EPA's Greening America's Capitals

2016 City of Oklahoma City Letter of Interest

1. **PROJECT CONTACT.** T.O. Bowman, Sustainability Manager; City of Oklahoma City Planning Department, Office of Sustainability; 405-297-3168; Thomas.Bowman@okc.gov; 420 West Main Street, Suite 900, Oklahoma City, OK 73102

2. **DESCRIPTION OF THE DESIGN CHALLENGE AND PROJECT AREA.** Our proposed project area is a dense, diverse square mile within Oklahoma City's urban core, approximately two miles north of downtown and ½ mile west of the State Capitol, from NW 36th Street to NW 23rd Street and North Western Avenue to I-235/U.S. Highway 77. Four historic neighborhoods are within the project area – the Paseo, Jefferson Park, Edgemere Park, and Central Park – where the homes of nearly 4,000 residents are nestled alongside a vibrant regional commercial district, four parks, and three schools.

   The **Paseo Neighborhood Historic District** is a 30-block neighborhood built in 1929, placed on the National Register of Historic Places in 2004, and recognized in 2010 by the American Planning Association as one of America's Great Places. The Paseo is also served by Positively Paseo, a Community Housing Development Organization (CHDO) founded in 1991 to revitalize historic homes, plan residential infill, and increase community investment through homeownership.

   Jefferson Park is a 26-block bungalow community established in 1903 added to the National Register of Historic Places in 1995 and declared a Historic Landmark District in 1998. An active neighborhood association incorporated in 1990 serves as a CHDO, applying for HOME funds through the City to construct and renovate affordable housing within their neighborhood.

   Added to the National Register of Historic Places in 1980, the **Edgemere Park Historic District** was established in 1926 as the first planned development west of the Mississippi River. The 300 historic neighborhood homes are situated around two parks, Edgemere Park and Guy James Park, which have a tributary of Deep Fork Creek at their center. Edgemere Park is also home to the David R. Lopez Community School at Edgemere Elementary, Oklahoma City Public Schools' (OKCPS) first community school. OKCPS' most recent statistical profile of Edgemere indicates 98.3% of the student population qualifies for free or reduced lunch.

   The **Central Park** neighborhood was established in 1910 and in 1924 saw the construction of Harding Junior High, now Harding Charter Preparatory High School and Harding Fine Arts Academy (HFAA). Both schools have been designated as U.S. Department of Education National Blue Ribbon Schools in 2013 and 2015, respectively. Central Park is also an epicenter of urban agriculture with a neighborhood organization, CommonWealth Urban Farms, converting vacant lots to urban agriculture and working with teenage volunteers through the Closer to Earth Youth Gardens program.

   The central hub of these four neighborhoods is the **Paseo Arts District**, a Spanish Revival-style business district added to the National Register of Historic Places in 1983. Cozy and colorful, the Paseo Arts District maintains its Bohemian roots with a multitude of art galleries, shops, and restaurants, attracting upwards of 2,000 for once-a-month Friday night district art walks and more than 60,000 for the annual Paseo Arts Festival.

   The proposed project area has an approximate **population density of more than 4,300 people per square mile**, more than four times that of Oklahoma City's overall population density. American Community Survey data indicates the project area has a **32% minority population**. Because the project area is surrounded by major arterials to the south, west and north as well as I-235 to the east, the project area is ranked in the 98th state percentile, 96th Region 6 percentile, and 93rd national percentile for traffic proximity. This is of concern because EPA EJSCREEN's Environmental Indicators suggest the project area population has significant exposure to ground-level ozone, ranking in the **96th percentile for ozone** both nationally and within Region 6.

The Centers for Disease Control and Prevention has found that while ozone exposure negatively affects all ages, races, and ethnicities, African Americans disproportionately suffer from respiratory disease and conditions worsened by exposure to smog. Two other environmentally sensitive cohorts – the **young and the elderly – make up approximately 27% of the project area population**. Even with the area density and the regular presence of pedestrians, poor sidewalk conditions in the project area may be incenting near-by residents to make higher emissions-generating short-distance vehicle trips than necessary.

In 2014 the Paseo Arts Association worked with the City of Oklahoma City Planning Department, the Office of Sustainability, and the University of Oklahoma's Institute for Quality Communities to conduct an **assessment of the Paseo Arts District's walkability** both within the District and accessibility to and from surrounding neighborhoods. City staff and stakeholders identified short-term and long-term needs to enhance walkability; short-term recommendations included the installation of crosswalks at unmarked intersections, installation of Americans with Disabilities Act-compliant curb ramps, and safety improvements to the NW 30th and Walker route connecting students to Edgemere Elementary School.

Long-term recommendations were projects of significant but transformative scope including the design and implementation of a curbless, shared right-of-way street for Paseo Drive and the use of stormwater management best practices such as permeable pavement, rain gardens and planting strips to absorb rather than channelize stormwater and reduce accessibility obstacles caused by large drainage infrastructure. The **need to address the project area's drainage infrastructure** has become clearer in recent years, not just to strengthen walkability and accessibility but to adapt to changing conditions and protect property and human life.

In 2015, Oklahoma City was one of five Great Plains cities to participate in a regional research project in collaboration with Iowa State University. The project report, **"Climate in the Heartland: Historical Data and Future Projections for the Heartland Regional Network,"** used local climate data for each city to model climate scenarios over the next 60 years to provide a path forward for local resilience planning.

The data illustrated that between 1981 and 2010, Oklahoma City's average precipitation slightly increased, a trend projected to continue. The frequency of heavy rainfall events, however, has increased enough to indicate inundation events such as the record-setting rainfall and floods of June 2010 and the tornadic storms and flash flooding of May 2013 will no longer be outliers. These two inundation events demonstrated the inability of the proposed project area's existing drainage to withstand an increase of historic rainfall.

In addressing these challenges, the City of Oklahoma City hopes to **enhance quality of life** but do so in a way that works with the community for solutions that are bottom-up, preserving both historic character and natural spaces, and better understanding how infrastructure can be used to mimic natural functions to address the symptoms of urbanization.

3. **POTENTIAL IMPACT OF THE PROJECT.** Schematic designs and illustrations addressing the challenges jointly identified by stakeholders and City staff through a public, collaborative process would greatly escalate not just the likelihood of project implementation but a holistic approach to infrastructure that factors in the potential positive impact to economic, environmental, and equitable health. This process could reframe foundational infrastructure as a potential tool of **placemaking**, assisting in the creation and **preservation of historic and civic character**, while offering the opportunity to assess the performance of innovative approaches to a number of **environmental challenges** existent in the project area and the City as a whole.

   Several years ago the City convened a Green Infrastructure Task Force, comprised of City staff, engineers, developers, and educators to evaluate barriers to codifying green infrastructure and low-impact development practices; the implementation of a demonstration project was a key Task Force recommendation. The proposed project could serve to demonstrate to community stakeholders and City policymakers the capability of green infrastructure. Consultant subject matter experts could help the City better understand how to design, maintain, and inspect green infrastructure so those essential components can be included in green infrastructure ordinances and projects moving forward.

The community within the project area has already identified a benefit **innovative stormwater management** could provide. Edgemere Park Preservation, the Edgemere Park neighborhood association, assembled an 18-page appeal for restoration and erosion control of the Deep Fork Creek tributary running through both Edgemere Park and Guy James Park. The appeal cites "increased water flow and severe flooding," maps the creek's alignment changes since 1941 and requests a "historically natural, aesthetically pleasing" approach. The proposed project could also illustrate how green infrastructure would address problems of impaired water bodies and within Oklahoma City and its watersheds.

An operational understanding of **green infrastructure** could provide a greater likelihood not just of adoption of ordinances and policies but the use of green infrastructure and alternative stormwater management technologies to address flooding that occurs across Oklahoma City. Over Oklahoma City's 621 square miles, impervious surface is estimated to cover 15.6% of total land area; of that 15.6% impervious surface, an estimated 69.2% is pavement and 22.7% of that pavement is streets. Oklahoma City's expansive infrastructure, while an indicator of our economic growth, stresses our existing drainage infrastructure and requires a significant investment in maintenance.

Similarly, much of Oklahoma City's **transportation infrastructure** is auto-oriented. Within the project area, improved connectivity and enhanced safety infrastructure for active modes of transportation could contribute to a reduction in short-distance car trips. The strategic use of trees, green infrastructure, and cool/green roofs could increase absorption of pollutant-forming transportation emissions and mitigate the urban heat island effect.

Understanding the nexus between active transportation infrastructure and green infrastructure is a key impact of this project. Hands-on guidance for City stakeholders in addition to public education efforts would lay a significant foundation for momentum for both policy and implementation. An ability to better navigate the challenges posed by an innovative approach greatly increases the likelihood of converting essential infrastructure into infrastructure that provides their essential purpose – whether drainage, traffic calming, roadway or retention pond – but simultaneously enhances livability for Oklahoma City residents.

There are other potential impacts of not just **improved connectivity** but a greener project area. Oklahoma is the only state in the U.S. where cities are reliant on sales tax for their greatest source of revenue; to illustrate this, 52.5% of Oklahoma City's general fund revenue came from sales tax. Innovative transportation approaches such as a shared street along Paseo Drive, improved sidewalk accessibility, and traffic calming through stormwater tree trenches could create an even more pedestrian-friendly environment that could in turn generate greater retail activity to the benefit of local merchants and the City.

The City has options regarding project implementation; two major possibilities are inclusion of the project as part of the **Capital Improvement Program (CIP) five-year plan** or inclusion in a package for the anticipated **2017 general obligation bond** election. Likely components of the final project design could each be eligible for smaller, more specific funds that would contribute to the full project; these include proposed park improvements through the Oklahoma City Community Foundation, transportation infrastructure changes and drainage improvements with federal dollars through the region's metropolitan planning organization, or green infrastructure via funds through the Oklahoma Water Resources Board's Clean Water State Revolving Fund Loan Program.

4. **LEVERAGING OTHER FEDERAL INVESTMENTS.** In 2010, the City of Oklahoma City received an award of $500,000 through the Department of Housing and Urban Development's (HUD) **Sustainable Community Challenge Planning Grant** program to assist in the development of Oklahoma City's first new comprehensive plan since 1977. As part of that development, the City also received a 2012 **EPA/Smart Growth America Building Blocks Technical Assistance** grant to shape the transportation policies of the new comprehensive plan, plan**okc**.

   The content of plan**okc** was shaped by seven Big Ideas: a transportation system that works for everyone; housing a choice and diversity for all lifestyles; an urban environment that facilities health and wellness; great places that attract people and catalyze development and innovation; stable, safe, attractive and vibrant

neighborhoods; efficient development to achieve fiscal sustainability and improve quality of life; and preservation of rural character and natural resources.

Adopted by Oklahoma City Council in June 2015, plan**okc** is a 413-page policy document to inform and guide land use decisions as well as long range policy direction for economic development, transportation, housing, natural resources, and more. Three forthcoming implementation plans, in addition to AMP UP OKC, the public art master plan adopted in December 2015, will serve to operationalize those long range policy directions: BikeWalkOKC, a bicycle-pedestrian master plan; PreserveOKC, the City's first historic preservation plan; and the City's first sustainability plan.

The proposed project carries out the vision of plan**okc** not only through the lens of the seven Big Ideas but the project highlights that earned the Sustainable Community Challenge Planning Grant: strengthening local economies, preserving cultural and natural assets, and reducing regulatory barriers.

5. **SUPPORT FROM ELECTED OFFICIALS AND THE PUBLIC.** The proposed project area's **elected officials** support this application and hope to be involved should Oklahoma City be selected. They include Oklahoma City Ward 2 Councilman Dr. Ed Shadid, Oklahoma House District 88 Representative Jason Dunnington, and Oklahoma Senate District 46 Senator Kay Floyd. Additionally, the Mayor-appointed Parks Commissioner for Ward 2, Christine Patton, supports this application and is vigorously invested in park improvements as well as urban forestry efforts for her Ward and the City as whole.

   At the **state level**, the Oklahoma Conservation Commission supports this application and has offered to participate through their significant water quality public education resources and expertise. The Oklahoma Water Resources Board and the Oklahoma Department of Environmental Quality have both expressed support.

   Within the **City of Oklahoma City**, the Stormwater Quality Division of the Public Works Department, led by the City's Environmental Manager, Raymond Melton, has expressed support as has the City's chief drainage engineer, Blaine Sheffield. Mr. Melton will be working with EPA Region 6 closely in the coming months on the 2016 EPA Region 6 Stormwater Conference, to be held here in Oklahoma City October 2nd through the 6th. The City's Historic Preservation Officer, Kathryn Friddle, supports this application in the midst of historic neighborhoods essential to Oklahoma City's heritage. The Parks and Recreation Department has also expressed support, particularly in addressing stormwater issues within the project area parks.

   Critical **public and community support** comes from the neighborhood associations within the project area: Jefferson Park Neighborhood Association, Edgemere Park Preservation, and Central Park Neighborhood Association. A 501(c)3 contracted with the City, Neighborhood Alliance of Central Oklahoma, also provides support and outreach to neighborhood associations and will assist with outreach and communication.

   The Paseo Arts Association, an **artist-run 501(c)3** integral to the area's revitalization and momentum, supports this application and will assist in outreach to area residents, businesses, property owners, and artists. The **Community School Coordinator** at the David R. Lopez Community School at Edgemere Elementary, Colin Strickland, has also expressed support for this application, citing the large number of students who walk to school and the need for increased safety and walkability.

   Because of the widely recognized challenges within the project area this technical assistance could help the City and the public address, we feel there is already a significant groundswell of support within the state and local government in addition to the project area community that will translate well to active participation and momentum towards implementation.