VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING
“REAL MINNESOTA EXAMPLES”

23rd Annual CTS Transportation Research Conference

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MAY 23, 2012
Visualization is the visual representation of proposed project alternatives and improvements and their associated impacts on the surroundings.”
- NCHRP 361

PRESENTATION OUTLINE
- Types of visualization tools
- “Real Minnesota Examples”
  - Graphic methodology
  - Benefit to project
  - Approximate level of effort
- Potential applications
WHY USE THESE VISUALIZATION TOOLS?

- Enables stakeholders and the public to understand transportation concepts and proposed solutions
- Allows complex information to be simplified
- Can highlight or reveal “hidden” infrastructure that is not easily portrayed in traditional graphic methods
- Technology is rapidly making it more efficient to create powerful visualization graphics
- A picture is worth a thousand words!
- An animation is worth millions!
ANALYSIS, DIAGRAMS, AND SECTIONS

TRANSPORTATION INFRASTRUCTURE

STREETSCAPE PLANNING AND DESIGN

BEFORE AND AFTER PHOTO

ILLUSTRATIVE PERSPECTIVES

TRAFFIC SIMULATION

VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

Concrete Sidewalk
Street Tree
Boulevard Pavement
Tree Opening (Tree G
Groundcover Planting
Metal Fence Shown)

Moisture Barrier
Structural

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CEDAR RIVERSIDE STREET SECTION
Minneapolis, MN

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MANUAL FOR STREET TREE & BOULEVARD DESIGN
Minneapolis, MN

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MIXED USE ZONING
Moorhead, MN

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CENTRAL AVENUE PEDESTRIAN BRIDGE
Columbia Heights, MN
CENTRAL AVENUE PEDESTRIAN BRIDGE
Columbia Heights, MN

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ROBERT STREET PEDESTRIAN BRIDGE FEASIBILITY
West St. Paul, MN

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ROBERT STREET PEDESTRIAN BRIDGE FEASIBILITY
West St. Paul, MN
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TH101 FLYOVER
Rogers, MN

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TH 41 RIVER CROSSING PHOTO VISUALIZATION STUDY
Chaska, MN
TH 41 RIVER CROSSING PHOTO VISUALIZATION STUDY
Chaska, MN

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LAFAYETTE BRIDGE
St. Paul, MN

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TH 610/ZACHARY LANE
BIRD’S EYE GRAPHIC
Maple Grove, MN
DRESDACH INTERCHANGE
I-90 Crossing over the Mississippi River
MnDOT & WisDOT
DRESBACH INTERCHANGE
I-90 Crossing over the Mississippi River
MnDOT & WisDOT

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VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

13TH STREET PEDESTRIAN IMPROVEMENTS
Minneapolis, MN

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ARterial Rapid bus Transit
Metropolitan Council
BROADWAY AVENUE
Forest Lake, MN

VISUALIZATION TOOLS FOR
COMMUNICATION & DECISION MAKING
Visualization Tools for Communication & Decision Making

Analysis, Diagrams, and Sections

Transportation Infrastructure

Streetscape Planning and Design

Before and After Photo

Illustrative Perspectives

Traffic Simulation

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VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

BROADWAY AVENUE
Forest Lake, MN

BEFORE
May 23, 2012
VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

BROADWAY AVENUE
Forest Lake, MN

AFTER

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84TH ST. CORRIDOR
Bloomington, MN
VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

SHINGLE CREEK LAND USE STUDY
Brooklyn Center, MN

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VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

63RD AVENUE/ BOTTINEAU BOULEVARD
LAND USE & TOD PLAN
Hennepin County

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VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

DRESBACH INTERCHANGE
I-90 Crossing over the Mississippi River
MnDOT & WisDOT
VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

FARGO-MOORHEAD AREA DIVERSION RECREATION AND USE MASTER PLAN

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FARGO-MOORHEAD AREA DIVERSION RECREATION AND USE MASTER PLAN
VISUALIZATION TOOLS FOR COMMUNICATION & DECISION MAKING

ANALYSIS, DIAGRAMS, AND SECTIONS

TRANSPORTATION INFRASTRUCTURE

STREETSCAPE PLANNING AND DESIGN

BEFORE AND AFTER PHOTO

ILLUSTRATIVE PERSPECTIVES

TRAFFIC SIMULATION

SRE Consulting Group, Inc.

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LAKE ST./ SUPERIOR BLVD.
Wayzata, MN

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CSAH 2
(BROADWAY AVE.)
Forest Lake, MN

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POTENTIAL APPLICATIONS

- Project management meetings
- During the design process
- City council meetings
- County board meetings
- Public open houses
- Project newsletters, project website
- YouTube channel
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THANK YOU!

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