

# Calculating Infrastructure Needs with Fiscal Impact Models

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# Florida State Mandate

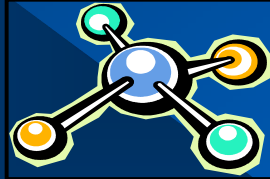
Required for Evaluation and Appraisal Reports (EAR) of comprehensive plans:

*... The financial feasibility of implementing the comprehensive plan and of providing needed infrastructure to achieve and maintain adopted level-of-service standards and sustain concurrency management systems through the capital improvements element, as well as the ability to address infrastructure backlogs and meet the demands of growth on public services and facilities.”*

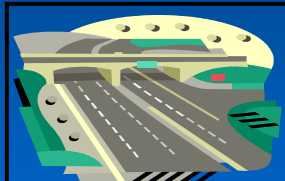
[Florida Statute, Chapter 163.3191(2), and (2)(c)]

# The FIELD Model

**FISCAL IMPACT ESTIMATES**



**OF LAND DEVELOPMENT**



# Design of FIELD Model

- ◆ FIELD is explicitly designed to address the question of financial feasibility of the Comprehensive Plans on the budgets of Hillsborough County, the Cities of Tampa, Temple Terrace and Plant City, and the Hillsborough County School Board, as mandated by Florida Statute.
- ◆ FIELD is designed to easily, dynamically test alternative policy options.
- ◆ FIELD is being designed to handle spatial factors on costs and revenues.

# Peer Review Evaluation

Dr. Robert Burchell, Ph.D. and Co-Director of the Center for Urban Policy Research at Rutgers University led an evaluation of FIELD in April, 2006 that concluded:

- ◆ FIELD scored “Excellent” overall.
- ◆ FIELD “provides reasonable fiscal results.”
- ◆ There are NO “other models more appropriate to the task.”
- ◆ There are NO “other models intellectually more rigorous.”

# Special Problems and Approaches

- ◆ Adopted v. defacto levels of service
- ◆ Existing deficiencies (excess capacities)
- ◆ Impact of policy changes, e.g., LOS
- ◆ Operating cost of facility expansions
- ◆ Spatial factors of costs and revenues
- ◆ Length of planning horizon
- ◆ Debt management considerations
- ◆ Handling inflation
- ◆ Full build-out v. projected growth

# Adopted Levels of Service

**Issue:** Florida Statute requires that financial feasibility consider infrastructure needed to achieve and maintain adopted level-of-service standards.

**Models that use defacto standards (based on actual budgets) tend to underestimate costs, and therefore perpetuate infrastructure deficiencies.**

# Existing Deficiencies (Surpluses)

**Issue: Florida Statute requires that financial feasibility consider infrastructure backlogs.**

**Models that do not include the cost of existing deficiencies or credit for the value of current excess capacity, fail to accurately portray the net fiscal condition.**

# Impact of Policy Changes

**Issue:** When comprehensive plans are not financially feasible, policy alternatives must be considered to remedy the problem. Three basic policy options include: (1) lowering levels of service (LOS), (2) raising revenues, and (3) changing the future land use plan.

Analyzing these policy alternatives is complicated by interdependencies, for example, among LOS, existing deficiencies and potential impact fees.

# Operating Costs of Capital Growth

**Issue:** New capital facilities require added operating expenditures. The recent experience of a newly-constructed Oregon prison sitting empty for lack of operating funds shows the risk of failing to draw these connections.

**Models should explicitly link relevant operating expenditures to their capital infrastructure component.**

# **Spatial Factors of Development**

**Issue: Distance between land uses increases transportation infrastructure costs and response times (& costs) for providing emergency services.**

**Compact development patterns reduce stormwater runoff, lower solid waste collection costs and improve scale economies for other service delivery.**

# Length of Planning Horizon

**Issue:** Fiscal impact analyses explicitly assess whether revenues and costs “breakeven” at some future time. Long planning horizons are more likely to be positive, than short horizons, since infrastructure costs are paid upfront, while ad valorem revenues accumulate over time.

**Models should incorporate replacement costs of all capital infrastructure, and consistently use the same planning horizon from year to year.**

# Debt Management

**Issue:** Debt can be assumed away by modeling a pay-as-you-go approach relative to fiscal impacts of new growth alone, but becomes more complicated when considering existing development, existing deficiencies and estimating potential impact fees.

**Close cooperation with local budget officials is necessary to ensure proper representation of debt considerations.**

# Handling Inflation

**Issue:** Forecasting inflation over 20 or more years is inherently difficult, heroic even. And, it only adds value if: (1) relative prices differ, and (2) the rate of growth varies over the plan horizon.

**Models that assume a constant growth rate over time reveal no additional fiscal effects from the land use plan, only the effect of relative prices, which is not our focus.**

# Full Build-Out v. Projected Growth

**Issue:** DCA generally demands that financial feasibility be based upon a full build-out of the comprehensive plan, but jurisdictions commonly plan at greater densities than are actually built, and resist efforts to downplan.

Using land use policy to induce positive fiscal changes in an environment of excess land use capacity will be ineffective (like pushing on a string).

# Feedback Effects

**Issue:** Traditional fiscal impact models are justifiably criticized for being static, and not considering the feedback effects of the budget and policy decisions that are being modeled.

For example, raising impact fees will increase housing prices shifting some population growth to adjacent counties.

# Credible Fiscal Impact Analysis

To accurately assess the financial feasibility of the comprehensive plan, jurisdictions must:

- ◆ annually update budget numbers with sufficient detail to assess which categories are impacted by growth,
- ◆ incorporate existing deficiencies (and excess capacity) in conjunction with annual concurrency reports,
- ◆ utilize adopted levels of service, not defacto, as set forth in the comprehensive plan and other local statutes, and
- ◆ annually update capital cost estimates in coordination with impact fee analysis.

# Credible Fiscal Impact Analysis

To maintain objectivity, accuracy and credibility, local jurisdictions should engage in an annual process to adopt their model assumptions, so as to reflect their:

- ◆ local budget,
- ◆ adopted levels of service,
- ◆ concurrency (or deficiencies) report, and
- ◆ impact fee analysis.

Any fiscal impact analysis for that jurisdiction should be made using only that model with adopted assumptions for that year.

# Credible Fiscal Impact Analysis

To usefully assess the financial feasibility of the comprehensive plan, jurisdictions should:

- ◆ evaluate alternative locations, patterns and mixes of land uses, to identify more efficient land use alternatives than conventional plans, for example:
  - ◆ to minimize road construction,
  - ◆ to minimize school bus routes,
  - ◆ to minimize storm water runoff,
- ◆ consider compact designs that make private sector development more cost effective and lower the price of housing.

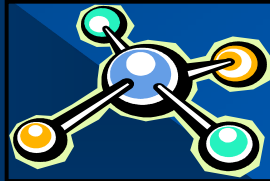
# Credible Fiscal Impact Analysis

To effectively utilize fiscal impact analysis as another growth management tool, the analysis and resulting policy options must be regional in nature.

- ◆ natural regions are based on "laborsheds."
- ◆ uncoordinated policies within regions will be rendered impotent by leapfrogging.
- ◆ development that escapes stricter regulations or higher taxes will create less efficient patterns of development in both the area it eluded and the area in which it located—taxes will be higher in both locations as a result.

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