IHT CSS Traffic Calming for Today's Society

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Traffic Calming in the United States
An Overview

Presentation Outline

1. Introduction
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1. Introduction

Traffic Calming in Three European Cities – Recent Experience (TRB - 2004)

1) Traffic calming has been well integrated into the transportation planning process.
2) More funding for traffic calming is needed.
3) Strong public involvement is essential.
4) Compromise is critical.
5) Additional research is needed on techniques, implementation strategies, and measurement.

Research Questions

- Are these same findings valid in the USA?

- What are US cities doing to address these issues?

- Are US cities implementing innovative traffic calming projects or programs?

2. US Traffic Calming Trends

Data Sources

A. Sacramento County (California) Neighborhood Traffic Management Program "Best Practices" White Paper (June, 2004).

B. Interviews with city staff implementing traffic calming projects and other traffic calming experts.

A. Sacramento NTMP Study

- White Paper updates information in: "Traffic Calming State-of-the-Practice" (ITE/FHWA) 1999.

- Data based on responses from traffic calming staff in 20 (progressive) U.S. cities.

- Designed to serve an *educational role* summarizing neighborhood traffic management practices from progressive cities as part of a comprehensive approach to addressing neighborhood traffic concerns.

Sacramento NTMP Study

- The NTMP is designed to update existing traffic calming program to create a more comprehensive approach to neighborhood traffic management.

- The NTMP will include:
  - A manual to educate residents on tools available;
  - A systematic approach for initiating citizen requests;
  - A prioritization system for projects;
  - A neighborhood involvement program;
  - A broader "Toolbox" providing more options for traffic management; and
  - Street design guidelines for new developments.

Sacramento NTMP Study – Survey Results

1) What factors motivated development of your NTMP?

- Most programs were established in response to public demands for relief from traffic speeding through neighborhoods and excessive traffic volumes.

- Interesting that surveyed cities did not mention supplemental purposes of traffic calming: business development, neighborhood revitalization, and crime prevention.

Sacramento NTMP Study – Survey Results

2) Who administers NTMP program?

- Traffic calming is primarily viewed as a traffic related function rather than a planning function. Most programs are administered within transportation or public works departments. Engineers dominate other professions (staffing seems to have shifted in this direction), but planners are also well represented.

- This finding is interesting given the need for public involvement and more comprehensive planning.
- However, it also indicates that traffic calming has become an accepted part of the traffic engineering practice.

Sacramento NTMP Study – Survey Results

3) Any innovative programs funding traffic calming?

- **Set-Asides** – Since it is hard for traffic calming to compete with other transportation projects many cities have set aside funds for traffic calming (e.g. California transportation sales tax programs).

- **Neighborhood Budgets** – Providing neighborhoods with a set budget and allowing them to decide how the money is spent (not a common approach).

- **Resident Funding** – Residents pay all or part of cost of traffic calming devices – see next slide.

Sacramento NTMP Study – Survey Results

4) How do residents participate in project funding?

- There is greater reliance on neighborhood residents to finance their own traffic calming projects compared to earlier study (half of cities surveyed rely fully or partly on private funds).

- Localities that rely on private financing often allow residents to pay for aesthetic upgrades.

- Many localities ask neighbors to help maintain devices (especially those with landscaping).

- **Advantage:** Asking residents to pay for traffic calming is surest test of the value they place in them.

- **Disadvantage**: Bias against poorer neighborhoods?

Sacramento NTMP Study – Survey Results

5) How do cities minimize controversy?

- Early and systematic public involvement programs.
- Avoidance of emergency vehicle routes.
- Developing plans for the whole street network.
- Formalizing traffic calming policies (rather than ad hoc approach)
- Requiring applicants to work through neighborhood associations.

Sacramento NTMP Study – Survey Results

6) How is the public involved in project planning?

- In half the surveyed cities public involvement was limited to passing petitions, voting on plans, or public hearings.

- The rest had more extensive public involvement programs:
  - **Informal** – Citizen surveys, meetings, open houses, commenting on plans.
  - **Formal** – Creation of neighborhood traffic calming committee (including most of the informal items as well).

- The degree of public involvement often depends on the nature of the treatment (more comprehensive = more involvement).

Sacramento NTMP Study – Survey Results

7) How do you address fire department concerns?

- Fire departments review and comment on traffic calming plans.

- Traffic calming measures are (physically) designed to accommodate emergency vehicles.

- Cities designate primary emergency response routes - these streets are ineligible for traffic calming (or only eligible for a limited set of measures).

- Trial runs and evaluation of temporary measures by emergency vehicles.

Sacramento NTMP Study – Survey Results

8) Are post-construction evaluations conducted?

- Speed data are frequently collected.
- Volume data sometimes collected.
- However, no surveyed jurisdiction is systematically measuring:
    - Noise levels;
    - Pedestrian counts;
    - Property value changes; or
    - Other supplemental information.

- Is this a case of what gets measured gets accomplished?

Sacramento NTMP Study – Survey Results

9)   What streets are eligible for traffic calming?

- Most cities allow traffic calming on local and collector streets while a few allow some types of traffic calming on arterials.
- Most cities have standards or guidelines for determining street eligibility for traffic calming.
- Generally these guidelines are based on traffic speed &/or volume … and they vary by type of roadway.

- There has been less expansion of traffic calming to arterials and higher level streets than was expected in the 1999 study.

B.   City Staff/Expert Survey

An unscientific survey designed to spur thinking and elicit ideas from city staff and experts on traffic calming. The questions were:

1) Is traffic calming an accepted part of transportation planning?
2) How is the lack of traffic calming funding being addressed?
3) Are you aware of any innovative traffic calming programs?

Most answers were similar to the Sacramento White Paper survey, but there were several interesting comments ...

City Staff/Expert Survey

1) **Growing opposition from the disabled community.**

- The disabled community has started fighting traffic calming measures with vertical deflection (e.g. speed humps) since these can cause pain to people with spinal cord injuries.

- For example, the Mayor's Disability Council in San Francisco passed a resolution in 2001 "not supporting the use of vertical deflection traffic calming solutions" (www.sfgov.org/site/sfmdc/resolutions)

- San Francisco is testing measures with less vertical deflection, but have found that these don't work as well reducing speed.

City Staff/Expert Survey

2) **Anti Traffic Calming Website: Americans Against Traffic Calming**

- http://www.io.com/~bumper/ada.htm

- From the site: 'AATC - This Traffic calming website is produced in Austin Texas and is for all Americans and the world. We are citizens from all walks of life putting out the call for much needed Traffic Calming "Reform"'

- No comment needed.

City Staff/Expert Survey

3) San Francisco Page Street Project

- **Background:** The project consisted of constructing small traffic circles in intersections on this neighborhood arterial street. These traffic circles replaced four-way stop signs. The project was originally characterized as a 'bicycle arterial' project but then changed to a traffic calming project.

- **Results:** The project elicited extreme public opposition (and, more limited support). After a trial period residents voted to reject the traffic calming measures.

San Francisco Page Street Project

City Staff/Expert Survey

- **SF Page Street Project – Lessons Learned:**
  - Guidelines required use of the traffic calming voting system for a bicycle arterial project (thus residents of a small area voted on an improvement affecting a larger group of users) – a policy gap.
  - The Fire Department never bought into the project (individual fire fighters even fanned the flames of citizen opposition).
  - The disabled community opposed the measures.
  - Residents thought 4-way stops were safer than circles.
  - People (drivers & pedestrians) don't understand rules at circles.
- **More public education and involvement.**
- **More thought on addressing policy gaps.**

3. Innovations

A. Traffic Calming for Citizens

**B. Pushing the Traffic Calming Envelope**

A. Traffic Calming for Citizens

NYC Transportation Alternatives:

*Streets for People – Your Guide
To Winning Safer
And Quieter Streets*

- Introduction to Traffic Calming
- Your Toolbox – Traffic Calming Solutions to Common Problems (speeding, inappropriate through traffic, dangerous intersections, and scary big streets).
- Action Plan – The politics of implementing a traffic calming project.
- Frequently Asked Questions & References.

Download at: http://www.transalt.org/info/streets4people/index.html
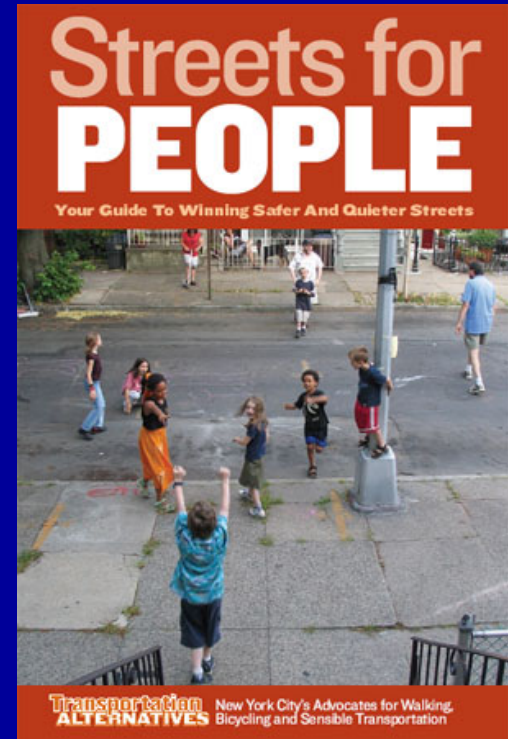
Quotes from "Streets for People"

- "Motorized traffic is not like water; if it can't go through one place, it won't necessarily just spill over somewhere else. Why? Because … unlike water, these people can make common sense decisions. This is especially true in New York City where people have a wide variety of options for getting around…"

- "You should always question what you hear from the City's traffic engineers; ask them if they've factored in walking traffic data and the likelihood of drivers choosing better driving routes or switching to the subway, … You can also encourage them to conduct experiments to see if a traffic calming idea will work."

- "In the end, implementing a traffic calming plan on your street is a matter of politics."

# B.	Pushing the Traffic Calming Envelope

- **LessTraffic.com –** David Engwicht
  - Street Reclaiming and Traffic Calming: The Solution to Urban Traffic and a New Vision for Neighborhood Livability (2000?).
  - A step-by-step process to **psychologically** & physically reclaim our streets.

- **Why don't we do it in the road? –** Linda Baker, Salon 5.20.04.
  - A new school of traffic design says we should get rid of stop signs and red lights and let cars, bikes and people mingle together. It sounds insane, but it works.

- **Roads Gone Wild –** By Tom McNichol – Wired, 12.12.04
  - No street signs. No crosswalks. No accidents. Surprise: Making driving seem more dangerous could make it safer.

How to Build a Better Intersection:
Chaos = Cooperation

1) **Remove signs:** The architecture of the road – not signs and signals - dictates traffic flow.

2) **Install art:** The height of the fountain indicates how congested the intersection is.

3) **Share the spotlight:** Lights illuminate not only the roadbed, but also the pedestrian areas.

4) **Do it in the road:** Cafés extend to the edge of the street, further emphasizing the idea of shared space.

5) **See eye to eye:** Right-of-way is negotiated by human interaction, rather than commonly ignored signs.

6) **Eliminate curbs:** Instead of a raised curb, sidewalks are denoted by texture and color.

From: Roads Gone Wild (Wired 12.12, December 2004)

4. Conclusions

1) **Cities are taking a more comprehensive approach to traffic calming – "Neighborhood Traffic Management" rather than isolated measures.**

2) **Cities are continuing to expand education efforts, partly through taking a more comprehensive approach.**

3) **There is still little formal recognition for the non-traffic related benefits of traffic calming (e.g. noise, business development, property values).**

Conclusions

4) Strong public involvement and inter-department coordination (e.g. Fire Department) is essential.

5) Battle lines are being formed in what is now being understood as a political issue.

6) Traffic calming is coming of age with all the associated benefits and problems.

5. Questions?

6. Selected References & Websites

The Institution of Highways and Transportation – IHT is internationally acknowledged for its best practice Technical Guidelines in the transportation field. *Traffic Calming Techniques* (2005) continues this tradition. More information available at: http://www.iht.org/

Institute of Transportation Engineers – ITE has a comprehensive website on traffic calming, including links to download: Traffic Calming, State of the Practice, FHWA/ITE, 1999. See: http://www.ite.org/traffic/tcstate.htm

TrafficCalming.org (http://www.trafficcalming.org/) - This site is provided by Fehr & Peers Transportation Consultants, the firm which completed the Sacramento NTMP survey: http://www.fehrandpeers.com

Selected References & Websites

City Traffic Calming Websites:

San Francisco – www.sfgov.org/site/dpt_index.asp?id=13563

Sacramento – Includes NTMP White Paper download:
www.sacdot.com/projects/NTMP/

San Jose (California) –
www.sanjoseca.gov/transportation/traffic_calming.htm

Portland Oregon –
www.portlandtransportation.org/TrafficCalming/default.htm

Seattle –
www.ci.seattle.wa.us/html/citizen/transportation_services.htm

Selected References & Websites

Advocacy Groups:

NYC Transportation Alternatives – Includes "Streets for People" download: www.sacdot.com/projects/NTMP/

Americans Against Traffic Calming – Know your enemy: www.io.com/~bumper/ada.htm

LessTraffic.com - David Engwicht's traffic calming site: www.io.com/~bumper/ada.htm

Articles:

Roads Gone Wild – Wired Magazine (12.12.04): www.wired.com/wired/archive/12.12/traffic.html

Why don't we do it in the road? – Salon: www.salon.com/tech/feature/2004/05/20/traffic_design/index.html

7. Additional Sacramento Survey Results

Sacramento NTMP Study – Survey Results

10) Does your city conduct trials of traffic calming?

- Over half the cities surveyed use trial periods to test traffic calming measures.
- Trial periods often depend on the nature of the traffic calming measure (more intensive measures = longer trial).

Sacramento NTMP Study – Survey Results

11) Have traffic calming measures been removed?

- There were only a few reported instances of having permanent measures removed.

- Generally measures can be removed:

  - … by staff if they are determined to be unsafe.
  - … by staff if they are determined to have led to unacceptably (high) levels of traffic diversion (in some cities).
  - … by the public using a similar process to that used before installing the measures (often including a public vote).

Sacramento NTMP Study – Survey Results

12) Voting on projects?

- All but three of the survey cities require votes of citizens before plans are adopted and implemented.

- Typically cities allow all residents to vote, about half the surveyed cities also allow business owners to vote.

- Definition of 'affected area' – which also determines who can vote – generally varies depending on nature of improvement (larger improvements or improvements on busier streets = larger vote area).

Sacramento NTMP Study – Survey Results

13) How are priorities established for traffic calming?

- Most cities surveyed have adopted priority rating systems to determine priority among competing traffic calming projects.
- A key reason for these priority setting systems is to achieve a degree of objectivity and effectiveness in making funding decisions.
- Howard County's priority setting system is interesting. It assigns priority in the following order: school walking routes, connector or through streets, and cul-de-sacs or isolated networks.