
Chapter 9
Recycling Opportunities, Impediments and
Disincentives

Opportunities that Encourage Recycling
Impediments and Disincentives to Recycling

The Arizona Solid Waste Recycling Act of 1990 (A.R.S. §49-832.C.6.) requires that recycling opportunities, impediments, and disincentives be reported annually. This chapter will relate the most common of these mentioned by respondents to the FY 2000 Annual Waste Reduction and Recycling Questionnaire. Opportunities that will be discussed first may be useful to communities considering the implementation of a recycling program. The impediments and disincentives are closely monitored by the Arizona Recycling Program to direct resources toward problems that inhibit the growth of recycling in the state. It is important to note that this information is subjective and reflects the opinions and experiences of the respondents.

Opportunities that Encourage Recycling

The most identified opportunities for recycling were existing programs, educational/awareness programs, and community involvement and support. A complete list of the stated opportunities and incentives, as well as a list of the reporting jurisdictions, is provided in Table II.6. In the table, the number of jurisdictions identifying each opportunity is given in the middle column. The jurisdictions identifying the opportunity are given in the right column.

Existing Program Opportunities

The most frequently identified opportunity or incentive to recycle has remained constant over the past five years. It is the availability of existing programs. Jurisdictions stated that drop-off sites, curbside pick-up, scrap metal/white goods collection, and greenwaste collection programs provided the greatest opportunity for their community to recycle. Although this was the most cited opportunity in the questionnaire, there are some jurisdictions that have existing programs that neglected to mention them as an opportunity.

Educational/Awareness Program

The second most frequently identified opportunity or incentive to recycle was the availability of educational materials and/or awareness programs. Many jurisdictions cited that educational materials provided a great opportunity to increase their audience's awareness of recycling and waste reduction activities. Others cited that educational materials help promote their programs and increase participation within the community.

Community Involvement and Support

The third most frequently identified opportunity or incentive to recycle was community involvement and support. Again, this remained consistent for the past five years. It seems that the factors that were identified in community involvement were strongly affected by one another. A positive attitude toward recycling or environmental stewardship proved to be the largest factor for community involvement and support. Cooperation and partnerships tied with community involvement and support for the third most frequently identified opportunity.

Impediments and Disincentives to Recycling

The impediments and disincentives fall into four main categories. These categories are: 1) financial impediments, 2) community attitudes and education, and 3) infra-

Table II.6 Opportunities and incentives to recycle in Arizona as identified by local jurisdictions within the state.

Opportunity or Incentive	No.	Jurisdictions
Existing Programs	17	
Drop-off programs	23	Bisbee, Bullhead, Cave Creek, Chandler, Coolidge, Cottonwood, Flagstaff, Florence, Gilbert, Jerome, Kingman, Mesa, Phoenix, Queen Creek, Sierra Vista, Tombstone, Tucson, Yuma, Coconino County, Graham County, La Paz County, Santa Cruz County, Yavapai County
Curbside programs	10	Cave Creek, Chandler, Flagstaff, Florence, Gilbert, Jerome, Mesa, Phoenix, Tucson, Coconino County
Scrap metal/white goods programs	19	Apache Junction, Bullhead, Chandler, Coolidge, Cottonwood, Florence, Gilbert, Guadalupe, Holbrook, Jerome, Kingman, Mesa, Phoenix, Tombstone, Tucson, Coconino County, La Paz County, Santa Cruz County, Yavapai County
Greenwaste collection program	11	Chandler, Cottonwood, Florence, Gilbert, Holbrook, Jerome, Mesa, Phoenix, Sierra Vista, Tombstone, Tucson
Multi-unit recycling programs	2	Mesa, Phoenix
Program for large volume clients	2	Flagstaff, Mesa
Private companies	2	Chandler, Mesa
Educational/Awareness Programs	10	Cave Creek, Chandler, Cottonwood, Flagstaff, Gilbert, Kearny, Mesa, Sierra Vista, Yuma, Santa Cruz County
Community Involvement/Support	9	
Positive attitude toward recycling	2	Sierra Vista, Coconino County
Environmentally aware citizens	3	Sierra Vista, Tucson, Coconino County
Individual effort/participation	1	Mesa
Volunteerism/community events	3	Chandler, Mesa, Sierra Vista
Cooperation and Partnerships	5	Bisbee, Cottonwood, Flagstaff, Kearny, Queen Creek
Convenience/Simplicity	4	Chandler, Flagstaff, Mesa, Phoenix
Financial Benefits	3	
Received grant money	2	Flagstaff, Mesa
Rising tipping fees at landfills	1	Yuma County
Other Opportunities or Incentives	2	
Diversity of recycling opportunities	2	Mesa, Phoenix

structure and logistical problems. Financial concerns are, by far, the most frequently identified impediments to recycling. A complete list of the impediments and disincentives, as well as a list of the reporting jurisdictions, is given in Table II.7.

Financial Impediments

Financial impediments were identified by jurisdictions as the greatest impediment. Although this is consistent with the results from the past four years, the number of jurisdictions reporting financial impediments decreased from FY 1999. The top five financial concerns dealt with the economics of sustaining a recycling program. By far, the greatest impediment reported this fiscal year was the cost of programs and the lack of resources. Little or no revenues from recycling, transportation costs, the location, and size of the jurisdiction, volume of material, and instability in the markets consistently have been reported as the greatest impediments. These are all legitimate issues that are difficult to overcome due to the geography of Arizona, current locations of recycling processors and end-users, and the nature of recyclable materials markets.

Community Attitude and Education

Community attitudes and education tied with infrastructure and logistical problems as the second most common impediment or disincentive to recycle. This fiscal year, six jurisdictions reported this as an impediment or disincentive, that was a decrease from the FY 1999 report. Apathy and lack of interest for recycling is still considered a large impediment throughout the state, which is consistent with past years. This fiscal year, jurisdictions cited that there was not enough recycling education in their community; this is consistent with last year.

Infrastructure and Logistical Problems

Infrastructure and logistical problems were identified as major impediments to recycling. This was reported, primarily, by jurisdictions that have lower population densities. The staff members of these jurisdictions usually do not have the time or resources available to them to provide an adequate, if any, recycling programs to their communities. A solution to this problem is to investigate developing partnerships with local businesses and service organizations as discussed in Part A of this chapter.

Table II.7 shows impediments and disincentives to recycling in Arizona as identified by local jurisdictions within the state. The number of jurisdictions identifying each impediment is given in the middle column. The jurisdictions identifying the impediment are given in the right column.

Arizona Recycling Program Staff

The 1990 Arizona Solid Waste Recycling Act established the Arizona Recycling Program within the Arizona Department of Environmental Quality (ADEQ). The Arizona Recycling Program is funded by disposal fees collected at solid waste landfills regulated by ADEQ. As outlined in A.R.S. §49-837, the Arizona Recycling Program's responsibilities include distribution and administration of grant funding. The Arizona Recycling Program offers two grant programs: the Waste Reduction Assis-

Table II.7. Impediments and Disincentives to to Recycle in Arizona as Identified by Local Jurisdictions Within the State.

Impediment or Disincentive	No.	Jurisdictions
Financial	18	
Cost of programs/lack of resources	11	Apache Junction, Bisbee, Cottonwood, Eloy, Guadalupe, Holbrook, Queen Creek, Safford, Tucson, La Paz County, Santa Cruz County
Transportation costs	4	Holbrook, Kearny, Safford, Thatcher
Location of markets/jurisdiction	2	Florence, Kearny
Community size/volume of materials	5	Holbrook, Kearny, Queen Creek, Sierra Vista, Graham County
Prices/market fluctuations	2	Phoenix, Sierra Vista
Markets for all recyclables not available	3	Jerome, Mesa, Thatcher
Competition with private haulers	1	Mesa
No revenues for citizens	2	Holbrook, Sierra Vista
Community Attitudes/Education	6	
Lack of interest/apathy toward recycling	6	Bullhead, Coolidge, Holbrook, Kingman, Phoenix, Safford
Infrastructure and Logistical Problems	6	
		Flagstaff, Holbrook, Sierra Vista, Thatcher, La Paz County, Yuma County
Limited Amounts/Items Accepted	2	
		Gilbert, Mesa
Lack of Jurisdictional Staff	1	
		Holbrook
Other Impediments or Disincentives		
Limited/no drop-off locations	3	Bisbee, Flagstaff, La Paz County
No local end-user or secondary processor	2	Mesa, Sierra Vista
Public perception that collection is free	1	Tucson
No commercial opportunities to recycle	4	Apache Junction, Chandler, Flagstaff, Jerome
Do not offer recycling to all citizens	1	Chandler
Long landfill lifetime expected	1	Safford
Lack of service provider for commercial generators	1	Chandler
Contamination	1	Tombstone

tance (WRA) and the Waste Reduction Initiative Through Education (WRITE). In addition, the Arizona Recycling Program conducts public education, technical assistance and outreach events. The Arizona Recycling Program also partners with the Arizona Department of Commerce to attract recycling-related companies to the state, keeping the economic benefits of recycling in Arizona rather than shipping the commodities and losing the benefits to other areas of the world.

The Arizona Recycling Program staff assist governmental jurisdictions, private companies and non-profit organizations. The Arizona Recycling Program team members consist of seven uniquely qualified individuals from ADEQ and a representative from Arizona Department of Commerce.

Tammy Shreeve is the manager of the Arizona Recycling Program and Database Management Unit and is responsible for the administrative functions of the program. Tammy can be contacted by e-mail at tas@ev.state.az.us or at (602) 207-4171.

Pat Fizer is the Arizona Recycling Program's administrative secretary and can be contacted for general recycling information by e-mail at pmf@ev.state.az.us or at (602) 207-4133.

David Janke is the recycling statistical analyst/database coordinator. He oversees the collection and compilation of statistical data pertaining to solid waste recycling and disposal. David also conducts research to determine recycling trends and the status of past recycling grant projects. He can be contacted by e-mail at drj@ev.state.az.us or at (602) 207-4173.

Jackie Hosier is the recycling information coordinator. She oversees promotional projects, such as the Arizona Recycling Program's quarterly newsletter, brochures and other informational materials. Jackie also administers the Arizona Recycling Program's statewide recycling awareness campaigns. She can be contacted by e-mail at jah@ev.state.az.us or at (602) 207-4134.

Cara Slaton is the Waste Reduction Initiative Through Education Grant program coordinator. She oversees the Arizona Recycling Program's education projects. Cara can be contacted by e-mail at cld@ev.state.az.us or at (602) 207-4865.

Mitra Khazai is the recycling market development manager at the Arizona Department of Commerce. Mitra is responsible for the administrative duties of the Recycling Market Development Program. She can be contacted by e-mail at Mitrak@azcommerce.com or at (602) 280-1398.

The Arizona Recycling Program staff can also be reached toll-free in Arizona at (800) 234-5677 by using the last four digits of each staff member's phone number as the extension. The Arizona Recycling Program's Web site can be accessed at www.adeq.state.az.us/environ/waste/solid/recycle.html.