Carter::Burgess

Complete Streets

25th Street, Ogden

Utah League of
Cities and Towns

September 11th, 2008

Presentation Outline

- What are "Complete Streets?"
- Flexibility In Design.
- Implementation.
- UDOT's approach.
- The Land Use Connection.
- Vehicle speeds.
- Local Case Studies.
- Quiz Time.

100 South Main Street, Salt Lake City

What Is a Complete Street?

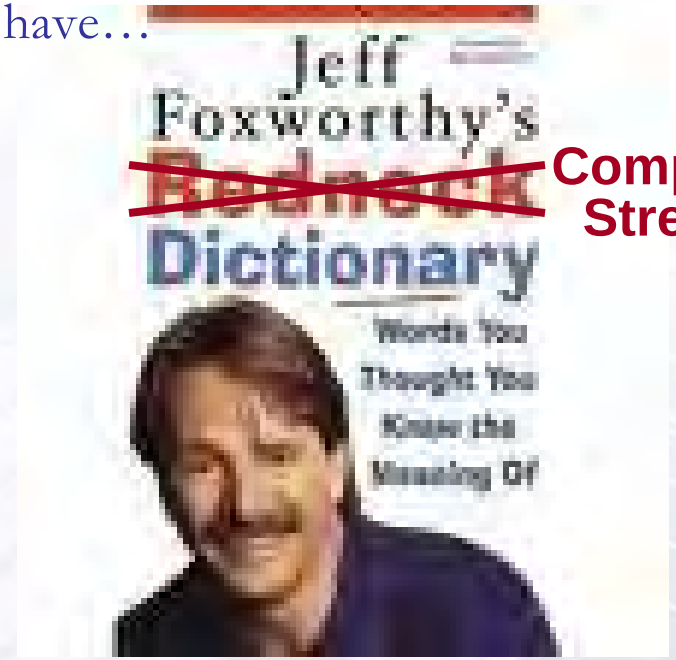
The www.completestreets.org website states that…

"Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities are able to safely move along and across a complete street."

250 South Main Street, Salt Lake City

What Makes a Complete Street?

- Every street is unique. However…
- You just *might* be a Complete Street if you have…
  - Sidewalks
  - Bike Lanes
  - Wide Shoulders
  - Plenty of Crosswalks
  - Refuge Medians
  - Bus Pullouts
  - Special Bus Lanes
  - Raised Crosswalks
  - Audible Pedestrian Signals
  - Sidewalk Bulb-outs



Flexibility in Design

- Complete Streets don't require a "one size fits all" approach.
- This is a Complete Street…

Looking east at B St./2nd Ave., Salt Lake City

Looking north at B St./2nd Ave., Salt Lake City

Flexibility in Design

- And so is this…

Legacy Parkway/500 South interchange

Legacy Parkway/Center Street interchange

Flexibility in Design

- Flexibility has its risks.
  - Must be applied carefully.
  - Must be applied with experience.

Implementation

- Adoption of Complete Streets policies – internal or external.
- All levels of government.
- Cities
  - Sacramento, CA
  - San Diego, CA
  - Santa Barbara, CA
  - Boulder, CO
  - Fort Collins, CO
  - West Palm Beach, FL
  - Chicago, IL
  - Columbia, MO
  - Charlotte, NC
  - Spartanburg, SC

Paul Zykofsky, Del Mar 2005

Implementation

- Counties
  - Sacramento, CA
  - San Diego, CA
  - DuPage, IL
  - Jackson, MI
- MPOs
  - Bay Area, CA
  - Gulf Coast, FL
  - Cleveland, OH
  - Columbus, OH
  - Knoxville, TN
  - Austin, TX
- State DOTs
  - CA
  - FL
  - KY
  - MA
  - NC
  - OR
  - PA
  - RI
  - SC
  - TN
  - UT
  - VA

Berkeley, CA

UDOT Approach

Bicycle and Pedestrian Checklist **Planning/Concept Phase**

Planning/Concept Checklist

Project _____

SR _____ Segment _____ Offset _____

Team Members _____

_____ Date _____

Bicycle and pedestrian accommodations will be included in this project:
Yes _____ No _____ (if no, please explain)

_____

_____

Item	Considerations	Check	Comments
1. Consistency with Bicycle/Pedestrian Planning Documents	Is the transportation facility included in or related to bicycle and pedestrian facilities identified in a master plan? MPO bike/pedestrian plan Local planning documents Bicycle Routes Statewide Bicycle and Pedestrian Master Plan		
	Will the transportation facility provide continuity and linkages with existing or proposed bicycle/pedestrian facilities?		
	Is the transportation facility included in or related to a regional/local recreational plan? Rails-to-Trails Greenways Local, State, National Parks		
	On the state transportation system, what is the long-range vision for bicycle and pedestrian facilities?		

The Land Use Connection

- Land use is as important as transportation design.
- Mixed-use zoning helps.
- Buildings oriented to the street.
- Variety of uses, such as…
  - Mexican Restaurant
  - Radio Station
  - Comedy Club
  - Sandwich Shop
  - Japanese Restaurant
  - Chinese Restaurant
  - Art Gallery

50 West Center Street, Provo

The Need For (Low) Speed

- Low speeds make it easier for cyclists to share the road, and make pedestrians more comfortable.
- Vehicles speeds are proportional to the need for special facilities.
- Visual narrowing and "side friction" lower speeds.

300 West Center Street, Provo

The Need For (Low) Speed

- Wide roads, large setbacks, no medians, and no street trees = speed.
- This road is posted at 40 mph, but averages about 50 mph.
- Wide shoulder is good for through cycling -- but left turns are tough.
- Good for buses.
- No crosswalks for ¾-mile.

700 East (~8500 South), Sandy

Case Study #1 – Ogden 25th Street

- The birds-eye view.

The Street-Level View

- Visual narrowing.
  - On-street parking.
  - Building frontages.

- Mid-block crosswalks.
- Uniform architecture…mostly.

Transit Integration

- Bus service.
- Commuter rail.

Bicycle Environment

- Speed limit.
- Speed reality.
  - On-street parking.
  - Visual narrowing.

Pedestrian Environment

- Sidewalks.
  - Icy.
  - Dry
  - Both are wide.

Pedestrian Environment

- Mid-block crosswalks.
  - With bulb-outs.
  - Signage.

Pedestrian Environment

- Small corner radii.
- ADA truncated domes.
- Snow removal/maintenance issues.

Pedestrian Environment

- Art.
- Historical/interpretive markers.
- "Functional" street furniture.
  - Garbage cans.
  - Benches?
  - Bike racks?

Land Use

- Variety.
  - Restaurants.
  - Comedy club.
  - Office supplies.
  - Hotel.
  - *One of these buildings is not like the others…*

Case Study #2 – Provo Center Street

The Street-Level View

- Mid-block crosswalks.
- Median sidewalks.
- Bulb-outs.

- Visual narrowing.
  - Median and curb parking.
  - Street trees.
  - Narrow lanes.

Transit Integration

- UTA Bus Service

Bicycle Environment

- Speed limit.
- Speed reality.
  - Visual narrowing and "side friction" eliminate the need for wide shoulders.

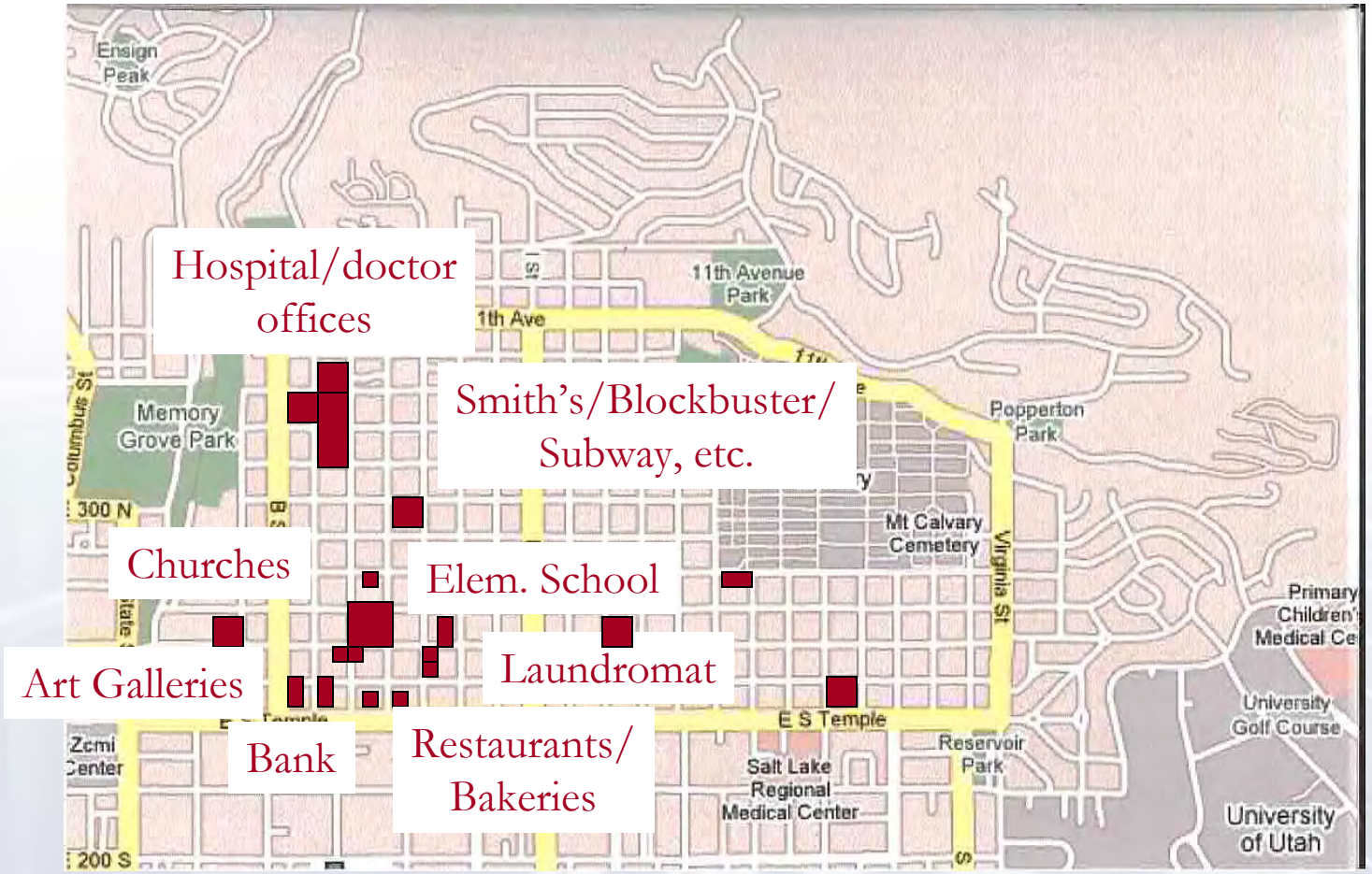
Pedestrian Environment

- Wide sidewalks.
- Mid-block crosswalks.
  - Bulb-out and textured pavers.
- Small turning radii.

Pedestrian Environment

- Street furniture.
  - Art.
  - Benches and garbage cans.

Case Study #3 – The Avenues



Land Use Mix

- All within one block, 4th Avenue between D and E Streets…
  - Two restaurants and scrapbooking store.

Land Use Mix

- All within one block, 4th Avenue between D and E Streets…
  - Single-Family homes.

Land Use Mix

- All within one block, 4th Avenue between D and E Streets…
  - Apartments and duplex.

Bicyclists and Pedestrians

- Relatively low vehicle speeds enable bikes to share the road.
- 3rd and 11th Aves. have bike lanes, but others don't need them.
- Every street has good sidewalks.
- Some raised crosswalks.
- Street parking and park strips provide buffers from traffic.

But What About Traffic?

- With lots of apartments and commercial land uses there must be lots of traffic, right? Well, not really…
- The grid network spreads out traffic.
- Mixing the uses in a bicycle/pedestrian friendly atmosphere may reduce vehicle trips.
- This is the largest road in the Avenues =>.
- No speed limits more than 25 mph.

Quiz Time…

The correct term for the pavement shown to the right side of the solid white line is:

(a) Bike lane
(b) Shoulder
(c) Parking lane

(b) Shoulder

Quiz Time…

True or False: A pedestrian approaching a signalized intersection with a "Walk/Don't Walk" display may begin walking across the intersection even if "Don't Walk" is flashing (or solid), as long as the traffic light is green.

False!

41-6a-306. Pedestrian traffic-control signals -- Rights and duties.
(2) A pedestrian facing a flashing "Don't Walk" or "Upraised Hand" of a pedestrian traffic-control signal may not start to cross the roadway in the direction of the signal, but a pedestrian who has partially completed crossing on the walk signal shall proceed to a sidewalk or safety island.

(3) A pedestrian facing a steady "Don't Walk" or "Upraised Hand" of a pedestrian traffic-control signal may not enter the roadway in the direction of the signal.

Quiz Time…

When riding a bicycle on a street, you should ride:

(a) The same direction as traffic.

(b) Against the flow of traffic.

(c) Either one – you can choose.

(a) The same direction as traffic!

Why?

Because drivers look in areas where they expect to see cars, and if you're not behaving like a car, you likely won't be seen by them.

Quiz Time…

What is this feature called?

(a) Bulb-out

(b) Curb extension

(c) Raised crosswalk

(a) Bulb-out OR

(b) (b) Curb extension

What do bulb-outs/curb extension do?

- Slow speeds
- Improve pedestrians' visibility to motorists

Quiz Time…

You are riding a bicycle up to an intersection. The light is red and there is a marked right turn lane. Where should you stop your bicycle while waiting for the light to change?

(a) At the right side of the right turn lane so that you are as far right as possible.

(b) In the middle of the right turn lane.

(c) In the right-most through traffic lane.

C

Quiz Time…

True or False: It is OK to allow parking next to bike lanes as long as there is enough space for the wheels of the parked cars to be between the bike lane and the curb.

False…No bike lane is better than one that tells cyclists to ride in a dangerous location!

Quiz Time…

True or False: It is a good idea to put 2-way shared use paths (i.e. bike paths) adjacent to urban streets with frequent crossings.

False!

The American Association of State Highway and Transportation Officials (AASHTO) recommends against this.

Why? Because this results in some cyclists traveling against the flow of traffic and drivers crossing the path may not see them. Urban streets should accommodate cyclists on the road.