

Complete Streets

Conference resources online at www.planning.org/audioconference/cstreets

February 14, 2007

Ask questions
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Today's Speakers

Barbara McCann
 McCann Consulting
 National Complete Streets Coalition

Christopher R. Conklin
 Principal
 Vanasse Hangen Brustlin, Inc.

Martha Roskowski, Randall Rutsch, and Mike Sweeney
 City of Boulder, Colorado

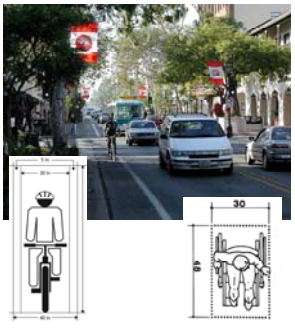
Joseph A. MacDonald, AICP, *moderator*
 Program Development Senior Associate
 American Planning Association

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What is a complete street? What is its purpose?

Barbara McCann:

- Safe, comfortable and convenient for travel via auto, foot, bicycle, and transit
- Policy ensures that the entire right of way is routinely designed and operated to enable safe access for all users



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- Create a complete network of roads that serves all users
- Integrate the needs of all users in everyday planning practices



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Please give us some examples of incomplete streets.

Barbara McCann:



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The best complete streets policies...

- Specify exceptions
- Require high-level approval of exceptions
- Use best design standards
- Allow flexibility
- Apply to all phases of all projects



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Federal guidance

- 2000 US DOT recommended policy:

Bicycle and pedestrian ways shall be established in new construction and reconstruction projects in all urbanized areas unless one or more of three conditions are met:
Non-motorized uses are prohibited
Excessive cost
Absence of need now and in future

www.completestreets.org

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Institutionalize:

- Restructure procedures
- Rewrite design manuals
- Retrain planners and engineers
- Retool measures to track outcomes



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Retrofit:

- Identify and improve incomplete streets

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Tell us about the MassHighway *Project Development and Design Guide*.

Chris Conklin:

- Policy:
 - Developed in response to citizen objections
 - New approach
- Principles:
 - Integrated multimodal approach
 - Context sensitivity
 - Clear project development process

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What were some innovations in the manual?

Chris Conklin:

- Robust project development process
- Broad basic design controls
- Multimodalism
- Design flexibility



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What were the project development goals?

Chris Conklin:

- Open dialogue
- Optimum accommodation
- Early public outreach
- Consistent expectations
- Allocate resources to address priorities

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Tell us about Boulder's complete streets policy framework.

Randall Rutsch:

- Boulder Creek path languished
- Transportation master plan
- Hold vehicle miles traveled (VMT) steady
- Reduce single occupancy vehicle (SOV) trips
- Focus on creating multimodal corridors

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Boulder Creek Plan – 1923

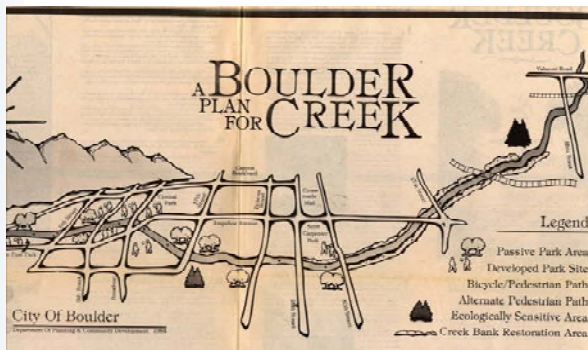


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Boulder Creek Plan – 1984



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Boulder Creek



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Transportation Master Plan

- First created in 1989: vision
- Revised 1996: goals and measurements
- Revised 2003: implementation

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Eco Pass

- Unlimited-use bus pass
- 60,000 total passes in Boulder
- Eco Pass holders are nine times more likely to use the bus



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2003 Transportation Master Plan Multimodal Corridors



Current Funding

Action Plan

Vision

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Can you describe a mature corridor retrofit?

Mike Sweeney:

- Broadway corridor



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Before



After

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How do you retrofit from scratch?

Martha Roskowski:

- 28th street—major urban arterial

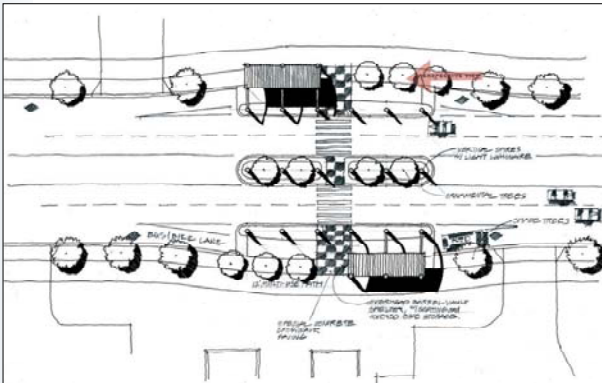


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North end: new role for the outside third lane



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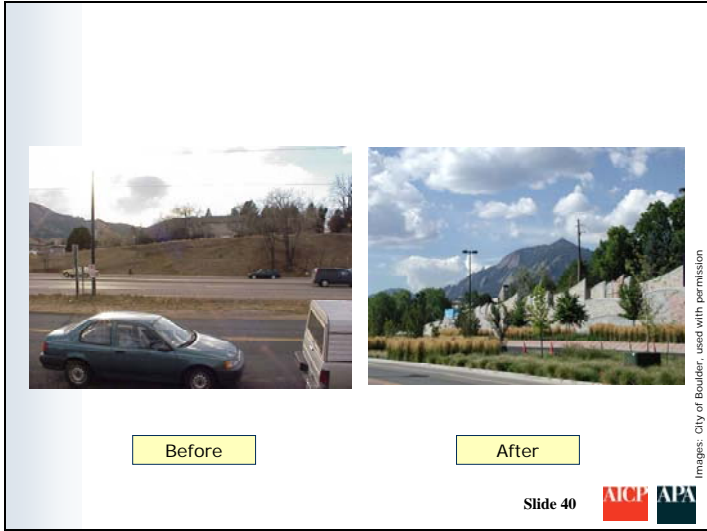
New role for frontage road



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Redevelopment along the 28th Street Frontage Road

Landmark Lofts Phase 1:
103 student rentals/condos
and a coffee shop

Landmark Lofts Phase 2:
Currently under review

Golden West is adding
57 units of senior housing
in a major expansion

The Lotus building will likely
be transformed into 70 to
100 housing units

The former Perkins restaurant
is now 30 condominium units

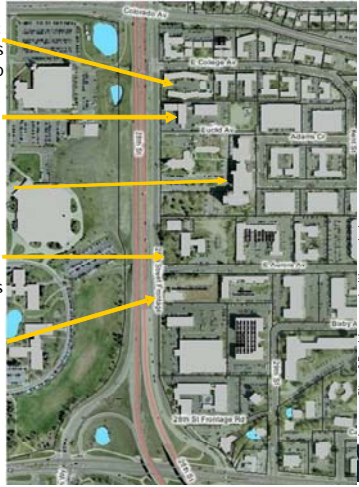


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Please describe some different complete streets and their characteristics.

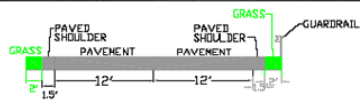
Chris Conklin:

- Rural natural
- Suburban town center
- Suburban high density

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Rural Natural:
Douglas
No visible
buildings
Few driveways
Few mailboxes
Tight tree line
No curb
No sidewalk
Narrow
shoulders
No parking
Guard rail
40 MPH



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Suburban Town Center: Milford

Storefronts and civic uses

Uniform building line

Frequent intersections

Vertical curb

Sidewalks (2)

No shoulder


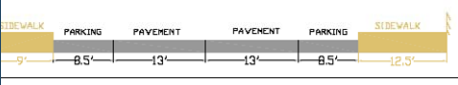
On-street parking

Crosswalks

Underground utilities

Decorative streetlights

30 MPH

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Suburban High Density: Cambridge

Strip retail

Varied setbacks

Underground utilities

lighting

Frequent driveways

Vertical curb

Sidewalk with buffer strip

Raised median


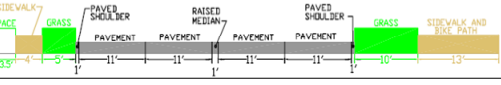
Side road multiuse path

Multi-lane

No shoulder

No parking

30 MPH

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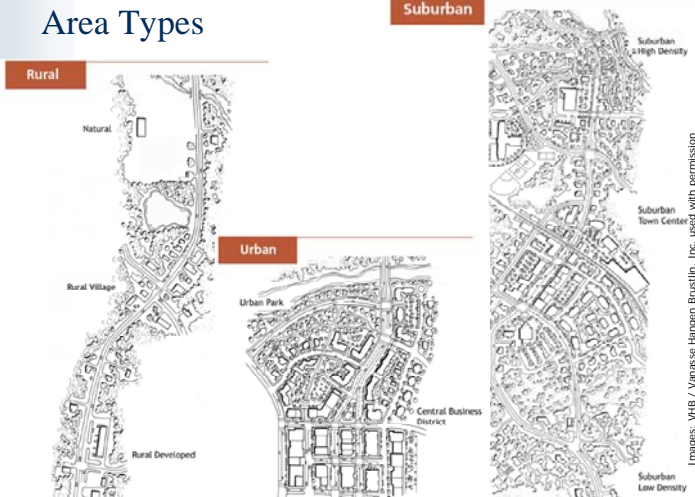


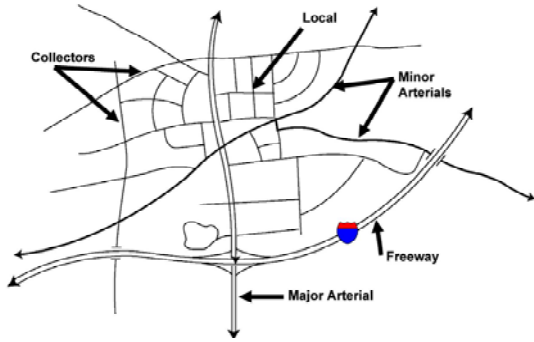
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Area Types



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Schematic Representation of Roadway Type



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Roadway type and functional classification

- Roadway type reflects the road’s role and its local context
- Functional classification is used to determine Federal funding eligibility
- Roadway type is the design control

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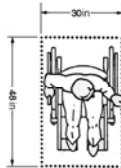
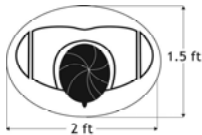


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Explain the standards for each user group.

Chris Conklin:

- Pedestrians
 - Walkway at least five feet wide and clear of obstructions
 - Walking speed of 3.5 fps



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Pedestrians requiring mobility aids

- 20% of the pedestrian population has some disability
- MassHighway intends to accommodate all pedestrians in the design and construction of pedestrian facilities

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Bicyclists

- Accommodating those with moderate skills will meet the needs of most riders
- Require a clear width of at least 40 inches and 100 inches of vertical operating space



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Drivers

- Largest vehicle to use facility on a regular basis should be the design vehicle
- Decisions depend on:
 - Frequency of larger vehicles
 - Amount of other traffic
 - Character of the area

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Revised design speed approach

- Choice of design speed must consider:
 - Roadway context
 - Pedestrian and bicycle safety and comfort
 - Regional mobility
- Design speed informed by existing operating speed and likelihood of change
- Flexibility allows design speeds lower, the same, or higher than existing operating speeds

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What recommendations were there for intersections?

Chris Conklin:

- Achieving a desired flow for one user group can diminish the capacity for another
- Balanced multimodal capacity supersedes maximizing motor vehicle flow



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Landscape and Aesthetics

- Improve consideration of landscaping in overall design and environmental considerations



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Traffic Calming and Traffic Management

- Applicability to new and retrofit projects
- Describes four basic approaches
 - Narrow the real or apparent width of the street
 - Deflect the vehicle path
 - Alter the vertical profile of the vehicle path
 - Prevent some vehicle movements through design, regulations, or both

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What were some of the lessons learned in Boulder?

Randall Rutsch:

- Change in thinking
- Limitations when transportation and land use are not fully integrated
- Coordinate efforts with regional and state efforts
- Design and integration issues:
 - Parking policies
 - Site design

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How has this policy been conceived in different communities?

	State	County	MPO	City
Public: legislation, ordinance, resolution	OR, FL, RI, NC, SC, MA	DuPage, IL Sacramento, CA San Diego CA Jackson, MI	Columbus, OH Bay Area, CA	Columbia, MO Sacramento, CA Spartanburg, SC
Internal: policy, plans, manuals	TN, CA, KY, VA, PA, MA		Cleveland, OH Bay Area, CA Knoxville, TN Gulf Coast, FL Austin, TX	Chicago, Charlotte, NC Boulder, CO Santa Barbara San Diego Ft. Collins, CO W. Palm Beach, FL

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Existing Policies

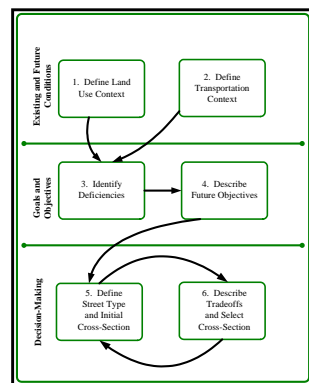
- Chicago's Complete Streets Policy
- Charlotte's Street Design Standards
- Oregon's "Bike Bill"

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Charlotte Transportation Action Plan

- Urban Street Design Standards have a six-step process for balancing the needs of all users



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What challenges do complete streets face in other areas of the country?

Barbara McCann:

- Implementation
 - Design manuals
 - Design speed
- Training and learning to balance
- Sidewalk responsibility
- The role of land use
- Retrofitting
- Including transit



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How can we work successfully with traffic engineers?

Mike Sweeney:

- Engineers are problem solvers
- Change the definition of the problem
- Engineering manuals support complete streets



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What about the role of elected officials?

Martha Roskowski:

- A champion with vision
- Policy leadership and support
- Ongoing commitment



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“If Christ himself were city manager of Boulder, there would be some people who would want to recall him.”

—Boulder civic leader F.C. Moys, 1923



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What can be replicated in other communities?

Barbara McCann:

- Massachusetts:
 - Context sensitivity and complete streets
 - Integrates all users in every aspect of the guide
- Boulder:
 - Keeps the big picture in mind
 - Expanding capacity in time of constraint
 - Full inclusion of transit issues

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Tell us about the National Complete Streets Coalition.

Barbara McCann:

- | | |
|--|--|
| <ul style="list-style-type: none"> • AARP • America Bikes • America Walks • American Council of the Blind • American Planning Association • American Public Transportation Association • American Society of Landscape Architects • APBP • City of Boulder • Institute of Transportation Engineers | <ul style="list-style-type: none"> • League of American Bicyclists • McCann Consulting • NCBW • National Parks Conservation Association • Natural Resources Defense Council • Paralyzed Veterans of America • Smart Growth America • Surface Transportation Policy Partnership • Thunderhead Alliance |
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- www.completestreets.org
- Examples and links to existing policies
- How-to tools
- Resources: PowerPoint, brochures
- Relevant research and reports
- Newsletter sign-up



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Questions and Answers

Barbara McCann

Christopher R. Conklin

Martha Roskowski

Randall Rutsch

Michael Sweeney

Joseph A. MacDonald, AICP, *moderator*

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