Smart Growth INDEX® 2.0

A Sketch Tool for Community Planning

What Is It?

Smart Growth INDEX is a GIS sketch tool for comparing alternative land-use and transportation scenarios, and evaluating their outcomes using indicators of community and environmental performance. Sketches can be prepared and analyzed for:

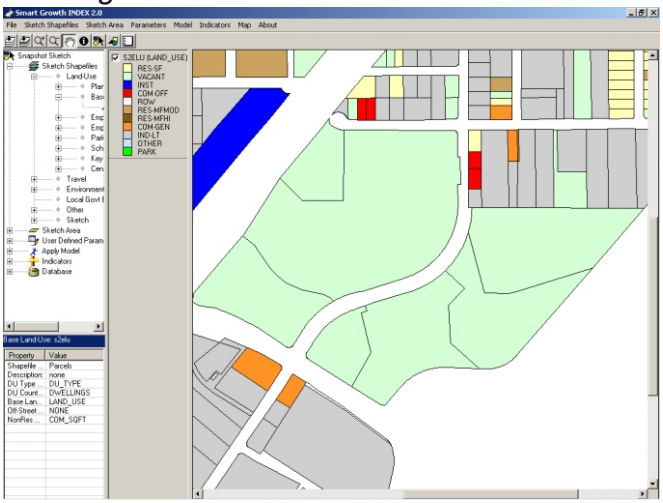
- Existing baseline conditions.
- Regional growth management plans.
- Land-use and transportation plans.
- Neighborhood plans.
- Land development proposals.
- Environmental impact reports.
- Special projects, e.g. brownfield redevelopment.

Smart Growth INDEX 2.0 executes static, or single point in time, analyses that can compare multiple scenarios for the current year or a future planning horizon. The geographic scope of sketches can range from multi-county regions down to single neighborhoods, and users may choose from a menu of 56 indicators for evaluating sketches.

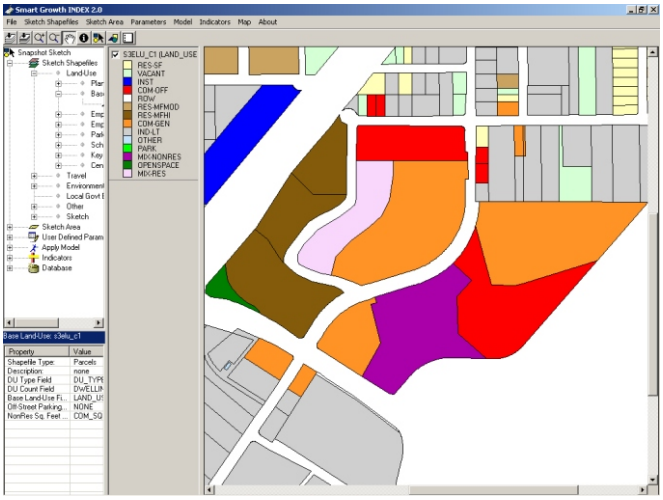
How Does It Work?

1. Define a sketch area that encompasses the analysis site and its surrounding vicinity.
2. From the indicator menu, select those indicators that are relevant to the issues being analyzed.
3. Assemble GIS data to support calculation of selected indicators.
4. Prepare and evaluate a baseline scenario that alternatives can be compared to.
5. Prepare and evaluate as many alternative scenarios as desired.
6. Compare and rank scenario choices using stakeholder weighting of indicator results.

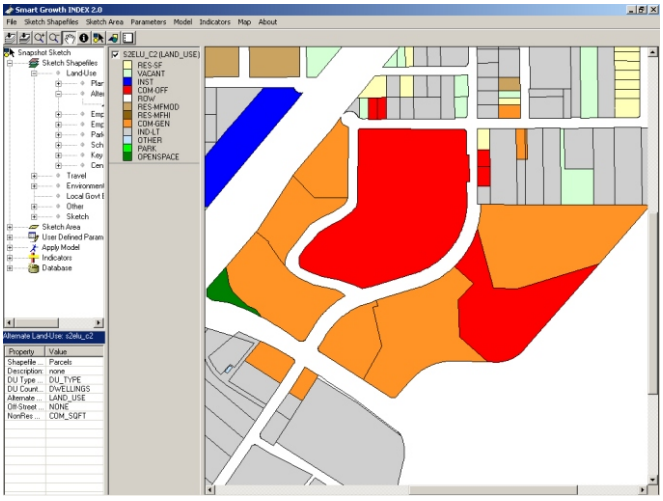
Existing Conditions Base Case



Alternative Plan A



Alternative Plan B



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Inputs

Smart Growth INDEX requires GIS coverages in ESRI shapefile format for:

- Land-use.
- Housing and employment.
- Street centerlines.
- Transit routes.
- Other community features.

In addition to GIS data, users also define various demographic, transportation, resource consumption, and emission parameters for each sketch.

Outputs

Smart Growth INDEX evaluates sketches with a set of 56 indicators that measure such outcomes as land consumption, housing and employment density, proximity to transit, and pollution emissions. Indicator results are expressed both numerically and spatially, so users obtain both tables and maps showing the performance of each sketch.

User Requirements

Once installed, Smart Growth INDEX is suitable for non-technical users with moderate computer skills. Installation and maintenance requires an advanced steward with GIS modeling experience. Smart Growth INDEX requires a 300 MHz or higher PC with 128 MB of RAM.

What Are Its Limitations?

As a sketch tool, Smart Growth INDEX simulates land-use/transportation scenarios in a simplified manner, and should not be solely relied upon for evaluating major investments or documenting regulatory compliance.

More Information

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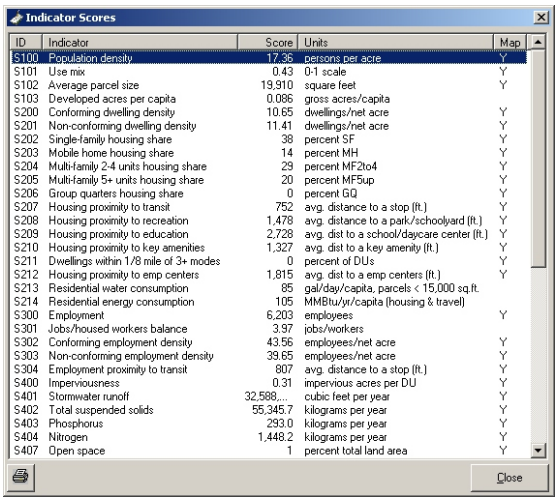
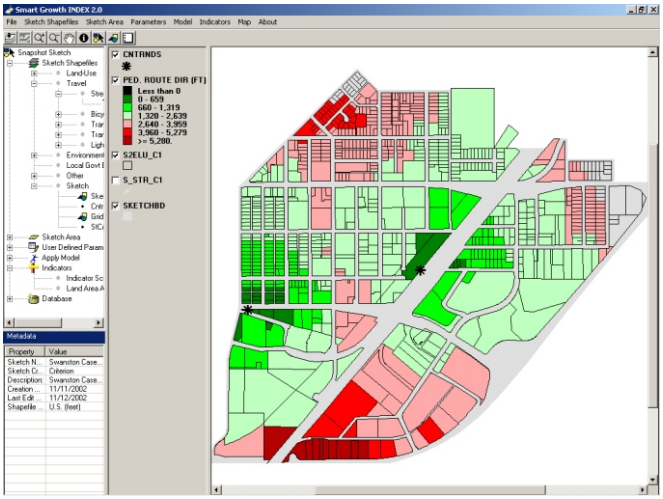
- Eliot Allen, Criterion Planners/Engineers, 503/224-8606 or eliot@crit.com. Also www.crit.com.

Indicator Scores



Indicator Mapping



Stakeholder Weighted Ranking of Alternatives

Developed for the U.S. Environmental Protection Agency by

CRITERION PLANNERS ENGINEERS Portland, OR

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