

Elevating Traffic Animations Without Breaking the Bank

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PRESENTER



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01 Why Elevate Traffic Animations?

02 What are the Challenges to 3D Animations?

03 What are Typical Techniques for 3D?

04 Need 3D: Use LumenRT

01

**Why Elevate Traffic
Animations?**



Photo: Adam Lynch

Why make your model 3D?
Colorado National Monument

Typical Decision Variables?

- Audience
 - Who is the animation for?
- Existing Terrain
 - Is it hilly or flat?
- Proposed Terrain
 - Are there cut & fill sections?
- Interchanges
 - Are there bridges & ramps
- Budget and Scale
 - How much do I need (and for how much)?



Photo: Adam Lynch

Other Factors?

What does my project look like with:

- Lighting Conditions
 - Sun glare
 - Nighttime
 - Tunnel lighting
- Weather Conditions
 - Rain
 - Snow
 - Fog



Added Benefits?

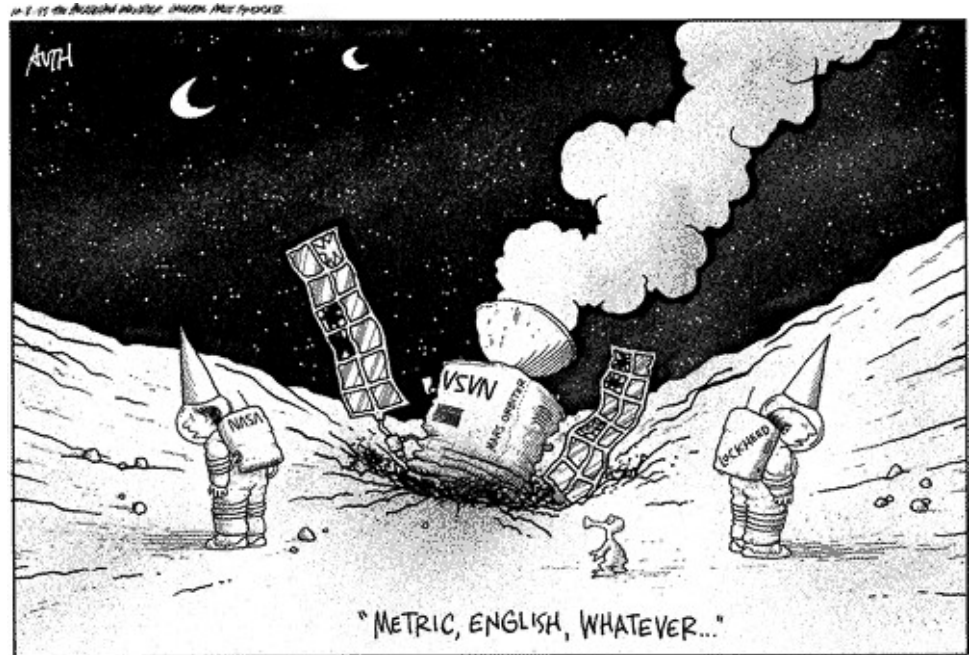
- Reinforcement that your design works (in all dimensions)
- Better communication with:
 - Clients
 - Stakeholders
 - Design team

“Now there are more than just videos!”



Photo: Adam Lynch

02 What are the Challenges to 3D Animations?



What are the challenges to 3D animations?

Planning: It reduces cost!

- What is the animation for?
 - Define decision variables
 - Key elements to show
- What is the area of interest?
 - Minimal area of focus
 - Do you need to develop the entire city?
- What are the camera angles?
 - Develop a storyboard
 - Static vs. dynamic views
 - Develop more outside of area of interest?
- Is the conceptual design complete?
 - Minimal design changes desirable



03

**What are Typical Techniques
for 3D?**

What are Typical Techniques for 3D Traffic Animations?



3DS Max
Top Tier?



With Vissim 3D Mode
Most Cases?



Integrated with Vissim
New to 3D market

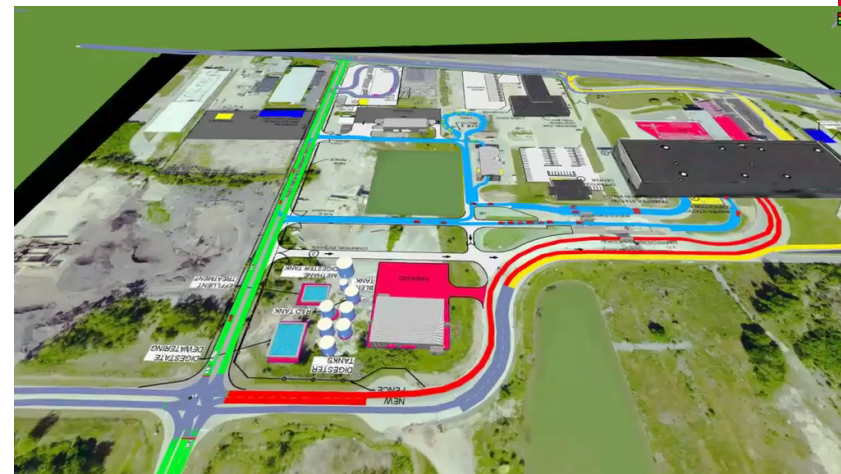
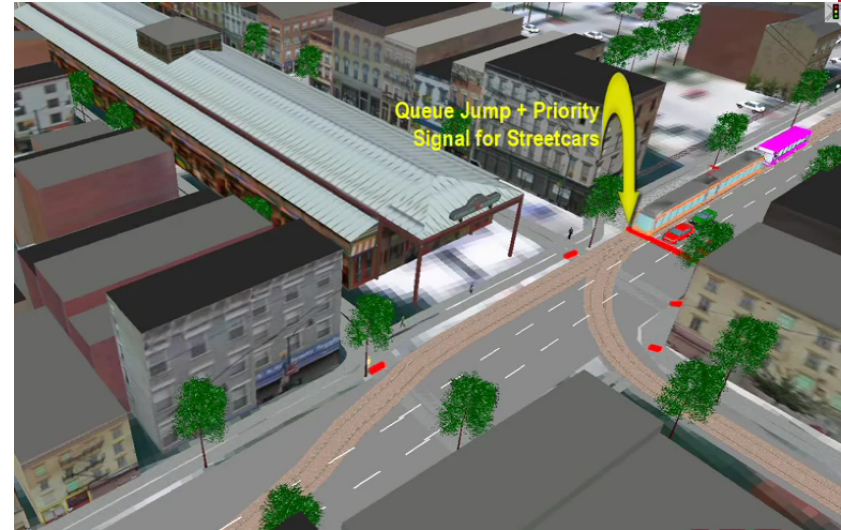
3DS Max



SketchUp Examples



SketchUp + Vissim 3D mode



ConceptStation and Vissim

■ Features

- Sets coordinate system in Vissim
- Exports proposed CS roads into Vissim file
- Imports Vissim ani.txt for LumenRT Traffic

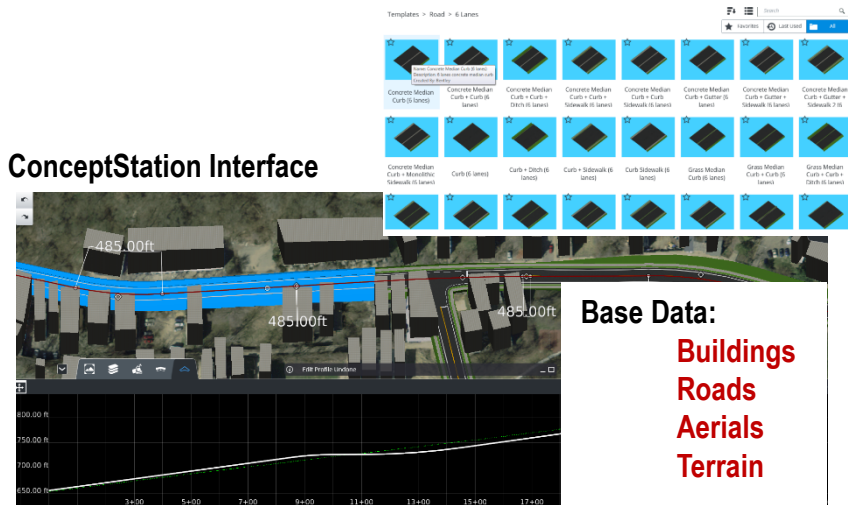
A head start?

■ Issues

- Need to load in your favorite Vissim defaults
- Links/Connectors are not coded properly
- CS templates do not support complex geometries

Lots of re-coding

ConceptStation Interface



Quick Renderings



04

Need 3D: Use LumenRT

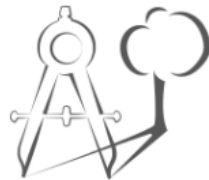
What is LumenRT?

www.Lumenrt.com

Quickly create **images, videos** and **real-time presentations** of
Architecture, Landscape, Urban and Infrastructure Designs



Tell a Better Story



Work in Your Design System



Photographic Environments



Your Projects in Context

Work directly inside your CAD/BIM/GIS system: add characters, vehicles, plants and light to your designs using LumenRT's **built-in content library**. Then press Export and watch your designs come to life!

LumenRT imports content from all 3D applications:



LumenRT plugs directly into Graphisoft ArchiCAD, Bentley MicroStation, Autodesk Revit, E-on Software VUE, Esri CityEngine and Trimble Sketchup:



Advanced Vehicle Traffic Animation Support

Import MicroStation Traffic and VISSIM animation paths for large scale traffic simulations. Additionally, LumenRT 2015 contains enhanced support for jitter-free pavement markings.

LumenRT without Vissim – 3D Surface

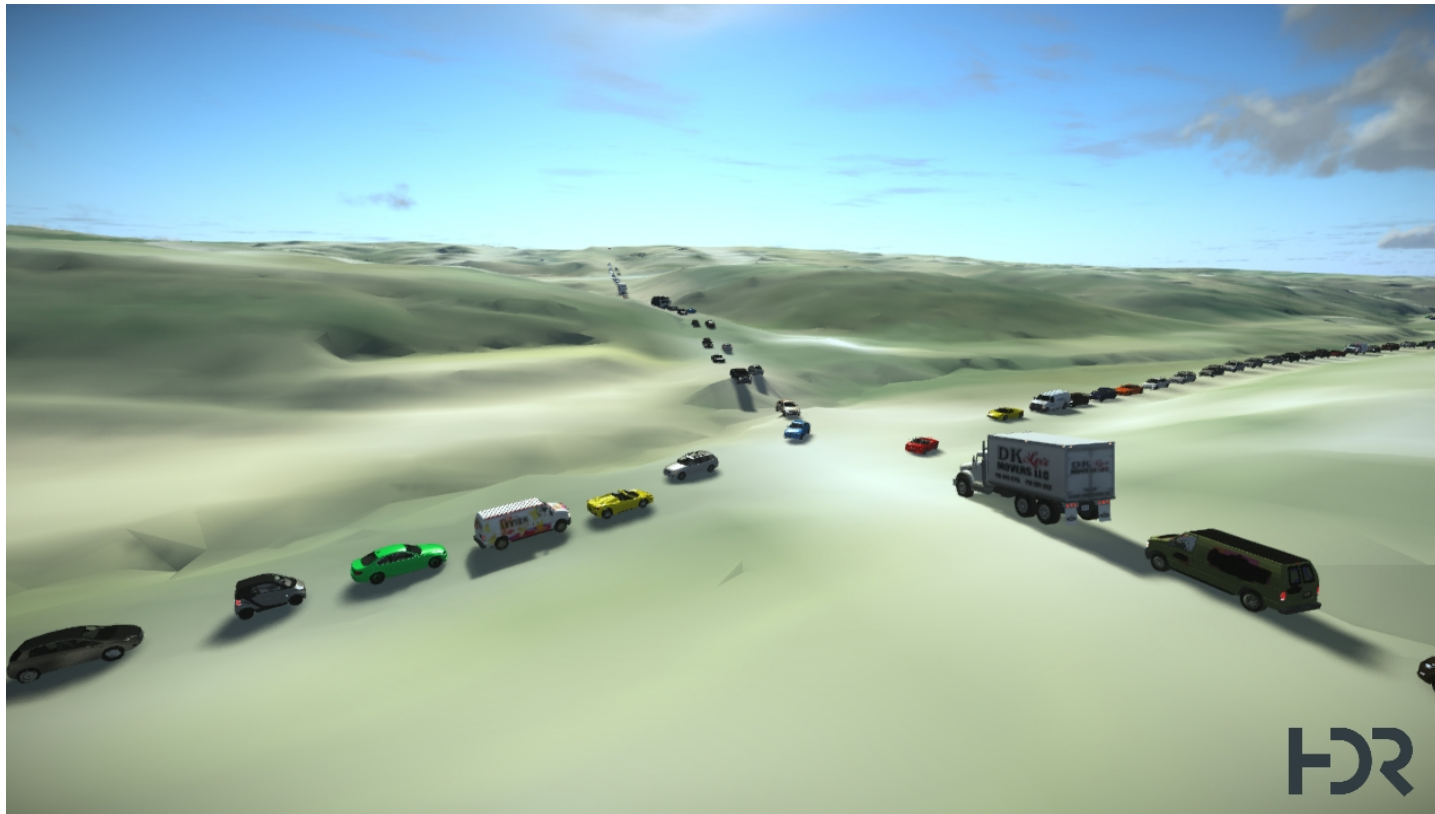


LumenRT without Vissim - 2D Surface



- LumenRT with SketchUp Buildings

LumenRT Example – Out of the Box



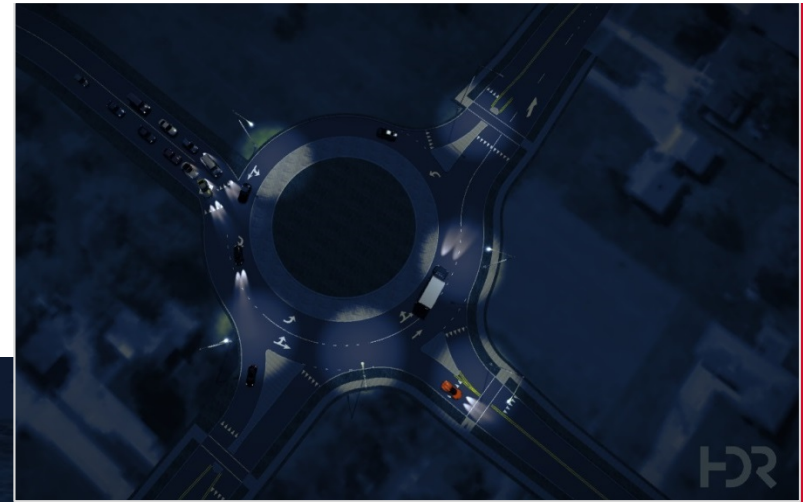
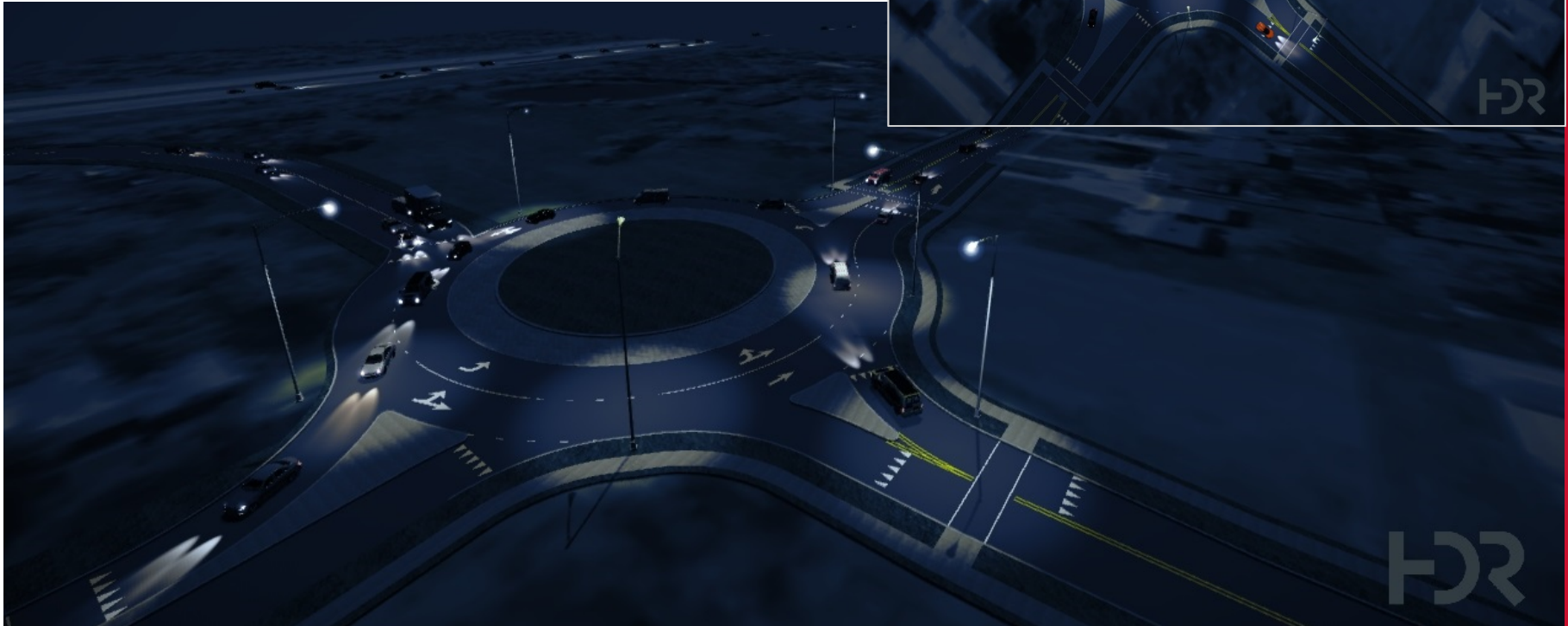
LumenRT Example – Out of the Box with Aerial



LumenRT Example – 2D surface with 3D elements



LumenRT Example – Lighting



LumenRT Example – Lighting



LumenRT Example – LiveCube





QUESTIONS