



**BikeSafe**

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Mr. David Henderson  
Office of the County Manager  
111 NW 1<sup>st</sup> St. Suite 910  
Miami, Florida 33128

**RE: Metropolitan Planning Organization  
BikeSafe™ Final Report**

Dear Mr. Henderson,

The following is a report for activities completed from September 2009 to August 2010. Please contact me or the Director, Dr. Gillian A. Hotz [ghotz@med.miami.edu](mailto:ghotz@med.miami.edu), if you require additional information regarding this progress report period.

Sincerely,

Jamie Caulkins  
Project Coordinator



**The BikeSafe™ Program Office**



## 1. Educational Materials: Literature Review

BikeSafe™ staff developed a rubric to evaluate each bicycle education program, and the rubric consisted of educational factors including gender, age, presence of the 5-E model, curriculum-based education, community events and benefits, evaluation methods, safety focus topics, health components and the dissemination method of the program. This rubric enabled our staff to identify programs that matched our search for a curriculum-based education program which our staff could use to conduct a feasibility study, since no reviewed program had already conducted such research. After the rubric, the next step was to seek out bicycle education programs, both in the U.S. and internationally. This process spanned from sources such as the League of American Bicyclists to recommendations made by bike professionals around the country. Programs of “best fit” were identified for their alignment with our program rubric. The individual program review process consisted of direct contact with the program and, where possible, acquisition of the program’s full curriculum and materials to review. Table 1 is a list of U.S. programs which contained these elements, and Table 2 is a list of the international programs that were reviewed.

**Table 1: 2009 BikeSafe™ National Reviewed Programs List**

State	Program/Organization
AL	Bike Auburn
CA	Bicycle Solutions
CA	CycleSmart Santa Barbara
CA	East Bay Bike Coalition
CA	Folsom Cordova School District Bike Ed
CA	Palo Alto (Swent Bike Ed)
CA	San Francisco Bicycle Coalition
CA	Santa Cruz Ride n’ Stride Bike Ed
CA	Silicon Valley Bicycle Coalition
CA	UC Davis Bike Program
CA	YMCA “YBike” Program
CA	WalkBike Marin
CO	Fort Collins Bike Co-Op
CO	Freiker
FL	Florida Traffic Safety and Bicycle
FL	Florida Bike Association
GA	Atlanta Bicycle Tours
HI	Hawaii Bicycling League
IL	Chicago Bike Ambassadors
LA	Eagle School of Cycling



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MA	MassBike
MD	Rockville Bike Safety
ME	Bike Coalition of Maine
MN	Helmet Hero
MO	St. Louis Bicycle Works
OH	Safety Council of Northwest Ohio Bike Ed
OR	Bicycle Transportation Alliance
PA	Pennsylvania Bicycle Coalition
PA	Neighborhood Bike Works PA
SC	Palmetto Cycling Coalition
TX	BikeTexas
UT	Salt Lake City Bicycle Collective
VA	Confident City Cycling
VA	Bike Smart Virginia
VT	Vermont Bicycle and Pedestrian Coalition
WA	Bellingham Bicycle Education
WA	Cascade Bicycle Club (Seattle)

**Table 2: 2009 BikeSafe™ International Reviewed Programs List**

Country	Program/Organization
Canada	Toronto CAN-Bike
Canada	Vancouver Area Bicycle Coalition
England	Bikeability
Australia	Bike On Australia
Australia	AustCycle

## 2. BikeSafe Task Force Meeting

Invitations to the BikeSafe™ Task Force Meeting on November 5<sup>th</sup> were distributed at the October 4<sup>th</sup> Bike Miami Days and sent out to the membership groups of both the City of Miami Bicycle Action Committee and the Miami-Dade County Metropolitan Planning Organization Bicycle Pedestrian Advisory Committee. Task Force event information was posted on the Critical Mass and Transit Miami websites. 22 community partners attended the Task Force, including members from the following organizations:



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Table 3: November 5<sup>th</sup> BikeSafe™ Task Force Meeting Attendance

Organizations in Attendance		
Belafonte Tacooley Center	High Gear Cycling	MDC Police Department
Epilepsy Foundation	Kimley-Horn Consulting	MDC Public Schools
City of Miami Bicycle Coordinator	Jackson Memorial Hospital	MDC Public Works
City of Miami Office of the Mayor	MDC Parks and Recreation	University of Miami Police
Florida Department of Transportation	MDC Metropolitan Planning Organization	University of Miami WalkSafe™ Program

Based on recommendations from Task Force members the Bicycle Transportation Alliance was selected as the model program for BikeSafe™ implementation. A statewide Safe Routes to School education program, the Bicycle Transportation Alliance offers the benefits of successfully implemented and existing programs and materials, and has the organizational ability to contribute to and collaborate on future research. Table 4 details the Bicycle Transportation Alliance curriculum.

Table 4: Bicycle Transportation Alliance Curriculum Components

Bicycle Transportation Alliance (Portland, Oregon)	
<b>Program Reach</b>	5,000 students educated in 2008
<b>Target Age</b>	10-14 yrs
<b>Number of Class Sessions</b>	7-10
<b>Components of Class</b>	Bicycle Laws, Bicycle Maintenance, Safe Bicycling Skills, On-Bike Road Skills
<b>Resources Provided</b>	Bicycles, Helmets, Bike Rodeo Materials, Classroom materials
<b>Dissemination Model</b>	Train the Trainer



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### 3. Belafonte Tacolcy Center Pilot Program

BikeSafe™ staff made plans to pilot the adapted curriculum at the Belafonte Tacolcy Center’s After-School Program. To conduct the BikeSafe™ pilot program study at the Belafonte Tacolcy Center, BikeSafe™ staff completed an Internal Review Board Study Protocol for the BikeSafe pilot program. This submitted protocol included parental consent and child assent documents to be administered to the BikeSafe™ program participants, a history and background of the program and the methods and goals of the pilot study. This information was submitted to the University of Miami Miller School of Medicine Internal Review Board and BikeSafe staff will begin the pilot program at the Tacolcy Center upon study approval by the Internal Review Board.

BikeSafe™ staff completed the eight hour League of American Bicyclists Road Skills 101 Course on Sunday, November 15<sup>th</sup>, 2009 at Tropical Park. This course is a prerequisite to attending the League’s Bike Ed Cycling Instructor Course, which is the final requirement to becoming a certified League Cycling Instructor. Staff also received helmet-fit instructor certification from the Florida Department of Transportation September 29<sup>th</sup> 2009 and also attended the University of Florida’s Bicycle Driver Education Instructor Training Course on October 29<sup>th</sup>, 2009. These certifications strengthen the BikeSafe™ staff’s ability to implement and provide bicycle safety education in Miami-Dade County.

The Tacolcy Bicycle Safety Course began on January 19<sup>th</sup>, 2010. Fourteen students signed assent forms and submitted parental consent forms to become eligible for the five-week, ten session bicycle safety course. This program and these classes are held within the Tacolcy Bike Club After-School Program, and the Bike Club Director, Roger Horne, assisted with the administration of the BikeSafe pilot program and supervised each class session.

**Table 5: Tacolcy Bicycle Safety Class Schedule**

Session #	Title	Date
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1	Bicycle Ridership and Safety	1/19/2010
2	Helmets, gear and bike parts	1/21/2010
3	Laws, hazards and repair	1/26/2010
4	Traffic simulation: fitting bikes	1/28/2010
*	Makeup Class for Session 4	2/2/2010
5	Controlling, stopping and signaling	2/4/10
6	Riding with Traffic	2/9/10
*	Makeup Class for Session 6	2/11/10
7	Intersections	2/16/10
8	Hazards and Emergency Avoidance	2/18/10
*	Makeup Class for Session 8	2/23/10
9	Neighborhood Bike Rodeo	2/25/10
10	Neighborhood Ride and Post-Test	3/2/10



2/16/10 Session 7: About to practice intersection skills

#### 4. University of Miami Coral Gables Campus BikeSafe™ Class



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The University of Miami Coral Gables campus hosted a “Bicycle Skills and Safety Course” modeled after the League of American Bicyclists Traffic Skills 101 Course, along with existing college bicycle education programs at universities in the U.S. and Canada. BikeSafe staff reached out to these universities seeking information on their respective programs, including curriculum materials, course timeframe, program history, instruction methods, marketing and recruitment efforts and any program research involved. Table 6 is a list of programs which were reviewed for this project.

**Table 6: 2009 BikeSafe™ College Programs List**

State	University
CA	University of California at Santa Cruz
CA	Stanford University
CO	University of Colorado at Boulder
IL	University of Illinois
LA	Tulane University
MD	University of Maryland
MI	Michigan State University
NY	Cornell University
OR	Portland State University
WA	University of Washington
WI	University of Wisconsin-Madison
*	McGill University

\*McGill University in Montreal, Canada

BikeSafe™ staff hosted a two hour bicycle safety course on March 3<sup>rd</sup> at the University of Miami Coral Gables campus. Seven people attended the safety course which consisted of bicycle laws, traffic skills, the basics of bicycle commuting and local bicycle transportation options. The community ride component of the class was cancelled because the students in attendance did not bring their bicycles with them to the class. The University of Miami Campus Police expressed interest in hosting future class sessions for their student population, and these future courses would be made available for public participation.



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POLICE DEPARTMENT

**BikeSafe Partnership**



**University of Miami  
BikeSafe Class**

**When:** Wednesday, March 3<sup>rd</sup>, 2010, from 6pm to 8pm  
**Where:** University Center - Orange Key Room 245 - Coral Gables Campus  
**Cost:** FREE Class  
**Sign-Up:** Advanced online registration REQUIRED due to limited class size

*Register online*

**[www.miami.edu/police/bikesafe](http://www.miami.edu/police/bikesafe)**

The UM BikeSafe Course is a 2 hour program for existing and future bicyclists that provides riders with safety skills and information on bicycling as a transportation alternative and a recreation activity. Understanding bicycle laws and learning bicycle traffic skills will limit the risk of injury and enhance the participant's comfort and ability to travel by bicycle.

For more information, contact the BikeSafe program at (305) 243-8115



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## 5. BikeSafe Collaboration with Miami-Dade County Parks and Recreation

BikeSafe™ staff began collaborating with Miami-Dade County Parks and Recreation staff to adapt the BikeSafe™ curriculum used at the Belafonte Tacolcy Center to be used within the schedules of summer camp programming within three Miami-Dade County Parks; Gould’s Park, Tamiami Park and Gwen Cherry Park. Over the course of this process, the curriculum was condensed to three hours in order to fit within the schedule of these summer camps. The three hour limit was decided upon as a way to fit these classes into the morning or afternoon portion of the daily schedule, enabling age groups from the 8-9 year old group to the 13-14 year old group to participate in the BikeSafe™ course. Once this decision was made, BikeSafe™ staff met with staff from Gould’s Park, Tamiami Park and Gwen Cherry Park to discuss the Tuesday, Wednesday and Thursday course schedule and go over the logistics of the class.

BikeSafe™ staff worked with community partners, including Miami Children’s Hospital and the Epilepsy Foundation of South Florida to supply materials for the Parks and Recreation course. The Miami Children’s Hospital Outreach Coordinator provided a bicycle fleet of six children’s bikes to be used for the duration of the summer. The Epilepsy Foundation of South Florida agreed to provide 150 children’s helmets to be provided to all BikeSafe™ Parks and Recreation course attendees. Finally, BikeSafe™ staff created the course documents, including the intersection and bike hazards worksheets, along with the pre and post test materials. Other course materials included cones, tape, basic art supplies, pencils and sample bicycle equipment, including hand and floor pumps, front and rear bicycle lights, tire tubes and bicycle locks.

Along with the BikeSafe™ project coordinator, Roger Horne from the Belafonte Tacolcy Center and Kathryn Moore from the South Florida Bicycle Coalition were hired as summer Parks and Recreation staff in order to have multiple instructors present at each class session. Prior to course implementation, the instructors met to review the course documents to provide feedback and edit the course outline accordingly.

**Table 7: Summer 2010 BikeSafe Parks and Recreation Courses**

Location	Date	Boys	Girls	Daily Attendance	Total Attendance
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Tamiami Park	6/16/10	24	0	24	24
Gwen Cherry Park	6/17/10	16	18	34	58
Gould's Park	6/22/10	0	17	17	75
Tamiami Park	6/23/10	0	30	30	105
Gwen Cherry Park	6/24/10	24	0	24	129
Tamiami Park	6/30/10	11	16	27	156
Tamiami Park	7/7/10	18	0	18	174
Gwen Cherry Park	7/8/10	21	0	21	195
Gould's Park	7/13/10	0	26	26	221
Gould's Park	7/20/10	0	28	28	249
Tamiami Park	7/21/10	21	0	21	270
Gould's Park	7/27/10	18	0	18	288
					(153 boys, 135 girls)

## 6. BikeSafe Summer Course Review

Following the completion of the summer camp programming, the BikeSafe™ coordinator met with staff from the three Parks in order to gather feedback on the course and gain insight into how the course can be improved. Along with a discussion of how to make the course work better in the future, staff members from each of the three Parks were asked to fill out a simple survey measuring their assessment of the BikeSafe summer camp program's impact. Survey respondents were asked to rate their response using the following scale: "Strongly Disagree"- "Disagree"- "Neither Agree nor Disagree"- "Agree"- "Strongly Agree". The results of this survey can be found below in Table 5. Recommendations from Parks and Recreation staff included the following:

- Limit the class to the 8-11 age range as the older campers seemed less excited by and receptive to the course content.



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- Work with Parks and Recreation staff earlier in the year so that the class is listed on the Parks schedule from the start- this would ease pressure on Parks staff to adjust the schedule to accommodate a BikeSafe™ class and would eliminate the need to cancel BikeSafe™ classes due to scheduling conflicts.
- List the BikeSafe™ class on the Parks and Recreation summer camp registration form, similar to the existing “Learn to Swim” class, to allow students to attend the class outside of the normally held Park schedule. This would also ensure a receptive and interested audience.
- Training Parks and Recreation staff to teach the course would not work as staff ratios need to be maintained so the course will need to be taught by outside instructors in the future.
- At Gwen Cherry, there were times when too many kids were waiting to ride the bike, and some students wanted to get more time on the bikes. A larger bike fleet in the future or smaller class sizes would alleviate this problem.
- Create a longer bike route for the end of class to allow kids to participate in a longer practice ride at the end of class.
- Consider hosting an after school class with a focus on bike commuting to and from school.



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**Table 8: Parks and Recreation Staff Survey Responses**

	<b>Gould's Park</b>	<b>Tamiami Park</b>	<b>Gwen Cherry Park</b>
Campers enjoyed the BikeSafe class.	Agree	Agree	Agree
Campers became more knowledgeable on bike safety after taking the BikeSafe class.	Strongly Agree	Agree	Agree
After taking the BikeSafe class, campers are more likely to ride their bicycles.	Strongly Agree	Agree	Agree
I recommend that we have more BikeSafe classes in the future.	Strongly Agree	Agree	Agree
BikeSafe classes would work well in Parks and Rec after school programs.	Strongly Agree	Strongly Agree	Agree
The BikeSafe class was a positive addition to our summer camp schedule.	Strongly Agree	Agree	Agree



## 7. Community Outreach

Along with hosting the bicycle safety classes, BikeSafe™ also attended a series of outreach events throughout the year, at which staff provided brief bicycle safety lessons including rules of the road, the ABC Quick Check, proper bike helmet fit as well as brief demonstrations of proper riding behavior and proper helmet fit. Table 9 details BikeSafe outreach efforts over the past year.

**Table 9: Outreach Efforts Attended by BikeSafe, November 2009 to July 2010**

Name of Event	Date	Adults Educated	Children Educated	Total
Xtra Space Storage Epilepsy Fundraiser	11/14/09	9	26	35
Palmetto Senior High Bike Day	1/23/10	100	75	*175
Safety is Fun Family Check up Day	2/6/10	9	8	17
Rainbow Park Elementary School Health Fair	2/27/10	40	77	117
Miami Science Museum Brain Fair	3/20/10	84	261	345
Miami-Dade College Bike to School Day	3/26/10	22	0	22
City of Miami Bring Your Child to Work Day	4/22/10	11	38	49
Ludlam Elementary School Health Fair	4/30/10	12	150	162
The Children's Trust Family Expo	5/8/10	84	160	244
Village South Health Fair	6/26/10	40	84	124
Back To School Fun Day	7/31/10	23	48	71
<b>Total</b>		<b>434</b>	<b>927</b>	<b>1,361</b>

\*175 were educated through a safety presentation at the beginning of the event

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Clockwise from the top left

1-ABC Quick Check at the Miami Science Museum Brain Fair

2-Bike safety Q&A at the Children's Trust Family Expo

3-Helmet fit demonstration at the Rainbow Park Elementary School Health Fair

4-Discussion of safe riding techniques at the Back to School Fun Day

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## 8. Next Steps

BikeSafe™ staff will continue working with various Parks and Recreation staff members to identify opportunities to collaborate and deliver bicycle safety education through Parks and Recreation services in the future. One of the goals is to not only sustain the program but also expand it in order to educate more children and reach more areas within Miami-Dade County. Hosting the BikeSafe™ program in more parks and incorporating the course into after-school programs along with summer camp programming will enable BikeSafe to reach a larger portion of Miami-Dade County children and empower those children to ride more and ride safely, in order to increase physical activity levels and decrease chances of bicycle injury. BikeSafe will continue to work with its community partners to identify target areas and populations within Miami-Dade County in need of bicycle safety education.

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