

Complete Streets Indicators

County of Kaua'i 2013 Report

Prepared by:

Get Fit Kaua'i Built Environment Task Force

County of Kaua'i Planning Department



Kaua'i County Complete Streets Performance Measures Report 2013

Introduction









Complete Streets promote safe access for all users of the public right of way. This supports healthy community design, since walking and biking are forms of active transportation requiring physical activity. In 2010, Kaua'i became the first county to in Hawai'i to adopt a Complete Streets policy after the State passed Act 54 in 2009. Kauai's policy requires roadway design and planning to be balanced and equitable in accommodating and encouraging travel by bicyclists, public transportation vehicles and their passengers, and pedestrians of all ages and abilities.

Get Fit Kaua'i played a critical role in passing the Complete Streets policy. Since then, Get Fit Kaua'i has provided funding for Complete Streets technical assistance and the Task Force monitors implementation efforts. In 2012, the Task Force decided to compile the first Complete Streets performance measures.

Performance measures are used to evaluate progress made toward specific goals, but the County has not yet established quantitative targets related to Complete Streets. Therefore, this report will provide a snapshot of active transportation behavior and facilities on Kaua'i and serve as a basis upon which to monitor progress. It is anticipated that the report will be expanded upon in the future.

Selection of Performance Measures

The list of performance measures was initially developed during a countywide workshop on Complete Streets led by transportation engineer Michael Moule in October 2011. The Built Environment Task Force refined the list and also selected performance measures based on the accessibility of data and the likelihood that data could be collected on an annual basis.

Performance Measures Summary	
Pedestrian and cyclist safety <ul style="list-style-type: none"> • Non-motorized vehicle/pedestrian accidents 	
Active transportation rate <ul style="list-style-type: none"> • Trip mode share • Commute to Work • Overall VMT • VMT per registered vehicle 	
Safe Routes to School <ul style="list-style-type: none"> • Mode of transportation to school 	
Public transportation use <ul style="list-style-type: none"> • Average weekly bus ridership 	
Active transportation facilities <ul style="list-style-type: none"> • Length of sidewalks • Length of multi-use pathways • Length of bike lanes • Sheltered bus stops 	
Evaluation Key	
	Good News! Progress has been made in this area.
	Warning: The trend is stagnant or showing movement away from our goal.
	The impact or trend is unclear. Additional years of information are needed.

Kaua'i County Complete Streets Performance Measures Report 2013

Performance Measure 1: Pedestrian and Cyclist Safety

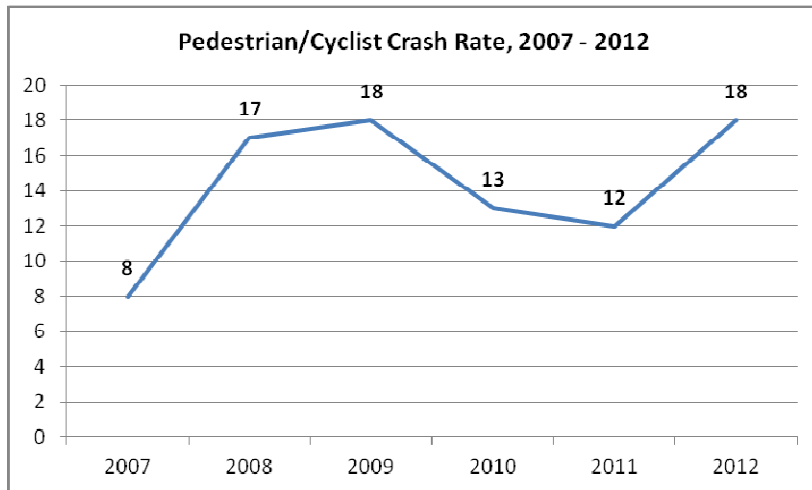
Why is this important?

A Complete Street improves safe access for pedestrians and cyclists in the public right of way. One measure of safety is the crash rate for pedestrians and cyclists with motorized vehicles.

How are we doing?



In 2012 there were 18 accidents involving non-motorized vehicles and pedestrians or cyclists. This represents an increase of 6 incidents from the previous year. 2009 was the last year the crash rate reached 18.



Source: Kaua'i County Fire Department Records, 2013.
Data Notes: Incident Type Code 323 – Motor Vehicle/Pedestrian Accident (MV Ped)

Performance Measure 2: Active Transportation

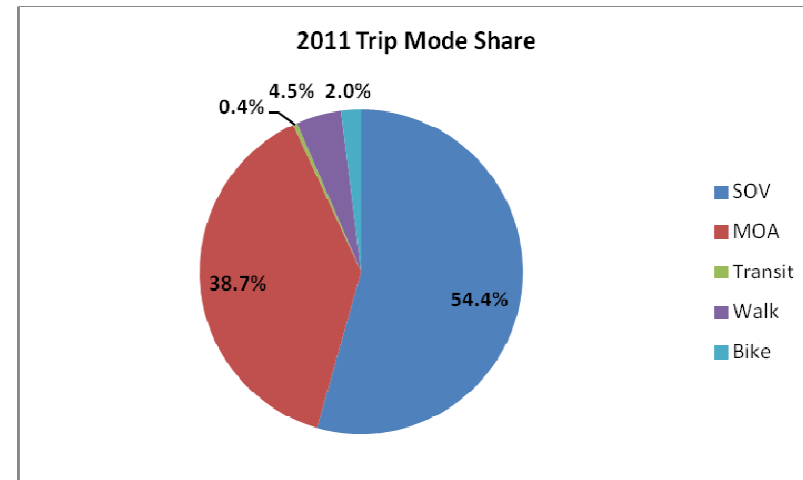
Why is this important?

Trip mode share shows the percent of all trips taken using various modes, such as single-occupancy vehicle (SOV), multi-occupant automobile (MOA), bicycle, transit, and walking.

How are we doing?



In 2011, ninety-three percent of all trips were taken in motorized vehicles. Of this amount, the majority were taken in single-occupancy vehicles. Less than seven percent of all trips were taken via active transportation methods.



Source: Kaua'i County Multimodal Transportation Plan, June 2012 (Draft).

Kaua'i County Complete Streets Performance Measures Report 2013

Performance Measure 3: Commute to Work Mode

The American Community Survey asks respondents questions related to their means of travel to work. Looking over the past three years of the 5-year ACS survey results for Kaua'i County, there are small increases in walking, bus and bicycle as the means of commuting to work. However, the vast majority of workers still commute via single occupancy vehicle.

American Community Survey 5-Year Estimate

COMMUTING TO WORK	2006-2010	2007-2011	2008-2012
Workers 16 years and over	31,890	31,289	31,414
Car, truck, or van -- drove alone	25,128	24,289	23,994
Car, truck, or van -- carpooled	3,867	3,884	4,027
Public transportation (excluding taxicab)	114	172	225
Walked	503	748	847
Bicycle	195	197	250
Other means	352	293	279
Worked at home	1,520	1473	1,607

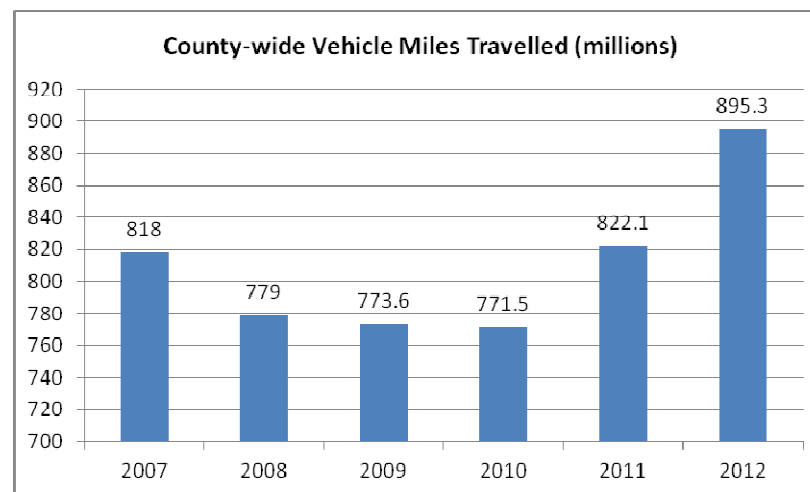
Performance Measure 4: Vehicle Travel

Why is this important?

Vehicles miles travelled (VMT) and VMT per registered vehicle are measures of how much people are using their cars (in lieu of active transportation options).

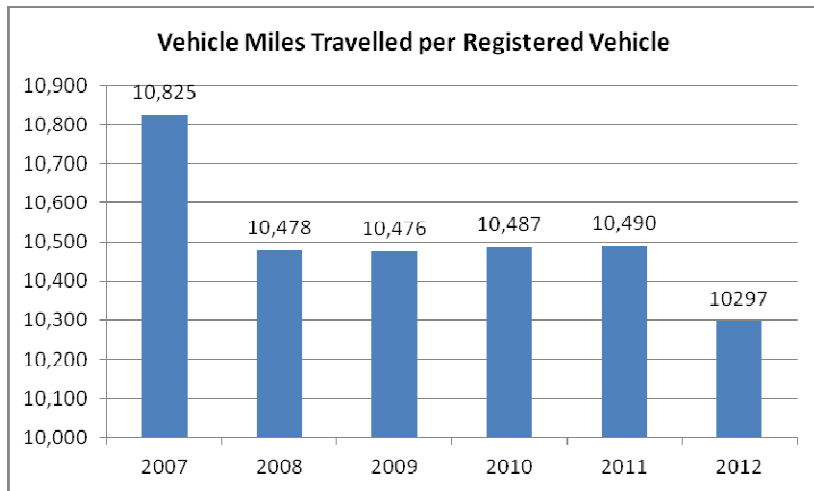
How are we doing?

VMT declined between 2007 and 2010, but recently jumped to a high of 822 million miles. However, the increase in VMT per registered vehicle was relatively small due to an increase in registered vehicles.



Source: Hawai'i State Data Book 2012. Table 18.17 Motor vehicle fuel consumption and vehicle miles, 1990 to 2012, and by county, 2010, 2011, 2012.

Kaua'i County Complete Streets Performance Measures Report 2013



Source: Hawai'i State Data Book 2012. Table 18.17 Motor vehicle fuel consumption and vehicle miles, 1990 to 2012, and by county, 2010, 2011, 2012.

Performance Measure 5: Safe Routes to School

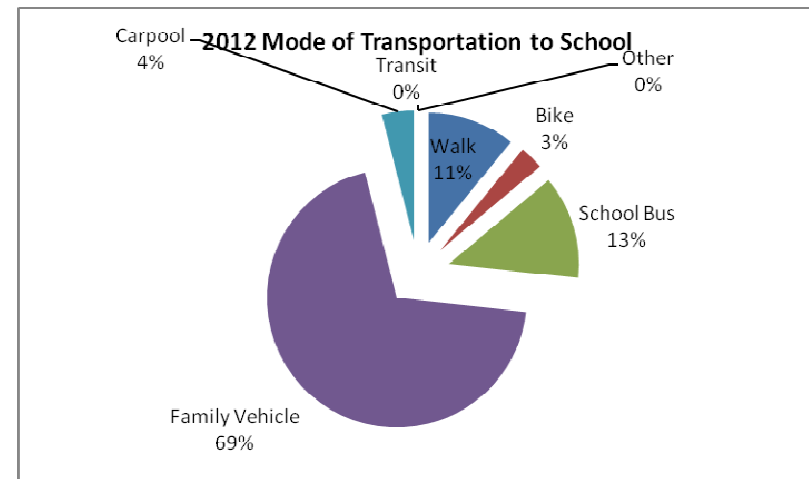
Why is this important?

When the streets and intersections adjacent to schools are pedestrian friendly, it is more likely that children will walk or bike to school.

How are we doing?



In 2011, Get Fit Kaua'i conducted several surveys as part of the Safe Routes to School Task Force in 2011 and 2012. The results are not statistically significant, but they provide a snapshot of elementary student travel behavior. According to the survey, almost 70 percent of students are driven to school. Thirteen percent ride the school bus, and only 14 percent either walk or bike to school. Additional years of data will be needed to assess the trend.



Source: Get Fit Kaua'i Classroom and Parent Surveys, 2011 and 2012.

Kaua'i County Complete Streets Performance Measures Report 2013

Performance Measure 6: Transit Use

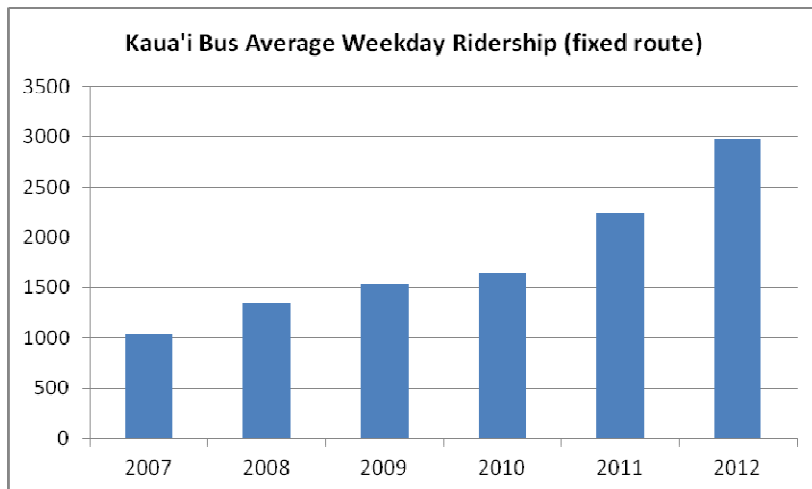
Why is this important?

Transit is a form of active transportation because riders must walk or bike to and from the bus stop. Research has shown that bus commuters are more likely than non-bus commuters to achieve the thirty minutes of physical activity a day recommended by the Center for Disease Control.

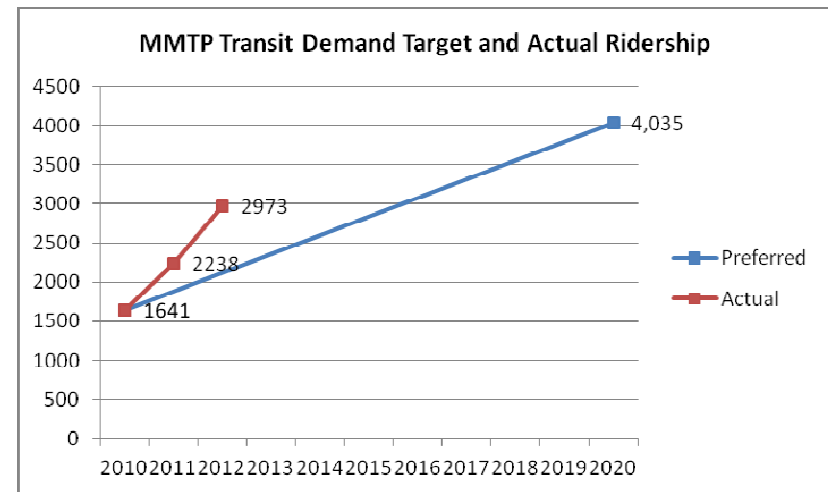
How are we doing?



Transit use has almost tripled between 2007 and 2012, and grew by 33% between 2011 and 2012. This trend exceeds the preferred scenario in the Kaua'i Multimodal Transportation Plan.



Source: Kaua'i County Transportation Agency Records, 2013.



Source: Kaua'i County Transportation Agency Records, 2013 and Kaua'i Multimodal Transportation Plan, 2013.

Kaua'i County Complete Streets Performance Measures Report 2013

Performance Measure 7: Existing Active Transportation Facilities

Why is this important?

Complete Streets supports the development of active transportation networks, which includes facilities such as sidewalks, multi-use paths, bicycle lanes, signed shared roads and sheltered bus stops.

How are we doing?



There are 416 miles of paved road on Kaua'i (both County and State roads). Of this amount, there are 21.082 miles of roads with sidewalks (on one side or both sides), 5,478 meters of bicycle lanes, and 14.5 miles of shared use path. Twenty-seven percent of all bus stops are sheltered.

Existing Active Transportation Facilities (June 31, 2013)		
	2012	2013
Paved Roads	416 miles	416 miles
Sidewalks	19.12 miles	21.082 miles
Shared Use Path	n/a	
Bike Lanes	200 meters	5,478 meters
Bus Stops	121	121
% Sheltered Bus Stops	27 percent	27 percent

Sources:

Kaua'i County Planning Department GIS Records, 2013.

Kaua'i County Transportation Agency Records, 2013.

State of Hawai'i Databook, 2012. Table 18.02—Length of streets and Highways, Paved and Unpaved, By Island. State of Hawai'i Department of Business and Economic Development and Tourism.

Inventory of New Facilities

New Sidewalks:

Kaumuali'i Highway = 3,158 meters/1.962 miles

New Bike Lanes:

Po'ipū Road at Kōloa School (.2 mile)

Kapule Highway = 2320 meters/1.44 miles

Kaumuali'i Highway = 2788 meters/1.73 miles

New Shared Use Path:

Ka Ala Hele Makalae

Upper and Lower Kawaihau Spur = 372 meters/.23 miles

Wailua Beach & Papaloa Road = 966 meters/.6 miles

Moanakai = 1078 meters/.67 miles

Kaua'i County Complete Streets Performance Measures Report 2013

Additional Kaua'i County Complete Streets Resources:

Get Fit Kaua'i Built Environment Task Force

Website: <http://www.getfitkauai.com/built-environment.html>

County of Kaua'i Complete Streets

Website: <http://www.kauai.gov/Government/Departments/PlanningDepartment/Projects/CompleteStreets/tabid/372/Default.aspx>