

## Map Analysis, Topic 5 Calculating Visual Exposure

### 18 Line-of-Sight Buffers Add Intelligence to Maps

### 19 Identify and Use Visual Exposure to Create Viewshed Maps

### 20 Visual Exposure Is in the Eye of the Beholder

### 21 Use Exposure Maps and Fat Buttons to Assess Visual Impact

#### Further Reading

● **Keywords for Online Search** — *viewshed, line-of-sight connectivity, calculating viewsheds, visual connectivity, GIS visual analysis, GIS visual impact assessment, visual exposure modeling, weighted visual exposure.*

● **Extended Visual Exposure Techniques** — *three references describing extended techniques involving weighted visual exposure for assessing overall aesthetics and visual vulnerability.*

**Exposure Surface Analysis for Assessing Relative Visual Vulnerability and Aesthetics**

(Basis Posting) — *paper for GeoTech Conference, GeoWorld-Adams Business Media, Vancouver, BC, Canada, March 16-19, 2003.*

[http://www.innovativegis.com/basis/present/GIS03\\_Visual/GIS03\\_Visual.htm](http://www.innovativegis.com/basis/present/GIS03_Visual/GIS03_Visual.htm)

**Use Maps to Assess Visual Vulnerability** (GW Feb 2003) — *BM column discussing a procedure for identifying visually vulnerable areas.*

<http://www.geoplace.com/gw/2003/0302/0302bmp.asp>

**Try Vulnerability Maps to Visualize Aesthetics** (GW Mar 2003) — *BM column describing a procedure for deriving an aesthetics map based on visual exposure to pretty and ugly places.*

<http://www.geoplace.com/gw/2003/0303/0303bmp.asp>

● **Visual Exposure Application Examples** — *two references containing annotated examples using visual analysis in land planning and natural resource management contexts.*

**Determining Visual Exposure** (Basis Posting) — *A land planner needs to determine areas that are highly visible from the road network for consideration in a new development plan for the county. (Uses MapCalc Learner Tutor25 dbase)*

[http://www.innovativegis.com/basis/Senarios/Visibility\\_scenario.htm](http://www.innovativegis.com/basis/Senarios/Visibility_scenario.htm)

**Modeling Visual Exposure from Roads and Houses** (Basis Posting) — *A natural resource manager needs a map that identifies the relative visual exposure of forested lands in a county. This information is important in deciding where visually sensitive activities should and shouldn't be located. (Uses MapCalc Learner Tutor25 dbase)*

[http://www.innovativegis.com/basis/Senarios/VisModel\\_scenario.htm](http://www.innovativegis.com/basis/Senarios/VisModel_scenario.htm)