

# Planning for Sustainable Housing Empowers Smart Communities



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In many communities across the country, government officials have declared states of emergency regarding homelessness.

This has resulted in encampment sites of people experiencing homelessness now becoming the norm. These encampments can impact the infrastructure and economic viability of communities. This phenomenon threatens public health; puts pressure on public works and public safety; and in some cases, discourages business. Government leaders must fight this crisis in a similar fashion to a natural disaster. Planners must influence government officials to take a housing-first approach to get people experiencing homelessness off the streets and into services and housing to increase their chance at economic mobility.

Esri's homelessness and housing solution ensures governments can develop strategies to mitigate homelessness, identify the most suitable areas for affordable housing, design an economic mobility strategy, and effectively manage growth capacity.



# Five Steps to Effectively Addressing Homelessness and Housing Affordability

The key to designing a smart community is to have an effective and equitable housing strategy. Rising housing prices, increased urbanization, and elevated financial burdens on middle- and lower-class homeowners make the role of the planning professional in sustainable housing more critical than ever. When people are not able to afford to live in the community in which they work, it can result in undesirable sprawl in surrounding communities. Implementing policies for sufficient affordable housing provides many benefits for communities, including increased spending power, more educational opportunities, job creation and economic mobility, growing municipal revenue, lower stress on transportation networks, and reduction of poverty by ending the cycle of homelessness.

The search for viable solutions and approaches to address pressing issues by planners, community leaders, and administrators, such as homelessness, housing affordability, and economic opportunity, is at the forefront of dialogues in many communities. These issues are intertwined, and governments must recognize the need for an equitable plan of action to meet the needs of all residents. Homelessness, in particular, is a complex issue as the needed support spans mental health services, veterans, drug addiction, job opportunity, and historically marginalized groups.

Planners and administrators must follow five necessary steps to address housing and homelessness in their community.



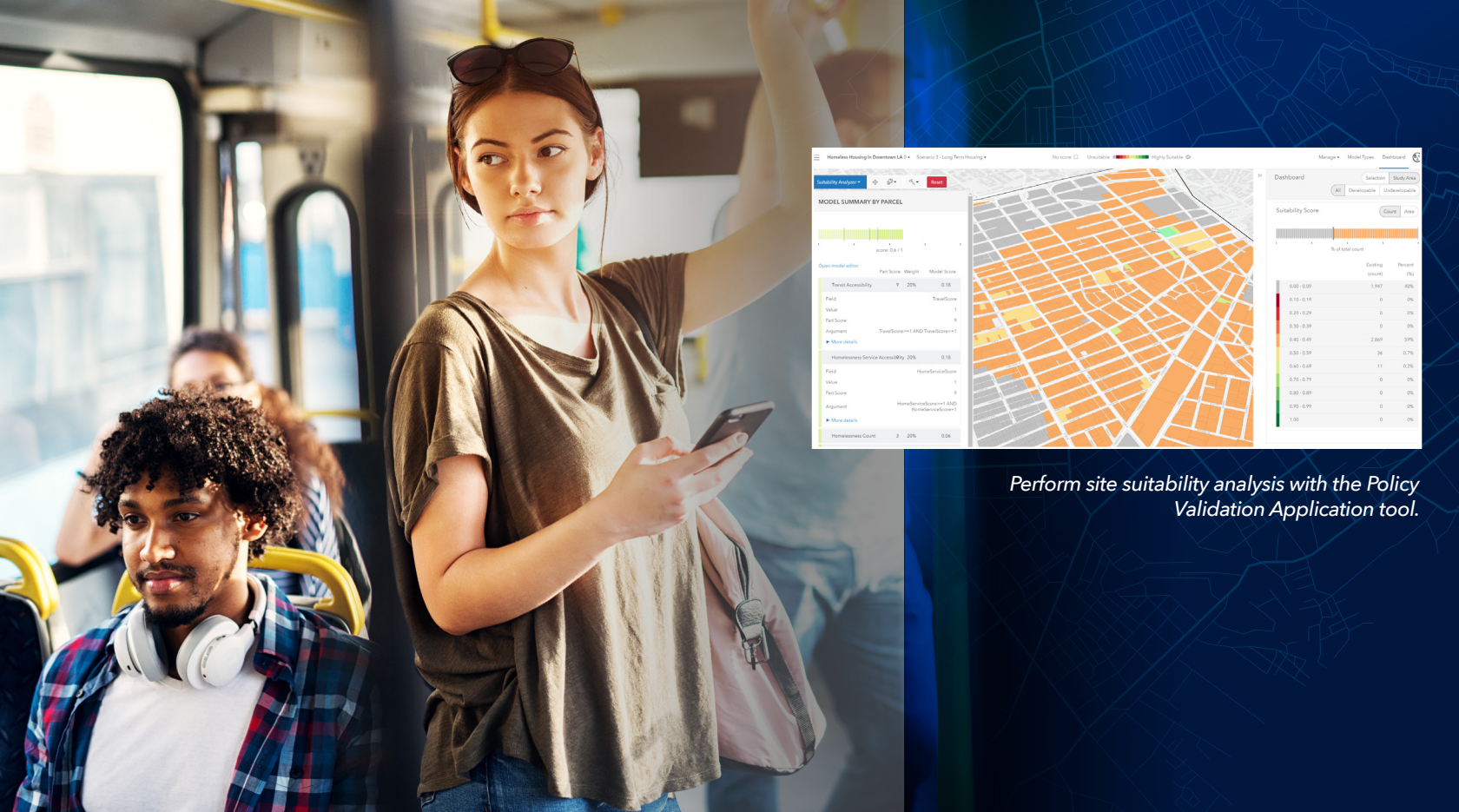


## 1. Centering Policy Development around Location

Planners and geographic information system (GIS) technology play an integral role in decision-making regarding housing strategies, because location is at the epicenter of this topic. Planners and policy makers must be able to define the need, benefits, and challenges in assigning areas for affordable housing, mitigating homelessness, and understanding the capacity for growth in neighborhoods. Taking a data-driven approach, planners can develop multiple housing

and economic development scenarios in neighborhoods and measure their potential effectiveness. Policy makers can then evaluate and visualize these scenarios, collaborate with community leaders, and engage the public to meet their expectations for transparency and accountability. ArcGIS® technology provides the tools to make better, more justifiable decisions for housing policy development.





Perform site suitability analysis with the Policy Validation Application tool.

## GIS enables planners and government officials to

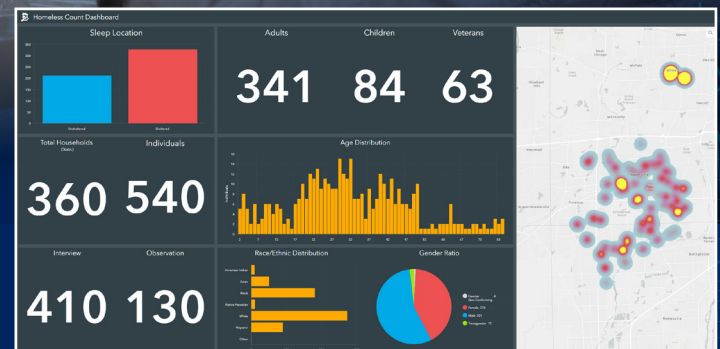
- Identify and analyze demographic and socioeconomic variables for neighborhoods to assess needs.
- Allocate percentages of development to affordable housing as part of a comprehensive plan.
- Evaluate accessibility to essential services, such as transit, education, and health care.
- Perform land-use inquiries.
- Understand the impact of homelessness in the area.
- Communicate policies to stakeholders and monitor feedback.





## 2. Mitigating Homelessness

Ending the cycle of homelessness sustainably starts with understanding and analyzing location. As one of the most pervasive stresses on local governments, mitigating homelessness requires innovative planning practices that balance immediate and long-term needs. Planners have to meet policy guidelines and assess and justify changes that should be made to meet the needs of the people experiencing homelessness. Planners need to track the people experiencing homelessness; monitor the status and proximity of assets, services, and facilities to them; and identify affordable housing options. As affordable housing is not enough to correct this



situation, this effort also includes corresponding opportunities for economic mobility. The goal is to eliminate the cycle of homelessness whenever possible through affordable housing and economic mobility. Planners can positively influence the policies of homelessness to improve the lives of its residents. GIS provides the tools to assess and monitor homelessness, identify necessary resources, and measure key performance metrics to validate decision-making.





### 3. Using Location to Design Effective Affordable Housing

Effective affordable housing relies on sustainable design that is centered around location. The design needs to incorporate transit-oriented design (TOD) in more dense urban neighborhoods to increase accessibility to services, education, training, and jobs, creating a more walkable and desirable neighborhood. In addition, these affordable housing developments need to blend seamlessly with other existing developments to generate a more cohesive and inclusive neighborhood that meets the needs of all its residents. Creating even one successful affordable housing development helps justify policies to generate more developments in other neighborhoods, expanding the benefits this housing provides throughout the city. ArcGIS provides the tools to design, analyze, and visualize multiple sustainable affordable housing scenarios for your community.





Analyze affordable housing scenarios with ArcGIS Urban.

## Planners and decision-makers can use GIS to

- Design sustainable affordable housing developments.
- Enable data-driven comparison of multiple scenarios to help policy makers formulate better decisions.
- Modernize zoning ordinances to accommodate development.
- Provide a platform for residents and stakeholders to learn about development scenarios and offer feedback.





## 4. Empowering Residents through Economic Mobility Requires Detailed Location Analysis

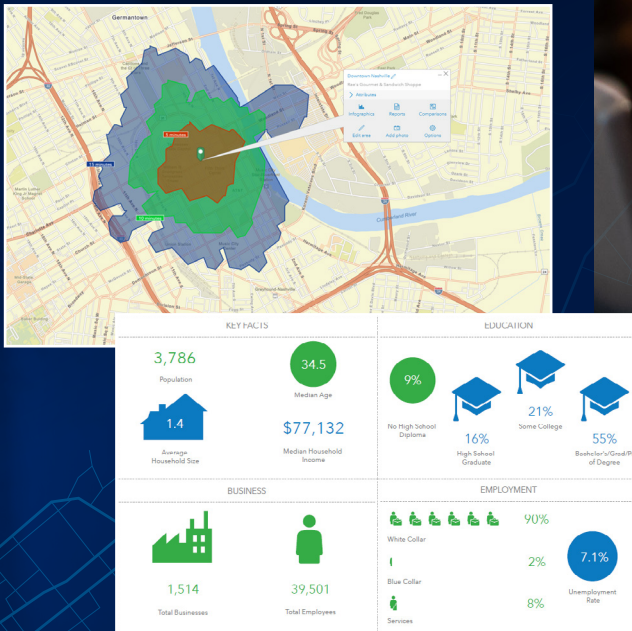
Economic mobility provides a path for disadvantaged residents, particularly to elevate themselves from stagnant or untenable economic conditions. Planners, economic developers, and community leaders have both the obligation and ability to design sustainable opportunities for their residents. These opportunities, when combined with employers who are incentivized to make long-term investments in personnel, can create jobs and subsequently break cycles of poverty and homelessness. This consequently

grows municipal revenue, which provides more resources for services. When combined with nearby effective affordable housing, an economic mobility strategy provides pathways for disadvantaged and disenfranchised residents to capitalize on opportunities and make a tighter connection with their neighborhood. ArcGIS enables you to take a data-driven approach to design a sustainable economic mobility strategy for your community.



# Improve economic mobility with GIS to

- Analyze and understand community demographics and socioeconomic characteristics.
- Assess community needs for employment, training, education, and services.
- Monitor and quantify status of economic mobility in neighborhoods.
- Coordinate with Economic Development Organization (EDO) officials to recruit sustainable new investments and expand existing ones.
- Report to policy makers and the public the impact of mobility in neighborhoods.







## 5. Designing and Managing Sustainable Growth by Leveraging Location

Whether in urban, suburban, or rural areas, planners are expected to manage the growth of their communities in a sustainable way. They must plan for varying levels of growth based on the needs and desires in each neighborhood. Understanding location and the characteristics of these neighborhoods is the cornerstone of this practice. Leverage a data-driven approach to growth capacity by providing community stakeholders with efficient and sophisticated tools to visualize, review, and offer feedback on your multiple development scenarios.



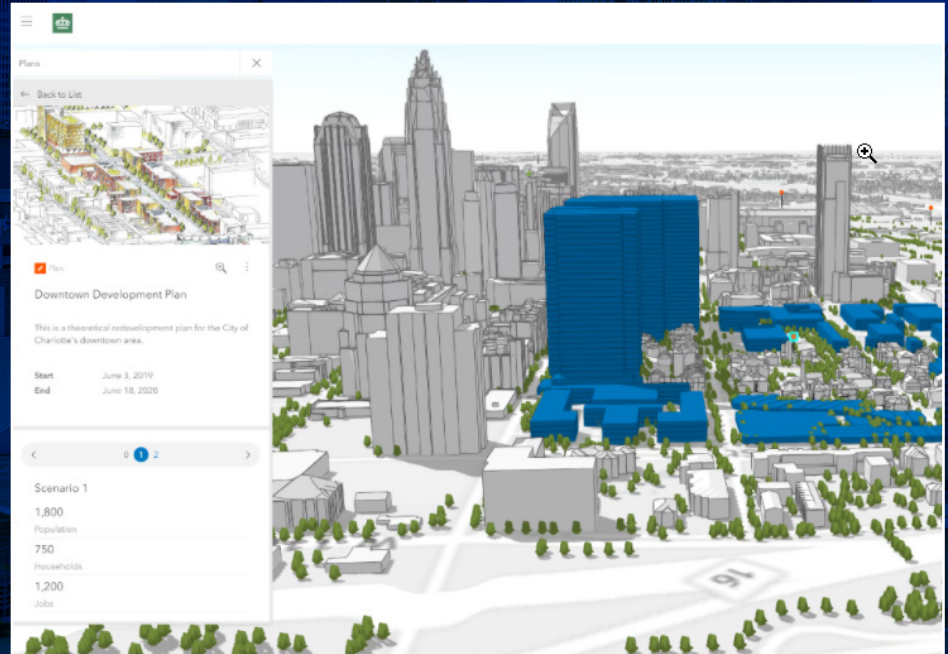
## USER STORY

# Charlotte, North Carolina

The City of Charlotte, North Carolina's Housing Locational Policy (HLP) goal was to distribute affordable housing investments into more affluent communities to limit the concentration of poverty within distressed neighborhoods. HLP staff used Esri's GIS technology to model their criteria and goals, which helped them meet data-driven policy challenges.

To meet these goals, city staff proposed site scoring. The city's housing operations manager, along with the data analytics team, used public data to power an online tool. The tool scored proposed development sites against four criteria:

- Proximity to current and/or planned transit assets and amenities
- Income diversity
- Access to jobs within a reasonable distance
- Level of neighborhood change or risk of displacement in historically lower income neighborhoods





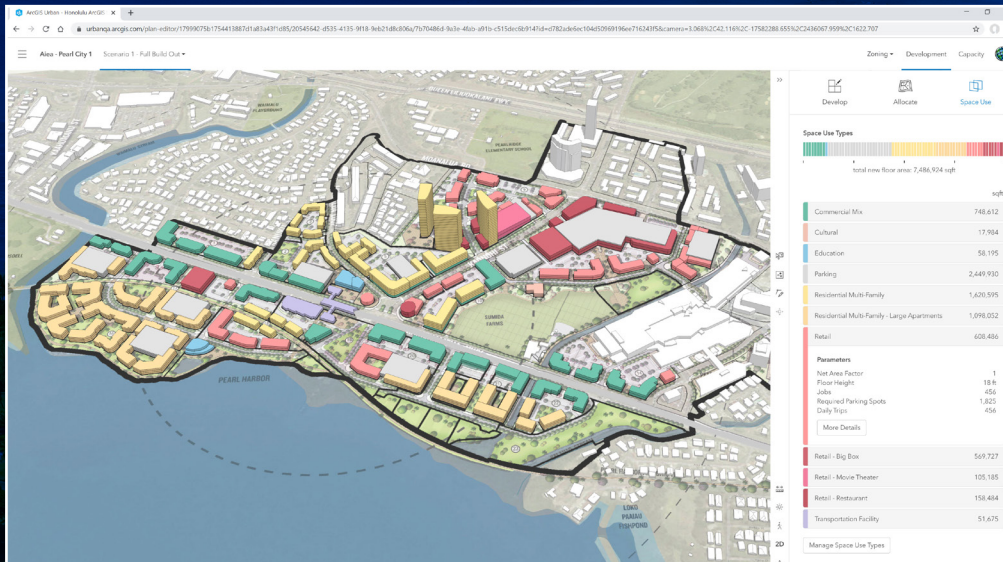
## USER STORY

# Honolulu, Hawaii

“ ArcGIS Urban is a powerful 3D modeling tool that will revolutionize the future of land-use planning. With its ability to generate multiple redevelopment scenarios based on proposed zoning regulations and land-use codes, planners, architects, engineers, policy makers, and their [residents] can visualize and understand the possible alternatives, benefits, and impacts of major land-use changes being proposed in their communities.”

Ken Schmidt

*GIS Administrator for the City and County of Honolulu*







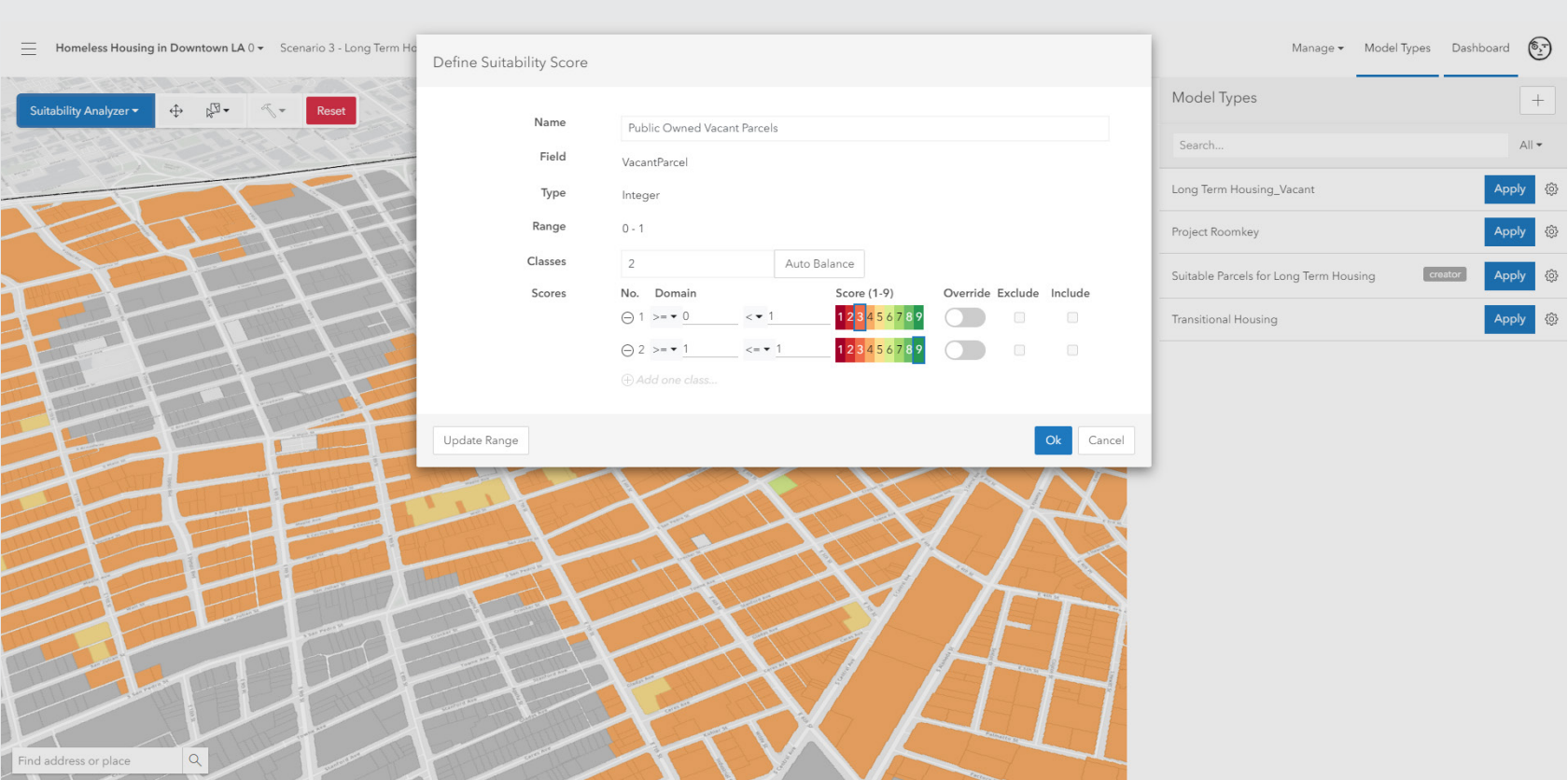
## GET STARTED

# ArcGIS Urban

ArcGIS Urban is a geoenabled system that helps you improve urban planning and make better development decisions. With Urban, planners and designers can streamline the urban development life cycle and create more livable, prosperous, and sustainable cities.

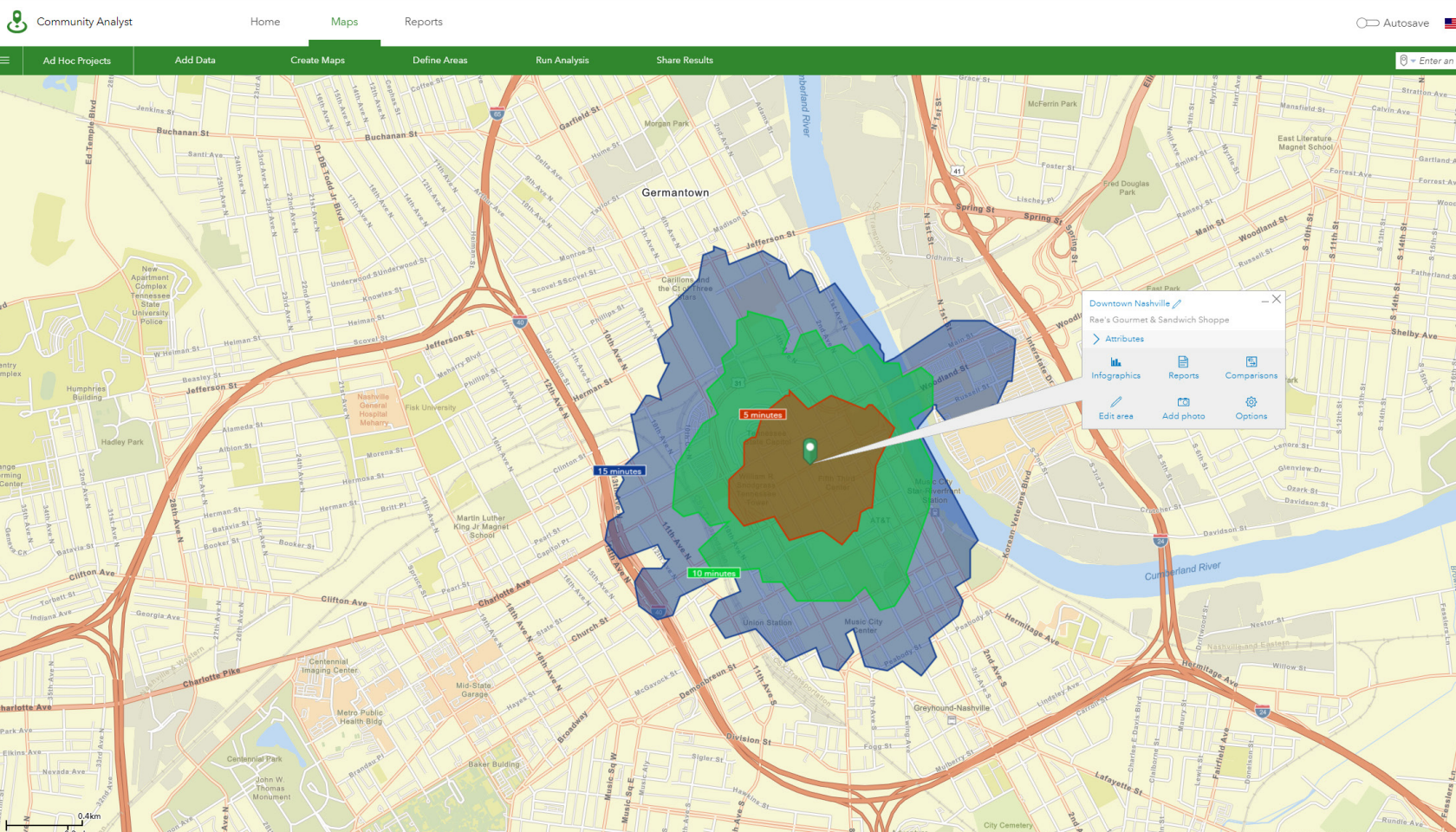
Urban provides a 3D web experience that lets you quickly visualize projects in their local context and evaluate key performance metrics. It also provides web-based tools designed to simplify zoning and land-use planning. You can use Urban to make more informed planning and development decisions and improve collaboration between public and private stakeholders. This helps you stimulate private investment and support development to achieve your vision for the community.





# Policy Validation Application

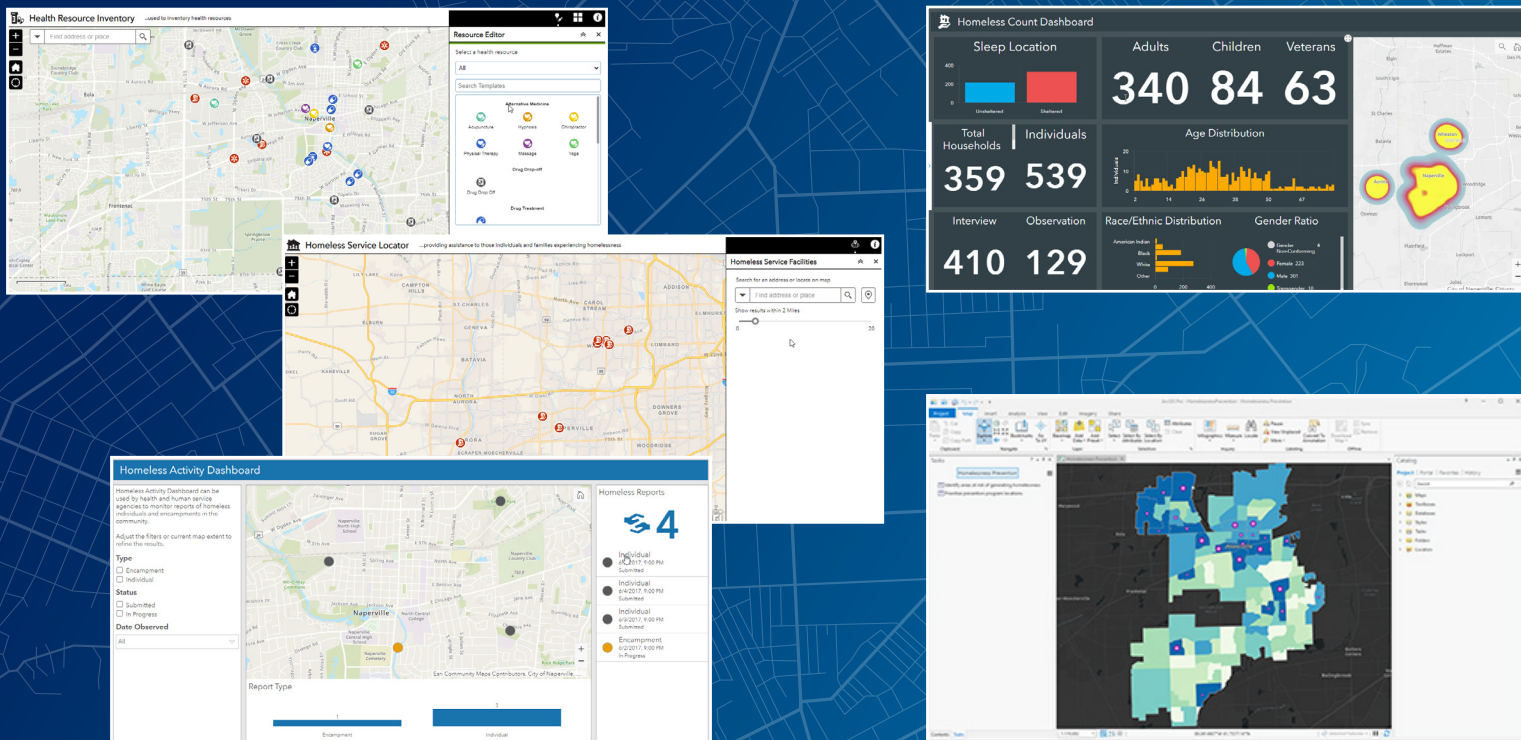
The Policy Validation Application (PVA) is a web-based application designed to extend the capabilities of ArcGIS Urban and support advanced urban planning workflows related to policy validation. A policy can be any course of action defined to address a problem a city faces, such as homelessness. For example, the PVA could be configured to identify suitable parcels based on the current homelessness conditions and potential at-risk population metrics and then allocate interim and/or permanent housing solutions in those locations. With the PVA there can be more than one suitability model using different variables to drive different redevelopment scenarios. The PVA enables cities to be efficient and flexible for this kind of analysis and build-out modeling.



# ArcGIS Community Analyst<sup>SM</sup>

ArcGIS Community Analyst helps you gain insight into neighborhood characteristics, provides smarter market planning and site selection for economic development, and improves project planning by combining demographic, lifestyle, behavioral, and spending data, maps, and reports with location-driven analytics. You can identify the underserved neighborhoods, detect walkable and drivable service areas, pinpoint optimal development sites, find where your target workforce lives, and share the market research across your organization.





# ArcGIS Solutions for Local Government

ArcGIS Solutions configurations are ready-to-use web and mobile applications and maps to jump-start your work in mitigating your community's homelessness situation. These free solutions for ArcGIS are open source, fully configurable, and supported by Esri Technical Support. ArcGIS Solutions for Local Government includes configurations to manage homelessness, including apps such as Homeless Point-in-Time Counts, Activity Reports, Resource Inventory, Services Locator, and Homeless Risk Reduction.



## Partner Solutions

If you need specialized solutions to meet specific requirements, you can leverage our extensive partner community, which provides cutting-edge planning and community development solutions. Let the technology advance as you do.

**Contact your Esri account team to discuss the best partner solution for you. Email [Planning@esri.com](mailto:Planning@esri.com)**





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