

UNIT AND LEVEL OF ANALYSIS	SUMMARY OF POSITIVE ASPECTS	SUMMARY OF NEGATIVE ASPECTS	RECOMMENDATIONS
AMBULANCE COMPANY	<p>The ambulance is capable of responding to a majority of all roads in the response jurisdiction within critical time frames, increasing the odds of a positive patient outcome.</p>	<p>The ambulance deploys with two firefighters trained to provide only basic life support (BLS) services.</p> <p>The deployment of the ambulance into the community drains the limited number of available fire department personnel.</p> <p>Any decrease in available personnel translates into under-staffed units deploying into the community in the event of a simultaneously occurring alarm.</p> <p>Under-staffed units deploying into the community results in a decrease in efficiency and effectiveness, and increases the odds of injury and death to both citizens and firefighters.</p>	<p>Provide dedicated staffing of two EMS cross-trained firefighter/EMTs on the ambulance on a 24-hour basis.</p> <p>Ensure all fire department personnel are cross-trained as basic life support (BLS) providers, certified in automated external defibrillation.</p> <p>Consider cross-training fire department personnel as providers of intermediate or advanced-level emergency medical care.</p>

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ENGINE COMPANY	<p>The engine is capable of responding to a majority of all roads in the response jurisdiction within critical time frames, increasing the odds of patient survivability and, in the event of fire, a positive outcome.</p>	<p>The engine is not staffed with four firefighters, out of compliance with the company staffing objectives outlined in NFPA 1710.</p> <p>Simultaneously occurring emergencies drain the limited number of fire department personnel, increasing the reliance upon mutual aid resources.</p> <p>Extra-jurisdictional resources consist of distantly-located mutual aid companies that:</p> <ul style="list-style-type: none"> <li>a) respond to the Fairview Fire District only when they are available to respond</li> <li>b) are themselves understaffed<sup>1</sup></li> <li>c) may not be certified to conduct interior fire suppression operations in the Fairview Fire District</li> <li>d) include volunteer companies, an unreliable and inadequately-trained source of mutual aid</li> <li>e) have response times that exceed critical time frames for the safe and effective delivery of emergency services</li> </ul>	<p>All fire companies should be staffed with at least four firefighters, cross-trained as EMS providers, in compliance with NFPA 1710 company staffing objectives.</p> <p>The engine company should consist of three firefighters operating under the command of a fire captain, and should deploy as a company, from the engine, at all times and under all conditions.</p> <p>The practice of cross-staffing other emergency units with engine company personnel should be discontinued.</p>

<sup>1</sup> It had been indicated that mutual aid companies respond apparatus that are staffed with as few as a single firefighter, and never more than three firefighters.

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LADDER COMPANY	<p>The ladder truck is capable of responding to a majority of all roads in the response jurisdiction within critical time frames.</p>	<p>The ladder truck does not deploy with four firefighters, out of compliance with the company staffing objectives outlined in NFPA 1710. Rather, the ladder truck deploys into the community staffed with only two fire fighters, assuming a simultaneously occurring emergency has not depleted available personnel.<sup>2</sup> Staffing may decrease to as few as a single firefighter in the event of overlapping incidents.</p> <p>A dispatch to a structure fire, which consists of the deployment of one engine and one truck, requires two firefighters to staff and deploy the engine and the remaining two firefighters to staff and deploy the truck. This single incident involves the deployment of all four firefighters. With all on-duty personnel engaged on a single incident, no personnel remain at the station to respond to simultaneously occurring alarms.<sup>3</sup></p>	<p>All fire companies should be staffed with at least four firefighters, cross-trained as EMS providers, in compliance with NFPA 1710 company staffing objectives.</p> <p>The ladder company should consist of three firefighters operating under the command of a fire officer, and should deploy as a company, from the ladder truck, at all times and under all conditions.</p> <p>The practice of cross-staffing the ladder truck, or any other emergency unit, with engine company personnel should be discontinued.</p>

<sup>2</sup> For example, in the event of a brush fire or car fire, the engine is assigned to respond. This single incident involves the deployment of all four firefighters, and translates into no personnel remaining at the station to respond to simultaneously occurring alarms.

<sup>3</sup> It is important to note that this condition is not mitigated by the Fairview volunteer corps. Volunteer firefighters respond to an emergency at their discretion and based upon their availability. Inasmuch as volunteer firefighters are not located at the firehouse, they are not immediately available to respond to time-critical emergencies. More importantly, in those instances where they do respond to an incident, they may not be certified to perform certain on-scene operations, such as interior fire attack. According fire department training records, of the 18 volunteer firefighters that constitute the volunteer corps, only 8 are certified in interior structural fire suppression.

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<p><b>“2 IN/2 OUT” FIRE SUPPRESSION &amp; RESCUE OPERATIONS</b></p>	<p>Due to existing staffing practices that fail to meet compliance with existing national standards, there is no commentary that can be provided in regards to safe and effective fire suppression and rescue operations.</p>	<p>The OSHA “2 In/2 Out” regulation requires that fire suppression operations be conducted only when sufficient personnel are assembled at the incident scene to allow for at least two firefighters performing interior fire suppression and rescue operations, and two firefighters outside immediately available to intervene in case of an emergency, such as structural collapse or flashover.</p> <p>The fire department is unable to initiate safe and effective fire suppression and rescue operations in accordance with the “2 In/2 Out” regulation in the event of an simultaneously occurring emergency, such as a medical alarm, which effectively reduces the pool of available personnel by 50%, from four firefighters to two firefighters. Under such conditions, “2 In/2 Out” operations become impossible.</p> <p>Even if all four personnel are available to respond to a fire, one of those is required to establish and maintain the water supply to those operating in the burning structure. The performance of these duties effectively renders this individual incapable of acting as part of a rapid intervention team in the event of structural collapse, flashover, or other fireground emergency.<sup>4</sup></p>	<p>The fire department should pursue efforts to enter into compliance with existing professional standards for the safe and effective delivery of fire suppression and rescue operations. All engine and ladder companies should be staffed with four firefighters, in compliance NFPA 1710 company staffing objectives.</p>

<sup>4</sup> A four-person fire company may initiate emergency search and rescue operations at the order of the incident commander if there is a “reasonable” and immediate threat to life.

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<p><b>INITIAL ALARM ASSIGNMENT</b></p>	<p>When all on-duty personnel are available to respond immediately upon dispatch, the fire department is capable of reaching a majority of all roads in the response jurisdiction within 8 minutes.</p>	<p>In spite of the fire department's ability to respond on a majority of all roads 8 minutes or less, they do so with insufficient resources to initiate safe and effective fireground operations. Assuming all on-duty personnel are available to respond, the fire department is capable of assembling four firefighters in 8 minutes or less at the scene of a structure fire. Recall, however, that one of these firefighters is required to establish and maintain a water supply. As such, only three firefighters are available to engage in direct fire suppression and rescue operations.</p> <p>Reliance upon volunteer firefighters to augment career personnel at the fire scene translates into a delayed response of support personnel who possess limited fire service training and experience, and who may not be qualified to perform interior fire suppression and victim rescue.</p> <p>The fact that distantly-located mutual aid companies a) must be available to respond, b) have response times that exceed critical time frames for the safe and effective delivery of emergency services, and c) include volunteer companies who may not be available to respond (and if they are, may be limited in the support they can provide) only exacerbates the Fairview Fire Department's staffing conundrum.</p>	<p>The fire department should pursue efforts that bring it closer into compliance with existing professional standards. One engine and one ladder company should each be staffed with <i>at least</i> four firefighters, in compliance NFPA 1710 company staffing objectives.</p> <p>In addition, the fire department should update the existing mutual aid contracts it maintains with neighboring jurisdictions. Extra-jurisdictional resources should be deployed to arrive at the scene of a structure fire in the Fairview Fire District within 8 minutes of alarm receipt.</p>

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<p><b>NFPA 1710'S INITIAL FULL ALARM ASSIGNMENT</b></p>	<p>Due to existing staffing practices that fail to meet compliance with existing national standards, there is no positive commentary that can be provided in regards to NFPA 1710's Initial Full Alarm Assignment.</p>	<p>The fire department does not appropriately staff and deploy sufficient resources to comply with NFPA 1710's Initial Full Alarm assignment, which states that "the fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a 4-minute response time and/or the initial full alarm assignment within an 8-minute response time to 90% of the incidents."<sup>5</sup> Using roads as a proxy for incidents, the fire department fails to meet this requirement on both counts: less than 90% of all roads receive engine coverage within 4 minutes, and an insufficient number of on-duty personnel exist to meet the requirement of 15 firefighters on scene within 8 minutes.</p> <p>Although NFPA 1710's equivalency clause allows the use of mutual aid to attain compliance with the standard, existing mutual aid compacts with neighboring departments do not provide sufficient resources, within critical time frames, to meet compliance.</p>	<p>The fire department should pursue efforts to enter into compliance with existing professional standards. One engine and one ladder company should each be staffed with four firefighters, in compliance NFPA 1710 company staffing objectives. One ambulance should be staffed with two firefighters cross-trained in the delivery of emergency medical care.</p> <p>In addition, the fire department should update the existing mutual aid contracts it maintains with neighboring jurisdictions. Efforts should be pursued to ensure that at least five firefighters respond automatically from a neighboring jurisdiction in the event of a structure fire in the Fairview Fire District. These extra-jurisdictional resources should be deployed to arrive at the incident scene within 8 minutes of alarm receipt.</p>

<sup>5</sup> NFPA 1710, § 5.2.3.2.1 and § 5.2.3.2.2, (a) – (h)