2022 URISA ESIG Award
Equity Explorer, County of Los Angeles

A. System

1. Name of system and ESIGTM category for which you are applying (Enterprise System or Single Process System). ESIGTM Award Categories:
   a. Enterprise Systems: Systems in this category are outstanding and working examples of using information systems technology in a multi-department environment as part of an integrated process. These systems exemplify effective use of technology yielding widespread improvements in the process(es) and/or service(s) involved and/or cost savings to the organization.

2. A letter from the executive administrator authorizing submission of the system application (letters must be signed and scanned).
   a. Please see attached document, “URISA Letter.pdf”.

3. One (1) page, or less, summary of what the system accomplishes and why it is exemplary.
   a. The Anti-Racism, Diversity and Inclusion (ARDI) Initiative developed equity principles and a formula to direct County investments toward communities highly impacted by the COVID-19 pandemic centered on areas experiencing concentrated poverty and disadvantage. Data show that Los Angeles County neighborhoods experiencing concentrated poverty (i.e., areas with higher percentages of residents under 200% of the federal poverty level) have nearly three times as many COVID-19 cases than communities with higher incomes. Plotting case and death rates over time demonstrated that our Native Hawaiian, Pacific Islander, Black, and Latino/a/x populations have most consistently faced housing, food and economic insecurity during the pandemic. Given these disparities, equity principles and a funding formula were created to be applied to American Rescue Plan (ARP) resources targeting those most impacted by the pandemic. Los Angeles County residents living in highest need communities where there are high rates of housing vulnerability, poverty, unemployment, and the underinsured, make up a greater share of the essential workforce and experienced higher adjusted death case rates. Therefore, concentrating efforts in those communities require a greater amount of the ARP resources to heal and recover from the pandemic.

Due to the health, social, and economic circumstances experienced by economically vulnerable communities of color that pre-dated and were exacerbated by the pandemic, COVID-19 infection patterns demonstrated a shift in the spread of COVID-19 from wealthier, predominantly White communities towards non-White, low-income communities early in the pandemic. To account for this inequitable impact and to help guide ARP investments where they are needed most, the County of Los Angeles partnered with Advancement Project California to adapt its initial statewide index to develop the COVID-19 Vulnerability and Recovery Index (Index) for the County that identifies the communities most disproportionately impacted by COVID-19 and at greater risk of adverse outcomes. The Index includes COVID-19-related risk, severity, and recovery need indicators and stratifies County cities and communities into five need tiers, ranging from highest to lowest need.
Using the COVID-19 Vulnerability and Recovery Index, we can visually map and identify where population level differences exist between the Highest and the Lowest Need census tracts. The higher need census tracts on the Index experience higher rates of COVID-19 risk factors, such as overcrowded housing, poverty, unemployment, essential workforce employment, lack of insurance, and diabetes. Therefore, the people living in the higher need census tracts are more likely to be at risk for COVID-19 exposure, experience higher adjusted death case rates, and will require a greater amount of ARP-funded resources to recover from the pandemic as a result of the health, social, and economic circumstances that pre-dated and were exacerbated by the pandemic. This analysis provides a strong justification for equitably distributing ARP resources to the communities most impacted by the pandemic and justifies the allocation formula’s distribution of ARP resources based on the identified percentages.

Using this allocation formula will assist departments in concentrating program allocations and resources in Highest and High need communities, while also allowing individuals and families residing in Low and Lowest need census tracts who are uninsured, unemployed, and live in overcrowded housing to still be eligible for and able to access these services.

The Equity Explorer mapping tool visually represents the COVID-19 Vulnerability and Recovery Index overlaid on top of a map of Los Angeles County to allow County departments and other stakeholders to explore data to identify and prioritize areas of the highest need based on populations disproportionately affected by COVID-19. The mapping tool utilizes the Index to stratify County cities and communities into five need tiers ranging from highest to lowest need based on COVID-19-related risk, severity, and recovery need indicators. The Equity Explorer mapping tool also features economic, health, environmental, education, demographic, and justice filters that allow users to access summary statistics for geographies down to the census tract level.

The County is using the Index to ensure $1.9 billion in American Rescue Plan (ARP) funds reach areas at greatest risk for COVID-19 infection and severity, as well as areas most impacted by the health, economic, and social impacts of the pandemic.

The County’s first tranche of funding consists of 82 programs across 17 Departments using the mapping tool to target their ARP program funding resources, totaling $975,000,000 toward communities with the greatest need.

4. Three “user testimonials”. These testimonials should include the title of the system, the person’s name, job title (if relevant), a statement of what specific ways the system improves their work and/or the work of their organization, and how frequently they use the system (testimonials may be signed and scanned).
   a. Hyunhye Seo, Chief, Office of Cannabis Management, Department of Consumer and Business Affairs
      i. Equity Explorer is and will continue to be a key tool in creating the Office of Cannabis Management’s equity program. Building on the strong data analysis led by ISD and ARDI, we can look at the historical and current impacts of drug policies, policing, hazardous land uses, and access to care for residents across LA County. This ensure a data-driven approach to our program, which is committed
b. Dr. Tamara N. Hunter, Executive Director, Los Angeles County Commission for Children and Families
   i. The work of the Los Angeles County Commission for Children and Families (Commission) has benefitted significantly from regular use of the Equity Explorer Tool in recent months. The Commission partnered with the Anti-Racism, Diversity, and Inclusion (ARDI) Initiative to add Los Angeles County-specific child protective services (CPS) data to the Equity Explorer. Specifically, these data indicate the rates of (1) allegations of child abuse and neglect, (2) open CPS cases, and (3) children being removed from their homes and placed into foster care, by zip code. Inclusion of these data in the Equity Explorer allow us to layer on indices that illuminate the community conditions with which CPS-involved families must contend, most of which are variations of concentrated need. Importantly, integration of CPS data into the Equity Explorer can also inform targeted investments in the community-based supportive services that are necessary to prevent child abuse and neglect, as well as the disproportionate involvement with the child welfare system experienced by Black and Native American children. The Equity Explorer was a prominent component of the Commission’s recent, Knowledge is Power Data Summit, which aimed to empower stakeholders with increased data accessibility and literacy, to move the needle for Black families impacted by the County’s CPS system.

c. Carrie Miller, Executive Director, Los Angeles County Poverty Alleviation Initiative
   i. We used the Equity Explorer tool in two ways when designing and implementing our Countywide guaranteed income program. First, we used it to help us determine what areas of the County we should target our program eligibility to using an equity lens. Second, we then used it to create a self-service tool that we posted on our website where anyone interested in applying could enter their address and instantly find out if they live in a qualifying area. People really appreciated the opportunity to find out right away if they were going to be eligible, instead of spending precious time filling out a lengthy application for a program they are not qualified for. This significantly improved both our program design and implementation by ensuring we were targeting under-resourced neighborhoods who needed the help and by limiting the number of applications received from people who did not qualify. It was a far more respectful process for them and it allowed us to focus more time on the applicants who were eligible and who needed our assistance during the enrollment period. It’s a fantastic tool and I’m now figuring out other ways to put it to good use!

B. Jurisdiction

1. Name of jurisdiction
   a. County of Los Angeles

2. Population served by the organization/agency
   a. Residents of the County of Los Angeles

3. Annual total budget for jurisdiction
   a. $38,234,000,000 for Fiscal Year 2021-2022
4. Name, title, and address of chief elected and/or appointed official  
   a. Fesia Davenport, Chief Executive Officer, 500 W. Temple St., Room 358, Los Angeles, CA, 90012

5. Name, title, address, telephone, FAX, and email for contact person for system  
   a. Kyle Ota, Special Services Assistant, 500 W. Temple St., Room 358, Los Angeles, CA, 90012, (213) 893-6228, kota@ceo.lacounty.gov

You must answer each of the following questions. Please cross-reference your responses to each of the topics/questions listed below. Be sure that your responses are clearly written and sufficiently comprehensive for reviewers to develop a clear understanding of the system. Responses should be in complete sentences and as brief as possible while communicating the necessary information. If appropriate, include graphics.

C. System Design

1. What motivated the system development?  
   a. The COVID-19 pandemic has devastated the lives of many Los Angeles County (County) residents. The disproportionate health and economic impacts of COVID-19 underscored the vulnerability of our County residents who are people of color, women, younger workers, and workers overall. There is an imperative opportunity to transform the lives of millions of County residents by centering equity, harm reduction, and providing proportional resources to address the needs of our residents and communities. Earlier this year, President Biden announced the American Rescue Plan (ARP) to provide local communities with much-needed resources to address the great harm caused by the COVID-19 pandemic. The County will benefit significantly from the $1.9 billion in ARP funds it is estimated to receive, as well as other ARP allocations in program-specific areas such as emergency response funding. This is an opportunity to make strides to reduce the negative burdens disproportionately borne by people of color, women, younger adults and working class Angelenos.

2. What specific service or services was the system intended to improve?  
   a. The Equity Explorer mapping tool visually represents the COVID-19 Vulnerability and Recovery Index overlaid on top of a map of Los Angeles County. This allows Departments to explore census tracts throughout Los Angeles County using the map or a series of filters to identify areas of highest, high, moderate, low, and lowest need when project design planning. The need tiers directly relate to the Funding Formula facilitating program allocations and resources in communities with greatest need. The map contains 20 other supplemental datasets as map layers, which provide additional context for departments addressing specific community needs or serving non-geographically concentrated populations. The Equity Explorer mapping tool and underlying datasets—including the COVID-19 Vulnerability and Recovery Index—are publicly accessible, creating transparency around funding priorities and empowering community organizations to do their own independent analyses.

In addition to the Equity Explorer mapping tool, the Equity Explorer report—also developed for this project—provides departments a wealth of data and feedback for project area, target population, etc., including the funding allocation breakdown. Departments use the Equity Explorer mapping tool to identify the exact boundaries of their proposed project. This boundary is submitted internally to generate an Equity
Explorer report, which provides a detailed analysis of underlying population data and ARP-specific funding allocations. ARDI uses this report as a tool to assist departments in refining their program design to best target community needs relative to COVID recovery need.

The Equity Explorer is a suite of technology products enabling departments to leverage the COVID-19 Vulnerability and Recovery Index and Board Allocated Funding formula in multiple stages of their ARP projects’ lifecycle to improve the equitable distribution of funds and resources to the communities most in need.

3. What, if any, unexpected benefits did you achieve?
   a. N/A

4. What system design problems were encountered?
   a. Due to the massive amounts of data, it was difficult to design a system that is easily operable and visually represents the required information.

5. What differentiates this system from other similar systems?
   a. This system provides both the public and County departments access to visualize many different datasets overlaid on a map of LA County. Seeing the many different communities’ information geospatially provides context to better target areas of need and the relationships they have with one another. There are no other systems we have available that provide this amount of information both internally and externally on a single platform.

D. Implementation

1. What phases did you go through in developing the system?
   a. Project planning begins week of July 12, 2021
   b. Development begins week of July 26, 2021
   c. Begin demos with pilot departments week of August 9, 2021
   d. Departments begin using tool internally to submit project design applications week of October 4, 2021
   e. Mapping tool goes public and is presented to Board of Supervisors week of February 7, 2022

2. Were there any modifications to the original system design? Why? What?
   a. No

E. Organizational Impact

1. What user community does the system serve and how?
   a. Initially, the Equity Explorer was a system that served the County and internal departments in the development and design of projects to identify and target the communities most at risk for the disproportionate impact of COVID-19 in terms of immediate health risk and long-term recovery costs.

   Due to the health, social, and economic circumstances experienced by economically vulnerable communities of color that pre-dated and were exacerbated by the pandemic, COVID-19 infection patterns demonstrated a shift in the spread of COVID-19 from
wealthier, predominantly White communities towards non-White, low-income communities early in the pandemic. To account for this inequitable impact and to help guide ARP investments where they are needed most, the County of Los Angeles partnered with Advancement Project California to adapt its initial statewide index to develop the COVID-19 Vulnerability and Recovery Index (Index) for the County that identifies the communities most disproportionately impacted by COVID-19 and at greater risk of adverse outcomes. The Index includes COVID-19-related risk, severity, and recovery need indicators and stratifies County cities and communities into five need tiers, ranging from highest to lowest need. These groups of variables are identified as follows:

- **Risk:**
  - Individuals without U.S. citizenship
  - Population Below 200% of the Federal Poverty Level (FPL)
  - Overcrowded Housing Units
  - Essential Workers

- **Severity:**
  - Asthma Hospitalizations (per 10,000)
  - Population Below 200% FPL
  - Seniors 75 and over in Poverty
  - Uninsured
  - Heart Disease Hospitalizations (per 10,000)
  - Diabetes Hospitalizations (per 10,000)

- **Recovery Need:**
  - Single-Parent Households
  - Gun Injuries (per 10,000)
  - Population Below 200% FPL
  - Essential Workers
  - Unemployment
  - Uninsured Population

It has since become a public tool and is now available to everyone to access a wide range of factors including foreign born population, percentage with health insurance, those with internet and computer access, households without a vehicle, etc. More factors will continue to be added.

2. **What are the ultimate decisions/operations/services being affected? If appropriate, provide a few examples including, but not limited to: screen input/output forms, paper products, or other descriptive graphics.**
   a. The decisions being affected are the designs and frameworks of the many different programs throughout Los Angeles County, all of which are receiving allocations from the $1.9 billion in ARP funds. As a result, all of the related operations, services, etc. are impacted, as well as the millions of residents within the County.

3. **What were the quantitative and qualitative impacts of the system?**
   a. The Equity Explorer mapping tool has been successfully used internally throughout various project designs to implement equitable funding for a vast range of programs. The County’s first tranche of funding consists of 82 programs across 17 Departments.
using the mapping tool to target their ARP program funding resources, totaling $975,000,000 toward communities with the greatest need.

The Equity Explorer mapping tool has since been launched publicly and can now be used more broadly to influence funding, policy, etc. decisions beyond ARP. This tool provides a visually engaging, interactive, and transparent look into Los Angeles County’s communities in an effort to facilitate program allocations and resources to communities with the greatest need. Not only does it increase the economic stability of households and communities disproportionately impacted by the pandemic through program design, but it also highlights health, social, and economic circumstances that pre-dated and were exacerbated by the pandemic.

4. **What effect has the system had on productivity?**
   a. The system greatly improved the productivity of ARP project development by allowing the many LA County departments to visually map out relevant data and target the communities that are most at risk for the disproportionate impact of COVID-19 and that will need the most support to recover.

5. **What, if any, other impacts has the system had?**
   a. N/A

6. **How did the system change the way business is conducted with and/or service delivered to clients? Give specific examples comparing the old way with the new.**
   a. The Equity Explorer mapping tool helps identify and target the communities most at risk for the disproportionate impact of COVID-19 in terms of immediate health risk and long-term recovery costs. This visual representation of the County’s communities with the greatest need extends beyond the specifically COVID-19-impacted and showcases a wide range of factors including foreign born population, percentage with health insurance, those with internet and computer access, households without a vehicle, etc.

   In addition to the mapping tool, the Funding Formula suggests percentages of allocated resources based on need. This ensures that the majority of funding will go towards the communities that were most impacted by COVID-19 and that will need the most support to recover.

   This public tool and data can now be used to positively implement program, policy, grant, etc. decisions to help promote a more equitable Los Angeles County. Previously, there was no single resource to refer to for an overview on equitable resource distribution, especially so with regards to the simultaneous analysis of multiple individual factors.

**F. System Resources**

1. **What are the system’s primary hardware components? Give a brief list or description of the hardware configuration supporting the system.**
   a. There are no hardware components as this is a software system.

2. **What are the system’s primary software components? Describe the primary software and, if a commercial package, any customizations required for the system**
   a. The primary software is Postgres AWS and 1 Esri viewer license (with PostgreSQL hosting).
3. What data does the system work with? List and briefly describe the database(s).
   a. Census-tract level data, supervisorial districts, school districts, community business enterprise locations, CalFresh gap analysis, neighborhood redlining grade, disability status, foreign born population, health insurance, internet and computer access, limited English, rent or owned predominance, without vehicle status, DCFS referrals per 1,000 children, DCFS investigations per 1,000, DCFS substantiated referrals per 1,000, DCFS removals per 1,000, DCFS children in foster care per 1,000, DCFS open cases per 1,000, below poverty, income per capita, median income and Area Median Income, arrests per capita, reported hate crimes, CDC social vulnerability, concentrated disadvantage, healthy places, justice equity services index, justice equity need index, tenant vulnerability, and COVID vulnerability and recovery. More data is continually added and will increase over time.

4. What staff resources were required to implement the system? (i.e., report approximate staff and consultant time as FTE’s)
   a. Coordination on this project was led by ARDI, who provided leadership for all partners. Development of Equity Explorer mapping tool led by County Internal Services Department (ISD)-Enterprise GIS section in partnership with Esri, a private GIS company. Data entry forms and project dashboard development were a collaboration between Esri, ISD-Collaboration Application Development, and ISD-Enterprise GIS. Development of the Index data product led by Advancement Project, a nonprofit, with partial development and incorporation into the tools by County ISD-Enterprise GIS section. Other County departments provided important preliminary insight that helped guide development of product including Arts and Culture and Parks and Recreation. Data provided by County departments including Chief Information Office, Department of Public Social Services, Department of Consumer and Business Affairs, and Human Relations Commission.

5. Comment on anything unusual about the resources used to develop your system, such as data, software, personnel and financing.
   a. N/A
June 6, 2022

To: URISA ESIG Review Team

From: D’Artagnan Scorza, Ph.D.
Executive Director, Racial Equity

2022 URISA ESIG Award Application

As the Executive Director of Racial Equity for Los Angeles County, I am authorizing the submission of the URISA ESIG award application for our Equity Explorer system. This mapping tool visually represents the COVID-19 Vulnerability and Recovery Index overlaid on top of a map of Los Angeles County to allow County departments and other stakeholders to explore data to identify and prioritize areas of the highest need based on populations disproportionately affected by COVID-19.

Should you have any questions concerning this matter, please contact me or Kyle Ota, Special Services Assistant, at (213) 893-6228 or kota@ceo.lacounty.gov.

Best Regards,

D’Artagnan Scorza, Ph.D.
Executive Director, Racial Equity