

Over and Under I-40
Community Redevelopment Agency of the City of Memphis and Shelby County
US DOT FY23 Reconnecting Communities
and Neighborhoods (RCN) Program

Narrative

a. Overview

The Community Redevelopment Agency of the City of Memphis and Shelby County (CRA) proposes to lead a community-driven planning effort to mitigate the impacts of Interstate 40 (I-40) for seven historically African American and disadvantaged neighborhoods in North Memphis. I-40 is a major east-west transcontinental highway in the United States, running from North Carolina to California. Almost 110,000 vehicles and trucks travel on the segment through downtown Memphis each day (Tennessee Department of Transportation, 2022). Since its construction in the late 1960s, the communities irrevocably changed by its route have been burdened with harmful air pollutants, greenhouse gases, and noise from the heavy volume of traffic as well as lower property values and neglected areas subject to illegal dumping. I-40 also serves as a barrier to mobility. While there are several access routes to traverse the expressway via pedestrian bridges and local street over and underpasses, these passageways are in extremely poor condition, discouraging their use. For example, pedestrian bridges lack basic safety features such as railings, and streets running under large moldering highway bridges have little to no sidewalks, lighting, or bike lanes. For a disadvantaged community, this has real consequences to everyday life by restricting safe access to jobs, schools, and essential services.

The goal of the planning project, *Over and Under I-40*, is to engage the affected communities in a design process with the assistance of a team of professionals to develop innovative strategies to reconnect these neighborhoods through the enhancement of twelve (12) crossing points. CRA's mission is to eliminate blight, provide affordable housing and encourage reinvestment in neighborhoods as directed by the comprehensive plans of Memphis and Shelby County. CRA has experience in spearheading planning projects that integrate environmental sustainability and resilience in neighborhood transformation projects such as enhanced energy efficiency in housing, green infrastructure to help with flooding or pollution, and changes that make it easier to bike and walk.

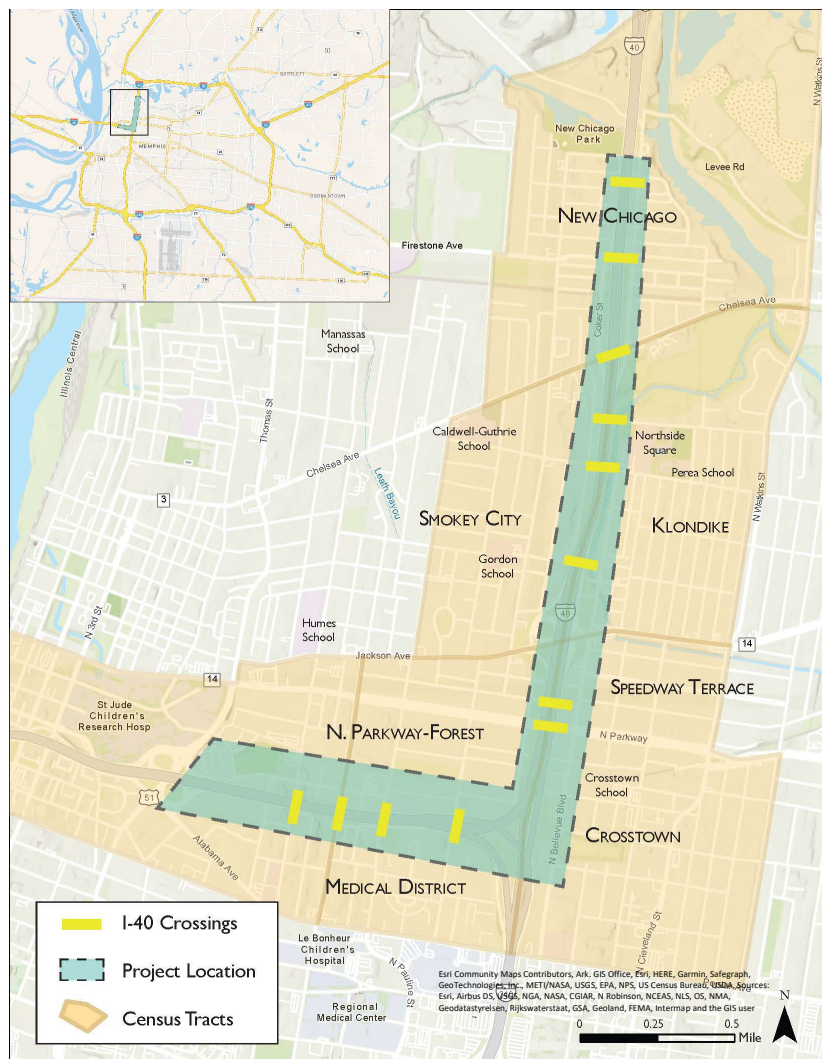
Over and Under I-40 (the Project) will involve a 2.75-mile segment of I-40 through North Memphis that includes the neighborhoods of Klondike, Smokey City, New Chicago, North Parkway-Forest, Speedway Terrace, Medical District, and Crosstown. Through the proposed planning process, CRA will hire a team of transportation planners, engineers, landscape architects, and local artists to assist these communities in redefining North Memphis's relationship with I-40 and develop actionable solutions that provide a safe, vibrant experience for residents and their vision for their community. Because of the egregious conditions of the intersections and their significant neighborhood impacts, community-driven planning has been conducted over the last 5-10 years, and this planning grant builds on that foundation, with a focus on working out the design details and to prepare as much as possible for implementation. Important elements for consideration will include improving pedestrian and bike infrastructure, reimagining perilous pedestrian bridges, and exploring measures to turn adjacent vacant lots into a network of environmentally beneficial green spaces with trails.

The Project's outputs will include:

- Determination of community preferences/priorities for functionality and design and the development of community champions to advocate for implementation;
- Gathering and/or development of resources such as surveys, traffic studies, and environmental assessments needed to support the planning/design process;
- Concept designs (30%) for each of the 12 intersections that feature improved pedestrian, biking, and ADA mobility infrastructure;
- Strategies for the integration of public activation and art elements celebrating local history and culture;
- Plans for environmental enhancements including use of nearby CRA-owned parcels that will improve accessibility and resiliency, including landscape design and a planting guide for native plants and trees that will help mitigate air quality and stormwater issues;
- A preliminary construction cost estimate and cost-benefit analysis;
- A list of required permits and preliminary environmental assessment for NEPA;
- Engagement of state, regional and city decisionmakers;
- Implementation plan defining immediate and longer-term projects and actions required; and
- Design plans up to 100% for a subset of projects that can be implemented quickly due to their simplicity, availability of funding and/or prioritization due to safety concerns.

b. Location & Map

This project focuses on a 2.75-mile section of I-40 that runs through seven North Memphis neighborhoods. Within that segment are twelve crossing points over and under I-40 between Bellevue Street and N. Manassas Street. The planning area includes three pedestrian overpasses, seven underpasses and two bridges over the highway, as well as three interstate entrances/exits at Jackson Ave, Chelsea Ave, and Smith Ave. Jackson Avenue is also the route of the national historic Trail of Tears.



c. Response to Merit Criteria

c1. Equity and Environmental Justice

In the 1980s, the City of Memphis pursued a policy of physical expansion by expanding its Urban Services Boundary. The annexation had a direct impact on the urban core as resources and investments turned their figurative back on the oldest and poorest parts of the city, many of which are in North Memphis. According to the City’s most recent master land use plan, *Memphis 3.0*, in the years since 1970 Memphis added only 4% more people but grew 55% in physical size – from 217 square miles in 1970 to 324 square miles in 2017. This resulted in substantially more land and infrastructure to maintain, with a lack of population and revenue to support it. To exacerbate the lack of municipal resources, deindustrialization and white flight to the suburbs left Memphis with shuttered factories and vacant properties. As major employers (such as Firestone Tire & Rubber Co. in New Chicago) left the area in the 1980s, a sudden and dramatic decrease in the number of local jobs led to higher unemployment and persistent poverty.

According to the Census Bureau’s 2021 5-year ACS, in the six census tracts within half a mile of the targeted segment of highway, 84% of the population are people of color, over 60% are low income, and 33% of the population lives below the federal poverty line. Median household income is less than half of the national average and 70% of households are renters. All six census tracts are Historically Disadvantaged Communities and Areas of Persistent Poverty, according to the US DOT/FTA mapping tool.¹ As articulated in *Memphis 3.0*, the City of Memphis ranks first nationally in both overall and child poverty among large metro areas. A recent study found that 68% of the population lives in economic distress, as measured by indices of educational attainment, unemployment, median income, vacant houses, and shuttered businesses.² Nearly 80% of Memphis’s poor are African American.

Table 1: Demographics of Target Communities

| | Census Tract | | | | | | Combined area | US |
|--|--------------|----------|----------|----------|----------|----------|---------------|----------|
| | 4 | 19 | 24 | 25 | 112 | 113 | | |
| Population | 1,296 | 1,127 | 1,983 | 2,976 | 1,068 | 1,272 | 9,722 | |
| % People of color population | 99% | 99% | 94% | 60% | 100% | 84% | 84% | 42% |
| Households | 451 | 590 | 840 | 1,286 | 502 | 775 | 4,444 | |
| Own home | 31% | 43% | 18% | 40% | 27% | 20% | 30% | 65% |
| Rent home | 69% | 57% | 82% | 60% | 73% | 80% | 70% | 35% |
| Median household income | \$30,565 | \$27,647 | \$25,764 | \$39,615 | \$17,083 | \$30,750 | \$30,398 | \$74,543 |
| Low-income population* | 66% | 61% | 67% | 49% | 86% | 52% | 61% | |
| People in poverty | 42% | 23% | 34% | 30% | 42% | 34% | 33% | 13% |
| Families in poverty | 28% | 9% | 31% | 13% | 38% | 21% | 22% | 8.9% |
| Households with food stamp/SNAP benefits | 43% | 39% | 32% | 11% | 53% | 24% | 29% | 12% |
| Households with no car | 28% | 34% | 17% | 13% | 41% | 25% | 23% | 8% |

¹ <https://usdot.maps.arcgis.com/apps/dashboards/75febe4d9e6345ddb2c3ab42a4aac85f>

² According to an index by the Economic Innovation Group, which uses data from the American Community Survey. See EIG, “Defining Economic Distress” ([pdf](#)).

| | | | | | | | | |
|---------------------------------|------|-------|-------|------|-------|-------|-------|------|
| Less than high school education | 24% | 31% | 28% | 12% | 37% | 19% | 23% | 11% |
| Unemployment rate | 8.4% | 13.7% | 14.6% | 3.6% | 22.9% | 17.1% | 10.8% | 6.3% |
| Persons with disabilities | 27% | 24% | 23% | 17% | 25% | 12% | 21% | 13% |

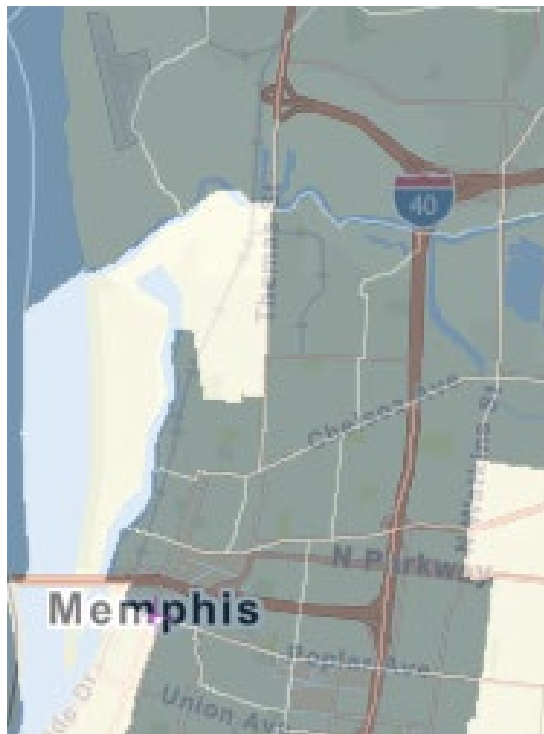
*Less than or equal to twice the federal poverty level
Source: US Census ACS 2017-2021; EPA EJScreen

All six census tracts are also burdened according to the Climate and Economic Justice Screening Tool (CEJST), meaning that they all are areas of low income and face challenges in the following additional categories:

Table 2: Climate and Economic Justice Screening Tool

| Census tract | CEJST Category | | | | | |
|--------------|----------------|--------|--------|---------|----------------|-----------------------|
| | Climate change | Energy | Health | Housing | Transportation | Workforce development |
| 4 | x | x | x | x | x | x |
| 19 | | x | x | x | x | x |
| 112 | x | x | x | x | x | x |
| 24 | | | x | x | x | x |
| 25 | | | | x | x | |
| 113 | | | x | x | x | x |

Source: Climate and Economic Justice Screening Tool



The residents of these neighborhoods face housing burdens such as historic disinvestment and high barriers to accessing home loans, high housing costs, lack of indoor plumbing, and frequent presence of lead paint; and of course, all suffer the consequences of being situated in an area of very high traffic volume. There is a lack of green space, and tree canopy cover ranges from 7% to 36% – far lower than the city-wide goal of 55%.³ These census tracts also have serious health burdens, such as rates of asthma, heart disease, and diabetes in the top percentiles. In one tract (112), average life expectancy is a full 10 years lower than the national average. The number of people with disabilities (21%) is far higher than the US average of 13%.

Figure 1 :CEJST Disadvantaged Communities (shaded) in Over and Under I-40 project area

³ [Tree Equity Score](#), accessed 11 Sept 2023. The tree canopy target is a measure of the minimum tree canopy cover required to deliver the full benefits of trees to a neighborhood. Target are set in conjunction with the USDA Forest Service and The Nature Conservancy.



Hazardous pedestrian overpasses in Smokey City (left) and Klondike (right) missing large sections of railing.

Table 3: Key health indicators

| Census tract | Percentile vs. US | | | |
|--------------|-------------------|---------------|---------------------|---------------------------|
| | Asthma | Heart disease | Low life expectancy | Persons with disabilities |
| 4 | 98 | 97 | 94 | 95 |
| 19 | 98 | 93 | 99 | 93 |
| 24 | 95 | 81 | 89 | 88 |
| 25 | 81 | 48 | 78 | 70 |
| 112 | 99 | 99 | 99 | 94 |
| 113 | 98 | 91 | 98 | 47 |

Source: US EPA EJScreen

c2. Access

The current state of pedestrian, bike, and ADA connections over and under I-40 is unsafe, uninviting and/or non-existent to the point of preventing access across the interstate without use of a car. Simply put, these facilities, intended to provide public access, contribute to the blight in the communities where they are located, without providing any benefit of access. Some are closed on account of the dangers they pose, while others – shockingly – remain open and are used by residents who are merely looking for an expedient route across I-40 to reach destinations such as work, school, healthcare, recreational opportunities, and places of worship. An average of 23% of households in the planning area do not have access to a car (compared to the national average of 8%) and residents consider transit as unreliable, untimely and an option of last resort. Thus, they often must navigate these hazardous crossings to reach transit and/or jobs.

The design and condition of routes intended to provide access across I-40 serve to restrict the following:

- Access for the Disabled: It is not possible to navigate disintegrating overpasses or crumbling underpasses other than to travel in the roadway, impacting the 21% disabled population living in the area.
- Safety for Children - Several schools in Memphis have closed recently, forcing children to work or bike further to the remaining schools. Perea Elementary School, Caldwell-Guthrie Elementary School, and the Boys and Girls Club of Greater Memphis are all located near the Vollintine Ave. underpass. Children from Perea Elementary School must travel through the large underpass to reach before- and after-school care/activities at the Boys and Girls Club on the western side.

- Access to Community Facilities and Services - Travel across I-40 is also necessary for people to reach destinations such as Klondike Park, Klondike Sexton Community Center, and the North Branch Library as well as any of the 65 places of worship located within the project area. The number of people needing to cross will increase when the Northside Square redevelopment, adjacent to I-40 near Klondike Park, is completed. In addition to housing, Northside Square will include much-needed services such as a health clinic, workforce training, and commercial and recreational facilities. Medical facilities are scarce in these six census tracts – another factor that necessitates travel across I-40.



Brown Ave. underpass in Klondike: Inadequate sidewalk and no bike lane

- Access to Food - The neighborhood of New Chicago is identified by EJSscreen as a food desert, meaning that residents must travel outside the neighborhood to shop.

Safety concerns for pedestrians and cyclists are very real in the underpasses and on bridges over I-40. In 2021, Memphis was ranked the third deadliest city in the country for pedestrians, averaging four deaths per 100,000 people (BLDG Memphis, 2021). The overbuilt infrastructure of 4-5 lanes for local roads crossing the expressway promotes speeding. Speed bumps and a public awareness campaign have done little to discourage unsafe driving or calm traffic, leading to an uptick in accidents and fatalities involving pedestrians.

While removing I-40 from these North Memphis communities is not currently feasible, it is possible to reimagine the infrastructure to mitigate its negative effects and improve the safety of residents. The Project will address these issues by employing Complete Streets design strategies. Vacant land along I-40 will also be considered for possible off-road trails and improved connections leading to and from I-40 crossing points. CRA owns 24 acres on the west side of I-40, and it is estimated that there are close to 300 acres of vacant property within the area that can be considered for alternative transportation infrastructure.

c3. Facility Suitability

The condition of public access facilities over and under I-40 clearly presents significant barriers to mobility and the quality of life in North Memphis and signals that the community’s safety and well-being are not valued. An inventory of the current state of the 12 crossing points is listed in Table 4.

Table 4: Status of 12 crossing points over and under I-40

| Location | Current status |
|---------------------------------------|---|
| Elevated pedestrian bridges | |
| New Chicago Bridge | Protective fencing missing on both sides. The bridge is still open, but there is little to prevent a pedestrian from falling to the ground on one side and onto the highway exit ramp on the other. |
| Smokey City Bridge | Missing both protective fencing and railings on both sides. One side currently has a “Bridge Closed” sign but the other is open. People circumvent the fencing on the closed bridge to cross. |
| Winchester Park Bridge | Both fence and railings are missing, and both sides of the bridge currently have “Closed” signs with a notice about a detour. |
| I-40 underpasses | |
| Smith Ave | 5-lane avenue with sidewalk without buffer on both sides. No bike lanes. Lighting in need of repair. |
| Chelsea Ave | 5-lane avenue with sidewalk without buffer on both sides. No bike lanes. Lighting in need of repair. |
| Brown Ave | Broken/missing sidewalk both sides. No bike lanes. Lighting in need of repair. |
| Vollintine Ave | Sidewalk without buffer on one side; sidewalk missing on other side. No bike lanes. Lighting in need of repair. |
| Ayers St | Sidewalk with small buffer. No bike lanes. Lighting in need of repair. |
| Dunlap St | Sidewalk with no curb and no buffer. No bike lanes. Lighting in need of repair. |
| Manassas St | Sidewalk with no curb and no buffer. No bike lanes. Lighting in need of repair. |
| Streets with bridges over I-40 | |
| Faxon Ave | 2-lane road with sidewalks without buffer or furnishing zones. No bike lanes. |
| North Parkway | 4-lane divided parkway. Recently upgraded to improve sidewalks and add trees. On-street/undivided bike lane. |

Note: Jackson Avenue will be addressed specifically through a concurrent Corridor Improvement project.

c4. Community Engagement, Community-based Stewardship, Management, and Partnerships

Community Engagement and Partnerships: The community engagement and community-based stewardship strategy for this project is based on CRA’s vision to *restore, reinvest, and reconnect* – providing residents with a healthy and safe environment, economic opportunity, affordable housing and excellent quality of life. CRA will forge stronger community bonds, ensuring every resident in the North Memphis project area feels heard, seen, and represented. CRA invests in the longevity of the neighborhoods we serve through community-driven planning, resulting in deep and long-standing relationships. Under the leadership of Kimani Shotwell, CRA’s Director of Community Building, Engagement and Impact, CRA has developed successful partnerships with over 60 neighborhood organizations and businesses through a block-by-block approach to combatting blight.

In 2018, CRA facilitated the creation of the Uptown Community Plan, a plan for eight communities in North Memphis on the west side of the I-40 planning area. A group of diverse neighborhood representatives was formed to direct the investment of local Tax Increment Financing (TIF) which provides a source of funds for community redevelopment. Valuable working relationships built by the Uptown Community Advisory Committee will serve as a

model and springboard to reach neighbors across I-40. Community liaisons will be recruited to participate in the design process and receive support for their time and efforts.

To bolster our community engagement results, CRA will partner with Innovate Memphis (<https://innovatememphis.com/about/>), a nonprofit organization formed to work closely with government to support city-wide change and innovate solutions. Their ability and experience to conduct research, investigate root causes, and create tactical strategies will strengthen the capabilities of CRA to tackle this complex problem. Their role will be to collect baseline data, problem research, assist with facilitation of at least eight community meetings, and to create an ESRI storymap to share information and spur participation.

Other partners critical to the project include the owners of the targeted infrastructure: the City of Memphis and the Tennessee Department of Transportation (TDOT). Both have agreed to support the project, assist the planning/design team with existing resources, and participate in finding solutions that will work under their constraints and meet the goals of the community. As these entities will be essential for the implementation of any change, their participation and buy-in is essential. For the City, the project perfectly aligns with Memphis 3.0, the City's long-range plan and its initiatives such as Accelerate Memphis that is already making public realm and streetscape improvements to community anchors in the planning area. Mayor Strickland has pledged that City divisions and agencies will work collaboratively with the CRA on this project, if funded. For TDOT, this project provides exceptional community engagement and planning legwork that can speed their planned maintenance/ improvements and/or add projects that will have community support. Letters of support are provided in the attachments.

Community-based Stewardship and Management: Community engagement will establish long-term partnerships and/or local employment opportunities that will help manage and support ongoing maintenance and upkeep of improved infrastructure and new pocket parks. Letters of support demonstrate the diversity of support from churches, schools, neighborhood associations, nonprofits, business owners, and elected officials for this project. They share a desire to see long-overdue attention, investment, and action for change. These support letters are provided as an attachment.

c5. Equitable Development

The North Memphis neighborhoods in the project area remain some of the poorest and most disinvested in Memphis. As part of the ongoing work called for in *Memphis 3.0*, the Memphis & Shelby County Division of Planning and Development has developed Small Area Plans to prioritize opportunity and development around neighborhood anchors, chosen by residents based on their potential to become catalytic drivers of investment in the neighborhood. CRA's programs complement this effort through anti-displacement/gentrification efforts, including home rehabilitation programs for senior and low-income homeowners; block wellness programs using local small businesses; brownfields initiatives to prepare sites for reuse (funded by EPA), and land banking and property acquisition for future development of affordable housing for low- and moderate-income residents.

Neighborhoods in the project area have consistently advocated for cultural monuments, along with new greenspaces and installation of public art highlighting local historical figures. Part of

the planning process will be dedicated to working with community members and local artists to integrate the cultural identity/heritage of the community – adding beauty and visual interest to what is now a foreboding environment. Incorporating design, public art and/or the creative input of artists to the redevelopment of these spaces will offer the ability to create gateways of celebration, removing the stigma of neglect and blight. The planning area has several historic districts, and Jackson Avenue marks the path of the Trail of Tears through Memphis.

c6. Climate and Environment

I-40 is a major contributor to the negative environmental conditions of the area, including harmful air pollutants and greenhouse gases from the heavy volume of traffic. This is on top of adjacent neglected vacant lots and rights of way subject to dumping. The US EPA’s EJScreen shows that for the combined area of the six census tracts, 12 of the 13 indices are in the 89th percentile or above. Air quality issues are particularly prevalent health hazards in these neighborhoods, as summarized in Table 5.

Table 5: Environmental justice indices for combined area of 6 census tracts

| | Percentile in US |
|-------------------------------|------------------|
| Particulate Matter 2.5 | 91 |
| Ozone | 89 |
| Diesel Particulate Matter | 93 |
| Air Toxics Cancer Risk | 97 |
| Air Toxics Respiratory Hazard | 93 |
| Toxic Releases to Air | 97 |
| Traffic Proximity | 95 |
| Lead Paint | 94 |
| Superfund Proximity | 93 |
| RMP Facility Proximity | 92 |
| Hazardous Waste Proximity | 89 |
| Underground Storage Tanks | 89 |
| Wastewater Discharge | 52 |

Source: US EPA EJScreen

Encouraging alternative modes of transportation and increasing green infrastructure are primary objectives of the *Memphis Area Climate Action Plan (CAP)*, which calls for a 71% reduction in carbon emissions by 2050. Transportation accounts for 39% of the area’s 16.9 million metric tons CO₂e and the goal is to convert 40% of vehicle trips to bike/ped by 2050 (10% by 2030) using Complete Streets to encourage walking and biking. Unfortunately, Memphis is trending in the wrong direction. The 2021 CAP status report shows that only 1% of commuting trips were by bike/ped, a drop from the 2016 level of 1.6%.⁴

A second objective of the CAP is to achieve a 60% increase in urban tree canopy coverage countywide to reduce energy costs which will also address the related heat island effects. While progress is being seen countywide, within its downtown area, Memphis has no urban forests and very few parks and green spaces. This is particularly true of the I-40 corridor, and all six census

⁴ https://shelbycountyn.gov/DocumentCenter/View/40521/2022_CAP_Annual_Report_FINAL

tracts are urban heat islands experiencing peak temperatures that are on average 8°F hotter than nearby areas that have more trees and less impervious surface (ClimateCentral.org, 2023). Extreme heat in urban heat islands amplifies air pollution and exacerbates the health burdens of North Memphis residents.

The Project area will be assessed for its potential to provide resiliency and environmental mitigation measures. Vacant lots will be considered for redevelopment as healthy green spaces offering environmental and aesthetic improvements such as pocket parks, urban forests, and meadows to help improve air quality and provide a buffer between communities and the expressway. Urban landscaping – and particularly tree planting – has the capacity to mitigate heat over time by increasing the neighborhoods’ tree canopy and replacing impervious or naked dirt surfaces with native plants. The redesign of the over- and underpasses and expansion of public greenspaces will improve air quality and provide new opportunities for outdoor recreation, yielding physical health benefits over time. Cleaning and caring for these areas will help to discourage trash dumping and littering in the near term. With removal of blight and installation of new public art and monuments, CRA aims to support mental health benefits in these disadvantaged neighborhoods as well.

c7. Workforce Development and Economic Opportunity

All Memphis CRA contracts are subject to the requirements of our Equal Business Opportunity Program. In order to increase the participation of locally owned minority- and women-owned business enterprises (M/WBE) and locally owned small businesses (LOSB), the goal for CRA’s purchasing activities is a combined 40% for MBE and WBE participation and 10% LOSB participation. In most categories, CRA meets or exceeds this 40% target. CRA defines the

percentage of M/WBE participation as the dollar value of contracts and subcontracts awarded to certified minority and/or women business enterprises divided by the total proposed base bid amount. Both the City and the County provide lists of M/WBE and LOSB certified firms on their websites.

Purchasing outreach will include, but not be limited to, participation in the following:

Notification in CRA publications, publishing in general circulation newspaper, listing projects online with local minority and women-owned business associations, and hosting one or more pre-bid meetings. This policy will govern both procurement of the planning consultant team and, in the future, the construction phase of the project.

