VISIONZERO HILLSBOROUGH

Hillsborough MPO
Metropolitan Planning for Transportation

MANAGING SPEED on Hillsborough's High Injury Network

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GPI

What it is:

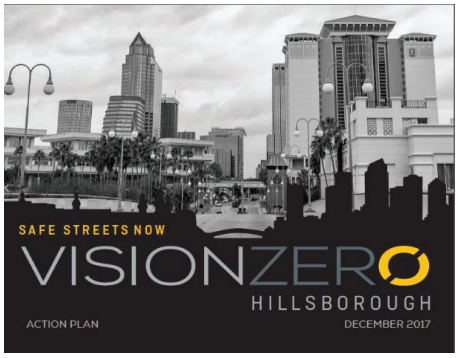
- Furtherance of Hillsborough MPO Vision Zero policy
- Furtherance of Hillsborough Complete Streets policy
- Next step toward reducing fatal and serious injury crashes
- Identification of national best practices on speed management
- Update on TOP20 HIN trends and potential solutions

What it is not:

- A new policy statement
- Directive to any agency

Vision Zero Action Plan

- Future is not like the past
- Consistent & Fair
- Paint Saves Lives
- One message, many voices



SAFE STREETS NOW
VISIONZERO
ONE TRAFFIC DEATH IS TOO MANY

Future will not be like the past - Goal1

Short-term action

- Enhance requirements in local land development codes

Mid-term actions

- Enhance requirements in technical manuals
- Revisit and update maintenance of traffic policies
- Provide professional training opportunities

Long-term action

- Develop context classifications and target speeds within Vision Zero corridors, consistent with FDOT Complete Streets guidelines.

WHY IS IT IMPORTANT?

- Florida - most dangerous state for pedestrians and bicyclists in recent history
- Nations Top 10 metro areas with highest pedestrian fatalities
  - Cape Coral
  - Palm Bay
  - Orlando
  - Jacksonville
  - Daytona Beach
  - Lakeland
  - Tampa/St. Petersburg
  - Sarasota/Bradenton

On average, a person is dying on Hillsborough streets every other day!

BABY, 10 MONTHS, DIES IN I-75 CRASH

TBadmin | October 8, 2018

BICYCLIST DIES IN HIT AND RUN CRASH

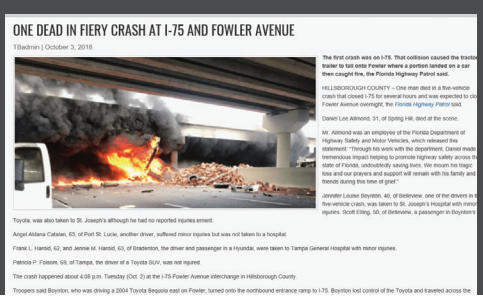
TBadmin | September 24, 2018

RIVERVIEW MAN DIES IN I-75 CRASH

TBadmin | October 9, 2018

BRUCE B. DOWNS CRASH KILLS TWO

TBadmin | October 11, 2018



ONE DEAD IN FIERY CRASH AT I-75 AND FOWLER AVENUE

TBadmin | October 3, 2018

BRANDON MOTORCYCLIST DIES IN CRASH

TBadmin | October 2, 2018

Study Objectives

GOAL

- Improve public health and safety by reducing road fatalities and serious injuries.

DESIRED OUTCOMES

- *Improved safety experience* for all road users - pedestrians, bicyclists, and motorists.
- *Increase awareness* of the dangers of speeding.
- *Institutionalize good practices* in road design, traffic operations, engagement, enforcement and safety.
- Identify *supportive policies, programs and infrastructure* improvements to meet safety goal.
- Obtain *cooperation and support* of stakeholders.

SPEED MANAGEMENT ACTION PLAN – Study Scope

- Task 1 - Stakeholder Involvement
- Task 2 - Speed Management Practices
- Task 3 - Corridor Prioritization
- Task 4 – Next30 High Injury Corridors
- Task 5 - Speed Management Action Plan

Task 1 – STAKEHOLDER ENGAGEMENT

Partners & Stakeholders

- Hillsborough County MPO
- Hillsborough County
- Hillsborough County School District
- City of Tampa
- City of Temple Terrace
- Plant City
- Law Enforcement
- FDOT
- HART
- THEA
- Florida Health Department

TASK 2 - SPEED MANAGEMENT PRACTICES

- Existing Speed Management Practices
- Industry Best Practices
  - Statewide & National

Education · Engineering · Enforcement · Equity · Evaluation

ROAD TO ZERO

"…incremental progress is no longer acceptable given the increasingly rapid advances in technology and the wealth of knowledge about how to prevent crashes…

with the right *policies*, *technologies*, and *strategy*, we could *prevent all roadway deaths*"

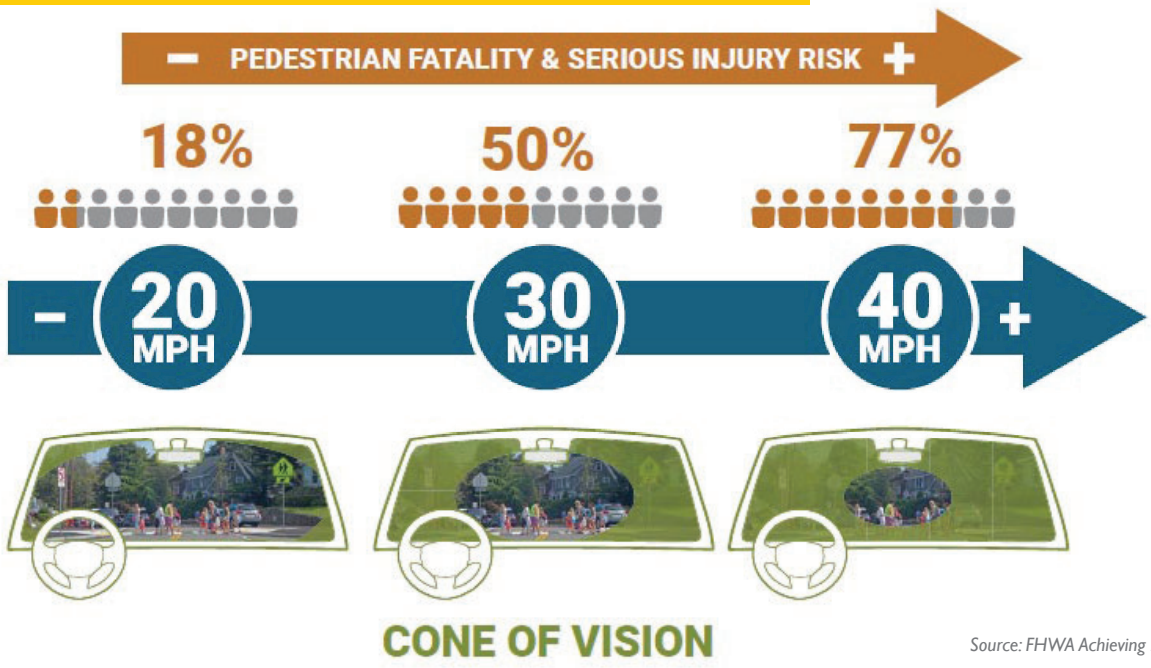
USDOT, National Safety Council

MANAGING SPEED

- Speeding kills more than 10,000/year
- On par with drunk driving
- Doesn't carry the same social consequences
- 30% of all fatal crashes nationwide
- Societal cost = $40 Billion annually
- *National problem, effective solutions must be applied locally*

Source: USDOT, NHTSA 2016 Traffic Safety Facts

SPEED TAKES THE BACK SEAT



Source: FHWA Achieving Multimodal Networks

SPEED MATTERS MOST

SPEED LIMIT REDUCTION RESULTS

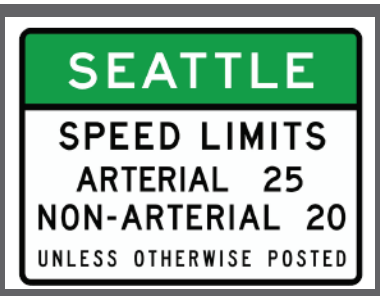
Seattle
- 40% in crashes
- 30% in injury crashes

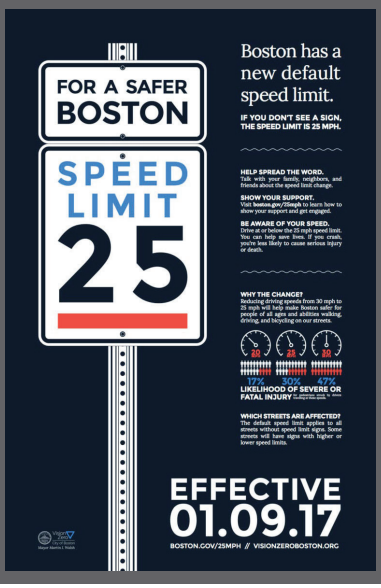
NYC
- 14% in crashes
- 49% in pedestrian crashes
- 42% in bicyclist crashes

Mexico City
- 18% in crashes

Boston
- 30% in speeds over 35 MPH

Other Cities
- Washington, DC
- Portland, OR
- Cambridge, MA
- Albuquerque, NM
- Nashville, TN
- Minneapolis
- St. Paul
- Boulder, CO





Task 2 - WHAT IS SPEED MANAGEMENT?

SPEED MANAGEMENT PLAN ATTRIBUTES:
- Data-driven – crash, roadway, user, landuse data
- Applying road design, traffic operations, & safety measures
- Setting "appropriate/rational/desirable/safe" speed limits
- Institutionalize good practices
- Supportive enforcement efforts
- Effective outreach & public engagement
- Cooperation by traffic safety stakeholders

Source: USDOT, SPEED MANAGEMENT PROGRAM PLAN, MAY 2014

Task 2 - WHAT IS SPEED MANAGEMENT?

FLETCHER AVENUE COMPLETE STREETS PROJECT
BEFORE / AFTER Analysis

- Fatal crashes reduced by ~60%
- Serious injury crashes reduced by ~46%
- Average vehicle speeds reduced
- Over 83% of compliance by pedestrians and over 97% compliance by motorists at midblock crossings
- Traffic volumes increased
- Depending on direction of travel, average travel times either decreased, remained the same, or increased at the most by 87 seconds

Notable improvements:

- Speed limit reduced from 45mph to 35mph
- 5 mid-block crossings with RRFB's
- 1 mid-block crossing with full signal
- LED lighting as pedestrian crossings
- Landscaped refuge islands, medians, and raised separators

TASK 3 – CORRIDOR PRIORITIZATION

- Evaluate Top 20 HIN Corridors
- Develop Metrics for Prioritization
  - Severity
  - Equity
  - Focus on Pedestrian Crashes
  - Proximity to Schools
  - Ease of Implementation

PROTECT
#EVERYSCHOOL
WITH SPEED SAFETY
CAMERAS

Education · Engineering · Enforcement · Equity · Evaluation

HIN Crash Statistics (2014-2018)

Fatal Crash Characteristics

67%
< 35 Years Old

92%

Non-Peak Hours 83%

59%

Non-Intersections

59%

4 or more travel lanes

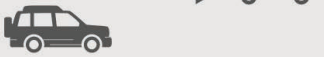
Aggressive Driving/Speeding

Erratic Reckless, Aggravated maneuvers, ran off road, exceeded speed limit, ran red light, careless or negligent

71%

43% cars

24% suv



14% motorcycles

Example Assessment -Posted Speed & Context Class

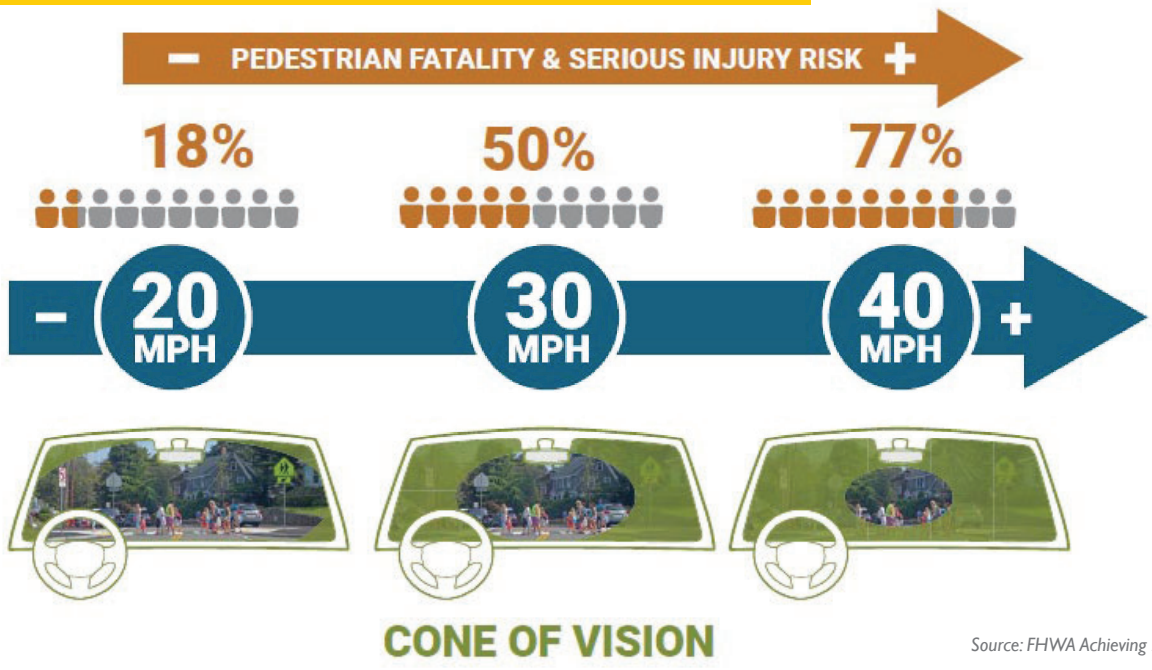
Overall

- 70% are 5-10MPH over National Practice
- 15% are 15-20MPH over National Practice

Corridor	Road Classification	Context Classification	ITE/CNU Class Speed Range*	Posted Speed (MPH)	Conflict Range (MPH)
Brandon Blvd from Falkenburg Rd to Dover Rd	Principal Arterial	C3 (35-55)	25-35 Max	45,50, 55	10-20
Gibsonton Dr/Boyette Rd from I-75 to Balm Riverview Rd	Arterial	C3 (35-55)	25-35 Max	45	10
Hillsborough Ave from Longboat Blvd to Florida Ave	Principal Arterial	C3 (35-55)	25-35 Max	45, 50	10-15
Fletcher Ave from Armenia Ave to 50th St	Principal Arterial	C3 (35-55)	25-35 Max	35, 40, 45	5-10
Dale Mabry from Hillsborough Ave to Bearss Ave	Principal Arterial	C3-C4 (30-45)	25-35 Max	45	10
Lynn Turner from Gunn Hwy to Ehrlich Rd	Arterial	C3 (35-55)	25-35 Max	45	10
Meridian Ave from Channelside Dr to Twiggs St	Arterial	C6 (25-30)	25-30 Max	40	10
Bruce B Downs from Fowler Ave to Bearss Ave	Arterial	C3 (35-55)	25-35 Max	45	10
50th/56th St from MLK Blvd to Hillsborough Ave	Principal Arterial	C3 (35-55)	25-35 Max	45	10
15th St from Fowler Ave to Fletcher Ave	Collector	C4 (30-45)	25-35 Max	30	0
Big Bend Road from US41 to I75	Arterial	C3 (35-55)	25-35 Max	45	10
US301 from I75 to Adamo Dr	Principal Arterial	C3 (35-55)	25-35 Max	50	15
Sheldon Rd from Hillsborough Ave to Water Ave	Arterial	C3 (35-55)	25-35 Max	45	10
I4 from I275 to 22nd St	Freeway	Urban (50-70)	50-70	55	0
56th St from Sligh Ave to Busch Blvd	Principal Arterial	C4 (30-45)	25-35 Max	35, 45	10
I275 from Howard Frankland Bridge to Busch Blvd	Freeway	Urban (50-70)	50-70	55, 60	0
Kennedy Blvd from Dale Mabry to Ashley Dr	Principal Arterial	C4 (30-45)	25-35 Max	40, 45	5-10
78th St from Causeway Blvd to Palm River Rd	Arterial	C4 (30-45)	25-35 Max	45	10
CR579/Mango Rd from MLK Blvd to US92	Arterial	C4 (30-45)	25-35 Max	45	10
Florida Ave from Waters Ave to Linebaugh Ave	Arterial	C4 (30-45)	25-35 Max	40, 45	5-10

*Designing Walkable Urban Thoroughfares: A Context Sensitive Approach- An ITE Recommended Practice, ITE, CNU, 2010

SPEED TAKES THE BACK SEAT

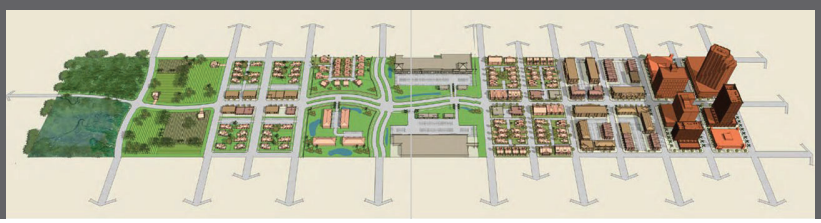


Source: FHWA Achieving Multimodal Networks

Prioritization Factors

Identified-
Risk Performance Level

- Posted speed vs. context Class
- Regional equity (low income, Commissioner districts)
- Crash history
- Proximity to schools
- Ped/bike injuries
- Transit service route
- Geometric features (volumes, lanes, intersection spacing)



Top 20 - Priority Matrix

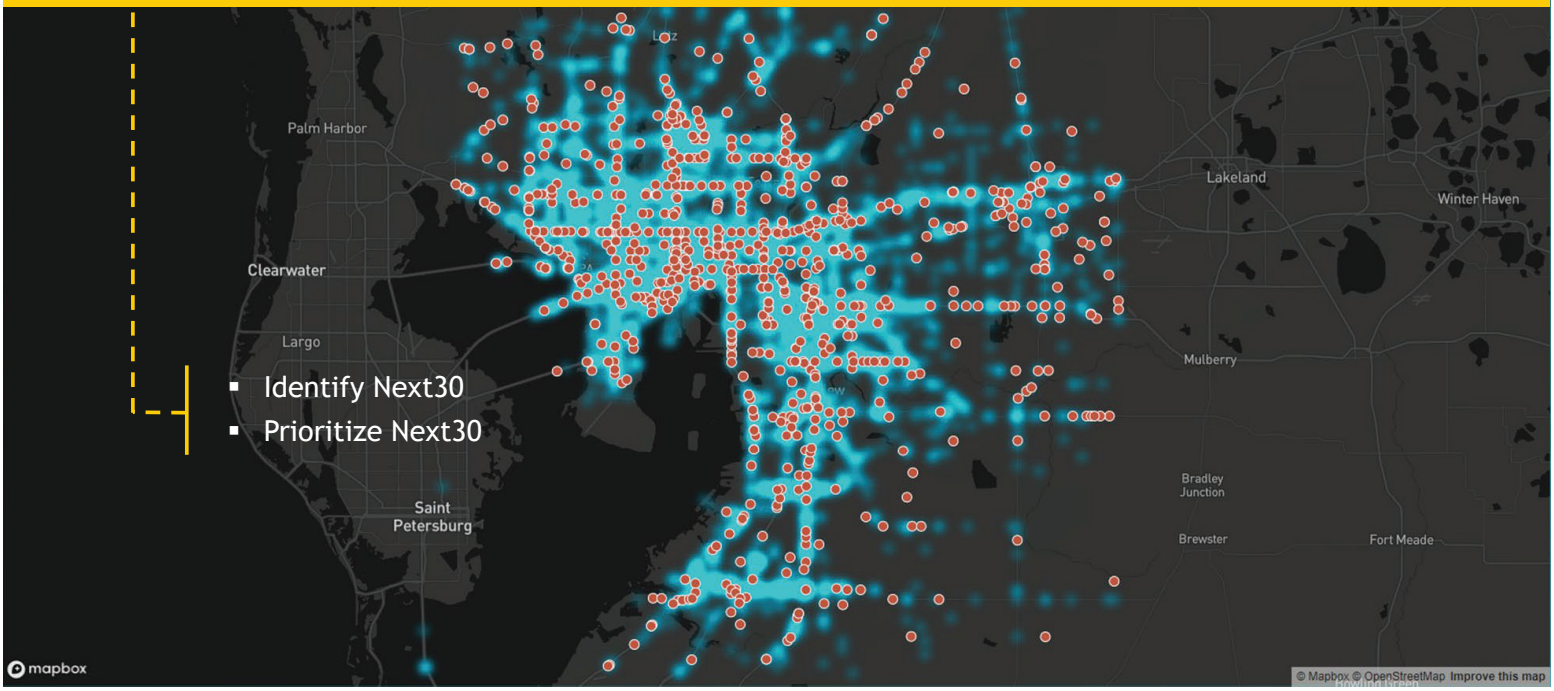
Corridor and Extent

Corridor and Extent		Crash Severity / Mile	Ped/Bike Crash Rate/ Mile	Schools / Mile	Equity CoC Coverage	Posted Speed – Context Class Conflict	Transit Routes	High Volumes	
Brandon Blvd	Falkenburg Rd to Dover Rd	●	◑	●	○	●	◑	◑	5.3
Gibsonton Dr/Boyette Rd	I-75 to Balm Riverview Rd	●	○	●	◑	●	○	○	4.7
Hillsborough Ave	Longboat Blvd to Florida Ave	◑	●	●	◑	●	◑	◑	5.7
Fletcher Ave	Armenia Ave to 50th St	◑	●	○	●	●	◑	◑	5.3
Dale Mabry	Hillsborough Ave to Bearss Ave	◑	◑	●	●	●	◑	◑	5.7
Lynn Turner	Gunn Hwy to Ehrlich Rd	◑	○	○	○	●	○	○	3.3
Meridian Ave	Channelside Dr to Twiggs St	●	○	◑	◑	●	◑	○	4.7
Bruce B Downs	Fowler Ave to Bearss Ave	◑	●	◑	●	●	●	◑	6.0
50th/56th St	MLK Blvd to Hillsborough Ave	◑	○	◑	●	●	●	○	5.0
15th St	Fowler Ave to Fletcher Ave	●	●	○	●	○	○	○	4.3
Big Bend Road	US41 to I75	◑	○	●	○	●	○	○	4.0
US301	I75 to Adamo Dr	◑	○	○	○	●	○	◑	3.7
Sheldon Rd	Hillsborough Ave to Water Ave	◑	●	●	◑	●	◑	○	5.3
I4	I275 to 22nd St	●	○	○	○	○	○	●	3.7
56th St	Sligh Ave to Busch Blvd	◑	●	◑	○	●	◑	◑	5.0
I275	Howard Frankland Bridge to Busch Blvd	○	○	◑	○	○	●	●	4.0
Kennedy Blvd	Dale Mabry to Ashley Dr	●	◑	◑	◑	●	◑	◑	5.3
78th St	Causeway Blvd to Palm River Rd	●	◑	○	◑	●	○	○	4.3
CR579/Mango Rd	from MLK Blvd to US92	◑	○	●	○	●	○	○	4.0
Florida Ave	Waters Ave to Linebaugh Ave	●	●	○	●	●	●	○	5.7

Priority Scoring
- High
- Medium
- Low

Performance Level
- ● High
- ◑ Medium
- ○ Low

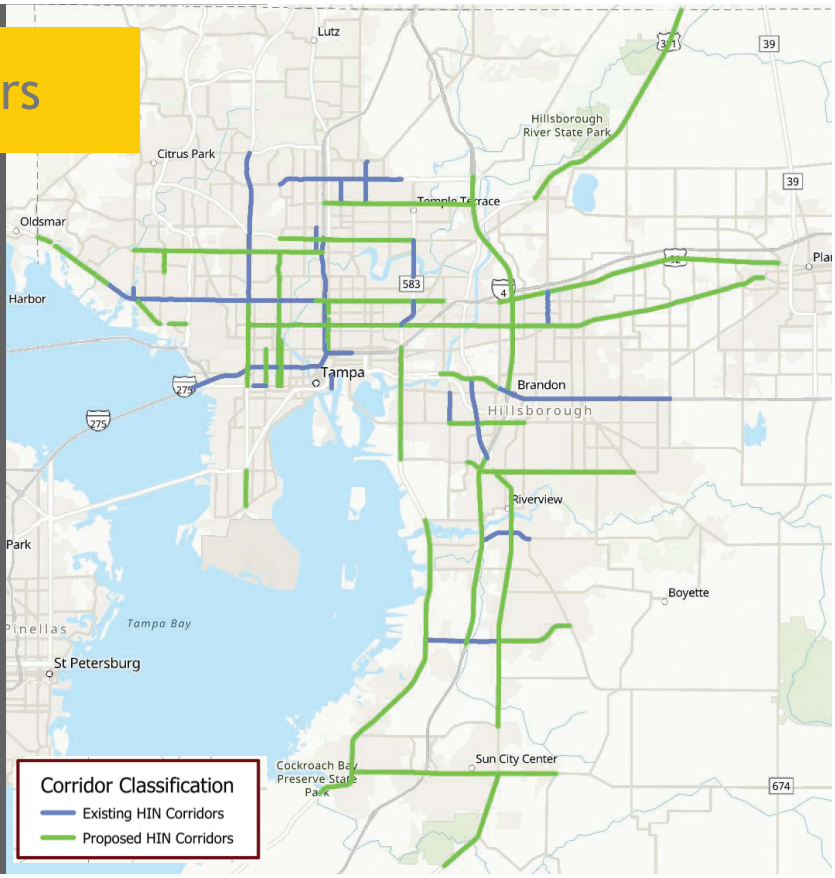
TASK 4 – Next Top 30 HIN Corridors



- Identify Next30
- Prioritize Next30

Next30 High Injury Corridors

Bloomingdale Ave - US Hwy 301 to Lithia Pinecrest Rd
US Hwy 41 - Gulf City Rd to Riverview Dr
US Hwy 301 - 19th Ave to Bloomingdale Ave
M L King Blvd - Dale Mabry Hwy to Parson Ave
US Hwy 41 - Madison Ave to I4
Big Bend Rd - I75 to Balm Riverview Rd
Busch Blvd - Armenia Ave to 56th Street
SR 674 (Sun City Ctr Blvd) - US Hwy 41 to CR579
I-75 - SR 60 to Fletcher Ave
Hillsborough Ave - Florida Ave to Orient Rd
Waters Ave - Sheldon Road to Dale Mabry Hwy
Fowler Ave - I275 to I75
US Hwy 301 - SR 674 to Lightfoot Rd
I-75 - Big Bend Rd to US Hwy 301
SR 60 /Adamo Dr - Orient Rd to Falkenburg Rd
Causeway Blvd - 78th St to Providence Rd
Waters Ave - Dale Mabry Hwy to Nebraska Ave
Progress Blvd - Falkenburg Rd to US Hwy 301
Hillsborough Ave - Race Track Rd to Longboat Blvd
Memorial Hwy - Hillsborough Ave to Veterans Expwy
Hanley Rd - Woodbridge Blvd to Waters Ave
Dale Mabry Hwy - Interbay Blvd to Gandy Blvd
Howard Ave - Kennedy Blvd to Tampa Bay Blvd
Dale Mabry Hwy - Kennedy Blvd to Hillsborough Ave
US Hwy 92 - Falkenburg Rd to Thonotosassa Rd
Nebraska Ave - Columbus Ave to Hillsborough Ave
US Hwy 301 - Stacy Rd to County Line
Armenia Ave - Tampa Bay Blvd to Waters Ave
MacDill Ave - Kennedy Blvd to Columbus Dr
M L King Blvd - McIntosh Rd to Sammonds Rd



Next 30 - High Injury Corridors Priority Matrix

Corridor and Extent		Crash Severity / Mile	Schools / Mile	Equity CoC Coverage	Posted Speed – Context Class Conflict	High Volumes	
Bloomingdale Ave	US Hwy 301 to Lithia Pinecrest Rd	●	●	○	●	◒	4.0
US Hwy 41	Gulf City Rd to Riverview Dr	●	◒	◒	●	○	2.0
US Hwy 301	19th Ave to Bloomingdale Ave	●	●	○	●	◒	4.0
M L King Blvd	Dale Mabry Hwy to Parson Ave	●	●	●	●	○	3.3
US Hwy 41	Madison Ave to I4	●	○	◒	●	◒	3.3
Big Bend Rd	I75 to Balm Riverview Rd	●	●	○	●	○	3.7
Busch Blvd	Armenia Ave to 56th Street	●	●	●	●	○	4.7
SR 674 (Sun City Ctr Blvd)	US Hwy 41 to CR579	●	◒	◒	●	○	3.7
I-75	SR 60 to Fletcher Ave	●	○	◒	○	●	3.0
Hillsborough Ave	Florida Ave to Orient Rd	●	◒	◒	◒	◒	3.0
Waters Ave	Sheldon Road to Dale Mabry Hwy	●	◒	●	●	◒	4.3
Fowler Ave	I275 to I75	●	●	●	●	◒	4.7
US Hwy 301	SR 674 to Lightfoot Rd	●	◒	○	●	○	3.3
I-75	Big Bend Rd to US Hwy 301	◒	◒	○	○	●	2.0
SR 60 / Adamo Dr	Orient Rd to Falkenburg Rd	◒	○	○	●	◒	3.0

Corridor and Extent		Crash Severity / Mile	Schools / Mile	Equity CoC Coverage	Posted Speed – Context Class Conflict	High Volumes	
Causeway Blvd	78th St to Providence Rd	◒	◒	◒	●	◒	3.7
Waters Ave	Dale Mabry Hwy to Nebraska Ave	◒	◒	◒	●	○	3.3
Progress Blvd	Falkenburg Rd to US Hwy 301	◒	●	○	●	○	3.3
Hillsborough Ave	Race Track Rd to Longboat Blvd	◒	◒	○	●	◒	3.3
Memorial Hwy	Hillsborough Ave to Veterans Expwy	◒	●	○	●	◒	3.7
Hanley Rd	Woodbridge Blvd to Waters Ave	◒	●	○	◒	○	3.0
Dale Mabry Hwy	Interbay Blvd to Gandy Blvd	◒	●	○	●	◒	3.7
Howard Ave	Kennedy Blvd to Tampa Bay Blvd	◒	●	●	◒	○	3.7
Dale Mabry Hwy	Kennedy Blvd to Hillsborough Ave	◒	●	◒	◒	◒	3.7
US Hwy 92	Falkenburg Rd to Thonotosassa Rd	◒	○	◒	◒	○	2.7
Nebraska Ave	Columbus Ave to Hillsborough Ave	◒	●	●	◒	○	3.7
US Hwy 301	Stacy Rd to County Line	◒	○	○	●	○	2.7
Armenia Ave	Tampa Bay Blvd to Waters Ave	◒	●	●	◒	○	3.7
MacDill Ave	Kennedy Blvd to Columbus Dr	◒	●	○	◒	○	3.0
M L King Blvd	McIntosh Rd to Sammonds Rd	◒	○	○	◒	○	2.3

Priority Scoring
High
Medium
Low

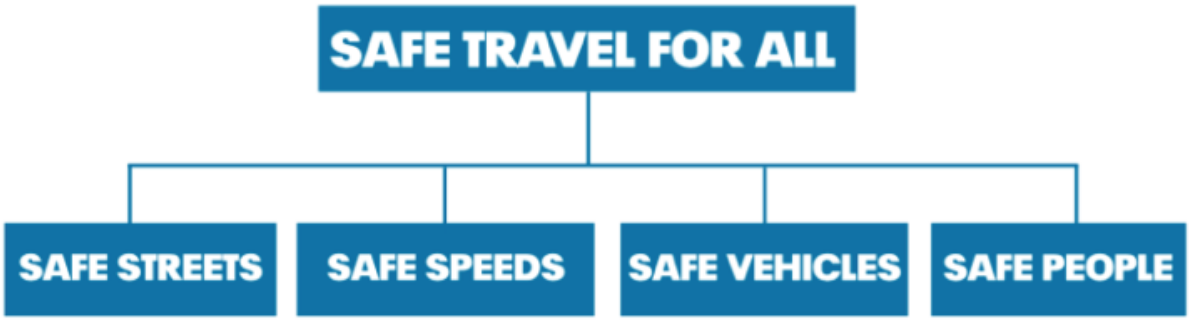
Performance Level
● High
◒ Medium
○ Low

TASK 5 – Speed Management Action Plan

- Strategies and Countermeasures
- Actions and Implementation Strategy

Education · Engineering · Enforcement · Equity · Evaluation

Vision Zero Principles



Source: Vision Zero Network

Safe Systems Approach

- Holistic view of the road system
- Interactions among roads and roadsides, travel speeds, vehicles and road users
- Inclusive approach for all users
  - Drivers, motorcyclists, passengers, pedestrians, cyclist, and commercial/heavy vehicles
- Speeds must be managed
- Humans are not exposed to impact forces beyond their physical tolerance

Most Importantly, it's proactive vs. reactive

Figure 2.1 | Principles of the Safe System Approach

Source: Collaborative Sciences Center for Road Safety

Aggressive Driving Crash Countermeasures

	Area Type			Location Type			Effects		
Countermeasure	Urban (C4,C5,C6)	Suburban (C3)	Rural (C1-C2)	Intersection	Slow Street	Arterial / Corridor	Crash Reducing	Speed Reducing	Severity Reducing
Safe People Walking or Bicycling:									
Pedestrian Crossing - High Visibility	✓	✓	✓	✓	✓	✓	✓	✓	✓
Raised Pedestrian Crossing	✓	✓		✓	✓	✓		✓	✓
Sidewalks Required on both sides	✓	✓		✓	✓	✓	✓		✓
Sidewalks (8 foot min standard)	✓	✓		✓	✓	✓	✓		✓
Sidewalk Seperation (from travel lanes)	✓	✓	✓	✓	✓	✓	✓		✓
Mid-Block Pedestrian Crossing/Short Blocks	✓	✓			✓	✓	✓	✓	✓
Refuge Islands (raised/painted)	✓	✓		✓	✓	✓	✓	✓	✓
Painted Intersections / Crosswalks	✓	✓		✓	✓	✓		✓	✓
Protected Intersections	✓	✓		✓	✓	✓	✓	✓	✓
Bike Lanes (seperated)	✓	✓		✓	✓		✓	✓	✓
Bike Lanes (protected)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shade Trees / Landscaping	✓	✓	✓	✓	✓	✓	✓	✓	✓
ADA Curb Ramps	✓	✓	✓	✓	✓	✓	✓	✓	✓
Expand Radius of Safe Routes to School	✓	✓	✓	✓	✓	✓	✓	✓	✓
Work Zone Temporary Facilities	✓	✓		✓	✓	✓	✓	✓	✓
Create Shared / Slow Streets	✓			✓	✓		✓	✓	✓
Re-evaluate Context Class	✓	✓	✓		✓	✓	✓	✓	✓
Re-evaluate Target Speed Limit	✓	✓	✓	✓	✓	✓	✓	✓	✓

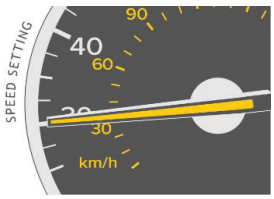
Aggressive Driving Crash Countermeasures (cont.)

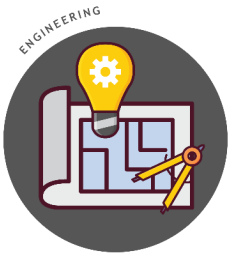
Countermeasure	Area Type			Location Type			Effects		
	Urban (C4,C5,C6)	Suburban (C3)	Rural (C1-C2)	Intersection	Slow Street	Arterial / Corridor	Crash Reducing	Speed Reducing	Severity Reducing
Safe Streets:									
Chicanes / Lateral Shifts	✓	✓		✓	✓	✓		✓	✓
Full / Half Closure	✓			✓	✓	✓	✓	✓	✓
Lane Width (10 foot standard)	✓	✓		✓	✓	✓	✓	✓	✓
Road Diet (repurpose space)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gateway Treatement	✓	✓	✓	✓	✓	✓	✓	✓	✓
Roundabout	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mini Traffic Circle	✓	✓	✓	✓	✓		✓	✓	✓
Speed Tables/Raised Intersections	✓	✓		✓	✓	✓		✓	✓
Bulb Outs	✓	✓	✓	✓	✓	✓	✓	✓	✓
Corner Radii / Radius Reduction	✓	✓	✓	✓	✓	✓		✓	✓
Centerline Hardening	✓	✓		✓	✓	✓	✓	✓	✓
Eliminate Acceleration Lanes	✓	✓		✓	✓	✓	✓	✓	✓
Eliminate Deceleration Lanes	✓	✓		✓	✓	✓		✓	✓
Eliminate Right Turn Channelization	✓	✓		✓	✓	✓	✓	✓	✓
On-Street Parking	✓	✓			✓	✓		✓	✓
Tactical Urbanism-Quick Fixes	✓	✓	✓	✓	✓	✓	✓	✓	✓
Provide Street / Pedestrian Lighting	✓	✓		✓	✓	✓	✓	✓	✓
Convert to Two-Way Streets	✓	✓	✓		✓	✓		✓	✓
Enhanced Curve Delineation	✓	✓	✓		✓	✓	✓	✓	✓
Optical Speed Bars/ Converging Chevrons	✓	✓	✓			✓	✓	✓	✓
Re-evaluate Context Class	✓	✓	✓	✓	✓	✓	✓	✓	✓
Re-evaluate Target Speed Limit	✓	✓	✓		✓	✓	✓	✓	✓

Aggressive Driving Crash Countermeasures (cont.)

Countermeasure	Area Type			Location Type			Effects		
	Urban (C4,C5,C6)	Suburban (C3)	Rural (C1-C2)	Intersection	Slow Street	Arterial / Corridor	Crash Reducing	Speed Reducing	Severity Reducing
Safe Freeway Interchanges:									
Eliminate Acceleration Lanes	✓	✓	✓		✓	✓	✓	✓	✓
Redesign High Speed Exit Ramps	✓	✓	✓		✓	✓	✓	✓	✓
Redesign High Speed On-Ramps	✓	✓	✓		✓	✓	✓	✓	✓
Transverse(in lane) Rumble Strips	✓	✓	✓		✓	✓	✓	✓	✓
Provide Safe Continuous Bike Lanes	✓	✓			✓	✓	✓	✓	✓
Provide Safe Pedestrian Crossings	✓	✓			✓	✓	✓	✓	✓
Re-evaluate Context Class	✓	✓	✓	✓	✓	✓	✓	✓	✓
Re-evaluate Target Speed Limit	✓	✓	✓		✓	✓	✓	✓	✓
Safe Traffic Operations:									
Lower Speed Limits	✓	✓	✓		✓	✓	✓	✓	✓
Add New Signals / Improve Connectivity	✓	✓	✓	✓	✓	✓		✓	✓
Protected-only Left Turn Signal Phasing	✓	✓	✓	✓	✓	✓	✓	✓	✓
Signal Coordination-Target Speed	✓	✓		✓	✓	✓	✓	✓	✓
Variable Speed Limits (Expressways)	✓	✓						✓	✓
Driver Feedback Signs - Speed	✓	✓	✓		✓	✓	✓	✓	✓
Leading Pedestrian Interval	✓			✓	✓	✓	✓	✓	✓
Rectangular Rapid Flashing Beacon	✓	✓		✓	✓	✓	✓	✓	✓
Hybrid Ped Beacon / HAWK	✓	✓		✓	✓	✓	✓	✓	✓
Rest in Red Signal Operation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Advanced Speed Detection Signals	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shorter Signal Cycle Lengths	✓	✓	✓	✓	✓	✓	✓	✓	✓
Traffic Signal- Demand Responsive off-peak	✓	✓	✓	✓	✓	✓	✓	✓	✓
Street Lighting / Pedestrian Level Lighting	✓	✓	✓	✓	✓	✓	✓	✓	✓
Update Pedestrian Countdown Timers	✓	✓	✓	✓	✓	✓	✓	✓	✓
Re-evaluate Context Class	✓	✓	✓	✓	✓	✓	✓	✓	✓
Re-evaluate Target Speed Limit	✓	✓	✓		✓	✓	✓	✓	✓

Actions and Implementation Strategy



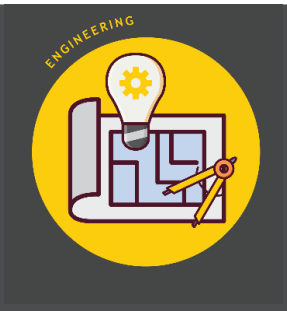


Actions and Implementation Strategy - Speed Setting

Action 1 – Regional Context Classification
Action 2 – Evaluate All Projects
Action 3 - Initiate a HC safety task force to engage on speed limit setting, improve consistency of outcomes, and restore credibility of speed limits.

Short Term (1-2 Years)
Mid Term (3-5 years)
Long Term (5+ years)

Actions and Implementation Strategy - Engineering & Operations



Action 1 - Develop preliminary recommendations for Top50 High Injury Network corridors.
Action 2 – Update Design Manuals and Design Standards for roadway construction, operations and maintenance.
Action 3 – Incorporate design flexibility to reflect national best practices.
Action 4 – Establish Local Street Design Guidelines
Action 5 - Traffic Operations Recommendations
Action 6 – Professional Development and Training
Action 7 – Fund Improvements to Achieve Speed Management Goals
Action 8 – Collaborate with law enforcement, firefighting and other emergency response professionals.

Short Term (1-2 Years)
Mid Term (3-5 years)
Long Term (5+ years)

Actions and Implementation Strategy – Education

Action 1 – Educate Public and Elected Officials
Action 2 – Encourage Adoption of Speed Management Policy
Action 3 – Develop Education / PSA Messages

Short Term (1-2 Years)
Mid Term (3-5 years)
Long Term (5+ years)

Actions and Implementation Strategy – Policy / Legislation

Action 1 – Support Changes to Laws and Regulations as necessary to ensure people are protected to the greatest extent possible.

Action 2 - Set a firm Vision Zero crash reduction Goal.

Action 3 - Develop an inter-agency speed and safety review process to assess land use and transportation plans, designs, and implemented projects.

Action 4 – Review and update Land Use Policies to ensure walkable, safe, and healthy communities.

Action 5 – Review and Initiate New Traffic Safety Legislation Measures.

Short Term (1-2 Years)
Mid Term (3-5 years)
Long Term (5+ years)

Actions and Implementation Strategy – Plan Evaluation

Action 1 – Develop evaluation metrics and timeframes for plan updates.

- ✓ Establish quarterly updates of the Speed Management Action Plan.
- ✓ Establish post-project evaluation measures with qualitative and quantitative approaches, including:
  - ✓ Quantitative measures: speed reduction, crash reduction, serious injury/fatality reduction, impact on travel time, and number of corridors (proactive and reactive) addressed.
  - ✓ Qualitative measures: user observations, surveys

Short Term (1-2 Years)
Mid Term (3-5 years)
Long Term (5+ years)

Recommendation

Approve the Speed Management Action Plan