

# Well Designed Density



Urban Advantage photo simulations

....but this instead

# Well Designed Density

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Urban Advantage photo simulations

## “Location Efficiency”



## Location Efficiency - defined

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- Compact regional development
- Redevelopment & infill rather than exurban “greenfields” development
- New development focused in centers
- Centers feature mixed uses
- Network connectivity is provided
- New urban growth is concentrated in transit served districts, incl. TODs



# Smart Location and Linkage







# Smart Location and Linkage







# Neighborhood Pattern and Design







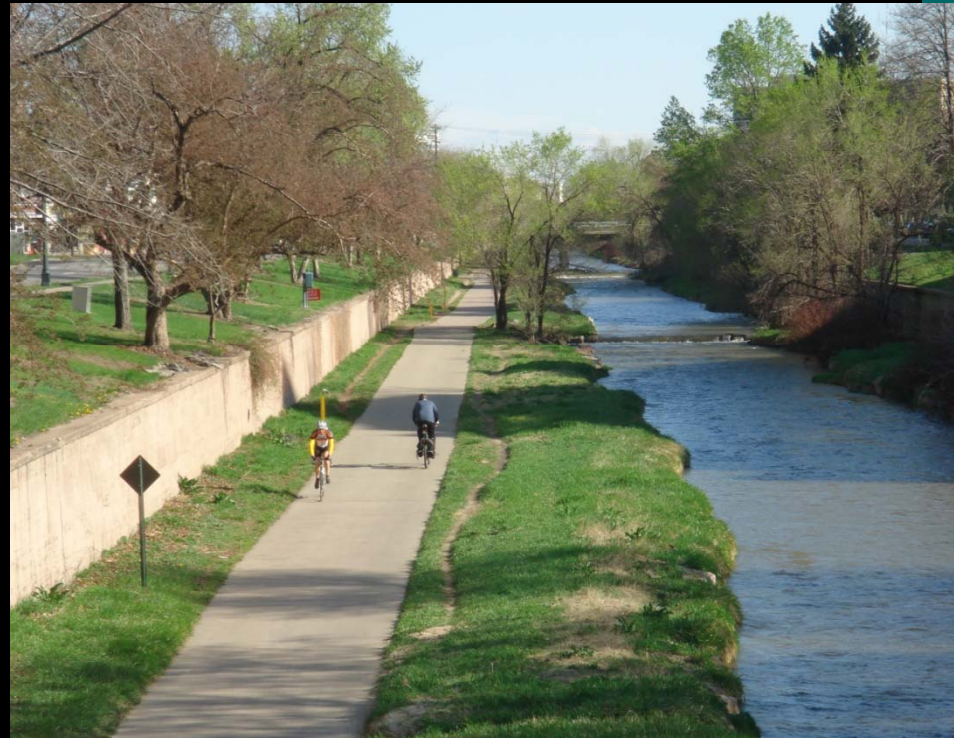
# Neighborhood Pattern and Design







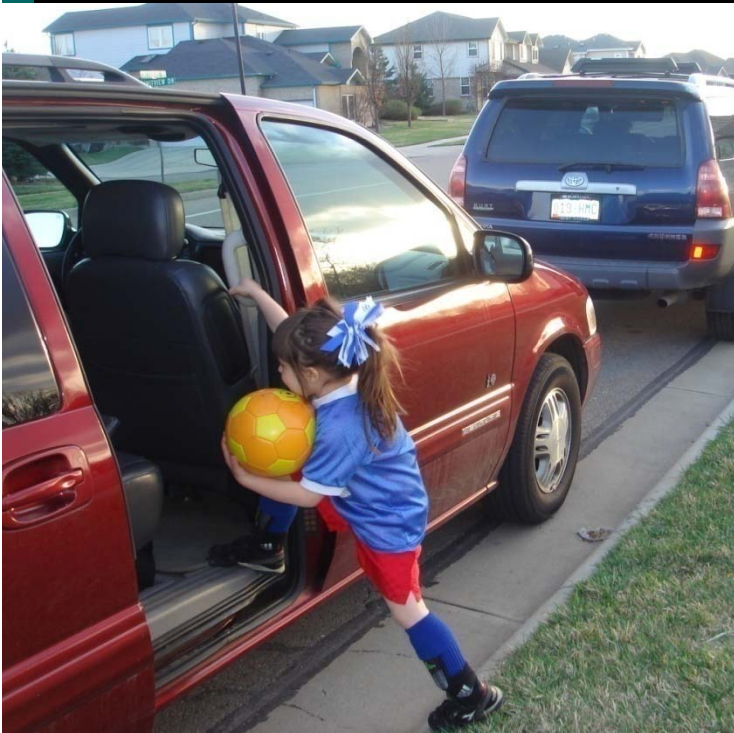
# Neighborhood Pattern and Design







# Neighborhood Pattern and Design





# Neighborhood Pattern and Design





## Cumulative Effects: Location Efficiency

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- Fuel economy, alt. fuels and other vehicle technology solutions have little cumulative effect on GHG accumulations

Road widening = Temporary Solution

- Location efficiency improvements are cumulative over the long term

Location Efficiency = Permanent

## Challenges: Location Efficiency

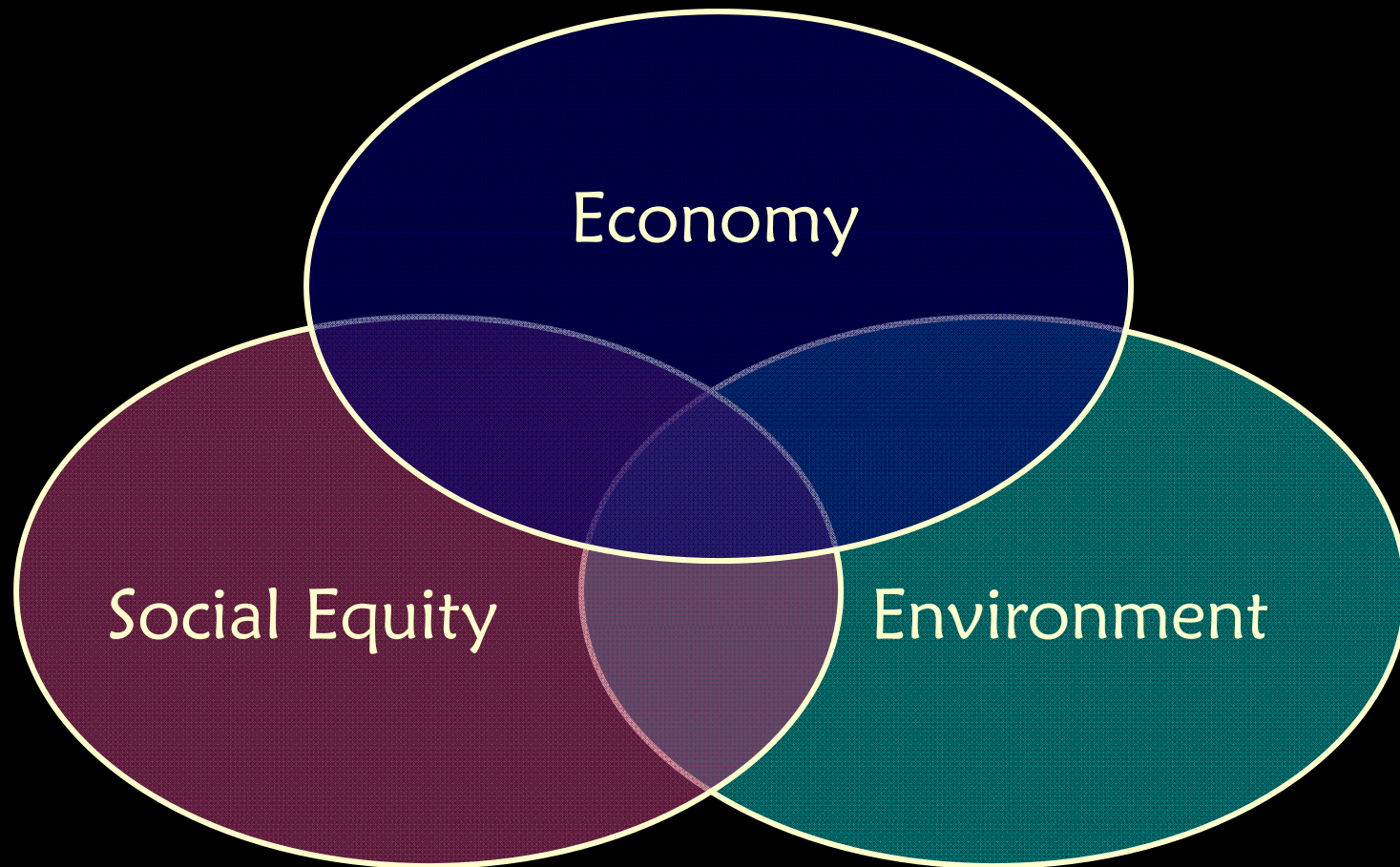
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- Different needs in rural, suburban and urban jurisdictions
- Political support for sprawl
- No current mandate for improvement
- Many states historically not involved in land planning or guiding land development



# CLASSIC SUSTAINABILITY

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## (R U R A L I I I I I I I I I I I I I I I T R A N S E C T I I I I I I I I I I I I I I I U R B A N )





**RURAL TRANSECT URBAN**

**T1 RURAL PRESERVE** **T2 RURAL RESERVE** **T3 SUB-URBAN** **T4 GENERAL URBAN** **T5 URBAN CENTER** **T6 URBAN CORE** **D SPECIAL DISTRICT**

[illegible]

## Least Location Efficient















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## Principles

### TRANSPORTATION, SMART GROWTH & SUSTAINABILITY



1. Planning and design for sustainable transportation must address **energy use** and **climate change** objectives. Some improvement in system performance may be achieved through technology – more efficient vehicles, alternative fuels, etc. However, long term sustainability requires reducing the overall rate of traffic growth relative to population, which in turn requires addressing the location efficiency of land development patterns.

2. Functional transportation systems balance the requirements of **three mobility elements**:

- **access** (local movement – achieving the destination);
- **circulation** (movement between nearby neighborhoods and commercial areas); and,
- **travel** (regional and interstate movement).

Most transportation planning and investment today is too focused on serving travel at the expense of good access and circulation. This is one of the primary engines of sprawl.



3. A **well-connected network** of narrow streets provides better mobility and is safer and more efficient than a poorly-connected network of wide streets. Arterial street widening projects generally represent default outcomes resulting from a failure to address the transportation system as an integrated multimodal network of facilities.

4. Design and cross section of streets should reflect the **scale and character** of abutting land uses and neighborhoods. It is rarely justifiable to build a street that detracts from the value of, or forces undesirable changes in, abutting land uses. Well-planned, well-designed, context-sensitive streets reflect neighborhood character and **add value** to property.



5. Traffic forecasting is of limited value in planning. Virtually all of the details of street network and facility design should be based on **planned community form and character** of abutting land uses. Basing street design on traffic demand forecasts – “project and provide” planning – is self-fulfilling and self-defeating.

6. Public **transit systems** improve personal travel choices and economic vitality. Flexible mobility is a realistic transit objective; reduced traffic congestion is not. Good transit service supports improved personal mobility; it generally does not reduce traffic volumes.



7. High quality walking and bicycling environments enable **active living**, which improves community and individual health and well being. This represents the largest category of unmet mobility need in most North American communities.

8. Streets provide the principal infrastructure network for all modes of travel. Sustainable transportation systems require significant investments in **complete streets**.



9. Good transportation planning requires the direct, committed and continuing involvement of a broad cross section of **empowered community members and stakeholders**. This is expensive, time-consuming and difficult. It is also essential.

10. Community support for progressive transportation requires routine monitoring and reporting of **system performance based on community objectives**. This should be done with unambiguous accuracy that reveals the condition of the transportation system and the effectiveness of state and local transportation programs.

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Thank You