



Consolidation Assessment Study

Santa Barbara County and City Fire Departments

June 7, 2005

➤ **Background**

- ↳ Santa Barbara County and City Fire Departments
- ↳ Objectives and Scope
- ↳ Approach and Methodology

➤ **Findings**

- ↳ Advantages and Disadvantages
- ↳ Organizational Structure
- ↳ Financial Cost / Benefit Analysis
- ↳ Conclusion

➤ **Recommendations and Next Steps**

- ↳ Summary

Background

Fire Protection in Santa Barbara County

Fire protection in Santa Barbara is highly fragmented

➤ Santa Barbara County:

- ↪ Population of 399,347 (last census)
- ↪ Total area of 2,744 square miles
- ↪ 9 independent fire protection agencies, each with its own chief, separate governing body and administration

- Santa Barbara County Fire District, governed by the Board of Supervisors
- Cities of Santa Barbara, Santa Maria, Lompoc, Solvang (an hourly paid volunteer department), and Guadalupe, governed by City councils
- Independent Fire Protection Districts of Carpinteria-Summerland, Montecito, and Orcutt (a paid on-call, volunteer department), governed by independent boards



*The Two Fire Departments**

The City and County Fire Departments have begun working together

General Characteristics	City	County
Number of Stations	8	15
Number of Shift Firefighters	83	163
Population	95,000	172,000
Coverage (in sq. miles)	23	1,236
Budget	\$12.2M	\$35.3M
Services Offered	First Responder Hazmat, USAR	Hazmat, OES, Helicopter, Water Rescue, USAR, Paramedics

➤ **Current Status of Functional Consolidation:**

* All data based on 2003-2004

- ↪ Training Academy
- ↪ Procurement (limited)
- ↪ Mutual Aid
- ↪ Dispatch (in progress)
- ↪ Like-minded Chiefs
- ↪ Arson investigations
- ↪ Regional grant applications

Assessment Objective and Scope

Our task was to conduct an objective assessment of a potential consolidation

➤ **Stated objective:**

- ↪ Conduct an unbiased analysis of a potential consolidation
- ↪ Identify the advantages and disadvantages of consolidation
- ↪ Complete a thorough financial review of consolidation scenarios
- ↪ Provide a financial model that can be applied to future consolidation analyses
- ↪ Investigate opportunities for operational efficiencies

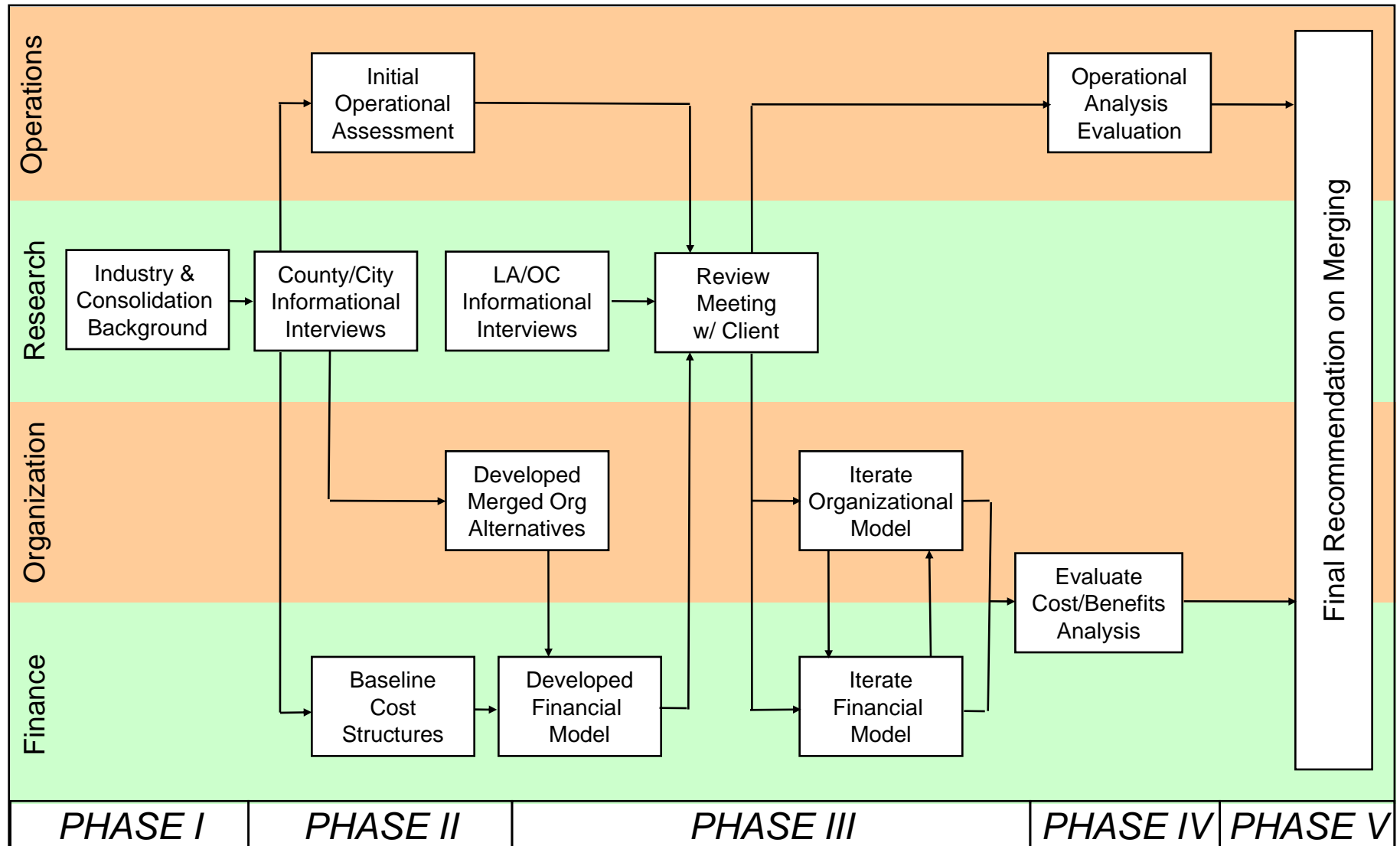
➤ **Scope:**

- ↪ Limited to Santa Barbara County and City Fire Departments (excludes surrounding areas) – *potentially to be used as a model for future studies*
- ↪ Only expenses (not revenues) were considered
- ↪ Issues of politics, political will or governance were not addressed

“Should adjacent fire departments date, live together, or get married?” (Making the Pieces Fit)

Approach and Methodology

We performed an iterative analysis that utilized primary and secondary research



Common Advantages, Risks and Hurdles of Consolidation

Our task was to conduct an objective assessment of a potential consolidation

➤ Advantages:

- ↳ Number of firefighters can be increased by reducing administration duplicity
- ↳ Increased fire assistance to neighboring communities
- ↳ Improved career development opportunities and more diverse working locations
- ↳ More efficient use of resources (rapid backfill and callback)
- ↳ Allows for a single voice to the community
- ↳ A larger department is more likely to receive grants
- ↳ Unified training and ordering

➤ Risks and Hurdles:

- ↳ Difficult to obtain political support when there is no crisis driving the change
- ↳ Lack of due diligence and planning
- ↳ Miscommunication between departments, governments and the community
- ↳ Perceived loss of local control

Organizational Structure Analysis

Organizational Structure Analysis Overview

We recommend a dependent 'Joint Entity' due to diseconomies of scale

- **Two organizational views will be presented:**
 - ↪ Current Org – compares current City and County organizations
 - ↪ Recommended – recommended consolidation scenario, if consolidation is pursued

- **Purpose of Analysis was to provide input for financial analysis by developing an organization structure that balances cost, operational efficiency and flexibility**

- **Analysis Summarizes:**
 - ↪ Impacts of consolidation
 - ↪ Potential benefits of consolidation
 - ↪ Potential risks of consolidation

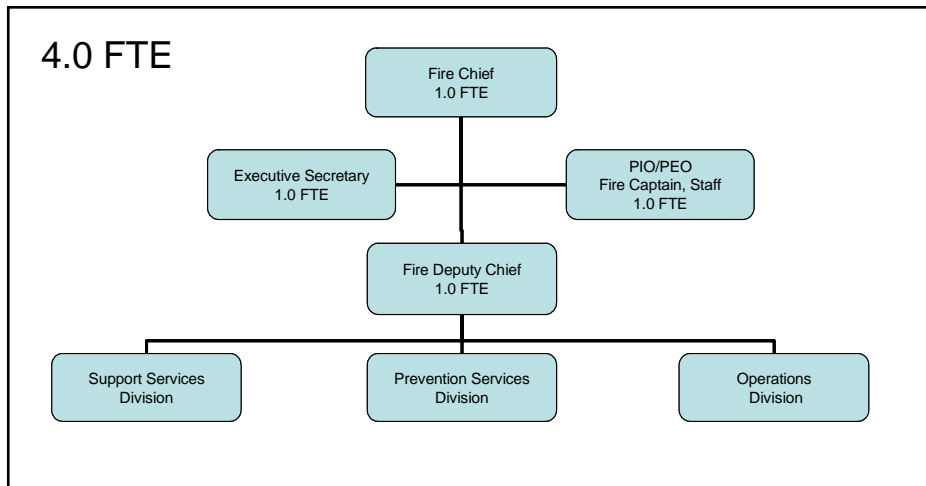
- **Hazmat Regulatory Unit and Countywide OES were not included in the analysis**

- **Analysis concluded: If decision is made to consolidate, the 'Joint Entity' should remain dependent on City/County governments in the near term**

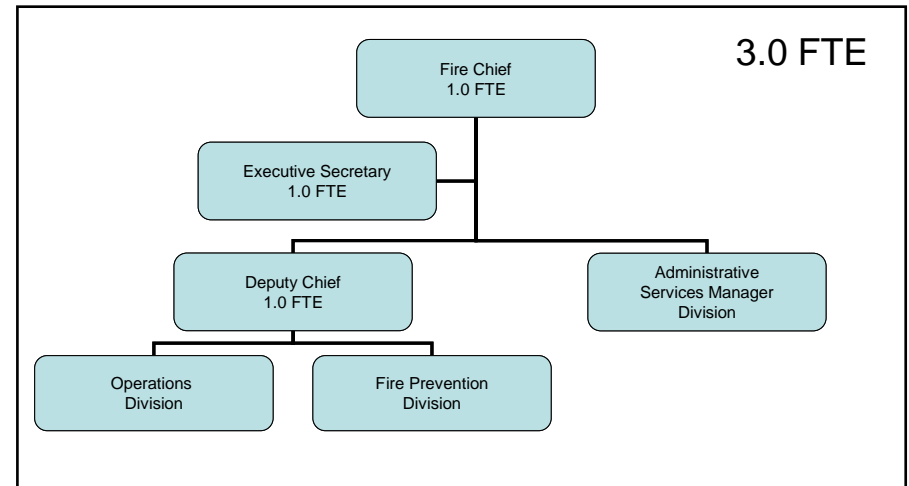
- **Note: all data is 2003-2004**

Current Executives

Santa Barbara County Fire Department



Santa Barbara City Fire Department



Roles and Responsibilities

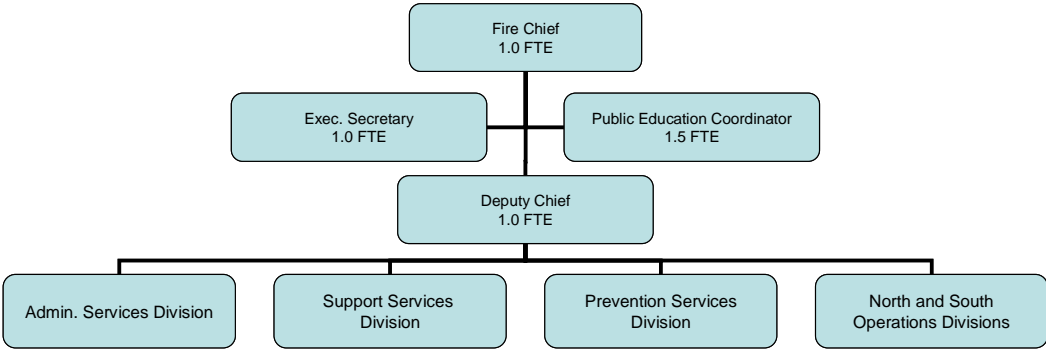
- To provide leadership to entire organization

Differences between City and County

- County: Support, Prevention and Operations report to Deputy Fire Chief
- City: Operations and Fire Prevention report to Deputy Chief, Administrative Services reports to Fire Chief

Recommended Executives

4.5 FTE



Potential Benefits

- Cost savings through consolidation of leadership positions (i.e. fire chief, deputy chief, etc.)
- Improved communication with community
- Centralized chain of command

Potential Risks

- No major risks identified

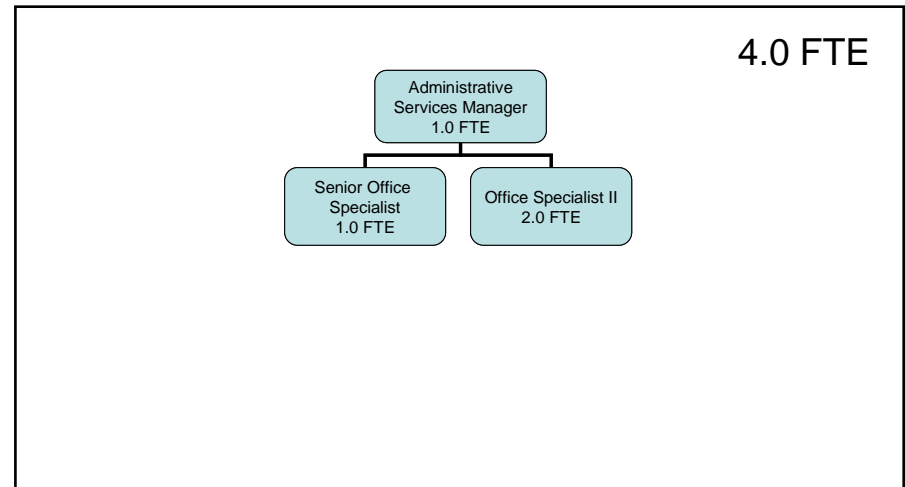
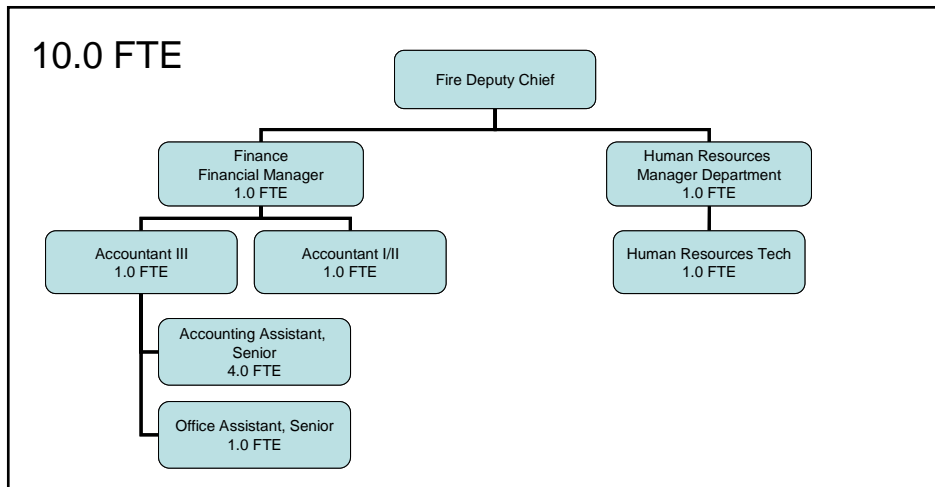
Summary Impacts of Consolidation

- Operations split into North and South Divisions
- **Headcount reduction of 2.5 FTE**

Current Administrative Services Organizations

Santa Barbara County Fire Department

Santa Barbara City Fire Department



Roles and Responsibilities

- To provide administrative support to organization, including finance and human resources

Differences between City and County

- County: co-manages financial and human resources
- City: coordinates with City Government Administrative group for provision of services

Recommended Administrative Services Organization

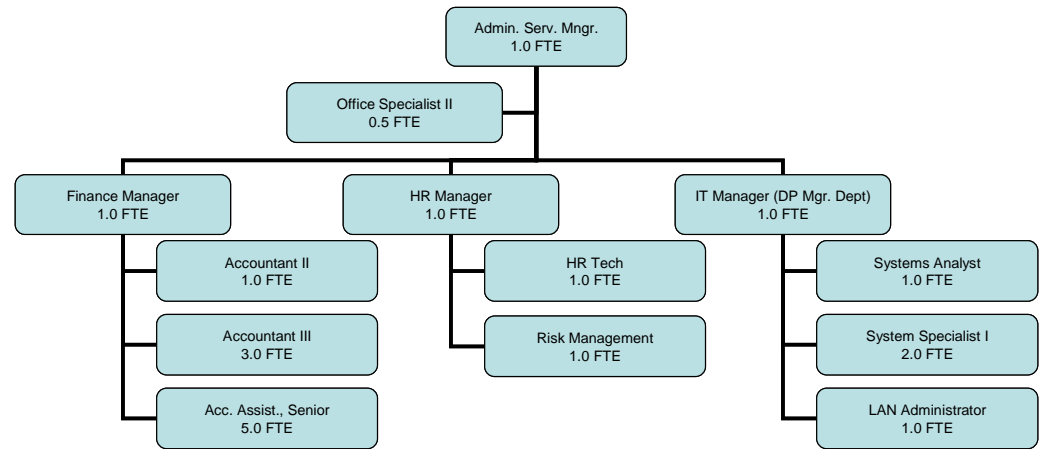
Potential Benefits

- Reduction in cost/headcount relative to a merged independent entity
- Increase in finance resource pool
- Flexibility for future independence
- Sharing of best practices
- Consolidation of IT, HR and finance systems

Potential Risks

- Redundant effort between Joint Entity, City/County governments
- Negotiating an equitable agreement with City Council

19.5 FTE



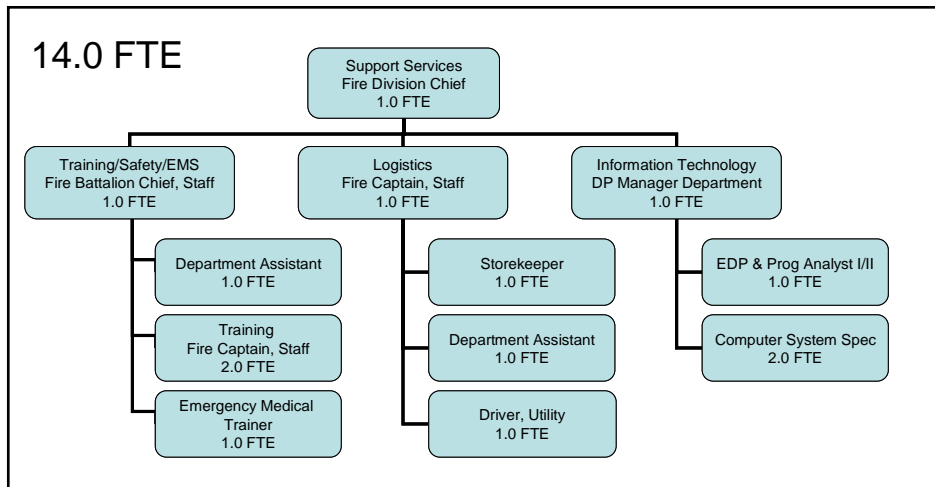
Summary Impacts of Consolidation

- IT moved from Support Services
- City government assumes all purchasing, benefits, payroll and treasury activities
- County government retains only audit responsibility
- **Headcount increase of 5.5 FTE**

Current Support Services Organizations

Santa Barbara County Fire Department

Santa Barbara City Fire Department



0.0 FTE

Support services are provided by City Government

Roles and Responsibilities

- To support day-to-day on the ground operations, including training, logistics and information technology

Differences between City and County

- County: consists of training/safety/emergency medical services, logistics and information technology support
- City: support is provided by the relevant arms of the City Government

Recommended Support Services Organization

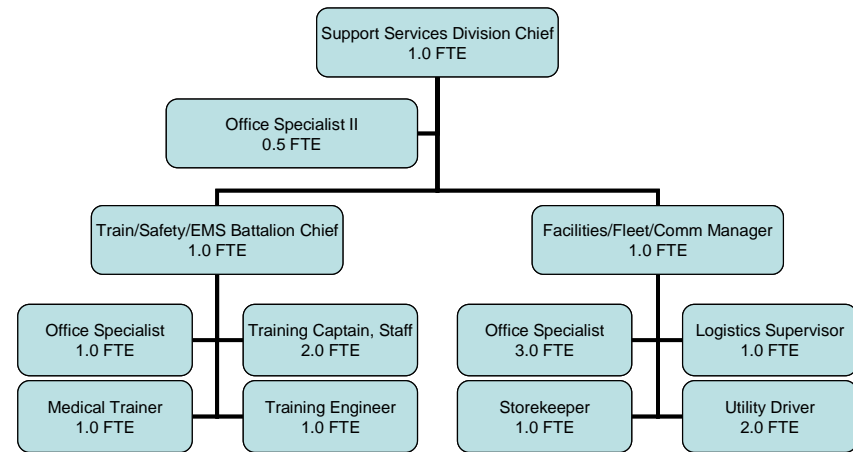
Potential Benefits

- Flexibility for future independence
- Improved coordination of maintenance activities
- Outsourcing maintenance to lower cost suppliers
- Further centralize training standards and requirements

Potential Risks

- Roadblocks to outsourcing changes

15.5 FTE



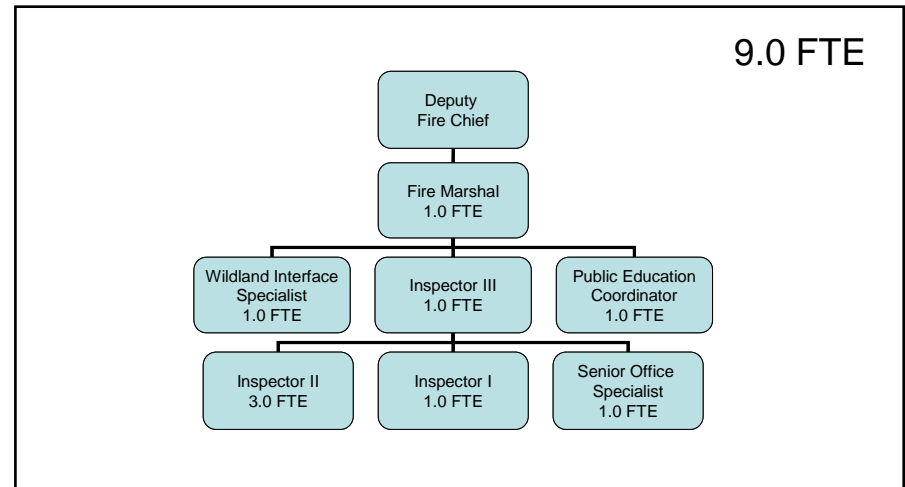
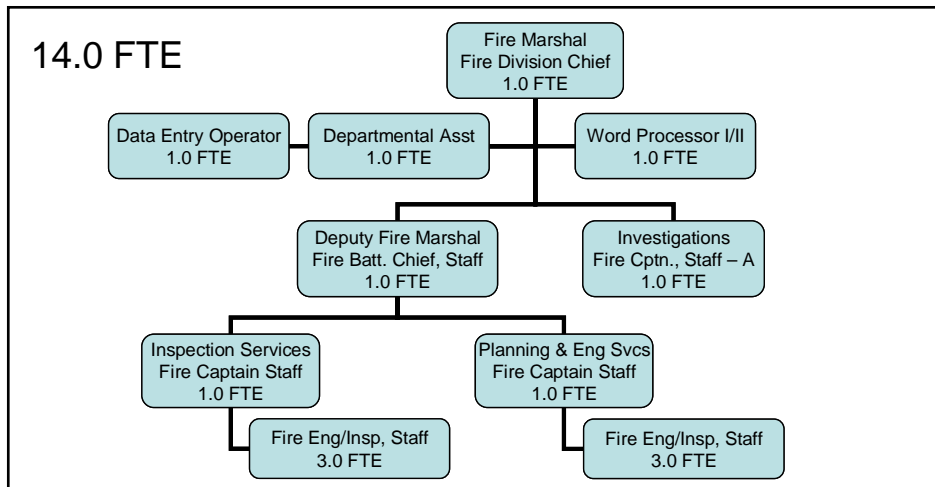
Summary Impacts of Consolidation

- IT moved to Administrative Services
- Facilities, Fleet and Communications management to be done in-house
- **Headcount increase of 1.5 FTE**

Current Fire Prevention Organizations

Santa Barbara County Fire Department

Santa Barbara City Fire Department



Roles and Responsibilities

- To adopt and enforce codes and ordinances relative to fire and life safety issues, coordinate and conduct inspections, investigate fires

Differences between City and County

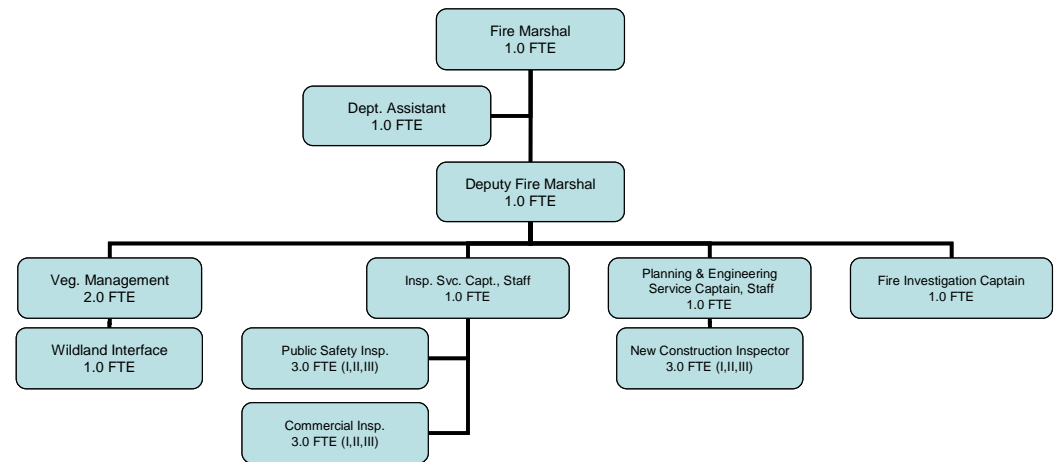
- County: Inspection Services and Planning & Engineering services report to Deputy Fire Marshal
- City: Wildland Interface, Public Education and Inspectors report to Fire Marshal

Recommended Fire Prevention Organization

18.0 FTE

Potential Benefits

- Improved coordination of prevention services
- Sharing of best practices



Potential Risks

- Challenge in addressing local concerns in code enforcement
- Decreased depth of emergency responders

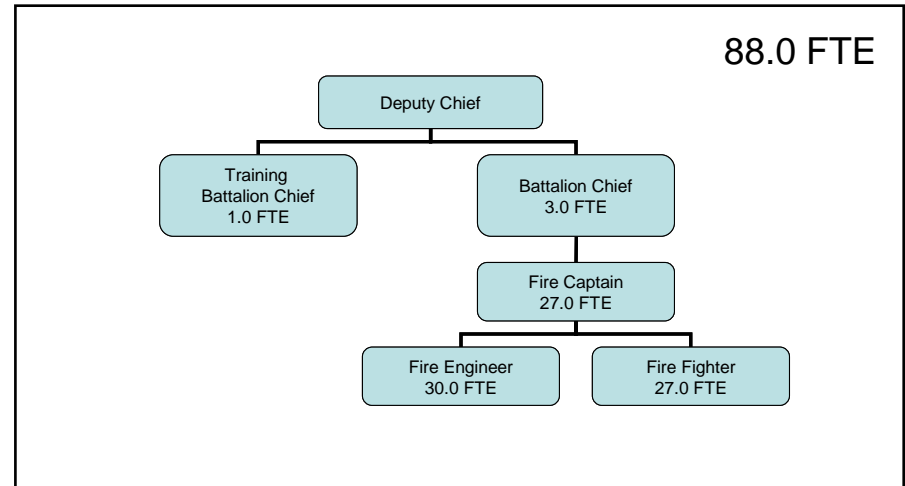
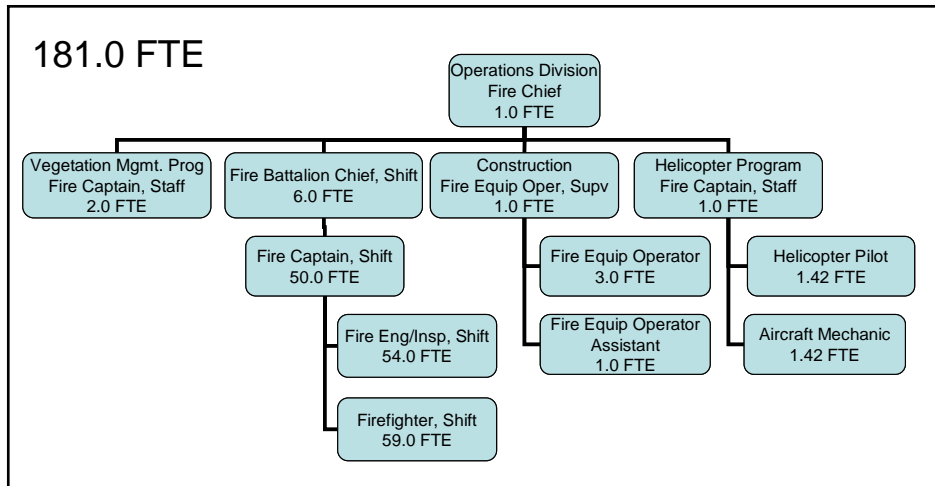
Summary Impacts of Consolidation

- Veg. Management moved from Operations
- **Headcount decrease of 5.0 FTE**

Current Operations Division Organizations

Santa Barbara County Fire Department

Santa Barbara City Fire Department



Roles and Responsibilities

- To provide delivery of fire, hazardous materials, emergency medical and rescue services

Differences between City and County

- County: Operations Division Chief oversees both Battalions, Construction, Helicopter and Vegetation Management programs
- City: Deputy Chief oversees the Training function and the Battalion

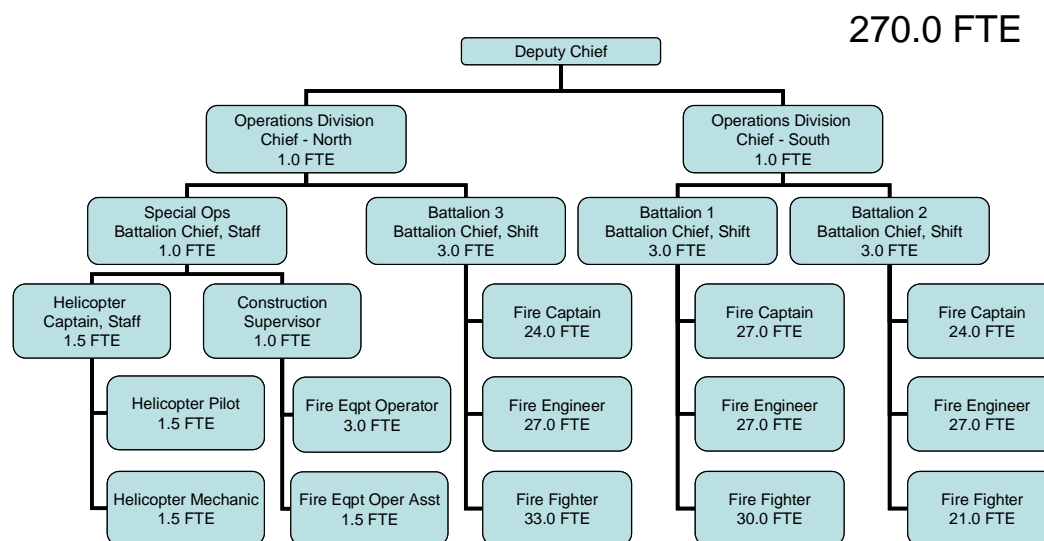
Recommended Operations Organization

Potential Benefits

- Improved regional coordination
- Increased pool of resources (call-back)
- Easier to implement countywide operational initiatives
- Greater opportunities for development and advancement

Potential Risks

- Issues to be addressed
 - ↻ Pensions
 - ↻ Salaries
 - ↻ Benefits
- Resistance to change



Summary Impacts of Consolidation

- Single fire department managed in two (North and South) divisions
- Divided Fire Stations into three battalions based on location
- Fire station manpower level found in Appendix
- Potential of adding Paramedics to City
- Some staffing adjusted for seasonality
- **Headcount increase of 1.0 FTE**

Organizational Analysis Takeaways

➤ Results table

Department	Exec.	Administrative Services	Support Services	Fire Prevention	Operations	Total
City FD	3.0	4.0	0.0	9.0	88.0	104.0
County FD	4.0	10.0	14.0	14.0	181.0	225.0
Total	7.0	14.0	14.0	23.0	269.0	327.0
Consolidated	4.5	19.5	15.5	18.0	270.0	327.5
Headcount Delta	-2.5	5.5	1.5	-5.0	1.0	0.5

- Headcount increase of 0.5 FTE
- Enables potential operational efficiencies
- Offers flexibility for independence in the future
- Provides key input for financial analysis

Financial Analysis

Financial Analysis Overview

We built a financial model to assess the cost impact of a consolidation

Potential Recommendations	Guidelines
Move Forward with Consolidation	10% annual savings in steady state and breakeven within 10 years
Conduct an Operational Analysis and then Decide	0-10% annual savings in steady state and breakeven within 10 years
Do Not Move Forward with Consolidation	No savings in steady state or breakeven in over 10 years

- ↪ 10% annual savings based on steady state of Joint Entity vs. Current State
- ↪ Breakeven is defined as the number of years before the financial impact of consolidating is \$0 (in today's dollar value)

Financial Analysis Overview

We looked at a variety of scenarios to obtain a range of cost impacts

➤ Four distinct scenarios will be presented:

Scenarios	Consolidate	Outsource	Close Station
Scenario 1	Yes	No	No
Scenario 2	Yes	Yes	No
Scenario 3	Yes	No	Yes
Scenario 4	No	Yes	No

➤ For each scenario we looked at:

- ↪ Headcount change from current state
- ↪ Steady state cost change (%)
- ↪ Breakeven years
- ↪ 5 year net present value (NPV)

The financial analysis was relatively conservative

➤ **Conservative Approach:**

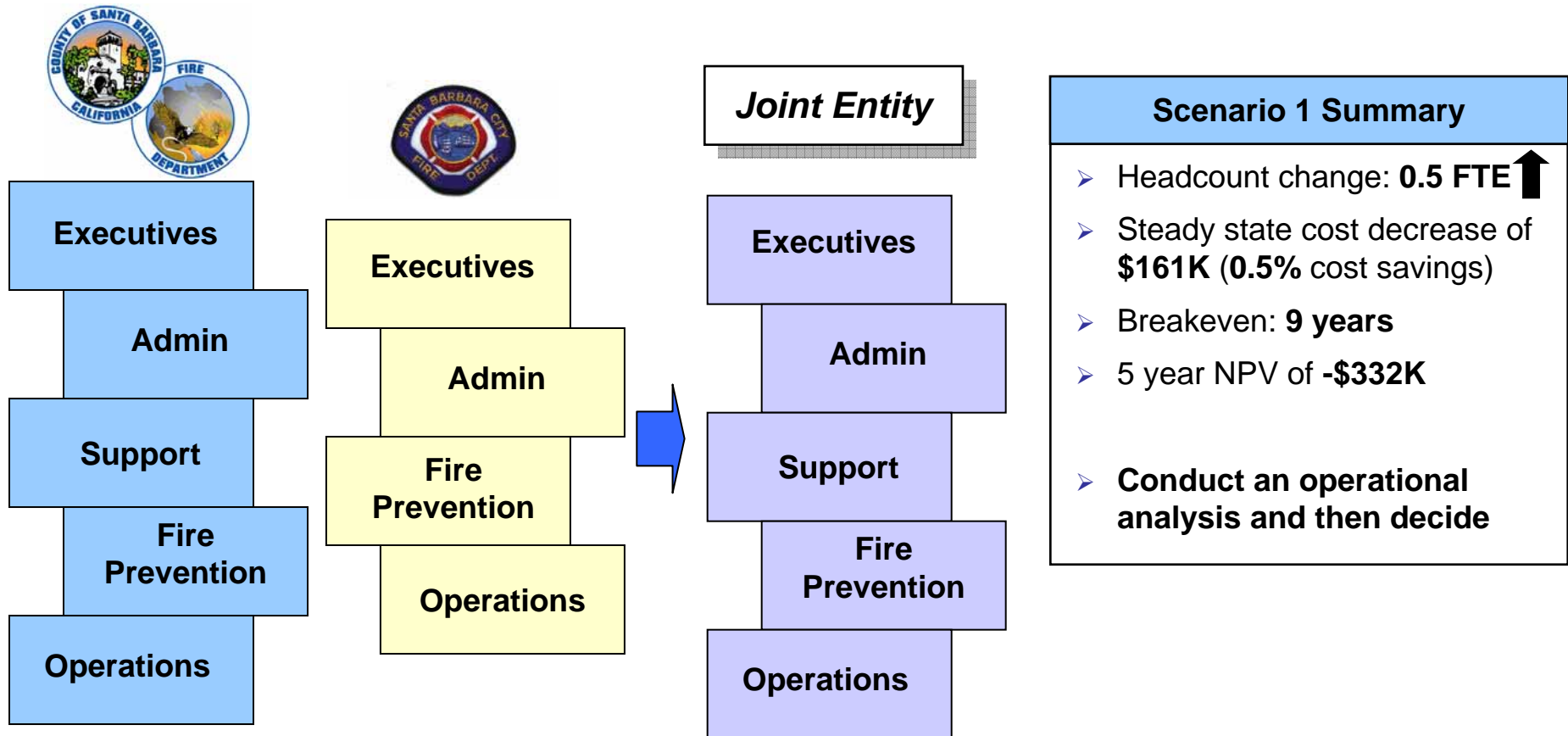
- ↳ Santa Barbara did not create an “adjusted” current state that adds cost to improve operations up to the level in a joint entity; rather, used as-is current costs
- ↳ Analysis incorporates one-time costs equaling \$770K (including apparatus upgrades, new uniforms, office relocation); many of these costs could have been accounted for by grants or ordinary course of business.
- ↳ Assumed a 5 year ramp-up to realize full impact of savings

➤ **Caveats:**

- ↳ Benefits and overtime excluded from analysis
- ↳ Used “weighted average” salaries to equalize salary costs between City and County positions rather than taking the higher salary
- ↳ There may be some obstacles to outsourcing maintenance
- ↳ It is unlikely that a fire station would ever be closed (as shown in Scenario 3)

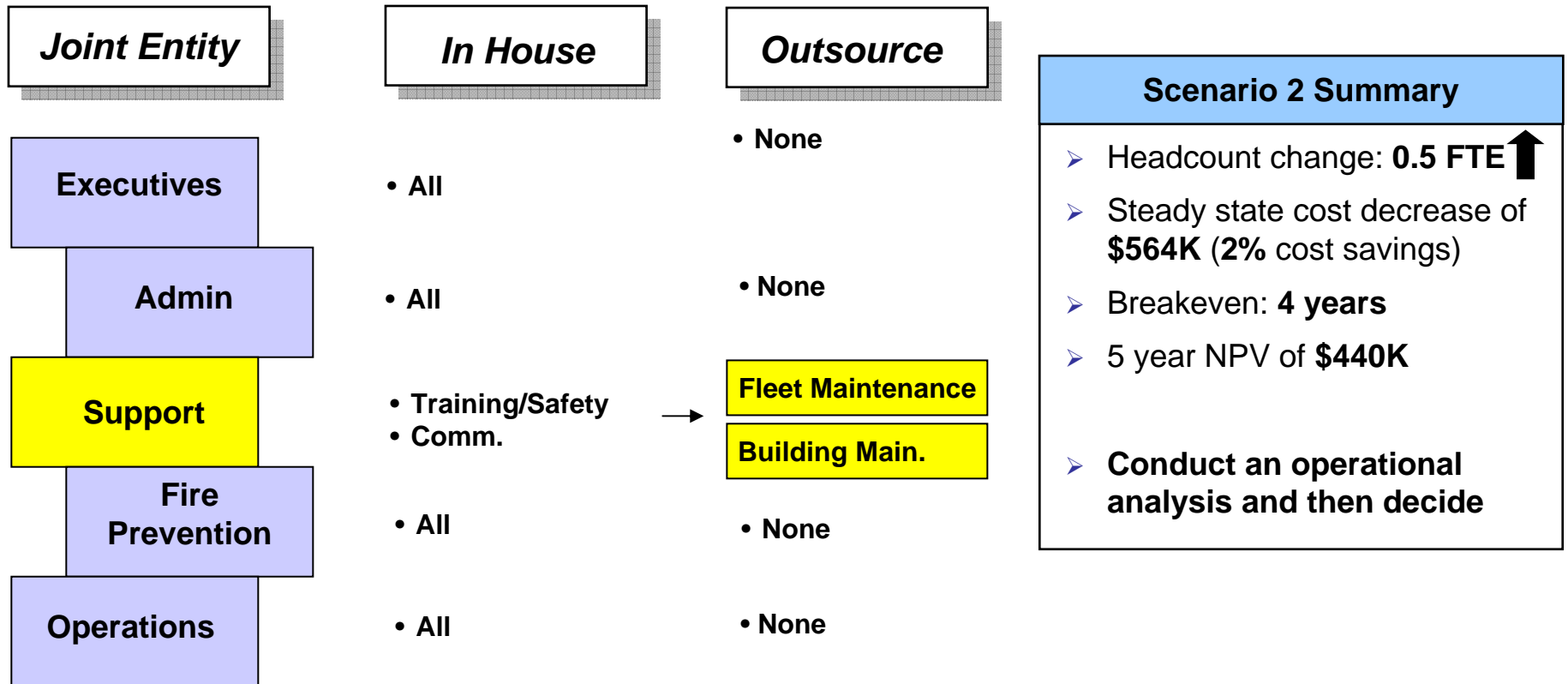
Scenario 1: Consolidate, No Outsourcing, No Station Closures

Only consolidating does not lead to significant savings; breakeven in 9 years



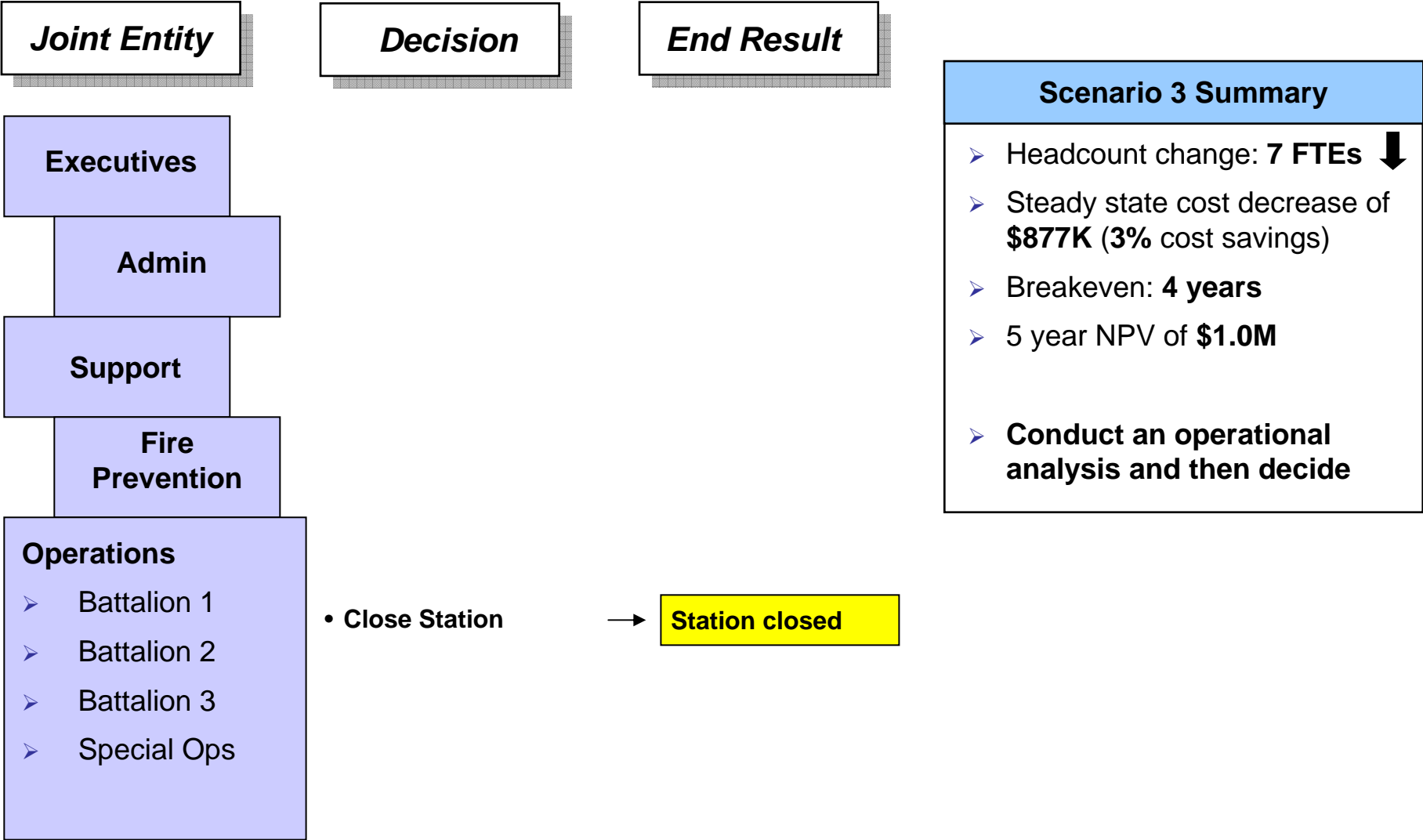
Scenario 2: Consolidate, Outsource Maintenance, No Station Closures

Consolidating & outsourcing improves savings but still not significant



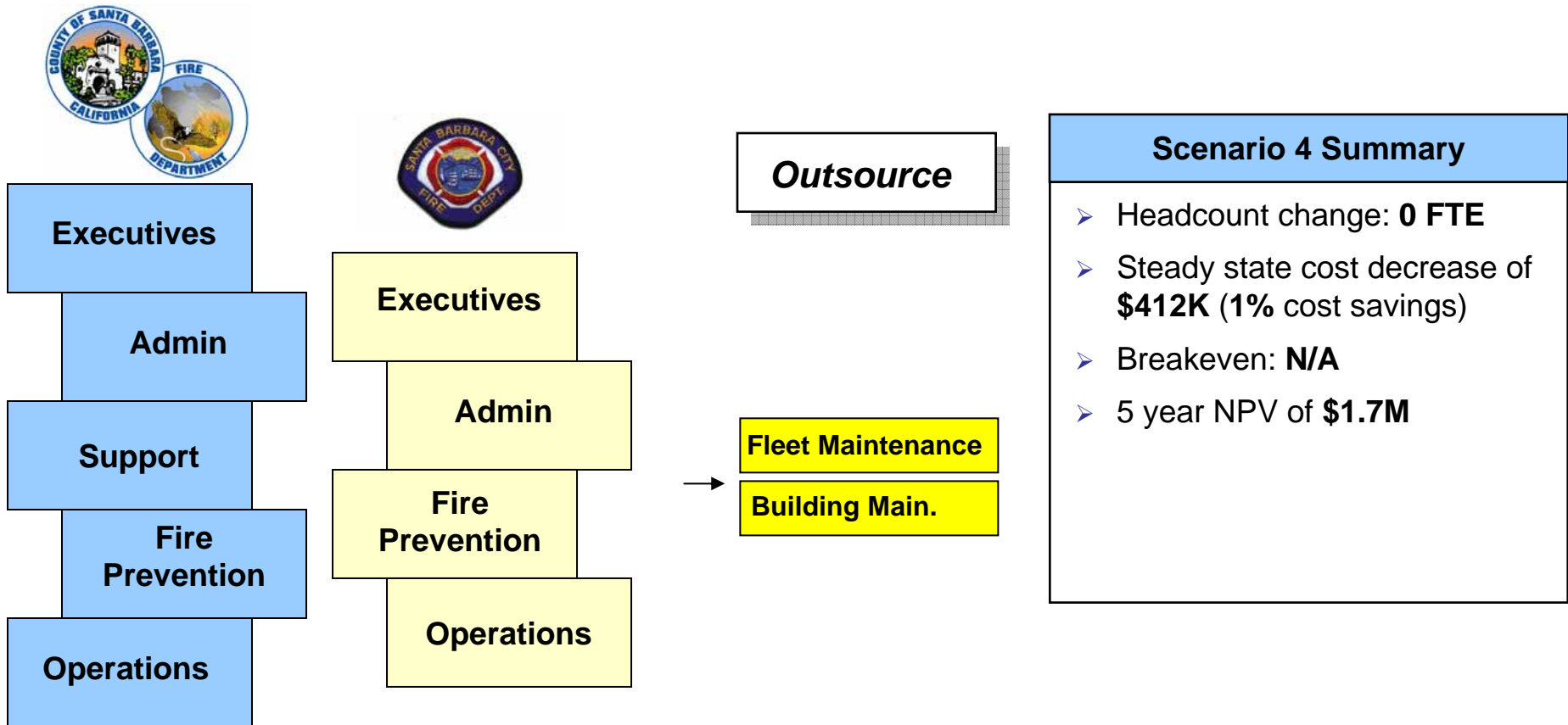
Scenario 3: Consolidate, No Outsourcing, Station Closure

Consolidating & closing a station also leads to the same conclusion



Scenario 4: Separate, Outsource Maintenance, No Station Closures

Outsourcing alone provides less long-term savings than consolidating as well



Financial Analysis Takeaways

The financial analysis points to the need to assess operational improvements

	Scenario 1: Consolidate Only	Scenario 2: Consolidate, Outsource	Scenario 3: Consolidate, Close Station	Scenario 4: Outsource Only
Headcount Change (FTEs)	0.5 ↑	0.5 ↑	7 ↓	0
Steady State Cost Change	\$161K ↓	\$564K ↓	\$877K ↓	\$412K ↓
Steady State % Change	0.5% ↓	2% ↓	3% ↓	1% ↓
Breakeven Years	9	4	4	N/A
5 Year NPV	-\$332K	\$440K	\$1.0M	\$1.7M

➤ Summary points

- ↳ All three consolidation scenarios yield the recommendation to conduct an operational analysis and then decide whether to consolidate
- ↳ Consolidating and outsourcing maintenance provides the most long-term savings
- ↳ As discussed, the financial analysis was relatively conservative

Conclusion

A quantitative analysis of operations is required before deciding to consolidate

- **Recommended organizational structure reduces redundant staff while maintaining and expanding operational capabilities**
- **Regardless of consolidate decision, outsourcing and increased cooperation are beneficial**
- **Based on a cost analysis, consolidation would be warranted only if an operational analysis proved beneficial**

An operational analysis is needed to fully evaluate consolidation benefits

➤ **Goals of the operation analysis**

- ↳ To identify any potential operational efficiency improvements
- ↳ To assess the impact of a consolidation on operational performance and service levels

➤ **Approach to be used**

↳ Qualitative analysis

↳ Quantitative analysis

- Different levels of quantitative analysis (detail in the appendix)
- Creation of coverage maps
- Develop model or use an existing software solution

➤ **Operations and service levels improvements are often the main drivers of a consolidation (for example: OCFA, LA County FD)**

Recommendations

Perform an operational analysis and evaluate outsourcing options

➤ Next steps in consolidation analysis:

- ↪ Perform an operational analysis to determine whether service level improvements warrant a consolidation (e.g. Santa Barbara Airport, UCSB campus, mountain canyons)
- ↪ Conduct analysis of consolidation with other cities in Santa Barbara County
- ↪ Consider revenue implications of a consolidation (e.g. potential ERAF exemption to City)

➤ Actions to pursue regardless of consolidation decision:

- ↪ Increase operational cooperation through aid and dispatch system
- ↪ Outsource to reduce costs
- ↪ Increase joint procurement

Appendix A: List of Interviewees

- **Santa Barbara County Fire Department**: John Brodbeck, Darrell Delgado, Tom Franklin, Robert Heckman, Martin Johnson, Carol Patrick, Diane Sauer, John Saunders, Mark Schmitt, John Scherrei, Jim Scott, Kate Sulka, Craig Thomas, Steve Vittum, Curt Warner
- **Santa Barbara City Fire Department**: Warner McGrew
- **Orange County Fire Authority**: Chip Prather, Gene Begnell, Michele Hernandez
- **Los Angeles County Fire Department**: Barbara Herrera

Appendix B: Organizational Analysis Detail

Appendix B: Organizational Analysis Summary of Headcount Changes

Executives

Headcount Changes
➤ Summary <ul style="list-style-type: none">↻ Reduction from 7.0 to 4.5 FTE
➤ Consolidated Positions – 3.5 FTE <ul style="list-style-type: none">↻ 1.0 FTE – Fire Chief↻ 1.0 FTE – Executive Secretary↻ 1.0 FTE – Deputy Fire Chief↻ 0.5 FTE – PUB INFO Captain
➤ Positions added – 1.0 FTE <ul style="list-style-type: none">↻ 1.0 Public Educator (moved from City Operations Division)

Administrative Services

Headcount Changes
➤ Summary <ul style="list-style-type: none">↻ Increase from 14.0 to 19.5 FTE
➤ Consolidated Positions – 3.5 FTE <ul style="list-style-type: none">↻ 1.0 FTE – Senior Office Specialist↻ 1.5 FTE – Office Specialist II↻ 1.0 FTE – Office Assistant
➤ Positions Added for Improved Administrative Support – 5.0 FTE <ul style="list-style-type: none">↻ 2.0 FTE – Accountant III↻ 1.0 FTE – Accountant Assistant, Senior↻ 1.0 FTE – LAN Administrator↻ 1.0 FTE – Risk Management
➤ IT Positions moved from Support Services – 4.0 FTE

Appendix B: Organizational Analysis Summary of Headcount Changes

Support Services

Headcount Changes	
➤	Summary
↻	Increase from 14.0 to 15.5 FTE
➤	Consolidated Positions – None
➤	IT positions moved to Administrative Services – 4.0 FTE
➤	Extension of services to City – 1.0 FTE
↻	1.0 FTE – Utility Driver
➤	Added services – 4.0 FTE
↻	1.0 FTE – Training Engineer
↻	1.0 FTE – Facilities/Fleet/Comm. Manager
↻	2.0 FTE – Office Specialist II
➤	Other additions – 0.5 FTE
↻	0.5 FTE – Office Specialist II

Fire Prevention

Headcount Changes	
➤	Summary
↻	Reduction from 23.0 to 18.0 FTE
➤	Consolidated Positions – 7.0 FTE
↻	1.0 FTE – Fire Marshal
↻	6.0 FTE – Fire Engineer/Inspector Staff
➤	Other reductions – 4.0 FTE
↻	1.0 FTE – Word Processor I/II
↻	1.0 FTE – Senior Office Specialist
↻	1.0 FTE – Data Entry Operator
↻	1.0 FTE – Public Educ. (moved to board)
➤	Additional inspection positions – 4.0 FTE
↻	2.0 FTE – Inspector III
↻	2.0 FTE – Inspector I
➤	Vegetation moved from Ops – 2.0 FTE

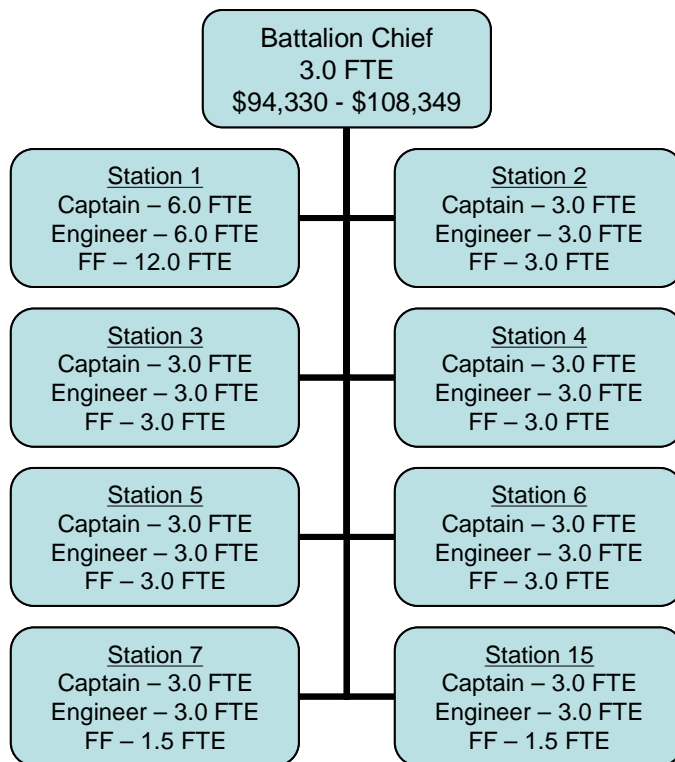
Appendix B: Organizational Analysis Summary of Headcount Changes

Operations Division

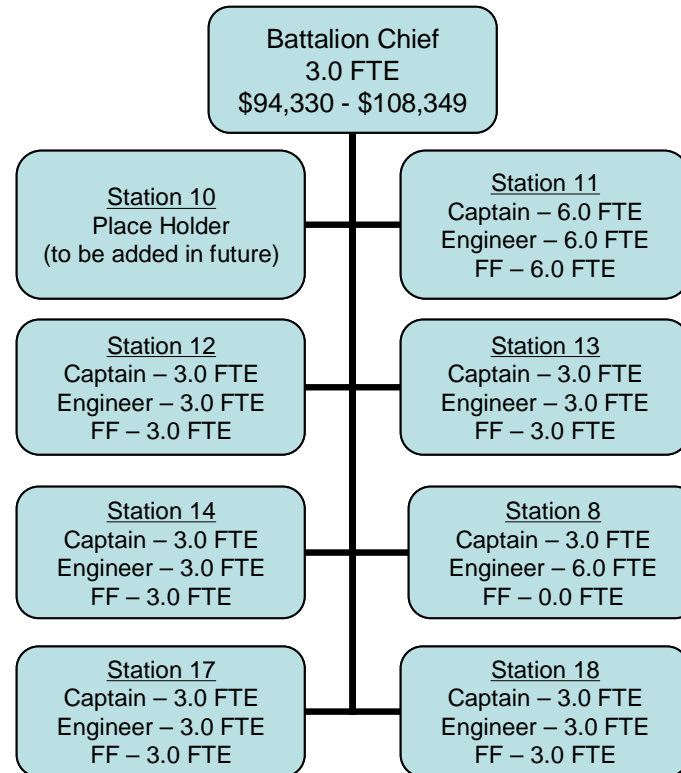
Headcount Changes	
➤	Summary
↻	Increase from 269.0 to 270.0 FTE (includes 8.0 floating positions)
➤	Consolidated Positions – 1.0 FTE
↻	1.0 FTE – Training Battalion Chief
➤	Vegetation Management moved to Fire Prevention – 2.0 FTE
➤	Management Positions added – 2.5 FTE
↻	1.0 FTE – Operations Division Chief
↻	0.5 FTE – Helicopter Captain Staff
↻	1.0 FTE – Battalion Chief Staff
➤	Operational Positions added – 1.5 FTE
↻	0.5 FTE – Fire Equipment Operator Asst.
↻	1.0 FTE – Firefighter

Appendix B: Station Manpower Allocation by Battalion

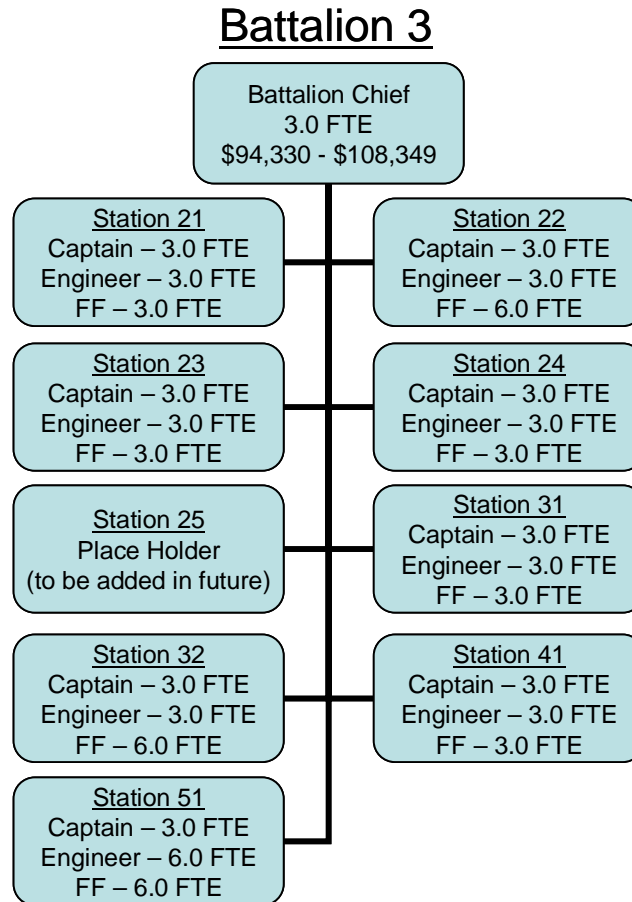
Battalion 1



Battalion 2



Appendix B: Station Manpower Allocation by Battalion



Appendix C: One-Time Costs

One-Time Costs

#	One - Time Cost Category	Year 1 Cost	Year 2 Cost
1	Communications, Equipment & Training		
1a.	Upgrade Breathing Apparatus (\$3500 per person) (Assume 80 people)	280,000	0
1b.	Public Information	10,000	0
1c.	Inclusion into Sheriff Dispatch	150,000	150,000
1d.	Training	20,000	0
2	Information Systems		
2a.	Information Integration	25,000	25,000
3	Uniform Related		
3a.	New Uniform - Assume 60K (Uniform & Badges)	60,000	0
4	Office Relocation		
4		50,000	0
	Total	595,000	175,000

Appendix D: Operational Analysis

Aid and dispatch system

➤ Mutual aid

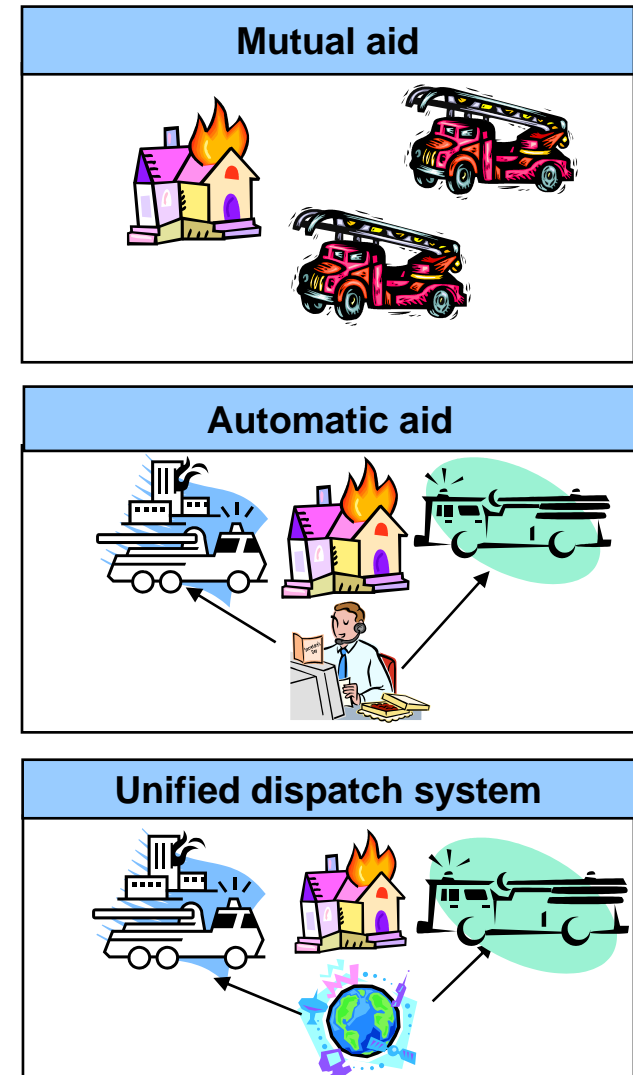
- ↪ Starts when all assets have been used
- ↪ No guarantee
- ↪ Already used by city and county

➤ Automatic aid

- ↪ Systematic decision but human intervention required
- ↪ Improved response time

➤ Unified dispatch system

- ↪ Seamless dispatch system; no human intervention
- ↪ Improved time performance
- ↪ **OCFA – “dispatch from 5 - 8 minutes to 17 seconds !” – Chief Prather**



Consolidation

➤ Pool of resources

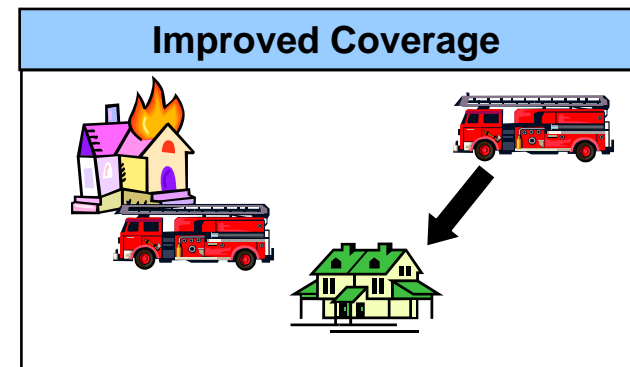
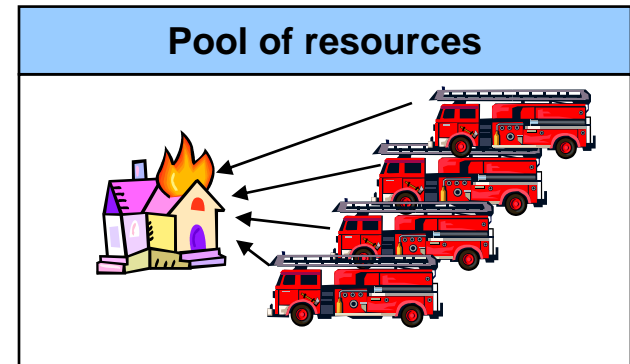
- ↪ Larger pool to draw resources from in case of incident

➤ Proximity of firefighters to station

- ↪ Resources more readily available
- ↪ Less geographical risk (i.e. traffic, road blocks, mud slides)

➤ Improved coverage

- ↪ Allow a much faster response time in case of simultaneous incidents
- ↪ Better coverage, shrinking coverage gaps



Quantitative Analysis: Coverage Analysis

➤ Create coverage maps for different scenarios

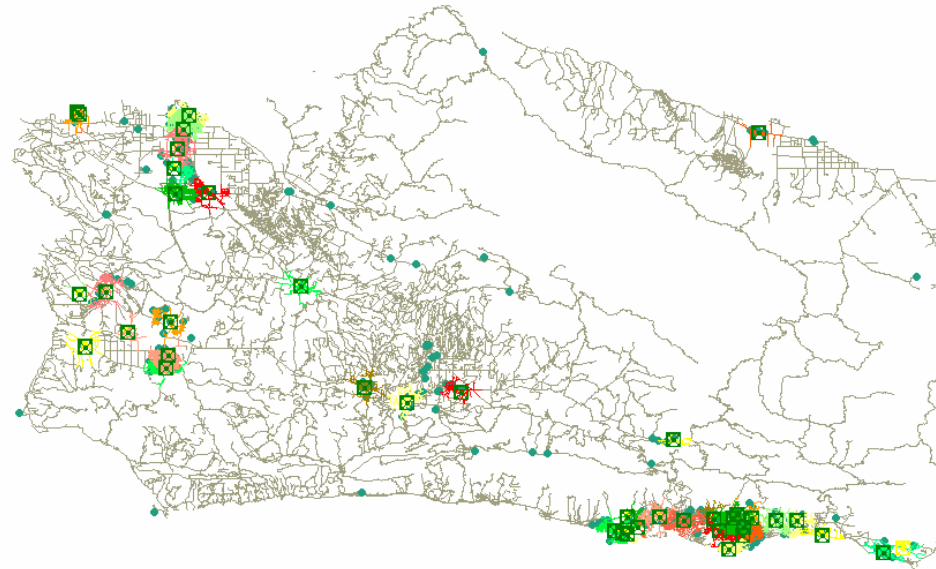
- ↳ Simple and efficient way to evaluate if a consolidation can improve the coverage
- ↳ Particularly effective at closing coverage gaps

➤ Approach

- ↳ Software: ArcExplorer (free software)
- ↳ Data needed: Shape files with time from fire station to destination
- ↳ Compare current structure to consolidation scenario

➤ Results

- ↳ County maps such as this one, provided to us by OCFA



Quantitative Analysis: Incident and Concentration Analysis (1)*

➤ From our interview with OCFA Planning Department

➤ CAD (Computer Aided Dispatch) Analyst

↳ Mapping based software that uses historical incident data

↳ Main benefits:

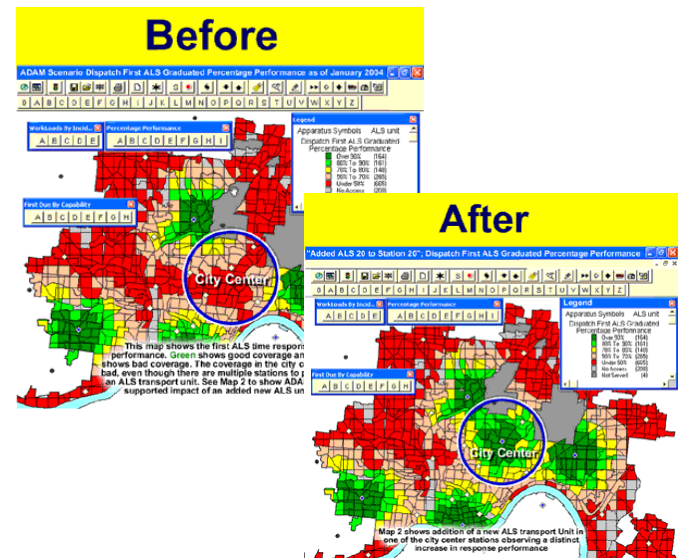
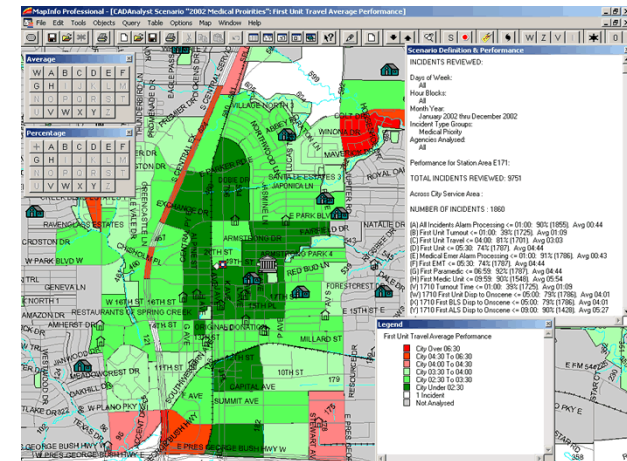
- Graphically illustrates workload statistics and call-to-scene performance

➤ Fire / EMS ADAM (Apparatus Deployment Analysis Module)

↳ Offers consolidation strategy and answers how to keep an optimized field performance balanced

↳ Main benefits:

- Evaluates current and prospective station locations
- Ensures apparatus changes/additions are placed in the optimal location
- Analyzes staffing changes and their impact



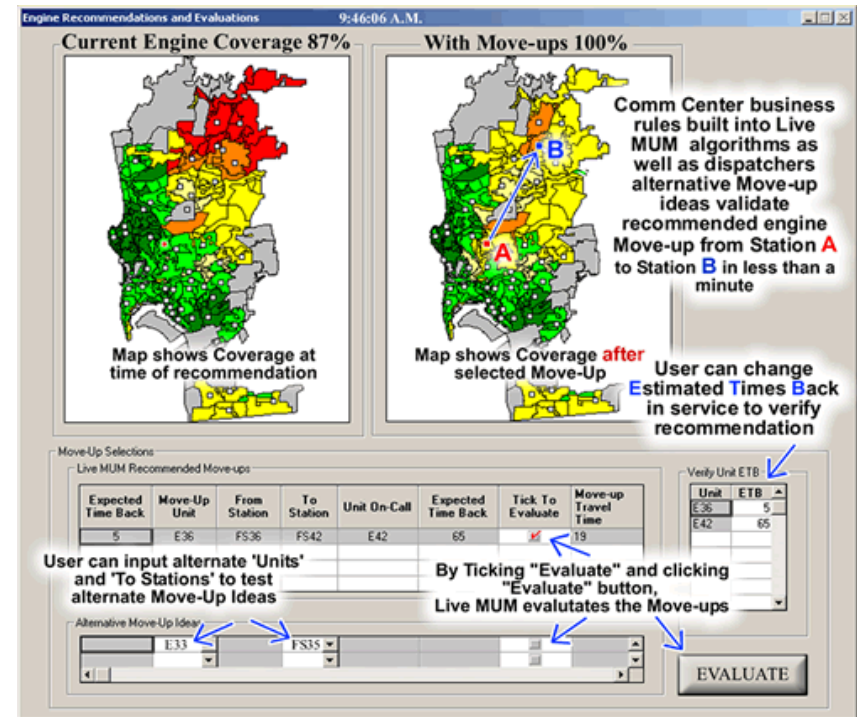
* Map samples from www.deccanintl.com

Quantitative Analysis: Incident and Concentration Analysis (2)*

➤ Live Move-Up Module (LiveMUM)

- ↳ Live analysis model
- ↳ Main benefits:
 - Displays real time color-coded maps
 - Allows for easy identification of coverage gaps
 - Makes real-time recommendations for closing gaps

➤ CAD and ADAM are currently being used by over 70 fire departments in the US and Canada



➤ Examples of other relevant software include: FIREbaseMap from Mapping Solutions (www.mapsol.com), VisiCAS from TriTech Software Systems (www3.tritech.com)

* Map samples from www.deccanintl.com