

Road to Zero Final Report | Coconut Grove | August 2025















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Thank you to the many community members and organizations who have provided their support and input during this project, including - but not limited to - the following individuals and organizations:

Liz Butler Steve Capellini Danilo Castro Dan Couch Clarice Cooper Luis Diaz Coconut Grove Elementary PTA Coconut Grove Homeowners & Tenant's Association Coconut Grove Ministry Alliance The Coconut Grove Spotlight **Center Grove Neighbors** Don Finefrock Frances S. Tucker K-8 PTA Michael Fleming Melissa Goldberg **Chris Groobey** Shablé Harris

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### **Executive Summary**

The Matilda Street Multimodal Pop-Up initiative, funded by the National Safety Council's Road to Zero initiative, piloted protected bike lanes and traffic-calming features in Coconut Grove, Miami. The project addressed pedestrian and cyclist safety concerns through tactical urbanism interventions, data collection, and community engagement.

**Key outcomes** included a <u>34% reduction</u> of school drop-off traffic, over <u>70% parent support</u> for permanent infrastructure, plus <u>113 unique</u>, <u>community-sourced recommendations</u>.

**Findings strongly support** the implementation of a permanent <u>protected</u>, <u>bi-directional</u> <u>bike lane and modal filter</u> on Matilda Street at Coconut Grove Elementary and <u>both mobility</u> <u>and traffic calming improvements on 37th Avenue</u> at and near Frances S. Tucker Elementary.

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# 1. Introduction

### **History**

In 2021, the University of Miami's BikeSafe Program supported a grassroots bike-to-school effort at Coconut Grove Elementary (CGE). During this event, BikeSafe staff discovered an active group of over 40 parents and youths who ride to school on a regular basis.



Anne Haywood

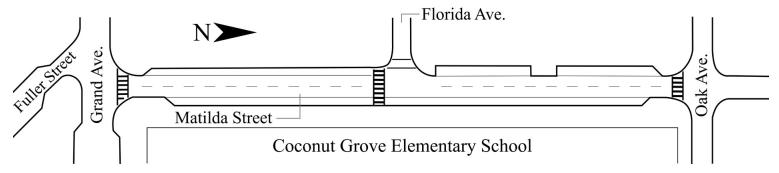
Despite the volume of parents and youths riding to school on the Grove's network of calm neighborhood streets, Matilda Street – the street that both fronts the school and connects to the neighborhood – currently creates risks for all micromobility users (bicycles included), despite being a preferred route for bicycle and e-scooter users to reach both the school and Coconut Grove business district.

Matilda Street is primarily a narrow (8-foot lane), two-way residential street - part of the aforementioned neighborhood network. At the school, however, it is one-way, divided by Oak Avenue. Traffic from the school - over 200 automobiles daily - exits westbound, eastbound, or northbound at the Oak Avenue intersection. Northbound traffic is particularly problematic, as it exits straight into the residential area.



This is only part of the issue currently facing families and micromobility users using Matilda Street: Besides braving excess traffic coming towards them on an otherwise low-stress neighborhood street, they must cross Oak Avenue and ride directly into traffic – contraflow – to reach either the school or the business district.

#### Matilda Street - Grand to Oak Avenue





While this appears risky, the contraflow approach remains the lowest-stress option for risk-averse riders. The alternatives - looping around the school on Virgina or McDonald Street to enter from Grand Avenue - are simply not safe due to the much higher traffic volumes and average speeds on those streets.

Shortly thereafter, BikeSafe and the City of Miami Police Department partnered on a tactical urbanism project, or "pop-up," to test whether a protected bike lane – constructed as a temporary, one-day facility for Walk, Bike, and Roll to School Day – could solve the safety issue by creating dedicated space for riders.



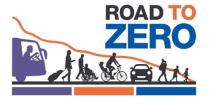
The result was a success and has since been repeated over six times as a twice-yearly event with PTA support of both the pop-up and a desire for bike lane permanancy: A 2022 BikeSafe survey distributed to the Coconut Grove Elementary parents (through the Miami-Dade Schools Office of Communications) indicated a 73% parent support rate for a permanent bi-directional bike lane. This is further supplemented by the Miami Police Department's support of a permanent design, nearby neighborhood residents in favor of traffic relief, and the area non-profits Bike Coconut Grove and Grove Connect.

Additionally, the implementation also proved the bike lane can relieve automobile congestion: Each event has seen a reduction of car traffic from 25 to 30 percent, thanks to the parents riding, not driving, to school.

Nevertheless, some issues remained with the temporary implementation, including excess deflection due to the bike lane's offset from the neighborhood street.

The BikeSafe team was eager to test a solution in the form of a "modal filter" – a partial street closure allowing bikes and pedestrians through, while redirecting automobile traffic to more appropriate corridors. Likewise, parents at the nearby Frances S. Tucker K-8 Center expressed similar interest in a pop-up – citing pedestrian safety needs – and further public feedback was desired.

With the prior success of the pop-up, BikeSafe sought a National Safety Council "Road to Zero" grant to support the further expansion of the pop-up initiative, allowing BikeSafe to test the pop-up bike lane along with a modal filter, gather additional community feedback, and to expand the pop-up efforts to the West Grove communuty, a historical Bahamian enclave of the Grove, through Frances S. Tucker K-8.



This report is the culmination of the data and observations collected following this one-year project.





# 2. Existing Knowledge and Research



Protected bike lane in Davis, California, circa 1969 | Photo: The Davis Enterprise

### **Background**

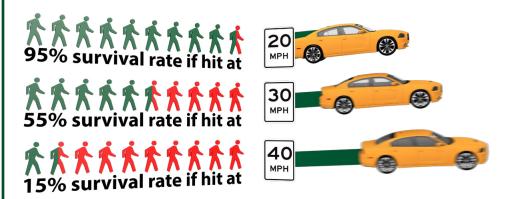
Vehicular cycling, once widely promoted, has proven insufficient in modern traffic conditions. This type of riding – where riders are expected to "drive their bicycle" with automobile traffic, "claiming the lane" – was promoted heavily during the 1970s when bicycle facilities were few and far betwen, despite a brief emergence of protected bike lanes in Davis, California. This was largely a reaction by the cycling community to other cities who used Davis' template as a means to mandate riders off roads and onto unsuitable facilities, including narrow pedestrian sidewalks without ADA ramps.<sup>1</sup>

In this context, the promotion of vehicular cycling made sense, but the reality is that vehicular cycling is neither low-stress nor safe on all but the *calmest* of local streets, usually those with eight-foot-wide lanes or narrower, further supplemented with traffic calming to reduce unnecessary auto traffic. Speed limits at or under 25

miles per hour also contribute to the usability of a shared lane, directly mitigating the severity of injuries or fatalites in the event of a collision.

### In brief

Protected bicycle infrastructure significantly improves safety and ridership. Studies by Marshall and Ferenchak (2019, 2024) found that protected bike lanes reduce crashes by 44% and fatalities by 50%, while attracting 52.5% more riders than painted lanes and 281% more than on-street "sharrows." These findings confirm that well-designed, separated facilities are critical to encouraging active transportation for all ages and abilities.



<sup>1</sup> Bill Schultheiss, Rebecca Sanders, and Jennifer Toole: A Historical Perspective on the AASHTO Guide for the Development of Bicycle Facilities and the Impact of the Vehicular Cycling Movement - <a href="https://tooledesign.com/wp-content/uploads/2018/10/TRB">https://tooledesign.com/wp-content/uploads/2018/10/TRB</a> Paper18-05962 HistoryofAASHTO BikeGuide TRB rev.pdf



BICYCLE FACILITIES

Manual on

Uniform Traffic Control Devices

> Urban Bikeway

Design

Guide

for Streets and Highways

11th Edition

With an exponential increase in automotive traffic since the 1970s, vehicular cycling has failed its mission for all but the most fearless of riders, since becoming the primary source for most bicycle-vs-automobile conflicts instead of the silver bullet to prevent them.

Nevertheless, these mistakes of half a century ago are essentially rectified in new engineering guidelines. The 11<sup>th</sup> Edition Manual on Uniform Traffic Control Devices (MUTCD)<sup>2</sup>, the American Association of State Highway and Transportation Officials' (AASHTO) *Green Book and Guide for the Development of Bicycle Facilities*<sup>3</sup>, and National Association of City Transportation Officials' (NACTO) *Urban Bikeway Design Guide*<sup>4</sup> all now encourage separated, low-stress infrastructure, marking a turning point in urban planning for bicycle facilities.

Most recently, a 2019 study by Wesley E. Marshall and Nicholas N. Ferenchak<sup>5</sup> – executed over 13 years in 12 major US metropolitan cities – found that physical barriers that separate bicycle riders from automobiles, on average, reduce bike vs. auto crashes by 44% and rider deaths by 50%. Cycling rates also rose in cities that incorporated these protected bike lanes ("separated bike lanes" by Federal Highway Administration nomenclature) concurrent with the reduction in crashes.

Traffic density of any mode generally results in an increase in crashes, so results that reverse this trend are exceptional. The same researchers explored this phenomenon, publishing a further study in 2025<sup>6</sup>, establishing that people interested in riding but concerned about their safety would perceive a separated bike lane as a safe place



based on visual qualities alone. Thus, protected bike lanes increase safety and mode shift on both a qualitative and perceptive basis.

Per these landmark studies, the new infrastructure manuals, and lessons learned relating to vehicular cycling, protected bicycle lanes are the solution to both mode shift and bicycle + micromobility (e-scooter) safety, especially for the most vulnerable populations within these road users; youths and aging seniors.

<sup>6</sup> The link between low-stress bicycle facilities and bicycle commuting - https://www.nature.com/articles/s44284-025-00255-5



<sup>2</sup> Manual on Uniform Traffic Control Devices - https://mutcd.fhwa.dot.gov/kno 11th Edition.htm

<sup>3</sup> American Association of State Highway and Transportation Officials - <a href="https://aashtojournal.transportation.org/aashto-releases-5th-edition-of-comprehensive-bi-cycle-guide/">https://aashtojournal.transportation.org/aashto-releases-5th-edition-of-comprehensive-bi-cycle-guide/</a>

<sup>4</sup> National Association of City Transportation Officials - <a href="https://nacto.org/latest/nacto-launches-new-urban-bikeway-design-guide-for-the-next-generation-of-in-novative-cycling-infrastructure/">https://nacto.org/latest/nacto-launches-new-urban-bikeway-design-guide-for-the-next-generation-of-in-novative-cycling-infrastructure/</a>

<sup>5</sup> Why cities with high bicycling rates are safer for all road users - https://www.sciencedirect.com/science/article/pii/S2214140518301488



#### **Prior events**

Each year, the University of Miami BikeSafe Program holds one to two Bike to School Day events in celebration of Florida Bike Month (March) and National Bike Month (May). These events promote Safe Routes to School-oriented initiatives by encouraging families to experience cycling to school for a day, supporting youth health and mode shift, and reducing overall congestion during dropoff/pickup through the space advantage of bicycles over automobiles.

As part of these efforts, both UHealth BikeSafe and WalkSafe have supported community-led efforts in the West and Center Grove neighborhoods since May of 2021.

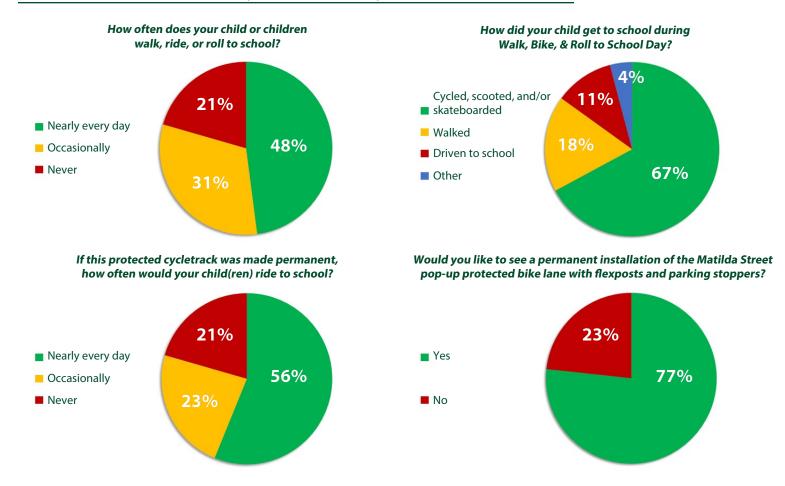
These events included providing ride leaders for the Coconut Grove PTA bike bus, a Walk to School Day celebration at Frances S. Tucker Elementary, and three permutations of the Coconut Grove Elementary pop-up protected bike lane, supplementing the bike bus.

The continued interest in these efforts, particularly those relating to riding to school, led to BikeSafe distributing a preliminary survey to parents of Coconut Grove Elementary - through Miami-Dade Schools - to query interest in the pop-up bike lane and cycling/walking in general.



Lotte Purkis

### **Coconut Grove Elementary Parent Survey - Results**



### **Further Research**

Following the PTA feedback, an effort was made to collect more data, including automobile drop-off counts compared with active transportation counts (cycling, walking, scooting, etc.) during the event. A particular effort was made to establish the approximate mode shift (bicycle trips substituting car trips) generated by the event, given the potential improvement this shift could have upon morning traffic congestion in Downtown Coconut Grove.

Over the next few years, the team at BikeSafe compiled these results into a scientific case study entitled *Using Pop-Up Protected Bike Lanes to Encourage Community Support for Safe Streets*. The study is available from the Journal of the American Planning Association and can be accessed through this link or the QR code.

These results - combined with the growing community support following each successive pop-up demonstration and the general demand for walkability and bikeability in the Grove - catalyzed the need to expand research past this initial case study and move forward with the Road to Zero project.

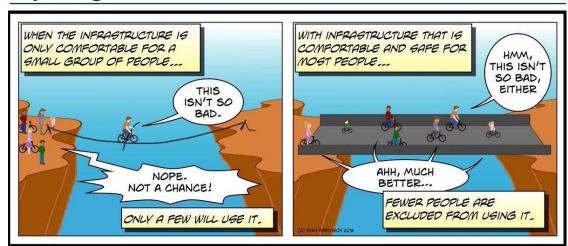






# 3. Road to Zero Project

### Improving the science of traffic



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North American traffic studies focus heavily on quantitative automotive metrics, including general automotive counts, existing Average Daily Traffic (ADT/AADT), and Level of Service (LOS). These metrics oven overlook the potential demand for vulnerable road users (VRUs): Pedestrians, bicycles, and other micromobility.

Even if VRU presence is accounted for in a study, counts of current streets may be abnormally low or zero. Existing stress levels of a given street's ped/bike facilities - if any facilities exist at all - may discourage people from using the street as a VRU, thus the study is likely to overlook the unmet and untapped demand for safe facilities.



Louis van Senden - CC BY-SA 4.0

For instance, a typical request for neighborhood traffic calming is traditionally approached with a portable "road tube" counter. By measuring vehicles without further context, these counters tend to provide limited qualitative insight into potential micromobility use or safety issues currently associated with a street's design. Road tube counters have also been cited for errors distinguishing between automobiles and bicycles.<sup>1</sup>

As such, the human observations reported from residents and neighbors may contain more accurate insights than the single metric recorded by the counter.

By comparison, pop-up tactical urbanism - executed as a temporary MOT (Maintenance of Traffic, e.g., barricades and cones) provides a low-cost opportunity to acquire both qualitative (neighborhood feedback, observed user behavior) and quantitative (multi-mode user traffic counts) data collection, while simultaneously testing the effectiveness of a physical redesign prior to the cost and time of formal traffic engineering, subcontracted construction firms, physical materials, and consultants associated with these tasks.



#### Goals

The Road to Zero project was crafted with the following goals:

- 1. Use pop-up tactical urbanism to **demonstrate the potential of capturing quantitative mode shift data** through traffic counts.
- 2. Establish the capability of a pop-up to provide **immediate qualitative data** in the form of on-site community feedback.
- 3. Demonstrate how a pop-up can help others visualize a conceptual street redesign.
- 4. Exemplify the importance of **improving the areas surrounding Coconut Grove Elementary and Frances S. Tucker K-8** to support Safe Routes to School initiatives and active transportation for youths.
- **5. Capture further public input** through open community meeting charrettes ("Feedback Forums").

### **Touchpoints**

These goals would be achieved through a series of events - serving as touchpoints with the community - spread between the Center and West Grove neighborhoods:

- Two pop-up events (including concurrent pop-ups at both schools) with on-site staff to capture traffic counts and parental feedback,
- Two community charrettes at local libraries to recieve general and post-event feedback from residents and business owners,
- Feedback captured at additional community meetings through the Coconut Grove Homeowners and Tenants Association and Coconut Grove Ministry Alliance.
- This final report establishing the results of these efforts.

The pop-ups created under Road to Zero would incorporate refinements (modal filter + expansion of Frances S. Tucker pop-up) not initially possible during the original implementations and further supplement observational and quantitative traffic data from prior events.





# 4. Demonstration Events

### Bike, Walk, and Roll to School Day - November 14, 2024

The first demonstration event under the Road to Zero grant set out to establish two specific pop-ups:

### 1. Matilda Street Temporary Protected Bike Lane



Emulating prior demonstrations, a pop-up protected, bi-directional bike lane (cones and washable tempera paint) was created along the full, ~640-foot length of Coconut Grove Elementary School, utilizing the existing parking zone.

### In brief

#### Timeframe:

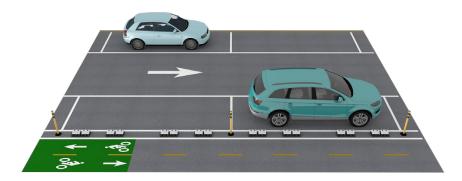
October 2024 to May 2025

### **Primary Goals:**

- Collect community feedback in West and Center Grove.
- Continue pop-up bike lane demonstrations at CGE.
- Introduce a pedestrian-focused popup at Frances S. Tucker K–8.
- Test modal filter to mitigate deflection (offset) of the bike lane and traffic spillover.
- Traffic re-routed to reduce neighborhood spillover

The bi-directional design was chosen to ensure the bike lane would avoid the intersection at Florida Avenue and other driveways to the south, in addition to keeping youths on the same side of the road as the school.

For the purposes of the proof-of-concept, the parking lane was (theoretically) moved to the eastmost travel lane, though never striped or acted on due to the traffic pattern during the demonstration. If the design were made permanent, all but two spaces would be retained.



Traffic counts were taken of both automobiles and micromobility during the pop-up demonstration, in addition to a pre-event count of



automobile dropoff traffic the prior day.

Table 1 - Traffic counts, November 2024 November 14, 2024 (event day) | 7:30am-8:30am

Mode	Count
Automobiles	161
People on foot	242
Parents and children on wheels (bicycles, scooter, skateboards, roller skates, and strollers)	185

246 automobiles were counted during the prior day's dropoff, resulting in a 34% reduction in automobile traffic during this implementation.

### 2. Frances S. Tucker K-8 Pop-Up Traffic Calming



A pedestrian-oriented pop-up was simultaneously implemented at Frances S. Tucker Elementary, with two specific implementations:



a. A no-outlet "Slow Street" at William Avenue, eliminating turning movements near the existing school crosswalk.

This also facilitated parents seeking to cross directly to the school entrance from across the street (rather than use the existing midblock crosswalk intended for this purpose).

This area was not striped as a crosswalk, but Miami Police Department officers on-site facilitated pedestrian crossings at this location.

b. A shortened crosswalk on Grand Avenue, created by reducing a superfluous turn lane on SW 37th Avenue.

The Frances S. Tucker implementation was executed specifically as a pilot test to examine traffic patterns and pedestrian behavior. As such, specific user counts were not taken.

Approximately 30 individuals – youths and adults – walked to school utilizing these pop-ups.



### Bike, Walk, and Roll to School Day - May 1, 2025

The Summer 2025 event marked the first to be coordinated directly by a new PTA bike bus leader at Coconut Grove Elementary. Additional logistics were handled through the existing PTA board members and parent mentors of prior events.

### 1. Matilda Street Temporary Bike Lane and Modal Filter



A modal filter was added to the existing bike lane during this event, allowing bicycle traffic to continue northbound and southbound on Matilda Street while filtering northbound automobile traffic into the Center Grove. Doing so addressed specific feedback the program received from residents about excess traffic in the neighborhood during school drop-off and pickup.

This feedback was brought to the program specifically by local advocates Hank Sanchez-Resnik of Bike Coconut Grove and Mel Meinhardt of Friends of the Commodore Trail, in addition to representatives of City of Miami District 2 over the course of two on-site visits.



As designed, the modal filter achieves two objectives:

a. It aligns all bicycle riders to the east side of the street, thus eliminating deflection to the pop-up bi-directional bike lane.



b. It routes all automotive drop-off traffic on Matilda Street onto Oak Avenue (westbound) toward McDonald Street (SW 32<sup>nd</sup> Avenue), thus eliminating pass-through traffic north of Oak.

On Matilda Street at both Day Avenue and Lime Court, two MUTCD-compliant, temporary signs with "NO OUTLET" / "EXCEPT BICYCLES" were placed to prevent unnecessary turning movements (and subsequent 3-point U-turns) from southbound drivers expecting to reach Oak Avenue through Matilda Street:



Table 2 - Traffic counts - May 2025 May 1, 2025 (event day) | 7:30am-8:30am

Mode	Count
Automobiles	228
People on foot	191
Parents and children on wheels (bicycles, scooter, skateboards, roller skates, and strollers)	168

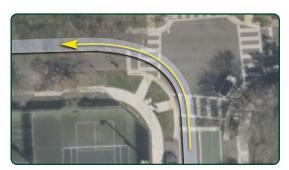
#### **Observations:**



The left-turn-only restriction for northbound Matilda Street auto traffic successfully reduced the number of mixing zones at the intersection, improving safety for riders crossing Oak Avenue. All pedestrians crossing the eastern Oak Avenue sidewalk also benefit from this configuration.

 Any implementation should be accompanied by a repositioned stop line for eastbound Oak Avenue traffic.

This is recommended even with the current street configuration to provide better turning clearance for NB Matilda St. traffic.



Bing Maps

 Grove Elementary drop-off traffic generally backs up onto Grand Avenue at all times, regardless of the pop-up's presence – this line can grow to 30-50+ cars, gridlocking the business district.
 Just before the May 1st event, the principal of the school expressed great concern about this, reporting unusually excessive delays during the November 2024 event.

Based on prior identical events and staff observations, the temporary congestion was likely unrelated to the demonstration design and was resolved through City

of Miami Police assistance and the modal filter.

Ultimately, fewer than 10 automobiles were backed up on Grand Avenue during the May pop-up at any one time, resulting in best automotive dropoff performance witnessed by BikeSafe staff at this school. Westbound and eastbound traffic was subsequently delayed on Oak Avenue to prioritize Matilda, but better circulation patterns would prevent the specific cut-through traffic witnessed.



 Further observations were provided by Miami Police Department Commander Daniel Kerr, who noted the modal filter's success to both keep kids safe from traffic and move drop-off traffic efficiently. These comments were captured in an informal video interview available from this link: <a href="https://www.linkedin.com/feed/update/urn:li:activity:7325207055332503552">https://www.linkedin.com/feed/update/urn:li:activity:7325207055332503552</a> Watch Commander Kerr discuss the impact of the modal filter on LinkedIn:





# 5. Community Feedback Forums

### **Project Overview:**



Resident feedback was sought over two "feedback forums" – community meetings held at the Virrick Park and Coconut Grove Libraries. Participants were provided with physical maps of the West and Center Grove and sticky notes to write and place comments with.

Both events were marketed through the Miami-Dade County Public Library e-newsletter, printed posters and flyers on-site (also distributed to the business improvement district through the library), and digital advertisements through the Coconut Grove Spotlight (cocnutgrovespotlight.com).

# Coconut Grove Safe Streets: YOUR Input Needed! Saturday, April 12 Coconut Grove Library Open feedback forum come anytime! WALKSAFE WALKSAFE BIKESAFE COCONUT GROVE LIBRARY STREET COMMAND COMM

### In brief

#### Locations:

- Virrick Park Library
- Coconut Grove Library

#### **Comments received:**

• 118 (113 relevant to project scope)

### **Comment categories:**

- Traffic calming 53 comments
- Crosswalks 16 comments
- Bicycle infrastructure 16 comments
  - Sidewalks 13 comments

Two formal community meetings – the Coconut Grove Ministry Alliance and Coconut Grove Homeowners and Tenants Association – were also provided the charrette maps and sticky notes, though participation was limited at these functions.

Over these four in-person events, 118 comments were received. These were reduced to 113 within the boundaries of Coconut Grove, eliminating a small number of comments (> 5) that referenced bike/ped concerns for areas outside of the project scope.

The comments were subsequently assigned to one of 11 categories, with further attributes to classify the specific request. All comments, as written, have been provided in <u>Section A</u> of the report's appendix. They are also available on BikeSafe's interactive map.

**Table 3 - All Feedback Forum comments, categorized:** 

Comment categorization	Total	Attribute	# of comments per attribute
		Excessive auto traffic - mitigation requested	11
		Design issue - road speed	10
		Lane reduction	7
		Speed bump requested	4
		General request for improved pedestrian safety	4
		Blind spot issue (traffic calming adjacent)	2
- · · ·		4-way stop requested	2
Traffic calming	53	Roundabout requested	2
		Recommendation to review existing data or study	2
		Traffic circle requested	1
		Design issue - blind spot	1
		Parking removal requested	1
		Enforcement	1
		Pedestrianization	1
		Speeding complaint	1
	16	New crosswalk location requested	11
Crosswalks		Unsafe crosswalk	3
		Scramble crossing requested	2
		Existing bike lane unsafe	6
Bicycle	16	Separated bike lanes missing	5
infrastructure		Protected intersection requested	4
		Bike racks missing	1
Sidewalks	13	New sidewalk location requested	12
Sidewalks		Sidewalk damaged	1
Obstruction	6	Blind spot issue (not traffic calming adjacent)	5
		Parking visual obstruction	1
Other	3	Park improvements	2
Other	٠	Historic preservation	1
Lighting	2	Missing lighting	2
Connectivity	1	Connections missing with other municipalities	1
Improve auto infra	1	Road surface damaged	1
Parking	1	Parking improvement requested	1
Signaling	1	RRFB requested at existing intersection	1



#### **Observations:**

• Despite the synergy of pedestrian and bicycle infrastructure together and the large number of commuter riders (bicycle, e-bike, and e-scooter) in the Grove, the majority of comments received were requests for pedestrian-oriented traffic calming, especially for the residential areas of both Center and West Grove.

These requests were often highly specific regarding what type of calming was preferred, though very few participants broached more modern infrastructure, such as raised crosswalks and modal filters. Many requested basic traffic calming devices (e.g. speed tables and 4-way-stops) instead.

Greater Miami-Dade tends to be a desert of innovative traffic calming and the public tends to draw their preferences from what they see on a daily basis. As such, a request for a specific traffic calming device (e.g., a speed table) may be worth reviewing:Somethingmoreinnovative(e.g., araised crosswalk or raised intersection) may be more suitable and effective than, for instance, a solitary speed bump.

Crosswalks came second on the list, with a host of new locations requested. A few
existing crosswalks were highlighted for upgrades, including some for scramble
(dedicated) phasing and striping.

Like traffic calming, new crosswalks usually necessitate a traffic study. However, we would recommend approaching the new crosswalks as part of the County DTPW Quick Build program. The Quick Build program may accelerate the DTPW approval process, provided infrastructure costs are covered by the City, non-profits, or developers (thus reducing the delay of City-County agreements and/ or MOUs).

- Bicycle infrastructure rounded out the podium of categories, with most requests citing existing painted bike lanes as unsafe, while most others asking for protected ("separated" by FHWA nomenclature) bike lanes where they do not presently exist. For the most part, these are both requests for protected/separated bicycle (micromobility) lanes, given that the way to make a painted lane safe is to provide a buffer and add physical separation.
- The community charrettes attracted a different subset of Grove residents and did not reflect a large number of parents with children at Coconut Grove Elementary PTA or Frances S. Tucker K-8 PTA. As such, comments about the traffic issues at either of these schools were not as prevalent, even though conversations with these PTAs have highlighted issues that the WalkSafe and BikeSafe programs have addressed during past Walk, Bike, and Roll to School Day pop-up initiatives (37th Avenue crossing at Tucker, protected bike lane on Matilda Street between Oak and Grand).

### **Heatmaps**

The point data associated with each sticky notes' location on the map were added to an ArcGIS geodatabase and layered with a heatmap of existing, five-year (2019-2024) crash data from the Florida Department of Transportation's Signal 4 Analytics database.



All charrette comments as point data, cropped within the boundaries of Coconut Grove. Layered with Signal 4 Analytics-sourced bike + ped crash data as heatmap.

Additional heatmaps, filtered by bicycle and pedestrian incidents, are included in <u>Section B</u> of the appendix.

A comparison of the comments received against the heatmaps indicates that while resident concerns are aligned with bike/ped crash hotspots in the Grove business district (BID), they diverge outside of this area:

There are fewer crashes in the Center Grove residential area north of the BID, but a
majority of comments focused upon this area. Per prior reports from the Coconut
Grove Spotlight and conversations with residents outside of the charrettes, these
concerns are long-standing; hence the existing efforts of District 2 to address
speeding and cut-through traffic through the current Traffic Calming Study
project.

- South Bayshore Drive remains a hot spot for crashes and remains a focus of the combined MDC District 7 / City District 2 stormwater improvement project. Despite the clear need for safety improvements (again, currently in progress) per existing Signal 4 crash data, not a single comment was received about this corridor east of 27th Avenue.
- The above was also the case for Tigertail Avenue, which while not subject to as many incidents as Bayshore Drive is presently a focus of MDC District 7.
- While 37<sup>th</sup> Avenue (Douglas Road) clearly suffers from a hot spot at Grand Avenue, the volume of comments along this corridor to the south of this location clearly indicates that this is where crash data is not reflecting the high stress level / near misses experienced by vulnerable road users in this location. Multiple comments referred to poor pedestrian connectivity to the existing bus stops along this corridor.







## 6. Recommendations

### Matilda Street - Grand to Oak:



Modal filter concept art

There is a need for a bi-directional protected bike lane on this block, designed in the same manner as the popup demonstrations. Such a design would provide safe access for families riding to Coconut Grove Elementary.

Matilda Street is also the only reasonable, low stress street to support a micromobility corridor that provides access to the business district and the Commodore Trail. The demand can be witnessed, as it is used – contraflow and otherwise – by neighborhood bicycle and scooter riders on a daily basis.

The addition of residential density via the new Allen-Morris redevelopment further justifies the need for the micromobility connection: It is unfeasible to add more automotive capacity to this area, so the new housing needs to be supplemented with an option for new residents, if they so choose and can do so, to commute with micromobility.

In addition to the bike lane, the modal filter – with or without the bike lane at the school – provides a critical element of traffic calming for the neighborhood, completely solving the issue of drop off traffic speeding down the residential blocks of Matilda Street to get to Bird Drive.

### In brief

#### Locations:

- Matilda St. Grand to Oak
- 37th Ave. & William Ave.
- 37th Ave. Grand to Washington Ave.
- 37th Ave. South of Kumquat Ave.
- 37th Ave. Missing sidewalk

### **Opportunities:**

- Establish campaign to inform the public about modern traffic calming options available to traffic engineers in the City/County.
- Leverage Miami-Dade DTPW Quick-Build program to implement lowercost, interim solutions.

### 37th Avenue and William Avenue:



Google Maps Street View

The current mid-block crosswalk at Frances S. Tucker is a cramped, uncomfortable place to walk – especially with children – and the sidewalk is adjacent to the traffic on 37<sup>th</sup> Avenue. This crosswalk forms an integral part of the school's walkable infrastructure.

Miss Lucy, the Miami-Dade crossing guard at this location, laments that even with the lights, her sign, and reflective vest, the existing crossing is frequently ignored by drivers, leading to many close calls in her experience guarding this crossing.

By closing William Avenue at 37th, these benefits emerge:

- 1. The block between 37<sup>th</sup> Avenue and Plaza Street becomes a No Outlet street for automobile traffic, thus making it less traveled and safer for walking to school. This also renders the street more accessible to neighborhood children for recreation.
- 2. Vehicles turning north onto 37<sup>th</sup> will no longer affect the existing mid-block school crosswalk or north-south pedestrian traffic at the William Avenue intersection.
- 3. A dedicated mid-block crosswalk, aligned with the entrance of the school, could replace the existing mid-block. This would create a highly visible, pedestrian-friendly connection directly to the front entrance of the school the way it should be to encourage further neighborhood walking.



May 2025 post-event flyer provided to residents on Matilda Street (Oak to Shipping Ave.) and Lime Court



### 37th Avenue - Grand to Washington Avenue:



The southwest leg of the 37<sup>th</sup> Avenue pedestrian crosswalk is longer than necessary, due to the presence of a dedicated turn lane on the south side of the intersection.

This lane is not a drop lane continuing from the north side of 37<sup>th</sup>; rather, it exists on its own between Grand and Washington Avenue. To date, we cannot find any practical or engineering (level of service) purpose for its existence or its excessive radius at Washington Avenue; this turn leads to a narrow residential street that should not see commercial traffic necessitating these clearances.

If anything, this specific section of turn lane renders westbound right turns onto 37<sup>th</sup> Avenue (WB Grand to SB Douglas) more dangerous for drivers. These drivers are free to turn right on red without delay but must immediately merge left into southbound traffic if legally following the current striping .

Given traffic speeds and uncooperative southbound traffic, there is an insinuated traffic pattern – per the striping – that would require westbound right-turn traffic from Grand, if unable to legally merge, to divert onto Washington Ave, requiring them to either circle back via Brooker back to 37<sup>th</sup>, or to continue south and return to 37<sup>th</sup> via and Thomas Ave. While unlikely to be followed by the majority of drivers, this pattern would nevertheless increase neighborhood traffic around the school.



Bing Maps

This lane is simply not necessary and should – as a temporary measure – be striped and hardened with flexposts (and Zicla Zipper separators within the standards available through the Florida GreenBook and approvable by County DTPW engineers). Doing so would shorten the crosswalk for safety and reduce turning conflicts for drivers.

As one of the hot spots ascertained with data from Signal 4 Analytics, this lane is low-hanging fruit. Its removal can quickly work towards improving both pedestrian and driver safety at this intersection.

### 37th Avenue – south of Kumquat Ave:



Google Maps Street View

Based on the comments from the Community Feedback Forums, the one standout location – aside from the areas in the Center Grove already being addressed by the City of Miami's traffic calming project – is the walkability and bus stop access on Douglas Road (37<sup>th</sup> Avenue) south of Kumquat.

Though the foliage in this area makes implementation difficult, it is nevertheless <u>possible</u> to continue the existing sidewalks in the same manner as they are to the north – chicaned around the existing trees where necessary, ensuring no loss of plant life – with proper marked crosswalks across each street.

The AADT and speeds on 37<sup>th</sup> Avenue should also warrant consideration of a further midblock crosswalk - with RRFB signalization – in this area.

### 37th Avenue - missing sidewalk:



A recurring complaint heard consistently from partners in the West Grove – including participants of the Coconut Grove Ministry Alliance, Friends of the Commodore Trail, and faculty, staff, and parents of Frances S. Tucker K-8 – is the lack of a sidewalk on the west side of 37<sup>th</sup> Avenue, between Washington and Thomas Avenue.

This lack of sidewalk connectivity has reportedly been an issue for at least 45 years in the community and, based on the verbal comments we received, one of the major sore spots between the West Grove community and the City of Miami.

As a matter of community equity, this sidewalk gap should be resolved, and also so for its function as a direct route to Frances S. Tucker K-8. This is a corridor classifiable as a Safe Route to School. thus, the existence of a safe sidewalk here should be a priority.

Solving this will rectify a longstanding safety gap for West Grove families traveling to school and will help patch one of the existing wounds of distrust in this historically underrepresented Bahamian enclave.

The adjacent properties to this location are vacant and held by a developer, and as developers generally handle the cost and construction of sidewalks fronting their properties, it is advised that the City should reach out to this developer in an attempt to get this sidewalk gap sorted. Both adjacent properties are currently held by Limestone Capital, LLC ("3442 SW 37 Ave LLC.") a.k.a. Cabos Real Estate, a.k.a. <a href="https://3442sw37ave.com/">https://3442sw37ave.com/</a>.









# 7. Final Thoughts

### In summary:



Nicola Stasi

This project demonstrates that safe, connected, and thoughtfully designed streets are not only possible in Coconut Grove—they are desired, feasible, and urgently needed.

Through data collection, tactical urbanism, and authentic community engagement, the Road to Zero initiative has provided both proof of concept and a clear roadmap for permanent infrastructure that prioritizes vulnerable road users, reduces traffic conflicts, and strengthens neighborhood connectivity.

The recommendations outlined in this report are grounded in real-world testing, measurable outcomes, and community-driven insight. Implementing them will not only address long-standing safety concerns but will also help ensure that residents, students, and visitors alike can walk, bike, and roll through the Grove with confidence, comfort, and dignity.







# 8. Appendix

### **Summary:**

- Section A: Full list of 113 community comments (raw and categorized).
- Section B: Charrette points overlaid with pedestrian/bicycle crash heatmaps.

### **Section A:**

All open-ended feedback received during the Community Charrettes are included below, reproduced as written by the participant (annotations are in brackets where necessary):

Comment ID	Participant Comment
1	Bike lane on Old Cutler trail has root damage. Makes bike lane
	very bumpy!
2	Crosswalks on Grand Avenue!
3	More side walks
4	[Traffic] circle or crosswalk
5	Where the ped flags are, should be highlighted / signalized RRFBs
6	Blind spot and no sidewalk at Oak and Matilda
7	Blanche Park - Speed bump or something to slow traffic
8	Crossing main highway to Cocowalk
9	Crossing McFarlane
10	Need speed bumps everywhere!
11	Sidewalk needed!! [ed. note: Mary to 27th on Bird]
12	Needs pedestrian crosswalk! Ideal push-button RRFB lights!!!
13	"Slow Down" sign needed around the bend at Peacock / Bayshore
14	People drive into the street pole!
15	Car drivers race! around the bend!
16	The bike lane, near the gas station on US1 and 27th St, crosses
	the right turning lane into the gas station. Feels unsafe. [ed.
	note: Participant meant 27th Avenue]
17	"Cut through street for ALDI's"
18	"New ALDI's location"
19	"New ALDI's location"
20	"US1 and Plaza - Obstructed View"

Comment ID	Participant Comment
21	Specifics not on card; discussed with participant. Currently a
	2-way stop resulting in high speeds on Frow Ave. Participant
	expressed interest in a 4-way stop.
22	"Sidewalk ends - no sidewalks @ bus stops"
23	Missing sidewalk (Post-It + multiple verbal comments)
24	Foliage obstruction
25	EB Grand Ave traffic is obscured by parking zone. Participant also noted that delivery trucks using the parking zone make the situation worse.
26	Foliage obstruction
27	Should not be parking
28	Nobody stops at new stop signs
29	No sidewalk(s)
30	"Sidewalk please"
31	"No sidewalk. Students can't travel on Douglas"
32	"No crosswalks on Douglas"
33	"My father Dr. David Hertzig was killed in a hit & run in 2018 after an accident riding his bike, crossing Douglas Ave. A young biker from Bahamian Grove [was] killed in the same spot a few years later" [1/2]
34	"Douglas Road needs to be safer, with places to cross for pedestrians and cyclists." [2/2]
35	"We need pedestrian crosswalks on Douglas. It's getting increasingly worse with the development & more traffic. If we are walking with a stroller or pets it can be very challenging & stressful."
36	"Completion of Charles Ave. Preservation of African American Museum."
37	"We absolutely need a crosswalk on Douglas Ave. It's needed on Both Kumquat & Loquat, however Kumquat may be most practical with the sidewalks and bus stops. This is a serious safety issue."
38	"Also on the NW corner of Dougles-Kumquat there is a pole blocking view when turning left onto Douglas Ave from Kumquat. Traffic on Douglas has gotten really bad, especially during certain hours it's impossible & frightening to try the road" [1/2]
39	"If we live in S. Grove we must cross Douglas to go into the Village." [2/2]
40	"Bridgeport Avenue / Bird has very [high] through traffic"
41	"Crosswalk for Carrolton school."



<b>Comment ID</b>	Participant Comment
42	"No night lightning. Add respectful lights."
43	"Sidewalks please."
44	"We need a proper crosswalk for crossing main highway. It's practical with the Plymouth Church & all the schools to make it safe to cross main highway to go into the CG business district. Traffic keeps increasing."
45	"Add water fountain in city mini park."
46	"We need 4-way stop signs on all streets on William Avenue between Douglas Rd & Via Abitare. It is a cut-through street & cars zoom like a race track. They also don't stop at 2-way signs. Very dangerous, loud cars with no mufflers need to be ticketed."
47	"Bad lanes with potholes." - On Main Hway from Charles Ave to Commodore Plz
48	"Peacock Park - I think it needs to be cleaned every day."
49	"Extremely dangerous left turn into sailing center / park. Change to traffic circle."
50	"Change curb lane to street parking."
51	"Change curb lane to street parking."
52	"Only one lane need[ed] southbound."
53	"Pedestrian scramble."
54	"Change two lanes SW-bound to single lane."
55	"Pedestrian scramble urgently needed - raised ped table."
56	"Stop left turn from right lane."
57	"Bird Westbound and US1. Middle lane turning left is illegal FDOT."
58	"Create safe & bike urban forest trails."
59	"Connect Little Havana & Shenandoah & Silver Bluff & Grove."
60	"Bike rack[s on] all sides of park."
61	"Paint down Day Avenue with chevrons etc. Narrow with paint like complete streets 2016. Helps guide speed."
62	"Need streetlights on McDonald between Grand & Florida. It's very dark - no lights."
63	"Grand Ave is near gridlock for parts of many days, with new development it will get much worse. Drastic measures needed from Mary St. to US1."
64	"Florida Ave between 32nd and Matilda need speed bumps, parents speed through to get to school."
65	"Must have single lane permanent bike lane."
66	"Center Grove: Grand Ave + Main Hway need slower speed limit. We are a pedestrian friendly community."



Comment ID	Participant Comment
67	"Matilda Street: Make sidewalks continuous; Ensure compound
	on corner from school enforces cleared sidewalks."
68	"Close Virginia St ; Pedestrian."
69	"McFarlane SE one-lane."
70	"Grand Ave - the crosswalk on Grand Ave between Mary and Virginia in Center Grove is extremely unsafe. There is limited visibility due to parked cars/vans and drivers don't stop. My 2 year old and I were nearly killed there last week."
71	Participant drew a roundabout here on May St + Grand Ave
72	"Gifford Lane is relatively calm + safe now. New development + traffic calming will push more traffic on it. Don't wait. Devolve traffic calming now!!"
73	"Matilda Street - Traffic calming; Keep one-way (Coconut Grove Elementary - very important); Sidewalks are blocked (enforce sidewalk [remains] empty for strollers, etc.)"
74	Participant comment - "LIFE SAFETY see Fire House" and "MOT" [Current construction on Tigertail and associated MOT currently leads to traffic backup causing safety issues for all, including Fire Rescue Station 8]
75	"Matilda - Install speed bumps between Day and Shipping [Ave]; Make sidewalks continuous; General traffic calming."
76	"Calm all of Grifford Lane, anticipate and preclude cut through."
77	"Paid golf cart parking along south side of Kirk Munroe Park on Florida Ave - redo ugly dirt swale and make nice cart spots for school drop-off and Cetner Grove retail parking. Many carts go to grove but no cart parking."
78	"Park vehicle (eg. VW vintage bus) permanently as a visual slowing trigger."
79	"Bird Ave bike lanes are a travesty! Redo them so they're safe!"
80	"Crosswalk where no one stops and speeds through, no lights."
81	"[Drivers] fly down Oak, also needs paint to slow down traffic."
82	[Participant recommended chicanes abd/or speed chokers using flower pots, plants and paint]
83	[Participant suggests looking at historical plans for traffic calming at Grand and McFarland, points out various approaches including lane reductions, curb separations for Grand through lane, a pedestrian scramble and other traffic calming methods."
84	[Participant suggests reviewing prior crashes on heat maps]



<b>Comment ID</b>	Participant Comment
85	[Participant suggests reducing lane in this area concurrent
	with improvements to crossing on Main Hwy and eventually
	pedestrianize Fuller St.]
86	[Participant suggests looking up Ron Nelson's 2014 concept
	to reduce Bayshore Drive in this area to one lane and use other
	lane as on-street parking, may have also included parking in
	median, not clear - have to review 2014 suggestions.]
87	"Shipping and Day center lane and white sidelines at 18 ft total width, minimum currently paved."
88	"Shipping and Day center lane and white sidelines at 18 ft total width, minimum currently paved."
89	"Add passage for bicycles at Lincoln."
90	"No crossing from Day to Bird Ave - add crossing."
91	"Add passage for bikes."
92	"Add crosswalk."
93	"Passage for walking bikes to North Grove."
94	"Passage for walking bikes to North Grove."
95	"Make this safe for bikes. It's a travesty! And it's extremely
	unsafe."
96	"No crossing between Virginia and 27th."
97	"Speeding to avoid 27th Ave."
98	"Speeding. Too much traffic. Slow down!"
99	"Add lane stripes for full length."
100	"Bridgeport Ave / Bird near the Home Depot, heavy traffic
	heads to US1 - lots of runners from 8nine gym at other corner
	at Bird and a school on the corner with US1."
101	"Extremely dangerous for bikes + peds. Make their safety a priority."
102	"No sidewalk Baby buggies pushed on street."
103	"Insane! No sidewalk & heavy traffic."
104	"Crosswalk needed here. No way to get to school safely."
105	"No sidewalk on shared use path. Super danger."
106	"Need crosswalk. None for long distance."
107	"Exit from Bayview to Main Hway is impossible. Blind turn."
108	"Extremely dangerous for bikes and peds. Make their safety
100	a priority. Move the pink wall that squeezes the Commodore Trail."
109	"Roundabout here."
110	"Redesign this intersection."
111	"Crosswalk and lightning needed here."



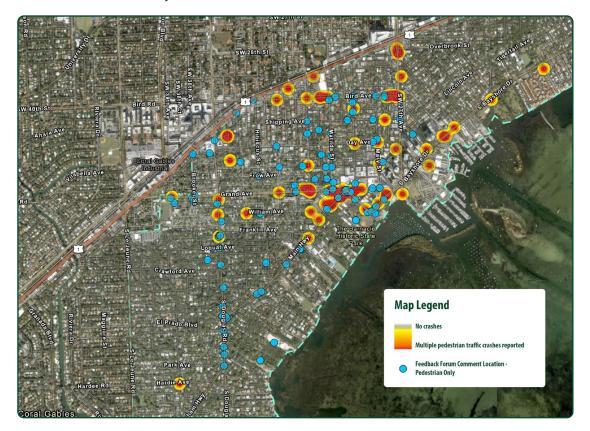
Comment ID	Participant Comment	
112	"3223 SW 28 St. The sidewalk needs to be fixed. Waiting long time."	
113	"We need better patrols, better crossings and/or speed bumps. It is not safe for families as is."	

### **Section B:**

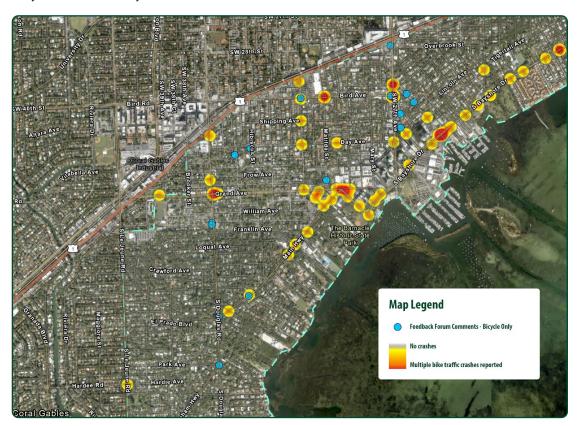
Charrette point data with Signal 4 Analytics heatmaps, pedestrian and bicycle specific.

Note: All Signal 4 Analytics crash point data used by BikeSafe has been previously filtered for geocoded accuracy. Crashes missing accurate geolocation data have been dropped from the raw dataset. E-scooter crashes have been filtered and removed from pedestrian crash typing.

Pedestrian crashes only, 2019-2024:



Bicycle crashes only, 2019-2024:







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