Eyes on the Street

A Geodesign Process for Evaluating Eyes on the Street Using CityEngine and 3D Analyst
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Why

How

Results

Next Steps
**Representation Model** – parcel boundary; building façade; building height and use; sidewalks, and streets.

**Process Model** – the relationship between building façade; building occupancy, time of day, and ability to see the streetscape.

**Evaluation Model** – the current study area is not maximizing eyes on the street.

**Change Model** – building designs should incorporate additional windows and diversify interior building uses to optimize eyes on the street.

**Impact Model** – evaluate the impacts of each change scenario.

**Decision Model** – because it is a pilot and research project we are the decision makers.
• Shapefiles
  • Parcels
  • Building footprints
  • Sidewalks
  • Streets
  • Zoning
  • Field notes
  • LIDAR

• ArcGIS
  • Select single parcel, building, etc.
  • Prepare export to CityEngine

• CityEngine
  • Import ArcGIS files
  • Model building height and facades
  • Prepare model for ArcGIS 3D Analyst

• ArcGIS
  • Import CityEngine model
  • Perform 3D sight line analysis
  • Export graphic of results
= Building Use (e.g. Commercial)
7 AM – 7 PM
7 PM– 7 AM
7 AM – 7 PM
7 PM– 7 AM
7 AM – 7 PM
7 PM–7 AM
7 AM – 7 PM
7 PM– 7 AM
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