## Smart and equitable parks: Quantifying returns on investments
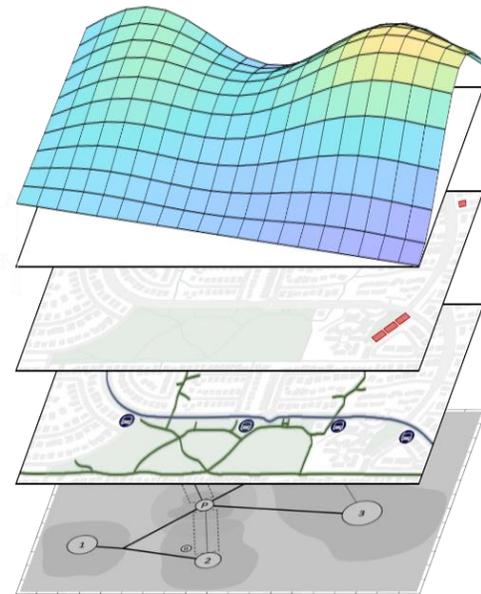
**Purpose:** Parks are integral to the success of any vibrant city and have long been touted as engines of economic growth that also improve public health, clean the air, manage stormwater, and enable patrons to commune with nature while enjoying a rich set of social experiences within their community. A key challenge for local governments is to develop and maintain parks and other public goods in ways that equitably distribute benefits to health, well-being, livability, accessibility to essential services, and the economy. This project explores urban park use and the linkage to economic growth through equitable access to essential services.

**Approach:** The team developed a "sensing for decisions" framework, which refers to data-driven decision processes based on data that can show quantifiable returns on investment. Using a framework of community transportation including an interconnection of linkages to parks and essential services.

**Key Findings:**

✓ The effectiveness of parks and greenways is highly dependent on their ability to connect residents to essential services and their surrounding community

✓ City planning officials may want to strategically invest in the nodes and linkages that they have control over, meaning parks and connecting mobility services in order to minimize the network's probability of failure

✓ For optimal urban planning and investment decisions, this framework was able to simulate the effects of specific park and mobility service maintenance, rehabilitation, and capital projects on network nodes and linkages, as well as the connectivity of the network



**Conclusion:** The research team plans to continue the existing stakeholder partnerships to simulate the effects of specific park and mobility service maintenance, rehabilitation, and capital projects on park facility accessibility. The goal is to enable decision makers to understand which mobility options have the potential to improve accessibility, gain insights into mobility disparities across different populations with different needs, and incorporate real-time metrics into the Pittsburgh Park Conservancy's Park Score database to assess the need for asset improvements.

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**Project Record:**
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