

# Complete Streets Indicators

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## County of Kaua'i 2014 Report

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# Kaua'i County Complete Streets Performance Measures Report 2014

## Introduction









Complete Streets promote safe access for all users of public right-of-ways. 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 Built Environment Task Force monitors implementation efforts. In 2012, the Task Force compiled the first Complete Streets Indicators Report. This volume marks the third annual report.

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 consultant Michael Moule in October 2011. The Built Environment Task Force refined the list and selected performance measures based on accessibility of data and the likelihood that data could be collected on an annual basis.

Performance Measures Summary	
1. Pedestrian and cyclist safety a) Non-motorized vehicle/pedestrian crashes	
2. Active transportation rate a) Commute to Work Mode b) Overall VMT c) VMT per registered vehicle	
3. Safe Routes to School participation a) Mode of transportation to school	
4. Public transportation use a) Average weekly bus ridership	
5. Active transportation facilities a) Length of roads with sidewalks b) Length of multi-use pathways c) Length of bike lanes d) 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.

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## 1. PEDESTRIAN AND BICYCLIST SAFETY

### Performance Measure 1a: Non-Motorized Vehicle/Pedestrian Crashes

#### Why is this important?

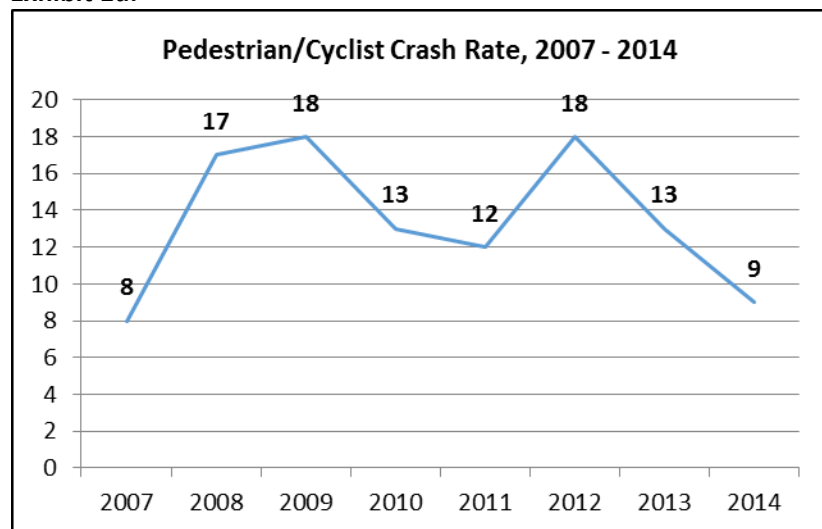
A Complete Street improves safe access for pedestrians and cyclists in the public right of way. One measure of safety is the crash rate for pedestrians/cyclists with motorized vehicles.

#### How are we doing?



The years 2013 and 2014 showed a decline in accidents involving non-motorized vehicles and pedestrians or cyclists.

Exhibit 1a.



Source: Kaua'i County Fire Department Records, 2013.

Data Notes: Incident Type Code 323 – Motor Vehicle/Pedestrian Accident (MV Ped)

## 2. ACTIVE TRANSPORTATION RATE

### Performance Measure 2a: Commute to Work Mode

The American Community Survey measures means of travel to work. Looking over the past four 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. The most marked increase has been in walking trips, which increased to over 1,000 workers from 500 workers three years ago. However, the vast majority of workers still commute via single occupancy vehicle.

Exhibit 2a.

American Community Survey 5-Year Estimates								
Commuting to Work	2006-2010		2007-2011		2008-2012		2009-2013	
Workers (16 years +)	31,890		31,289		31,414		31,296	
Car, truck, or van	25,128	78.8%	24,289	77.6%	23,994	76.4%	23,677	75.7%
Carpool	3,867	12.1%	3,884	12.4%	4,027	12.8%	4,048	12.9%
Public transportation	114	0.4%	172	0.5%	225	0.7%	262	0.8%
Walked	503	1.6%	748	2.4%	847	2.7%	1,055	3.4%
Bicycle	195	0.6%	197	0.6%	250	0.8%	253	0.8%
Other means	352	1.1%	293	0.9%	279	0.9%	251	0.8%
Worked at home	1,520	4.8%	1473	4.7%	1,607	5.1%	1,670	5.3%

### Performance Measure 2b and 2c: Overall VMT and VMT per Vehicle

#### 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). The Kaua'i Multimodal Transportation Plan also includes a long range goal of flatting Island-Wide VMT at 2010 levels (771.5 million) through dramatic trip mode increases in walking, bicycle and transit. This report does not include the 2014 figures for VMT as they have not been released at the time of report finalization.

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## How are we doing?



VMT declined between 2007 and 2010, but recently jumped to a high of 948.7 million miles in 2013. However, VMT per registered vehicle remains fairly stable since 2008.

Exhibit 2b.

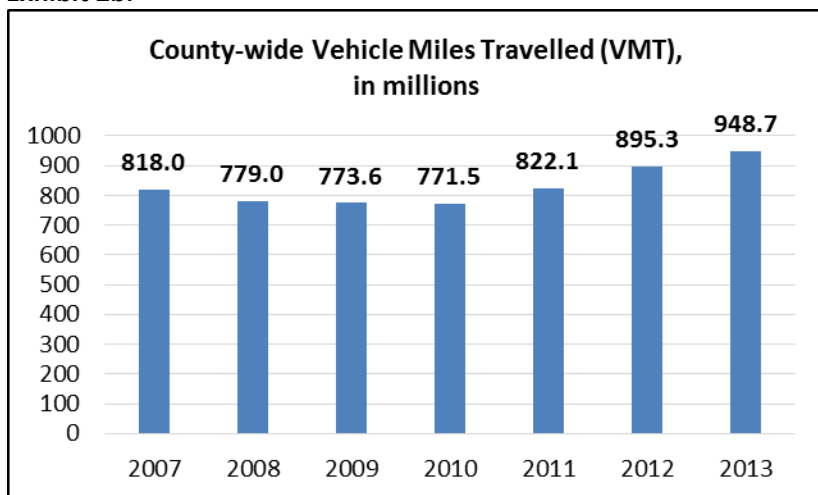
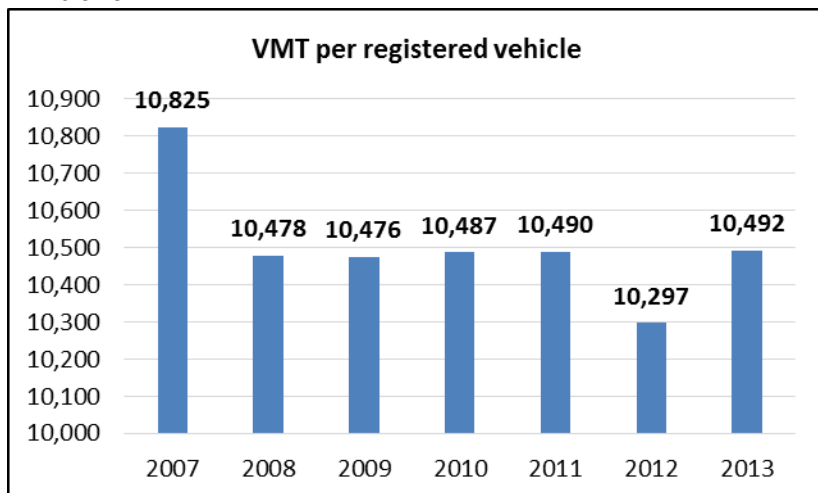


Exhibit 2c.



Source: Hawai'i State Data Book 2013. Table 18.17

## 3. SAFE ROUTES TO SCHOOL

### Performance Measure 3a: Trip Mode to and from School

#### Why is this important?

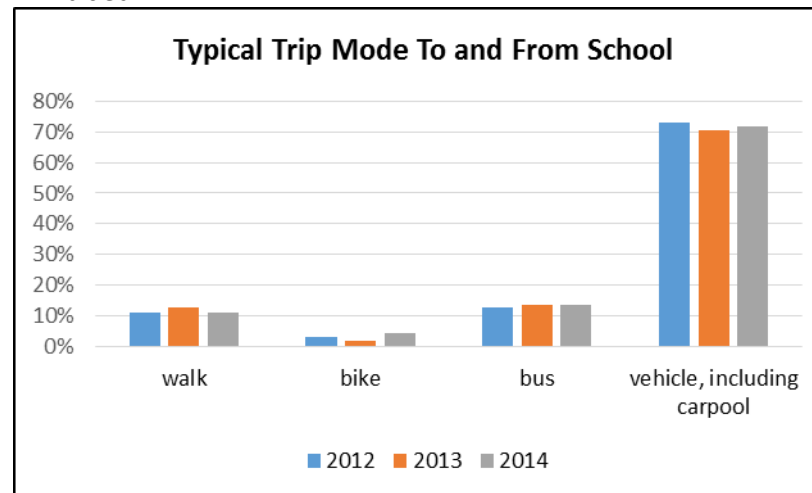
When the streets and intersections adjacent to schools are pedestrian friendly, it is more likely that children will walk or bike to school.

#### How are we doing?



Get Fit Kaua'i has conducted parent surveys as part of the Safe Routes to School Task Force since 2011, with a particular focus on students in the 4<sup>th</sup> and 5<sup>th</sup> grades. The results are not statistically significant, but they provide a snapshot of elementary student travel behavior. According to the survey, about 70 percent of students are driven to school. 13 percent ride the school bus, and about 15 percent either walk or bike to school. Additional years of data will be needed to assess the trend.

Exhibit 3a.



Source: Get Fit Kaua'i Classroom and Parent Surveys, 2012, 2013, and 2014.

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## 4. PUBLIC TRANSPORTATION USE

### Performance Measure 4a: Kaua'i Bus Average Weekday Ridership

#### Why is this important?

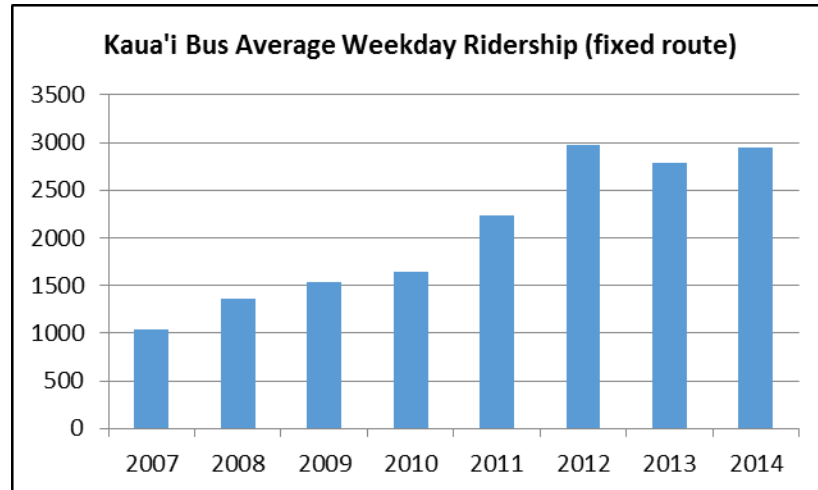
Transit is a form of active transportation because riders must walk or bike to and from the bus stop. Research has shown that bus commuters are more likely than non-bus commuters to achieve the thirty minutes of physical activity a day recommended by the Center for Disease Control. A dramatic increase in transit trips is a key strategy of the Kaua'i Multimodal Land Transportation Plan.

#### How are we doing?



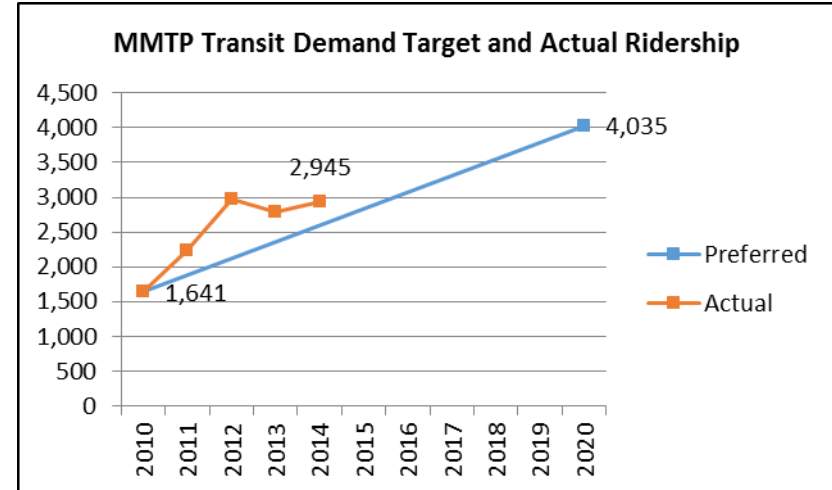
Transit use almost tripled between 2007 and 2012, but has remained stable since then. However, despite slightly stagnant growth, the trend still exceeds the preferred scenario in the Kaua'i Multimodal Transportation Plan as shown in Exhibit 4b.

Exhibit 4a.



Source: Kaua'i County Transportation Agency Records, 2015.

Exhibit 4b.



Source: Kaua'i County Transportation Agency Records, 2015 and Kaua'i Multimodal Transportation Plan, 2013.

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## 5. ACTIVE TRANSPORTATION FACILITIES

### Performance Measure 5a: 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. Fifteen of the Island's transit stops are sheltered, with more planned for construction in 2015.

#### **Exhibit 5a.**

<b>Existing Active Transportation Facilities (December 31, 2014)</b>			
	2012	2013	2014
Paved Roads	416 miles	416 miles	417 miles
Sidewalks	19.12 miles	21.082 miles	21.082 miles
Shared Use Path	7.15	8.65	8.65
Bike Lanes	200 meters	5,478 meters	5,478 meters
Total Bus Stops	121	121	121
Sheltered Bus Stops	13	13	15

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 (July 1, 2013 – December 31, 2014)

#### **New Sidewalks:**

\*Kaumuali'i Highway= 1,030 meters/0.64 miles

#### **New Bike Lanes:**

None

#### **New Shared Use Pathways:**

None

### Inventory of New Facilities (January 1, 2012 – June 30, 2013)

#### **New Sidewalks:**

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

#### **New Bike Lanes:**

Po'ipū Road at Kōloa School = 320 meters/.2 miles

Kapule Highway = 2320 meters/1.44 miles

Kaumuali'i Highway = 2788 meters/1.73 miles

#### **New Shared Use Pathways (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

*\*New sidewalks constructed on a road where a sidewalk existed on the opposite side are not counted as new "length of road with sidewalks (on one side or both sides)" in Exhibit 5a.*

# Kaua'i County Complete Streets Performance Measures Report 2014

## 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/Planning/Department/Projects/CompleteStreets/tabid/372/Default.aspx>