




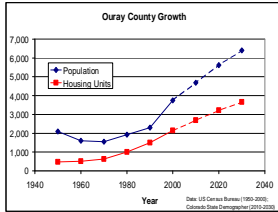
# Build-out analysis of Ouray County: what, why, how?

Presentation to  
Board of County Commissioners & citizens of Ouray County  
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## Ouray County Growth



Year	Population	Housing Units
1940	1,500	500
1960	2,000	800
1980	2,500	1,200
2000	4,000	2,000
2020	5,500	3,000
2040	6,500	4,000

Source: US Census Bureau (1980-2000); Colorado State Geographer (2010-2030)

## Road map

- Background
- What is a build-out analysis?
- What will it provide?
- How is it done?
- Discussion

Introduction    What is it?    What will it provide?    How is it done?

## Background

Studying landscape change and effects


- East River Valley (Gunnison County)
- throughout Colorado, Rocky Mountains, West

Scientists' role

- Conduct policy-relevant science
- Presume that better information leads to better decisions
- Data is transformed through analysis (& synthesis) to information

USDA NRI study  
[http://www.nrel.colostate.edu/~davet/nri\\_clustered.html](http://www.nrel.colostate.edu/~davet/nri_clustered.html)

Values and decisionmaking



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## Build-out analysis

Tool to examine:

- likely future development patterns
- the consequences of land use policies (regulations & incentives)
- use of open space conservation

Allows you to see where, how much (or little) effects of various policies and actions

Essentially, the number of housing units allowed under given assumptions about how development will proceed "in the fullness of time"

Introduction    What is it?    What will it provide?    How is it done?

## Build-out analysis is not

- A panacea
- A crystal ball
- A prescription from the outside

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### Example: Summit County, CO

Demographic growth

Current housing density

Alternative scenarios:

1. Baseline
2. Clustered
3. TDU/TDR
4. Etc.

Effects assessment:

1. # units
2. Acres of ag land and/or wildlife habitat
3. Land use changes
4. Etc.

Natural & Community Values

Introduction    *What is it?*    What will it provide?    How is it done?

Units in 1999 (3121 total)

Current zoning (8303 total)

Housing Units  
• 1 Dot = 1 unit

Lower Blue Basin

Private Land

Introduction    *What is it?*    What will it provide?    How is it done?

TDR (50%) (7404 total)

Clustered (8065 total)

Housing Units  
• 1 Dot = 1 unit

Lower Blue Basin

Private Land

Introduction    *What is it?*    What will it provide?    How is it done?

## Products

- A map showing likely development patterns for each build-out scenario
- Tables summarizing indicators for each scenario
- Visualize patterns and understand effects
- Compare between alternatives
  - Confirmatory or surprises
  - How different are policies?
- Information to help you create a future of your choice

Introduction    *What is it?*    *What will it provide?*    How is it done?

## How is it done?

- 1. Identify & describe scenarios
- 2. prioritize values to protect & identify indicators
- 3. spatial analysis of scenarios and indicators through GIS overlays

Introduction    *What is it?*    What will it provide?    *How is it done?*

## 1. Scenarios

- What are operating assumptions of various land use policies?
  - A. objectives
  - B. Eligible parcels: zoning, size, contiguity
  - C. Conditions: % open space/outlot, clustered, land uses allowed/prohibited, accessory units allowed/prohibited, wildlife friendly fencing, public benefit
- Typical scenarios:
  - Baseline (current zoning)
  - Open space/cluster PUD
  - 35-acre only
- Possible scenarios from Open Lands Preservation PUD discussion:
  - OLP:
    - Objectives: ag land, habitat, visually significant, cultural/historical/etc.
    - 105 contiguous acres: Alpine, High Mesa or Valley Zone ð Basic (1.26 ac) or Premium (1.21 ac); 75% in preserved parcel contiguous and adjacent to other preserved lands
  - Alt. A
    - 35 ac ð 1:17.5 & 25/35 open
  - Alt. B
    - 105 ac ð 1:17.5 with clear public benefit
  - Alt. C)
    - 1:21 ð 1:17.5 & 85% open
- You decide which are pursued, details in assumptions

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## 2. Indicators

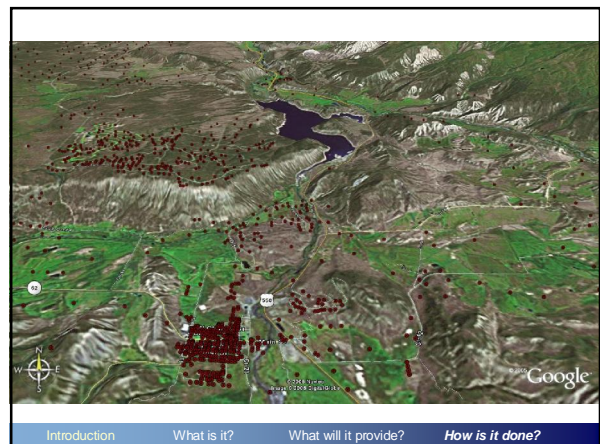
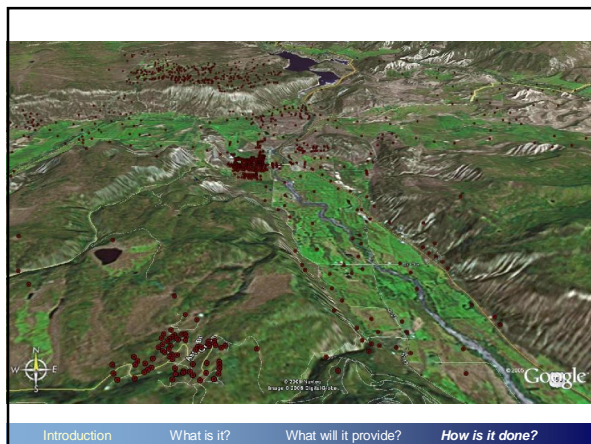
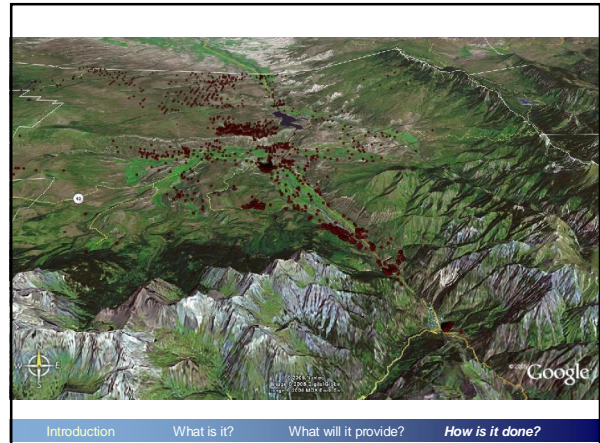
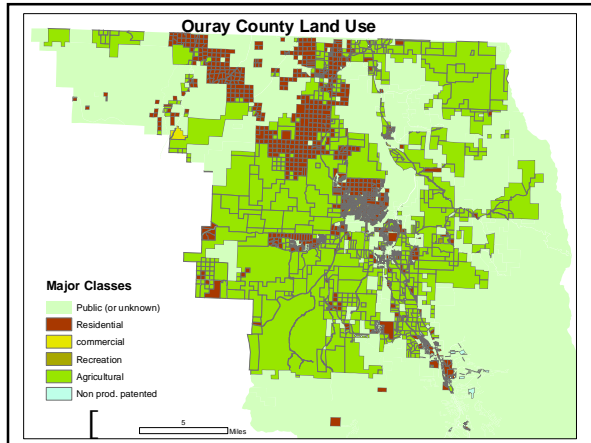
- Often from values expressed in Master Plan
  - Agricultural lands, scenic viewsheds, wildlife habitat, economic vitality, etc.
- Typically include:
  - # units
  - Acres of effected ag land, wildlife habitat, rare vegetation
  - Vehicle miles traveled
  - *Potentially* public service cost vs. revenue
- You decide, I offer spatial models based on landscape ecology principles, economics, etc.

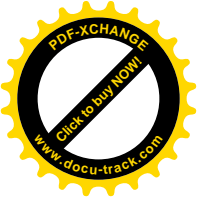
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## 3. Analysis & visualization

- Acquire, integrate GIS layers:
  - Parcels (land use, improved?, year improved?)
  - Zoning (allowed densities)
  - Protected areas
  - Restrictions on development:
    - Natural: floodplains, steep slopes, etc.
    - Code: set-backs, right-of-ways, etc.
  - Habitat, vegetation, roads, DEM, etc.
- Analyze/synthesize
  - Overlay each scenario with each indicator
  - Generate maps and tables summarizing effects
- Generate maps & possible 3D (Google Earth)

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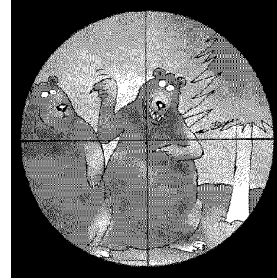


## Process

- BOCC directs public involvement
- Meeting(s):
  - Generate scenarios and indicators
  - Review data, model assumptions
  - Present results and discussion
  - Follow up
- Schedule
  - 3 to 6 months

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## Thanks! Questions? Comments?



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