



## SOUTH CENTRAL TRANSIT ORIENTED DEVELOPMENT (TOD)

### ACHIEVING A WALKABLE, HEALTHY & VIBRANT CORRIDOR KEY FINDINGS

#### **Major Barriers to Walking Today**

- The region continues to be in the top 10 for total number of annual pedestrian deaths (2019, Dangerous by Design), with 874 compared to the national average of 49 due to the poor condition of sidewalks and the primitive pedestrian safety environment
- Shading is almost non-existent and the entire corridor suffers from “urban heat island” effect caused by the lack of shading, tree canopy and low reflectance. This poses a health risk especially to older and younger residents and those with respiratory sensitivity. The 2017 Heat Vulnerability Index Map shows current bus stops as unshaded (South Central Corridor Existing Conditions Report, January 2019 Draft)
- Local businesses cannot afford efficient air conditioning. This limits customer desire to use local amenities and to access them by walking or by transit. Local businesses do not know how to access available energy efficiency resources from local utilities (APS, Salt River Project and Southwest Gas) and from local government and in turn, these resources are only modestly marketed
- No obvious current district designation available for prioritizing green infrastructure for shading and for flood protection, or for general infrastructure upgrades

#### **Walkability Brings Multiple Benefits**

- Tree canopy restoration could add local property value and wealth as could a focused energy efficiency and solar electric retrofit program and design standard
- Most trips made by households in Phoenix are not for commuting to and from work, rather they are for shopping, services, education, visiting, recreation and worship
- The most successful Transit Oriented Developments (TODs) are all in a “walkable urban place” format

Climate change is continuing with more days of intense heat and weather events generally occurring during the region’s short rainy season. Phoenix requires on-site retention of stormwater for new development and is fortunate to host leading urban forestry researchers at ASU that have taken initial steps with a Tree and Shade Master Plan and have a nearby comparable plan for the city of Tempe. Using green infrastructure (surface permeability and hyperlocal planting) to accommodate stormwater (aka “catching raindrops where they fall”) can result in reduced costs for storm sewers and retention basins and associated treatment.

Green infrastructure, cool roofs and tree canopy can provide significant health and economic benefits over time. The difference in comfort between the 44<sup>th</sup> Street light rail station with tree and artificial shading and stations without is striking. Also striking, were the news stories during the past year of the use of mass transit in Phoenix to provide “mobile cooling.” The practice of accelerating such benefits by building targeted cooling partnerships with local utilities and the creation of “tree exchanges” to relocate mature trees to receiving areas as opposed to cutting them down to accommodate development, has been adopted formally in Perth, Australia and adoption is pending in both Los Angeles and Santa Monica, CA. As mature street trees can add significant value to property, this latter strategy can also result in local wealth creation.

Strategies for achieving a walkable, healthy & livable corridor include:

**Expand the Walkable Urban Code coverage to include the South Central Corridor.** During Reinvent Phoenix, a “Walkable Urban Code” was developed and adopted by the Phoenix City Council as a zoning amendment covering that initiative’s five multi-station districts and could easily be extended to the corridor.

**Adopt an “ecodistrict” approach to prioritizing the corridor for resource-conserving, health-promoting infrastructure improvements.** Similarly, a proposed “Walkable Urban Fund” was planned for cohering and accelerating infrastructure improvements in a coordinated, “ecodistrict” framework, which could be adopted for South Central

**Reduce or eliminate parking requirements in the corridor.** A walkable urban format requires building to the lot line. Helping businesses “reformat” to replace frontage currently used for parking will help as will prioritizing effective and affordable designs for mixed-use in available financial assistance programs and in zoning reviews. Excessive parking worsens the “heat island effect”; for necessary parking, designs are available that minimize stormwater runoff and provide shading.

**Proceed with adoption of a “Complete Streets” strategy and a “vision zero” type commitment to safety.** Partner with MAG and Arizona DOT to secure flexible resources to support this on an accelerated basis within the corridor.

**Partner with local utilities and with the State of Arizona to secure targeted energy efficiency and urban heat island mitigation resources to complement existing commitments to use of renewable energy.**

**Develop a workforce training program in urban landscape and forestry practice to leverage further economic benefits from corridor greening and walkability improvements.** Utilize such a program in tandem with further investments in the corridor’s recreational assets including the Rio Salado Habitat Restoration Area, the Nina Mason Pulliam Rio Salado Audubon Center, South Mountain Park and Preserve, and the corridor’s parks.

