



Reimagine Phoenix  
Transforming Trash Into Resources



CITY OF PHOENIX PUBLIC WORKS DEPARTMENT

# SOLID WASTE STRATEGIC PLAN

FISCAL YEARS 2016-2021





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## DIRECTOR'S MESSAGE

I am pleased to present the city of Phoenix Public Works Department's Fiscal Year (FY) 2015-2020 *Solid Waste Strategic Plan*, which charts our course for providing high quality, timely, cost effective, environmentally responsible, and diversity-sensitive management of solid waste.

Today, Phoenix creates 1 million tons of trash each year, enough to fill Chase Field to the top 14 times. Through the leadership of our Mayor and City Council, the city was challenged to increase the amount of waste diverted from landfills to 40 percent by 2020. In response to this challenge, the Public Works Department launched the initiative: "Reimagine Phoenix: Transforming Trash Into Resources." The mission of Reimagine Phoenix is to inspire the Phoenix area to increase the amount of trash recycled to 40 percent by 2020 by considering how we reduce, reuse, recycle, reconsider, and reimagine healthy consumption habits to minimize waste in our daily lives. Reimagine Phoenix includes offering new and improved solid waste services; increasing education and community outreach; and creating partnerships with regional, public, and private sector organizations to collectively meet our goal. While we have made significant progress during the past few years, we are facing increasingly complex challenges at a time of continuing fiscal constraints. However, this also creates opportunities for innovation and creativity. We envision a new era of partnership to look at trash as resources, rather than waste. I am committed to working with regional and local partners, universities, businesses, and industry leaders — and, most importantly, our customers — to manage our waste stream in an environmentally responsible way for future generations.

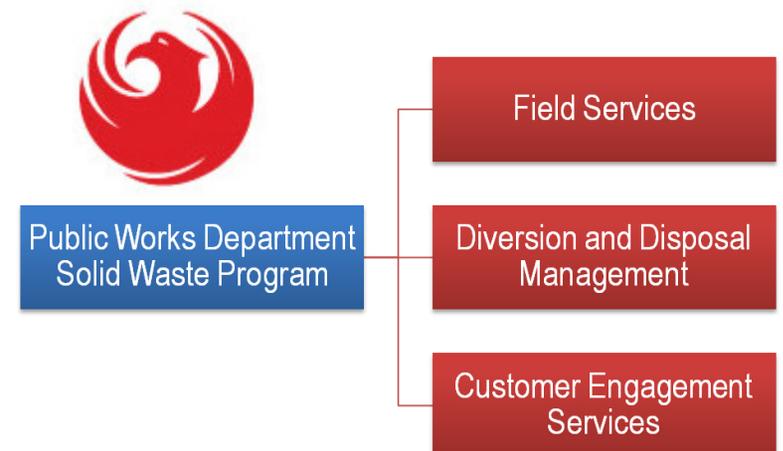
John Trujillo

Public Works Director

## WHO WE ARE

The city of Phoenix's Public Works Department Solid Waste Program is composed of three Divisions: Field Services, Diversion and Disposal Management, and Customer Engagement Services.

- Field Services Division — collects more than 700,000 tons of residential garbage, recyclables, bulk trash, and green waste every year from more than 390,000 households.
- Diversion and Disposal Management Division — responsible for operating transfer stations and landfill operations; operating waste stream minimization programs, such as recycling and green organics; and planning, designing, and monitoring environmental remediation.
- Customer Engagement Services Division — responsible for specialized solid waste collection, community engagement, code compliance, billing, and customer care.



**VISION STATEMENT**

We will create a sustainable Phoenix through positive resource management.

**MISSION STATEMENT**

We will make Phoenix a vibrant place to live, work, and visit by preserving our natural resources through environmental stewardship and quality resource management to provide a healthy and safe community for future generations.



**VALUES**

- Customer Care – We deliver exceptional customer service.
- Leadership – We are industry pioneers dedicated to shaping a better future for others to follow.
- Education – We transform behavior through empowerment and communication.
- Innovation – We adopt progressive solutions to better serve our community.
- Community – We build strong connections through engagement.
- Inspiration – We encourage our community to reimagine a sustainable Phoenix.
- Partnership – We collaborate with public and private organizations to meet regional goals.

**STRATEGIC FOCUS AREAS**

*Sustainable Infrastructure*

Support environmentally sound design, construction, and maintenance



*Net-Positive Operations*

Maximize efficiency, reduce impact, increase handprint



*Economic Development*

Promote quality local jobs and business attraction; create a circular economy



*Education and Community*

Transform behavior; empowerment through communication



*Healthy and Safe Environment*

Protect the environment, residents, and employees



# 1



## SUSTAINABLE INFRASTRUCTURE

*Support environmentally sound design, construction, and maintenance*

Sustainable design can lead to the development of sustainable communities by ensuring that design and improvements are made that do not deplete natural resources. The Public Works Department will place an emphasis towards sustainable development, operation, and maintenance of solid waste facilities that reduce our impact on the environment.



## STRATEGIC GOAL 1

### SUSTAINABLE PRACTICES

**Design, maintain, and operate all solid waste facilities with an emphasis on sustainable practices through:**

- Utilizing sustainable materials and design of new and improved facilities.
- Practicing diversion strategies such as recycling, composting, and waste reduction during daily facility operations.

## STRATEGIC GOAL 2

### PARTNERSHIPS

**Adapt current and future solid waste facilities by focusing on sustainable practices for multi-partner use through:**

- Developing public-private partnerships to establish satellite solid waste facilities focused on processing materials for waste diversion.
- Identifying properties suitable as adaptive reuse for solid waste facilities.
- Establishing Eco Station drop-off centers for residents in underserved areas to bring recyclables and other material that can be diverted from the landfill.

## STRATEGIC GOAL 3

### RESOURCE INNOVATION CAMPUS

**Establish the Resource Innovation Campus (RIC) through:**

- Constructing a composting facility designed to divert compostable materials currently sent to the landfill.
- Developing land leases for the 50 acres of property at and around the RIC to use as a resource cluster focusing on circular economy and by-product synergies.
- Housing a business incubator for start-up/emerging technologies and manufacturing processes that use trash as resources to create new products.
- Partnering with the Resource Innovation and Solutions Network (RISN).

# 2



## NET-POSITIVE OPERATIONS

*Maximize efficiency, reduce impact, increase handprint*

Every product, operation or service provided has a “footprint” — the total of negative impacts (such as pollution released) and resources consumed over time. We can also take action to positively benefit the environment and social fabric of our community. This is known as our “handprint.” Public Works strives to have a net-positive impact on our environment by ensuring that our handprints, or the good that we do through changes we purposefully bring about in our operation, are greater than any negative impacts to the environment.



### STRATEGIC GOAL 1

#### ORGANICS DIVERSION

**Increase organics diversion away from the landfill through:**

- Developing a composting facility to allow for organics processing.
- Establishing a commercial and residential food scraps program through public/private partnerships.
- Increasing end use opportunities for composted material.

### STRATEGIC GOAL 2

#### GREENHOUSE GAS REDUCTION

**Reduce greenhouse gas (GHG) emissions within the solid waste refuse fleet through:**

- Converting to 100 percent alternative fuel by 2023.
- Developing sustainable standards for equipment specifications.

### STRATEGIC GOAL 3

#### MILES DRIVEN

**Reduce miles driven by refuse collection fleet by:**

- Balancing every collection route to ensure optimal efficiency.
- Developing a comprehensive Reciprocal Agreement Plan to identify the most efficient locations to dispose of material.
- Implementing an electronic routing system.

## NET-POSITIVE OPERATIONS



In **2012** the city of Phoenix

recycled  
**41 million**  
aluminum cans

=  
enough to make

**9**  
jumbo jets



### STRATEGIC GOAL

# 4

#### CUSTOMER INCENTIVES

Identify options to incentivize customers' sustainable waste stream management, such as:

- Offering a modified Pay-As-You-Throw fee structure.
- Identifying a system for customers to monitor their waste diversion.
- Exploring sustainable waste management standards for private haulers operating in the city of Phoenix.

### STRATEGIC GOAL

# 5

#### BULK TRASH PROGRAM

Increase efficiency and waste diversion within the Bulk Trash Program through:

- Evaluating the current program to identify options for increased waste diversion.



# 3



## COMMUNITY & ECONOMIC DEVELOPMENT

*Promote quality local jobs and business attraction; create a circular economy*

As we look to meet the needs of a growing population with finite resources, the Public Works Department is placing an emphasis on developing a circular economy in managing the goods that are produced in a manner that seeks to reduce the need for disposal. A circular economy model finds new opportunities to share ownership of production, use and renewal of goods and services to place them back into the economy instead of the landfill.

### STRATEGIC GOAL 1

#### JOB GROWTH

**Support the development of domestic/local diversion solutions to promote domestic/local job growth and a circular economy by:**

- Developing programs to assist new and/or existing businesses to create local self-sustainable diversion solutions.
- Exploring domestic recycling/diversion market viability and establishing plans for increasing domestic material processing, including the possibility of regional collaboration to provide adequate materials to reach economies of scale.
- Reviewing options to allow for collection services to target specific materials to reach economies of scale for new local markets.



*Phoenix Mayor and City Council*

### STRATEGIC GOAL 2

#### BUSINESS PROGRAMS

**Establish collection and disposal/diversion programs for local businesses by:**

- Exploring options for collection and disposal solutions for businesses that could reduce costs by using city collection services.
- Creating cost-saving diversion programs for materials that could be diverted.



COMMUNITY & ECONOMIC DEVELOPMENT



GRAND CANYON UNIVERSITY



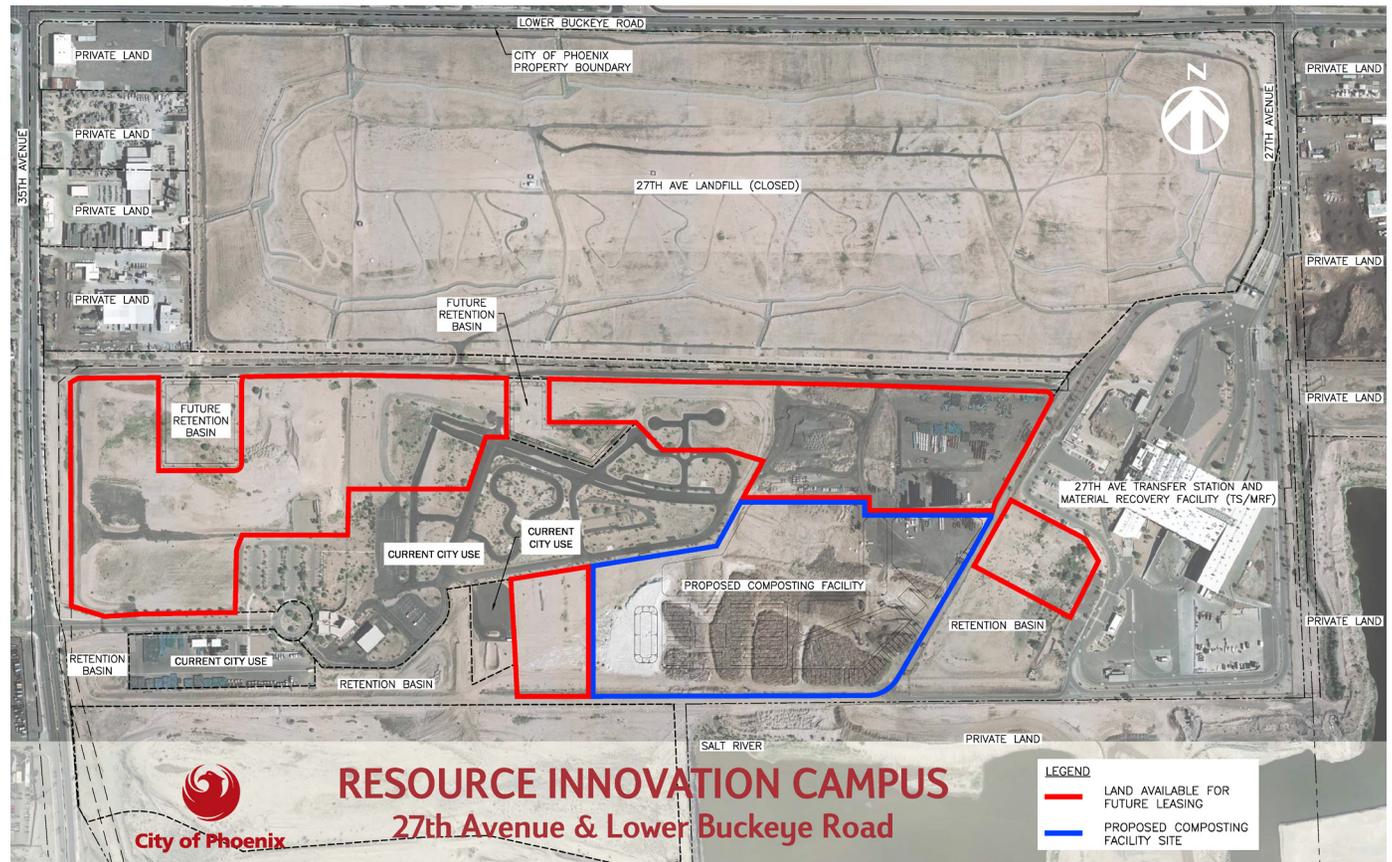
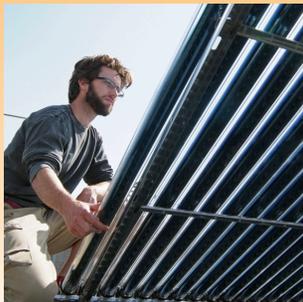
STRATEGIC GOAL

3

FINANCIAL STRATEGIES

Develop administrative/financial strategies to support local businesses through:

- Developing policies to prioritize purchasing of products promoting a circular economy (not just green or local, but a combination).
- Developing financial strategies to support operations and fund advanced diversion solutions.



# 4 EDUCATION & COMMUNITY

*Transform behavior, empower through communication*

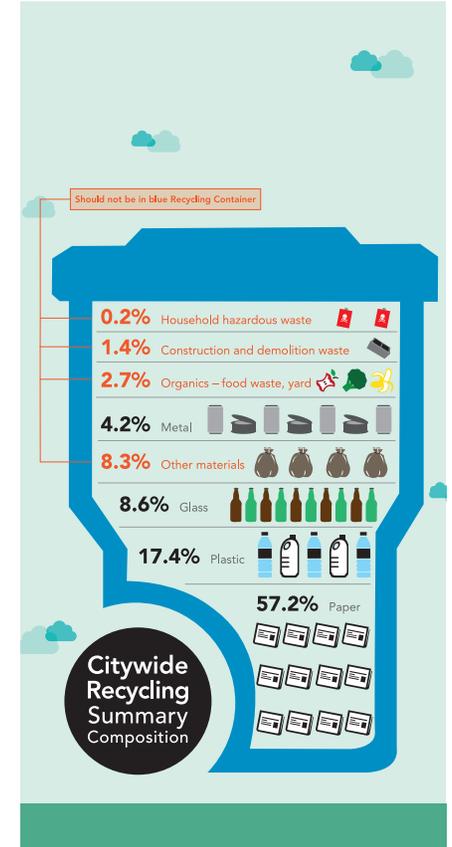
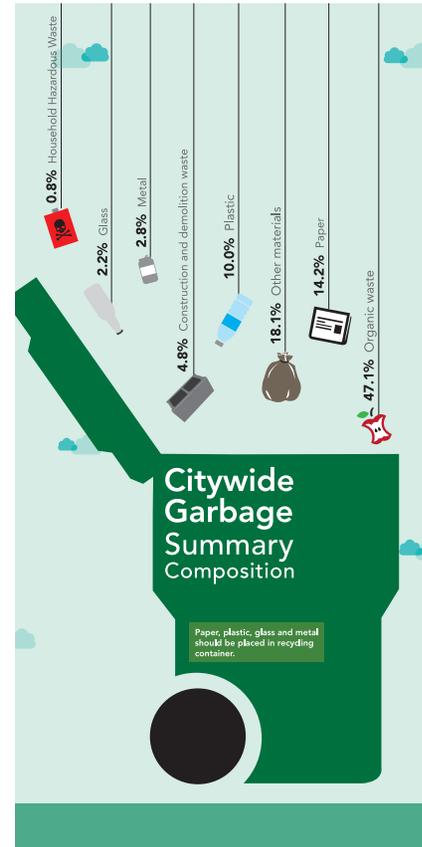
The Public Works Department strives to be recognized as a leader in sustainability. This can only be achieved through extensive outreach and education targeted to our community and stakeholders through a combination of grass-roots efforts and multimedia outlets.



## STRATEGIC GOAL 1 PUBLIC PARTICIPATION

**Increase the public's participation in the various city diversion programs through strategic communication by:**

- Obtaining important community and stakeholder baseline data on waste diversion, energy consumption and other aspects of sustainable practices to develop strategies for effective communication and outreach.
- Developing a comprehensive plan and process that will detail various communication and education strategies to assist the organization in meeting the established sustainability goals.



# 5

## HEALTHY AND SAFE ENVIRONMENT



*Protect the environment, residents, and employees*

Providing a healthy and safe environment for our residents and employees through the services we provide is the highest priority. The Public Works Department strives to be an industry leader in this area through infusing environmental stewardship and a safe service delivery in all aspects of the organizational culture.



### STRATEGIC GOAL 1

#### HOUSEHOLD HAZARDOUS WASTE DIVERSION

**Increase the amount of Household Hazardous Waste (HHW) diverted from the landfill by:**

- Exploring more accessible disposal options for the community.

### STRATEGIC GOAL 2

#### ILLEGAL DUMPING

**Decrease illegal dumping in the city through:**

- Establishing baseline illegal dumping data.
- Developing streamlined operations and procedures for reporting, responding to, and tracking illegal dumping.
- Creating an illegal dumping action plan to proactively address high profile areas.
- Enhancing enforcement efforts to catch illegal dumping.

### STRATEGIC GOAL 3

#### SAFE DRIVING

**Become an industry leader in safe driving through:**

- Maintaining the number of accidents below the national average.
- Developing a new comprehensive safety program.
- Enhancing safety specifications for fleet purchases.