



Visualizing Transportation and Development

3D Models of Transit-Oriented Development and Highway Redevelopment

Location: Golden, Colorado

Partners: Placeways, LLC; Orton Family Foundation; City of Golden

Context: Golden, located west of Denver, is a town of about 20,000 people. Nestled in the foothills of the Rocky Mountains with high accessibility to outdoor recreation and open space areas, it boasts historic character, a healthy economy, and a high quality of life.

The Regional Transportation District of Denver has an ongoing initiative called FasTracks that is extending transit infrastructure and light rail throughout the region. The initiative's current project called the "Gold Line" is a light rail line planned to terminate three miles away from downtown Golden. This new terminal caused Golden planners to begin considering the possibility of a Transit-Oriented Development (TOD) that could be built around the station.



In addition to considering the TOD, planners were also curious about another possibility of a phased redevelopment of nearby South Golden Road. The current road is a commercial highway strip, but planners were interested in the possibility of gradually replacing the low-rise commercial buildings and parking lots with a "Main Street" design that increased density, walkability, and the mix of uses, as well as pulling buildings facades closer to the road.

Both the TOD and the South Golden Road Corridor redevelopment were seen as credible, but still hypothetical test cases for some new approaches to community-informed site planning in Golden.



Working with the Orton Family Foundation and others through an initiative called Golden Vision 2030, the City asked Placeways to develop CommunityViz® 2D and 3D models of the conceptual designs for use in a public workshop.

Project Description: Planners identified four areas as potential TOD sites. Each site had its own pros and cons. For example, one of the sites was in a designated open space area, two were on the far side of a major highway from the station which would require building a pedestrian bridge, and another would require relocating part of a cemetery. In order to weigh the trade-offs and visualize what each area could become, Placeways developed a CommunityViz comparison analysis that included four scenarios (one for each site). The analysis provided a variety of traditional planning indicators measuring economic, social, and environmental impacts for each site.

During the public workshop, attendees were shown all four CommunityViz scenarios, with Scenario 360™ displaying objective impacts and 2D maps, and Scenario 3D™ showing 3D scenes. Participants were given

keypads (“clickers”) that allowed them to poll in their thoughts about the four scenarios. The polling questions asked for opinions on the character of each scenario and its impact on community values. The results gave planners a good understanding of the public’s subjective reactions to each scenario to weigh alongside the objective indicators.



For South Golden Road, Placeways used Scenario 3D to develop an interactive 3D scene of the main street concept to help participants visualize what the redesign could look like. It would represent a radical departure from the existing development, so the visual aids were particularly helpful. The model showed various building options at one-, two-, and three-story levels, as well as a three-story tiered model. The building models were based on similar nearby projects, which made them seem more familiar and realistic. At the workshop, attendees were given a virtual experience of walking down the street, looking around, and checking sight lines to nearby mountains. The presenter could also turn on and off design features such as bike lanes and grass strips. Participants used keypads to register their preferences for the various designs.



Technology and Tools: CommunityViz Scenario 360 and Scenario 3D, ArcGIS, Google Sketch-Up, and TurningPoint Response Cards (keypads).

Outcomes: These two exercises were designed and conducted primarily for educational purposes. Golden’s planners learned some methods for approaching community engagement regarding subjective opinions for developing comparative scenarios. This exercise showed how concepts and visuals could be presented in ways that made sense to a general audience, giving them the necessary tools to

make informed opinions about potential proposals. The exercise also helped both planners and the public think more deeply about the possibilities that could exist in the future of Golden, and how to approach decisions about them when the time comes.

KEY LINKS

- CommunityViz
<http://www.placeways.com/communityviz>
- Placeways, LLC
<http://www.placeways.com>
- City of Golden
<http://ci.golden.co.us>