Abstract

"Various Uses of Color in 3-D Visualizations to Demonstrate Traffic Operations to Decision Makers and the Public"

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As 3-D visualizations become more popular, decision makers and the public are increasing called upon to interpret these visualizations to select one of a set of alternative development proposals. These alternatives often have different impacts on traffic operations. The effective use of color in these visualizations can aid non-engineers in understanding complex traffic operational differences among proposals.

This presentation will demonstrate various ways that color was applied in 3-D animations of simulated traffic operations to explain differences in traffic conditions among proposals. These include both presentations to the public and to selected decision makers. These presentations dealt with a wide variety of issues including the effects on traffic operations of:

- different land-use proposals
- different levels of police enforcement of High Occupancy Vehicle lane use restrictions
- alternative configurations for high-speed Electronic Toll Collection at toll plazas.

These presentations include both rendered and real-time visualizations. The criteria for color differentiation and color selection in each case will be explained. The audience will be able to decide for themselves the effectiveness of these selections. The actual outcome of each of these presentations will also be explained.