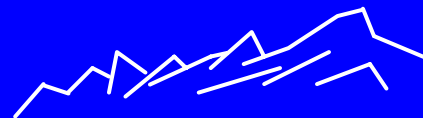




Transportation Livability in the West

PlaceMatters 2006

Jacob Riger, AICP



Charlier Associates, Inc.

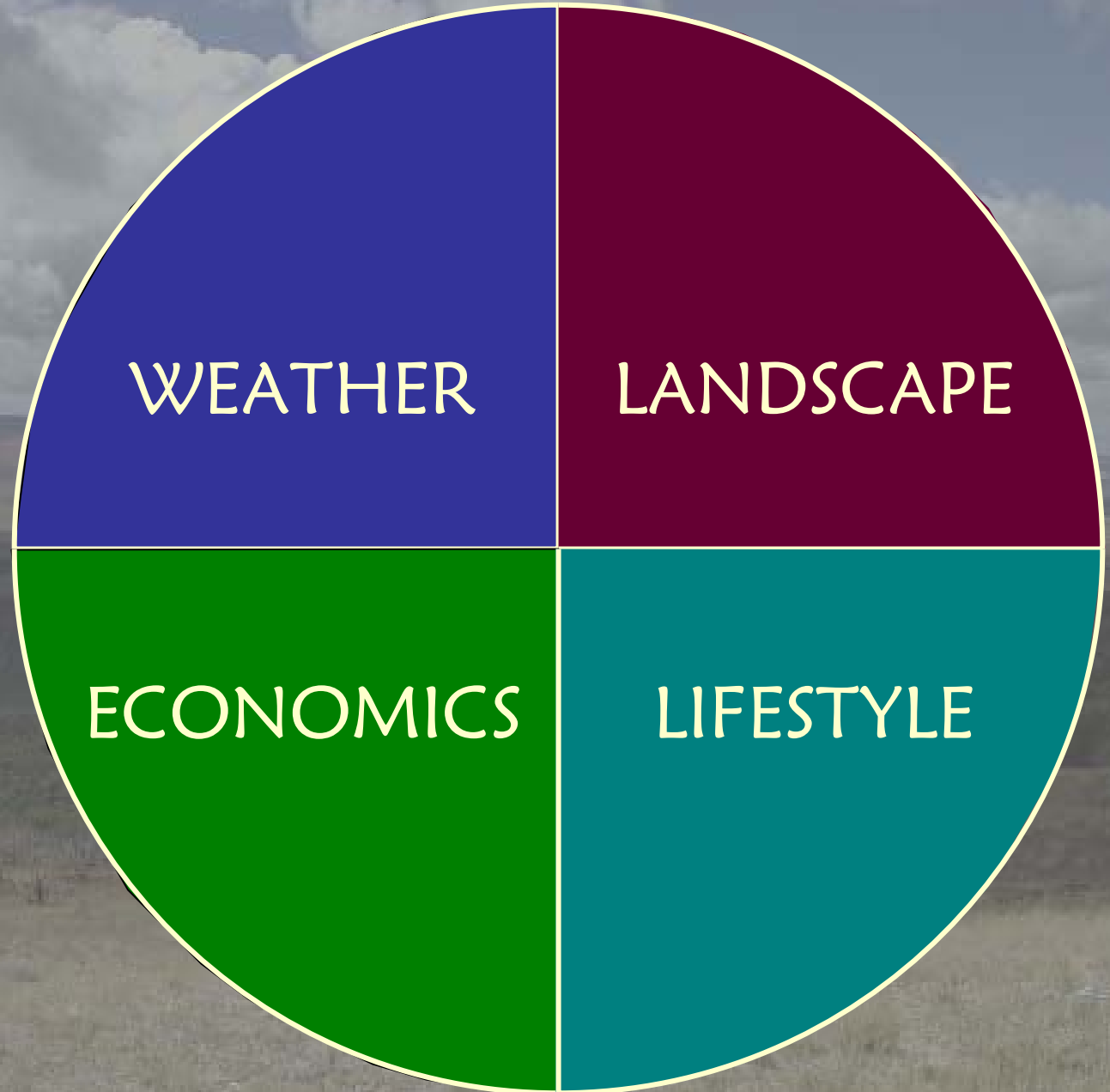
Overview

- Existing context: What trends are impacting the West?
- What's wrong with traditional planning
- Transportation livability principles
- One solution: importance of connectivity

The West



The West



The Changing West

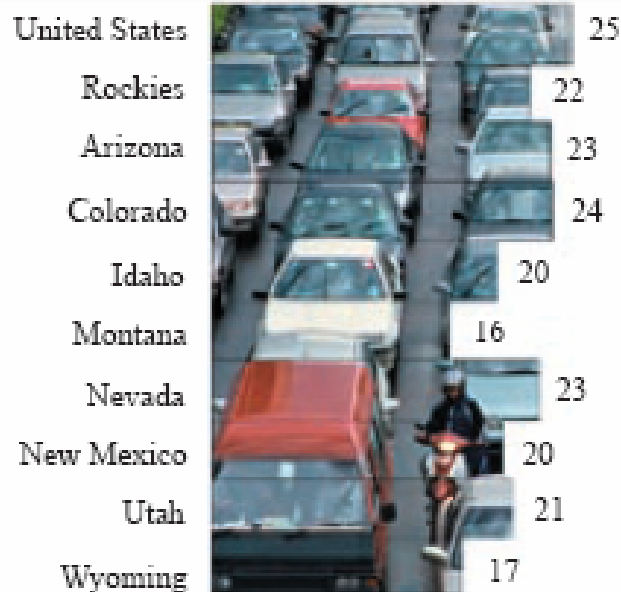


The 2006
COLORADO COLLEGE
STATE OF THE ROCKIES REPORT CARD

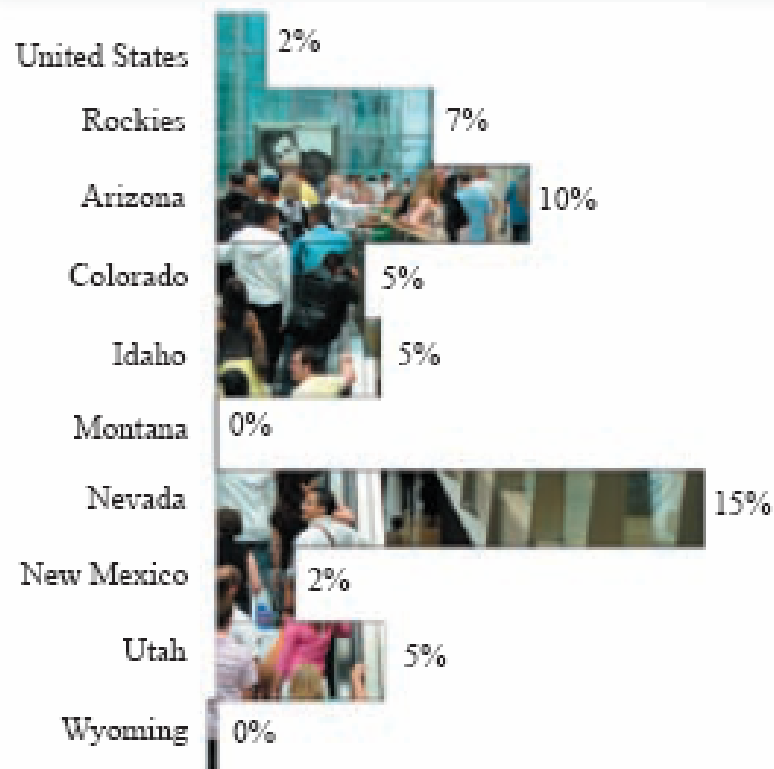
*An Outreach Activity of
COLORADO COLLEGE
VISION 2010*

Change: Major Trends

Minutes of
Mean Travel Time to Work, 2004

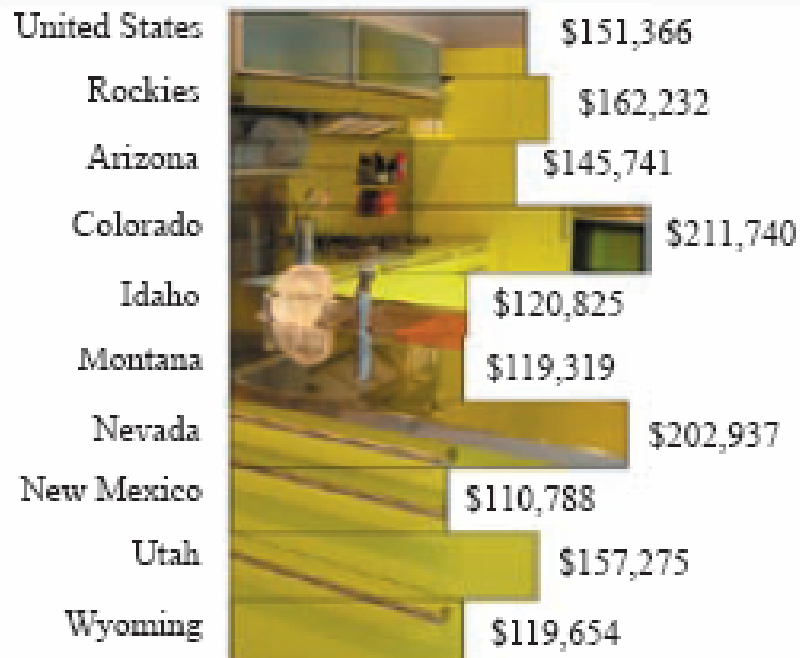


Population Growth, 2000 to 2004

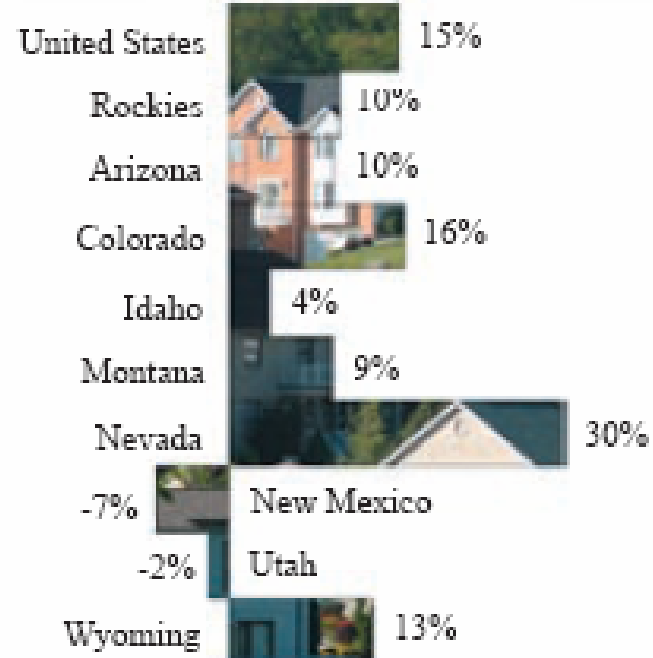


Change: More Trends

Median Home Value, 2004

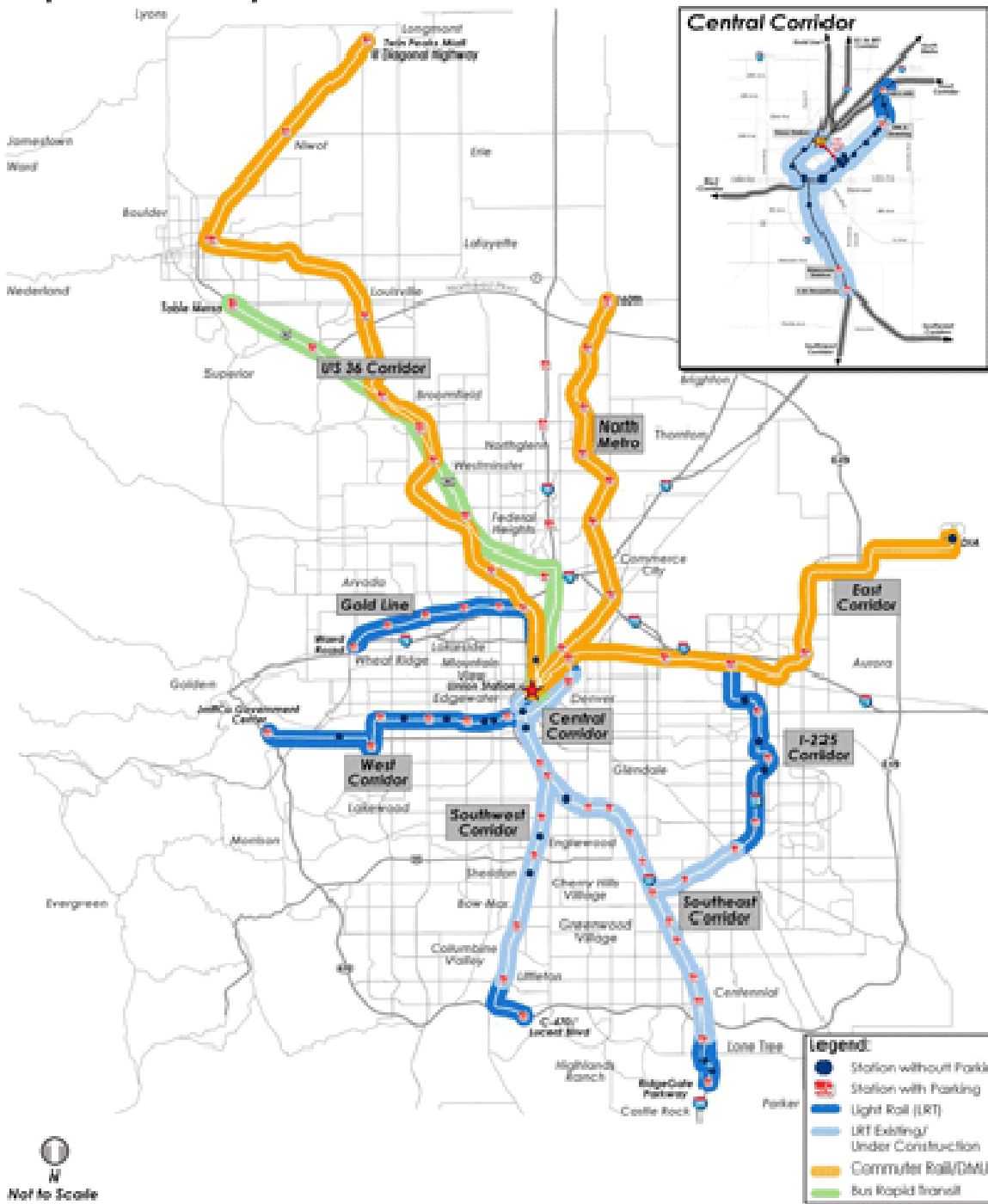


Change in Median Home Value, 2000 to 2004





Rapid Transit Map



Transit

NEW MEXICO
RAIL RUNNER
EXPRESS



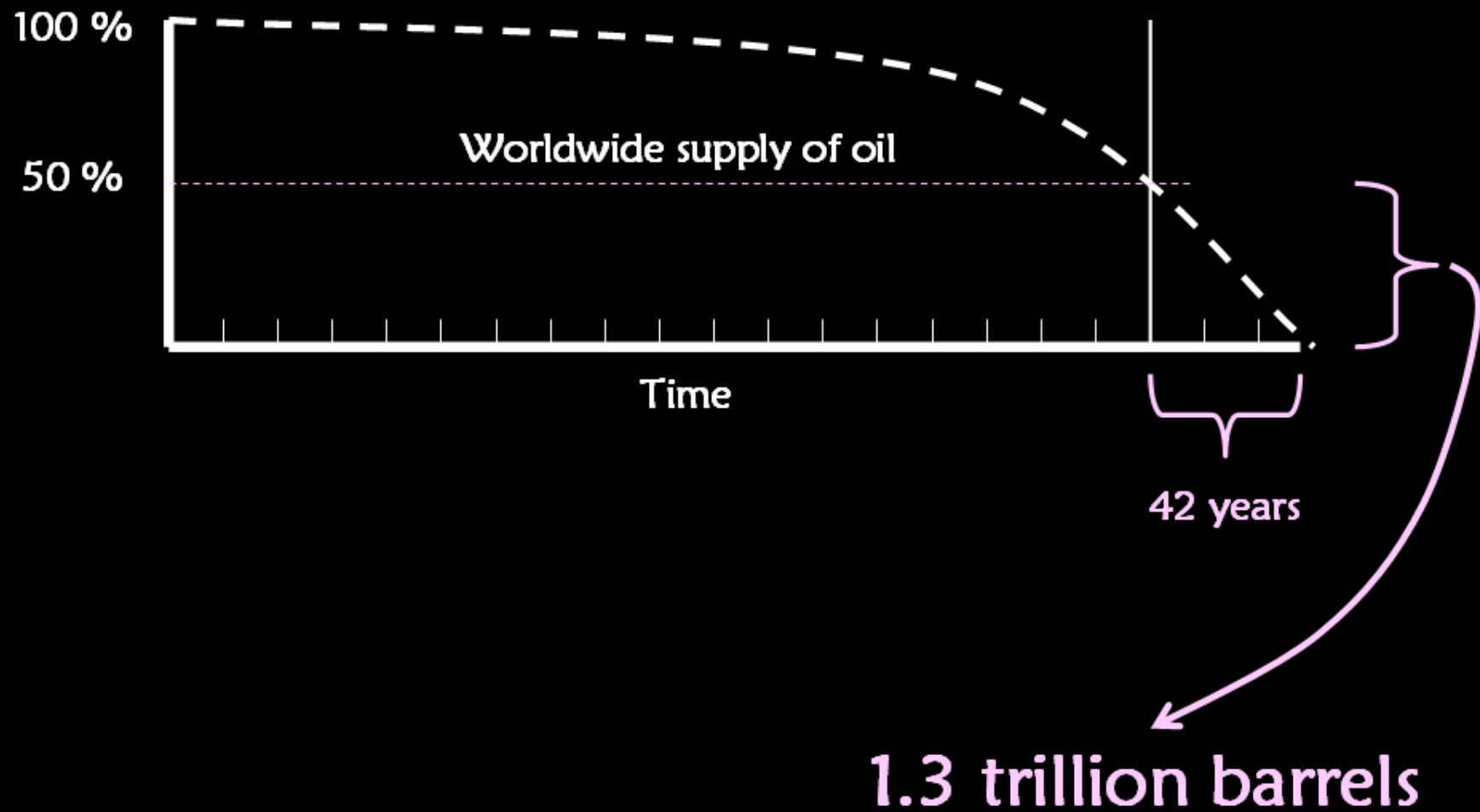
Small Towns and Rural Areas

- Cyclical economies
- Development pressure
- Ski/resort towns
 - Escalating housing prices, second homes
 - Service workers marginalized
 - Travel, mobility impacts
- Lack of good roadway networks, transit
- Rural areas struggling
- Other considerations: natural resources extraction, water



Are we running out of gas?





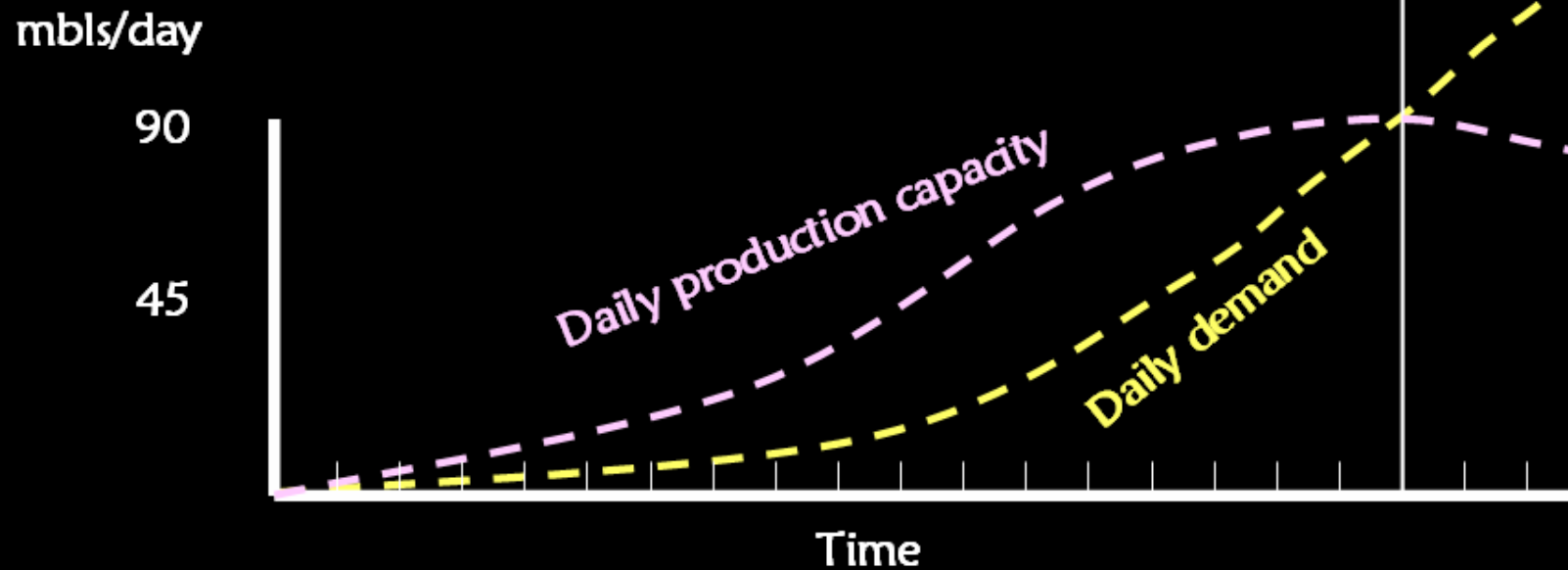
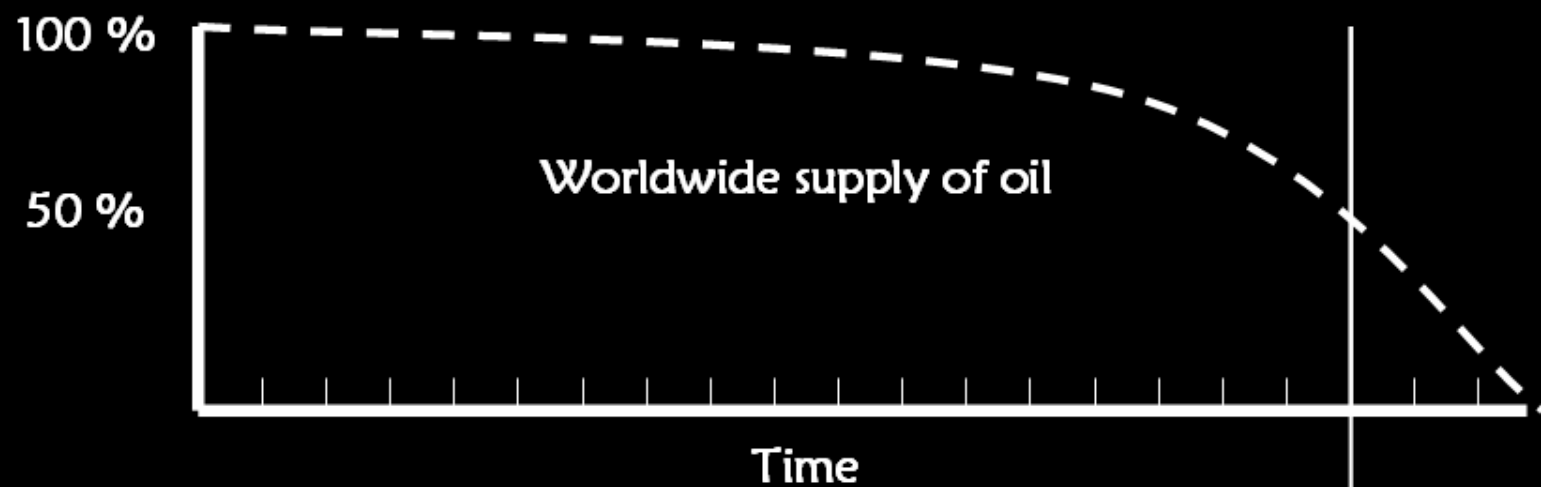
The stone age did not end...

...because we ran out of stones



The end of the age of...

...cheap oil



mbls/day

90

45

Daily production capacity

Daily demand

Time

\$/bl

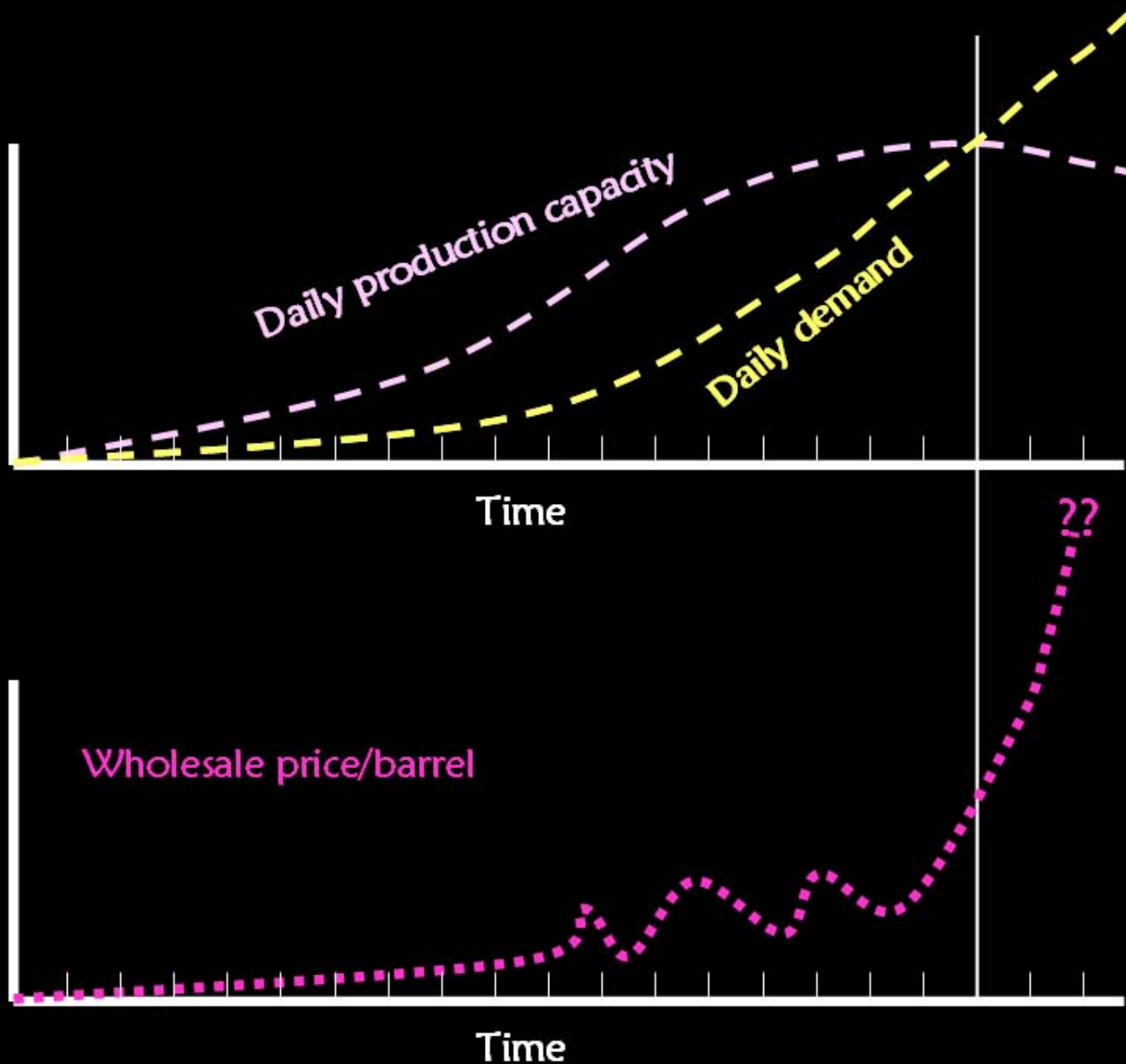
\$ 100

\$ 50

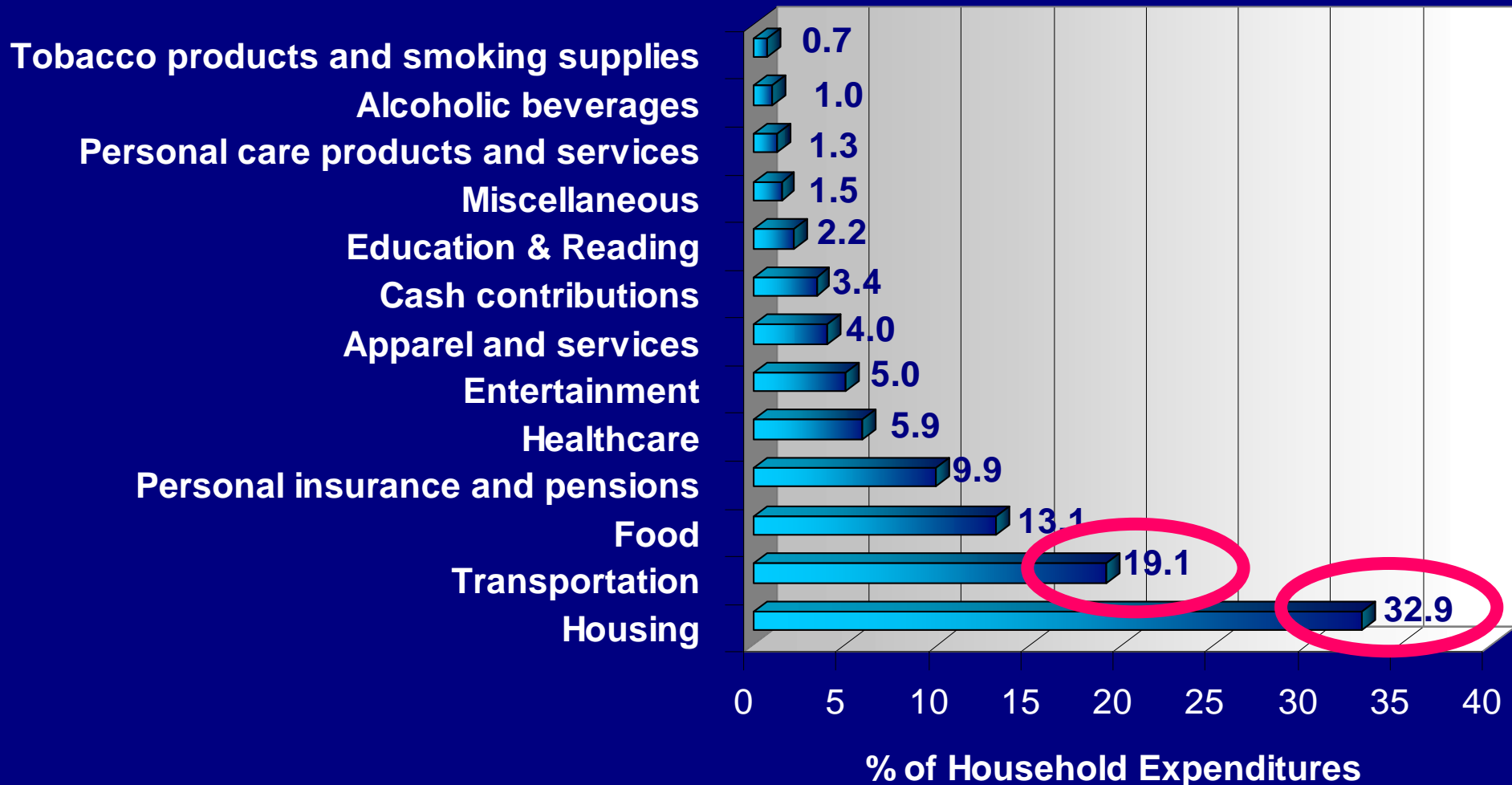
Wholesale price/barrel

Time

??



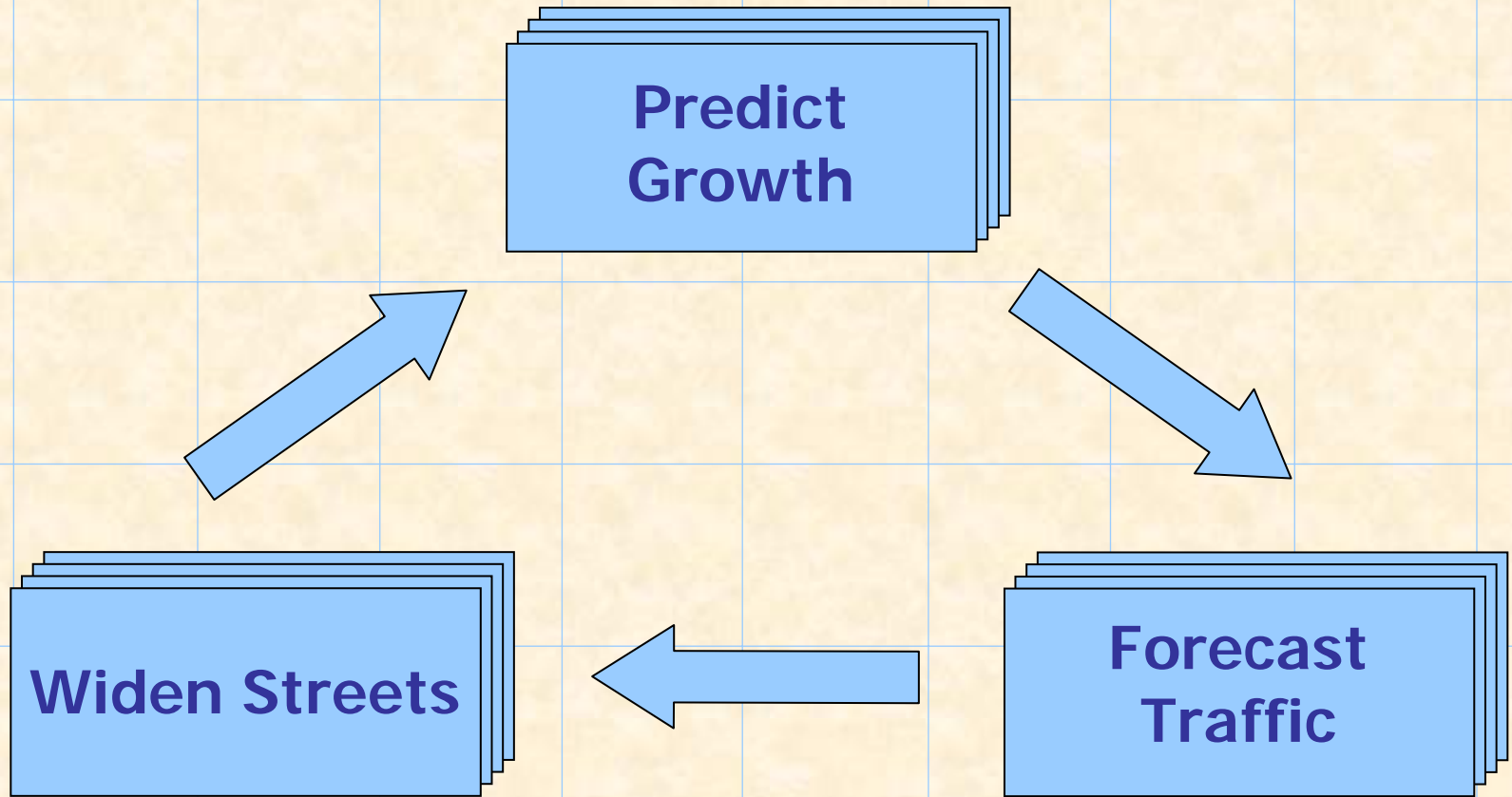
U.S Household Expenditures



One less car: - \$4,000/yr.
(net about \$3,500)*

At least \$50,000 in additional
mortgage capacity

* assumes 2nd or 3rd car for household



Proposed
Units

```
graph LR; A[Proposed Units] --> B[Traffic Level of Service]; B --> C[Widen Roadways and Intersections];
```

A flowchart with three light blue rectangular boxes connected by right-pointing chevrons. The first box on the left contains the text 'Proposed Units'. A chevron points from this box to a second box in the middle containing the text 'Traffic Level of Service'. Another chevron points from the second box to a third box on the right containing the text 'Widen Roadways and Intersections'.

Traffic
Level of
Service

Widen
Roadways
and
Intersections





WHOA

Sustainability

- Economy
- Families
- Community character



10 Principles

1. Balanced Mobility
2. Dense Street Networks - Connectivity
3. Scale & Character of Streets
4. Limited Value of Traffic Demand Forecasts
5. Public Transit = Choice, Not Congestion Relief
6. Walking & Biking = Major Markets
7. Multimodal = Multimodal Streets
8. Sustainable = Flexible
9. Public Empowerment
10. Accountability, Monitoring & Reporting

A well-connected network of
small streets
is safer and provides more
capacity and mobility than a
limited network of
wide streets.

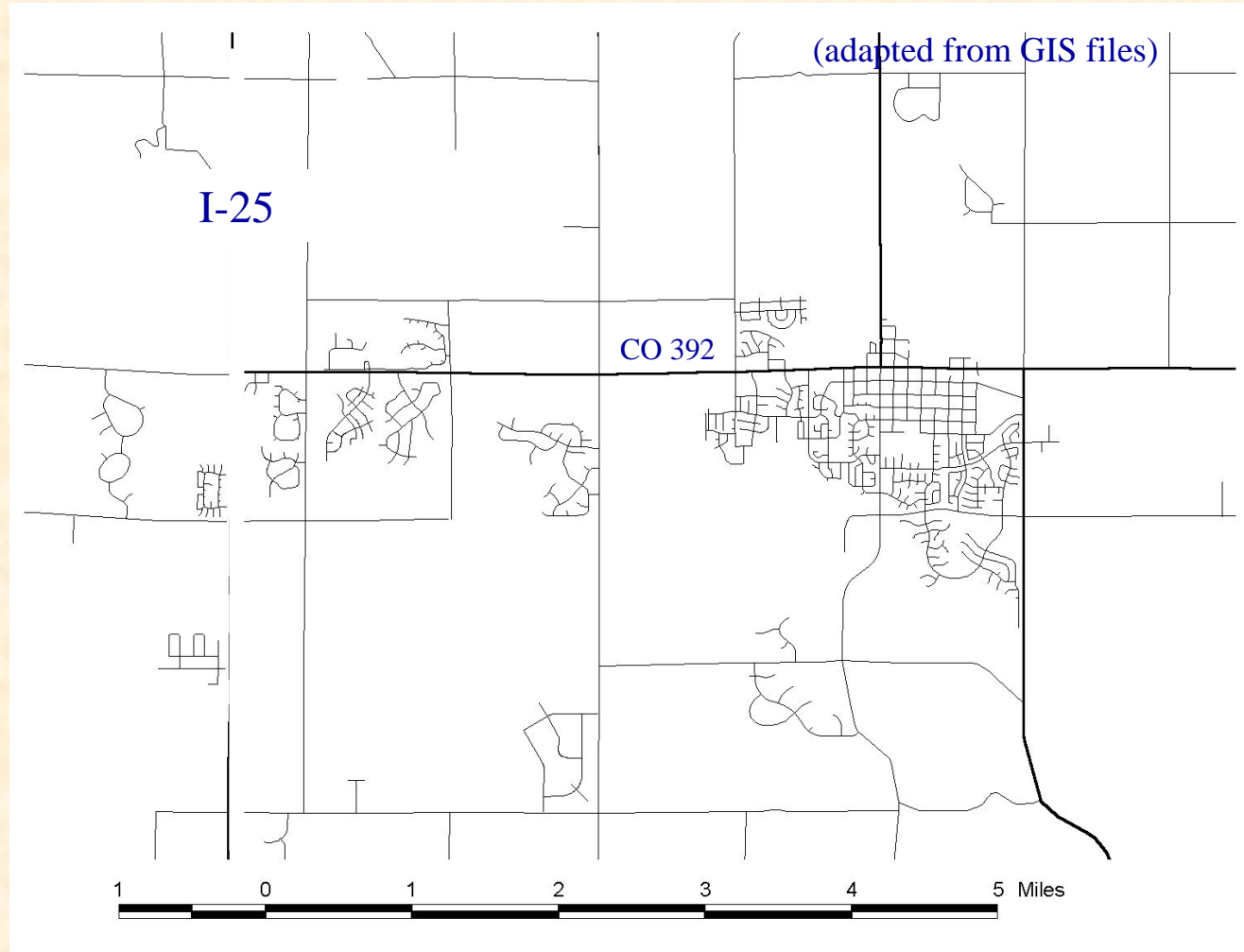
The inexorable widening of arterials represents a bad investment. Freeways have a role to play; multi-lane arterials (more than four general purpose lanes) normally do not.

Good circulation and access
are more important to
communities than travel
capacity. Basing street design
on traffic demand forecasts is
self-fulfilling and self-defeating.

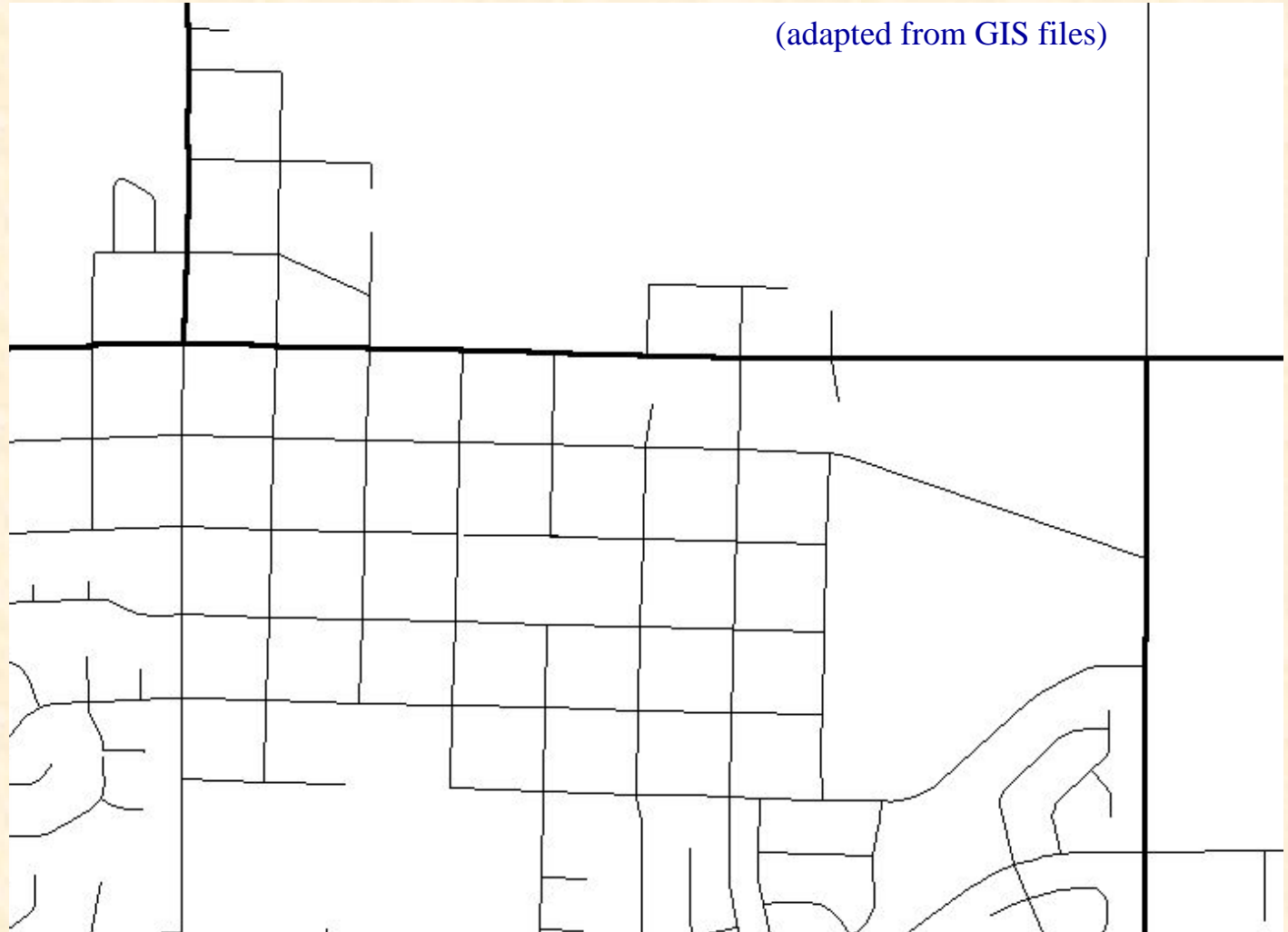




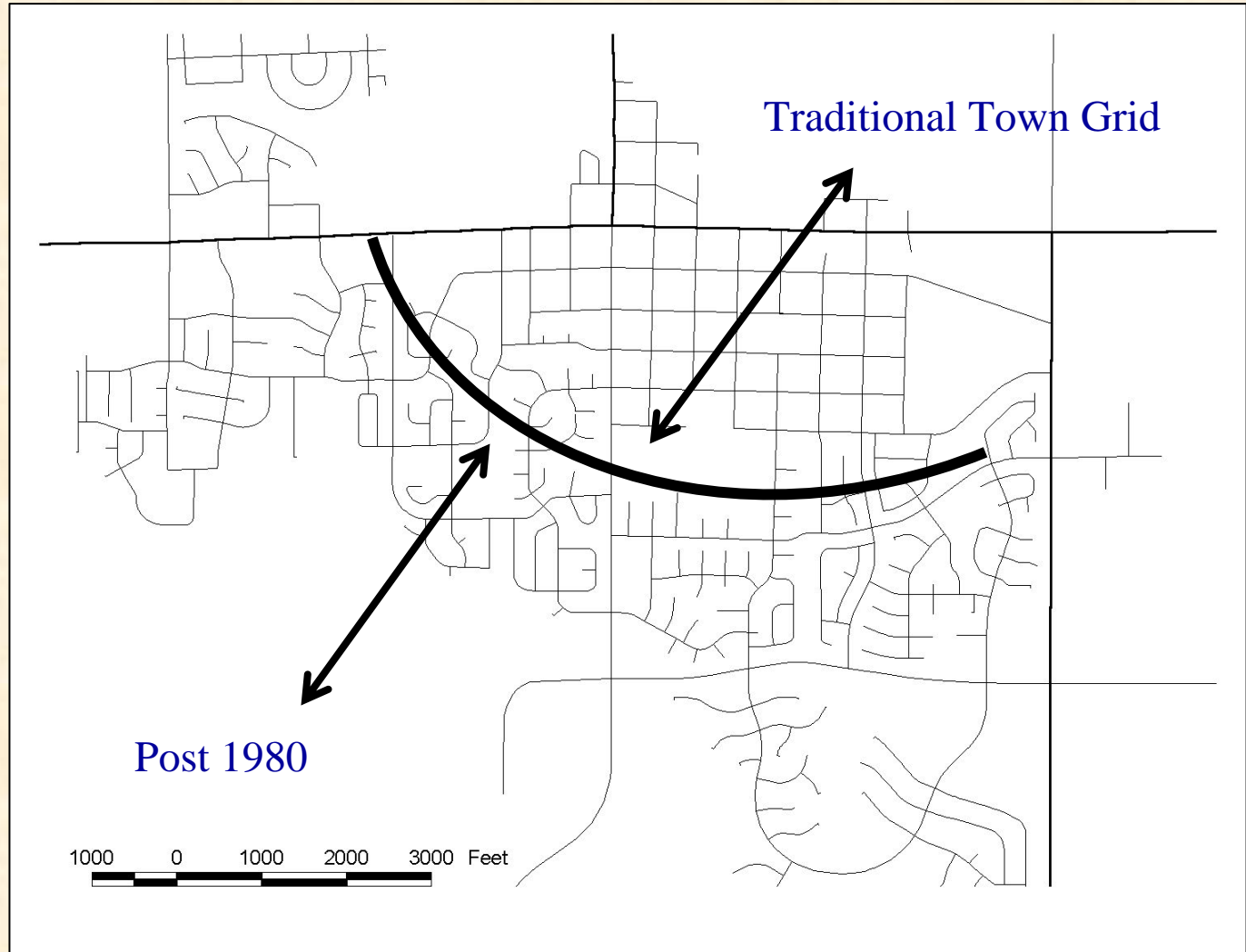
A Colorado Community



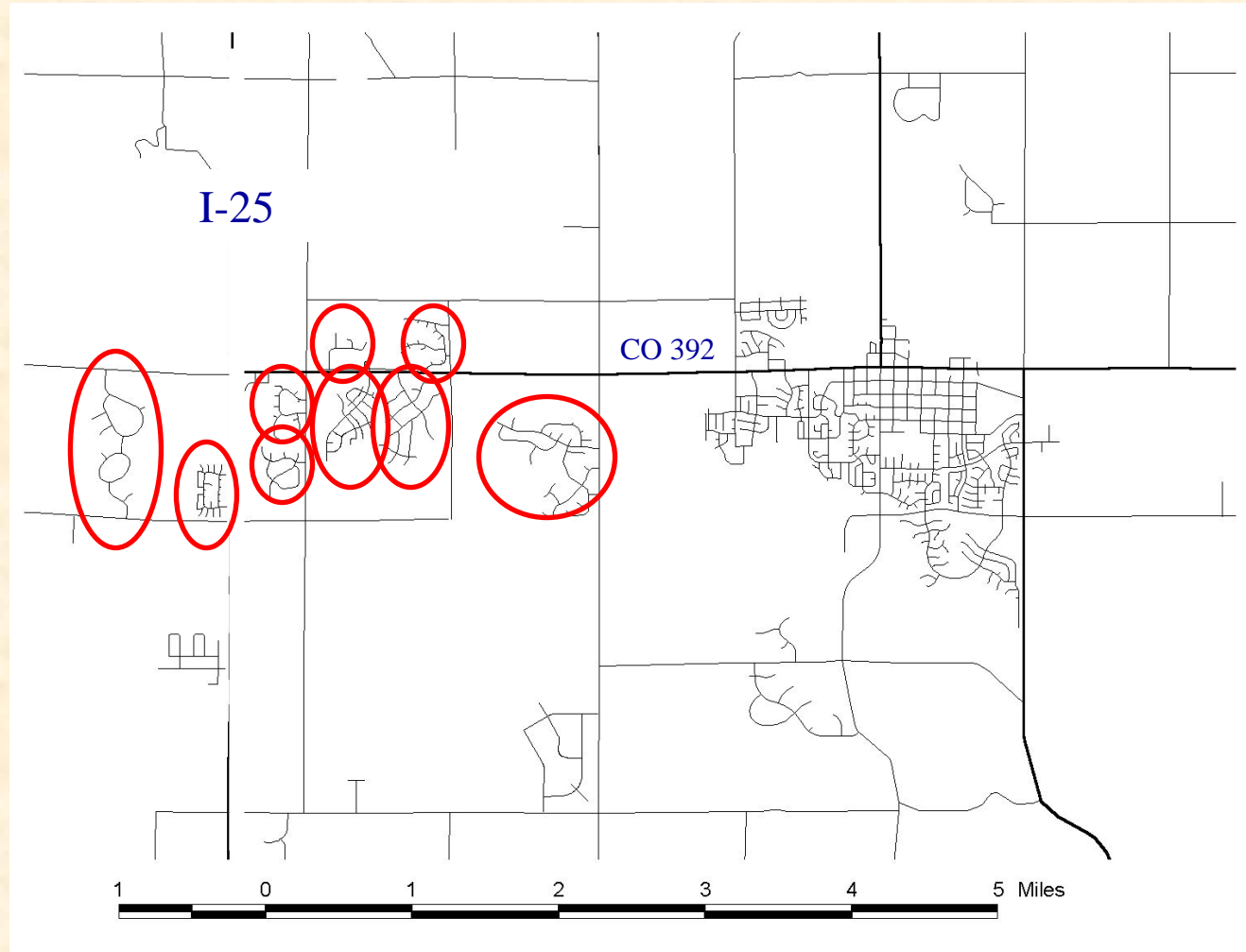
The Original Town



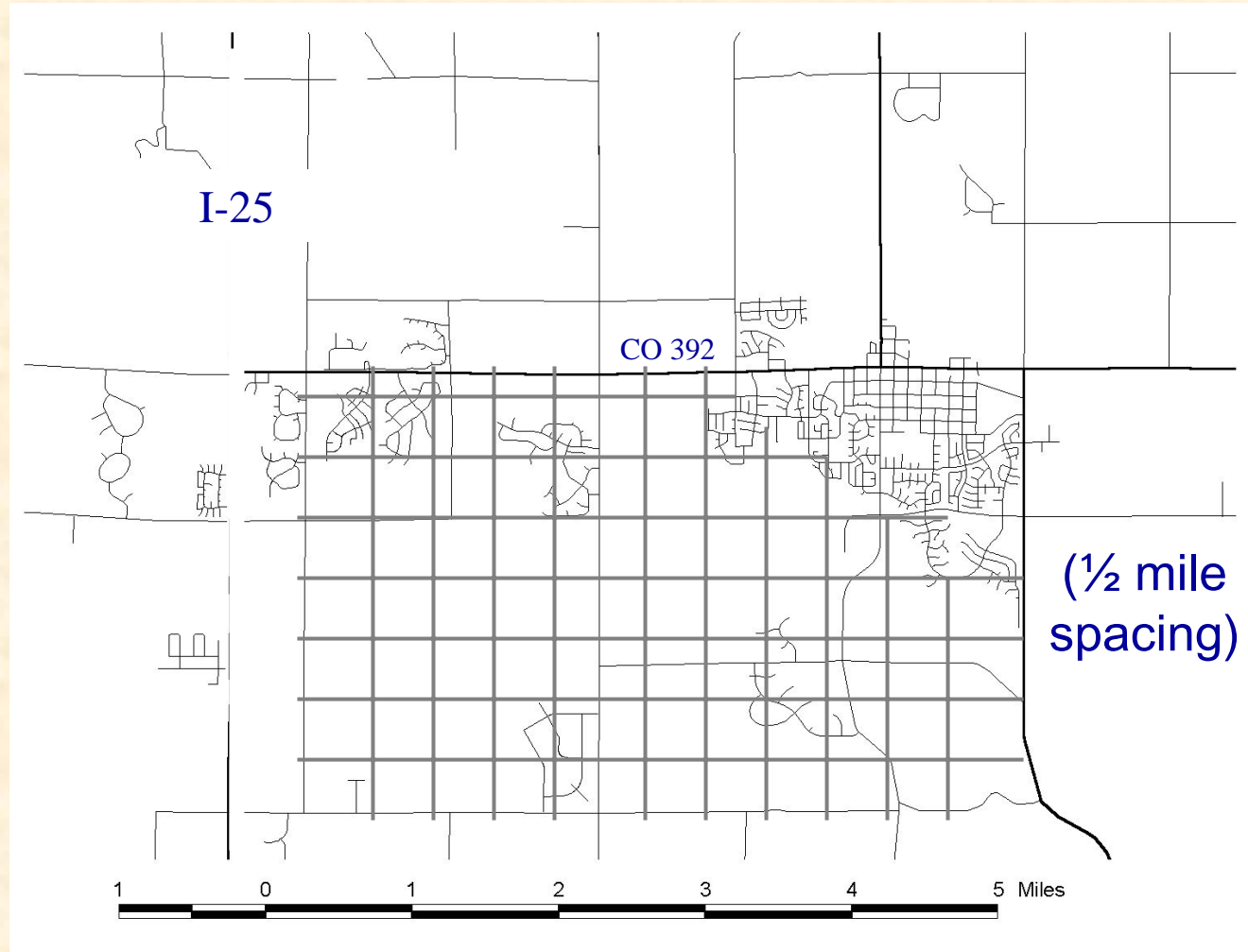
First Tier - New Development



1990s Invasion of the “Pods”

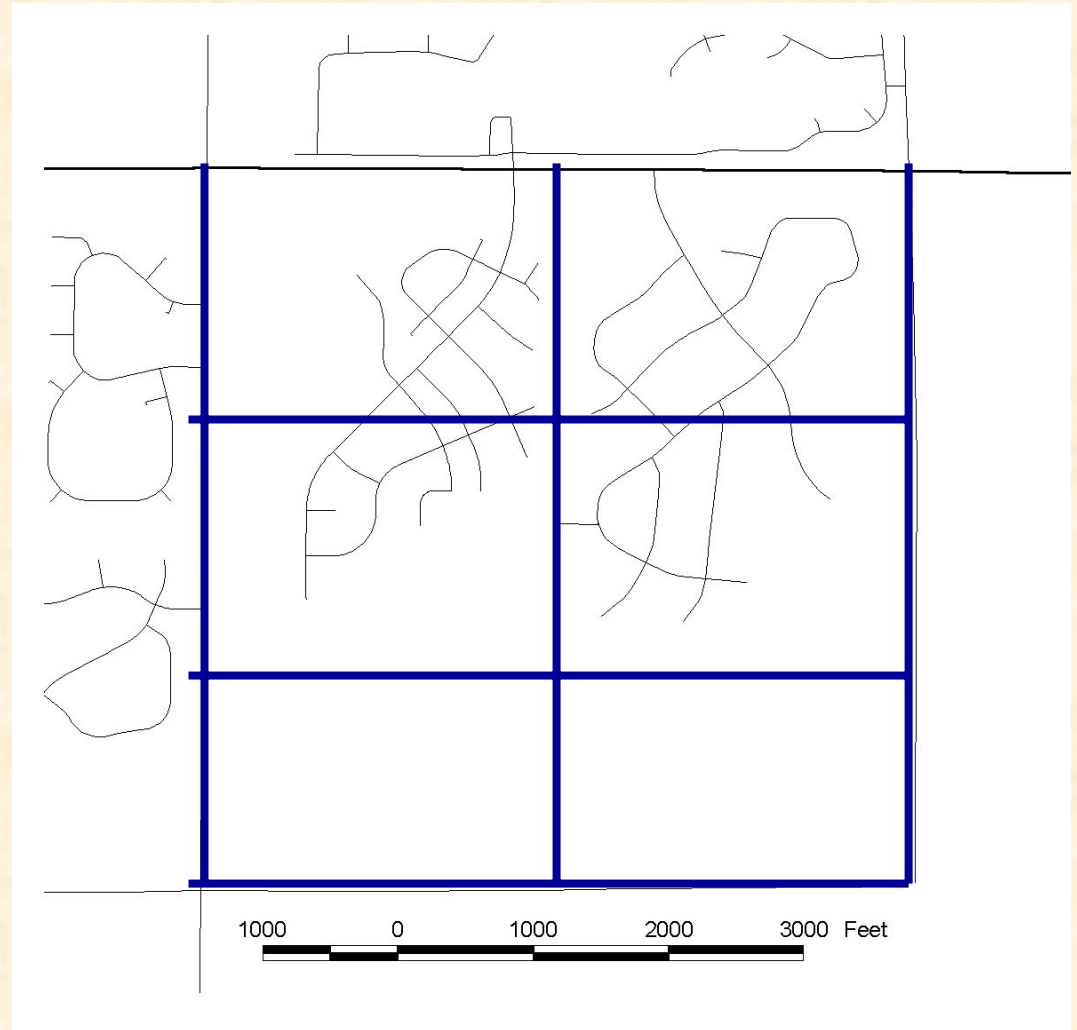


A 40-Year Look: Collectors



Lost Opportunity

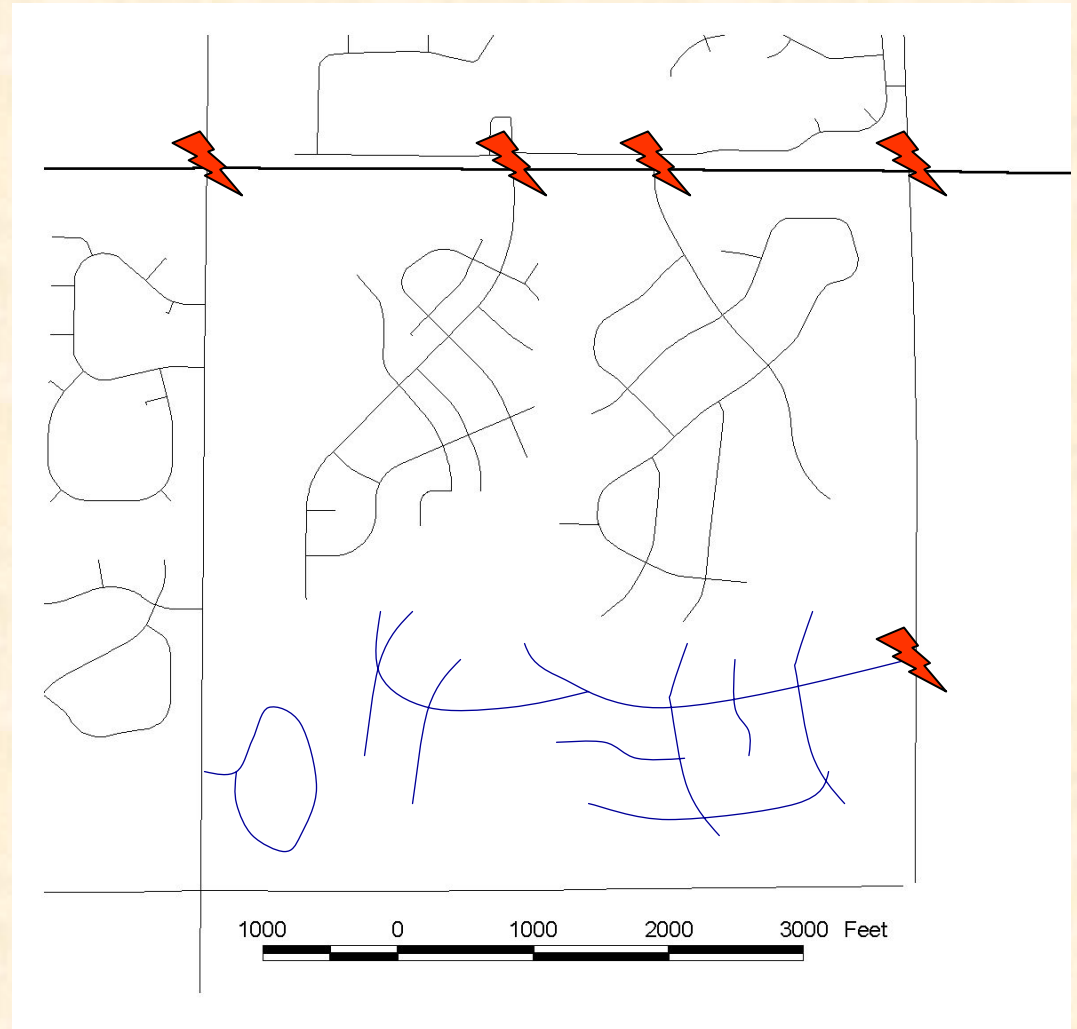
Because pods take access from the arterial highway, collectors are no longer feasible.



Build Out

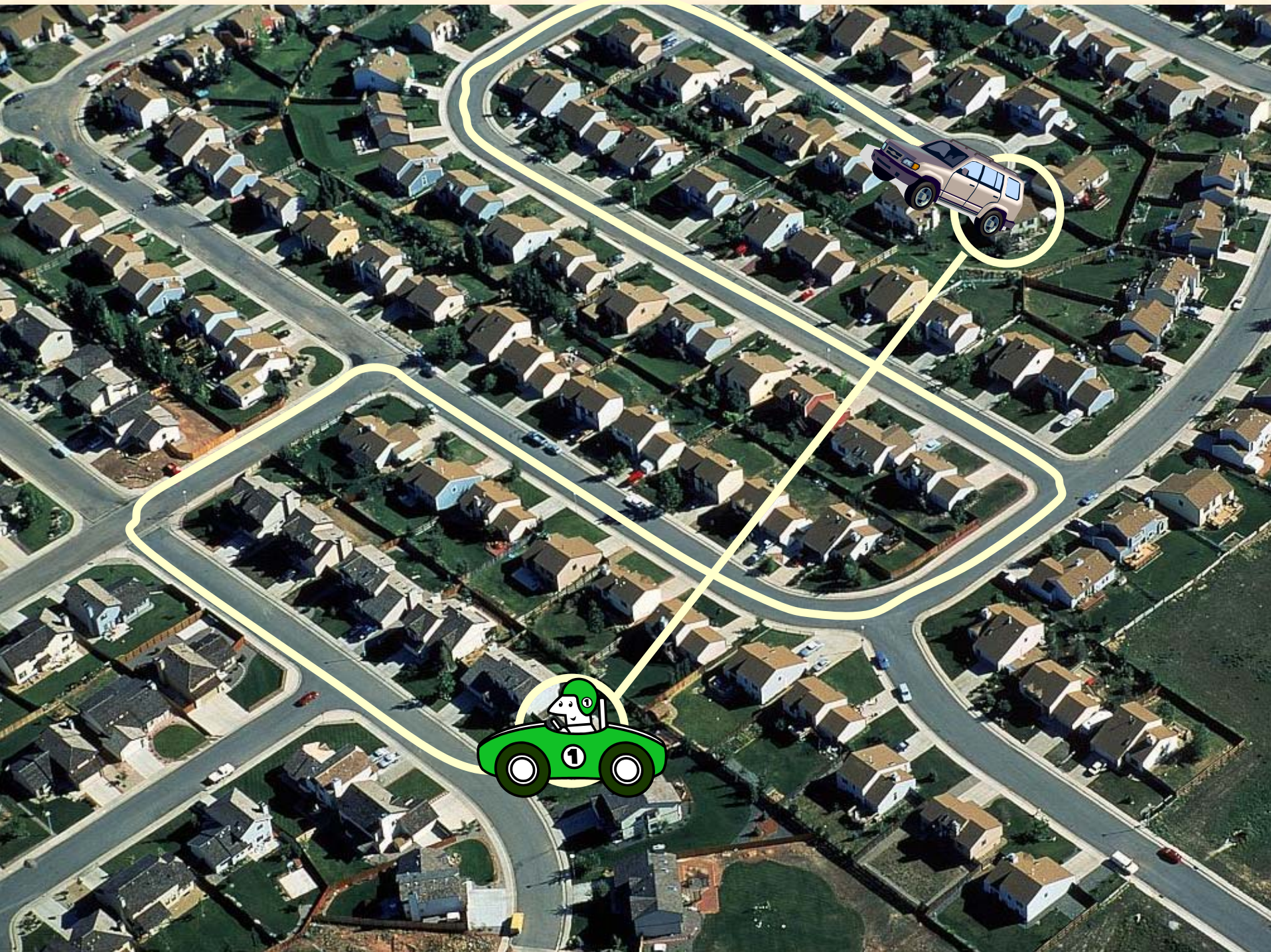
What will
actually
happen . . .

 Trouble
intersections



Impacts of Poor Connectivity

- Massive, congested arterials
- Increased driving/household
- Transit voids
- Inactive living
- Poor emergency service access
- Reduced travel safety



Connectivity Standards

Measure	Standard	Notes
Connectivity	1.4 minimum	Links/nodes - excludes links on perimeter highways
Intersections/Square Mile	250 minimum	Including perimeter intersections
Block perimeter	1,400 ft. Maximum	Measured at street centerline
Block Length	500 ft. Maximum	
Emergency Access	10% Maximum	% of parcels that are inaccessible if one street is blocked
Proximity	65%	% of DUs within ¼ mile of village nodes

Roadway network connectivity. Connected networks reduce congestion and improve safety. They reduce daily miles of vehicular travel per household and improve emergency vehicle response time. It is possible to set standards for connectivity. Some examples include:

- LEED ND. Max block perimeter 1,800' and min 300 intersections/square mile.
- Portland and Metro, Oregon. Max local intersection spacing of 530'.
- Fort Collins, Colorado. Max block size of 7 - 12 acres, depending on zoning.
- Orlando, Florida. Connectivity index = 1.4 minimum.

These and other examples are described in: Planning for Street Connectivity, published by and available from the American Planning Association. PAS 515. 2003.

Benefits of Connectivity

- Safety: pedestrians, children, emergency response, evacuation
- Travel: better mobility and mode balance, more efficient traffic flow
- Community character: supports good urban design, preserves neighborhoods, alternative to wide roads
- Cost: lower cost, easier to implement than major capacity projects

Summary

- Many types of pressures on Western towns
- Transportation is currently focused on building facilities instead of communities
- “Livable transportation” contributes to sustainable communities
- Several strategies in toolbox
- Connectivity is one of the best and most important, especially for smaller towns



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Thank You