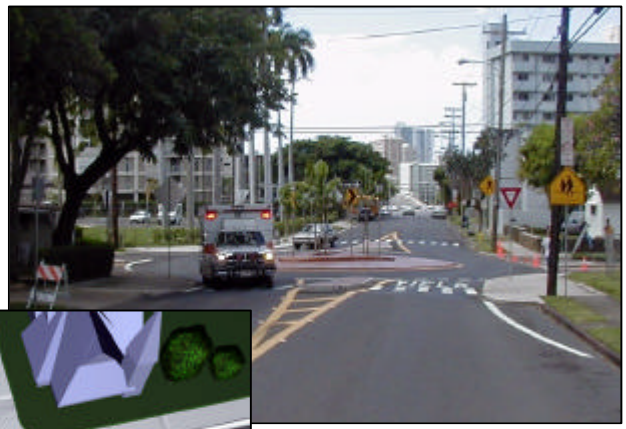
Island-wide Traffic Calming Program Status Report

August 2000



Credits

Jeremy Harris, Mayor

City Council
- Rene Mansho
- Steve Holmes
- John Henry Felix
- Duke Bainum
- Andy Mirikitani
- Jon Yoshimura
- Donna Mercado Kim
- Mufi Hannemann
- John DeSoto

Department of Transportation Services, City and County of Honolulu
- Cheryl D. Soon, Director
- Joe Magaldi, Deputy Director
- Paul Won, Chief, Traffic Engineering
- Mike Oshiro, Deputy Chief, Traffic Engineering
- Sam Higa
- Claude Matsuo
- Mark Kikuchi

The Department wishes to thank these pioneering consultants who helped lead Honolulu into a new era, with new tools for addressing community needs.

Charrette Consultants:
- Dan Burden, Walkable Communities, Inc.
- Michael Wallwork, Walkable Communities, Inc.
- Harrison B. Rue, Citizen Planner Institute
- Dr. Karl Kim, UH-Manoa, DURP
- James Yamamoto, R.M. Towill, Corp.
- Kevin Mendes, R.M. Towill, Corp.
- Alan Fujimori, ASLA

Design Consultants:
- Parsons, Brinckerhoff, Quade and Douglas
- Park Engineering
- SSFM
- R.M. Towill

Contractor
- Royal Contracting
- Ideal Construction
- Global Specialty Contractors

Oahu Trans 2K

Oahu Trans 2K is a program dedicated to extensive community-based planning as the base for identifying projects and setting priorities. It started in the fall of 1998 and has continued ever since. Thousands of residents in communities throughout Oahu have worked with transportation planners and engineers to develop workable solutions to transportation problems. The following transportation projects are among those included under the Oahu Trans 2K umbrella:

- Primary Corridor Transportation Project recommended Regional and In-Town Bus Rapid Transit (BRT) to increase the carrying capacity of the existing roadway system in the Urban Core.
- Leeward Hub-and-Spoke system involved residents in reconfiguring the current radial bus routes to a hub-and-spoke system to provide more service, faster trips, and more reliable schedules.
- Neighborhood Traffic Calming Program involves citizens in selecting techniques to slow speeders in residential neighborhoods.
- Honolulu Bicycle Master Plan identifies projects, policies and programs to make streets safer for bicycling.
- A Pedestrians First policy was adopted by the Joint City-State Task Force for Waikiki. Since then, Honolulu has received an FHWA Transportation and Community and System Preservation Pilot Program grant for the “Walkable Waikiki” project.

Introduction to Island-wide Traffic Calming Program

In September 1997, the Honolulu City Council voted unanimously to “request the Department of Transportation Services to conduct a comprehensive study and develop a program to increase safety in residential neighborhoods on Oahu.” Authored by Councilmember Andy Mirikitani, Resolution 97-288, CD1 launched the Island-wide Traffic Calming Program.

The Council took this action in an effort to reduce vehicular speeds in residential neighborhoods and to promote safe and pleasant conditions for motorists, bicyclists, and pedestrians. The Council recognized that relatively low-cost traffic calming measures can dramatically reduce the number of traffic crashes and at the same time create pleasant, more livable communities.

The Department of Transportation Services began the Island-wide Traffic Calming Program in 1998. Using a community-based process, Department staff and consultants worked closely with Councilmembers and residents of neighborhoods around the island to address specific concerns at locations determined by the residents.

This report includes details of the Island-wide Traffic Calming Program to date, the status of projects underway, and copies of the project materials.

Foster Village Residents Confer

Year One (1998) - Start Up - Phase I Charrettes and Workshops

Because this was a new program for the Department of Transportation Services (DTS), research regarding the appropriate principles of traffic calming was conducted to ensure that subsequent actions would lead to the desired outcome.

Funds were requested and received to begin the traffic calming program. DTS issued a notice for professional services to conduct a study to identify the locations where traffic calming would be desirable in consideration with safety and traffic volume. On June 30, 1998, a contract was executed with Walkable Communities, Inc., to conduct a study and to develop an island-wide traffic calming plan for the City and County of Honolulu.

For truly island-wide participation, each City Councilmember was asked to identify one neighborhood to be selected for study from his or her City Council district. Council staff worked with DTS and the consultants to schedule and arrange facilities for the first traffic calming charrettes. Council offices helped publicize the charrettes in each district and invited area residents to attend. This collaborative effort during Phase I of the project created a firm foundation upon which ensuing efforts were based. A schedule of the Phase I community meetings follows:

Traffic Calming Community Meetings – Phase I			
Neighborhood	**Charrette**	**Workshop**	**Councilmember**
Makiki	3/23/98	04/22/98	Mirikitani
Salt Lake	3/25/98	04/23/98	Kim
Kaimuki	3/28/98	08/19/98	Bainum
Pearl City	5/25/98	08/18/98	Hannemann
Mililani	8/13/98	10/17/98	Mansho
Olomana	8/12/98	10/12/98	Holmes
Lualualei	8/15/98	10/13/98	DeSoto
Kohou	8/14/98	10/16/98	Yoshimura
Coconut Grove	8/11/98	10/15/98	Felix

DTS staff and the consultants conducted community-based charrettes and workshops in the nine neighborhoods selected. Residents who were dedicated to improving the quality of life in their neighborhoods attended the meetings. At each charrette, the principles of traffic calming were explained, and residents were asked to identify traffic concerns on a map of their neighborhood. They were given a set of traffic calming “tools” and used these tools to propose specific solutions to resolve the traffic problems in their community.

Lualualei Workshop Participants

DTS staff and the consultants reviewed these proposals and made preliminary drawings of the traffic calming measures. These drawings were presented to the residents at the follow-up workshops held in each community where residents were afforded the opportunity to refine the plans and give their approval.

Wahiawa Residents Mark Maps

Year Two (1999)

A. Implementation of Phase I

During year two, the department used CIP funds (Project No. 96306 Traffic Improvements at Various Locations) to design and construct the first five traffic calming measures.

1. Koko Head Avenue/12th Avenue (Kaimuki) – Bulbout

2. Kaimuki Avenue/6th Avenue (Kaimuki) - Diverter median with bulbouts

3. Keeaumoku Street/Heulu Street (Makiki) – Roundabout

4. Piikoi Street/Mott-Smith Drive/Lewalani Drive (Makiki) - Bulbouts and narrowed lanes

5. Ala Lilikoi/Ala Ilima/Likini Street (Salt Lake) – Roundabout

This project won Hawaii Public Works Association's Best Transportation Project Under $2 million Award for 1999

The five completed projects are operating as intended within the existing conditions and parameters. The sidewalk at Koko Head Avenue/12th Avenue in Kaimuki has been redesigned to provide a buffer area between vehicles and pedestrians using the sidewalk.

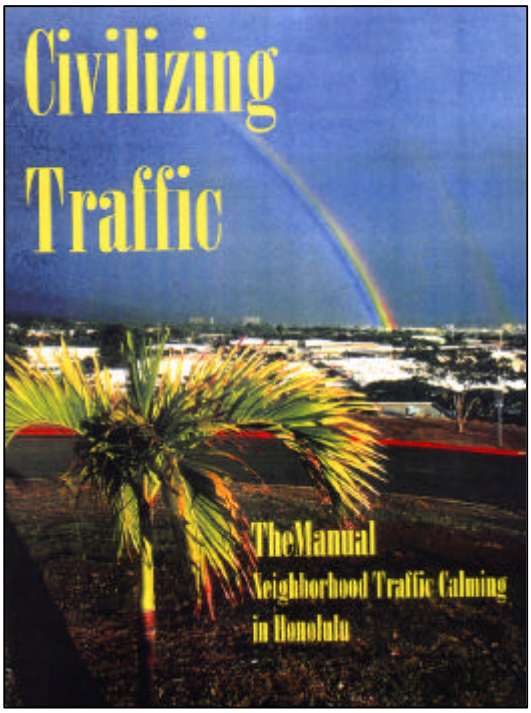
B. Manuals and Training

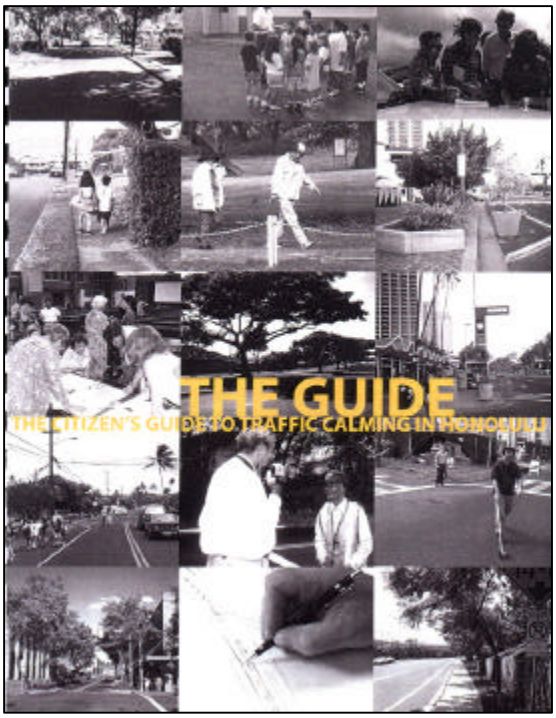
Also during Year Two, Phase I of the Traffic Calming program, two manuals were developed for the City and County of Honolulu to assist City staff and the residents of Honolulu with their efforts to slow traffic, alter driver behavior, and improve conditions for non-motorized street users.

"Civilizing Traffic: The Manual - Neighborhood Traffic Calming in Honolulu" was designed for the administrator, technician, and facilitator. The manual provides the background and the concept of "livable streets," planning and the process of traffic calming. It describes the traffic calming tools, their application, and a means to implement and evaluate their application.

"The Guide: The Citizen's Guide to Traffic Calming in Honolulu" was prepared to give residents a better understanding of speeding in residential neighborhood and cut-through traffic. The guide helps citizens identify opportunities and recommends improvements to streets throughout Honolulu. In addition to explaining the traffic calming process and identifying and selecting tools or treatments to solve problems, the guide provides resources for the inventory and evaluation of a neighborhood street.

These publications were used during the May 26 through May 28, 1999 traffic calming training sessions DTS convened for interested employees of affected departments of the City and County of Honolulu, neighborhood board members, and members of the City Council and their staffs. The training sessions were held at the Neal Blaisdell Center and approximately 80 persons attended.





C. Phase II Charrettes in New Areas

On June 30, 1999, the Traffic Calming/Speed Control Program (Phase II) consultant contract was executed with R. M. Towill Corporation with subconsultants Walkable Communities, Inc. Citizen Planner Institute, Inc., University of Hawaii, and Alan Fujimori, Inc. Under this contract, the consultant scheduled nine charrettes and workshops for neighborhoods in each of the nine City Council districts as was done in the Phase I traffic control contract. They also revisited two neighborhoods selected under the Phase I contract because participants had been unable to reach a consensus. The Phase II schedule follows.

Traffic Calming Community Meetings – Phase II			
Neighborhood	**Charrette**	**Workshop**	**Councilmember**
Pearl City (Revisit)	Phase I	09/10/99	Hannemann
Lualualei (Revisit)	Phase I	02/24/00	DeSoto
Waimanalo	09/07/99	11/09/99	Felix
Palolo	09/09/99	11/10/99	Bainum
Kahaluu	11/08/99	01/19/00	Holmes
Manoa	11/13/99	01/19/00	Mirikitani
Foster Village	02/28/00	04/10/00	Kim
Wahiawa	02/29/00	04/13/00	Mansho
Palama	04/12/00	06/7/00	Yoshimura
Pacific Palisades	05/03/00	06/6/00	Hannemann
Makakilo	04/11/00	06/01/00	DeSoto

Under this contract, the traffic calming process and presentation used a five-step process to address the reasons why people speed and cut through neighborhoods. Most neighborhood streets built in the past fifty years are designed for high speeds (30-40 mph) even though they may be posted at a lower limit. Meanwhile, appropriate speeds for typical local streets are 25 mph. Many of our land uses are scattered. This results in families making an average of 10 car trips daily. The volume of vehicles chokes and strangles traffic flow at intersections, then backs into neighborhoods as drivers take short cuts to avoid back-ups. Many motorists are late for events and try to make up the time. The Five-Step Neighborhood Traffic Calming process addresses all of these issues.

Step 1: Selection of area to be calmed
Traffic calming a neighborhood begins with a partnership. The DTS staff meet with the area Councilmember and staff to identify an area of concern in the district centering on a specific neighborhood.

Step 2: Gather accident data in the area
The consultant's staff collects traffic volume, speed and crash records to determine existing conditions and map traffic accident information using Geographic Information Systems (GIS).

Step 3: Field audit and photograph area
The Traffic Calming Team orients itself to the neighborhood through a walking audit and site inspection. Still and digital photos are taken, a windshield audit of all principal streets in the neighborhood is conducted. The team takes street width measurements, estimates block lengths, observes motorists' behaviors, interviews pedestrians and other residents, and gathers available maps.

Step 4: Hold Charrette (community-based planning workshop)
The neighborhoods host a community traffic calming charrette at a convenient location. Neighborhood residents are presented with community photographs and given some examples of traffic calming possibilities. Residents create a prioritized list of the traffic issues to be addressed. Finally, the neighbors gather around design tables and mark suggested solutions at specific locations on neighborhood maps.

Step 5: Design traffic calming devices
The Traffic Calming Team and engineers evaluate the suggestions and concerns expressed by residents during the charrette. Engineers select traffic calming devices and strategies that work most efficiently and cost effectively for the neighborhood. The Traffic Calming Team then works to create conceptual designs for specific treatments. Once a construction budget for individual devices is allocated, an engineering firm produces detailed construction drawings for each location.

In Phase II, reports for each neighborhood session were revised and upgraded. A copy of each neighborhood report is sent to the district councilmember and appropriate neighborhood board for their use.

Year Three (2000)

A. Implementation

Ten additional project designs from Phase I have been completed by SSFM, and Ideal Construction and Site Engineering have been selected to install them. These projects are located in the Kohou Street neighborhood, Olomana neighborhood, Mililani neighborhood, and Coconut Grove neighborhood. Funding comes from FY 99 CIP Project No. 96306 Traffic Improvements at Various Locations. Each community selected the top priorities within all projects identified.

1. **Kohou Street Neighborhood**

a.	Houghtailing/Kohou Streets	Median and Bulbout
b.	Kohou Street Improvements	Median, speed tables, curbs, bulbouts
c.	Kohou/Halona Streets	Bulbout at entry to Kohou Street

2. **Olomana Neighborhood**

a.	Ulupii Street (Between Ulukanu & Uluhala)	Speed Table
b.	Ulupii Street (Between Ululani & Kal. Hwy)	Speed Table
c.	Ululani & Ulupuni Streets (NW corner)	Reduce corner turning radius
e.	Ulupii & Ululani Streets (NW corner)	Reduce corner turning radius

3. **Mililani Neighborhood**

Kipapa Drive	Bulbouts and medians/speed table

4. **Coconut Grove Neighborhood**

a.	Kaha Street	Speed Tables
b.	Kihapai Street	Medians, speed tables, bulbouts

B. Projects Being Designed

Traffic calming design consultant, SSFM Engineers, Inc., has been contracted to design and prepare construction plans for another 33 traffic calming locations:

1. **Olomana Neighborhood**:

   a. Ulupuni and Uluhai Streets
   b. Ulupii St. & Kal. Hwy.

2. **Kohou Street Neighborhood**

Halona & Houghtailing Streets

3. **Pearl City Neighborhood**

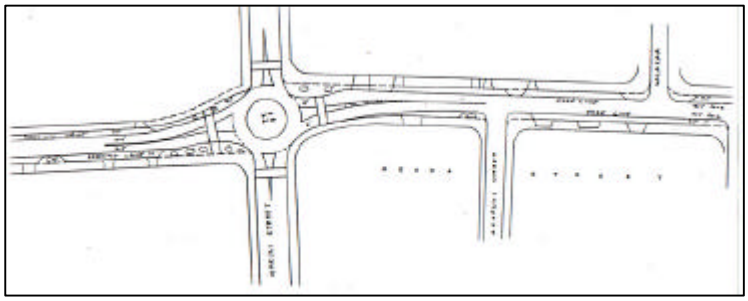
a. Kuahaka St. & Waimano Home Rd.
b. Kuahaka St. (between Palamoi & Kalauipo)
c. Kuahaka & Kalauipo
d. Kuahaka St. (between Kalauipo & Paakamaa)
e. Paakamaa & Kuahaka
f. Kuahaka (between Paakamaa & Leomele)
g. Leomele & Kuahakaing
h. Kuahaka (between Leomele & Kumano)
i. Kuahaka (between Kumano & Kaweloka)
j. Kuahaka Pl. & Kaweloka
k. Kaumahana Pl. & Kaweloka

4. **Kaimuki Neighborhood**

a. 7th Ave./Alohea
b. 8th Ave./Liholiho Elem.
c. Pahoa/6th Ave.
d. Pahoa/9th Ave.
e. Pahoa/11h Ave.
f. 8th & 10th Aves.

5. **Makiki Neighborhood**

a. Nehoa & Makiki St.
b. Nehoa St.
c. Wilder Ave. & Piikoi
d. Wilder Ave. & Kewalo
e. Wilder Ave. & Keeaumoku
f. Wilder Ave. & Makiki St.



Makiki Design

6. **Salt Lake Neighborhood**

   a. Likini St.
   b. Ala Ilima
   c. Ala Lilikoi/Likini
   d. Ala Lilikoi/Ala Ilima
   e. Ala Napunani/Likini/Ala Ilima

7. **Mililani Neighborhood**

   a. Kamaio St.
   b. Keaolani & Aaahi

8. **Coconut Grove Neighborhood**

   a. Kaha & Kainalu
   b. Kaipii & Kaha
   c. Kihapai St./Oneawa/Uluniu

C. Vision Team Projects

In FY 2000, a number of Vision Teams included traffic calming projects as part of their CIP requests.

Mililani (Vision Team #9) - $130,000

Speed humps and speed table on Keaolani Street between Meheula Parkway and Lanikuhana Street

Kahala (Vision Team #15) - $478,000

a. Median on Hunakai Street between Pueo Street and Pahoa Avenue
b. On Waialae Avenue between Hunakai Street and Kilauea Avenue, addition of a mid-block crosswalk, bus bay and median work.

Waianae (Vision Team #16) - $400,000

Speed tables and roadway realignment on Lualualei Homestead Road between Kawili Street and Leihoku Street

Kailua (Vision Team #5) - $275,000

Hamakua/Keolu Drive Bikeway and Traffic Safety Project – three median/angled crosswalks at Enchanted Lake Elementary (Pauku), St. John Vianney, and either Enchanted Lake Shopping Center or Enchanted Lake Elementary (Pahumele)

D. Traffic Calming Around Schools in Makiki, Manoa, McCully, and Moiliili (CIP Project No. 00013 – Traffic Calming Master Plan)

As implementation of neighborhood traffic calming measures continues, the program has expanded to include the areas around the schools in Makiki, Manoa, McCully, and Moiliili. Residents are deeply concerned about traffic safety issues around the schools and playgrounds

in their neighborhoods, and this project received $1 million in the FY 2001 CIP budget for design/build traffic calming projects focusing on the roadways around the schools in these communities. The planning contract has been awarded to R.M. Towill, Inc. with Walkable Communities, Inc.

DTS staff and consultants have begun working directly with the schools in these areas and will conduct training sessions in September for principals, safety committees, teachers, and PTSA's. Following this training, a two-part charrette/workshop series will be held in each of the four neighborhoods and school complexes.

E. Agency Outreach

We have learned from the first projects implemented that other city agencies needed training, buy-in and standard operating procedures for Traffic Calming. This included: Fire Department, Dept. of Planning and Permitting, Dept. of Facility Maintenance, Dept. of Design and Construction, and others.

Future Years

The FY2001 budget contains $250,000 for Phase III Planning Charrettes and $1,460,000 for design and construction of Phases I and II projects.

DTS plans to continue the traffic calming program, which has been shown to be a viable means of reducing vehicle speeds in Honolulu's residential neighborhoods. Initial traffic calming measures installed on Honolulu's streets have changed driver behavior, and they are helping to make our streets more livable and beautiful.

Because the program has been such a success, the Department is considering establishing a permanent Traffic Calming Branch within the Traffic Engineering Division with personnel dedicated to calming vehicular traffic.