



**RISN** Resource  
Innovation and  
Solutions Network



# **Recycle, Repair, Reuse: Gross Economic Impact Estimates of Existing Circular Economy Activities in Maricopa County, 2014**

**October 2016**

**ASU**® Arizona State  
University

[resourceinnovation.asu.edu](http://resourceinnovation.asu.edu)

Prepared by the  
L. William Seidman  
Research Institute  
on behalf of the  
Rob and Melani Walton  
Sustainability  
Solutions Initiatives



## THE CIRCULAR ECONOMY

Primarily intended as a practical solution to the planet's diminishing resources, a circular economy redesigns the way that we make things, replacing the high levels of waste associated with the current 'take-make-dispose' linear approach of our society.

In short, a circular economy encourages us to reuse, repurpose, recycle, refurbish, and repair goods and resources to minimize waste and manage the earth's finite stocks and renewable flows.

## ECONOMIC IMPACT IN MARICOPA COUNTY

Circular economy activities impact the Maricopa County economy through employment and payroll, supplier purchases, state and local taxes, and a range of secondary effects that ripple through other local industries.

Applying a series of local and national recycling, repair, and reuse rates to 43 sectors and sub-sectors in Maricopa County, the *maximum gross economic impact of circular economy activities in 2014 is estimated at:*



**\$1.9 BILLION**

**GROSS STATE PRODUCT**

*The state equivalent of GDP, this is the final value of all goods and services produced in Maricopa County.*

**35,454**

**JOBS**

*This is a count of full- and part-time paid employment.*

**\$1.2 BILLION**

**LABOR INCOME**

*These are salaries and benefits received by employees and the self-employed.*

**\$158.5 MILLION**

**TAX REVENUES**

*These are state and local tax revenues received by Maricopa County.*

The estimates above only account for recycling, repairs and maintenance, and reuse activities in Maricopa County in 2014. They exclude repurposing and refurbishing activities due to an absence of relevant data in Maricopa County.

Circular economy activities are therefore estimated to contribute a *maximum 0.9% Gross State Product* in Maricopa County in 2014.

Circular economy activities are estimated to contribute a *maximum 2% of all salaried jobs* in Maricopa County in 2014, and a *maximum 1.4% of annual labor income*.

Circular economy activities are also estimated to contribute a *maximum 2.6% of state and local government tax revenues* collected in Maricopa County in 2014.

## ECONOMIC IMPACT OF RECYCLING

Recycling refers to the conversion of waste into reusable material – for example, plastics, compost, glass, metals, and batteries.

In 2014, recycling in Maricopa County contributed a *maximum* **\$873.7 million Gross State Product** (GSP). That's equivalent to 46% of the total annual GSP contribution of the county's circular economy.

Up to **9,610 jobs** were generated in Maricopa County paying **\$560.2 million labor income** due to recycling in 2014. That's 0.5% of total employment in the county.

For every 1 recycling job in Maricopa County in 2014, a *maximum* 1.27 additional jobs were created elsewhere in the local economy.



## ECONOMIC IMPACT OF REPAIRS & MAINTENANCE



Repair and maintenance activities refer to the fixing or mending of products, rather than the discarding of them in favor of buying new products – for example, repairing the broken screen of an iPhone.

In 2014, repairs and maintenance in Maricopa County contributed a *maximum* **\$221.8 million Gross State Product**. That's equivalent to 11.7% of the total annual GSP contribution of the county's circular economy.

Up to **2,918 jobs** were generated in Maricopa County paying **\$152.9 million labor income** due to repair and maintenance in 2014. That's 0.1% of total employment in the county.

For every 1 repair and maintenance job in Maricopa County in 2014, a *maximum* 0.58 additional jobs were created elsewhere in the local economy.

## ECONOMIC IMPACT OF REUSING GOODS & RESOURCES

Reuse refers to the action of using a product or resource again in the same way that it was originally intended – for example, clothing or a jar.

In 2014, reuse activities in Maricopa County contributed a *maximum* **\$805.5 million Gross State Product**. That's equivalent to 42.4% of the total annual GSP contribution of the county's circular economy.

Up to **22,926 jobs** were generated in Maricopa County paying **\$528.4 million labor income** due to reuse activities in 2014. That's 1.3% of total employment in the county.

For every 1 reuse job in Maricopa County in 2014, a *maximum* 0.24 additional jobs were created elsewhere in the local economy.



**Prepared by:**


**L. William Seidman Research Institute**

660 S. Mill Avenue, Suite 300  
Tempe, Arizona, 85281

Tel: (480) 965 5362

Fax: (480) 965 5458

seidmaninstitute.com

 @SeidmanResearch



**seidman  
research** institute

**Prepared for:**



***A partnership between:***

**City of Phoenix**

200 West Washington  
Phoenix, AZ 85003

Tel: (602) 262 6011

www.phoenix.gov

**Walton Sustainability Solutions Initiatives**

21 E. 6<sup>th</sup> Street, Suite 126C  
Tempe, AZ 85281

Tel: (480) 965 4797

sustainabilitysolutions.asu.edu



**City of Phoenix**



ARIZONA STATE UNIVERSITY