









# NEW TAMPA AREA TRAFFIC SAFETY STUDY RESULTS MEETING

PRESENTED BY CITY OF TAMPA



TRAFFIC CONSULTANT VANUS, INC.



- Introduction by Jean Dorzback, PE City Transportation Manager
- Presentation by VANUS
  - Project Overview
  - Study Results
- **Question/Answer Period**







## PURPOSE OF STUDY

The City of Tampa Conducted a Traffic Safety Study in the Area of Tampa Palms and West Meadows.

The Purpose of This Study was to:

- Identify Citizen Concerns
- Collect Data
- Perform Necessary Traffic Analyses
- Make Recommendations for Potential Improvements







## PROJECT APPROACH

- Identify Citizen Concerns (Kick-off Meetings)
- Evaluate Existing Conditions
  - Roadway Speeds
  - Volumes
  - Crash History
  - Field Reviews
- Recommend Improvements
  - Traffic Calming
  - Safety/Signage
  - Multi-modal Accessibility









### CITIZENS CONCERNS

- Two Kick-off Meetings
  - 71 Attendees Signed-in
  - 52 Comment Forms Received
- Top Five Concerns
  - Cut-through Traffic on Tampa Palms Boulevard (39)
  - Speeds Will Increase (34)
  - Safety Pedestrian, Children, School, General, Crime, Traffic (26)
  - Side-street Delay (22)
  - Quality of Life (22)





### ROADWAYS STUDIED

- New Tampa Boulevard from Meadow Pine Drive to Bruce B. Downs Boulevard
- Commerce Park Boulevard from Tampa Palms Boulevard West to the Freedom High School
- Tampa Palms Boulevard West
- Tampa Palms Boulevard East
- Amberly Drive





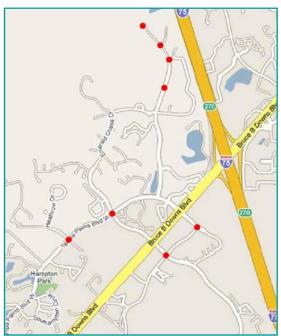




## INTERSECTIONS ANALYZED – TAMPA PALMS

- Commerce Park Boulevard at:
  - Freedom High School
  - Liberty Middle School/Technology Drive
  - Primrose Lake Circle/Liberty Middle School
  - New Tampa Regional Park
- Tampa Palms Boulevard West
  - Cypress Preserve Drive
  - Palm Springs Boulevard
- Tampa Palms Boulevard East at Compton Drive
- Commerce Palms Boulevard East of Compton Drive









### DATA COLLECTION

- Turning Movement Counts at Identified Intersections
- 7-day Continuous Speed and Volume Counts on All Roadways
- Crash Analysis on Identified Roadways and Intersections







### ADDITIONAL STUDY TASKS

- Tampa Palms
  - Freedom High/Liberty Middle School Access
- West Meadows
  - School Bus Stop Operations on New Tampa Boulevard
  - New Tampa Center Ingress/Egress on New Tampa Boulevard
  - Pedestrian/Bicycle Access to West Meadows Community Center











### SUMMARY OF RECOMMENDATIONS

#### 36 Recommendations

- Commerce Park Boulevard
  - 10 Recommendations
- Tampa Palms Boulevard West
  - 6 Recommendations
- Tampa Palms Boulevard East
  - 5 Recommendations
- Commerce Palms Boulevard
  - 1 Recommendation
- New Tampa Boulevard
  - 14 Recommendations

#### **Table 33: Study Recommendations**

Table 33: Study Recommendations		
Location	Recommendation	
	<ol> <li>Install a traffic signal on Bruce B. Downs Boulevard at Regents Park Drive South.</li> <li>After the Bruce B. Downs Boulevard construction project is completed, the cycle length, splits, and offsets at the intersection of New Tampa Boulevard and Bruce. B. Downs Boulevard should be adjusted as necessary. The intersection is part of a signal system, so signal timings along the entire Bruce B. Downs corridor should be evaluated after construction.</li> </ol>	
New Tampa Boulevard at New Tampa Center	<ol> <li>Maintain the U-Turn prohibition westbound on New Tampa Boulevard.</li> <li>Remove the existing SIGNAL AHEAD warning signs on New Tampa Boulevard. These signs are used for new signal installations or locations with a sight distance problem. They are no longer needed at this location.</li> </ol>	
	<ol> <li>Restripe both driveway approaches to New Tampa Boulevard to provide a shared left/through lane and an exclusive right-turn lane.</li> <li>Median landscaping needs to meet the 2010 FDOT Design Standards Sight Distance at Intersections, Standard Index 546.</li> </ol>	
New Tampa Boulevard at Wood Sage Drive	Install a traffic signal with pedestrian features to operate during school ingress and egress.     Restripe the intersection.	
New Tampa Boulevard at Timber Reach Drive	Install enhanced pedestrian features across the west leg of the intersection.	
New Tampa Boulevard at Highwoods Preserve Parkway	<ol> <li>After the construction of the extension, it is recommended that the intersection be reevaluated for a traffic signal.</li> <li>Install route markers for I-75, Bruce B. Downs Boulevard, and Commerce Park Boulevard on the westbound approach to the intersection.</li> <li>Install enhanced pedestrian features across the east leg of the intersection.</li> </ol>	
New Tampa Boulevard at Meadow Pine/Duquesne Drive	13. As part of the extension project, restripe both side street approaches to provide a left-turn lane and a shared through/right-turn lane.	
Commerce Park Boulevard	<ol> <li>Increased traffic enforcement of the existing speed limit, especially during school ingress and egress.</li> <li>Monitor traffic volumes at Ashington Landing Drive/Primrose Lake Circle South. A traffic signal may be necessary, in the future, when conditions satisfy the warrants.</li> <li>Install route markers for I-75 and Bruce B. Downs Boulevard (Bruce B. Downs Boulevard) on the southbound approach to Tampa Palms Boulevard West.</li> <li>Median landscaping needs to meet the 2010 FDOT Design Standards Sight Distance a Intersections, Standard Index 546.</li> </ol>	
Commerce Park Boulevard at the School Complex	<ol> <li>Widen Commerce Park Boulevard to provide a left-turn lane at the northern entrance as part of the extension and bridge over I-75 project.</li> <li>Construct a southbound right-turn lane at the northern driveway.</li> <li>Install a traffic signal at the northern driveway as part of the extension and bridge over I-75 project to operate during school ingress and egress.</li> <li>Install two speed limit signs southbound along the frontage of the school property – one south of the northern driveway and one south of the southern driveway/Primrose Lake Circle North.</li> </ol>	





# Commerce Park Boulevard – Speed Studies

## Findings & Recommendations

Location	85 <sup>th</sup> Percentile Speed (mph)		Posted Speed Limit
	Northbound	Southbound	(mph)
North of USAA	46.4	48.1	40
North of Ashington Landing Drive	45.4	49.3	40

Existing Level of Service - B

- Recommendation:
  - Maintain Existing Speed Limits





### Commerce Park Boulevard

#### Recommendations

- Increase Traffic Enforcement,
   Especially During School Peak Hours
- Monitor Traffic Volumes at Ashington Landing Drive/Primrose Lake Circle South – Signal May Be Warranted in the Future
- Install Route Markers at Tampa Palms Boulevard West for I-75 and Bruce B. Downs
- Revise Existing Median Landscaping to Meet FDOT Guidelines for Sight Triangles









## Commerce Park Boulevard at School Complex

### **Findings**

- Vehicles Queuing in the Through Lane
- Vehicles Blocking Driveways
- Lack of Adequate Queue Storage on Site
- Lack of Adequate Traffic Control
- Mixing of Student Drivers with Other Traffic
- Separate School Bus Entrance at New Tampa Community Park
  - 26 Freedom High School Buses
  - 21 Liberty Middle School Buses









## Commerce Park Boulevard at School Complex

#### Recommendations

- In Conjunction with the New Tampa Boulevard Extension Project
  - Add a Northbound Left-turn Lane at the Northern Driveway
  - Add a Southbound Right-turn Lane at the Northern Driveway
  - Install a Part-time Traffic Signal at the Northern Driveway
  - Install Two Additional Speed Limit Signs in the Vicinity of the School Complex
- City Staff is Working with the School Board to Address Queuing on Commerce Park Boulevard





# Commerce Park Boulevard at New Tampa Community Park

## Findings & Recommendations

### • Findings:

- Current School Bus and School Deliveries Entrance
- Traffic Late Evenings/Weekends
- East Approach Leads Into a Pond
- Traffic Signal Not Warranted

#### Recommendations:

- Block Access to East Approach
- Convert to Lane Ends Merge Left









### Tampa Palms Boulevard West – Speed Studies

## Findings & Recommendations

Location	85 <sup>th</sup> Percentile Speed (mph)		Posted Speed
	Eastbound / Northbound	Westbound / Southbound	Limit (mph)
West of Amberly Drive	44.0	45.8	40
South of Cypress Preserve Drive	45.0	44.4	35
West of Catlin Drive	44.8	43.5	35

Existing Level of Service - B

- Recommendations:
  - Maintain Existing Speed Limits





### Tampa Palms Boulevard West

## Findings & Recommendations

### Findings

- 17 Crashes in Three Years at Amberly Drive
- 12 Crashes in Three Years at Palm Point Plaza

#### Recommendations

- Increase Traffic Enforcement
- Revise Existing Median Landscaping to Meet FDOT Guidelines for Sight Triangles
- Monitor Crashes at Amberly Drive and Palm Pointe Plaza









# Tampa Palms Boulevard West at Cypress Preserve Drive

## Findings & Recommendations

### Findings:

- School Crossing with Special Emphasis Crosswalks
- 3 Crossing Guards
- No U-turn Southbound During School
- 171 Pedestrians and Bicyclists During Eight-hour Count
- No Reported Crash Problem
- Traffic Signal Not Warranted
- No Recommendations









# Tampa Palms Boulevard West at Palm Springs Boulevard

## Findings & Recommendations

### • Findings:

- 17 Angle Crashes (5.6 per year)
- School Crossing with Special Emphasis Crosswalks
- 2 Crossing Guards
- No U-turn Northbound During School
- 208 Pedestrians and Bicyclists During Eight-hour Count
- Traffic Signal Not Warranted

#### Recommendations:

- Relocate No U-turn Sign
- Continue to Monitor Crashes
- Re-evaluate for a Future Traffic Signal









# Other Roadways – Speed Studies

## Findings & Recommendations

Location	85 <sup>th</sup> Percentile Speed (mph)		Posted Speed
	Northbound	Southbound	Limit (mph)
Amberly Drive – South of Belmont Road	44.2	46.1	40
Tampa Palms Boulevard East - East of Ashbury Palms Drive	49.1	48.0	40

Existing Level of Service - B

- Recommendation:
  - Maintain Existing Speed Limits





### Tampa Palms Boulevard East

#### Recommendations

- Increase Enforcement of Existing Speed Limit
- Install additional speed limit signs
  - One Eastbound, East of Bruce B. Downs Boulevard on the North End
  - One Westbound, West of Ashbury Palms Drive





## Tampa Palms Boulevard East at Compton Drive

## Findings & Recommendations

### • Findings:

- 14 Angle Crashes (4.67 per year)
- Narrow Median
- Compton Drive Volumes Higher
- All Markings Faded
- Traffic Signal Not Warranted
- Pedestrian Signal not Warranted

#### Recommendations:

- Monitor Crashes
- Conduct a Four-way Stop Analysis
- Restripe All Intersection Markings







# Commerce Palms Boulevard at Compton Drive

## Findings & Recommendations

### • Findings:

- Compton Drive Volumes Equal to Commerce Palms Boulevard
- Traffic Signal Not Warranted



#### Recommendations:

 Install Speed Limit Signs Eastbound and Westbound on Commerce Palms Boulevard





## IMPROVEMENTS CURRENTLY PLANNED

### **Tampa Palms**

 City Staff is Working with the Tampa Palms CDD Regarding Pedestrian Access Adjacent to Hampton Park and is Considering Installing Enhanced Pedestrian Features



 City Staff is Working with Various CDDs and HOAs Concerning Speeding, U-turns, Intersection Sight Visibility, Parking on ROW, and School Zone Issues



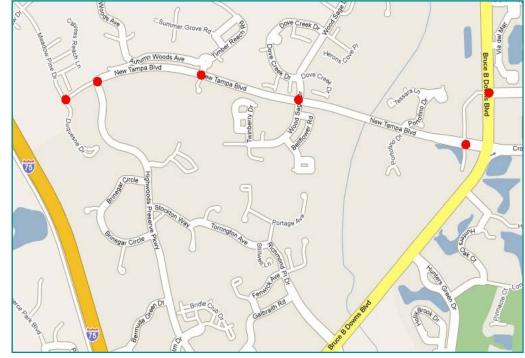


## INTERSECTIONS ANALYZED – WEST MEADOWS

### New Tampa Boulevard at:

- New Tampa Center Access
- Wood Sage Drive
- Timber Reach Road/West
   Meadows Community Club
- Highwoods Preserve Parkway
- Meadow Pine/Duquesne Drive









## Findings & Recommendations

### Findings

- FS 316.172 All Vehicles Approaching a School Bus Which Displays a Stop Signal Shall Come to a Full Stop While the Bus is Stopped.
- All Existing Stops on the Curb Side of the Road
- No Students Cross New Tampa Boulevard
- U-turns Onto Duquesne Drive

#### Recommendation:

 City to Coordinate with the School Board Regarding Future Bus Stop Changes









### New Tampa Boulevard – Speed Studies

## Findings & Recommendations

Location	85 <sup>th</sup> Percentile Speed (mph)		Posted Speed Limit
	Eastbound	Westbound	(mph)
East of Wood Sage Drive	46.2	48.5	40
West of Timber Reach Road	44.6	45.6	40

Existing Level of Service – B

- Recommendation:
  - Maintain Existing Speed Limits





### New Tampa Boulevard at New Tampa Center

### **Findings**

- Angle and Left-turn Crashes
- Intersection Queues
- Congested Median Opening
- Parking Lot Used as a Cutthrough
- Bruce B. Downs Widening Project
  - Dual Left-turn Lanes
  - Additional Through Lane Eastbound
- Should Not Signalize at this Time







### New Tampa Boulevard at New Tampa Center

#### Recommendations

- Install Signal at Bruce B. Downs and Regents Park Drive South
- Remove the Existing Signal Ahead Warning Signs
- Maintain the U-turn Prohibition Westbound
- Restripe Driveways to Provide Exclusive Right-turn Lane
- Revise Existing Median Landscaping to Meet FDOT Guidelines for Sight Triangles
- Review Signal Timings











## New Tampa Boulevard at Wood Sage Drive

## Findings & Recommendations

### Findings:

- Clark Elementary School Access
- Significant School Traffic
- Special Emphasis Crosswalks
- Advance Pedestrian Crossing Signs
- All Students Bussed Across New Tampa Boulevard
- No Reported Crash Problems
- Meets 4-Hour Signal Warrant

#### Recommendations:

- Install a Part-time Traffic Signal
- Restripe the Intersection









## New Tampa Boulevard at Timber Reach Road

## Findings & Recommendations

### Findings:

- West Meadows Community Center
- New Sidewalk on the South Side
- Special Emphasis Crosswalks
- Advance Pedestrian Crossing Signs
- Traffic Signal Not Warranted
- No Reported Crash Problem
- Pedestrian Signal Not Warranted (53 Pedestrians/Bicyclists Crossed on Memorial Day 2009)

#### Recommendations:

Install Enhanced Pedestrian Features









### New Tampa Boulevard at Highwoods Preserve Parkway

### Findings & **Recommendations**

### Findings:

- Special Emphasis Crosswalk
- Advance Pedestrian Crossing Signs
- No Reported Crash Problem
- Traffic Signal Not Warranted

### Recommendations:

- Install Enhanced Pedestrian Features
- Install Route Markers for I-75, Bruce B. Downs, and Commerce Park **Boulevard**
- Re-evaluate for Future Traffic Signal







# New Tampa Boulevard at Meadow Pine/Duquesne Drive

## Findings & Recommendations

### • Findings:

- Intersection Located at the Current End of New Tampa Boulevard
- No Reported Crash Problem
- Traffic Signal Not Warranted

#### Recommendations:

- Restripe the Side Street Approaches
  - Left-turn Lane
  - Shared Through/Right-turn Lane







#### (9) TAMPA PALMS

#### **West Meadows**

- Sidewalk
  - City of Tampa Installed Sidewalk on South Side of New Tampa Boulevard from Timber Reach Road to Meadow Pine Drive
  - February, 2010 City to Install Sidewalk
     from Woodsage Drive to Timber Reach Road



- Hillsborough County Bruce B. Downs Boulevard from Palm Springs Boulevard to Pebble Creek Drive Widening
  - Additional Turn Lanes at New Tampa Boulevard Intersection
  - Construction Starts January 18, 2010





### Questions and Answers

## **Questions?**





### CONTACT INFORMATION

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## **FUTURE VOLUMES**

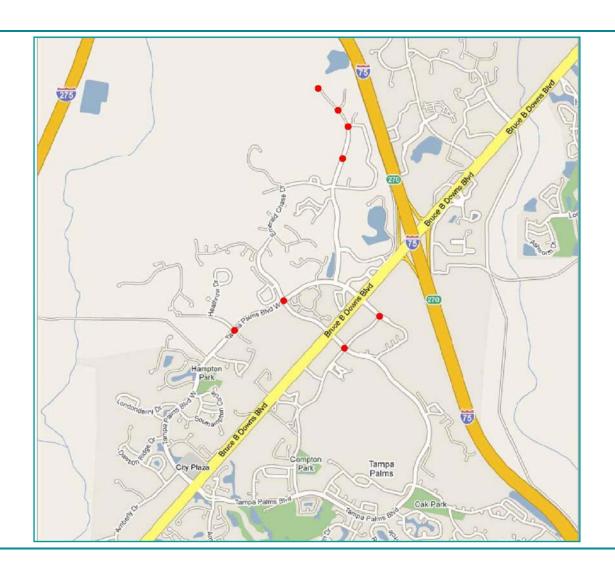
Segment	2025 without Extension	2025 with Extension	
New Tampa Boulevard	New Tampa Boulevard		
CR 581 to Shopping Center	16,900	19,000	
Shopping Center to Timber Reach Road	10,400	13,000	
Timber Reach Road to Highwoods Preserve	7,200	11,700	
Highwoods Preserve to Commerce Park Boulevard	3,500	8,500	
Commerce Park Boulevard			
Tampa Palms Boulevard West to New Tampa Boulevard	9,600	12,600	
Tampa Palms Boulevard West			
CR 581 south to Amberly Drive	12,400	12,000	
Amberly Drive to CR 581 north	19,400	19,300	
Tampa Palms Boulevard East			
CR 581 to Compton Drive	6,350	6,500	
Compton Drive east	2,200	2,300	

URS Noise Assessment – March 2008





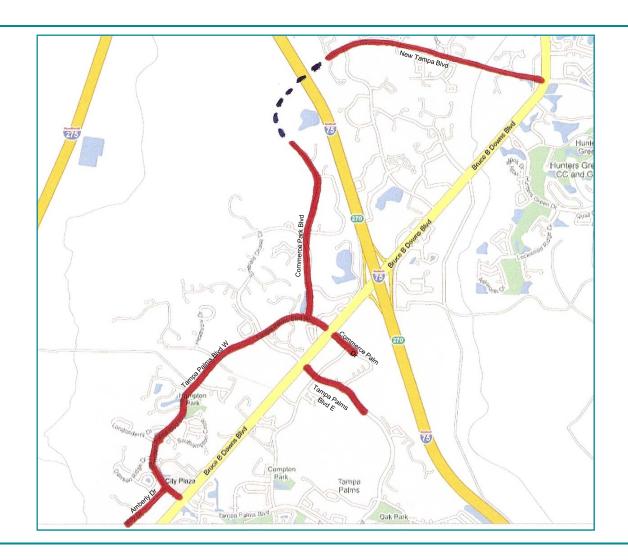
## INTERSECTIONS ANALYZED – TAMPA PALMS







## ROADWAYS STUDIED







## INTERSECTIONS ANALYZED – WEST MEADOWS





