

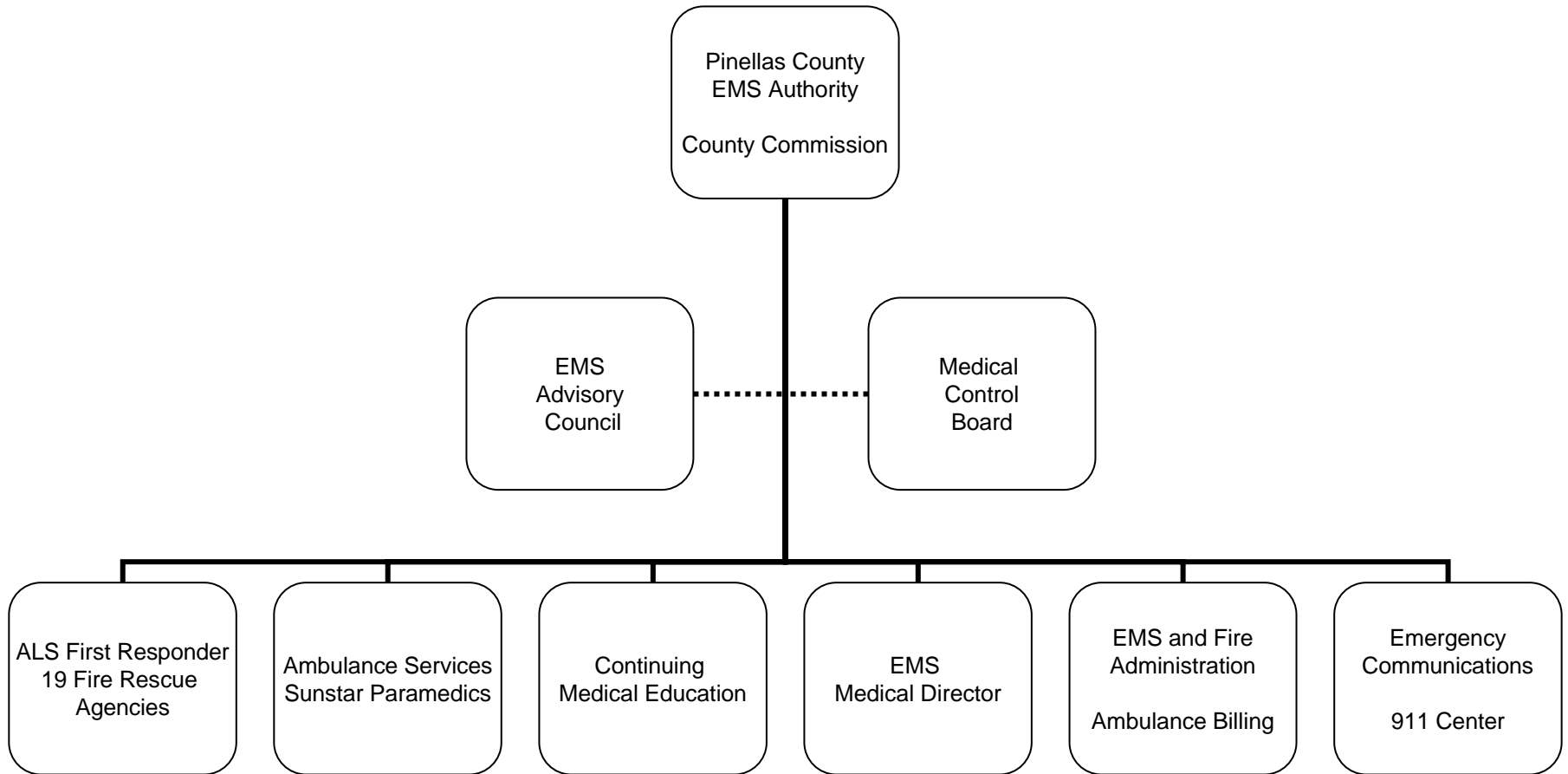


Emergency Medical Services Authority
EMS Standards Workshop
February 24, 2009

Overview

- **Background**
- **1 - Priority Dispatch**
- **2 - Response Time Standard**
- **3 - ALS First Responder Approval Criteria**
- **4 - Decision Matrix**
(Response Time, Units, Personnel, Estimated Cost)
- **5 - Reasonable and Customary Costs**
- **Longer Range Plans and Closing Remarks**

EMS System Structure



Legal and Contract Background

- **1980 - Special Act created the EMS Authority as a Dependent Special District. Countywide Referendum established our Countywide EMS system.**
- **1981- 1987 Funding provided for ALS First Responder Services. No standards set for budget submissions.**
- **1987 - 1997- Funding formula based ALS First Responder Agreement. “Excess compensation” did not resolve issues.**
- **1987 - First Countywide Contract for ALS Ambulance Services. Current Agreement with Paramedics Plus (2004-2009).**
- **1988 - Ordinance No. 88-12 solidified the EMS System design.**
- **1989 - Lawsuit between EMS and St. Petersburg.**

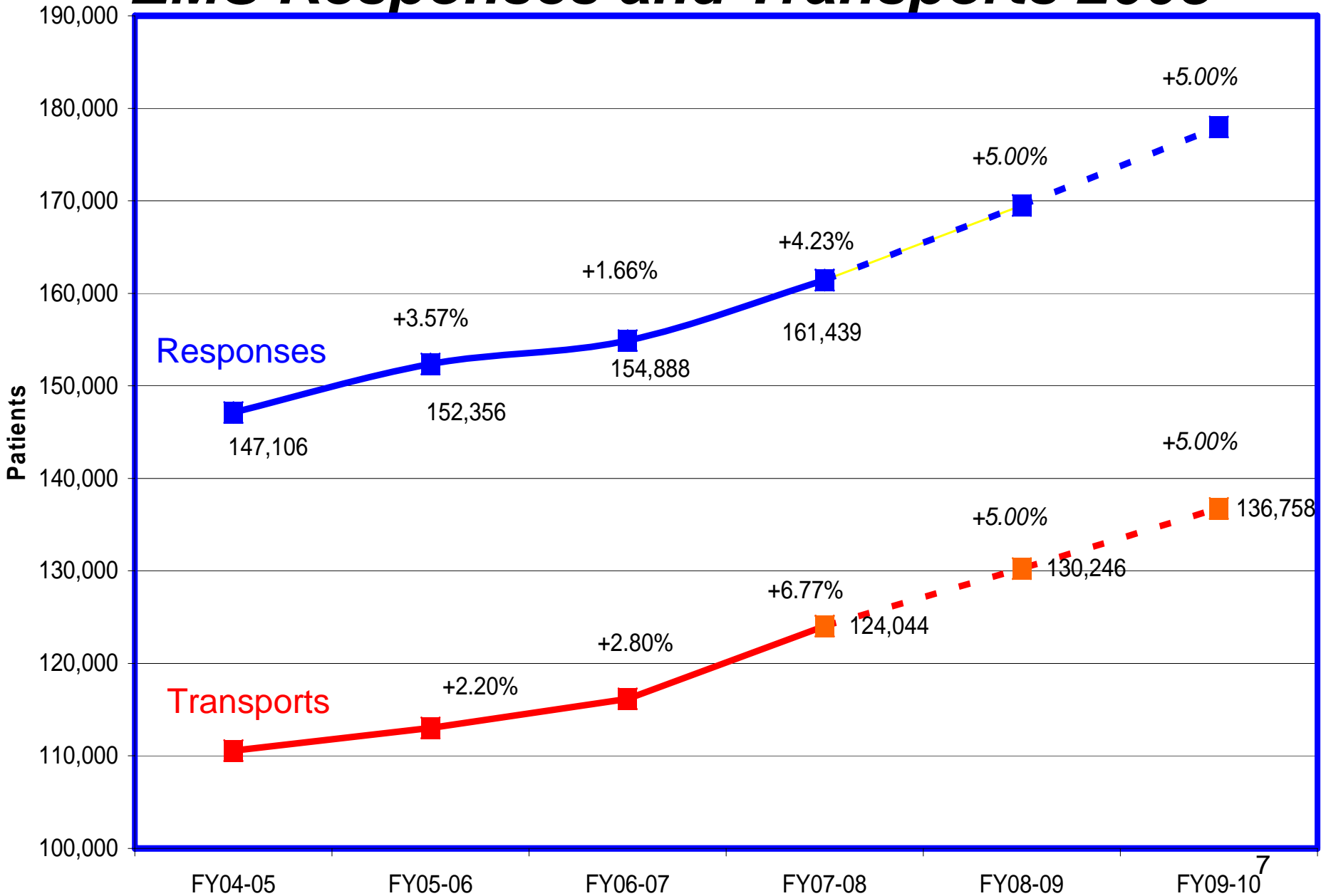
Legal and Contract Background

- **1989 – Revision Special Act allows EMS Authority to establish Levels of Service and the “reasonable and customary costs” for that level of service.**
- **1997 - 2007- Fixed price Agreement with inflation adjustment mechanism, utilized for ALS First Responder Services.**
- **2007 – New Fixed price Agreement with an inflation adjustment mechanism for ALS First Responder Services.**
- **2009 - Cancellation and Renegotiation of ALS First Responder Agreements pursuant to the EMS Authority establishing EMS Standards. Renegotiation of Ambulance Service Agreement and other Service Agreements to realign costs.**

EMS Authority's Role

- **Set Levels of Service and costs associated with those levels**
- **Adopt procedural requirements for submitting budget request.**
- **Set EMS Ad Valorem Tax Rate**
- **Contract Management and Operational Oversight**
- **Financial Oversight and Ambulance Billing**

EMS Responses and Transports 2008



Fire Rescue Responses 2008

<u>2008 Fire Rescue Responses</u>	<u>Average Involved</u>	<u>Incidents</u>	<u>Percentage</u>
Medical Emergency	0:25:34	121,777	77.41%
Fire Related Emergency	0:58:43	21,581	13.72%
Vehicle Crash	0:22:58	12,791	8.13%
Trauma Alert	1:01:47	695	0.44%
Water Rescue	0:49:18	262	0.17%
Air Transport	1:14:19	148	0.09%
Extrication	0:48:42	52	0.03%
Total	0:25:56	157,306	100.00%

EMS Provider Agencies

- **ALS First Responder Agreements**
 - **19 Providers, \$40.1 Million (primarily Ad Valorem)**
 - **65 ALS Units, 74 ALS Units Operated**
 - **Approximately 134,000 9-1-1/EMS Calls**
 - **1,200 Firefighter/Paramedics and Firefighter/EMTs Total**
 - **362 Firefighter/Paramedic Positions Funded by EMS**

- **Ambulance Service Agreement**
 - **1 Provider, \$34.2 Million (primarily User Fees)**
 - **69 Ambulances (65 ALS Units and 4 Critical Care)**
 - **Approximately 170,000 Calls and 121,200 Transports**
 - **Funding includes System Medical Supplies**
 - **EMS Communications**
 - **Critical Care and All Children's Transport Teams**
 - **Mental Health Transport and Tactical EMS**
 - **400 Paramedics and EMTs (240 Full Time)**
 - **500 Total Employees**

Pinellas County EMS System

**Dual Response With Many
Specialized Functions**

Operational Functions

Fire Rescue

- Fire Suppression
- **ALS First Responder Services**
- Extrication
- HAZMAT
- Technical Rescue
- Water Rescue
- Domestic Security
- Training & Pre Plan
- Fire inspection
- Fire Code enforcement
- Fire Cause (Arson) Investigation
- Fire and EMS Public Education
- Emergency Management

Sunstar Paramedics

- **9-1-1 Emergency and Non-Emergency Transport**
- **Emergency and Non-emergency Interfacility Ambulance Transport**
- **Long Distance Transports**
- **All Children's Transport Team**
- **Critical Care Transport**
- **Mental Health Transport**
- **Ambulance Communications**
- **Centralized Medical Supplies**
- **Ambulance Standbys**

Background - Basic Life Support

- **Basic Life Support (BLS) = Emergency Medical Technician**
 - **Ventilation, CPR and give Oxygen**
 - **Basic trauma care (bandaging, splinting, etc.)**
 - **Use of EMTs to assist Paramedics and helps contain costs**
 - **Firefighter/EMTs**
 - **Ambulance EMTs**
 - **Not All Personnel need to be Paramedics**

- **BLS for First Responder Services or Ambulance Services is limited because of lack of training, patient assessment skills and equipment.**

Background - Advanced Life Support

- **Advanced Life Support (ALS) = Paramedic**
 - **Mobile Emergency Healthcare – “More than a ride”**
 - **Intubation, Airway Control, Ventilation and give Oxygen**
 - **Advanced Patient Assessment Skills (Cardiac, Respiratory, Trauma, Stroke, Pediatrics, etc.)**
 - **Electrocardiogram (EKG), 12 Lead and Transmission**
 - **Intravenous Therapy (IV) Fluid and Medications**
 - **Administration of 40 Emergency Medications**
 - **Defibrillation, Cardioversion, External Pacing**
 - **Monitor Capnography, Oxygen Saturation, etc.**
 - **Deliver babies, confirm death, etc.**

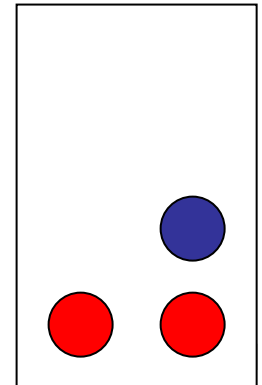
Background - Advanced Life Support

- **All Paramedics have the same training, continuing medical education and certification requirements.**
- **Paramedics are certified and not licensed. Paramedics practice under the EMS Medical Director's license.**
- **Pinellas County EMS has one Medical Director, one set of Treatment Protocols, one Continuing Education Program, and all of the medical supplies and equipment are standardized.**

Background - ALS Engine



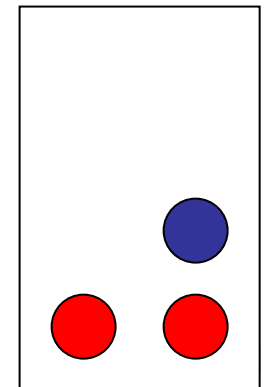
- Staffed with 3 or 4 Personnel (48 Units- incl. Ladder/Squad)
- If Authority Funded – One Position is Funded as a Paramedic
- May have more than one Firefighter/Paramedic
- Remaining Positions funded by City or Fire District
- Dual Role / Cross Trained – Fire and EMS Services
- Reduces City or Fire District Fire Costs for Fire Staffing



Background - Other ALS Fire Apparatus



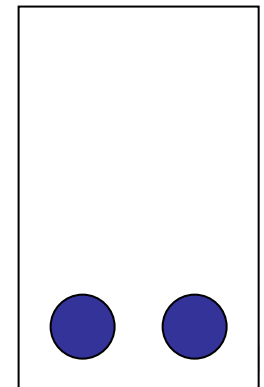
- Squads and Ladder Trucks
- Staffed with 2, 3 or 4 Personnel
- If Authority Funded – One Position is Funded as a Paramedic
- May have more than one Firefighter/Paramedic
- Remaining Positions funded by City or Fire District
- Dual Role / Cross Trained – Fire and EMS Services
- Reduces City or Fire District Fire Costs for Fire Staffing



Background - ALS Rescue Unit



- Staffed with 2 Personnel (26 Rescue Units)
- If Authority Funded – Two Paramedic Positions are Funded
- Typically utilized in High EMS Call Volume Areas
- Dual Role / Cross Trained – Fire and EMS Services
- Enhances the number of Firefighters in the Community
- EMS Calls don't impact Fire staffing calculations for ISO Fire Rating



Background - ALS Ambulance



- Staffed with 2 Personnel (64 ALS Ambulances)
- One Paramedic and One EMT
- Ambulance Contractor is compensated on a per Transport basis.

Typical EMS Call

- **Enough personnel to quickly perform necessary tasks:**
 - **Patient Assessment, Examination and Interview**
 - **Reassure and communicate with the Patient.**
 - **Vital Signs, Oxygen, Monitor EKG, Start IV, Administer Meds.**
 - **Gather medications and determine Medical History and Allergies from family or bystanders.**
 - **Prepare for transport (i.e. immobilizing a patient requires a minimum of three personnel – ITLS)**
 - **Determine appropriate Hospital and Hospital Availability**
 - **Consult with Medical Control by Radio for Treatment Orders**
 - **Notify the Hospital via Radio**
 - **Secure scene hazards (dogs, ovens, lock doors, etc.)**

Typical EMS Call

- **Ability to handle emotional patients/family**
- **Reassure and talk to family/bystanders (sometimes by phone)**
- **ALS First Responder Personnel assist during transport on approximately 4% of the 911 Transports (5,600 in 2008)**
- **Enough personnel means it is efficient and effective**
 - **On the way to the Hospital in 20 minutes**
 - **Carry equipment (Airway Bag, EKG Monitor, Drug Box, etc. – 75 pounds) while maintaining treatment and monitoring.**
 - **Safely move patients (downstairs, in confined spaces, obese, by stretcher, backboard, stair chair, hand carry, etc.)**

Typical 911/EMS Call Staffing

2-3 **Fire Rescue** Personnel

2 **Sunstar** Personnel

25 Min on EMS Call

64 Min on Transport



Four Staff Minimum (Current) on Medical Emergencies

“That’s Why We Send a Fire Truck and an Ambulance”

1 - Priority Dispatch

Priority Dispatch Background

- **“EMD” means an Emergency Medical Dispatcher that has received 24 hours of training. Does not need to be a Paramedic or Emergency Medical Technician (EMT).**
- **“EMD” also means the structured caller interrogation, prioritization of the call and pre-arrival instructions.**
- **Since it is software driven, it is highly detailed. There are 33 Problem/Symptom Categories and 258 individual “Response Determinants” contained within those Categories**
- **“EMD” also means “The National Academy of Emergency Dispatch” (NAED) Software Based Protocols for Emergency Medical Dispatch”.**
- **Nearly ALL Communications Centers utilize non-medically trained dispatchers, which is the NAED preference.**

Why is this so important now?

- **We must conserve resources and use our resources more effectively to contain growth and manage responses.**
- **We expect to reduce Ambulance responses by 10% - This effort will directly reduce costs.**
- **We expect to reduce Fire/Rescue responses by 10% - This effort will decrease fuel and maintenance costs, keep units available for true emergencies, improve response time, reduce longer responses, allow high quality services without increasing apparatus or personnel.**

Priority Dispatch Background

- **Pinellas County began Priority Dispatch in 1990! We've always dispatched units immediately and "downgraded" them to no lights or sirens once EMD was completed.**
- **The Pinellas County Emergency Communications (911) has been recognized as one of the best 911 Centers in the Country. So, there is no concern the 911 Center is fully capable of taking on this responsibility.**
- **911 has been conducting their core training in accordance with the NAED standards through use of the Emergency Telecommunicators Course (ETC), which is 40 hours of training.**
- **So, here is why we need to change the process...**

Current Call Taking Process

9-1-1/EMS Call Received

Location verified / Nature of Emergency determined

Fire/EMS Units are Dispatched

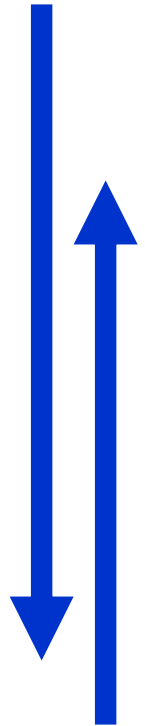
Call Transfer to Sunstar for EMD

Fire/Rescue and Sunstar are Responding EMERGENCY

EMD Determines the Resources Needed and

Response Mode (Emergency or Non-Emergency)

Dispatch Centers relay information to responding units



Concerns:

- Some have been needlessly dispatched; some needed haven't**
- All have been responding emergency when the call may be very minor**
- We've tied up units and another higher priority call could come in.**

New Call Taking Process

9-1-1/EMS Call Received

Location verified

**EMD determines the Resources Needed and
Response Mode (Emergency or Non-Emergency)**

Fire/EMS Units are Dispatched



Benefits:

- **Simpler, quicker, less personnel, no loops in the process**
- **Only the proper units are dispatched**
- **Units know if they are to respond emergency or non-emergency**
- **We reduce risk by not running emergency for several minutes until the call is “downgraded”**
- **As soon as we know it is a critical emergency, units are dispatched. Dispatch will not be delayed. “When in doubt, send them out!”**

Echo Response



Life Threatening Emergency

Patient Not Breathing or Ineffective Breathing (Choking, Hanging, Drowning)

ALS First Responder EMERGENCY

Response Time Goal: TBD

ALS Ambulance EMERGENCY

Response Time Goal: TBD

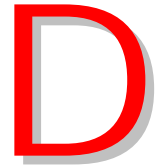
BLS First Responder EMERGENCY Fire District Discretion – NOT Funded

Minimum Response Personnel: 4 - Not a Legal Standard; Operational Recommendation

Total Response Personnel: 4 to 8

Annual EMS Incidents: 0.3% or 2,000 est.

Delta Response



Life Threatening Emergency

Chest Pain, Severe Difficulty Breathing, Unconscious, Seizures, Dangerous Bleeding

ALS First Responder EMERGENCY

Response Time Goal: TBD

ALS Ambulance EMERGENCY

Response Time Goal: TBD

BLS First Responder EMERGENCY Fire District Discretion – NOT Funded

Only Responds if First Due ALS First Responder Unit is Unavailable

Minimum Response Personnel: 4 - Not a Legal Standard; Operational Recommendation

Total Response Personnel: 4 to 8

Annual EMS Incidents: 35% or 49,000 est.

Charlie Response



Potentially Life Threatening Emergency

Difficulty Breathing, Not Alert, Diabetic Problems, Stroke, Overdose, Serious Injury

ALS First Responder **EMERGENCY**

Response Time Goal: TBD

ALS Ambulance **EMERGENCY**

Response Time Goal: TBD

BLS First Responder **EMERGENCY** Fire District Discretion – NOT Funded

Only Responds if First and Second Due ALS First Responder Units are Unavailable

Minimum Response Personnel: 4 - Not a Legal Standard; Operational Recommendation

Total Response Personnel: 4 to 8

Annual EMS Incidents: 25% or 35,000 est.

Bravo Response



Potentially Life Threatening Emergency

Unknown Situations, Serious Bleeding/Injury, Pregnancy, Psychiatric Problems

ALS First Responder **EMERGENCY**

Response Time Goal: TBD

ALS Ambulance **EMERGENCY**

Response Time Goal: TBD

Ambulance responds if likelihood of transport >50%

BLS First Responder **NONE**

Minimum Response Personnel: 2 - Not a Legal Standard; Operational Recommendation

Total Response Personnel: 2 to 5

Annual EMS Incidents: 18% or 26,000 est. **(5,200 Fewer Ambulance Responses)**

Alpha Response – Fire Rescue



Non-Life Threatening Situation
High Potential for Non-Transport (>50%) - Minor Vehicle Crash

ALS First Responder **NON-EMERGENCY**

Response Time Goal: **TBD**

ALS Ambulance **NONE**

Response Time Goal:

Ambulance sent to cover if busy ALS First Responder > 20 Minutes

BLS First Responder **NONE**

Minimum Response Personnel: 2 - Not a Legal Standard; Operational Recommendation

Total Response Personnel: 2 to 5

Annual EMS Incidents: 9% or 13,000 est. (13,000 Fewer Ambulance Responses)

Alpha Response – Ambulance



**Non-Life Threatening Situation
High Potential for Transport (>50%) – Sick Person**

ALS First Responder NONE

Response Time Goal:

ALS First Responder sent to cover if busy Ambulance > 20 Minutes

ALS Ambulance NON-EMERGENCY

Response Time Goal: TBD

BLS First Responder NONE

Minimum Response Personnel: 2 - Not a Legal Standard; Operational Recommendation

Total Response Personnel: 2 to 5

Annual EMS Incidents: 11% or 16,000 est. (16,000 Fewer Fire Rescue Responses)

Common Sense Approach - Falls

17D4	Abnormal Breathing	DELTA
17D3	Not Alert	DELTA
17D2	Long Fall (> 6 ft)	DELTA
17D1	Dangerous Body Area	DELTA
17B3	Unknown Status (3 rd Party Call)	BRAVO + AMB
17B2	Serious Body Injuries	BRAVO + AMB
17B1	Possible Dangerous Body Area	BRAVO + AMB
17A2	Non-Recent Injuries (< 6 hrs)	ALPHA – AMB
17A1	Not Dangerous Body Area	ALPHA – AMB

Common Sense Approach - Vehicle Crash

29D5	Not Alert	DELTA
29D4	Pinned (trapped) Victim	DELTA
29D3	Hazardous Materials	DELTA
29D2	High Mechanism	DELTA
29D1	Major Incident	DELTA

29B5	Unknown Status (3 rd Party Call)	BRAVO
29B4	Serious Hemorrhage	BRAVO + AMB
29B3	Multiple Victims (Multiple Units)	BRAVO + AMB
29B2	Multiple Victims (Single Unit)	BRAVO + AMB
29B1	Injuries	BRAVO

29A1	First Party Caller w/Injury to Non-Dangerous Body Area	ALPHA – FR
------	---	------------

Implementation Plan

November 2008 -	EMS Advisory Council Approved
December 2008 -	Medical Control Board Approved
	Purchase of Hardware/Software/Training
	Training of 911 Supervisors and I/T
January/February 2009 -	Training of 911 Operators
March 2009 -	Begin EMD Function at the 911 Center
April 2009 -	EMD Fully Implemented at 911 Center
	Collect and Analyze Data
June 2009 (TBD) -	CME Briefing to the Field
	Modify Responses per Protocol 3.1

What is the Long Range Plan?

- **All Emergency Communications will move to the new Emergency Coordination Center when it is completed.**
 - **Ambulance Communications**
 - **Medical Communications Officer**
 - **EMS/Fire Communications**
 - **911 Primary PSAP**
 - **Emergency Operations Center**
- **There will be more streamlining of processes and functions before and after the move to the new Center.**
- **The current EMS Communications Center will be the dedicated Backup.**

Priority Dispatch Approval

**1 - EMS Authority Action to
Fully Implement Priority Dispatch –**

**Adopt by Resolution the Priority
Dispatch Component of the EMS
Standards Resolution**

2- Response Time Standard

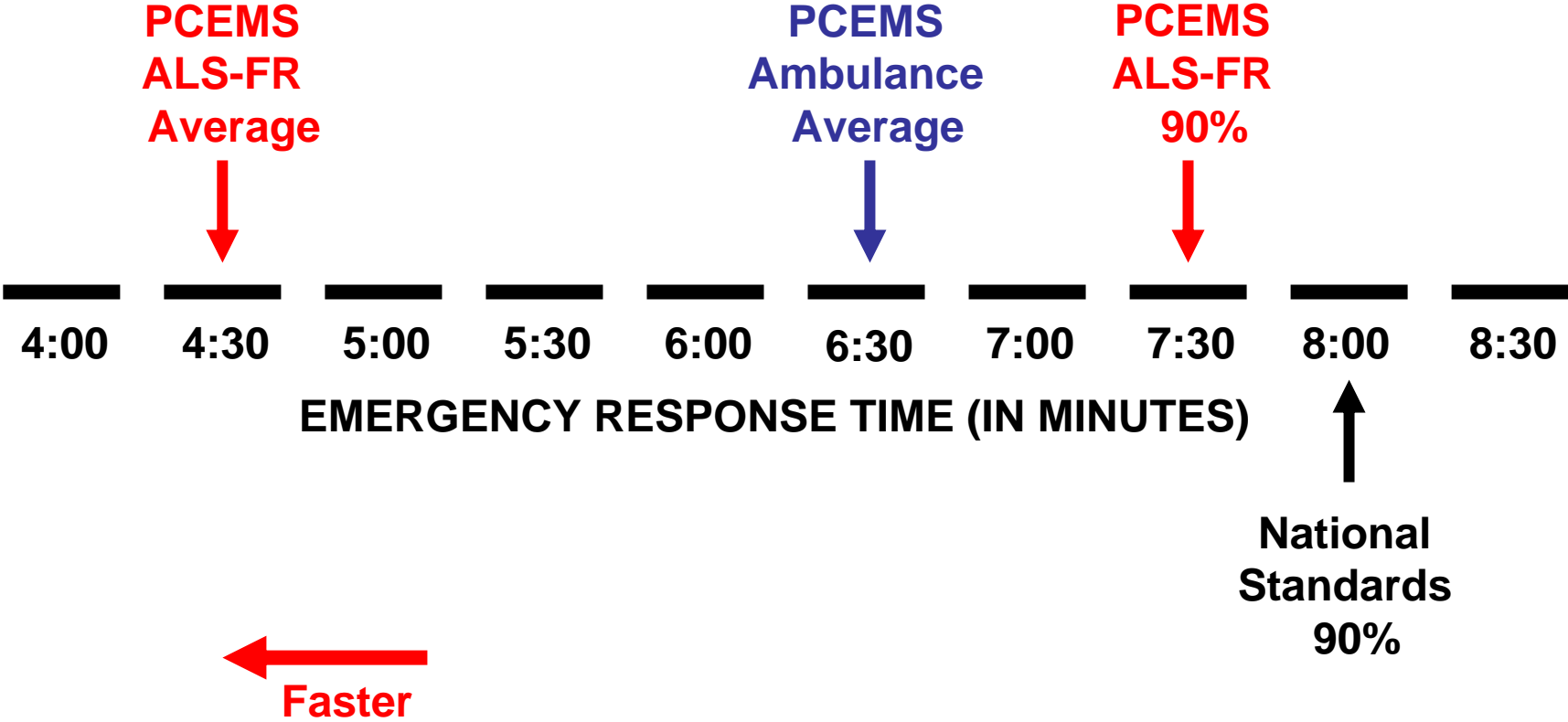
EMS Response Time Standard

- **Response Time Standards are Established Locally by the Agency Having Jurisdiction – EMS Authority.**
- **Response Times in Pinellas County are excellent and exceed National Guidelines.**
- **Response Times have been defined in the ALS First Responder Agreement since 1997 and the Ambulance Services Agreement since 1988.**
- **Florida Bureau of EMS has NO Response Time Standards.**
- **2.1 Response Time of the Ambulance is longer by design in Pinellas County because we have an ALS First Responder Program. The standard accounts for customer service and when transport capability is needed to arrive. Ambulance Emergency (10 Minutes) and Downgraded Emergency (20) Minutes, 90% or greater.**

EMS Response Time Standard

- **National Institute of Health produced a study Staffing and Equipping EMS Systems: Rapid Identification and Treatment of Acute Myocardial Infarction; NIH Publication No. 93-3304**
- **An ALS Response Time Standard of 8 Minutes, 90% is recommended.**
- **National Fire Protection Association, NFPA-450, Section 5.5.2.3.3 Guideline for Emergency Medical Services and Systems supports the 8 Minute, 90% Standard based upon many studies and reaffirms the NIH study.**
- **The studies included the American Heart Association's Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care, 1992, published in the Journal of the American Medical Association (JAMA).**
- **All Response Times discussed do not include the Call Processing Time Standard which is 1 Minute.**

EMS Response Time Standard



EMS Response Time Standard

- **2.2 Pinellas County ALS First Responder Response Time Standard is 7 Minutes & 30 Seconds, 90% or Greater**
- **This equates to a 4 Minute & 30 Second Average**
- **The Actual Response Time Performance in 2008 was 95.8%.**
- **2.3 This high Response Time Compliance points to Excess Capacity in the ALS First Responder Program that could be realigned.**
- **2.4 Remote Areas** must be excluded from Response Time Standards and calculations – Areas such as Off Shore, Caladesi Island, Booker Creek Preserve, Fort Desoto Park, Courtney Campbell Causeway, Howard Frankland Bridge, Gandy Bridge, and the Sunshine Skyway Bridge.
- **A Decision Matrix** will be presented showing alternatives after discussion about standard approval processes for ALS First Responder Units.

3 - ALS First Responder

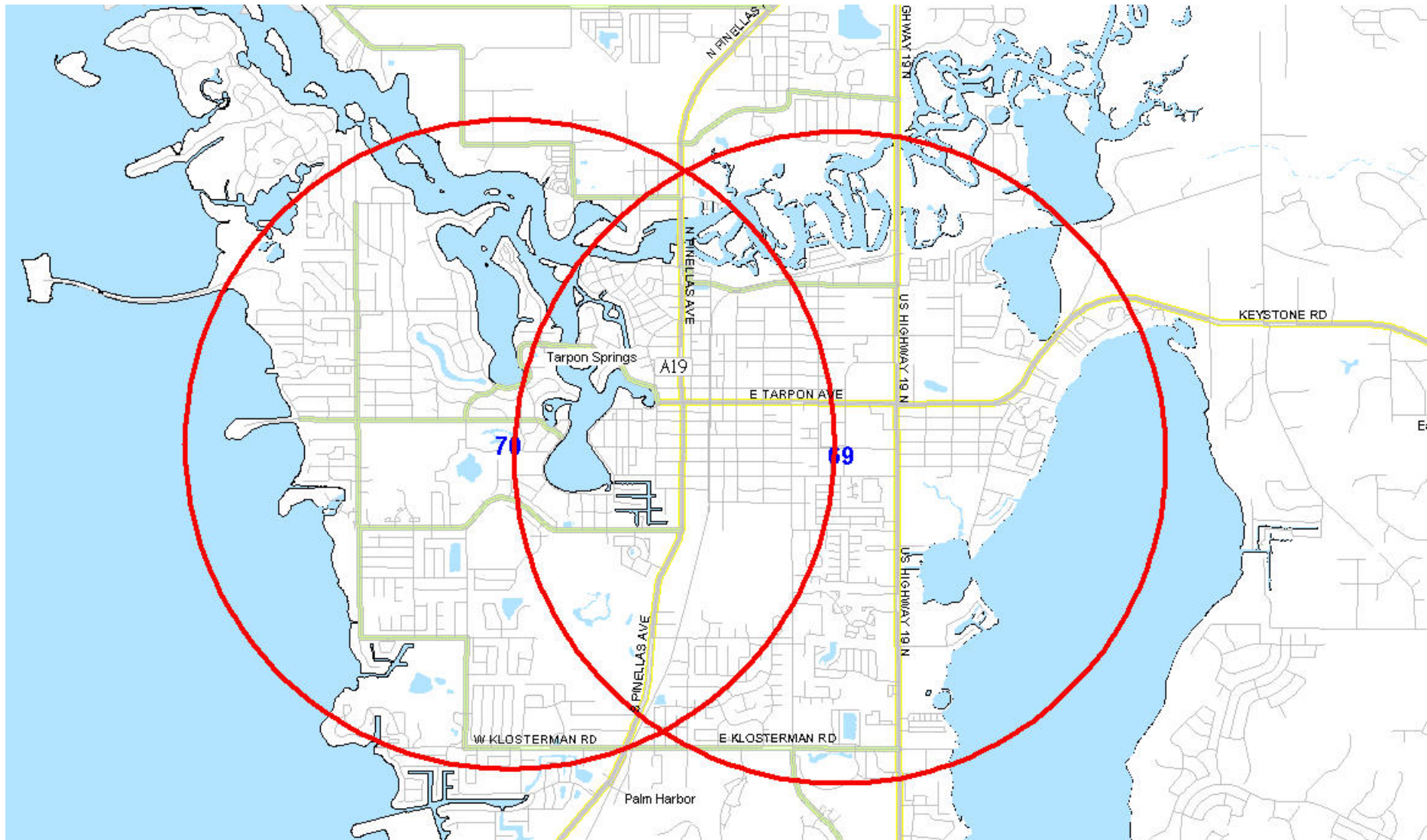
Unit Approval

Criteria and Process

Response Zone Coverage Criteria

- **3.1** Not Justified to cover Remote Areas (Bridges, Causeways, Islands, Parks, Conservation Lands, etc.)
- **3.2** Coverage is justified for Limited Access Areas that serve a Population. Examples: Barrier Islands, areas where there is a limited road network, low population density areas with a large response zone, etc.
- **3.3** Coverage of a Response Zone (1.5 mile radius for 4:30 average Response Time – Studied by ISO) based upon Fire Station Location
- Limitations in Fire Station placement include (available Real Estate, Community Perception, Station established before computer modeling, construction of roadways, new developments, etc.)
- **3.4** Response Zone is not overlapped >50% by another ALS Unit unless High Call Volume Area (>15 per day)

1.5 Mile Radius



EMS and Fire Call Volume

3.5 **0-5 Calls per Day**
Single Paramedic ALS Unit only in Limited Access Areas

3.6 **5-10 Calls per Day**
Single Paramedic ALS Unit

3.7 **10-15 Calls per Day**
Rescue Unit or two Single Paramedic ALS Units

3.8 **15-20 Calls per Day**
Rescue Unit and Single Paramedic ALS Unit

3.9 **20+ Calls per Day = Two ALS Rescue Units**

Response Zone Coverage Criteria

- **Call volume is based upon Automatic Aid calls to other Response Zones and not just their primary territory.**
- **3.10 Calls per day is a range based upon annual statistics and cannot be based upon one busy day or the “busy season” (January – April)**
- **EMS Call volume affects Fire Protection ISO Ratings (2,000 Medical Responses equates to 1 Position). So, a threshold of 10 Calls/Day is a typical standard for a Rescue Unit.**
- **There are many variables that need to be considered before approving a new unit (including First Due Availability, cost vs. benefit, etc.).**
- **3.11 Review and Approval process should include the requesting Fire Department and EMS Administration. Authority funded or City/Fire District funded Units should be approved by the Authority due to the long term costs.**
- **3.12 The EMS Authority should consider a moratorium on any New ALS First Responder Units to stop unnecessary growth,**

4 - ALS First Responder

Level of Service

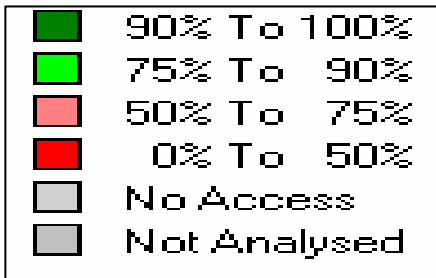
Decision Matrix

Level of Service Decision Matrix

	Current	Recommended	Minimum
Response Time	7:30, 96.39%	7:30, 93%+/-	7:30, 91%+/-
Funded ALS Units	65	60 5 Discontinued; 11 Realigned to ALS Engine	43 16 Discontinued; 6 Realigned to ALS Engine
Estimated Cost	\$40 Million	\$33 Million (\$6.8M or 17%)	\$32.4 Million (\$7.6M or 19%)
	Actual	Estimated	Estimated

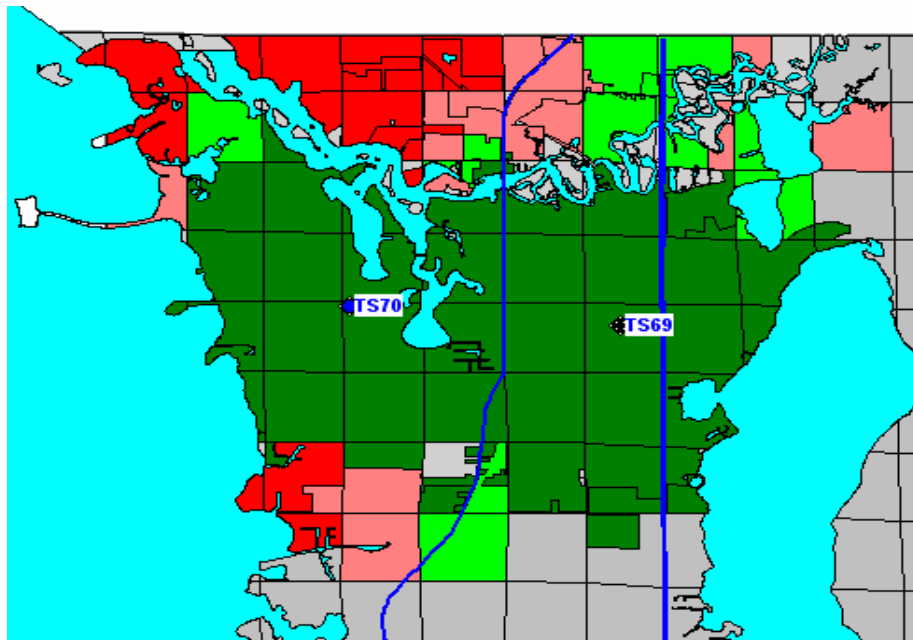
4.1 Tarpon Springs

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



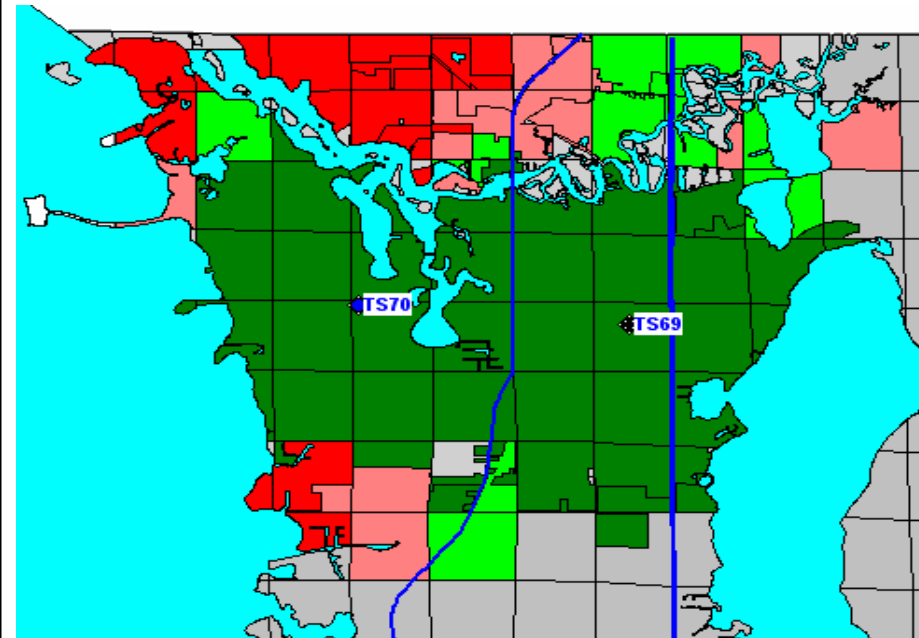
Current

92%
4:55 Average



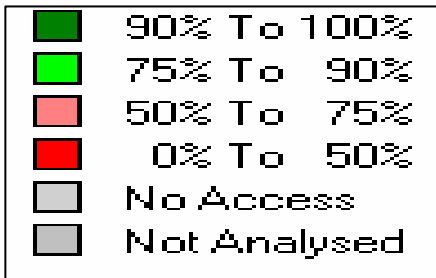
Proposed

No Changes Proposed
92%
4:55 Average



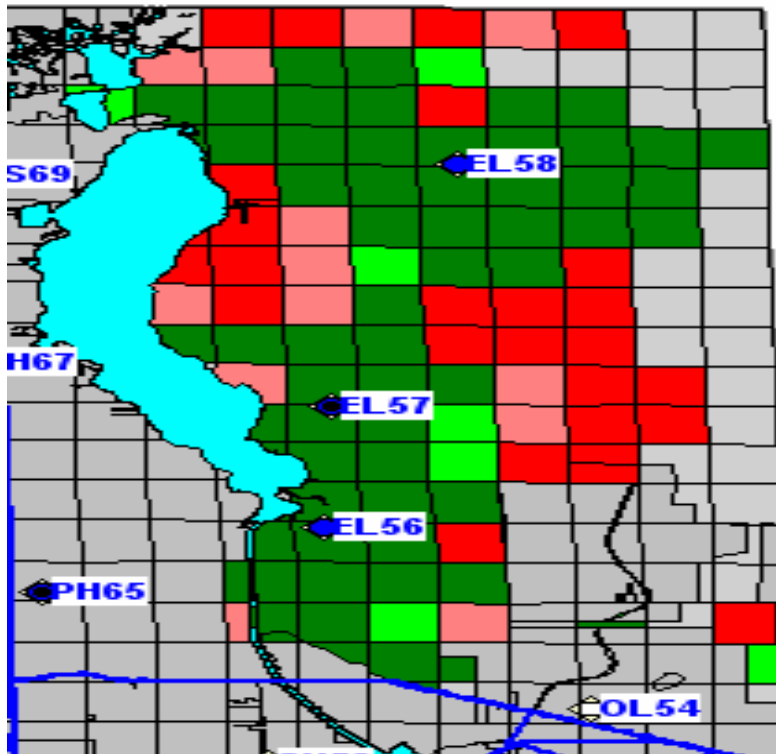
4.2 East Lake

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



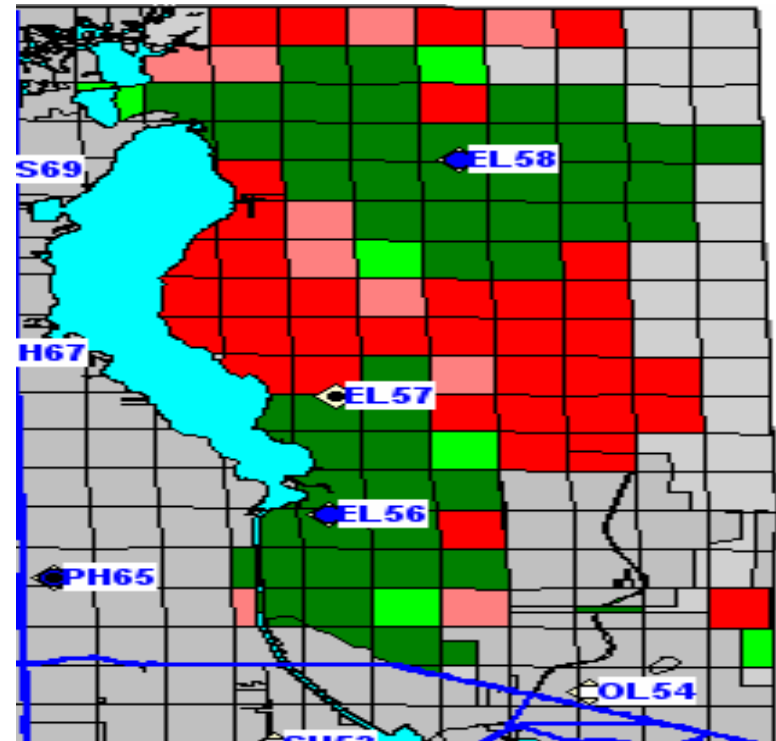
Current

79%
6:04 Average



Proposed

Discontinue 1 ALS Engine
70%
6:36 Average

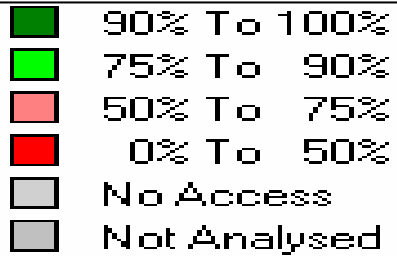


East Lake

- 1,000 population per sq. mile
- Low Call Volume Area in a nearly all Residential community
- Limited Access because of winding roads, gated communities, etc.
- NFPA 450 Section 5.5.3.2.1(6) considers “Road Structure Coverage Capability” in ability to meet Response Time Goals.
- Reasonable to reduce 1 ALS Engine because Average Response Time will only increase 32 seconds.
- Actual Response Time performance in 2008 was 86% at 7 Minutes & 30 Seconds
- **The District attains a 94% Response Time Reliability at 8 Minutes, which exceeds the 8:00 Minute National Standard.**

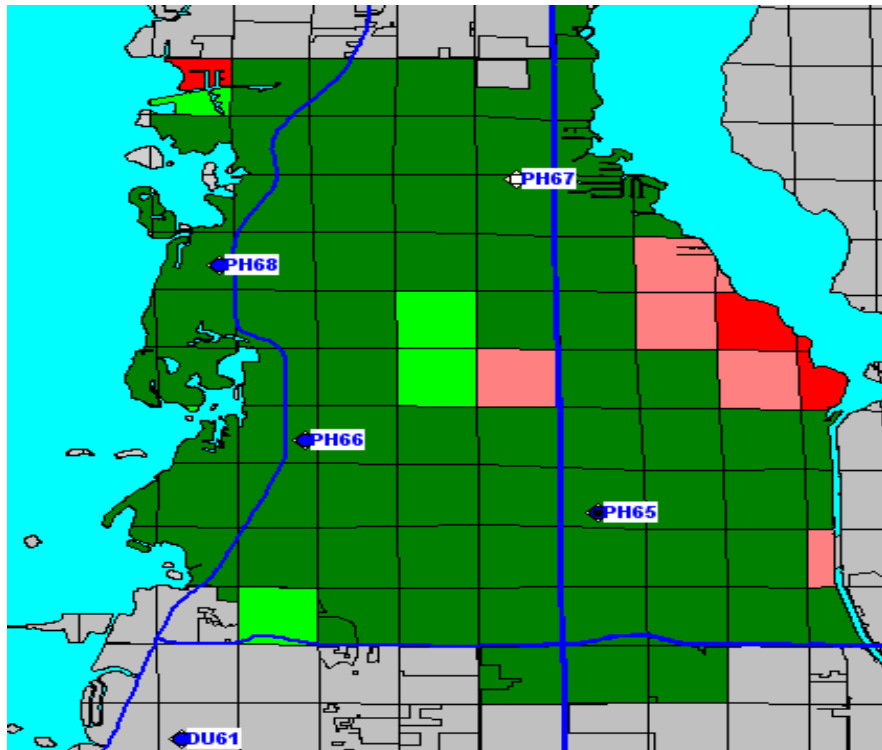
4.3 Palm Harbor

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



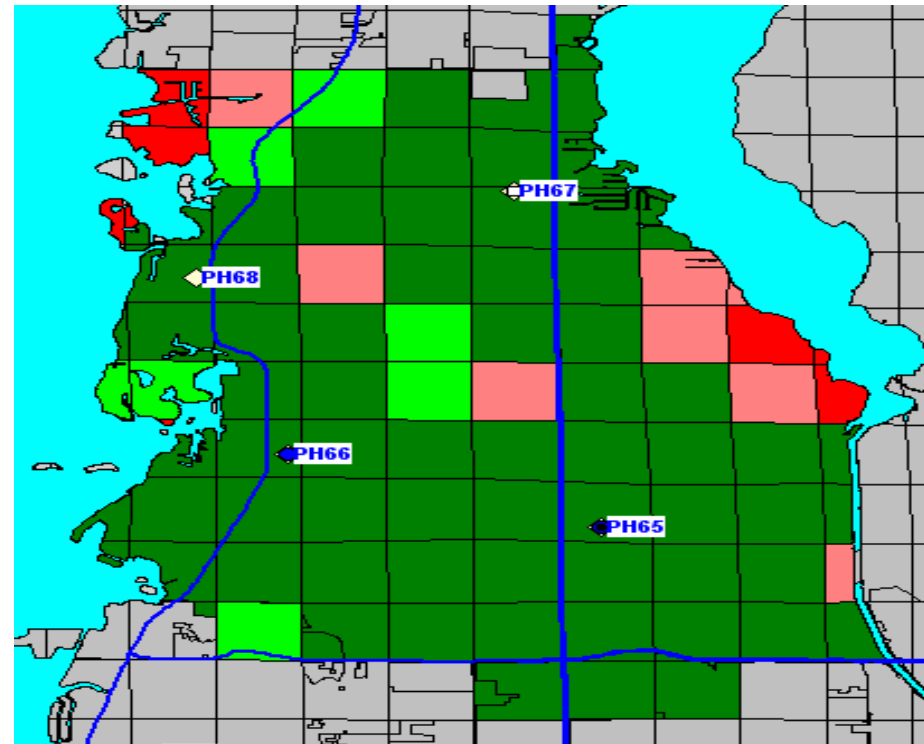
Current

94%
5:00 Average



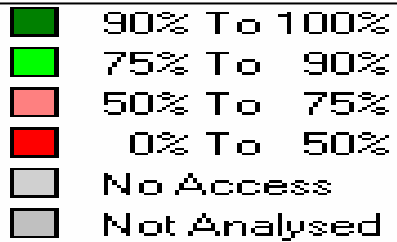
Proposed

Discontinue 1 ALS Engine
93%
5:04 Average



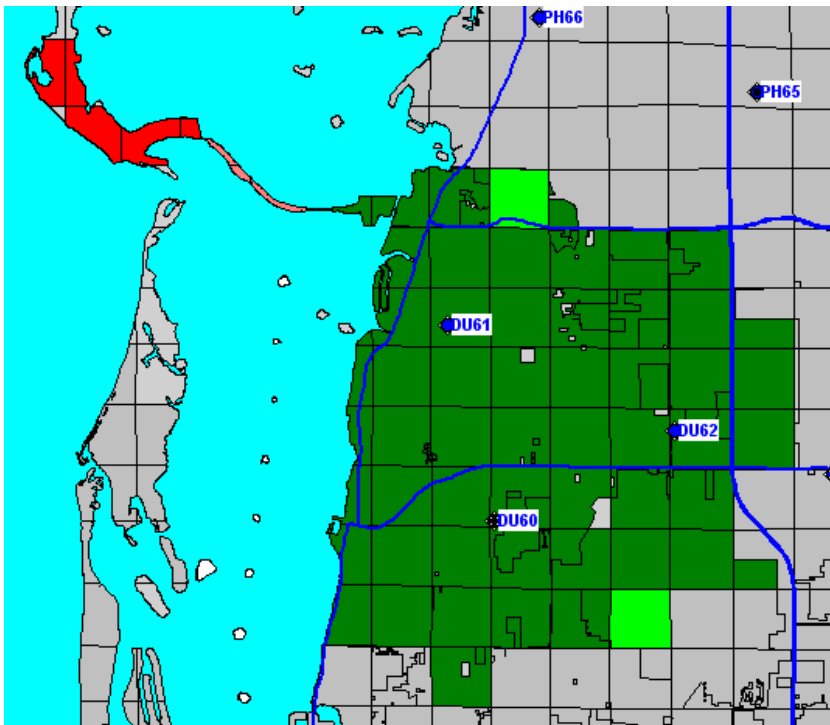
4.4 Dunedin

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



Current

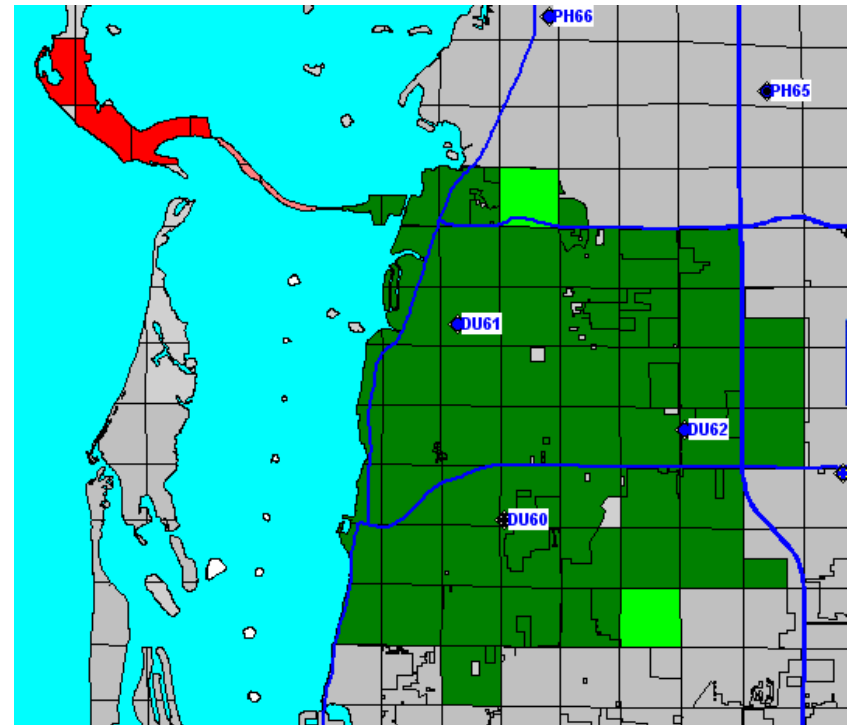
98%
4:33 Average



Proposed

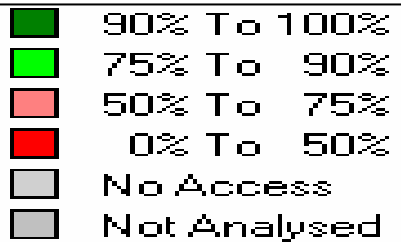
No Changes Proposed

98%
4:33 Average



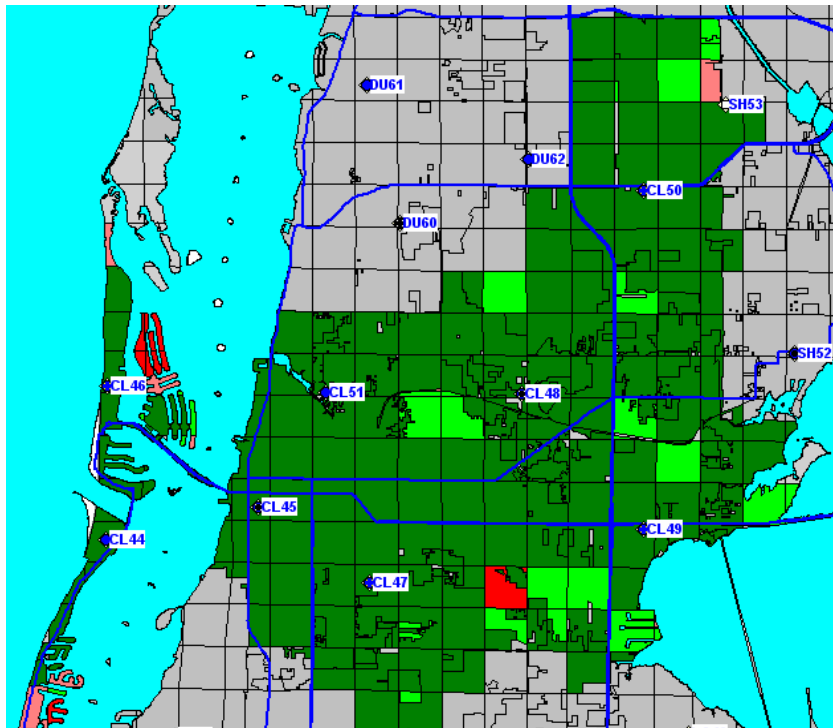
4.5 Clearwater

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



Current

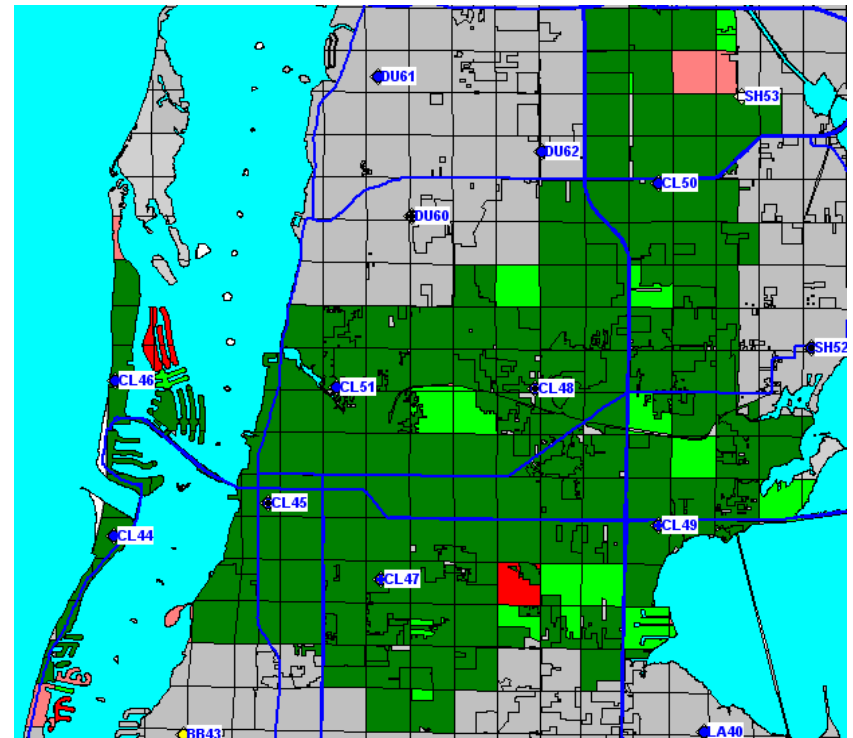
97%
4:36 Average



Proposed

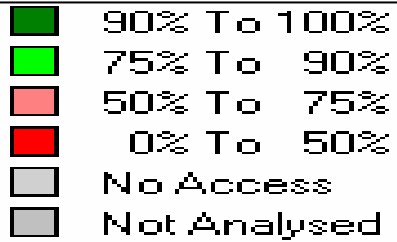
Realign 2 ALS Rescues to ALS Engines

97%
4:36 Average



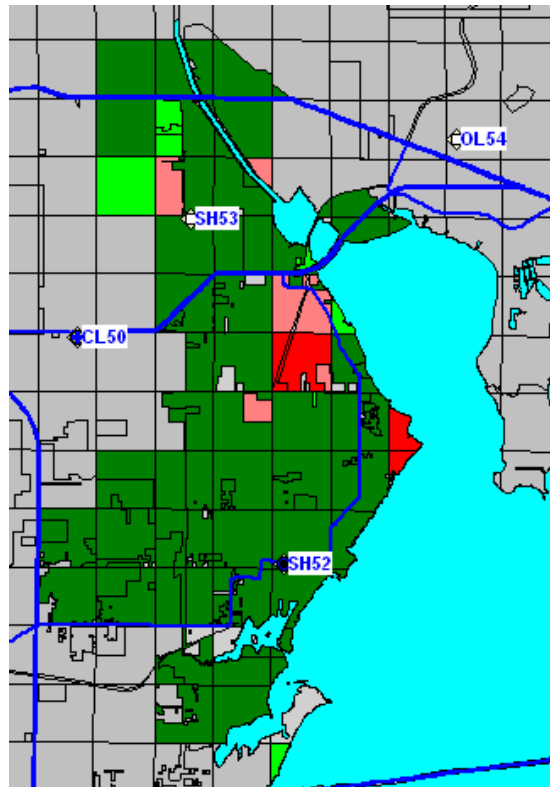
4.6 Safety Harbor

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



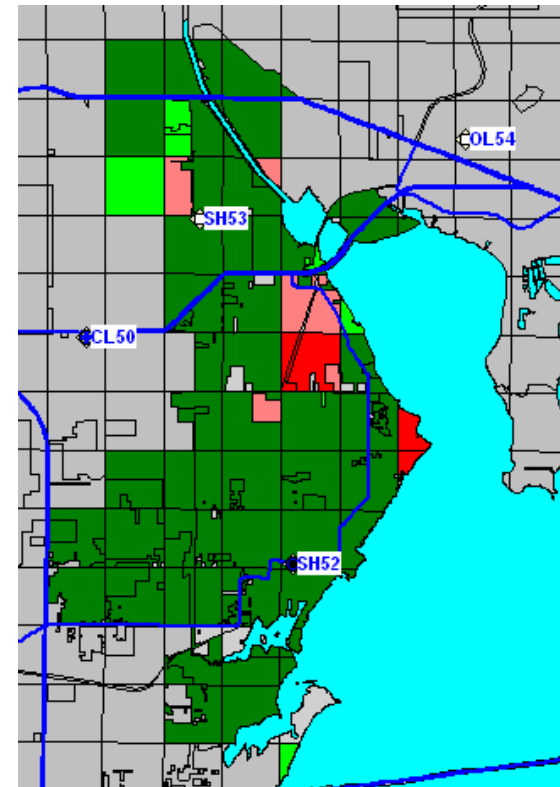
Current

97%
4:35 Average



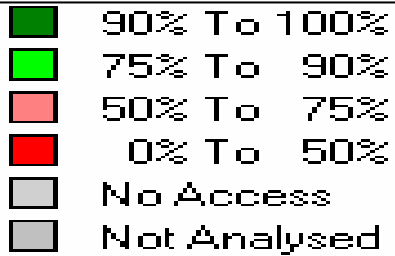
Proposed

No Changes Proposed
97%
4:35 Average



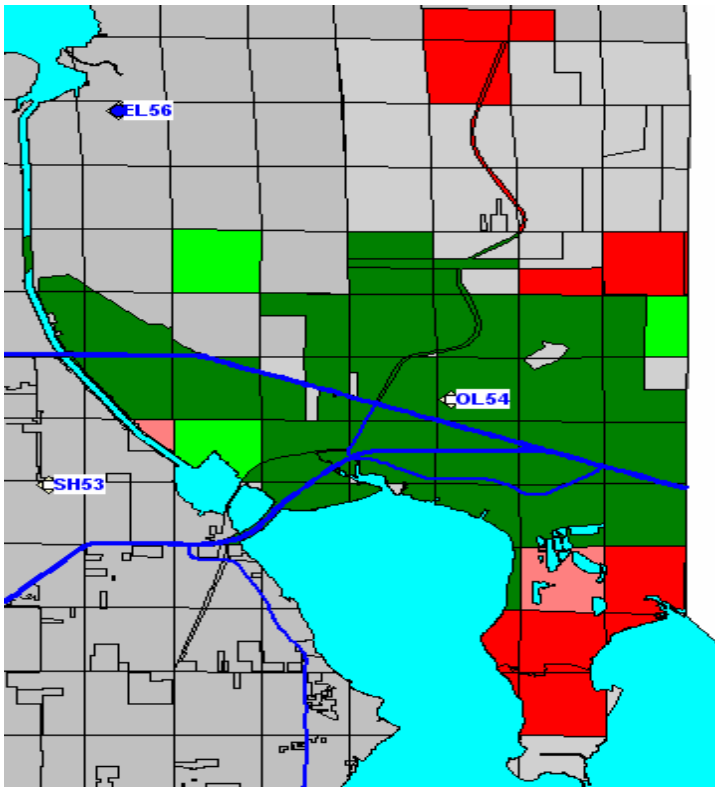
4.7 Oldsmar

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



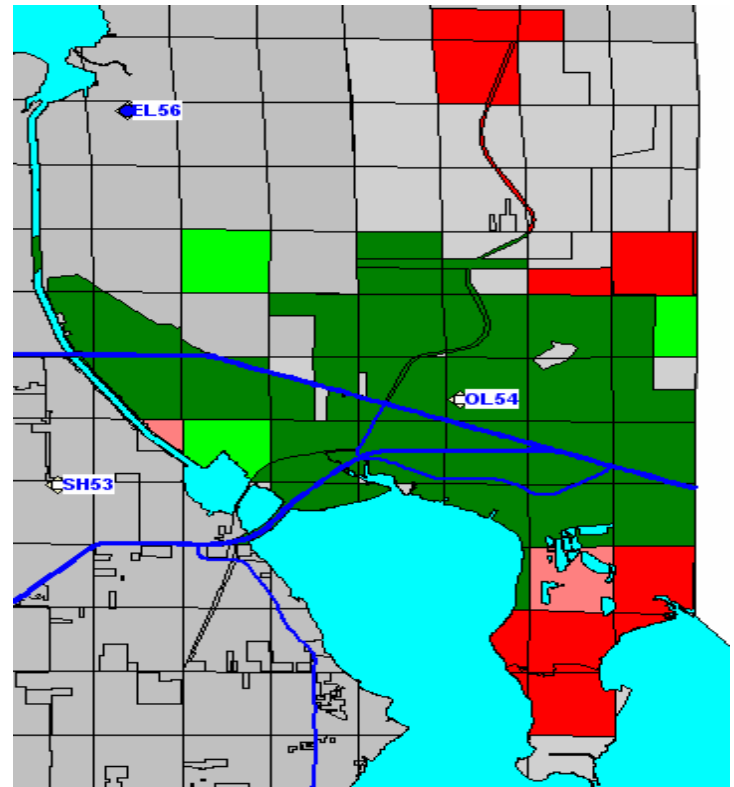
Current

97%
4:32 Average



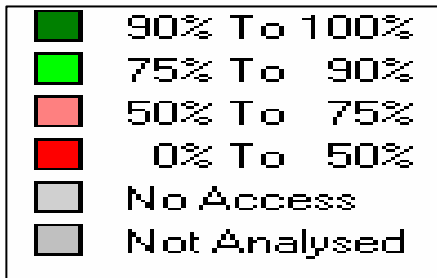
Proposed

No Changes Proposed
97%
4:32 Average



4.8 Largo

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency

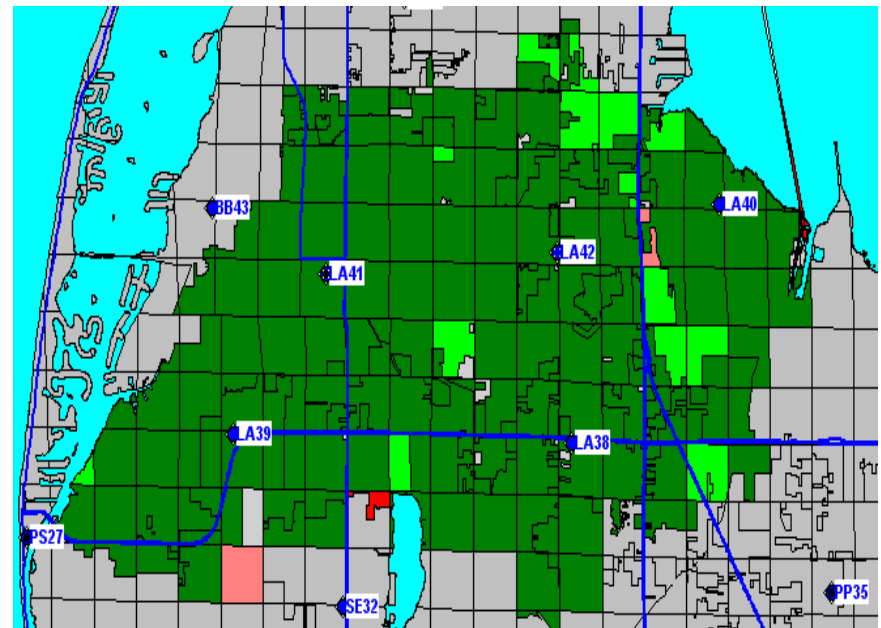
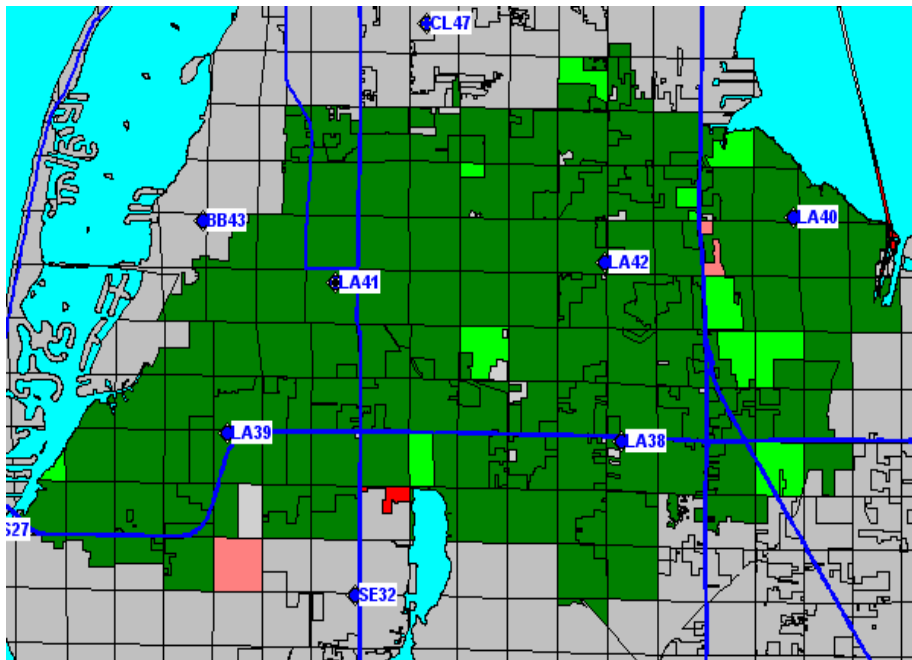


Current

99%
4:42 Average

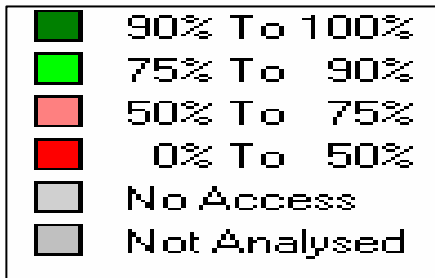
Proposed

Discontinue 1 ALS Engine
99%
4:44 Average



4.9 Belleair Bluffs

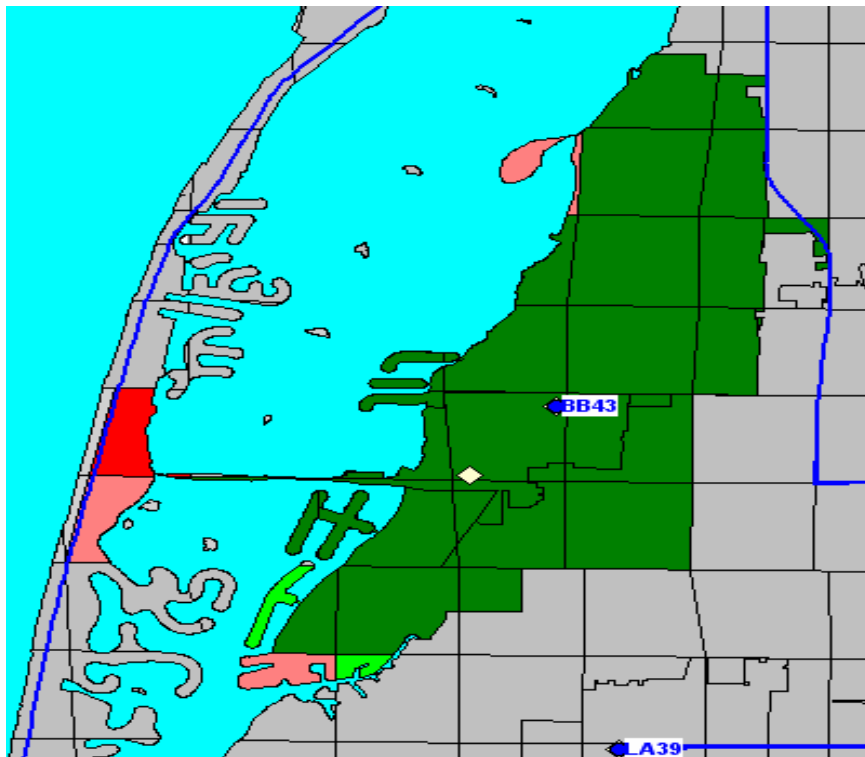
Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



Current

97%

4:41 Average

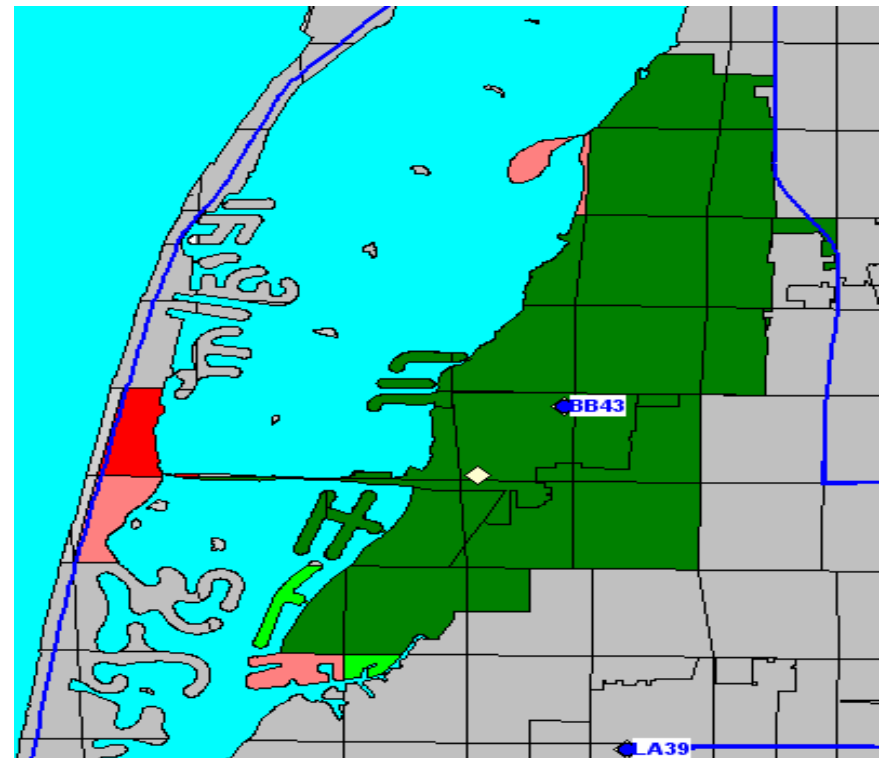


Proposed

No Changes Proposed

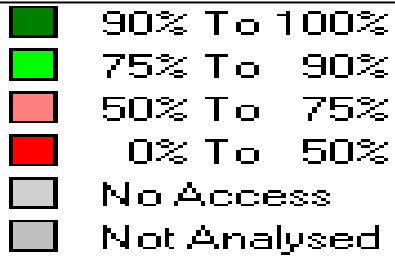
97%

4:41 Average



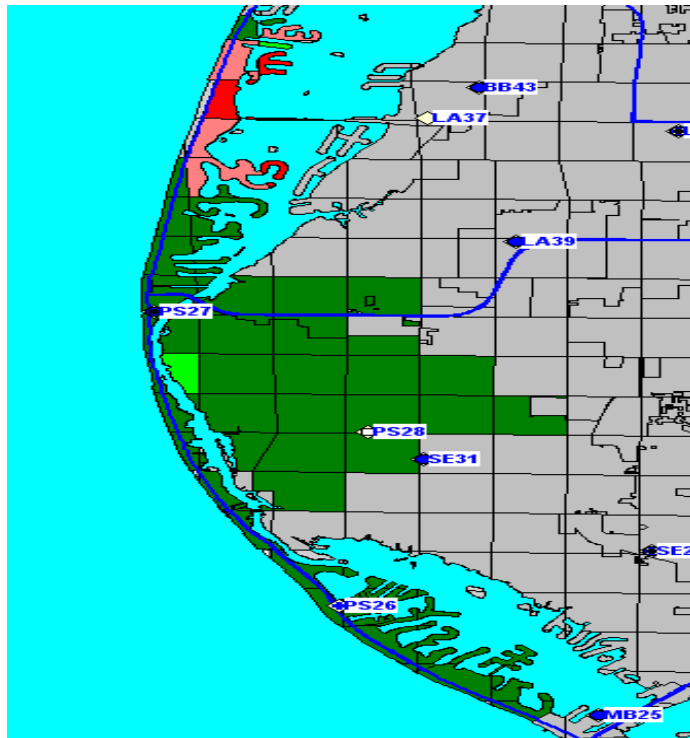
4.10 Pinellas Suncoast

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



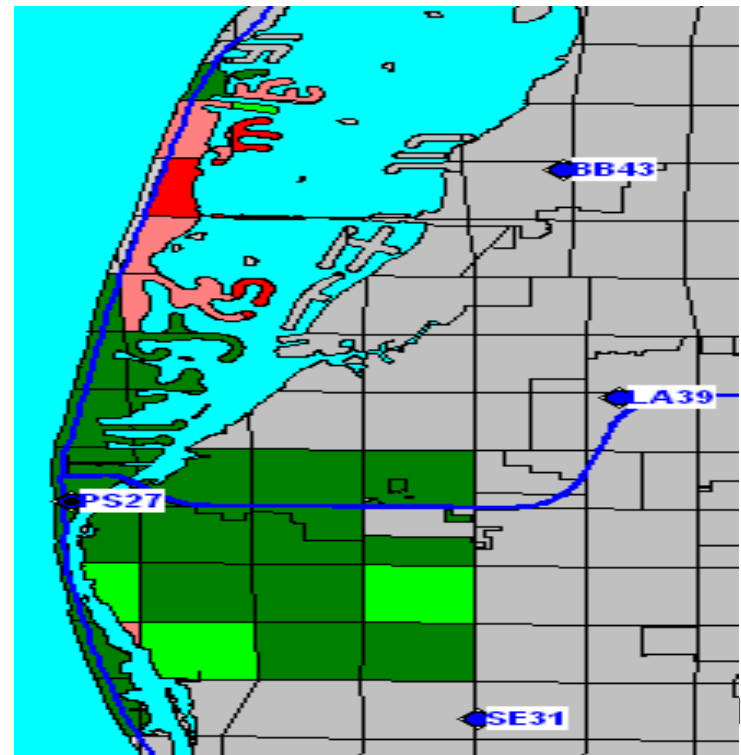
Current

98%
4:40 Average



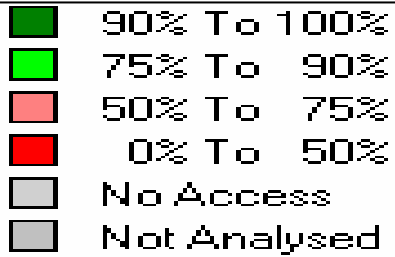
Proposed

Discontinue 1 Rescue & 1 ALS Engine
95%
5:09 Average



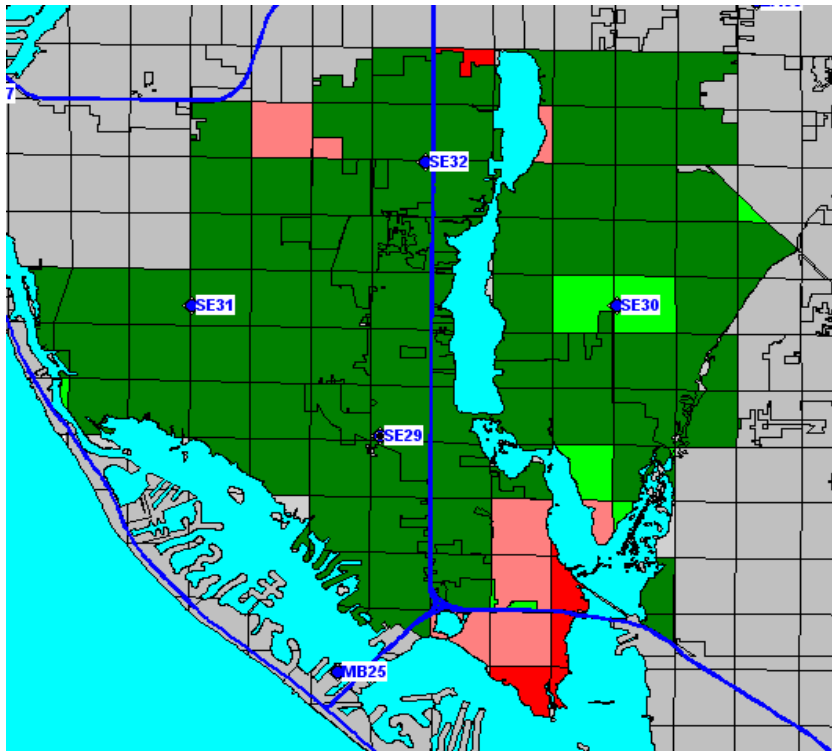
4.11 Seminole

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



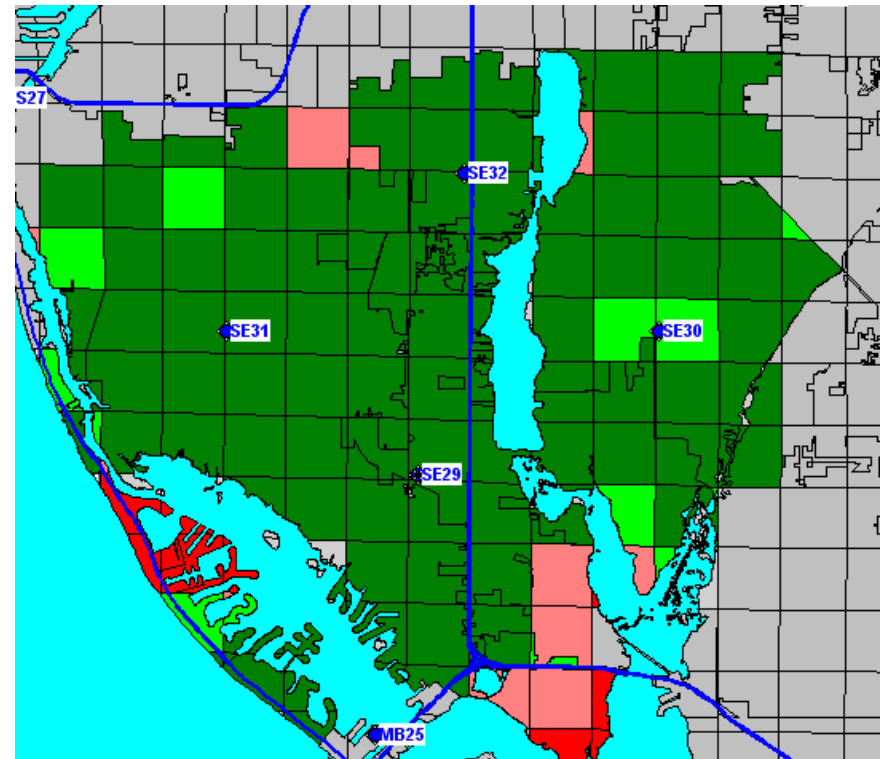
Current

96%
4:48 Average



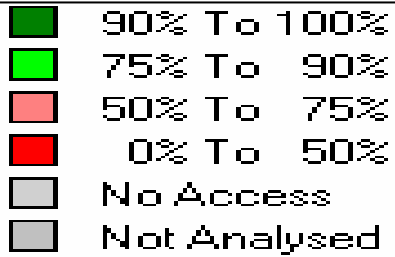
Proposed

New Service Area Analyzed
95%
4:55 Average



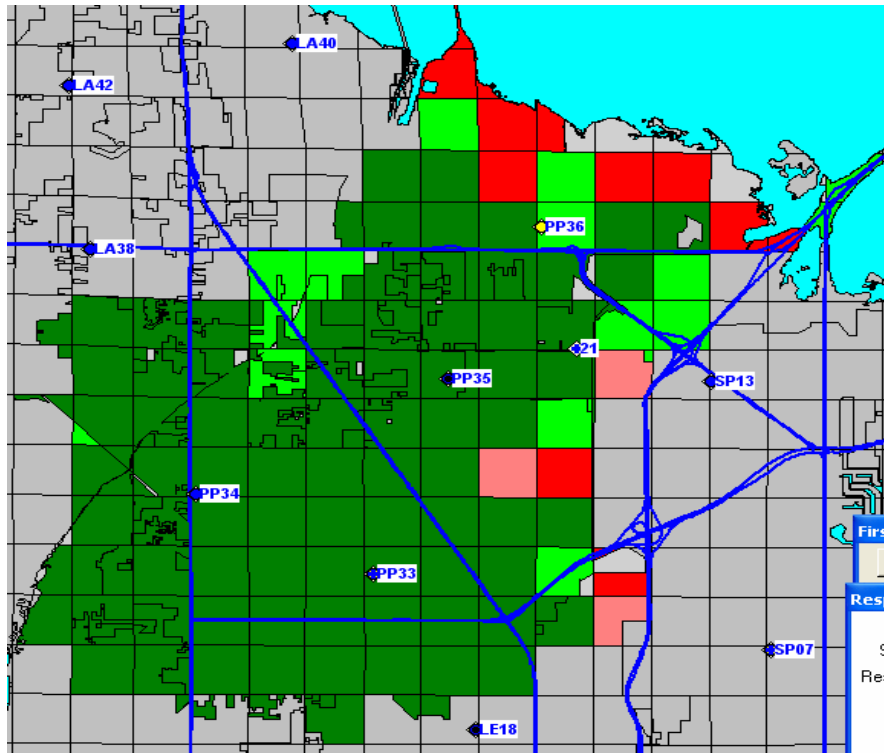
4.12 Pinellas Park

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



Current

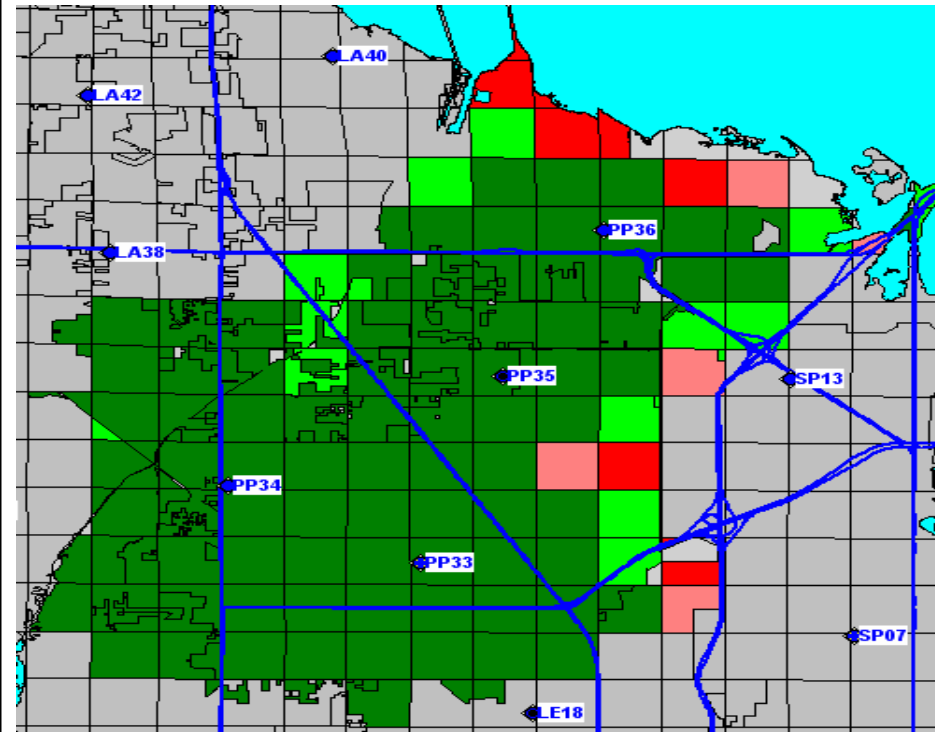
97%
5:03 Average



Proposed

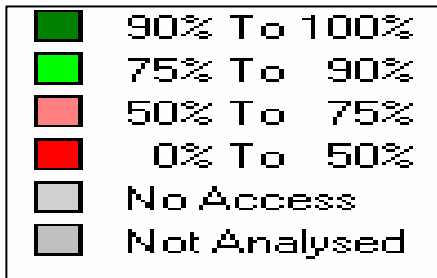
Realign 1 Rescue to ALS Engine

97%
5:02 Average



4.13 Lealman

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency

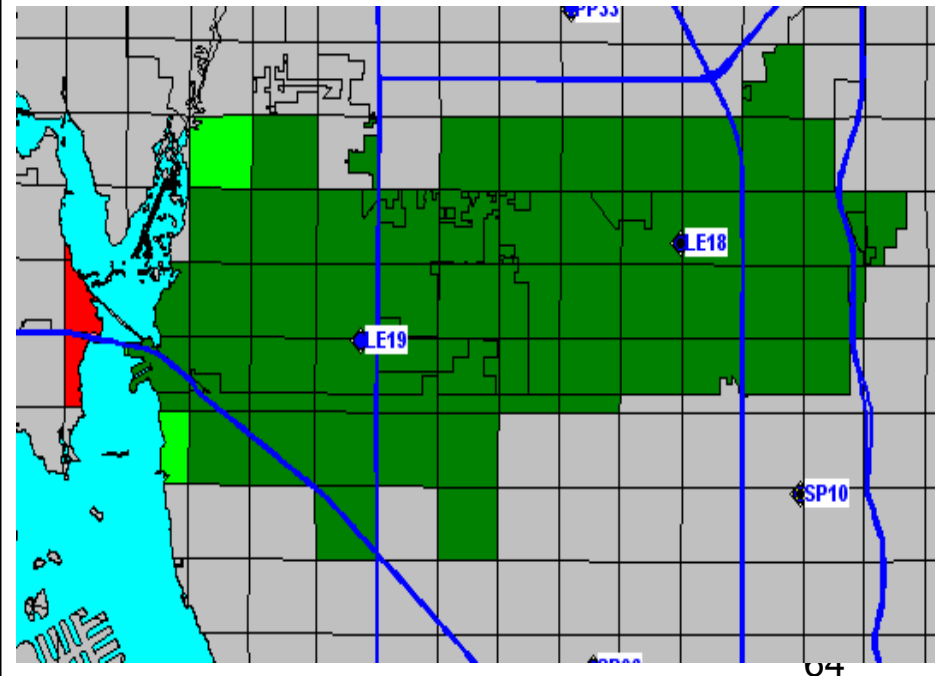
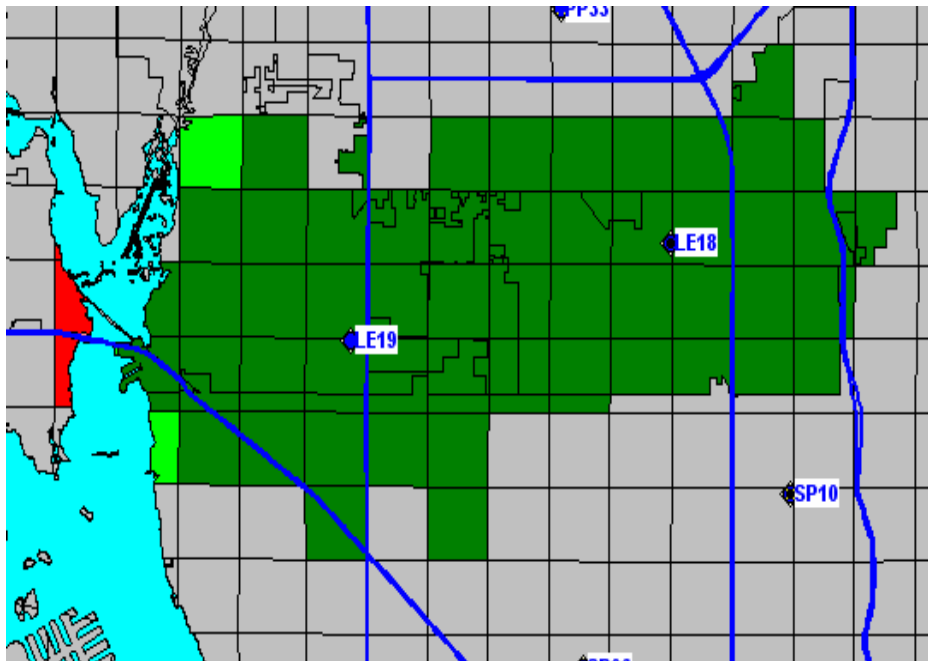


Current

99%
4:49 Average

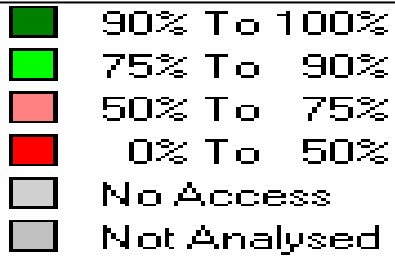
Proposed

No Changes Proposed
99%
4:49 Average



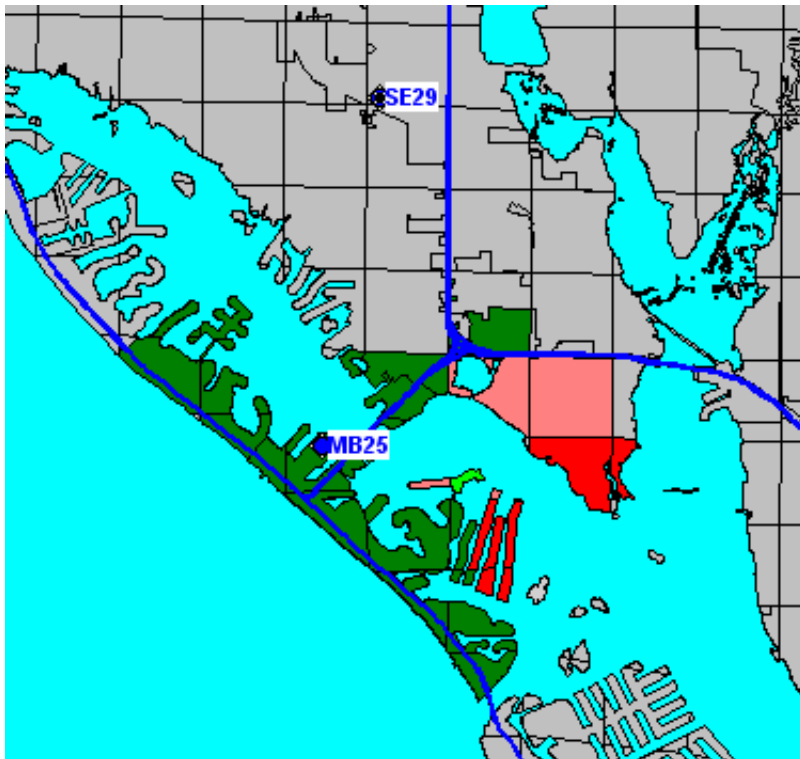
4.14 Madeira Beach

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



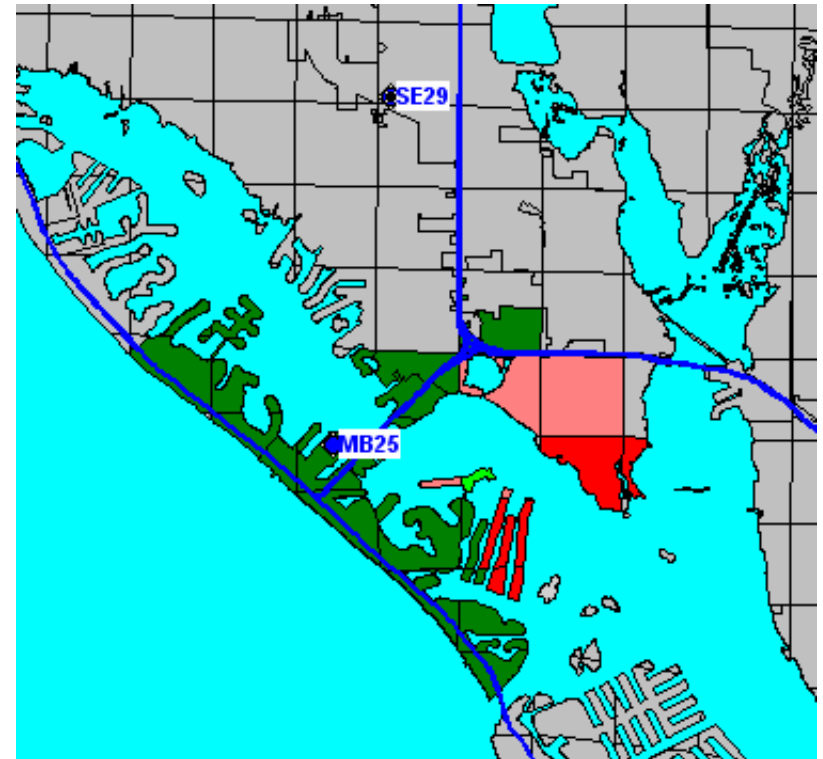
Current

95%
4:52 Average



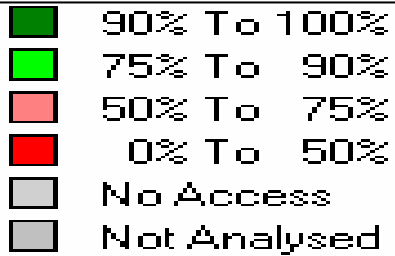
Proposed

No Changes Proposed
95%
4:52 Average



4.15 Treasure Island

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency

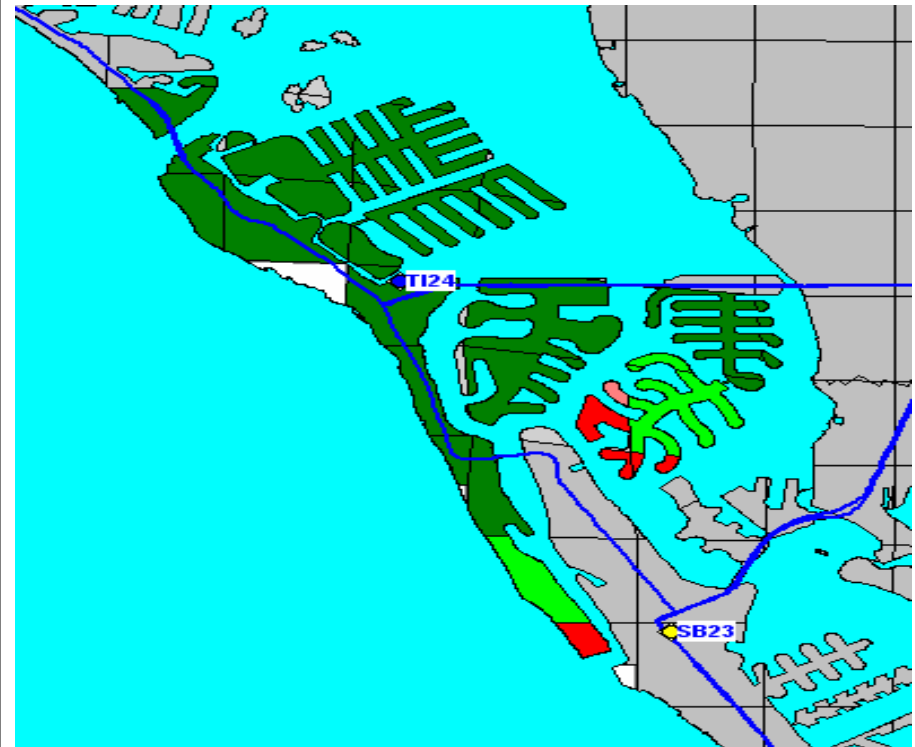
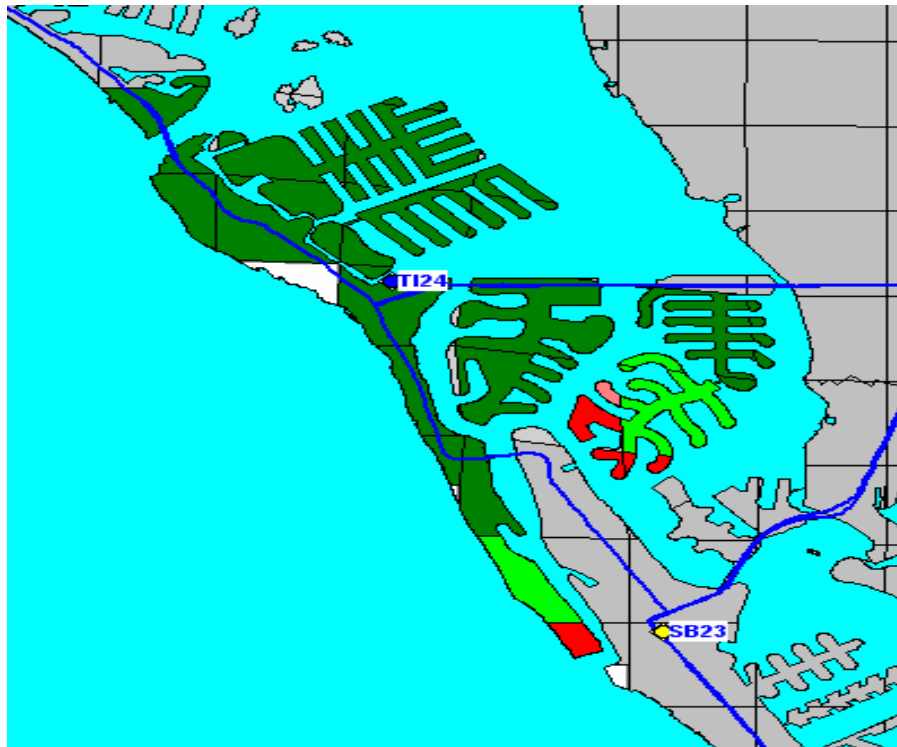


Current

98%
3:59 Average

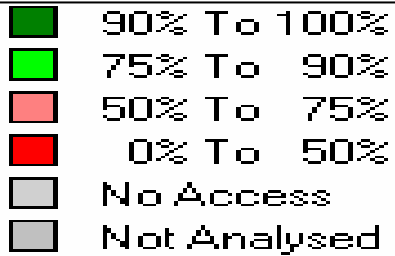
Proposed

No Changes Proposed
98%
3:59 Average



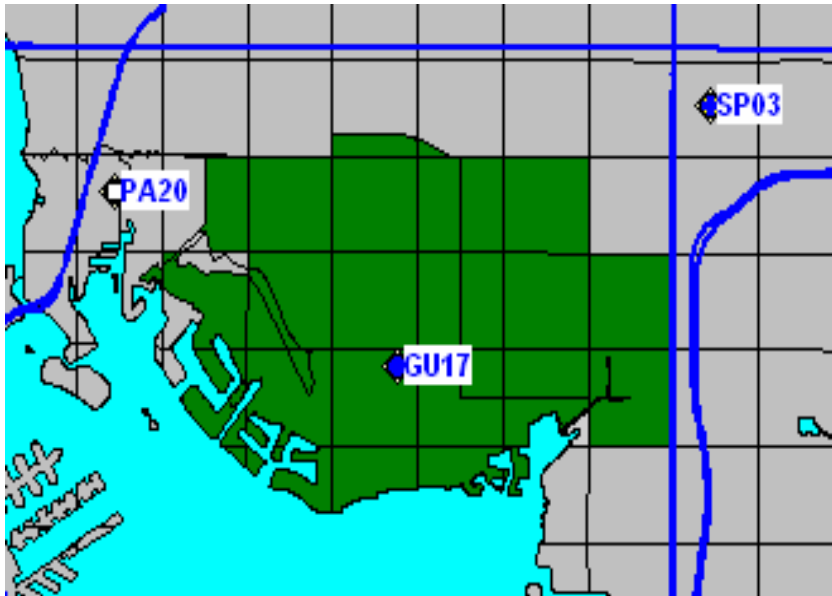
4.16 Gulfport

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



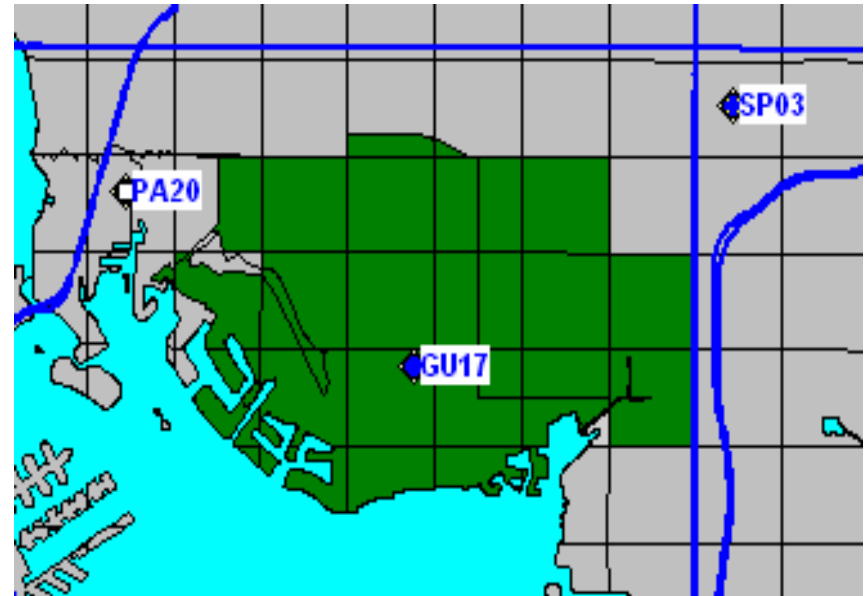
Current

99%
4:28 Average



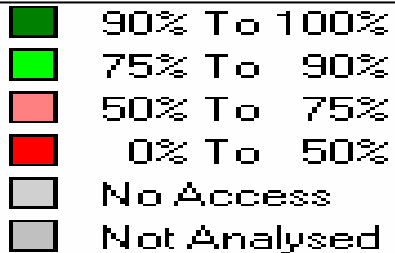
Proposed

No Changes Proposed
99%
4:28 Average



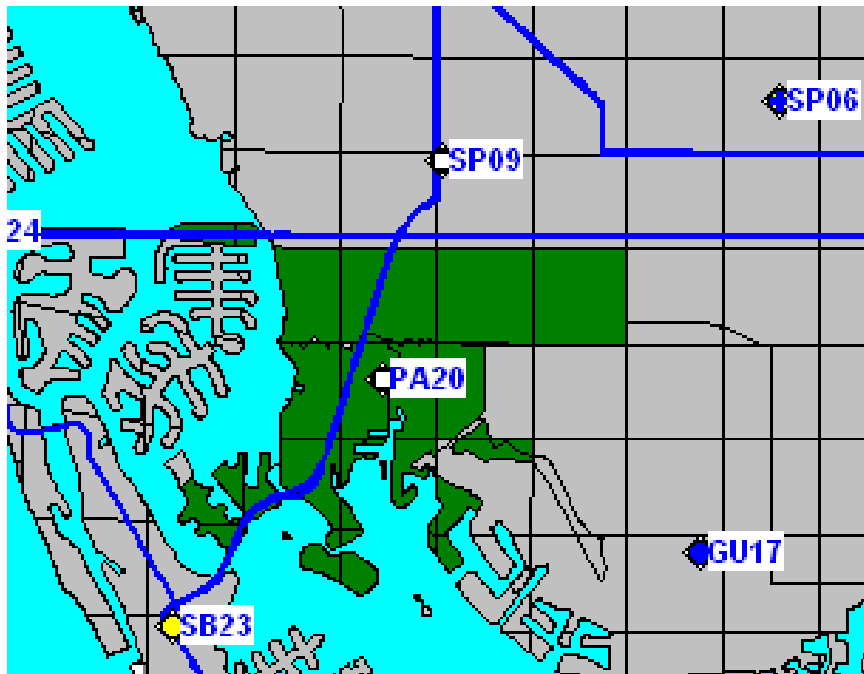
4.17 South Pasadena

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



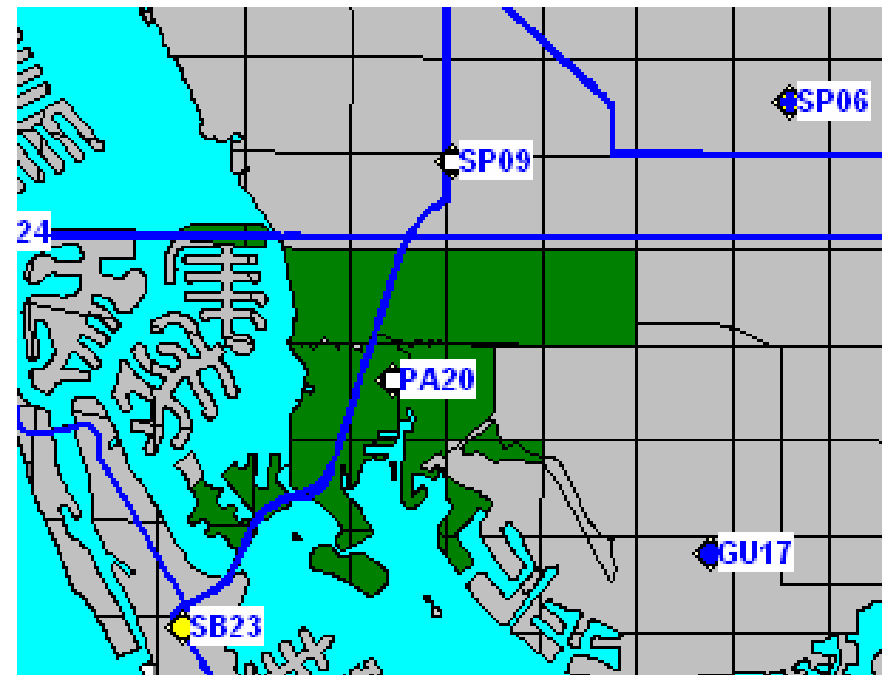
Current

99%
3:44 Average



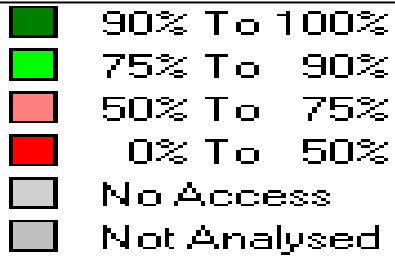
Proposed

No Changes Proposed
99%
3:44 Average



4.18 St Petersburg

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency

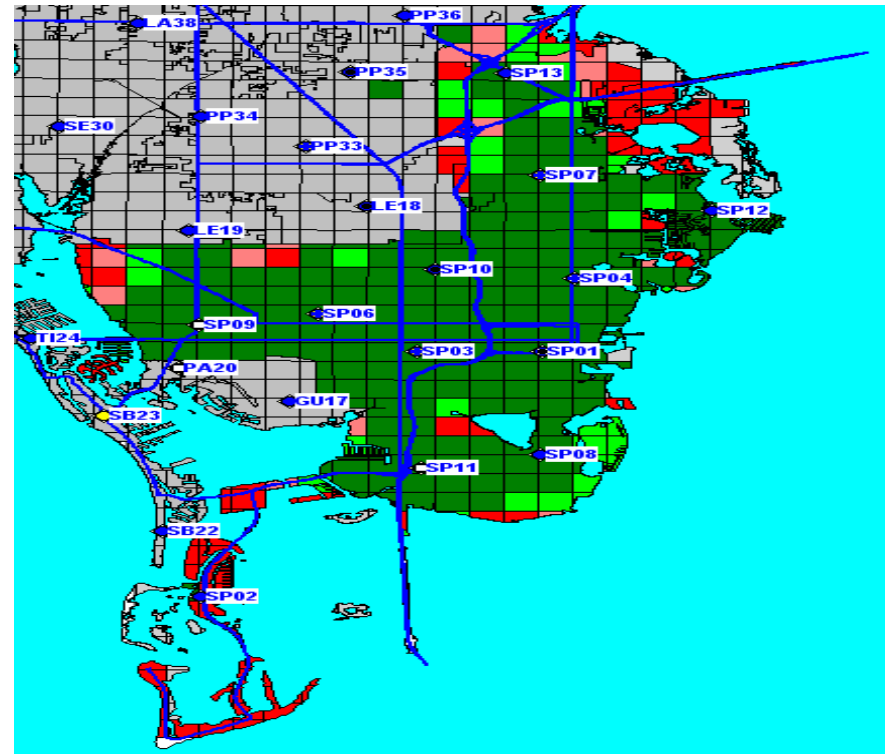
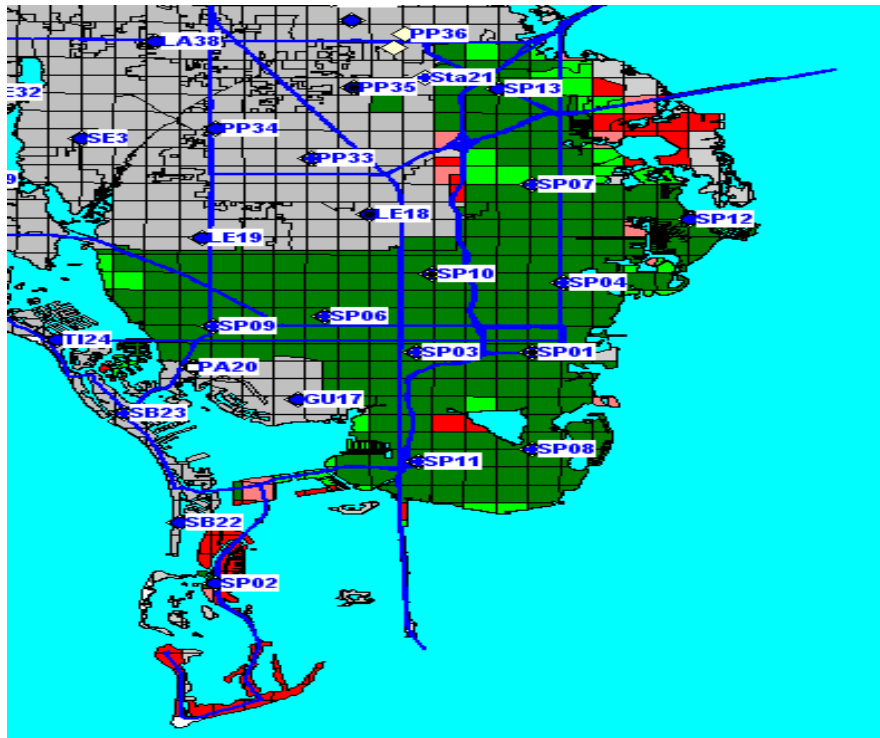


Current

97%
4:36 Average

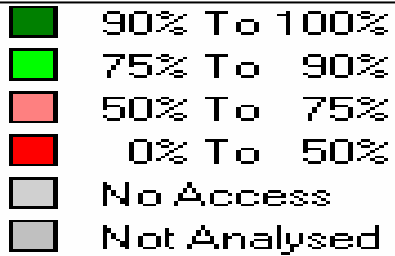
Proposed

Realign 4 Rescues to ALS Engine
96%
4:37 Average



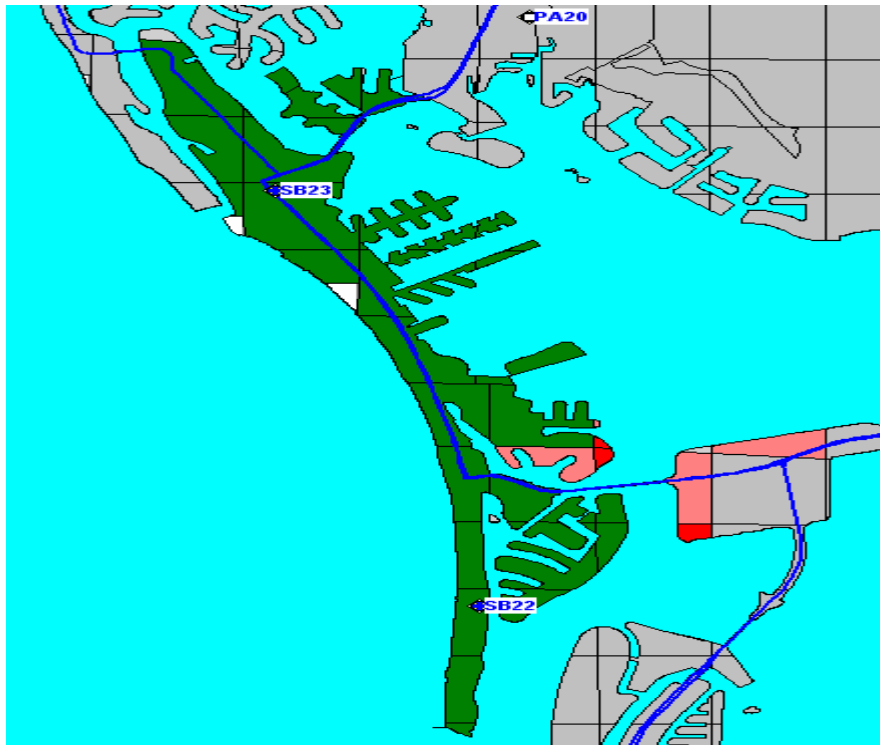
4.19 St. Pete Beach

Response Time Performance Analysis – 7 Minute, 30 Seconds Emergency



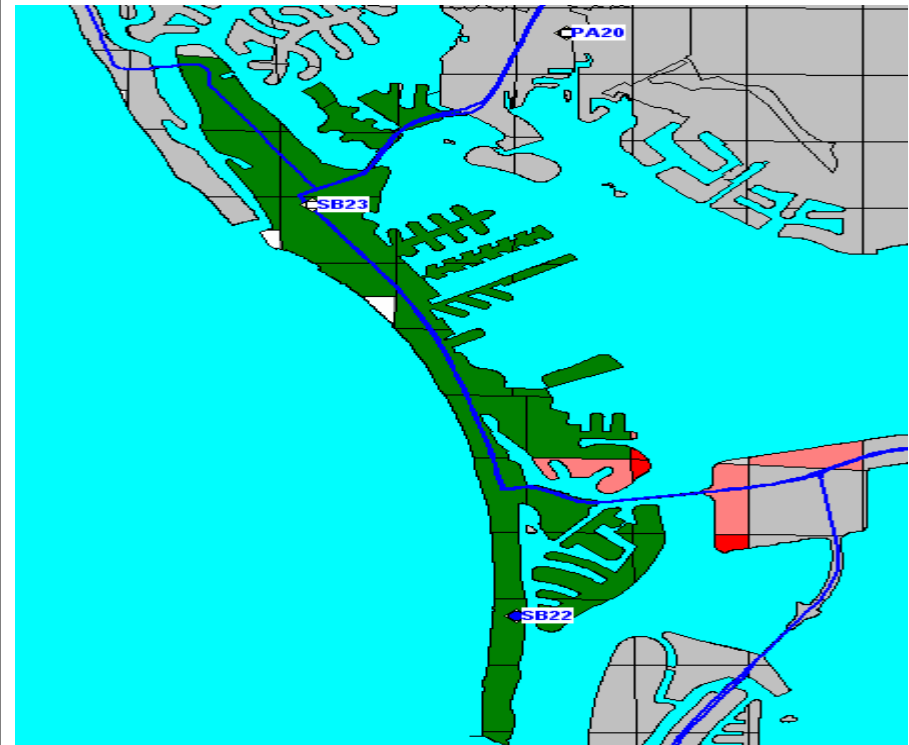
Current

97%
3:39 Average



Proposed

Realign 2 Rescues to ALS Engines
97%
3:40 Average



Level of Service Approval

**4 - EMS Authority Action to
Fully Implement Level of Service
Standard –**

**Adopt by Resolution the Response Time
Standard and the ALS Unit Approval
Criteria Components of the EMS
Standards Resolution**

5 - ALS First Responder

Reasonable and Customary Cost Determination

Funding Methodology Overview

Pinellas County EMS Authority
Dependent Special District
Countywide Ad Valorem Property Tax
“Regulator and Funder”



Cities and Fire Districts
“ALS First Responder Service Provider”

Funding Methodology Overview

**City or Fire District Funding
Line Item Budget**

**(Proportionate Share for
Unincorporated Areas)**

**EMS Funding
Fixed Price**

Current Budget Method

- Used by most Fire Departments
- EMS Funding is treated like a Grant
- Doesn't relate to Actual Costs



**Expense Level Here
Means "Under Funding"
Cost Shift of EMS Expense to Fire**



**Expense Level Here
Means "Excess Funding"
Cost Shift of Fire Expense to EMS**

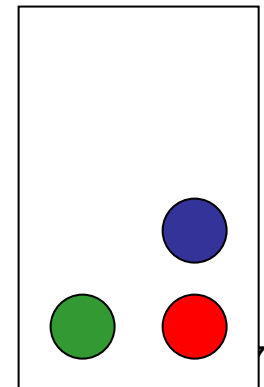
Funding Methodology Overview

- **Easy, Right?**
- **There have been a couple of academic studies on costing EMS Services in the Fire Service and they are very complex:**
 - **Integration of Funding Sources**
 - **EMS, City Fire, Unincorporated Fire, Grants, Service Contracts**
 - **Response Units**
 - **Staffed for Functional Need, not separated by Funding Source**
 - **Work together as a Team and assigned Duties as the Emergency dictates, which does not relate to the Funding Source**
 - **EMS funded Firefighter/Paramedics fight Fires**
 - **City funded Firefighters can be Paramedics and treat patients**

Funding Methodology Overview



- Not to belabor the point, but, Operations need to make sense
- Extrication (“Jaws of Life”) with Rescue Tools = Fire
- Care of the Extricated Patient = EMS
- This particular Unit could be assigned to one or the other.
- Sometimes they are assigned to both; or their role shifts during the emergency to new assignments.



Limitations/Benefits of Prior Funding Models

- **1981-1987 – Budget Based, but, there was NO definition of Service Delivery Level or “Reasonable and Customary” Costs. EMS Authority did not feel there were financial controls in place.**

- **1987-1997 – Formula Based Contract**
 - **Methodology varied Funding based on EMS Responses**
 - **Staffing and Fixed Costs don’t change on a “slow day”**
 - **Model was structured like a private contractor that could vary the number of personnel based upon demand**
 - **ALS First Responder Services are built as a preparedness model**
 - **“Excess Compensation” clause caused issues to remain without resolution and disparity among the Fire Departments.**

Limitations/Benefits of Prior Funding Models

- **1989 – St. Petersburg Lawsuit and Revision to Special Act**
 - **Not going to dwell on the case**
 - **Our “go forward” approach is to comply with the outcome of the litigation and exercise the responsibilities given to the EMS Authority by the Special Act:**
 - **Setting Service Delivery Levels**
 - **Determining “Reasonable and Customary” Costs**
 - **Revision to Special Act in 1989 established that we cannot go below the Level of Service provided by the Fire Departments at that time.**

Limitations/Benefits of Prior Funding Models

- **1997-2007 – Fixed Price Agreement with Adjustment for Inflation**
- **Negotiated a Fixed Price and Adjusted when Units were added.**
- **Contract worked well operationally; there were no disputes or lawsuits**
- **It eliminated the “run call to justify funding” concept.**
- **Method contained costs with inflation mechanism.**
- **Method did shift costs from EMS to Fire Departments and Unincorporated Fire Districts. For example, if Inflation was 3% and Health Benefit costs increased 8% then costs were shifted by 5%.**
- **There was not enough dialogue between Funder and Provider about costs that were increasing.**
- **There was a large “adjustment” in funding at the beginning of the new Agreement to “reset” funding to actual costs. One time increase was 21% (\$8 Million).**

Limitations/Benefits of Prior Funding Models

- **2007-2012 – Fixed Price Agreement with Adjustment for Inflation**
- **Negotiated a new Fixed Price and System Improvements were made**
- **Contract term was shortened to 5 Years to ensure more frequent “reset” of funding to actual costs and reduce large adjustments.**
- **Better Alignment of Actual Costs to Funding. For example, authorized units, staffing requirements, Paramedic Salary and Benefits were all linked and funded uniformly.**
- **“Uniformly” means the Actual Costs for each Fire Department and not exactly equal system wide:**
 - **Workers in the same classification have varying years of service and salaries.**
 - **Individual Fire Department have different benefit packages; paid time off, etc.**

Limitations/Benefits of Prior Funding Models

- **There is less variability on Cost per Paramedic Position**
- **It is not Perfect, but, it is a good baseline going into the future. There are limitations because the method is inadequate for accounting and auditing purposes.**
- **Funding will never be completely uniform:**
 - **Cost per Call varies because of High and Low Call Volume Areas**
 - **Cost per Unit varies because Rescue Funding is 2 Paramedics and ALS Engines are funded for 1 Paramedic (continuously staffed).**
 - **Historical issues that have been allowed to persist; as many as possible will be addressed in the new model.**
- **Unfortunately we cannot continue the current Agreement because Service Level and Funding must be realigned to Anticipated Tax Revenue.**
- **The current Agreement only has “forward gears”**

Proposed Methodology

- **Take all of the best components that have worked over the years**
 - **Utilize much of the existing Standardized Service Agreement**
 - **Utilize much of the 2007 “Reasonable and Customary” Cost Methods and solidify the processes.**
- **Two Distinct Options to Consider:**
 - **1) More frequent negotiation of Fixed Price Agreement using Service Level objectives of the EMS Authority**
 - **2) Utilize Actual Cost EMS Budgets that are submitted and funded year to year with the review and approval of the EMS Authority.**
- **Either approach could be used and that decision could be made later.**

Budget Based Methodology

- **The process of linking program service level with actual costs will increase dialogue between the EMS Authority and the Cities and Fire Districts (both at an Elected Official and staff level).**
- **The process will be more transparent to the taxpayer.**
- **The method will be more flexible in our current financial times**
- **Method supports analysis of providing funding support to “must have” necessities and eliminating or reducing “nice to have” components.**
- **It is consistent with the Special Act.**
- **It will require a Resolution and supporting Rules and Regulations**

Budget Based Funding Recommendations

- **5.1** Recommend the Authority adopt a Resolution requiring all ALS First Responder service providers to have a separate and standardized line item budget solely for the purposes of ALS First Responder Services.
- **5.2** Recommend the adoption of necessary Rules and Regulations to require standard Cost Center/Account definitions and implementation of those specific accounting requirements following GFOA standards.
- **5.3** Fully utilize the annual budget approval process described in the Pinellas County Code, Section 54-62.
- **5.4** City or Fire District funded ALS First Responder Unit (above what is authorized for funding by the EMS Authority) shall not be contained in the line item budget for funded services. If allowed, this would allow “deficit spending” and drive requests for funding increases.
- **5.5** Require a Reserve for the ALS First Response Cost Center in each Fire Department. Stipulate that EMS funds can only be utilized for the services contracted under the service agreement.

Budget Based Funding Recommendations

- **5.6** Set in rule the actual Cost Center/Account line item budget structure and definitions for allowable costs.
- **5.7** Set in rule a mechanism to return EMS funds when ALS First Responder Reserves exceed a level set by the EMS Authority.
- **5.8** The EMS Authority must have specific legislative findings regarding “reasonable and customary costs” that are allowed and disallowed.

Reasonable and Customary Costs

- **Since 1981 (28 years), EMS has fully funded the salary and benefits of Authorized Firefighter/Paramedic positions.**
- **You will hear:**
 - **EMS is inordinately expensive as compared to other communities, which isn't true. EMS offsets the cost of Fire Protection Service by providing Firefighter staffing for ALS Engines and augmenting the Firefighting force with Firefighter/Paramedics are assigned to Rescue Units. This does not mean EMS cannot reduce expenses.**

Paramedic Salaries

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.9 Actual Paramedic Salaries (including overtime) for personnel assigned to staff Authorized Paramedic positions on ALS First Responder Units. Payroll detail and general ledger detail shall be assigned to the proper ALS First Responder Cost Center/Account.**
- **5.10 Actual Paramedic Salaries (including overtime) for the actual hours personnel provide relief staffing for Authorized Paramedic positions on ALS First Responder Units. Payroll detail and general ledger detail shall be assigned to the proper ALS First Responder Cost Center/Account.**

Paramedic Fringe Benefits

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.11 Actual Paramedic Benefits for personnel assigned to staff Authorized Paramedic positions on ALS First Responder Units. Cost detail and general ledger detail shall be assigned to the proper ALS First Responder Cost Center/Account.**
- **5.12 Benefits may include the following: Pension/Retirement Contribution, Disability, Social Security, Group Health/Dental Insurance, Paid Time Off (Holiday, Sick, Vacation), Group Life Insurance, Worker’s Compensation, and Unemployment Compensation.**
- **5.13 Actual Paramedic Benefit costs incurred for personnel during actual hours while providing relief staffing for Authorized Paramedic positions on ALS First Responder Units. Cost detail and general ledger detail shall be assigned to the proper ALS First Responder Cost Center/Account.**

Continuous Staffing and Consistency

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.14** Such Salary pay ranges and Benefit Costs shall be consistent with the costs incurred by the City or Fire District for positions not funded by EMS.
- **5.15** Total hours of work by primary or relief staff does not exceed 8,760 hours (24 hours x 365 days) for any Authorized Paramedic position in any given Fiscal Year.
- **5.16** If not controlled and fiscally responsible the EMS Authority may have to limit or cap the allowable cost of specific Salary or Benefit components. Staff is not recommending that action at this time.
- **Paramedic Salary/Benefits represent 82% of Costs.**

Uniforms, Equipment and Supplies

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.17** Actual cost of uniforms, uniform accessories, health screenings, and other protective equipment for personnel assigned to staff Authorized Paramedic positions on ALS First Responder Units.
- **5.18** EMS shall provide all **EKG Equipment**, Medical Equipment, Radios, Computers, Medical Waste Disposal for Authority funded ALS First Responder Units.
- **5.19** EMS shall provide all Medical Supplies for Authority funded Units to ensure standardization.

Insurance, Permits, and Training

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.20** Costs for Vehicle Insurance for Authority funded Rescue Units. Cities and Fire Districts are responsible for Fire Apparatus.
- **5.21** Costs for Professional Liability Insurance to the limits authorized by the EMS Authority. Limits and necessity are being evaluated given sovereign immunity limits and claim history.
- **5.22** Costs for State EMS License and Vehicle Permits for Authority funded Units, Certification costs for personnel assigned to staff Authorized Paramedic positions on ALS First Responder Units to include (State Certification, ACLS, ITLS, etc.)
- **5.23** EMS shall provide or cause to be provided all Continuing Medical Education (CME) training and training materials. CME shall be conducted on duty.

EMS Coordinator

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.24 One (1) EMS Coordinator position (or partial position -25% of a Full Time Equivalent (FTE) for each unit for Fire Departments with less than four (4) Authority funded ALS First Responder Units. The actual Salary and Benefits are an allowable cost. Payroll detail and general ledger detail shall be assigned to the proper ALS First Responder Cost Center/Account. Benefits may include the following: Pension/Retirement Contribution, Disability, Social Security, Group Health/Dental Insurance, Paid Time Off (Holiday, Sick, Vacation), Group Life Insurance, Worker’s Compensation, and Unemployment Compensation.**
- **Costs for the EMS Coordinator’s uniform, protective equipment, certifications, and training consistent with Paramedic provisions.**

Rescue Lieutenant

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.25 One (1) Rescue Lieutenant (LR) position for every five (5) Authority funded Rescue Units continuously staffed. New LR Units must be approved by the Authority. The actual Salary and Benefits are an allowable cost. Payroll detail and general ledger detail shall be assigned to the proper ALS First Responder Cost Center/Account. Benefits may include the following: Pension/Retirement Contribution, Social Security, Disability, Group Health/Dental Insurance, Paid Time Off (Holiday, Sick, Vacation), Group Life Insurance, Worker’s Compensation, and Unemployment Compensation.**
- **Costs for the LR’s relief staffing, uniform, protective equipment, certifications, and training consistent with Paramedic provisions.**

EMS Administrative Support Positions

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.26** EMS Administrative support positions must be approved by the Authority for only large agencies (more than 10 Authority funded Paramedic positions). The actual Salary and Benefits are an allowable cost. Payroll detail and general ledger detail shall be assigned to the proper ALS First Responder Cost Center/Account. Benefits may include the following: Pension/Retirement Contribution, Disability, Social Security, Group Health/Dental Insurance, Paid Time Off (Holiday, Sick, Vacation), Group Life Insurance, Worker’s Compensation, and Unemployment Compensation.
- Costs for the Administrative support position’s uniform, protective equipment, certifications, and training consistent with Paramedic provisions for certified Paramedics filling any such position.

Vehicles, Maintenance and Fuel

Recommend the Authority recognize the following as “reasonable and customary” costs of providing ALS First Responder Services:

- **5.27** Acquisition, operation, maintenance, fuel and replacement of Authority funded and approved Rescue Vehicles. The useful life of Rescue vehicles shall be a minimum of 5 years. Fire Departments may maintain a maximum of a 25% in Reserve Rescue Vehicles.
- **5.28** Acquisition, operation, maintenance, fuel and replacement of Authority funded and approved EMS Coordinator and LR Vehicles. The useful life of EMS Coordinator and LR vehicles shall be a minimum of 7 years.
- **5.29** Actual cost of Fuel for Authority Funded ALS Engines less 20% to account for non-EMS activity.

Disallowed Costs

- **Recommend the Authority recognize the following are NOT “reasonable and customary” costs of providing ALS First Responder Services and are specifically disallowed:**
- **5.30 Acquisition, Operating, Maintenance and Replacement Costs for:**
 - **Fire Helmets, Bunker Gear, Self Contained Breathing Apparatus**
 - **Fire Stations**
 - **Fire Apparatus**
 - **Contractor Funded Units**
 - **Extrication Tools and Equipment**
 - **Specialized Rescue Equipment**
 - **Fire Related Expenses**
 - **Expenses not specifically authorized as an Allowable Cost.**

Disallowed Costs

- **Recommend the Authority recognize the following are NOT “reasonable and customary” costs of providing ALS First Responder Services and are specifically disallowed:**
- **5.31 Miscellaneous Overhead and Indirect Cost Allocations associated with the City or Independent Fire District operating as an Independent Contractor including legal fees.**

Budget Submission and Approval

- **5.32** The line item budget shall be submitted by each City or Fire District following the filing requirements, schedules and format specified in the rules and procedures.

- **5.33** The EMS Authority shall review and approve or reject the proposed Budget annually for the following Fiscal Year in accordance with the provisions of Section 54-62 of the Pinellas County Code.

Cost Methodology Approval

**5 - EMS Authority Action to
Fully Implement Cost Methodology –**

**Adopt by Resolution and Regulations
the Cost Methodology Component of
the EMS Standards Resolution**

Longer Range Actions

- **County and Cities will engage a Consultant to do an EMS Study that will look at the EMS System Design.**
- **Results of the EMS Study will be sent to OPPAGA for the Fire Protection Services Management Study.**
- **Office of Program Policy Analysis and Government Accountability (OPPAGA) is a special staff unit of the Florida Legislature**

Reassurance

- **The Board or the Public may hear concerns from affected agencies or groups that this action will cause a substantial negative impact – this is not true.**
- **Any service realignment is the responsibility of the various employers – Ambulance Service, Fire Departments, etc.**
- **Any impact on individual positions will be the result of individual management decisions by their departments.**
- **There is Excess Capacity in the EMS System. BOTH Ambulance Services and ALS First Responder Services will be realigned slightly.**
- **The Response Time Standards are NOT being reduced and they far EXCEED National Guidelines.**
- **Taxpayers are expecting Government Services to be Effective and Efficient and should not expect excess in Public Safety Services.**

Closing Remarks

The Recommended Actions are operationally sound, ensure a high service delivery level and reduce costs.

The Health, Safety and Welfare of our citizens and visitors is everyone's collective concern. The Recommended Actions do not diminish that concern or commitment.