



IDAHO  
SMART  
GROWTH

*encouraging vibrant communities through sensible growth*

# Making School Routes Safe Communitywide

[www.idahosmartgrowth.org](http://www.idahosmartgrowth.org)



# *Workshop Summary*

## **Presentations**

- Twenty three different presentations

## **Location**

- Fourteen sites around the state

## **Communities represented**

- Thirty – six different cities, three counties, and two regional representatives



# *Audience*

Over 200 individuals,

1. Professional planners (city, MPO, transportation/transit agency, parks, school district, private)
- 2. Engineers (city, transportation/transit agency, private)
- 3. Elected officials (mayors, city council members, school board members)
- 4. Professional staff (teachers, university faculty, administrators [city/school], facility managers, parks & rec, public health, historic preservation, smart growth)
- 5. Citizen advocates (pedestrian/bicycle organizations, safe routes advocates, historic preservation, neighborhood association)



# *Federal Transportation Law*

## **SAFETEA-LU**

Sections(s): 1101(a)  
(17), 1404

- A Program to Enable Children to Walk and Bike to School Safely





# *Federal Funding in Idaho*

## **Minimum Guarantee - \$1 million**

- Based on a ratio of student population K-8 to total state population

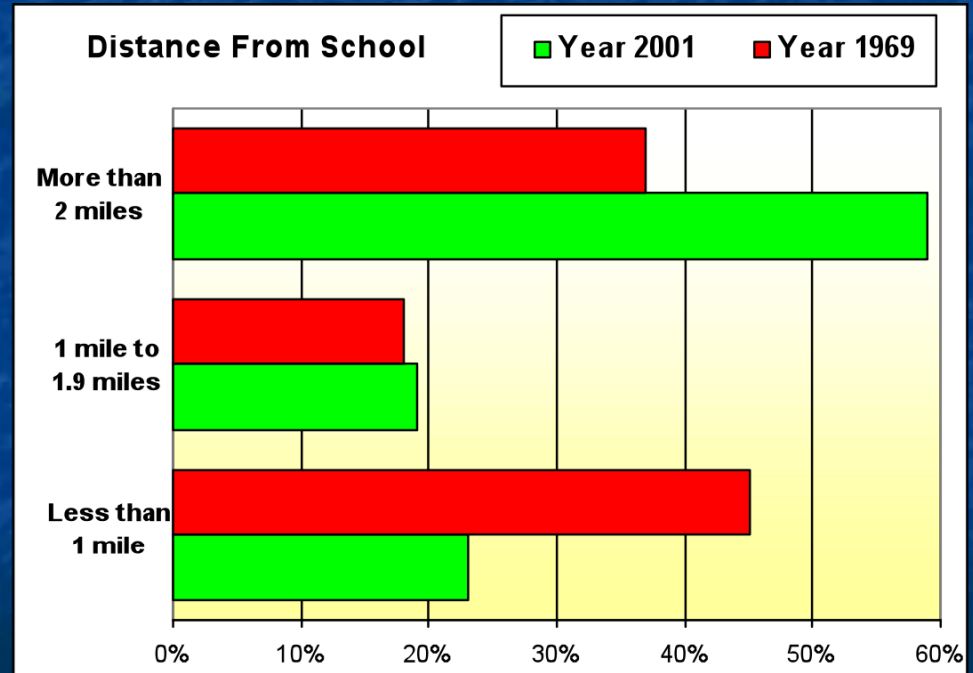
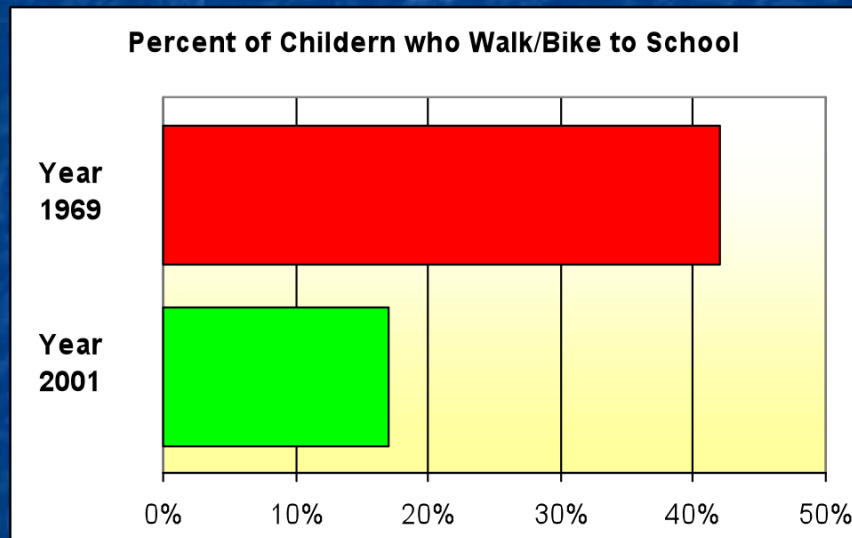
*Idaho receives  
\$1 million  
per year*



# *The Problem?*

## Fewer children walk or bike to school

- Kids walking to school dropped 23% between 1969 and 2001



Source: CDC 2005 and National Household travel survey



# *The Causes*

## Unsafe Conditions

- Pedestrian and Bicycle Infrastructure is inadequate/incomplete



# The Causes

## Land use

- Patterns have become spread out and disconnected



Drawing by Duany Plater Zyberk, in *ITE Journal* 1989;59:17-18

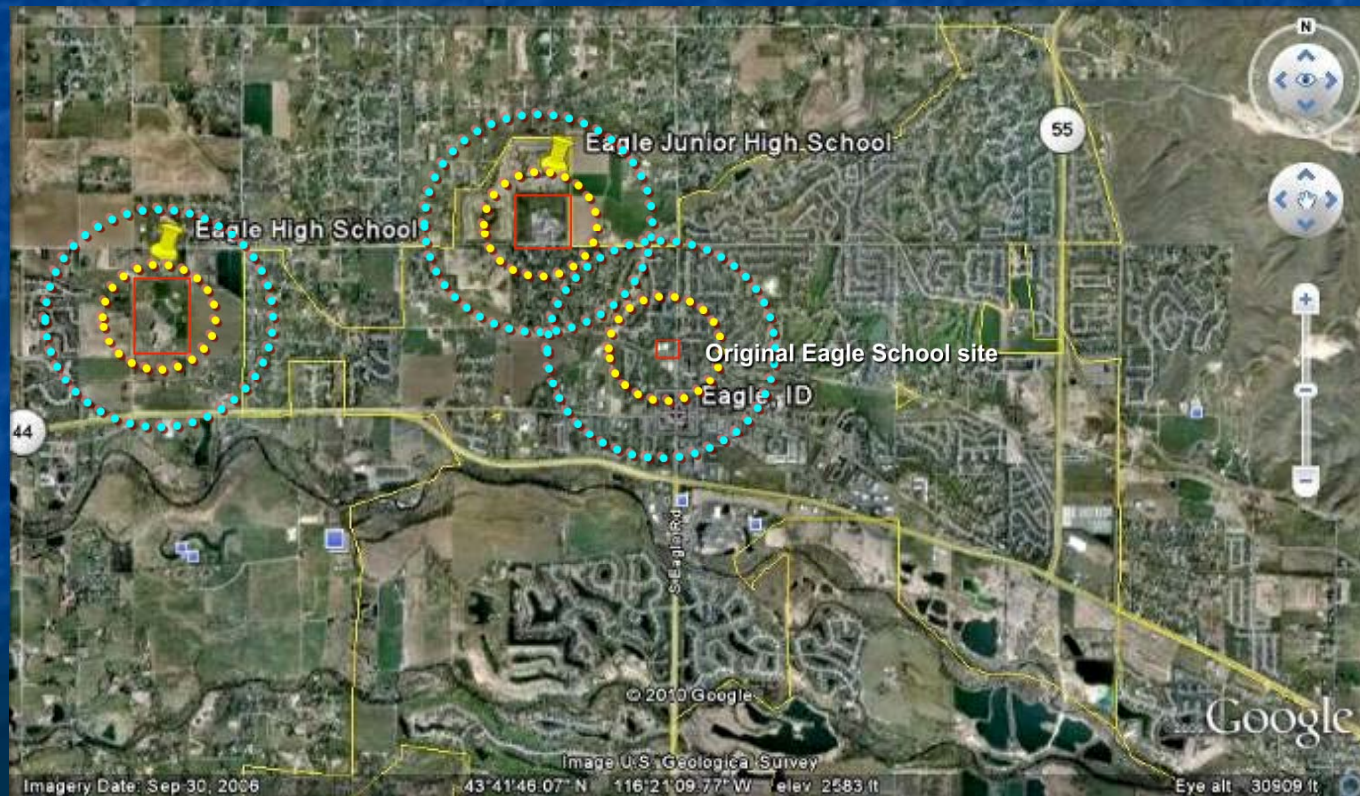


# *The Causes*

## School Sites have moved and grown larger

- Schools sited on overly large sites far from the neighborhoods and students they serve

-  Site boundary
-  1/2 mile walking radius
-  1 mile walking radius



# *The Consequences*

## **Congestion at schools is worsening**

- up to 25% of peak hour trips are created by parents driving kids to school

= increases of  
asthma and  
other chronic  
respiratory  
diseases.





# *The* *Consequences* Health impacts of low activity

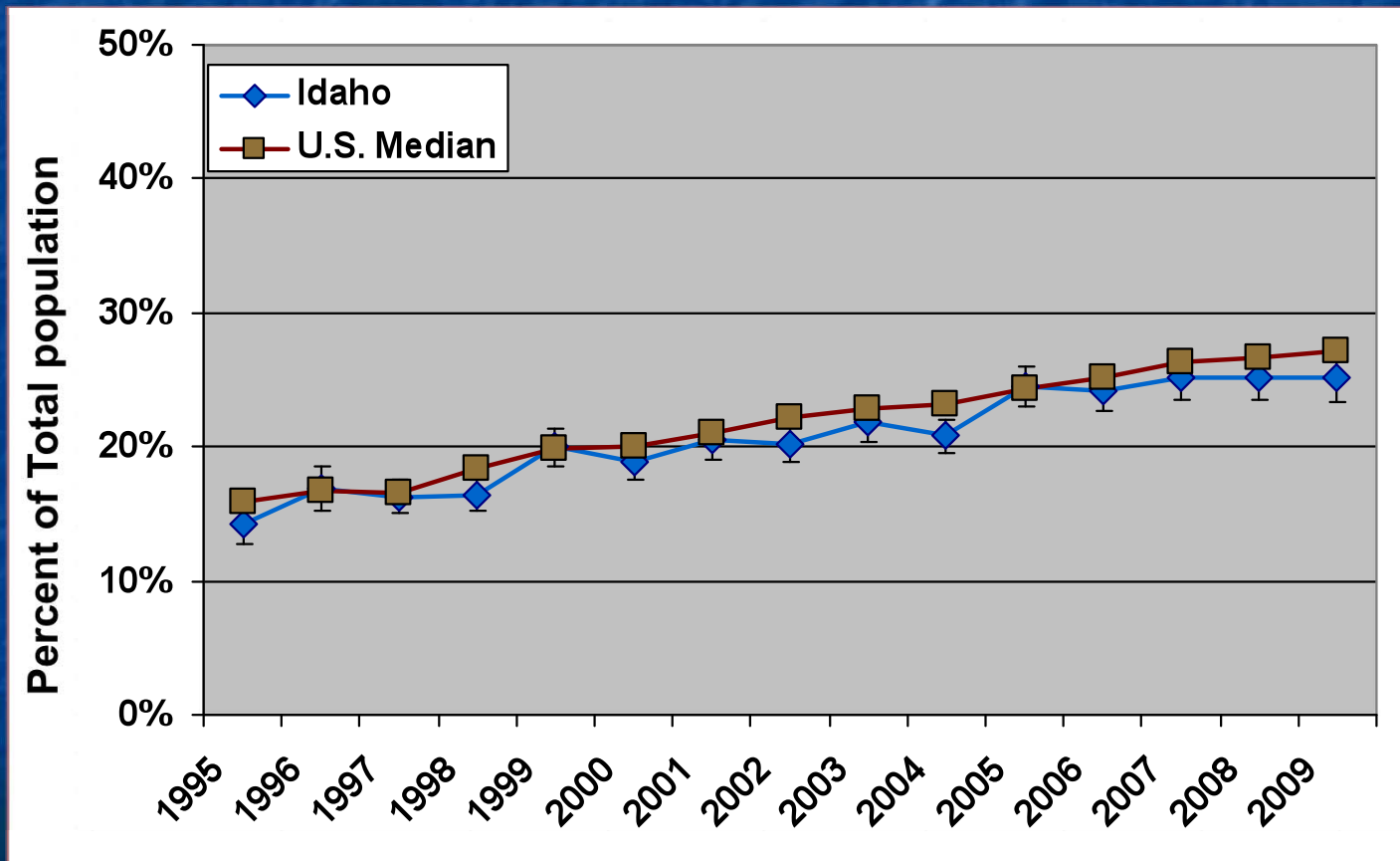
- Obesity is reaching epidemic proportions  
= increased Type II Diabetes



# *The Consequences*

## Health impacts of low activity

- Obesity in Idaho is reaching epidemic proportions



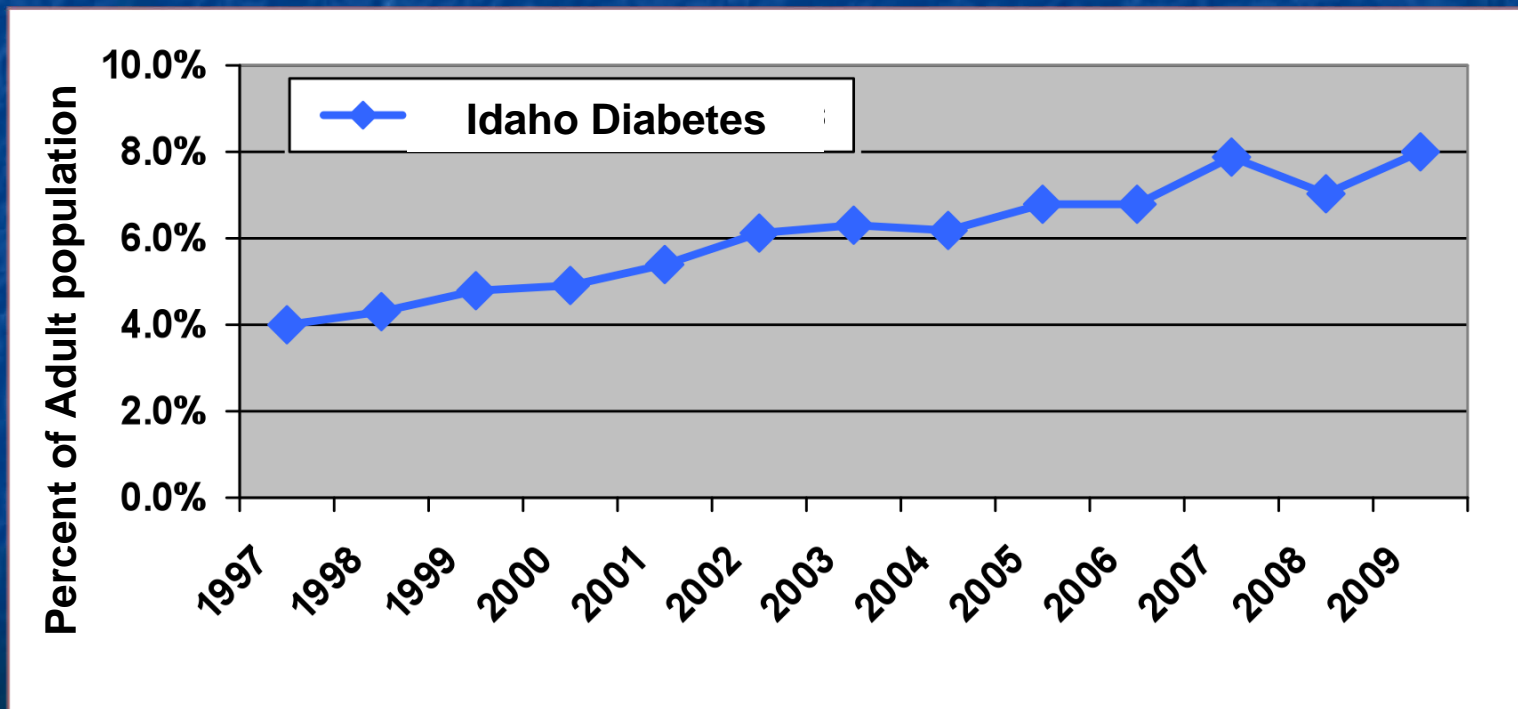
Source: Idaho BRFSS, Bureau of Vital Records and Health Statistics U.S. Source: BRFSS (median), Centers for Disease Control and Prevention



# *The Consequences*

## Health impacts of low activity

Increased **Diabetes** in Idaho, Diabetes has doubled in 13 years from 4% in 1997 to 8% in 2009



Source: Idaho BRFSS, Bureau of Vital Records and Health Statistics U.S. Source: BRFSS (median), Centers for Disease Control and Prevention

# *The Consequences*

## Children lose independence and mobility

- Kids must rely on adults to drive them



**Home**



**School**



**Shops**



**Recreation**



Everything is a  
Drive Away



**Library**





# *Solutions*

1. **Smart Growth** – Convenient community patterns
2. **Complete Streets** with bicycle & pedestrian infrastructure.
3. **School Site Planning** – within walking distance, meets communitywide needs.

*Create Safe Routes to School!*



*Smart Growth =  
Convenient  
Mixed-use  
Communities*





# *What is Smart Growth*

## Five D's

### ➤ Density & Distance

- Compact

### ➤ Diversity

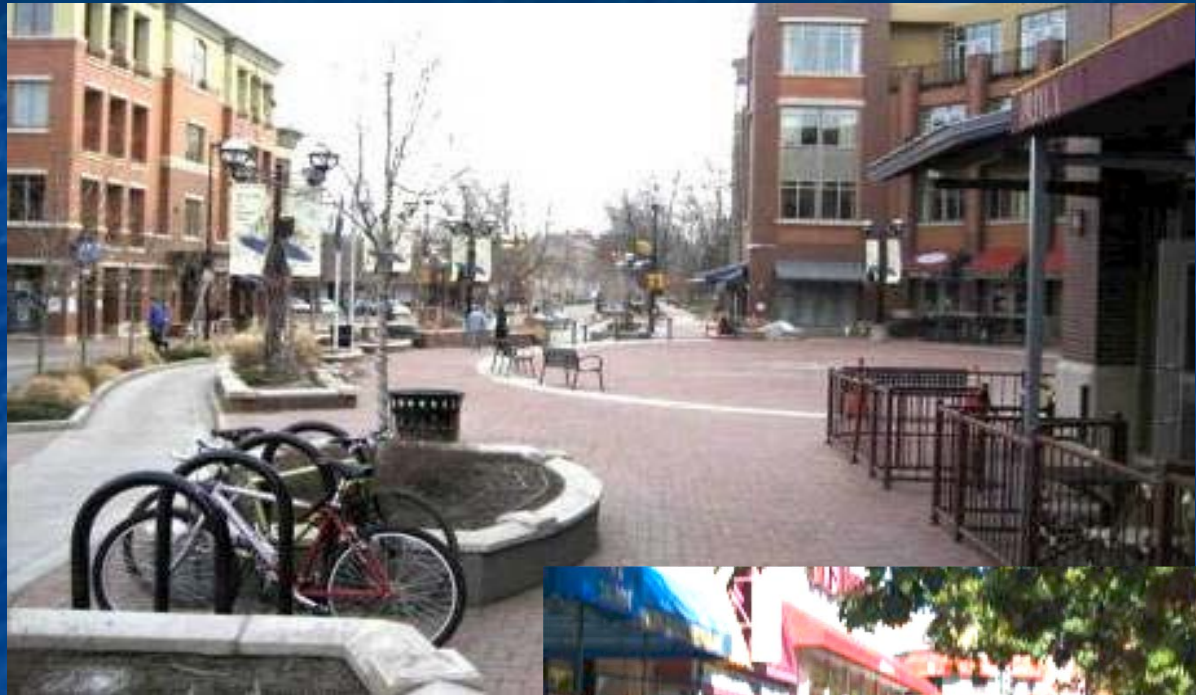
- Mixed Use

### ➤ Design

- Streets, Setbacks, Pattern

### ➤ Destinations

- Walk distance to needs

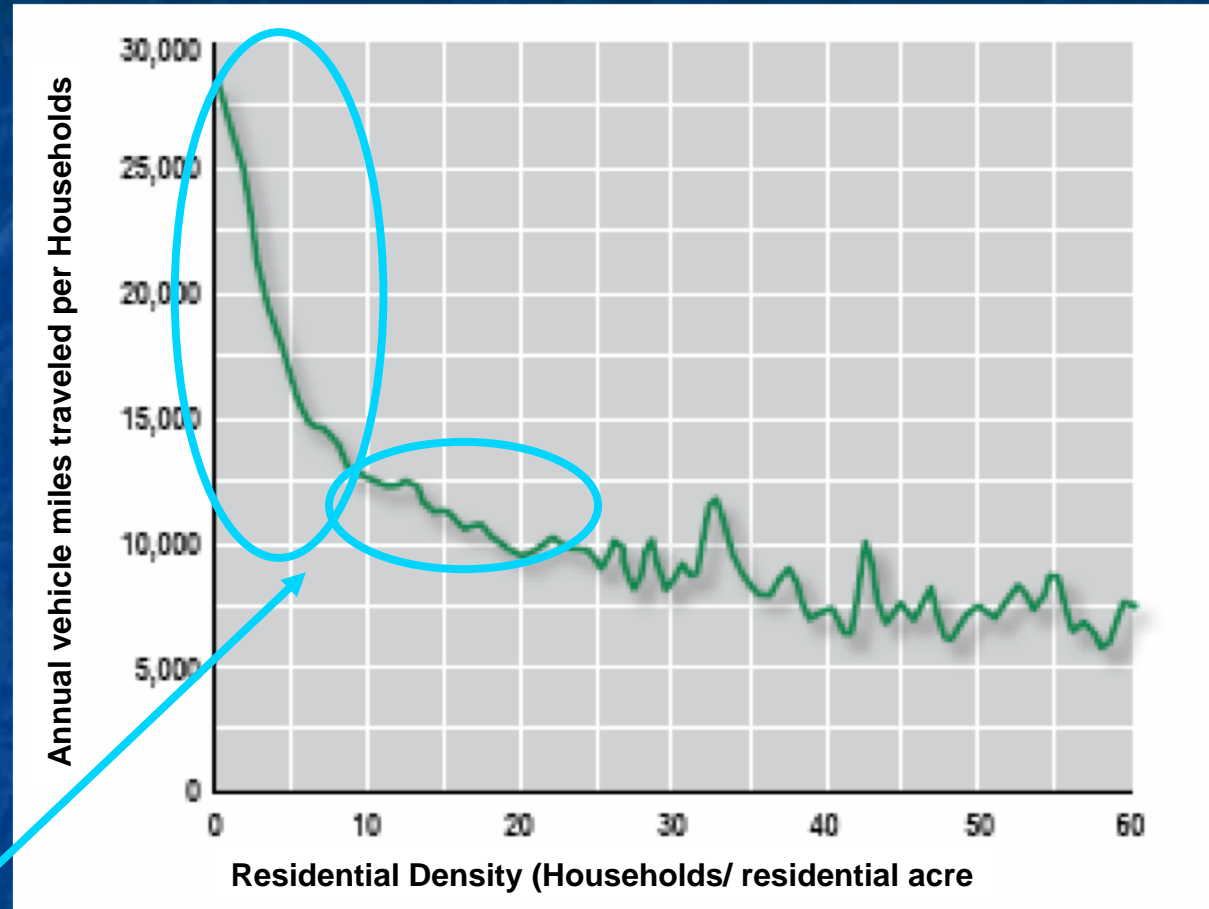


# *Density Affects Distance*

## Density

- Changes at lower end make a big difference in the # of miles traveled per year

Biggest gains at lowest levels



Source: Massachusetts data registry of motor vehicles 2005-2007





# *The Four D's*

## Diversity

- Mix of housing types





# *The Four D's*

## Diversity

- Mix of Uses

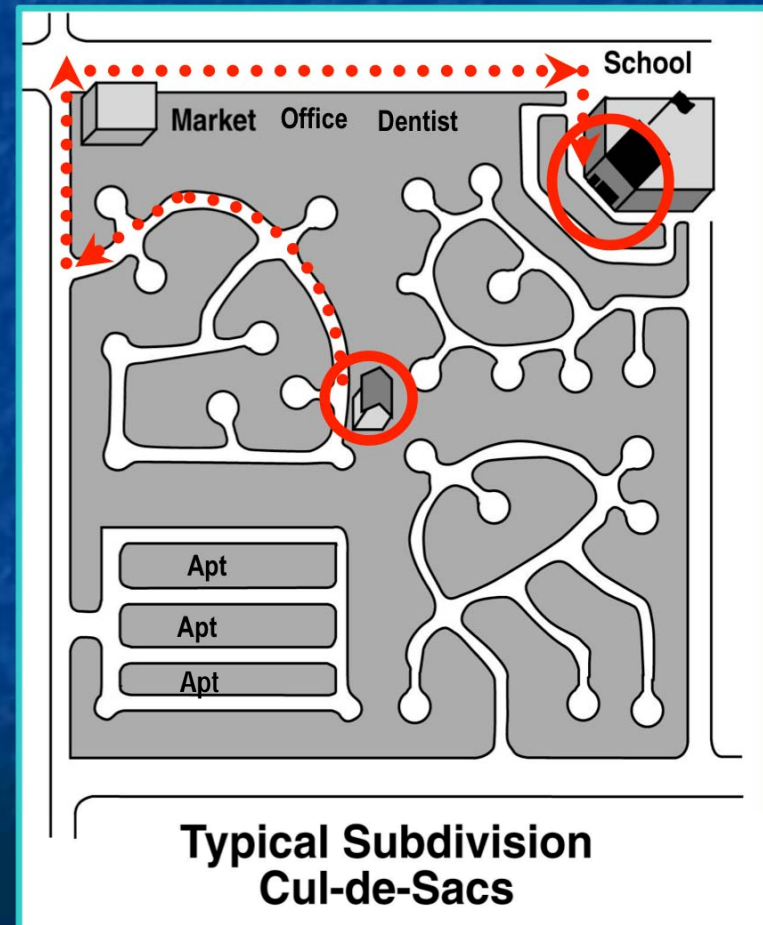
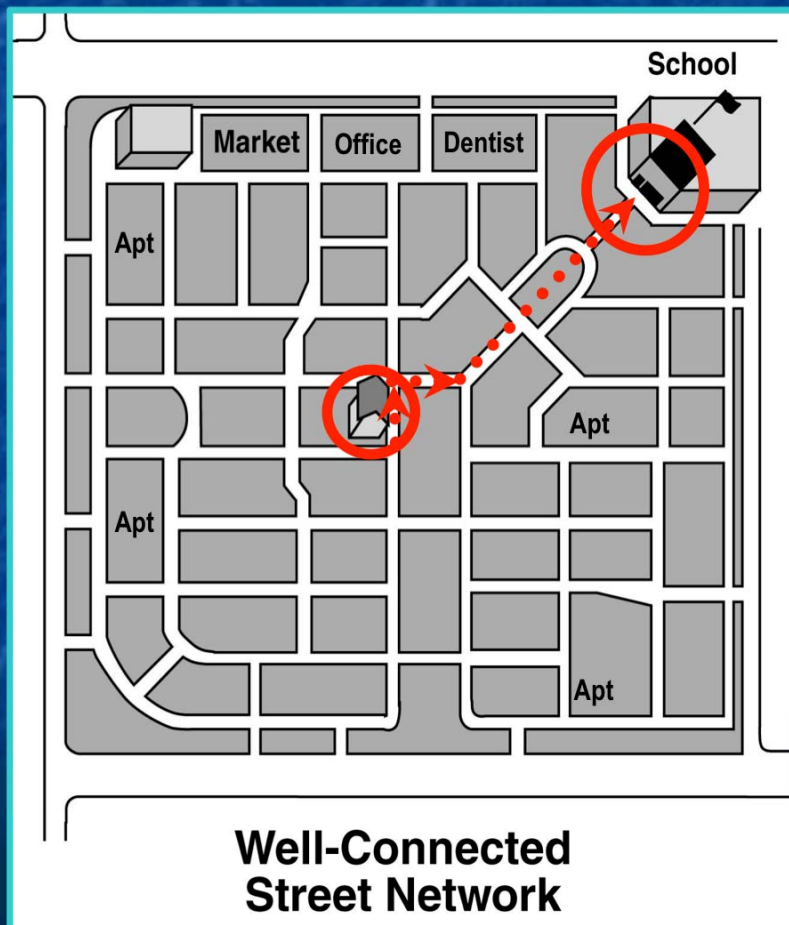




# *Design of street network*

## Destination Accessibility through Design

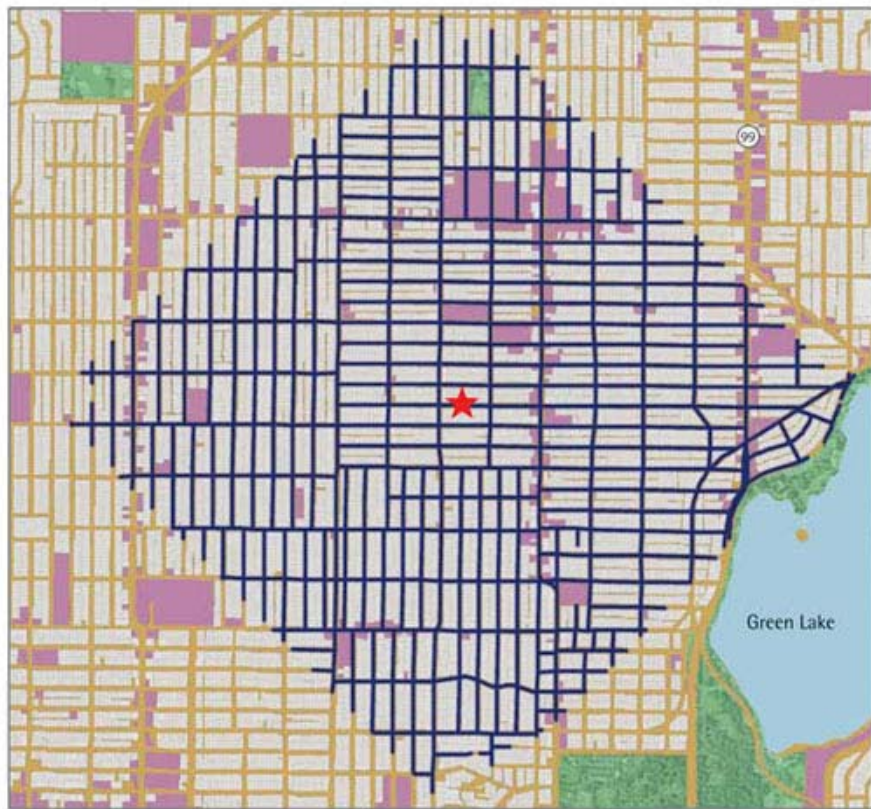
- Diversity makes use of good design



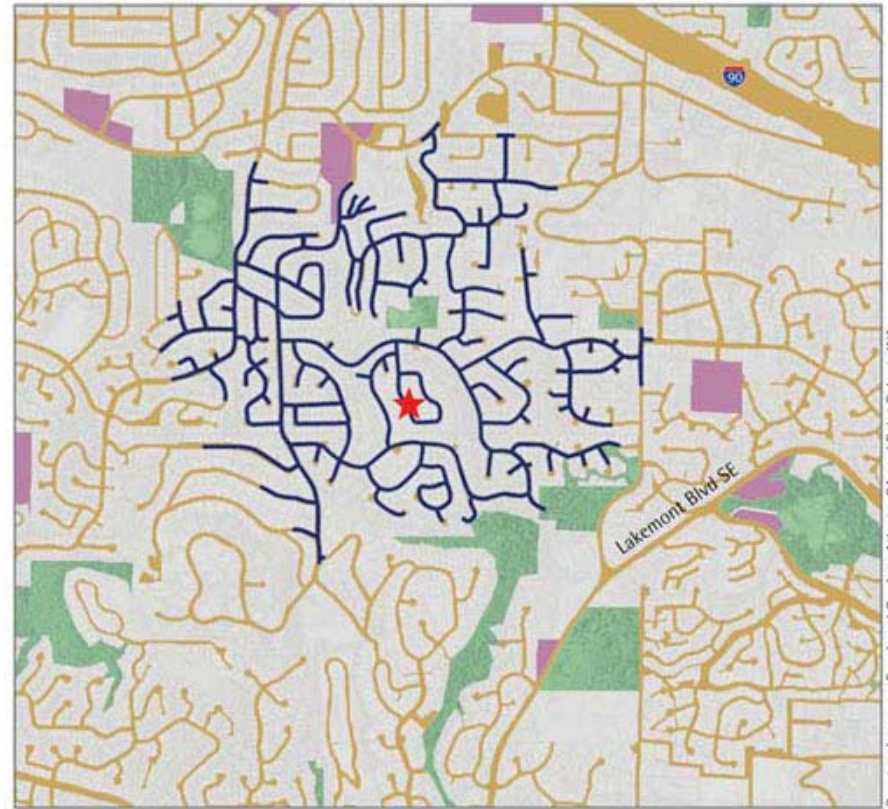
# *Design (again)*

## Compare Neighborhoods

- More connected – more within one mile



- ★ Starting point
- Places within a one-mile walk
- Commercial destinations
- Parks



- ★ Starting point
- Places within a one-mile walk
- Commercial destinations
- Parks



# *Sacramento Scenarios - Auto Use*

## *% Change from Existing*

Scenario	Total Vehicle Trips/Day	Total Vehicle Miles/Day
Current Trends	+140%	+120%
Density Only	+114%	+89%
Dense & Smart Growth	+91%	+62%
Land Use Balance	+111%	+74%

When population doubles, there will be a big increase in auto use under any scenario

But 4D model shows smart growth policies could reduce the growth significantly

Source: 4D study Sacramento, Fehr and Peers 2008



# *Sacramento Scenarios - Walk/Bike*

*...and other non-motorized trips.*

Scenario	Sac County	Total Region
Existing	6.6%	6.4%
Current Trends	5.1%	4.8%
Density Only	11.6%	8.9%
Dense & Smart Growth	23.5%	18.0%
Land Use Balance	13.9%	10.6%

The 4D's have major impacts on the percentage use of walking and biking that would not be detectable using a conventional model



Source: 4D study Sacramento, Fehr and Peers 2008



# *Sacramento Resulting Mode Split*

Scenario	Auto	Transit	Non-Motorized
Existing	92.2%	1.1%	6.6%
Current Trends	93.8%	1.1%	5.1%
Density Only	84.9%	2.4%	12.5%
Dense & Smart Growth	71.1%	5.4%	23.5%
Land Use Balance	83.0%	3.0%	13.9%

**4D model does not forecast the demise of the auto mode, even under the most aggressive scenario.**

**But it does suggest that a more balanced mode split is achievable in Sacramento**



Source: 4D study Sacramento, Fehr and Peers 2008

*Complete the  
Streets For All  
Users with walking  
and biking  
facilities*





# *How a Complete Street looks*

- Adequate Sidewalk widths
- Pedestrian Protection such as street trees or on-street parking
- Bike Lanes
- Appropriate Lane Widths to slow traffic





# Who are "All Users"?

Everyone who travels in your community.

- Pedestrians of all ages
- Disabled travelers
- Bicyclists
- Transit riders
- Drivers
- Freight haulers

Can you meet all of their needs?





# *Vision*

## What does your community want?

- Don't let traffic modeling determine the outcome.
- Decide what you want first  
Determine how traffic fits into that vision.





# *Integrate with Land Use*

**Many different kinds of complete streets.**

- Make “Context Sensitive by serving adjacent land use.





# *There will be Exceptions*

## Exceptions:

- Require a high level approval (elected officials)
- Have clear criteria and require findings about how the exception meets the criteria

## Ask

1. How will you meet all users needs?
2. If not on this roadway where?



# *How will you Measure?*

## **Establish measurements for all users**

- Determine **how** you will measure pedestrian and bicycle
- Look for adopted **LOS standards** for pedestrians and bicyclists
- Use **GIS technology** to pinpoint deficiencies

## **Find examples and plans at:**

<http://www.bicyclinginfo.org/develop/sample-plans.cfm>





# *How will you Implement?*

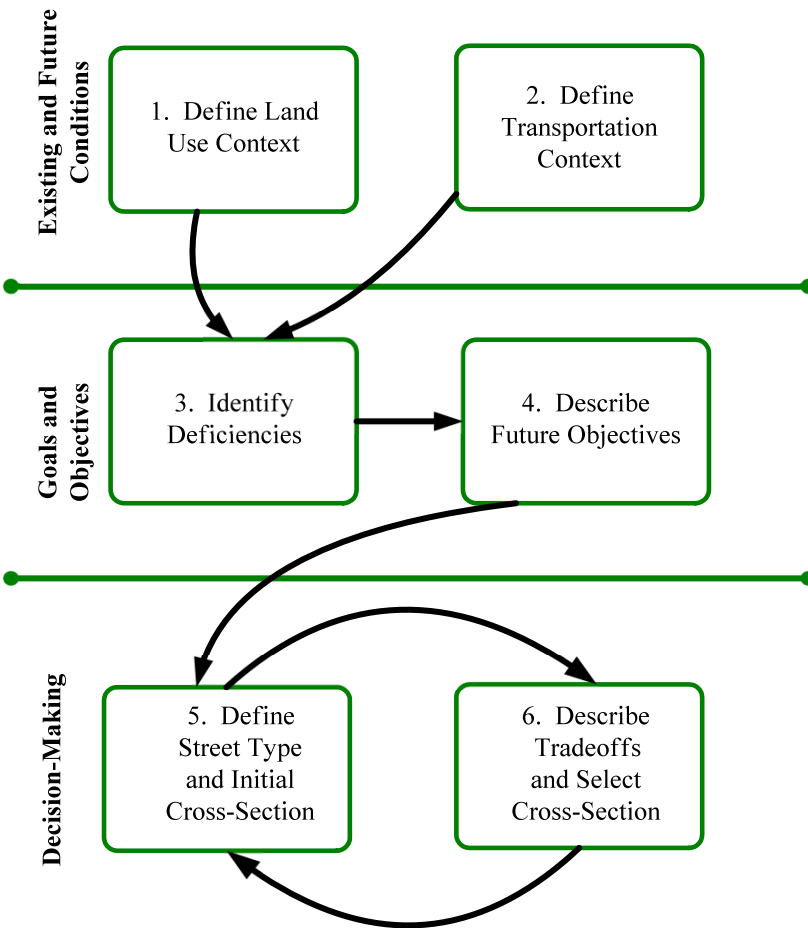
## Implementation

- measurable outcomes.

- Requires that you **identify** who will do what and by when.
- Develop a **process**, follow through is a must



### Six Step process used by Charlotte NC






# *School Site Planning*





# *School Site Planning*

-  *within walking and biking distance*
-  *meets community wide needs*
-  *joint collaborative process*



# *School Siting Obstacles*

## **Barriers to establishing walkable schools**

- School size drives Administrative costs





# *School Siting Obstacles*

## Barriers to establishing walkable schools

- Maintenance/Renovation costs





# *School Siting Obstacles*

## Barriers to establishing walkable schools

- Land costs
- Busing costs separate





# *School Siting Obstacles*

## **Barriers to establishing walkable schools**

- Educational program needs
- Athletic field needs/wants
- High costs



# *Implement Collaborative Community Planning*

## **Develop MOU or other commitment to plan collaboratively**

- Include land use agency, school district, transportation agencies at a minimum
- Determine decision-recommendation process.
- Work for consensus





# *Implement Collaborative Community Planning*

## Utilize workshop process

- Develop base line information (costs, needs, walkability) on all sites to be considered
- Invite all stakeholders, make input meaningful
- Include other facilities if pertinent (i.e. parks, fields community centers)
- Use process to balance competing needs.



# *Policy Survey*

## **What**

- 8 questions about pedestrian, bicycle, school siting and land use policies

## **Who**

- 82 respondents, from 23 communities.
- Between 32 and 77 of the participants answered each question





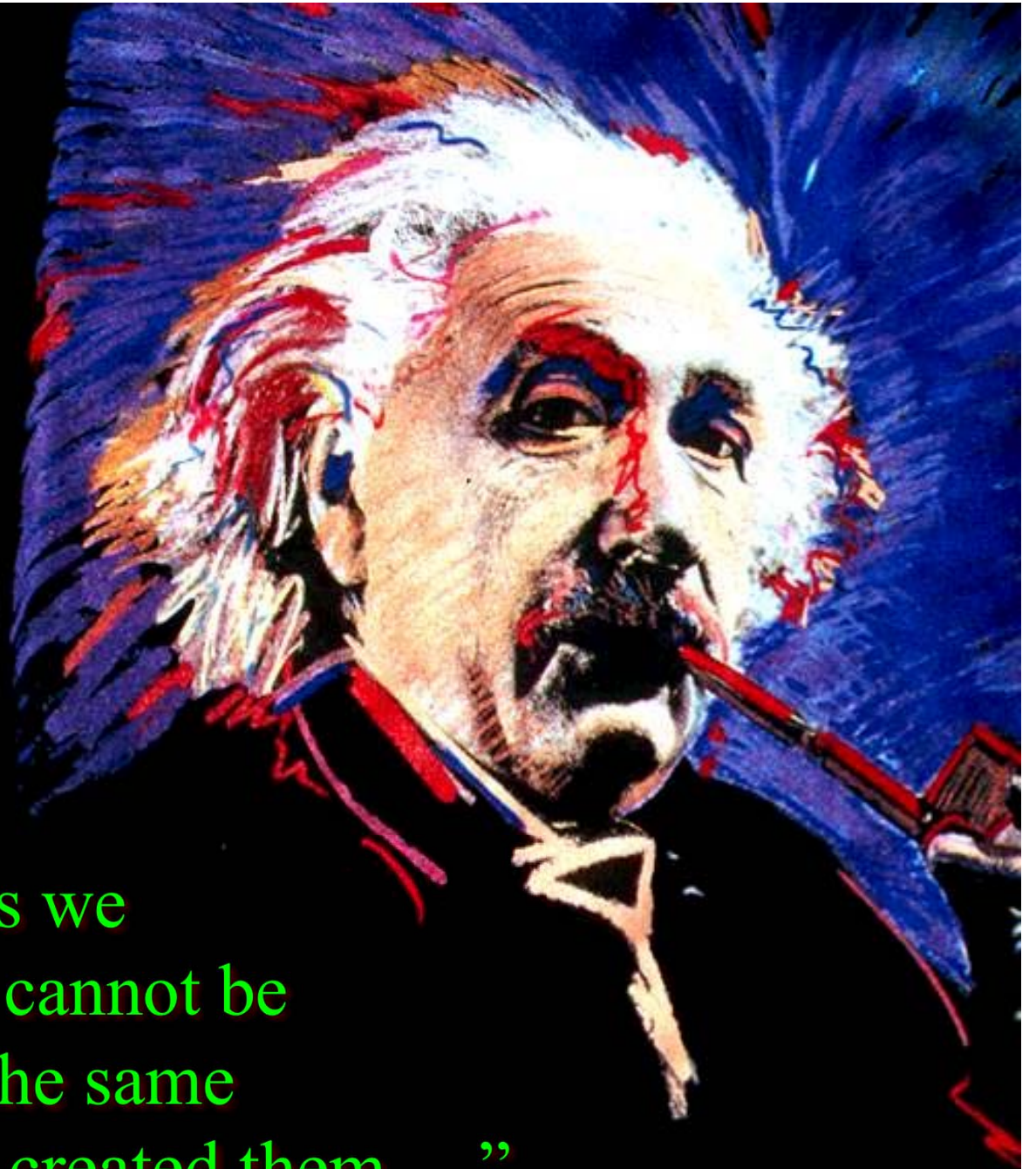
## Safe Routes Policy Survey Results

Mixed Use Policies			MU in Land Use Code			Sidewalks			Specific sidewalk requirements		
Yes	22	69%	Yes	31	74%	Comp Plan	35	49%	Detailed	34	52%
No	3	9%	No	7	17%	Limited	23	32%	Limited	13	20%
Don't Know	7	22%	Don't Know	4	10%	New Only	6	8%	New Only	9	14%
						None	5	7%	None	3	5%
						Don't Know	2	3%	Don't Know	6	9%
Bike lanes and paths			Require school connections			Future plans			Plans funded		
Y-Good	10	14%	Yes	17	30%	Yes	44	72%	Yes	8	15%
Y-Adequate	22	30%	Limited	7	13%	Limited	7	11%	Partially	20	36%
Y-Inadequate	23	32%	No	24	43%	No	6	10%	No	24	44%
Limited	6	8%	Don't Know	8	14%	Don't Know	4	7%	Don't Know	3	5%
None	11	15%									
Don't Know	1	1%									
Connectivity of transport system			Crossings			School siting/design Policy					
Yes	14	20%	Exceeds	9	16%	Yes	1	2%			
Partially	5	7%	Better	13	23%	Limited	9	14%			
No	30	43%	Standard	13	23%	None	39	62%			
Don't Know	20	29%	Poor	9	16%	Don't know	14	22%			
			Don't Know	12	21%						



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The problems we  
have created cannot be  
solved with the same  
thinking that created them....”





# *School Siting Policies that can make a difference*

## **1. School Size**

- Eliminate minimum acreage standards
- Lower or eliminate minimum school enrollment
- Use community based decision making process
- Share administrative costs between buildings



# *School Siting Policies that can make a difference*

## **2. Encourage School Renovation**

- Eliminate “% rules” that discourage renovation
- Prioritize repair/renovation of existing buildings over new construction
- Develop process to adapt current sites to new needs





# *School Siting Policies that can make a difference*

## **3. Conduct a Full Cost Accounting**

- Compare cost of reuse and reconstruction to new construction
- Complete comparative analysis of possible sites
- Study all costs in comparison, include extension of infrastructure (roads, sidewalks, sewer), busing costs



# *School Siting Policies that can make a difference*

## Minimize transportation/ health costs

- Determine direct life cycle transportation costs/benefits
- Assess health impacts of site
- Prepare walkability/bikability analysis for new sites.
- Evaluate indirect costs such as vehicle miles traveled, air quality impacts.





# *School Siting Policies that can make a difference*

## **Plan to Share Facilities**

- Authorize sharing of facilities with cities & non-profits
- Develop policies for liability, cost sharing, security, insurance, etc.
- Include sharing ideas in long range plans
- Examine sharing with every renovation or construction



<http://www.phlpnet.org>