



## **Resource Innovation and Solutions Network: Designing a Center of Excellence in Waste Management**

**THE PROBLEM** The Phoenix Public Works Department was tasked with reaching the newly established waste diversion rate of 40 percent by 2020, from the Phoenix City Council, up from its 16 percent diversion rate in 2014 and beyond the nation's 34 percent average diversion rate. In the creation of the waste diversion strategic action plan developed to help achieve this goal, short, mid and long term goals were established. A midterm goal was to team with ASU to establish a center of excellence in waste management that would provide support and momentum beyond immediate programs.

**THE PARTNER** The city of Phoenix Public Works Department

**THE SERVICE** To plan and design for the creation of a Center of Excellence in Waste Management

**THE SOLUTION** With the Solid Waste team at Phoenix, ASU conducted a series of nine workshops on different aspects of the creation of a center for excellence in waste management, including sessions on technology road-mapping, big data, policy, and waste stream-specific sessions. The result of these workshops was a plan for the center of excellence. In the development of this plan, Phoenix and ASU concluded that the focus should be on integrated management of all resources and the need for propagating this idea beyond ASU. This called for a network to collaborate with others and engage in knowledge exchange to create innovative resource management solutions. The Center for Excellence evolved into the Resource Innovation and Solutions Network (RISN).

**THE OUTLOOK** As of March 2016, RISN has initiated and/or completed 10 projects, focusing on different aspects of waste diversion, diversion and conversion processes. The projects range from education and operations planning around waste diversion in schools, multi-family housing recycling strategies, industrial recycling, food scraps collection and processing, and a metro region green organics management system design. Phoenix executed a Request for Proposals (RFP) process for specialty waste streams, resulting in three ideas going into contract negotiations, as well as a Call for Innovators (CFI) in partnership with ASU. The CFI established the market for market-ready manufacturing waste conversion business models based on existing technologies, and also identified start-up companies to occupy an incubator in the Resource Innovation Campus (RIC). Phoenix and ASU are in the process of developing RFPs for target technologies and businesses based on the CFI responses, and also of designing and opening the incubator to populate it with disruptive technologies and business models. ASU and Phoenix together have evolved the strategy behind RISN beyond 40 percent diversion by 2020 to develop RISN as a public-private collaboration platform for realizing the Circular Economy in Phoenix.

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