Transportation & Community: Mobility Options for Resilience

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USDOT-FHWA Hawaii

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Mobility Options
Design & Implement for Community
“Making streets more efficient, not simply widening them, can help solve our mobility problems.”

Better Streets, Better Cities: A Guide to Street Design in Urban India (Dec 2011)
Mobility Options

- Context Sensitive Solutions (CSS/ CSD)
- Complete Streets (CS)
- Transit Oriented Development (TODs)
- Green Corridors
- Rightsizing
- Community Design
- Resilient Communities

RESPECT

Bill Eubanks, RLA, FASLA
Urban Edge Studio, Charleston SC (April 2013)
Rightsizing

Allocating street space to serve the full range of users.

- **Typical Goals:**
  - Increase safety and access for all users
  - Encourage walking, biking, & transit use
  - Support businesses & the local economy
  - Create places that foster community livability

- **Typical Strategies:**
  - Convert vehicle travel lanes to other uses
  - Narrow vehicle lanes
  - Add bike lanes
  - Improve pedestrian infrastructure
  - Change parking configuration
  - Add roundabouts & medians
Benefits

A healthy community is a more RESILIENT community.

**Economic development**
- Increases productivity & saves time
- Encourages concentration of business activity
- Increases economic competitiveness
- Promotes a green economy
- Increases property values and development potential

**Fiscal benefits**
- Savings on cost to build & maintain highways & roads
- Generates stronger tax revenues

**Household benefits**
- Savings from reduced cost of driving
- Improved access to jobs, schools, and other destinations
- Promotes Health

**Environmental benefits**
- Reduces greenhouse gases
- Preserves agricultural land & assists with food security
- Promotes energy independence

Leveraging State Agency Involvement in TOD to Strengthen Hawai’i’s Economy - HI DBEDT-OP (Dec 2012)
Costs

- Increase in quality of public health (active living)
- Decrease in accident severity (safety)
- Reduced project costs (fiscal)
- Increased community participation & acceptance
- Decrease legal battles
Statistics

In the US:

- 40% of all road trips are <3 miles
  - 47% of these are made by car
  - 73% of the US has no access to sidewalks or bike lanes
- 17% of every trip made is <1 mile
- WA DOT saves ~$9M/ project (30% total cost) in small town main street projects

Lessons Learned

- Project should begin at neighborhood level
  - What do they want from their street?
- Some parts seem counterintuitive
  - Educate – show who else is on a diet
- Get Council and neighborhood on board
- Build advocates for the project
  - Show them how to be successful
- Weather the storm during construction
  - Be proactive with media
- Do before/after studies
Before & After Studies

Recommended:
- Volumes
- Speeds
- Travel time
- Accident rates
- Video of peak queues
- Bike/ped volumes (if necessary)
- Resident/business surveys (if necessary)
Corridors & Connections

Putting People and Places Together
Don't it always seem to go
That you don't know what you've got
Till it's gone...
…They paved paradise
And put up a parking lot

Joni Mitchell - Big Yellow Taxi, 1970
About her first visit to Waikiki
Charlotte DOT Implementation

- Transportation investments can be used to move people and create better places...streets can be memorable!
We can’t keep widening our roads, so we have to **broaden** our thinking.
Street Design Principles

- Safety
- Mobility
- Pedestrian Accessibility
- Livability
- Local Context
- Creative Use of Space
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He Kuleana kō Kākou

- Transport is everyone’s Kuleana.

- Social, environmental, economic issues twined with transport
  - Involve a broad spectrum of interests and parties in system planning, design, & maintenance.

- Coordination and cooperation
  - Among local, state, & federal agencies,
  - community & business associations,
  - environmental & recreational organizations, &
  - other groups.
Systems Thinking

- Protect & Restore Natural Resources, Improve Environmental Quality
- Create a Quality & Uniquely Hawaiian Experience for System Users
- Support Local Communities & Social Dynamics
- Enable/Advance Sustainable Transport Facilities
Honolulu Pilot

- *Hele On Kaka`ako 2013*
- Kaka`ako - Honolulu
- 12 May 2013
Cooke Street Complete Street Demonstration Project

- BMX Ramp
- Traffic Calming Circle
- Importance of Streetscapes
  - USGBC benches, pop-up gardens
- Awnings: wall display on heat, island effect and how canopies, awnings, and trees bring down temperature several degrees
- Friends of the Library: book shelves and info
- CS Demo Starts Here! Free standing box display with pamphlets handout
- Traffic Calming Circle
- SSFM Chess Parklet
- 449 Cooke Street Warehouse Space
- HCDA
- Out Door Circle Parklet in Front of This Is It Bakery
- Facts about Complete Streets
- B-Cycle Bike Share at 449 Cooke Street Warehouse location
- Bulb-outs and Rain Gardens
- Power of 10: place making principles demonstrated in a pop-up urban park
- Bulb-outs and Rain Gardens
- HCDA Lobby: display and area to donate, sign up to support future Complete Streets efforts, traffic simulation
- Complete Street Information - over Kakaako Plsp
- Makers Space Parklet
- Bulb-outs and Rain Gardens
- Agricultural Forest Pallet Benches
- Oiola Booth

Hele On Kaka`ako - Cyclovia, Honolulu
(12 May 2013)
Hello mayor? Good news! I have found a way to reduce the traffic on our streets! I have made some four lane roads into two lanes... with a lane for bikes on each side! And hello... hello...
Statute-Regulation-Policy

- Federal
  - 23 USC & 23 CFR

- State
  - Act 54 (2009)

- Local
  - Honolulu Ordinance (Bill 26, 2012)
  - 2012 - 130 communities adopted complete street policies
  - 2005-2012 – averaged 20/ year
Seattle Complete Streets

- Seattle City Policy is about creating and maintaining safe streets for everyone.
  - Seattle City Council Ordinance 122386 (2007)
- SDOT uses a rigorous, data-driven process to evaluate planned projects consistent with the Complete Streets policy.
  - Complete Streets checklist - tool used by SDOT to collect data and information about the status of the street and surroundings.
- Highest priority = safety.
  - Consider opportunities to improve safety.
  - Connection between street attributes and safety for road users.
- Second priority = mobility.
  - Mission is to move people and goods safely and efficiently.
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Supporting Sustainable Rural Communities
USDA & PSC (Fall 2011)