



Fireground Operations: Structure Fires and
Associated Personnel Requirements

What Happens When a Structure Fire is Reported?

Leavenworth County Dispatch
Receives Call and Enters Information
Into Computer Aided Dispatch (CAD)

Computer Aided Dispatch (CAD)
Recognizes:

- Address
- Mutual Aid Box Alarm System (MABAS)
- Address History

Dispatch Sent via Radios and Pagers
to Fire, Police, and EMS

Fire District No. 1,
Mutual Aid Box
Alarm System
(MBAS)

(N) Stranger Rd / (W) 187th St	(N) Stranger Rd / (E) 187th St	Excludes Lansing City	Within City Limits
Fire District No. 1	Fire District No. 1	Fire District No. 1	Fire District No. 1
City of Leavenworth (Engine Co.)	City of Leavenworth (Engine Co.)	City of Leavenworth (Engine Co.)	City of Leavenworth (Engine Co.)
Ft. Leavenworth (Engine Co.)	Ft. Leavenworth (Engine Co.)	Fairmount (Engine Co.)	Fairmount (Engine Co.)
Kickapoo Township (Tender)	Ft. Leavenworth (Tender)	Ft. Leavenworth (Tender)	
Alexandria Township (Tender)	Kickapoo Township (Tender)		
(S) Stranger Rd / (W) 187th St	(S) Stranger Rd / (E) 187th St	(S) of 4H (W) of U73 excludes Lansing	(S) of 4H (E) of U73 Excludes Lansing
Fire District No. 1	Fire District No. 1	Fire District No. 1	Fire District No. 1
City of Leavenworth (Engine Co.)	City of Leavenworth (Engine Co.)	City of Leavenworth (Engine Co.)	City of Leavenworth (Engine Co.)
Tonganoxie City (Engine Co.)	Fairmount Township (Engine Co.)	Fairmount (Engine Co.)	KCK (Engine Company)
Alexandria Township (Tender)	Stranger Township (Tender)	Stranger Township (Tender)	KCK (Tender)
Tonganoxie Twp. (Tender)	Tonganoxie Twp. (Tender)	KCK (Tender)	Fairmount (Tender)
Mutual Aid Box Alarm System 2nd Alarm (Structure Fires Only)			
High Prairie Township (DISTRICT 1 FIRE)		Delaware Township (DISTRICT 1 FIRE)	Lansing City (DISTRICT 1 FIRE)
(N) Stranger Rd / (W) 187th St	(N) Stranger Rd / (E) 187th St	Excludes Lansing City	Within City Limits
Easton Twp. (Tender)	Fairmount (Engine Co.)	KCK (Engine Co.)	Ft. Leavenworth (Engine Co.)
Fairmount (Engine Co.)	Alexandria Twp. (Tender)	Tonganoxie Twp. (Tender)	
	Tonganoxie Twp. (Tender)		
(S) Stranger Rd / (W) 187th St	(S) Stranger Rd / (E) 187th St	(S) of 4H (W) of U73 excludes Lansing	(S) of 4H (E) of U73 Excludes Lansing
Fairmount (Engine Co.)	Tonganoxie City (Engine Co.)	KCK (Engine Co.)	Fairmount (Engine Co.)
Kickapoo Twp. (Tender)	Kickapoo Twp. (Tender)	Fairmount Twp. (Tender)	Stranger Township (Tender)
Stranger Twp. (Tender)	Alexandria Twp. (Tender)		



How Many Firefighters Do We Send?

NFPA Standards, and Guidelines: Supporting On-Scene Personnel Requirements

- NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (ISO Criteria)
- NFPA 1521: Standard for Fire Department Safety Officer Professional Qualifications
- NFPA 1561: Standard on Emergency Services Incident Management System and Command Safety
- NFPA 1700: Guide for Structural Fire Fighting

NFPA 1710: 16 Personnel, Minimum (17 If an Aerial Device is Needed)

Establish Incident
Command (1)

Establish
Uninterrupted water
supply (1)

Establish an Effective
Water Flow of 300
GPM From 2
Handlines (4)

One Support
Member for Each
Attack and Backup
Line (2)

Establish at least
one victim search (2)

Establish team to
raise ground ladders
(2)

RIT (4)

Aerial Operator If
Used (1)

Initial Response For A Structure Fire: City of Lansing (12 Personnel)

Fire District No. 1 (4)

- Chief
- Captain
- Driver/Operator
- Firefighter
- Volunteers ?????

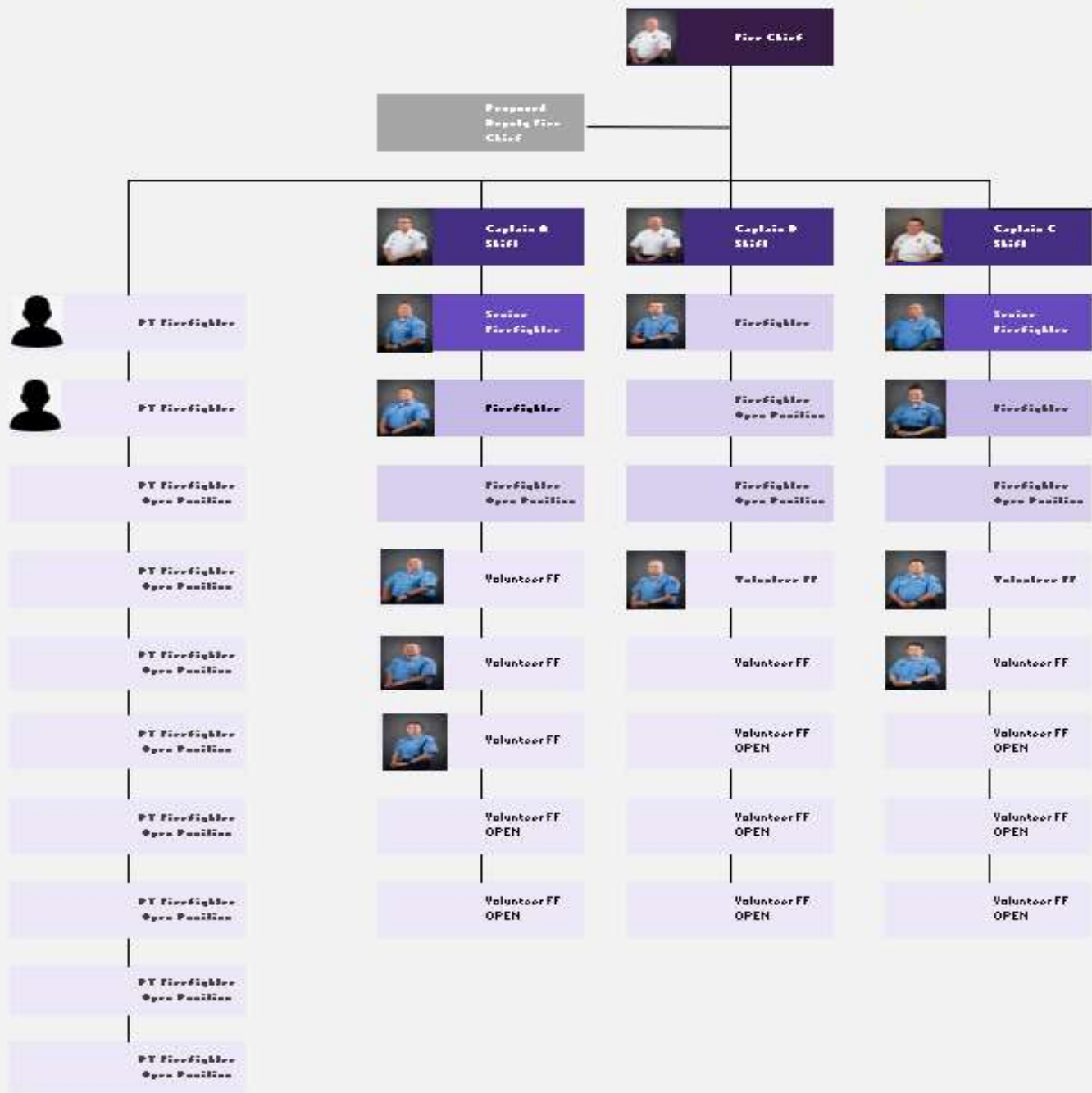
City of Leavenworth (4)

- Battalion Chief
- Captain
- Driver/Operator
- Firefighter

Fairmount Twp. (4)

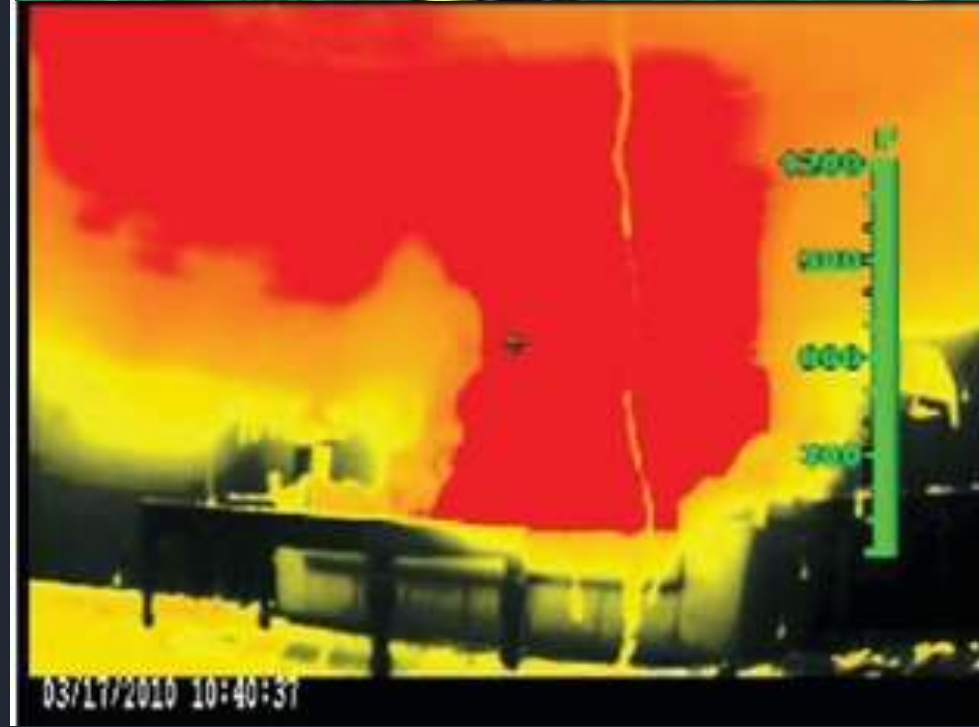
- Captain Driver/Operator
- Driver/Operator
- Firefighter
- Firefighter

Fire District No. 1, Leavenworth County



Fire District
No. 1:
Organizational
Chart

Why Do Manpower and Time Matter?



FLASHOVER!

- The point at which all contents within a room ignite
- Approximately 1,100° F



Open Flame to Flashover

- NFPA 921 states, "Research has shown that time to flashover from open flame can be as short as 1-1/2 minutes in a residential fire."
- Modern Day Causes of Decreased Time to Flashover
 - Furniture Made of Synthetic Fabrics
 - Plastics Used in Construction
 - Open Concept

Personnel Requirements Increase as Time Passes on The Emergency Scene

FATIGUE



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Personnel Challenges

- Volunteer Firefighters Dramatically Decreasing in Numbers
- More Career Firefighters Needed to Account For Fewer Volunteer Firefighters
- Note That Nationwide, There Are Declining Numbers of People Choosing to Become Career Firefighters



Personnel Challenges-Continued

National Trends/Issues

- Fewer Applicants (career and volunteer)
- More Disabling Events
 - ⑩ Mental Health
 - ⑩ Physical Injuries

Local Trends/Issues

- Leaving for Larger Departments that Offer:
 - ⑩ Higher Call Volume
 - ⑩ Higher Pay
 - ⑩ Availability of Specialty Teams
- Uncertainty About the Future of FD1 is Having an Impact

Conclusion

- The Decisions we Make as Leaders Affect the Safety of People and the Preservation of Property.
- Having the Right Numbers of Firefighters with the Appropriate Skill Set is Critical.
- National and Local Trends have made Hiring and Retaining Firefighters Very Challenging.
- Fire District No. 1 is Actively and Aggressively Working to Meet These Challenges.



Questions?

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Fire District No. 1

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