THE PROBLEM  Bicycling infrastructure in the Valley of the Sun consists of a loosely connected network of bike lanes and shared-use paths across numerous jurisdictions. However, gaps, barriers, unsafe crossings and unpaved paths frequently force bike commuters to choose between dangerous, common streets filled with vehicular traffic and driving themselves, which pollutes the air and increases health risks. Salt River Project (SRP) canals provide a potential cycling highway system to better link this network. If network connections could be optimized, SRP could better encourage its large employee base to choose more sustainable transportation between facilities and for commuting to work. Valley residents and municipalities could experience similar benefits.

THE CLIENT  Salt River Project

THE SERVICE  A regional bike network map and analysis that generated Route Directness Indices for routes between common destinations among the Central, East and West Valley and SRP facilities. Stakeholder summit coordination to communicate analysis results and benefits of tool and map to infrastructure decision-makers.

THE SOLUTIONS  By using ViaCity software and GIS data on existing networks to detect missing bike network connections, the analysis provides key data, a live tool and detailed map that can be used to quantify the severity of network problems and the beneficial impact of solutions that improve bike infrastructure in the Valley of the Sun. The findings were shared and discussed at a regional stakeholder Bike Network Summit in order to spur ideas and prioritization of network improvement projects.

THE OUTLOOK  City and regional planners and policymakers can now easily add dimensions like cost and affected populations to the bike network analysis in order to determine project priorities, run cost-to-benefit ratios and effectively communicate benefits, all of which can ultimately increase bicycle and pedestrian commuting, reduce automobile trips and improve air quality.

“As the Valley's largest water provider, SRP is in a unique position to leverage its canal system to promote alternative modes of transportation that reduce vehicle emissions and improve air quality. This study has helped us tremendously in addressing opportunities to create safe, reliable and sustainable transportation options within SRP's service territory.”

Seth Blumen, Policy Analyst, SRP Sustainability Policy and Programs