



AFD Presentation to Arcata Planning Commission

Arcata Fire: Your First Responders for All-Risk Emergencies



Arcata General Plan 2045 & Gateway Area Plan

AFD anticipates population growth in our service area

AFD is empathetic of housing challenges in our community

AFD wishes to be a partner in seeking resilient solutions



Arcata General Plan 2045 & Gateway Area Plan

AFD Concerns

- Staffing
- Access
- Water Supply



About Arcata Fire District

Independent Special District

- Governed by 5 Elected Board members
- 3 Staffed Fire Stations
- Jurisdiction 62 sq mi
 - City of Arcata, Bayside, Manila, McKinleyville, Jacoby Creek
- Population 36,000+
- Incidents: 3300+ (8% Fire 50% EMS)



NFPA 1710 Recommended Deployment

First unit arrive in 4 minutes

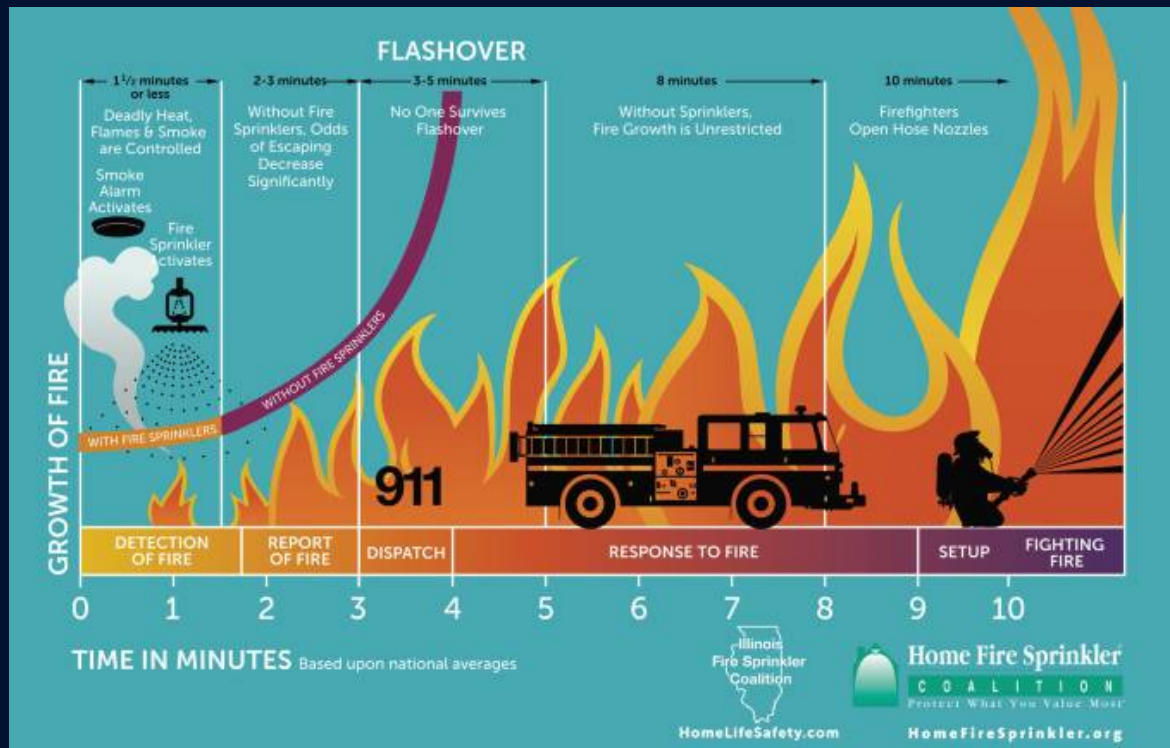
All units arrive within 8 – 10 minutes...

- Firefighters required for a residential structure fire – **14**
- Firefighters required for commercial, multi family, or 3 story – **25**
- Firefighters required for high-rise building – **38**

AFD cannot meet these fire response deployment even with Mutual-aid



Response Times and Adequate Staffing





Initial Response for a Working Fire Downtown Arcata

Critical Task	Needed Personnel	Responding Units	Staffing	Response Time (minutes)
Command	1	ARF Chief	1	8
Fire Attack	2	Arcata Engine	2	2
Water Supply/Backup	2	Mad River Engine	2	7
Pump Operator	1	McKinleyville Engine	2	11
Search	2	AFD Uses Automatic Mutual Aid to Respond to Structure Fires		
Ventilation	2			
Rapid Intervention Crew	3			
Safety Officer	1			
Total	14			



Fire Response Worst Case Scenario

Responding Units	Average Staffing	Response Time (minutes)	Responding Units	Average Staffing	Response Time (minutes)
ARF Chief	1	8	CDF Chief	1	19
Arcata Engine	2	2	CDF Engine	3	19
Mad River Engine	2	7	WVF Engine (Mutual Aid)	1	23*
McKinleyville Engine	2	11	FRT Truck (Mutual Aid)	2	23*
BLU Engine	3	12*	CDF Engine (Mutual Aid)	3	32*
HBF Chief	1	13	FEN Engine (Mutual Aid)	3	39*
HBF Truck	4	13	RIO Engine (Mutual Aid)	3	39
WVF Engine	2	16*	FBR Engine (Mutual Aid)	3	42*
SAM Engine	2	17*		3	43*
FBR Engine	2	18*		1	43*
		TOTAL			
				43	

**NFPA = 25 Firefighters
Commercial, or Multi
Family, or 3-Story**

**NFPA = 38 Firefighters
High Rise in 10 minutes**



What is a High-Rise Building?



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ed more than 75
of fire department



Proposed Gateway Building Type

Mid-Rise buildings - 4 to 8 Stories

- Fire fighting in mid-rise buildings present the same operational challenges as high-rise buildings.
- While there are no explicit NFPA response standards for mid-rise buildings, Arcata Fire Protection District will treat the Gateway mid-rise buildings equivalent to high-rise buildings for response staffing.



How Many Firefighters Does it Take?

Each Community is different – population size, area served, building height and mass variation, capacity of regional aid.

Formal method to establish staffing would be a Standard of Coverage. An independent assessment.



How Many Firefighters?

Humboldt Bay Fire JPA	Staff: 51 suppression – 17 On-duty	Budget: \$9.98 mil
Chico Fire Department	Staff: 57 suppression – 14 On-duty	Budget: \$17mil
San Luis Obispo FD	Staff: 49 suppression – 14 On-duty	Budget: \$13.9 mil
Arcata Fire District	Staff: 18 Suppression– 7 On-duty	Budget: \$6.4 mil



How Many Firefighters?

At minimum AFD would need an additional 24 suppression staff to have staffing similar to other comparable towns in California to respond to mid-rise building emergencies.

Because of the distribution fire stations and volunteer status of aid partners, more AFD staff might be required to meet response standards.



What Would it Cost?

Current Revenue:	\$6,473,000
Increased suppression staff cost:	\$4,868,600
Required Revenue w/ increased staff:	\$11,341,600



How many Firefighters?

- Staff: 42 Suppression - **14 On-Duty** Budget: \$ 11.3 Mil
- Three engine stations with a staff of 9: **27** suppression staff.
- One ladder truck with a staff of 4: **12** suppression staff.
- Shift duty officer, typically a Battalion Chief: **3** suppression staff.
- **24** more than AFD's current staffing.

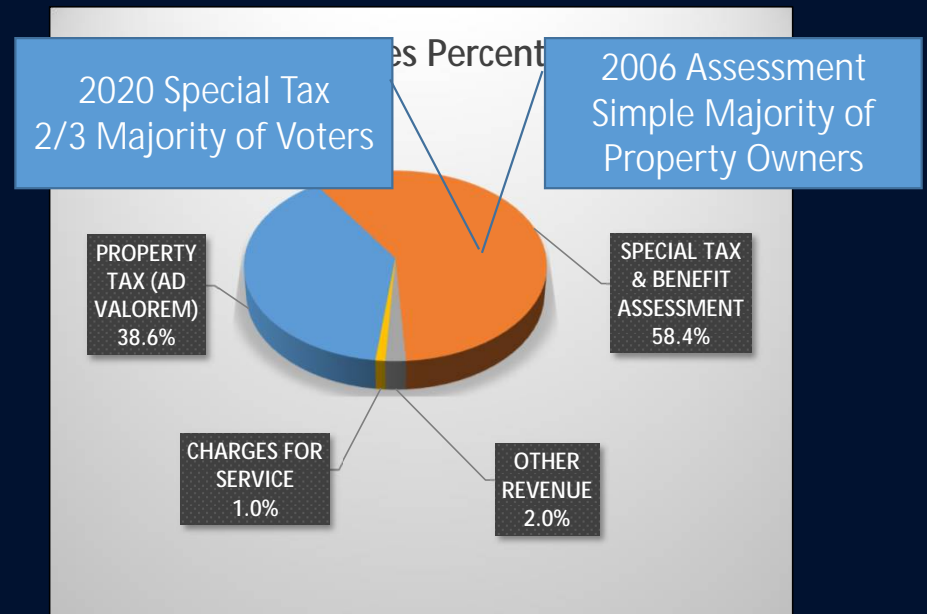


Arcata Fire District Budget

FISCAL YEAR 2022/23 Preliminary Budget Projections

REVENUES

PROPERTY TAX (AD VALOREM)	\$2,499,000
SPECIAL TAX & BENEFIT ASSESSMENTS	\$3,781,000
OTHER REVENUE	\$131,000
CHARGES FOR SERVICE	\$62,000
Total Revenues	\$6,473,000





Budget Modeling

FISCAL YEAR 2022/23 District Population 36022

REVENUES

PROPERTY TAX (AD VALOREM)	\$2,499,000
SPECIAL TAX & BENEFIT ASSESSMENTS	\$3,781,000
OTHER REVENUE	\$131,000
CHARGES FOR SERVICE	\$62,000
Total Revenues	\$6,473,000

FISCAL YEAR 2044/45 District Population 48384

REVENUES

PROPERTY TAX (AD VALOREM)	\$6,659,207
SPECIAL TAX & BENEFIT ASSESSMENTS	\$4,423,770
OTHER REVENUE	\$175,540
CHARGES FOR SERVICE	\$83,080
Total Revenues	\$11,341,597

48,384 District population estimate 2045, Arcata Growth 38%, Unincorporated Growth 31%, District 34%
Revenue Increases: Other Revenue and Services 34%, Assessments 17%, Property Tax, Remainder (166%)



Budget Modeling

Fiscal Year 2044/45
36,022 Initial Population Component

REVENUES

PROPERTY TAX (AD VALOREM)	\$3,106,257
SPECIAL TAX & BENEFIT ASSESSMENTS	\$3,781,000
OTHER REVENUE	\$131,000
CHARGES FOR SERVICE	\$62,000
Total Revenues	\$7,080,257

Fiscal Year 2044/45
12,362 Additional Population Component

REVENUES

PROPERTY TAX (AD VALOREM)	\$3,552,950
SPECIAL TAX & BENEFIT ASSESSMENTS	\$642,770
OTHER REVENUE	\$44,540
CHARGES FOR SERVICE	\$21,080
Total Revenues	\$4,868,597

The assessed value of new construction would need to be \$6,344,553,571 to generate the required Ad Valorem revenue.



Budget Modeling

- \$6,344,553,571 Assessed Value (2022 dollars)
- 12,362 Population Increase
- @ 2.3/ Household, 5,374 Units Required
- \$1,180,602 per Unit
- @ 949 sqft Gateway Unit \$1244/sqft
- 1500 sqft home: \$1,866,072



AFD's Conclusions

- Aid partner response and enhanced fire code elements are not adequate mitigation for 4 to 8 story residential buildings
- Feasibility of increased revenue for staffing mid-rise residential building response is unrealistic



AFD's Recommendations

- Height and Mass Codes commensurate with Fire District Capacity.
- Limit building to < 40 ft height (Garden Apartments) until funding is established for mid-rise residential response staffing.
- Require enhanced fire code elements in residential buildings over 2 stories.



QUESTIONS