenance was provided to each bike (where needed) before it was allowed on the riding course.

Street Transportation employees and hospital representatives manned the safety education and the interactive safety stations, and were also involved in helmet fittings. A total of 245 students attended the five bicycle rodeos during bike-to-school 2012.

School Safety Assemblies

Pre-ride safety assemblies were held at the 12 schools that were participating in the bike-to-school group rides. The assemblies were typically held outdoors and in most cases two safety assemblies were held per school to limit the number of students at each assembly to a more manageable level. They were designed to be fun events and interactive, with students serving as role models for the rest of their classmates. The topics at the assemblies included bicycle helmet use and how to properly adjust their helmet, the proper use of hand signals, and other safety information.

Bike riding courses were set up at the assemblies and student volunteers were asked to demonstrate proper bicycle safety skills for the rest of their classmates. Games of "Simon Says" were played with hand signals, and question and answer games were played with small prizes for the first students with the correct answers. Specially developed bicycling-themed comic books were given as prizes for students in grades 4 to 8. The assemblies were planned to last for about 30 minutes. Approximately 9,350 students attended the assemblies prior to the bike-to-school rides.

Bike-to-School Rides

Twelve bike-to school rides were organized as a part of the 2012 activities. Each of the group rides required the identification of a suitable meeting (starting) area and riding route.

A course route flyer was prepared showing the assembly area, route, and the meeting and departure times for the group ride (Figure 1). These bike route flyers were prepared by Phoenix staff and were given to school officials for distribution to the participating students/parents. The bike route flyers were also provided in Spanish for those schools with a large number of Spanish-speaking students. The route was checked well ahead of the ride by a traffic investigator to make sure there was no damaged pavement or overgrown bushes/trees along the route, and there was no debris in the riding area.

Meeting areas were often in cul-de-sacs, city parks (Figure 2), coned off portions of parking lots, or on vacant lots where the riders could assemble in safety and where there was room for parent parking. Some of the routes included park trails or other facilities (Figure 3), but most of the riding routes utilized local or collector streets. Police officers escorted all group rides. Most of the student rides were accompanied by bicycle officers, but in some cases the police utilized patrol cars as escorts at the start and end of the riders. At least one riding route included a portion of an arterial street that was marked with an on-street bike lane. In that instance, the police blocked off the adjacent travel lane while the student riders traveled along the arterial.

Parents were also invited to ride with their children, and several did. Overall, it was estimated that between 10 and 20 percent of the riders in the bike-to-school events were parents. All students who rode were required to wear a helmet. Students who did not have one were provided a free bike helmet at the assembly area using helmets purchased with the GOHS grant. All helmets were properly fitted and parents in attendance were also given a primer on how to properly adjust a helmet for proper fit. Children using skateboards and rollerblades were also included in the group rides. Students in the group ride were also provided a "ONE LESS CAR" T-shirt to wear. It was always a treat for students when the principal and teachers participated in the bike-to-school rides.

In a few instances two school rides were scheduled for the same day if the school start times were sufficiently offset to allow both rides to occur or if staff could be deployed to cover both events. In one instance, riders from two different schools assembled at the same city park and departed in opposite directions for their respective school bike rides. Since the departure times for the rides began about a half-hour apart, the same police escort was able to accompany the two groups of riders.

Approximately 1100 students, parents, school officials, and community leaders participated in the 12 bike-to-school rides, with the Zito Elementary School having about 250 participants alone. Both group rides in the Ahwatukee area of Phoenix (Kyrene De La Cerritos and Kyrene De La Sierra Elementary Schools) also had rather large

participation with nearly 100 bicyclists. These two schools typically have large riding populations with parking sufficient to accommodate nearly 100 bicycles at each school.

In summary, more than 500 bike safety helmets were provided to students between the rodeos and the bike-to-school events. The helmets were all fitted to the students at the events, and the students were instructed to keep using the helmets until they either outgrew them or the helmet was damaged. More than 350 "ONE LESS CAR" T-shirts were also distributed at the various events to encourage alternative forms of transportation. Other give-away items, mostly for prizes in the safety games and for student volunteers at the bicycle rodeos included water bottles, backpacks, reflectors, safety coloring books/crayons and the bicycle-themed comic books.

PLANS FOR 2013 BIKE-TO-SCHOOL EVENTS

Phoenix plans to expand the bike-to-school activities for 2013. All of the schools that participated in the 2012 events expressed a desire to be involved in 2013. It is hoped that some of the bike rides can be self-sustaining so that more schools can be included in citywide bike-to-school month activities. Some items that Phoenix will explore for 2013 include:

- Encourage more parents who accompany their children on the bike rides to wear bike helmets. Many parents were wearing helmets at some rides, but helmet use among parents was rather inconsistent at a few events. Parents set the example for their children. If the parents wear helmets, it is more likely that their children will do the same. Parents must come to bike-to-school events wearing a bike helmet.
- Create bike safety essay and poster contests for students. Phoenix uses this method to increase participation and involve students in educating their fellow classmates for the walk-to-school events. These posters and essays are often displayed at the schools or district offices, and winning essays are often read aloud to fellow students.
- Explore the donation of bicycles as prizes to encourage greater participation and greater excitement for the safety poster and essay contests
- Explore longer bike-to-school routes. Some of the 2012 bike rides seemed to be rather short. Many of the bike rides can be extended for a longer enjoyable experience. In some cases, the routes do not have to lead directly to school, but can be circuitous to pick up more riders along the way, thereby encouraging greater participation.
- More participation by elected officials. Mayors and councilmembers often participate in the walk-to-school activities and elected officials have been important advocates of programs that promote student safety and education.
- Conduct spot checks of helmet use during the 2012/2013 school year to assure that the helmets distributed during the events continue to be used. If low helmet use is observed, Street Transportation staff will meet with those school officials to explore ways to encourage helmet use.

It is encouraging that the bike-to-school events in 2011 and 2012 have occurred despite unprecedented staff reductions and budget cuts within Phoenix. This shows that the

organization and execution of these events do not need to require a significant amount of staff time and budget. Support for the purchase of helmets and other items came from area hospitals, the Arizona GOHS, and Valley Metro. The Valley Metro support is consistent with Phoenix being the first major metropolitan transit agency that equipped the entire bus fleet with bicycles racks, and works to provide space for bicycles on light rail transit.

The authors also wish to express their gratitude to the Police and Fire Departments who have supported both the walk- and bike-to-school events in Phoenix as well as officials at St. Joseph's Hospital, Phoenix Children's Hospital and the Arizona Safe Routes to School Coordinator, Brian Fellows, for his support in encouraging walking and bicycling activities in Phoenix.

REFERENCES

1. 2010 Phoenix traffic collision summary, <http://phoenix.gov/webcms/groups/internet/@inter/@dept/@streets/documents/webcontent/phxtrafficsum2010.pdf>, Street Transportation Department, Phoenix, AZ, obtained July 9, 2012.
2. 2007 bicycle Collision Summary, Phoenix Street Transportation Department, Traffic Services Division, Phoenix, AZ, http://phoenix.gov/webcms/groups/internet/@inter/@dept/@streets/documents/webcontent/d_039510.pdf, accessed July 20, 2012.
3. National Center for Safe Routes to School, <http://www.saferoutesinfo.org/about-us/newsroom/registration-open-national-bike-school-day>, obtained July 9, 2012

KEY WORDS: Bike-to-school, school transportation, bike safety, bike helmet, bike rodeo



Cerritos School



Bike to School Event: Wednesday May 9th, 2012

On **Wednesday May 9th, 2012** staff and students from Cerritos School will participate in a bike to school event. Students and staff will gather in the Desert Foothills Park parking lot at the southwest corner of Desert Foothills Pkwy & Chandler Blvd at 7:00 AM. Please bring a helmet if you have one. Let's get ready to have a fun and safe ride!

For more information, contact
Don Cross at (602) 534-2020

Biking to School is a fun activity
with tremendous benefits:

- / Everyone benefits from this easy and effective exercise.
- / It's a great opportunity to teach bike safety and identify safe routes to school.
- / Local community leaders, parents, teachers and students spend valuable time together.
- / It increases awareness of how bike accessible Phoenix is and where improvements can be made.

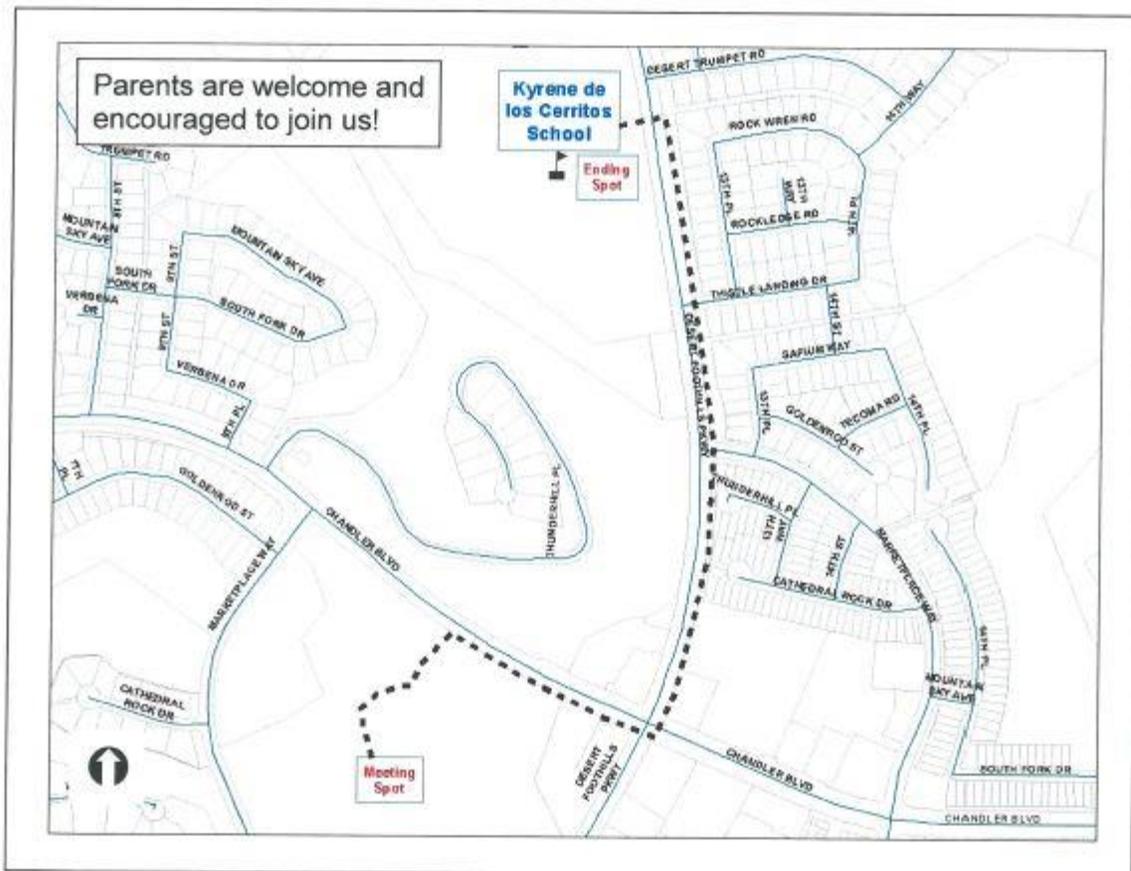


Figure 1 – Sample bike-to-school route flyer for Cerritos Elementary School



Figure 2 – Students, parents and faculty line up for the Kyrene de la Sierra School bike ride.



Figure 3 - The Vista Del Sur Elementary School bike ride is led by a police bike officer and utilized park sidewalks and roads.