Staffing Needs Analysis for Winchendon Fire Department (WFD)

1. Gap Analysis: WFD vs NFPA 1710 and OSHA 2-In/2-Out Standards

Current WFD Staffing: The Winchendon Fire Department operates one fire station with only 3 personnel on duty per shift on average (one of which is a part-time member). These members are cross-staffing an engine, ladder, and ambulance. This is below the NFPA 1710 recommended minimum of 4 firefighters per company for safe and effective fire response. It also falls short of the OSHA "2-in/2-out" regulation, which requires at least 4 firefighters on scene (2 inside fighting the fire and 2 outside ready to rescue) before initiating interior attack in a structure fire. In practical terms, WFD's crew of 3 cannot perform an OSHA-compliant interior fire attack upon arrival and must wait for additional help, unless a known life rescue exception applies. Just in the past twelve months alone we have had initial fire responses of just one firefighter multiple times.

NFPA 1710 Requirements: NFPA 1710 is the national standard for career and combination fire departments' organization and deployment. Key benchmarks include:

- Crew Size: Minimum 4 firefighters per apparatus (engine or ladder) on duty. WFD's 3-person engine companies do not meet this, impacting both fire suppression and EMS operations. NFPA 1500/1710 also recommend a four-member team on the initial attack line for firefighter safety. WFD's current staffing means initial fire attack teams are under-staffed, elevating risk.
- Full Alarm Assignment: Assemble 15 firefighters (for a low-hazard residential fire) on scene within 8 minutes travel (NFPA 1710's requirement for initial full-alarm for a single-family dwelling). WFD cannot muster anywhere near 15 firefighters rapidly; with only 3 on duty, it relies on off-duty call personnel and mutual aid for additional responders. This gap means critical tasks (search, ventilation, backup lines) are delayed until help arrives. Table 1 illustrates WFD's current response versus NFPA benchmarks.

Table 1. WFD Response Capability vs NFPA 1710 Benchmarks

Response Metric	NFPA 1710 Standard	WFD Current (3 per shift)	Needed to Meet Standard
Crew staffing per engine/ladder	4 firefighters (100% of responses)	3 firefighters (below minimum)	+1 firefighter per crew (4 total)
Full first alarm deployment	~15 firefighters in 8 min (low-hazard)	~3–6 on initial alarm (with call-ins/mutual aid)	Significant hiring + mutual aid to approach 15
OSHA 2-in/2-out interior attack	4 firefighters on scene before entry	Not met (Only 3 on initial response)	+1 on-duty to allow interior attack (2-in/2-out)

Impacts: These gaps manifest lead to extended response times, delayed fire attack, and reliance on mutual aid, which can jeopardize fire containment and patient outcomes. For example, 0% of the town currently receives an immediate OSHA-compliant interior attack (no two-in/two-out capability on first arrival). By increasing to 4 firefighters per shift, WFD could perform an interior fire attack upon arrival for a large percentage of fire calls. Similarly, with only one crew handling both engine and ambulance calls, simultaneous incidents overwhelm WFD's capacity immediately, forcing triage of incidents or waiting for neighboring towns. Currently with the 3 on-duty firefighters our department is incapable of handling two medical calls most of the time and at no time can we properly handle a medical call and a fire call for service.

ISO Public Protection Classification (PPC): WFD's staffing also affects its ISO fire insurance rating. ISO PPC grading assigns up to **15 points for staffing** on initial alarm, with credits only given for crews that can respond promptly. Departments must show at least 4 firefighters respond to all structure fires to avoid the worst rating (Class 10). Currently, WFD's **3-person response is below ISO's minimum criteria**, meaning Winchendon risks a poorer ISO class. (**ISO requires 6 firefighters on the initial alarm** for even a Class 8B rural classification). Improving staffing will not only enhance safety but can **improve ISO score**, potentially lowering insurance premiums for residents and businesses. In summary, there is a clear **gap between WFD's resources and national standards**. Bridging this gap (through hiring to improve deployment) is critical to meet NFPA 1710's benchmarks for timely, effective response and to comply with safety regulations.

2. Comparison to Similar Departments and Best Practices

Peer Staffing Levels: Winchendon's situation is not unique – many small towns (~10,000–15,000 population) operate combination fire departments with limited career staffing.

Nationally, only about 26% of U.S. fire departments in communities of 10,000–24,999 people are fully career; the majority rely on part-time or on-call firefighters. WFD's model (a small full-time core augmented by paid on-call members) is therefore typical for its size. However, best-in-class departments of similar size have moved toward higher on shift staffing to improve service. For instance, NFPA research shows an average of around 1.3–1.7 career firefighters per 1,000 population in small combination departments. For Winchendon (≈10.9k people), this implies roughly 14–18 full-time firefighters, whereas WFD currently has only 10 (plus call staff). Some peer communities maintain 4–6 firefighters on duty per shift even with one station, to ensure multiple units can respond. This exemplifies that many small-town fire departments recognize the need for 4+ person crews and are actively seeking to add personnel.

Deployment Approaches: WFD's current cross-staffing (one crew switching between engine, ladder, and ambulance) is inherently inefficient – when the ambulance is out on an EMS call (which is frequent, since EMS dominates the call volume), no staffed fire engine is available to respond to a fire, and vice versa. Comparable departments have mitigated this by adopting NFPA standards locally. Progressive departments use NFPA 1710 as a planning guide to quantify the gaps. Fire chiefs in peer towns have successfully argued for staffing increases to political leaders and taxpayers, often showing it is a public safety necessity supported by national benchmarks.

Firefighter Safety and Efficiency: It's widely recognized that crew size matters for fireground outcomes. We have seen this in recent tragedies as well as studies and NFPA standards, citing that a 4-person engine crew can deploy hose lines and perform rescues significantly faster and more safely than a 3-person crew or less. Smaller departments that have moved from 2- or 3-person crews up to 4-person crew report improved fire knockdown times and fewer instances of firefighters having to take high risks (like making entry without backup). The NFPA, IAFF, and ISO all emphasize that adequate staffing reduces firefighter fatigue and injury rates, which is something that has plagues WFD yearly. In Winchendon's case, increasing to four per shift will immediately improve compliance with the OSHA 2-in/2-out rule and enhance firefighter safety during interior fires. The best practice for any career department is to staff for the "worst first hour" of an incident, meaning having enough trained personnel on the initial alarm to effectively handle a room-and-contents fire or a cardiac arrest without relying on outside help. WFD's goal is to add staff to align with what many progressive small departments are doing by leveraging grants and regional support to incrementally reach NFPA 1710's recommendations, thereby improving service reliability and safety.

3. Grant Opportunities for Staffing and Equipment

Securing external funding will be critical for WFD to expand staffing and upgrade equipment. Several federal grants are tailored to fire department needs:

• FEMA Staffing for Adequate Fire and Emergency Response (SAFER) Grant: The SAFER program provides funding specifically to hire firefighters or recruit/retain

volunteer firefighters. It aims to help departments meet industry staffing standards and ensure 24/7 coverage. The Winchendon Fire Department has been fortunate enough to receive this nationally competitive grant previously. For FY 2024, SAFER has \$324 million available nationally. High priority is given to departments that need to **increase staffing to meet NFPA 1710 standards**, such as achieving 4 firefighters on an engine or improving response times. In fact, the program explicitly ties to NFPA standards. WFD, as a municipal fire department, is eligible to apply and has yearly.

- **FEMA Assistance to Firefighters Grant (AFG):** The AFG program is designed to help fire departments obtain critically needed equipment, apparatus, training, and other resources. WFD can use AFG funds for things like personal protective equipment (turnout gear, SCBAs), firefighting tools, communications equipment, and even vehicles. This is another grant opportunity that WFD has applied for and received, thus reducing the burden on the taxpayers.
- **Fire Prevention & Safety (FP&S) Grants:** Under the AFG umbrella, FP&S grants fund projects that improve **fire safety education, code enforcement, and firefighter health research**. WFD has used FP&S funding for initiatives like a public fire extinguisher training. This is a secondary priority relative to staffing needs, but worth noting for comprehensive risk reduction efforts.
- Other Grants: Massachusetts offers some fire service grants (such as the state Firefighter Safety Equipment Grant, EMS Regional grants, etc.). WFD has applied for these on an annual basis and has often received a sizeable boost to our equipment upgrades.

4. Financial Modeling: Cost Estimates for Staffing Plans

Upgrading WFD's staffing will require significant investment. WFD would like to outline **short-, medium-, and long-term staffing plans** with estimated costs, including salaries and benefits for new hires. All cost figures are approximate, for planning purposes.

Short-Term (0-1 year): Achieve 4 Firefighters per Shift. The immediate goal is to **increase from 3 to 4 personnel on duty 24/7**, complying with NFPA 1710's minimum company size and OSHA's 2-in/2-out. This requires hiring **4 additional full-time firefighters** (one per shift, assuming four rotating shifts). Table 2 illustrates the cost projection.

Table 2. Short-Term Staffing Cost Estimate (Adding 4 Firefighter/EMTs)

Cost Element	Per New Firefighter (Estimate)	4 New Firefighters (Annual)
Base Salary – Firefighter/Medic (assume mid-career rate)	~\$71,000	~\$284,000
Fringe Benefits (health insurance, pension, etc. ~30%)	~\$24,500	~\$96,000
Employer Taxes (FICA/Medicare, etc.)	~\$4,200	~\$16,800
Uniforms, Gear, Initial Training (first-year costs)	~\$10,000	~\$40,000 (one-time)
Total Year-1 Cost per FF (with gear)	~\$109,700	~\$438,800 (Year 1)
Ongoing Annual Cost per FF (salary+benefits)	~\$99,700	~\$398,800 (subsequent years)

Short-term impact on budget: Adding ~\$400k in annual payroll will raise the fire department budget. The Town will attempt to utilize a SAFER grant to cover a large portion of these costs in the first three years, easing the immediate burden. Even with SAFER, the town's share would gradually increase. The benefit is that WFD would then consistently field 4 firefighters per call, enabling an engine and ambulance to handle two simultaneous incidents (to an extent) or to perform full 2-in/2-out at a fire without waiting. This is expected to reduce overtime costs as well, since backfilling for a three-person minimum often incurs OT – with a fourth person, call shifts can be more flexible and the department is less strained by one person off-duty.

Medium-Term: Expand Staffing for Second Apparatus/Coverage. In the medium horizon, WFD should plan for either **staffing a second response unit**.

Add 4 more firefighters (total 8 added from current) to staff a second ambulance full-time or to elevate daily staffing to 5. This would allow, for example, 4 personnel to handle a fire call (engine + ladder) while a 5th takes an ambulance, or vice versa. It could also enable two ambulances during peak hours (2 crews of 2 each) or an engine and ambulance response to two different calls. The cost for another 4 firefighters is similar to Table 2: Some of this could again be grant-funded or phased over a couple budget cycles.

To present a **multi-year financial plan**, the town could use a model like:

- Years 1–2: Hire 4 (to 4/shift) leverage SAFER grant, convert ambulance revenue uptick into account for salaries. Another possibility that has been used in other communities is to dedicate a Proposition 2½ override strictly for staffing.
- Years 3–4: Hire additional 4 possibly another SAFER round if available. Town to cover prior hires as SAFER phases out.

Summary of Costs: Table 3 provides a simplified projection of staffing and budget impact:

Table 3. Short vs. Long Term Full-Time Staffing Plan and Estimated Budget

Phase	Career FFs (on shift)	Key Improvements
Current (2025)	10 FT (2 per shift)	0% 2-in/2-out coverage; heavy mutual aid reliance. ISO ~Class 5–9 (est.)
Short-Term (+4)	14 FT (3 per shift)	4-per-crew meets OSHA/NFPA crew minimum. improves 2-in/2-out capability, faster turnout, reduced fatigue and injuries.
Medium- Term (+8)	18 FT (4 per shift)	Crews available (e.g. engine + amb).

(FT = full-time firefighters; does not count call/volunteers. Budget includes salaries, benefits, operations not capital.)

These figures should be refined with actual pay scales and benefits rates. Nonetheless, the trend is clear: **significant investment is needed** to bring WFD up to national standards, but each incremental increase in staffing yields substantial service improvements (faster response, enhanced safety, and potentially lower insurance rates). Town officials must weigh these benefits against the costs and likely seek voter support for funding increases. In the next section, we explore ways to generate revenue or justify the budget growth.

5. Revenue Strategies and Budget Justifications

Paying for expanded Fire/EMS services in Winchendon will require a multi-pronged financial strategy. Below are several approaches:

Increase Ambulance Revenue: WFD's ambulance service is a key revenue generator. By increasing staffing and adding ability to cover a second ambulance, WFD can handle more EMS calls in-house that might otherwise be covered by mutual aid. This means more patient transports billed to insurance. Currently, WFD even covers Royalston's EMS calls (~75% of them) without reimbursement. This situation is proposed in the upcoming budget cycle. Strategies to increase ambulance revenue are:

 Billing and Fees: Ensure WFD is charging competitive transport fees for BLS and ALS, and aggressively pursue insurance reimbursements (Medicare/Medicaid and private insurers). If call volume rises (with population or service area growth), consider continuing to increasing rates modestly or possibly adding specialty service fees (where appropriate under law).

- Ambulance Enterprise Fund: Winchendon could adopt an enterprise fund for ambulance operations, where ambulance revenues are reserved to fund EMS expenses (including personnel). This can demonstrate to taxpayers that EMS can partially pay for itself. With expanded firefighter coverage the potential to add \$150K yearly is a conservative option. Those funds can offset salaries of new firefighter/paramedics.
- Inter-Municipal EMS Agreements: Given Royalston relies on Winchendon for EMS, pursue a contractual agreement for service. Neighboring towns sometimes pay an annual fee or per-call fee to departments that provide regular mutual aid. WFD could negotiate with Royalston (or the county) to contribute to costs e.g. an annual subsidy or paying the shortfall for handling their EMS calls. Exploring funding contributions from neighboring towns is recommended. Even a modest \$25,000-\$50,000 from Royalston would help cover a portion of an EMT's salary, for instance.

Tax Override (Proposition 2½): The Town may need to ask voters for a **Proposition 2½ override** earmarked for public safety. The Fire Department's needs (an extra ~\$400K annually in coming years) could be a component of that override. To succeed, a strong public communication is required:

- Justification: Emphasize that current staffing is below safety standards and that response times to calls are dangerously high (perhaps >25 minutes if waiting for mutual aid). Show how additional firefighters will directly improve life-saving services and enabling immediate rescue operations where today firefighters must wait for backup. Residents should understand that this is about saving lives and property; an engine arriving 4-5 minutes sooner can mean a fire contained to one room instead of a house lost, or a cardiac arrest patient getting defibrillation in 4 minutes instead of 20. These outcomes have real, quantifiable benefits.
- Cost to Taxpayers: Break down the override impact in simple terms (e.g. "for the average homeowner, it may mean \$X per month"). Compare that to potential insurance savings: if the ISO rating improves better staffing and water supply, homeowners could see insurance premiums drop. Investing in our fire department now could not only prevent tragedy but potentially pay back in lower insurance and higher property values long-term.

Grants and One-Time Funding: As discussed, SAFER grants can significantly subsidize new hires initially (covering up to 75-100% of wages for a couple years). WFD should aggressively pursue these to buy time and reduce immediate tax impacts. The Town should also reserve any unexpected revenues to put toward fire department needs, (for example, using one-time funds to buy a new ambulance instead of borrowing, so those types of purchases don't hit the tax levy).

Mutual Aid Cost Recovery: For fire mutual aid, direct charging is less common (since aid is usually reciprocal), but given WFD's unique EMS aid to Royalston, cost recovery is more than acceptable. Formal **automatic aid agreements** may include clauses for reimbursement if a department repeatedly has to cover another's jurisdiction. WFD's plan to **strengthen regional partnerships** might include seeking state support for being a regional EMS hub (perhaps a small state grant because covering Royalston effectively expands WFD's responsibilities).

Ambulance Service Expansion: Ensuring that WFD captures as many EMS transports as possible will boost revenue. This means keeping ambulances in-town available. By staffing a second ambulance unit (especially ALS-equipped) WFD can reduce instances where an outside ambulance (with no revenue benefit to Winchendon) has to be called because the primary ambulance is tied up. It also positions WFD to potentially handle *inter-facility transfers or special event standbys* for a fee, if staffing allows, further increasing revenue streams.

Efficiency and Cost Savings: While adding staff increases costs, there may be **offsetting savings** to highlight:

- Overtime Reduction: Understaffing often leads to heavy overtime to cover vacancies, which can be costly. WFD likely incurs OT whenever someone is sick or on leave to keep 3 on shift. With a 4th person on each shift, the department expects OT expenses could drop. Over several years, those savings accumulate.
- Injury and Liability: Better staffing can prevent firefighter injuries (two firefighters can lift heavy equipment together, etc.), reducing workers' compensation claims. It also reduces the town's liability risk in the event of a catastrophic fire. Failure to meet standards could be cited in lawsuits; conversely, if WFD meets recognized standards like NFPA 1710, the town is on firmer ground legally. This risk management aspect is a subtle but important savings.
- Fire Loss Reduction: Faster response and effective firefighting should lead to smaller fires (less damage) and potentially lower insurance payouts in the community. Over time, this can reflect in insurance rates and the town's economic well-being (businesses are more likely to invest if there's confidence in fire protection). While hard to quantify in a budget, it's a community cost savings that can be cited.

ISO Rating and Insurance: As mentioned, improving the ISO rating can reduce insurance premiums for property owners. Winchendon's ratings will consider the new staffing levels, and coverage improvements. If the town invests in these and communicates with ISO (requesting a new evaluation after major changes), residents could see tangible insurance savings. It should be emphasized that this investment that can pay back the community.

Regional Reimbursement for Mutual Aid: As a creative approach, Winchendon could advocate at the state level for a program to reimburse departments that **provide** disproportionate mutual aid. This is not standard currently, but some states do fund "regional service grants." Showing that WFD covers neighboring towns (Royalston EMS, etc.) could bolster a case for such funding.

In conclusion, funding WFD's staffing plan will rely on a mix of grant funding, increased recurring revenue, and taxpayer support. The Town should pursue grant opportunities aggressively (SAFER for personnel, AFG for equipment), enhance ambulance revenue by expanding services, and prepare a justified budget increase possibly through an override. By tying each dollar spent to a concrete outcome (a neighborhood gets an ambulance in 5 minutes instead of 15, firefighters can enter a burning home to save someone three minutes sooner, etc.), the WFD can build strong public backing. Public safety is a core service, and aligning WFD's resources with national standards (NFPA 1710, OSHA, ISO) is ultimately about protecting the lives and property of Winchendon's citizens in the most effective way.