GIS Facilitates Economic Development Strategies

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Who is Cape Coral?

- Largest City is Southwest Florida
  - 102,286 (census 2000)
  - 140,010 (census estimate 2005)
- Third largest city by area in Florida
  - 115 mi²
  - 400 miles of canals
Where is Cape Coral?

- Southwest Florida
- Across the bay from Fort Myers
- Near Pine Island and Sanibel Island
Downtown Cape Coral

- Not thriving on par with the rest of the community
- Currently under a multi-year redevelopment process led by the Cape Coral CRA
- “will facilitate the emergence of a vibrant urban village where people of all ages will live, work, shop, and be entertained.”
Community Redevelopment Agency

- Agency that allocates tax increment financing for downtown Cape Coral
- “The purpose and intent of the CRA District is to provide a means to enable mixed use urban, compact, densely developed, pedestrian oriented development and redevelopment that is consistent with the City's Community Redevelopment Plan and Comprehensive Plan.”
Community Redevelopment Agency

- Funding source for this project
  - TIF dollars
- The Downtown CRA is a defined district in need of economic assistance
- Lots of interest in redevelopment from developers nationwide
  - MSA is 20th in growth (of nearly 400)
  - The CRA wants to ensure the developments are “right” for the area
CRA’s Initial Plan

- Build a physical model of the CRA so they can evaluate proposed developments to see how they fit in with existing buildings and targeted growth

   *Not the CRA* ->
CRA’s Revised Plan

- Digital Models
  - 3d Analyst
  - High Detail
- Digital vs. Physical
ESRI’s 3d Analyst

- City has an existing GIS
- Allow for generalized modeling of community
- Useful in the initial stages of evaluating a development
High Detail Models

- Later stages of development approval process
- 3d Multimedia group at Schneider
High Detail Models
High Detail Models
The Process

- Collect Data
  - Aerials
  - Contours
    - Elevation range from 0’-14’
  - Building footprint/rooftop outlines
    - from aerials
  - Building heights
    - local survey building to building
  - Other assorted layers
The Process

- Build TIN from contours
- Overlay building footprint layer and extract to heights
The Process

- Incorporate the building heights into the TIN
- Overlay photo
The Process

- Symbolize point features
  - Trees
  - Cars, etc.
Using the GIS Model

- Visualize by use
Using the GIS Model

- Incorporate high-detail models to see how the building will fit in
  - Coronado Terrace
Using the GIS Model

- Quick animations that show a fly-through or drive-through
- Video
Using the GIS Model

- Line of site
  - Can I see point X from point Y?
Using the GIS Model

- Create view shed
Demonstration

- video