



Information Provided

★ Criteria evaluation and application summary

- Summarizes evaluation of closure criteria
 - Bay Leaf Fire Station #3
 - Falls Fire Station
 - Wake-New Hope Station #1
 - Western Wake Station #1

Information Provided

★ Map book

- 35 mph speed limit used for all streets
- Series of maps for each area
 - 7.5 minute travel time from station
 - Street network within 1000 feet of fire hydrant
 - RFD “quickest unit” response areas
 - Concentration maps
 - County and municipal at 15.5 minute and 7.5 minute travel times
 - 5 mile boundaries from other county stations

Timeline

- ★ 2003 Tri-Data Fire/EMS Capital Facility and Equipment Study recommended evaluating stations for possible service replacement

- ★ 2005 Long range business plan recommended evaluating stations
 - Included criteria to be used in evaluation

- ★ Western Wake Fire Station #2 is first station evaluated

Timeline

- ★ January 17, 2008, Long range business plan recommended evaluating four stations concurrently
 - Bay Leaf Fire Station #3
 - Falls Fire Station
 - Wake-New Hope Fire Station #1
 - Western Wake Fire Station #1

2009 Evaluation

- ★ GIS used to analyze and evaluate fire station criteria
 - Reviewed maps with and received feedback from Facility Committee
 - 35 mph speed limit recommended by Facility Committee
- ★ Departments provided fire incident report data and budget information for each station

Current Status

- ★ GIS analysis complete
- ★ Criteria evaluation complete (except for Raleigh contract cost)
- ★ Waiting on contract cost information from Raleigh Fire Department

Limiting Criteria

- ★ Water supply and impact on public protection classification (commonly referred to ISO grade) is most limiting factor
 - If grade gets worse, may negatively impact property owner insurance premiums

Limiting Criteria

- ★ Percentage of area within 1000 feet of a fire hydrant
 - Greater than 85% - Water supply considered completely provided by fire hydrants
 - Less than 85% - Area's water supply considered NOT provided by fire hydrants
 - Area receives split grade, or
 - Department uses alternate water supply method

Limiting Criteria

★ Alternate water supply

- Tanker shuttle method is most common alternate method
 - Bay Leaf, Wake-New Hope graded using water haul method
- Large diameter hose relay method is another method
 - Use of large diameter hose allows distance from fire hydrant to be increased to 2000 feet

Limiting Criteria

★ Alternate water supply

- Raleigh Fire Department (RFD) uses large diameter hose
- If Raleigh serves unincorporated area, can use large diameter hose relay operation for fire insurance grading purposes

Evaluation and Application Summary

★ Bay Leaf Fire Station #3

- RFD can respond quicker and with more personnel on the first unit on a 24/7 basis
- 70% of area within 1000 of fire hydrant
- 91% of area more than five road miles from Bay Leaf #1 and #2 is within 1000 feet of fire hydrant
- Although cost avoidances in CIP can be realized, waiting on RFD cost data to compare contract costs

Evaluation and Application Summary

★ Bay Leaf Fire Station #3

- Recommendation
 - Extend fire insurance district boundaries to maximum of 5 road miles from Bay Leaf #1 and #2
 - Create a “Raleigh Suburban Fire District” to include areas more than 5 road miles from other stations
 - Contract with RFD to serve Raleigh Suburban District
 - Contingent on cost evaluation

Evaluation and Application Summary

★ Falls Fire Station

- RFD can respond quicker and with more personnel on the first unit on a 24/7 basis
- 67% of area within 1000 of fire hydrant
- Wakefalls subdivision largest area not served by fire hydrants
 - Is within 5 road miles of Wake Forest Fire Station #2
- CIP cost avoidances can be redirected to fire service needs in other developing areas of County

Evaluation and Application Summary

★ Falls Fire Station

- Recommendation
 - Extend fire insurance district boundaries to maximum of 5 road miles from Wake Forest #2 to include Wakefalls subdivision
 - Add the area that is more than 5 road miles from WFFD #2 to the Raleigh Suburban Fire District
 - RFD provides service in Raleigh Suburban Fire District

Evaluation and Application Summary

★ Wake-New Hope Fire Station #1

- RFD can respond quicker and with more personnel on the first unit on a 24/7 basis
- 65% of area within 1000 of fire hydrant
- 85% within 2000 feet of fire hydrant
- CIP cost avoidances can be redirected to fire service needs in other developing areas of County

Evaluation and Application Summary

★ Wake-New Hope Fire Station #1

- Recommendation
 - Add station's service area to Raleigh Suburban Fire District
 - RFD provides service in Raleigh Suburban Fire District
 - RFD will need to request fire insurance grading using the large diameter hose relay method of water supply

Evaluation and Application Summary

★ Western Wake Fire Station #1

- RFD can respond quicker and with the same or more personnel on the first unit on a 24/7 basis
- 42% of area within 1000 of fire hydrant
- 98% within 1000 feet of fire hydrant if private hydrants included and I-40 excluded (not “built-upon” area)
- CIP cost avoidances can be redirected to fire service needs in other developing areas of County

Evaluation and Application Summary

★ Western Wake Fire Station #1

- Recommendation
 - Divide station's service area between Raleigh Suburban Fire District and Cary Suburban Fire District
 - RFD provides service in Raleigh Suburban Fire District and Cary Fire Department provides service in Cary Suburban Fire District

Evaluation and Application Summary

★ Recommended Timeline

- Three-year transition plan recommended
 - Bay Leaf #3 – July 1, 2010
 - Falls Fire Station – July 1, 2011
 - Wake-New Hope Fire Station #1 – July 1, 2012
 - Western Wake Fire Station #1 – July 1, 2012

Questions and Next Steps