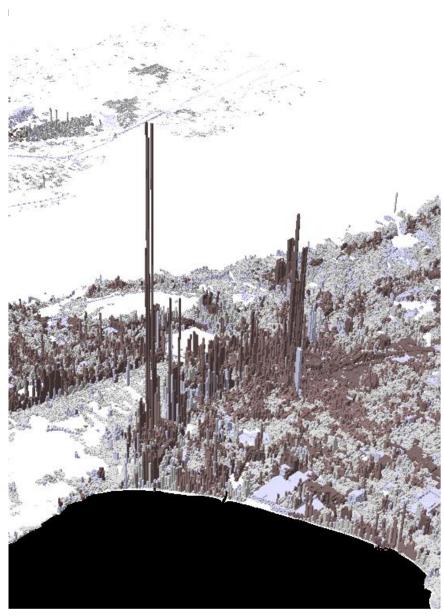
# **Graphic Techniques**



Los Angeles, California - 2004 Household and Employment Density

# Arc Info / Arc View / Spatial Analyst

**PEDESTRIAN MOBILITY MODEL.** Research, Urban Design. Development of an analytical 'cost surface' to simulate pedestrian movement in the region. This was comprised of an access network of streets and paths combined with impedance factors which would inhibit movement, such as arterial crossings, rivers and freeways. Originally designed to explore accessibility to parks and open



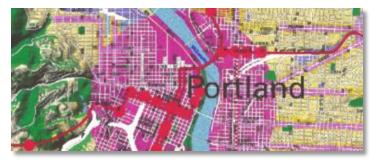
space it was ultimately used to limit parking within walking access of transit stations.

**FEC WALKABILITY ANALYSIS** - Delray Beach, Florida A 'cost-distance' model using ESRI's Spatial Analyst determined 20-minute wa from two proposed stations along the Florida East Coast Railroad proposed commuter rail line. The model measures walking distance along the roadway system rather than the typical circles that are used to represent station area locations. Thus it is sensitive to constraints, such as bridges and network deficiencies. These stations were chosen to contrast a traditional grid pattern and shopping mall developments that do not support pedestrian movement. ArcView Spatial Analyst, Visual Nature Studio.





**2040 GROWTH CONCEPT: CHAMPAGNE EDITION.** *Cartography.* Design and implementation of a shaded relief map for the Oregon Historical Society's "PORTLAND" exhibit. The final display is 9' by 7' illustrating the analysis version of the 2040 plan. This was done entirely in ArcInfo without further enhancements.



## Illustrator



CHICAGO REGIONAL PLAN, CHICAGO, Illinois Chicago Metropolis 2020 – a Committee of the Commercial Club of Chicago. Vision Plan for the 6-county region. Adobe Illustrator



Southern California Compass Blueprint. Adobe Illustrator. Concept plan for the SCAG region.

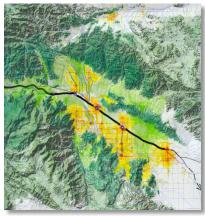


## **Colored Pencil**

#### SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG) - "Bookend" Scenarios



San Bernardino - 5th Ring Scenario

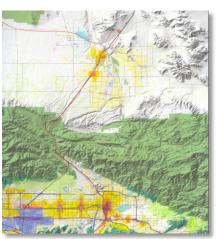


As a starting point in the regional visioning process we developed two extreme concepts to explore high level transportation and land use concepts. The 5<sup>th</sup> Ring scenario added an additional transportation corridor to serve an additional one million people in the high desert of Los Angeles and San Bernardino Counties. The Infill Scenario

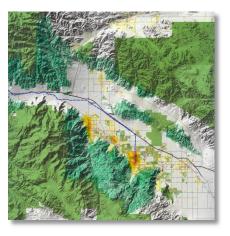
contained the forecast population within the existing urban area adding only transit improvements with very few new roads.

Colored pencil on shaded-relief base map.

Palm Springs 5th Ring and Infill Scenarios

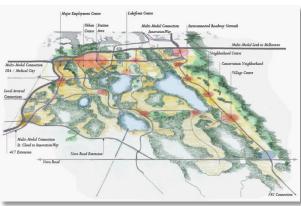


San Bernardino Infill Scenario

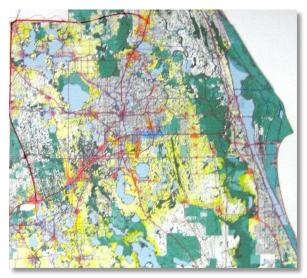


**SUNGROVE CONCEPTUAL PLANS** – Deseret Ranch, Florida Development programs for acreage added to the urban growth boundary in Osceola County. Initial and final designs for the proposed development included urban and neighborhood centers, compact residential areas, recreation and trails system and transportation improvements. ArcScene perspectives with colored pencil. Illustrator for notes and titles.





**EAST CENTRAL FLORIDA REGIONAL VISION** – East Central Florida Regional Planning Council, Orlando, Florida Development and allocation of 4 alternative scenarios for a 2060 Vision for the 7-county region. Initially the concepts were hand drawn to explore details. Subsequently they were allocated, modeled and illustrated for public comment. Colored pencil on ArcView base map.



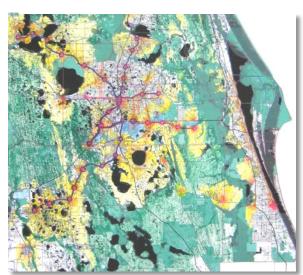
Scenario 1 - Trend



Scenario 2 – Transit Corridors



Scenario 3 - Open Space Preservation



Scenario 4 – Regional Centers

## **Visual Nature Studio**



MT. DORA CITY-WIDE VISIOINING PLAN

In order to update the comprehensive plan for the City and



anticipate future annexations the City of Mount Dora initiated a visioning exercise to engage the citizens and stakeholders. A number of key focus areas have been identified that are considered to be crucial in shaping the City's future. Sketch-Up models were imported into Visual Nature Studio to create this street-level scene. Visual Nature Studio, Sketch-Up



**TRANSIT VILLAGE DESIGN**, Deseret Ranch, Florida. Visual Nature Studio was used to illustrate a potential transit village. ESRI shapefiles were imported and extruded using planning colors to define land uses proposed for the development. The landscape context was supplemented with native Florida vegetation images collected locally and imported into the software package.



**CONCEPT TO FULL MODEL** - These illustrations were developed initially from a hand-drawn sketch plan integrated into the landscape context. After refinements the building footprints were digitized and added to the model. Specific areas will be chosen for more detailed graphic development in SketchUp that will be used to create ground-level imagery. Hand drawn concept, ArcView building footprints, Visual Nature Studio rendering.





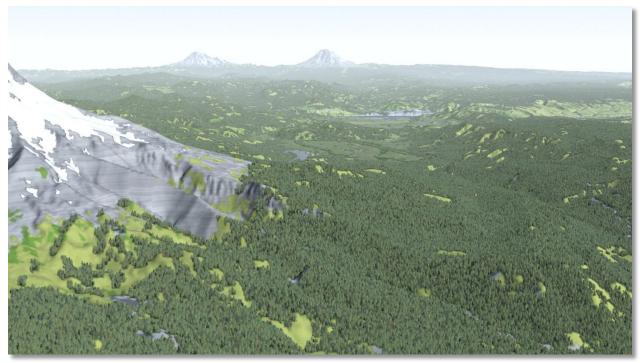


REGIONAL TRANSPORTATION STUDY – Sungrove to Innovation Way, Osceola/Orange County Florida Alignment studies for a proposed expressway in the southeast Orlando region. The alignment process involved integration with new development proposals as well as existing development. Visual Nature Studio.

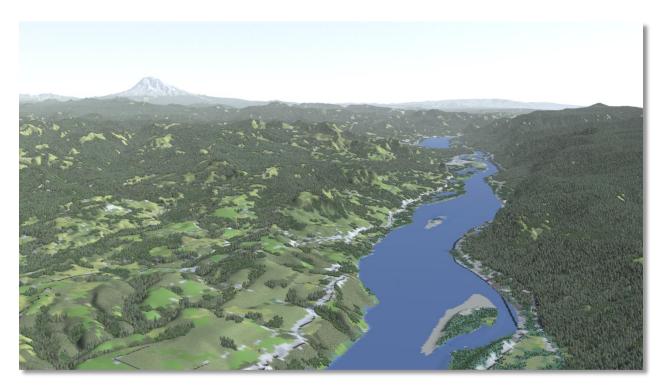




Columbia River Gorge explorations – These images were created in VNS using digital elevation models and 2006 land use/land cover data available from the USGS Seamless Server. It is a combination of image draping and attaching vegetation to specific colors in the image.



Hood River Valley, Oregon - Visual Nature Studio Simulation

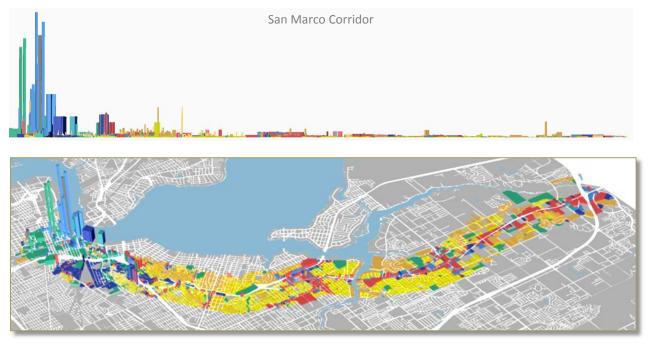


Columbia River Gorge - Bridal Veil / Bonneville Dam - Visual Nature Studio Simulation

### **Arc Scene**

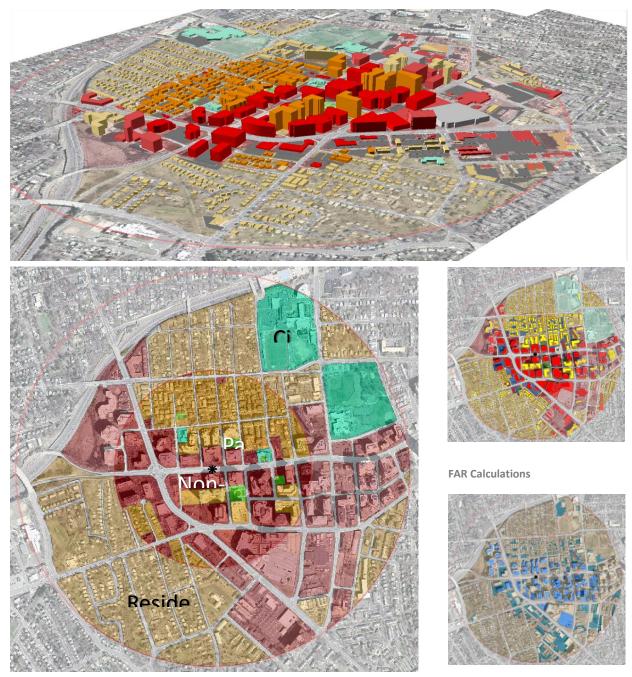
BRT CORRIDOR STUDIES – Jacksonville, Florida Commissioned by Jacksonville Transit Authority to study 5 potential BRT corridors in the region to identify transit stop locations. Subsequent phase will develop conceptual development patterns for station areas.

ArcScene perspectives



**Riverside Corridor** 

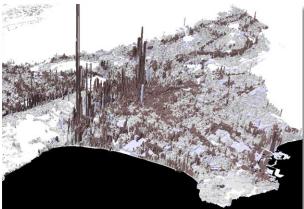
**STATION AREA ANALYSIS – BALLSTON LINE, VIRGINIA – WASHINGTON DC** This was an in-house analysis of nine stations along the Ballston Line to evaluate tipping point densities for successful station areas to support a National Transit Institute training course on TOD planning. Station types ranged from suburban to intensely urban to provide a wide range of densities. Imagery was available online and both surface parking and building footprints were digitized from these. Underground parking was verified on-site. Building heights and uses were determined using Google Earth street views. Employment and housing was estimated from calculate square footage. Summer intern produced the work under my supervision. ArcScene.



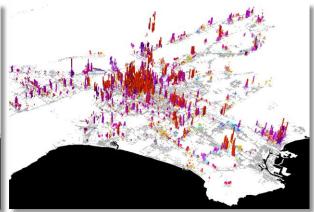
Structured and Surface Parking

**Existing Land Use** 

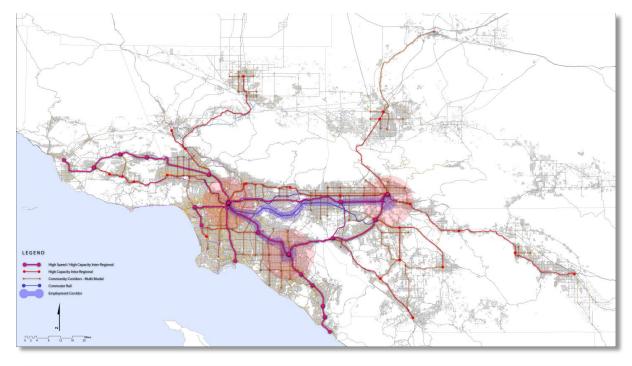
### Arc Scene – Illustrator- Visual Nature Studio



Existing Development - Los Angeles County Darker Color is High Quality Transportation Area



Envision Scenario - New Development in High Quality Transportation Areas



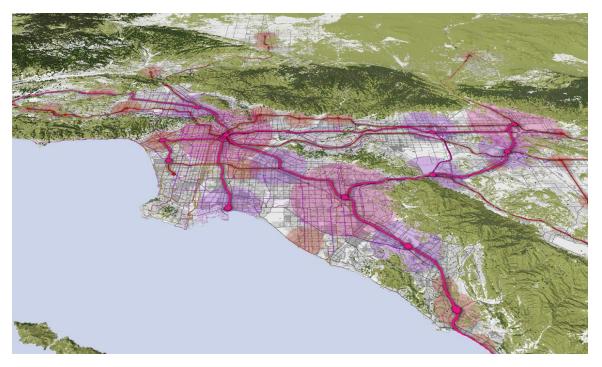


Community Corridors Scenario – Establishes three major centers in the region linked by high speed / high capacity transit. High Capacity transit links sub-regional centers and Community Corridors link en-place population to services and employment centers.



Centers Concept – Balances Jobs and Housing on a sub-regional level.

Community Corridors Strategy



Centers Concept