Dr. Richard Pain
Safety Coordinator
Transportation Research Board
2101 Constitution Avenue
Washington, D.C. 20418
City, State Zip Code



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Dear Dr. Pain

The following is the Abstract as requested for the International Visualization in Transportation Symposium & Workshop, scheduled for Spring 2006 in Denver, CO:

## Multimedia use in visualization of Transportation projects, from project pursuits to client reviews and public information

Written by Jesse K. Miguel, AIA, NCARB - Project Manager - Visualization Services, HNTB Corporation

Visualization of transportation projects, consisting of 3D modeling and animation, even real-time, is the typical "wow" factor in illustrating what proposed projects would look like. Visualization is often the key differentiator to show the selection panel for a major project pursuit, clients and major stakeholders for design reviews, and finally the public to understand, beyond the standard engineering "blueprints" what the proposed designs are to look like. Visualization, however, is only part of a multimedia package to really illustrate the projects; examples include interactive CD-ROMs, web sites, and part of a DVD video production. These various media can become part of the final package in delivering visualization effectively for winning projects and for conveying a clear message of the design intent to the clients, stakeholders, and the public.

The following are three HNTB visualization projects; one a major project pursuit win and two projects used for client design review and later for use in public meetings and for their respective web sites.

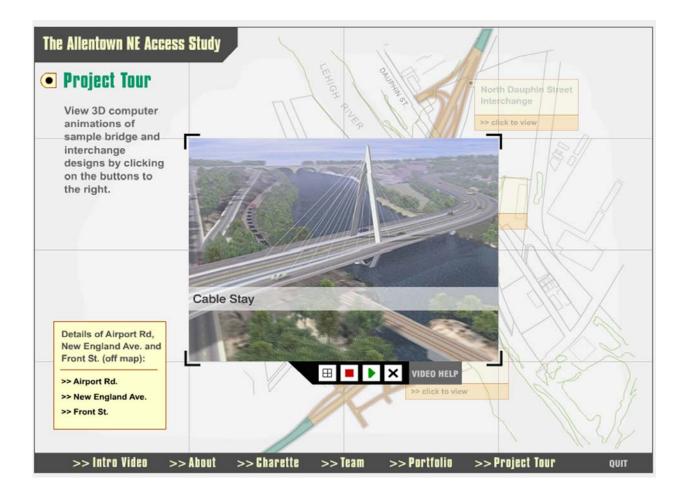
1. American Parkway – City of Allentown, PA and Pennsylvania DOT - HNTB visualization and multimedia for winning a \$70 million signature bridge and transportation improvement project. Key involvement included strategy "war room" meetings that were videotaped, coordination with the various key HNTB staff and other firms as part of the Allentown Alliance, working on proposed design alternatives resulting in modeling and animation of the alternatives, producing the interactive multimedia CD that "brought to life" the concepts developed for the project, follow-up with the client for additional images, with special thanks and awards for the project win and interactive CD.

- 2. Detroit Lakes TH-10 Highway City of Detroit Lakes, MN and Minnesota DOT. This client requested visualization over several years, starting with an aerial still image photomatch of the proposed design of the relocated TH-10 and BNSF rail line, followed by requests for updates and revisions to the aerial image photomatch. HNTB was later asked to assist MinnDOT's in-house visualization group, taking their 3D model to revise and refine additional updates in a short timeframe for stills and animation of the proposed BNSF grade separation at Roosevelt Avenue. HNTB ultimately produced a full feature video for public information (video product including script, narration, video clips, visualization stills, animation, construction sequencing).
- 3. Improve I-70, Missouri DOT . HNTB has produced the web site for MoDOT (www.improveI70.org) for the study of improving the I-70 Corridor across Missouri, running east –west from Kansas City to St. Louis. Visualization within the web site illustrated interchange studies, construction sequencing of the proposed widening, single-point urban interchange (SPUI), roundabouts, and access management. Latest visualization illustrated the I-70 Columbia Corridor in central Missouri; discussing procedures of the project, including coordination with MoDOT and CH2MHill, previsualization with ArcScene, use of HNTB's TrueViz™ Transport for bringing in CAD data to visualization software, final production of the six animation clips, and rendering of high resolution still images for public meeting displays.

Attachment: images of the respective HNTB projects

Best regards,

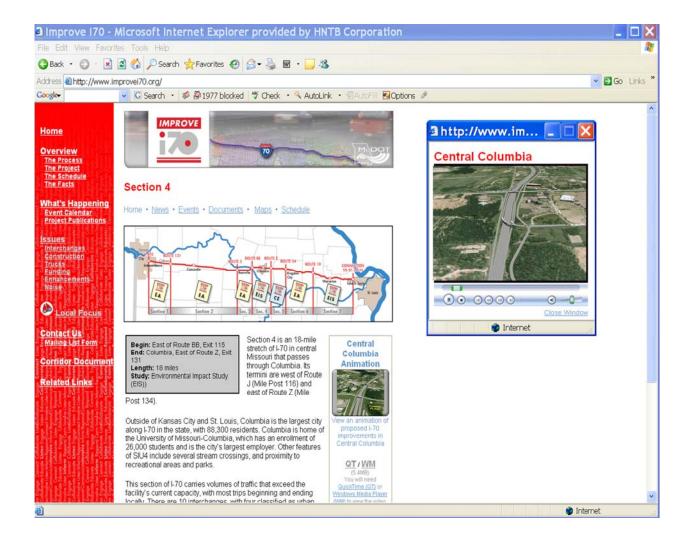
Jesse K. Miguel, AIA, NCARB Project Manager – Visualization Services HNTB Corporation



1. American Parkway – City of Allentown, PA and Pennsylvania – sample of the interactive multimedia CD-ROM used in the proposal for a project win.



**2. Detroit Lakes - TH-10 Highway - City of Detroit Lakes, MN and Minnesota DOT -**still image of proposed grade separation of TH-10 and BNSF railroad over Roosevelt Avenue.



3. Improve I-70, - Missouri DOT – screen image of the web page at <u>www.improveI70.org</u>, illustrating the Columbia, Missouri area and the animation clip.