

Evaluating Land Use Plan Quality

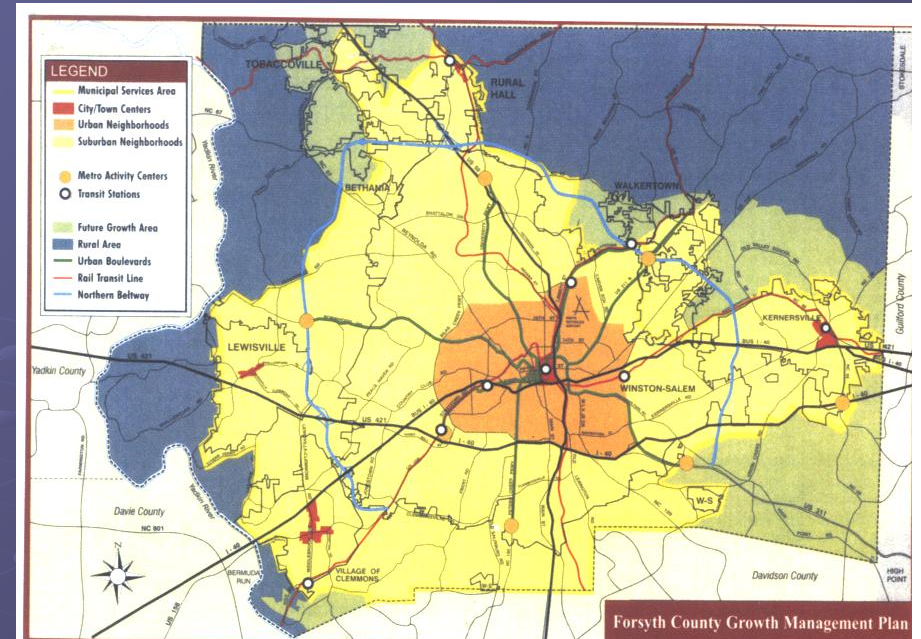
Trans-Atlantic Land Use Conference
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University of North Carolina Chapel Hill
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What makes a good plan?



- Why assess plan quality—increasing plan power
- A systematic evaluation approach—identifying good plans
- Meta-analysis of published work—how do plans perform in the aggregate
- Conclusions & recommendations—future of plan quality assessment

Why assess plan quality?



- Plans are widely used to shape urban form
- Good practice standards are rarely assessed
- Evaluation acts as a learning process
 - Identifies strengths & weaknesses
 - Contributes to power of planning

“A high quality plan provides a clear and convincing picture of the future, which strengthens the plan’s influence in the land planning arena” *Urban Land Use Planning, 5th edition*



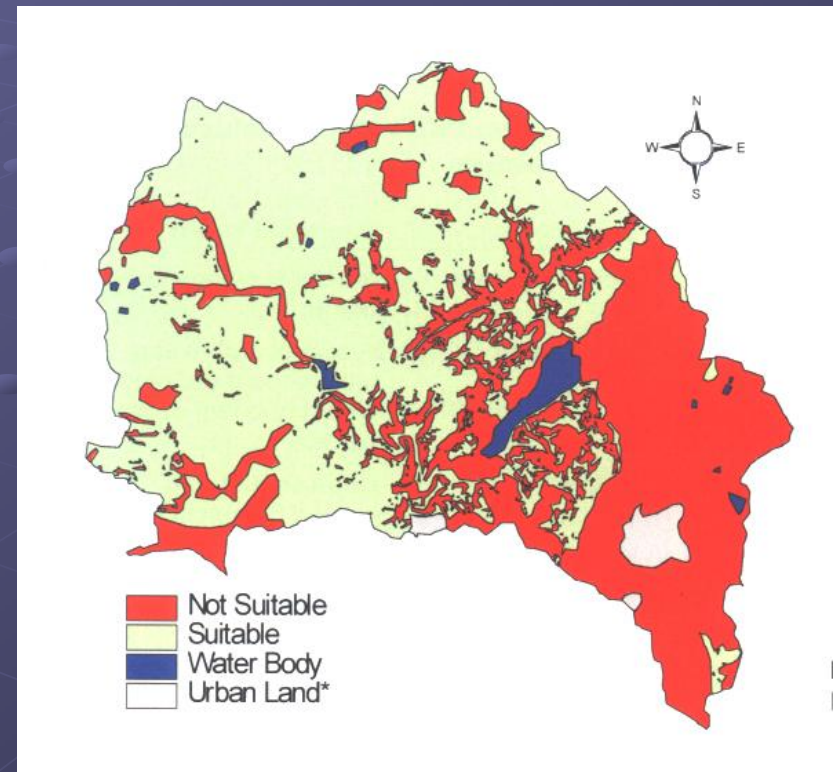
Types of Land Use Plans

1. Areawide Land Policy Plan
 - Mapped general policy districts
 - conservation, rural, urban
2. Communitywide Land Use Design Plan
 - Specific spatial organization of land uses
 - location, type, mix, and density
3. Small-Area Plan
 - Urban areas within a community
 - transportation corridors, CBDs, neighborhoods
 - Open space areas within community
 - watersheds, habitats, farmlands, flood zones
4. Development-management Plan
 - Program of action for plan implementation

Plan Elements

- Issues & vision
- Fact base
- Goals & policies
- Consistency
- Implementation, monitoring & evaluation

*Urban Land Use
Planning, 5th edition*



Soil suitability for bio-retention

Each plan element & characteristic can be evaluated

● *Internal* content & format

- Issues & vision
- Fact base
- Goals & policies
- Consistency
- Implementation, monitoring & evaluation

● *External* scope & coverage

- Organization & presentation
- Inter-organizational coordination
- Compliance

Land Use Element of Denver Comprehensive Plan 2000

- **Vision:** Congruence of land use & zoning, compact development, mobility, urban legacy preservation
- **Land use goal:** Manage growth & change through effective land use policies to sustain Denver's high quality of life
- **Issues:** Rapid growth, infill, balancing new development with neighborhood character

Denver Example Plan Quality Analysis

- **Issues & vision.** Reviewed trends, opportunities, threats
- **Fact base.** Clear population, economy, land use. Vague community facilities, natural environment. Good maps.
- **Goals & policies.** Action oriented.
- **Land use design.** Related to transportation but not water & sewer, land suitability.
- **Implementation & monitoring.** Timeline & responsibilities, but no priorities.

Urban Land Use Planning, 5th edition

Identification of published plan quality studies

● Inclusion criteria for studies

- Presented quality scores
- Reported number of plans evaluated
- Published in peer-reviewed journals & books
- We selected one publication when data set was used more than once

15 Plan Quality Analysis Studies

● Majority:

- Local plans (12 of 15) with focus on hazards (7 of 15)
- Done in USA (12 of 15)
- Cross sectional study (10 of 15)

● Others:

- State & regional plans with focus on hazards, environment, housing, human rights
- Done in USA, NZ, NETH
- Comparative study

1. Burby & May 1997 USA 180 local hazard plans
2. Berke et al. 1997 NZ/USA 23 regional hazard plans
3. Deyle & Smith 1998 18 FL local hazard plans
4. Berke et al. 1999 USA 34 local, 16 regional hazard plans
5. Godschalk et al. 1999 USA 44 state hazard plans
6. Berke & Manta-Conroy 2000 USA 30 local sustainable development plans
7. Berke et al. 2002 NZ 34 local human rights plans
8. Nelson & French 2002 USA 19 CA local hazard plans
9. Brody 2003a USA 30 FL/29 WA local hazard plans
10. Brody 2003b USA 30 FL local ecosystem plans
11. Brody et al. 2004 USA 35 FL local watershed plans
12. Norton 2005 USA 40 NC local coastal plans
13. Brody et al. 2006 USA 46 FL local smart growth plans
14. Termorshuizen et al. 2007 NETH 38 regional ecosystem plans
15. Hoch 2007 USA 36 IL local housing plans

Content Analysis Methodology

- Plans read by 2 readers, who compare notes (quality control)
- Content coded on binary (1 = present, 0 = absent) or ordinal (2 = full, 1 = present, 0 = absent) scale
- Scores summed & divided by total possible score (proportionate)

Meta-Analysis

- Procedure to analyze findings of *groups* of individual analyses
- Overcomes weaknesses of narrative discussions (selective, subjective weighting, misleading interpretation)
- Transforms statistics into standardized scores for comparison
- We weighted means based on sample size & viewed overall patterns

Internal quality findings (means)

● Low:

- Goals (.28)
- Facts (.23)
- Policies (.25)

● Moderate:

- Issue clarity (.48 mean)
- Implementation (.44)
- Monitoring & evaluation (.38)

● High:

- Internal consistency (.63)



External quality findings

● Moderate:

- Organization & presentation (.44)
- Coordination (.46)

● High:

- Compliance (.63)



Conclusions

- Plan quality analysis--accepted tool that will be increasingly used in research & practice
- Meta-analysis reveals--lower quality areas are goals, policies, & fact bases
- Potential future directions:
 - Broader scope—equity, environmental quality, transportation, sustainability, smart growth
 - More sophisticated research applications
 - Possible *requirement* for government plan approval