

Livable Communities, Transportation, and Climate Change

What Metros Can Do to Make a Difference

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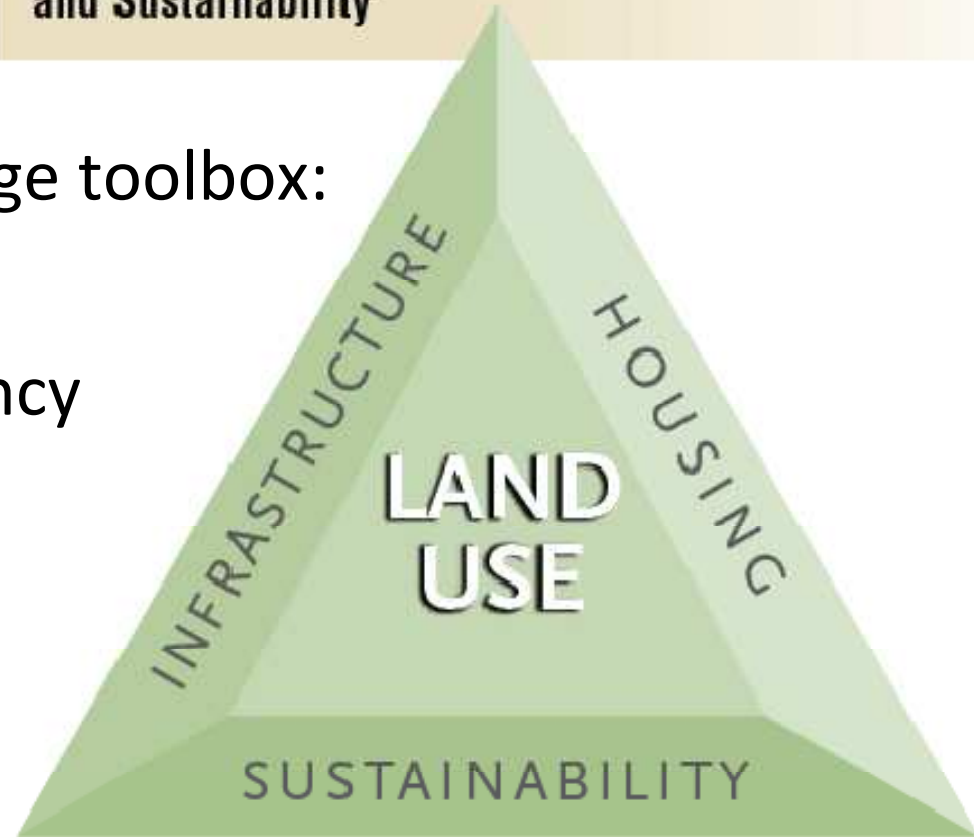


The importance of land use

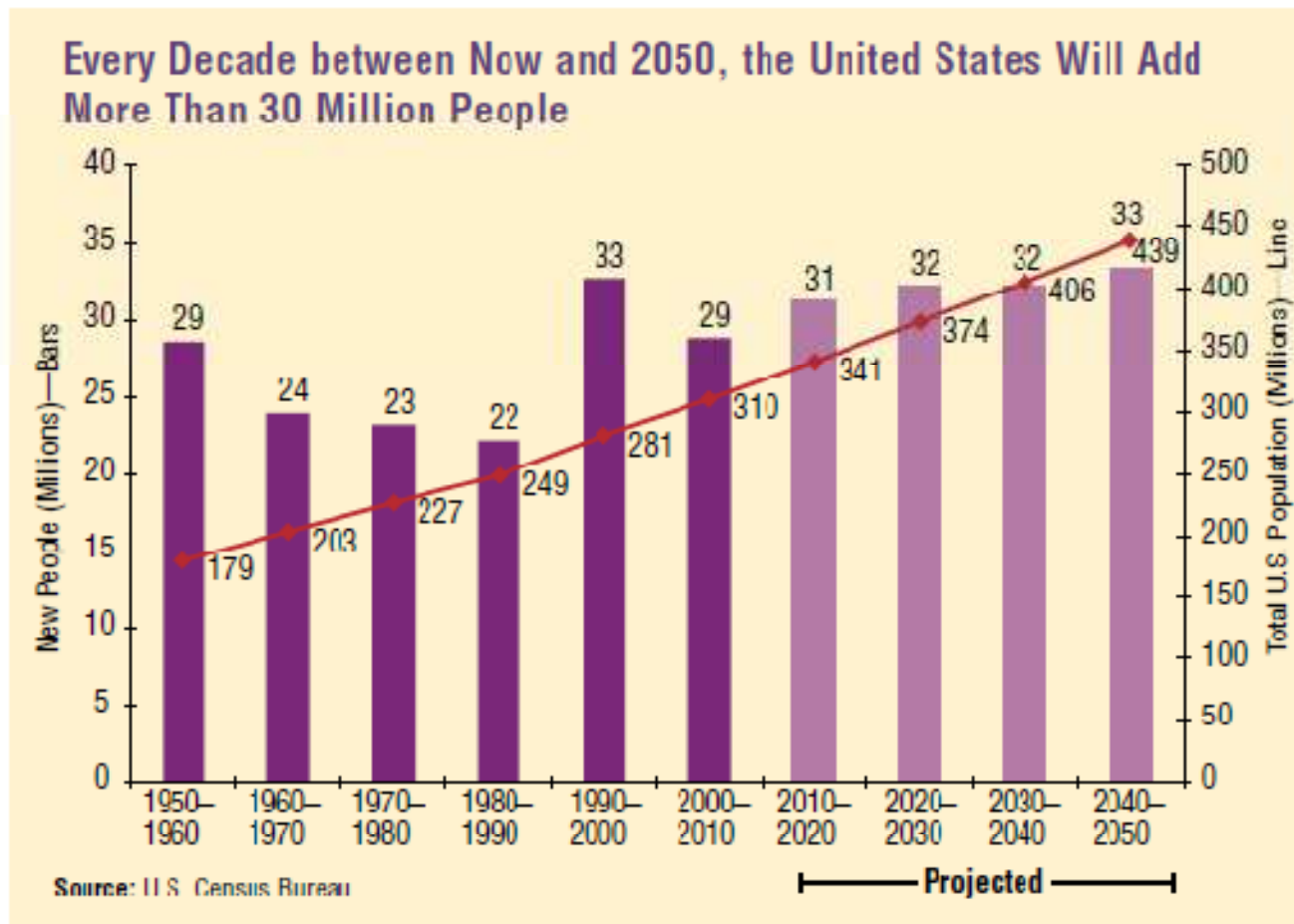
Land Use Links Infrastructure, Housing,
and Sustainability

Tools in the climate change toolbox:

- Vehicle fuel efficiency
- Building energy efficiency
- Conservation
- Land use patterns



Population growth vs. climate change



Advantages of compact development

- Foster the emergence of vibrant, walkable communities
- Make active, healthier lifestyles easier to enjoy
- Conserve land
- Support transportation alternatives and reduce congestion
- Lower infrastructure costs and reduce household expenses
- Make life more convenient
- Lower greenhouse gas emissions

What is compact development?

- Concentrations of population and/or employment
- Medium to high densities appropriate to context
- A mix of uses
- Interconnected streets
- Innovative and flexible approaches to parking
- Pedestrian-, bicycle-, and transit-friendly design
- Access and proximity to transit.

What does compact development look like?

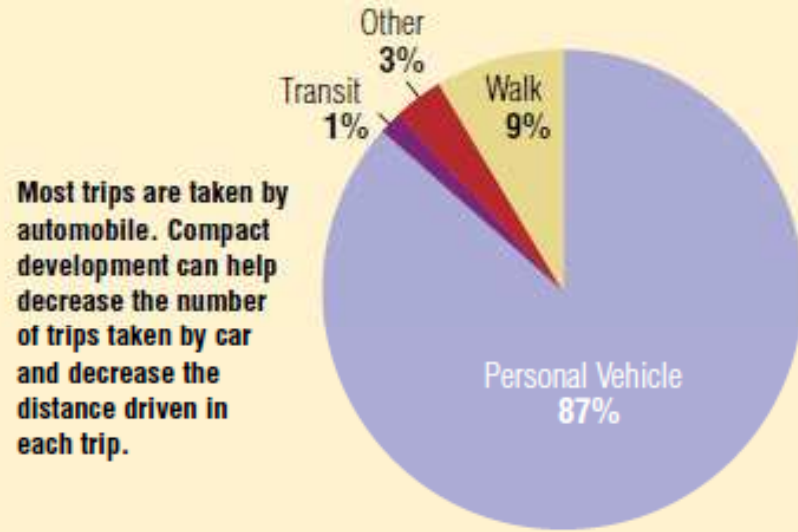
What Does Compact Residential Development Look Like?

Compact development can take many forms.



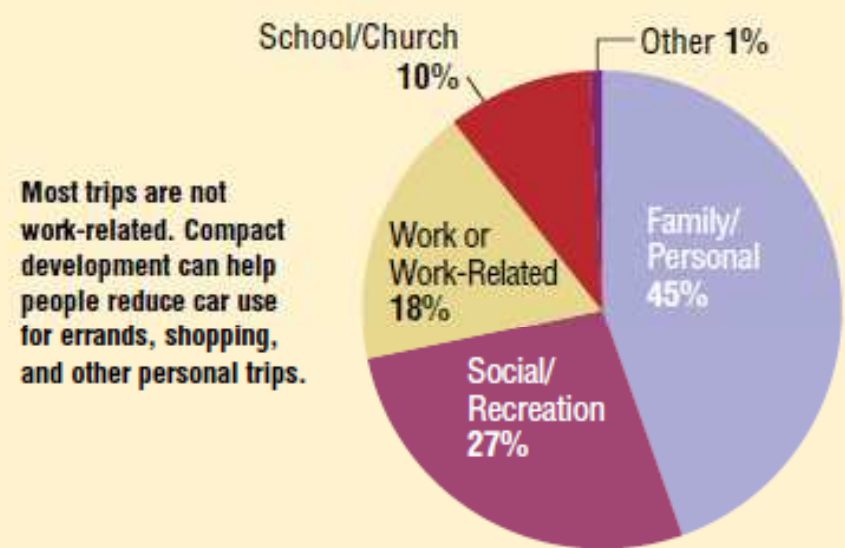
The land use-driving nexus

Proportion of Trips by Mode



Most trips are taken by automobile. Compact development can help decrease the number of trips taken by car and decrease the distance driven in each trip.

Proportion of Trips by Purpose



Most trips are not work-related. Compact development can help people reduce car use for errands, shopping, and other personal trips.

Source: National Household Travel Survey (2001), U.S. Department of Transportation.

CD, driving, and GHG emissions

- *Moving Cooler, Growing Cooler and Driving and the Built Environment*: Compact development reduces driving and GHGs

At a Glance: VMT and GHG Reduction Estimates from Compact Development (vs. Typical Suburban Development)

Study	VMT Reductions	GHG Reductions
<i>Moving Cooler</i>	20–60 percent	20–60 percent
<i>Growing Cooler</i>	20–40 percent	18–36 percent
<i>Driving and the Built Environment</i>	5–12 to 25 percent	5–12 to 25 percent

What land use could mean on a national basis

Summary of the Scenarios in the Three Studies: National Reductions of Annual VMT and GHG in 2050

Scenarios	Percent "Compact"*	Percent Reduction of Total VMT from Study Baseline	Percent Reduction of GHG from Study Baseline**
<i>Moving Cooler</i>			
Aggressive Deployment	64%	7.7%	7.7%
Maximum Deployment	90%	12.6%	12.6%
<i>Growing Cooler</i>			
Majority Compact	60%	12%	10%
Nearly All Compact	90%	18%	16%
<i>Driving and the Built Environment</i>			
Moderate	25%	1.3–1.7%	1.3–1.7%
Aggressive	75%	8–11%	8–11%

* Each of the three studies uses different definitions of "compact."

** Study baseline is 2050 household greenhouse gas emissions from VMT, not the often-cited 1990 total greenhouse gas emissions baseline.

Markets & regulations

- Demand for metro living is growing
 - Gen Y has strong urban preferences
- But host of issues stand in the way
 - Institutional: fragmentation and silos
 - Regulatory: zoning, lot size minimums, parking
 - Financial: complicated deals
- Challenges: local, regional, national, global?

What are cities and local areas doing?

- 20 U.S. states have adopted GHG reduction targets
- 1,000+ cities have signed on to U.S. Conference of Mayors' climate protection goals

Urban infill and redevelopment

- 2200 Westlake Project in South Lake Union, Seattle
- Washington, DC:
 - Waterfront
 - Columbia Heights
 - NoMa
 - H Street NE



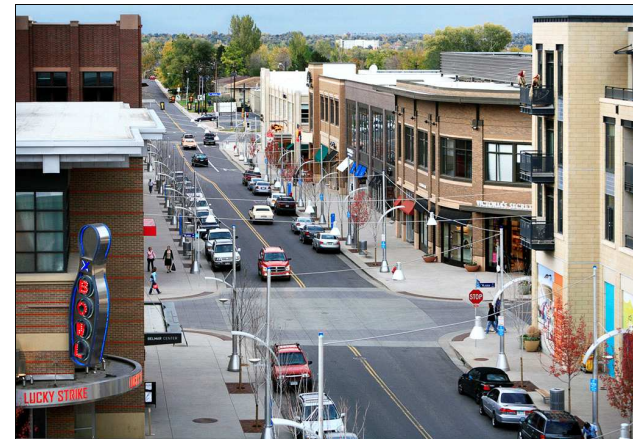
Suburban retrofits and mall makeovers

- Belmar (Villa Italia Mall), Denver, CO
- Dadeland, near Miami, FL
- Tysons Corner, VA

Need to “connect the dots”



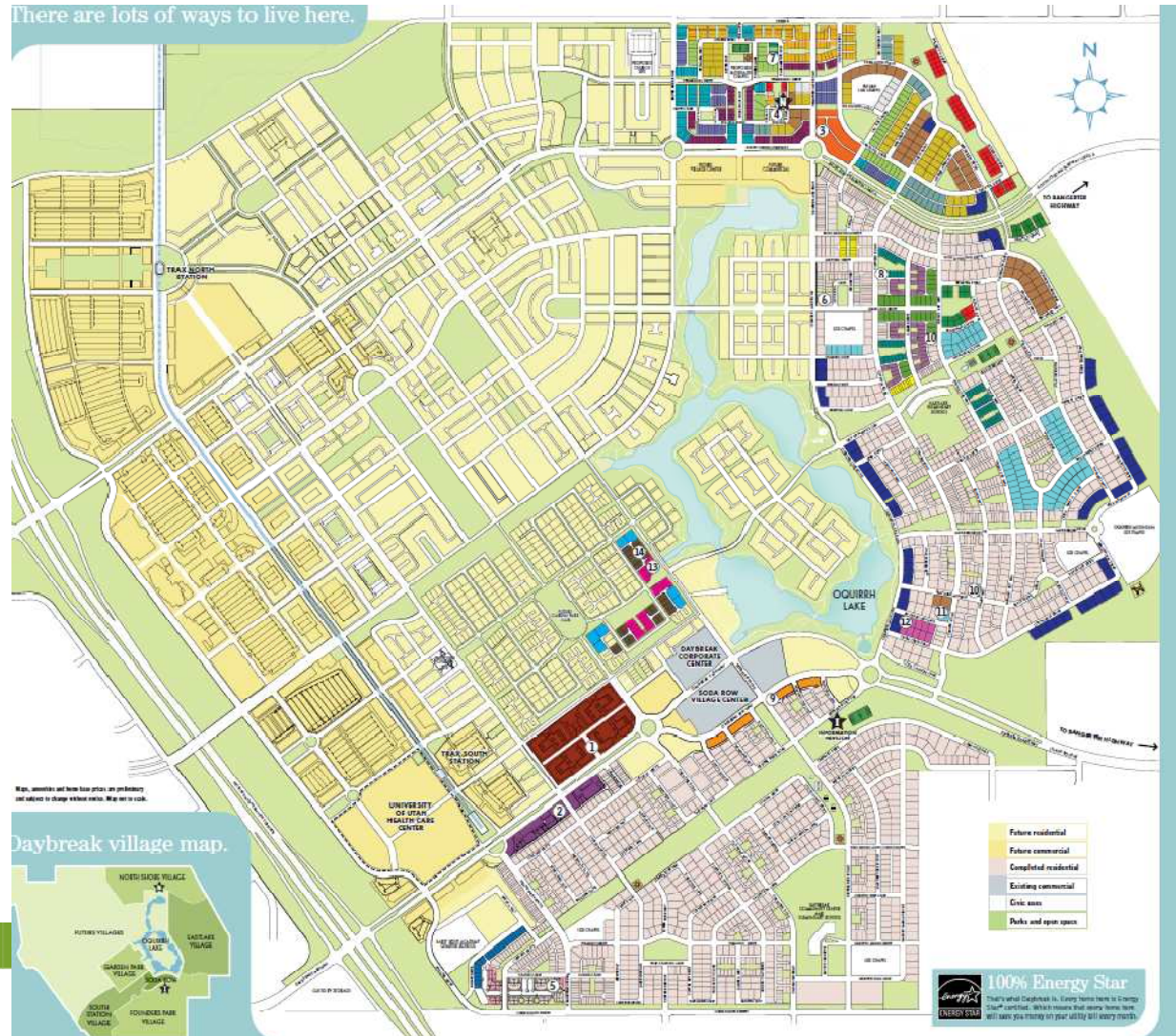
Before-- Villa Italia Mall



After-- Belmar

New walkable communities

- Daybreak, Salt Lake City, Utah

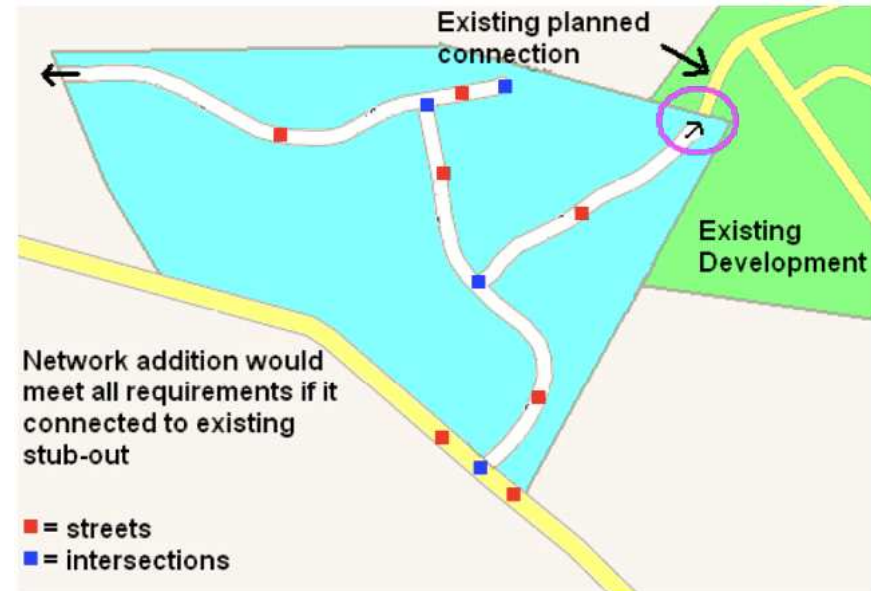


Supportive transportation investments

- Streetcars: It's a movement
 - Little Rock, Arkansas
 - Tucson, Arizona
 - Los Angeles & Sacramento, California
 - Fort Lauderdale, Florida
 - Atlanta, Georgia
 - Boise, Idaho
 - New Orleans, Louisiana
 - Baltimore, Maryland
 - Grand Rapids, Michigan
 - Charlotte, North Carolina
 - Cincinnati & Columbus, Ohio
 - Lake Oswego, Oregon
 - Providence, Rhode Island
 - Dallas, Fort Worth & San Antonio, Texas
 - Salt Lake City, Utah
 - Arlington, Virginia
 - Kenosha, Wisconsin
 - Washington, DC
- Major urban rail expansions
 - Phoenix, Arizona
 - Sacramento, California
 - Denver, Colorado
 - Minneapolis, Minnesota
 - Charlotte, North Carolina
 - Dallas, Texas
 - Salt Lake City, Utah
 - Seattle, Washington
 - Washington, DC

Policy reforms

- Maximum parking space regs
- Flexible/innovative parking strategies
- Street connectivity requirements
- Zoning reforms and innovations



Where is Asia going?

- Strong population growth
- Spreading centers
- Loss of farmland
- Growing auto use
- Need for more and better “places”

Reshaping development

- Compact development/livable communities strategies offer a win-win
 - Environmental benefits plus all the other advantages
 - Create the meaningful places humans yearn for
- But-- they are harder to do than typical greenfield development