

City of Rocky Mount, NC

Reference
Gregory Cotten, (Chief Technology Officer)

Turnaround Time
60 Days

Technical Challenge
High

Prime Consultant
ViewPro

Background

Rocky Mount, North Carolina faces significant development pressure as a result of several economic factors. Housing demand exceeds supply, particularly at a price point affordable to the middle class. City officials identified an updated development code and related ordinances as one (of many) solutions for addressing its housing affordability pressures.

Problem

Advanced GIS analytical tools were necessary for analyzing and communicating how a potential code change or new development impacts neighborhoods. Rocky Mount needed both a technical and communication solution that enabled better analysis and storytelling.

Solutions

Rocky Mount identified ViewPro's proprietary technology as its technical and communication solution. To begin, officials filled out ViewPro's needs assessment to identify specific problems ArcGIS Urban can help solve. The next step was to produce an ArcGIS Urban model. This required converting traditional 2D data, such as land-use designations, floor-to-area ratios, and building heights into 3D data. Staff at ViewPro incorporated other Esri software, including ArcGIS Pro, CityEngine, and 3D Analyst to achieve the desired model.

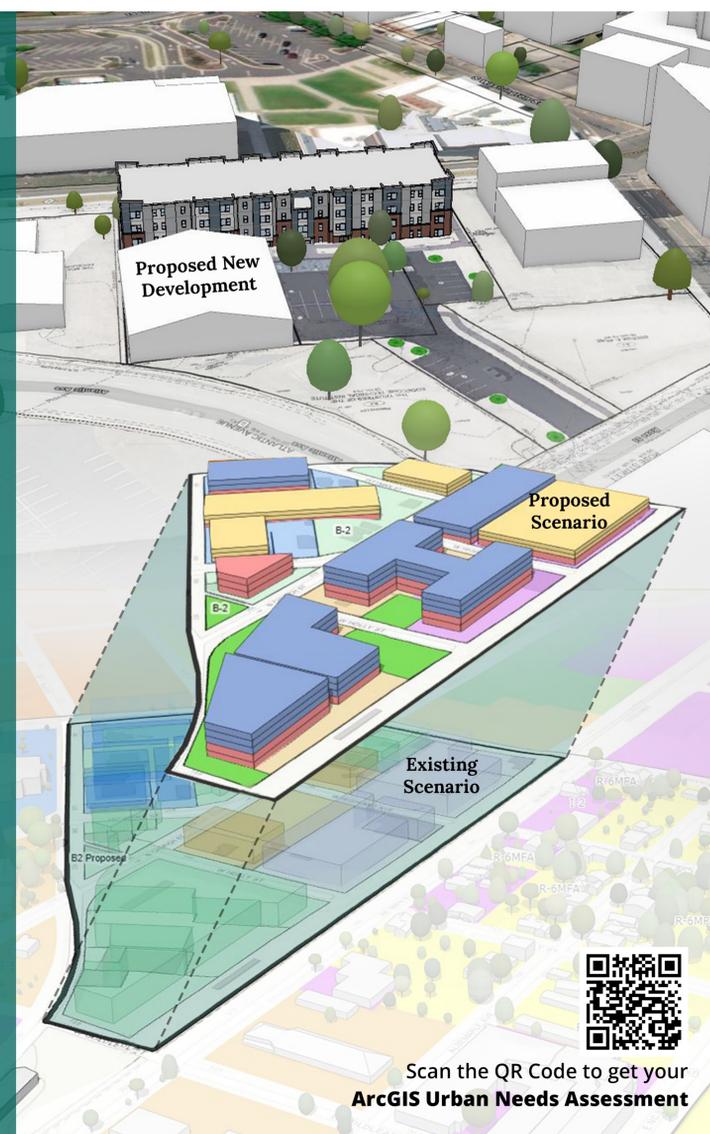
Rocky Mount's new tool simulates code changes, demonstrating how a zoning variance to reduce a building's setback and floor-area ratio will affect a proposed

Evaluate New Project Proposals

Study Area	
Population	877
Households	474
Jobs	2,548
Parking spots	2,810

Build Development Scenarios

Space use in scenario	
total new floor area: 1.95M sqft	
GreenSpace	97,532 sqft
OFF	768,633 sqft
RES_MF	418,078 sqft
RET	664,276 sqft



development project and neighboring parcels. An uproar from residents against a new development – no matter how much it can address Rocky Mount's housing affordability problem – will doom a project.

Thanks to their new ArcGIS Urban model, Rocky Mount officials can now demonstrate – through high quality visualizations – how a proposed building, like an apartment building, fits within the surrounding neighborhood. It is now possible to see how increased densities impact an existing neighborhood full of single-family homes. This accuracy of predictive analytics leads to a more informed discussion and decision-making process.

Testimonial

"Rocky Mount leverages the ViewPro team to better position the city en route to becoming a smarter city by using Esri based cutting-edge technology toolsets with ArcGIS Urban," said Gregory Cotten, the city's chief technology officer.



Esri Software Used



Esri Technical Specialties

GEOZONE

ViewPro Product Used