

VISUALIZING WHAT-IFs

How Michael Baker is helping community stakeholders better imagine their sustainable, connected transit network options with new technology

It's one thing to tell community constituents they have three options for establishing a more connected public bus system in their community. It's another thing altogether to let them see for themselves – at the push of a few buttons – which option would prove best for each of them.

Working with the city of Richmond, Va., and its residents, a team of planning experts from Michael Baker International over the past year has been assisting in the redesign of the Greater Richmond Transit Company's bus system to create a more connected and sustainable transit network. The Michael Baker team partnered with the city and Jarrett Walker + Associates to engage in a collaborative effort with city leaders and commuters to consider several concepts for redesigning bus system operations.

The team presented three options for a new transit program – a familiar model, a high-ridership model, and a high-coverage model – and laid them out for stakeholders to consider. But the team didn't just roll out routing maps and proposed stops and schedules to educate the community. Starting with traditional isochrones maps, which are maps that show connecting points, routes and times, the planning team developed a first-of-its-kind interactive computer tool driven by geographic information system technology.

Consequently, city officials and commuters could type in their own addresses and other personalized information or simply "click a place" to see how each option would affect their own commutes to and from home, work and other points of interest within Richmond. Constituents could use the interactive isochrones map, participate in in-person meetings and vote on the concepts via an online or paper survey. The results of the survey ultimately will directly impact the implementation plan and proposal to be developed by the Michael Baker team as phase three of the project.

"This tool is the first of its kind in the industry and has been a major

asset to the project overall," says Scudder Wagg, project manager and senior planner from Michael Baker's Richmond office. "Our team needed a unique way to visually demonstrate the potential transit options to the community so they would be empowered to make an informed decision on the direction of the plan."

The team developed the tool to allow residents and city leaders to personalize the transit options to their everyday activities. Of course, the Michael Baker team also will be able to utilize this new innovation to help guide other communities looking to improve their transit systems.

"It's an approach that ensures the future system will meet the needs of the community, keeping people and places connected," Wagg says.

The project began with phase one in January 2016, with phase two running from June to mid-September. The final phase of the project began in October with the drafting of the proposal and seeking City Council support for

implementing the plan in early 2017. Michael Baker also has been contracted by the City of Richmond for the design of the new Pulse Bus Rapid Transit.

"This project is a great opportunity for the community and city leaders to work together on an important initiative," Wagg says. "Keeping residents engaged and giving them an active voice throughout the process truly demonstrates our commitment to the community."

