INCIDENT MANAGEMENT TECHNOLOGY
FIRE RESPONSE SOFTWARE

PRISM REPORT 1 OF 3 · COMMUNITY RISK ASSESSMENT — NFPA 1300

A Community Risk Assessment for the Fairview Fire & EMS Service Area

Ten planning zones scored on the PRISM probability × impact model — the risk foundation for the Standards of Cover adopted in Report 2 and the performance scorecard measured in Report 3. Template-complete: every production data point, populated with synthetic demonstration data.

DEMO COMMUNITY · EVERY FIGURE SYNTHETIC

PREPARED FOR	ASSESSMENT DATE	VERSION	POWERED BY
FAIRVIEW FIRE & EMS (FICTIONAL)	2026-08-04	V2.1 · TEMPLATE-COMPLETE DEMO	IMT · PRISM

ABOUT THIS DOCUMENT

What this is — and what it is not

This is the **full-detail Report 1 demonstration deliverable** for the fictional community of Fairview. It carries every section of a production PRISM Community Risk Assessment — the same structure, the same risk model, the same tables — populated entirely with **synthetic demonstration data**. No figure in this document describes a real community, department, or incident. The numbers are internally consistent with the Fairview demo portals for Report 1, Report 2 (Standards of Cover) and Report 3 (Service Delivery Scorecard).

▸ THE THREE-REPORT CHAIN

Report 1 (this document) establishes what the risk is, zone by zone. **Report 2** adopts response standards sized to those risk classes. **Report 3** measures actual performance against the adopted standards, quarterly. Each report cites the same hashed data artifact, so every number is traceable to its source run.

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§ 01 · EXECUTIVE SUMMARY

The risk picture for the Fairview service area

Seven mandatory NFPA 1300 risk profiles, scored per planning zone with the PRISM probability × impact model.

COMPOSITE PRISM RISK	POPULATION PROTECTED	PLANNING ZONES	ANNUAL DEMAND	STATIONS · PERSONNEL	5-YR STRUCTURE FIRES
R 7.5	**34,800**	**10**	**2,410**	**5**	**214**
Moderate · prob 2.9 × impact 2.6	28.4 mi² · 1,225/mi² overall	1 High · 6 Moderate · 3 Low	2025 · 60% EMS · +2.8%/yr	38 career · 82 volunteer	$4.2M property loss

⚠ THE ONE-LINE RISK FINDING

Fairview's dominant risks are **concentrated, not uniform**: one High zone (Z-06 Riverbend — industrial park, 180-bed senior living, pre-war rowhomes, flood corridor) sits beside a Moderate urban core, while two rural zones carry long travel and no hydrants. EMS is 60% of demand and growing — the dual-role staffing model is the system's binding constraint (Report 3: 23% of calls begin while units are already committed).

Top findings

#	FINDING	WHERE IT IS QUANTIFIED
1	**Risk is concentrated in Riverbend (Z-06).** The only High zone stacks four independent drivers — flammable-liquids industry, evacuation-dependent congregate care, balloon-frame rowhomes and the Mill Creek SFHA — behind the system's thinnest daytime staffing (2 career at Station 3).	§17–§18
2	**EMS is the majority service line.** 1,445 of 2,410 calls (60%) in 2025; fall-related EMS is the fastest-growing type; the 19.2% senior population and 242 licensed congregate beds drive both demand and life-risk weighting.	§10
3	**Concurrency, not single-incident capability, is the emerging gap.** 23% of 2025 calls began while the department was committed; peak load reached 4 simultaneous incidents.	§15
4	**The 4-minute engine exists only in the urban core.** 47% of population is within a 4:00 first-engine travel; 88% within 8:00. Rural zones Z-01/Z-10 depend on their density-based 14:00 demand-zone objective.	§08
5	**18% of structures sit beyond creditable hydrant distance** (2,240 structures in Z-01, Z-10, and fringes of Z-02/Z-08) — every working fire there is a tanker-shuttle operation.	§09
6	**58% of housing predates 1980** — pre-code construction concentrated in the Old Mill Historic District and Riverbend rowhome blocks, with common cocklofts and legacy electrical.	§06

What this CRA recommends

Five community risk reduction priorities, risk-ranked in §20: (1) daytime effective-force staffing at Stations 3–5, (2) a senior & aging-in-place program, (3) automatic-alarm reduction, (4) winter-weather and flood readiness on the Mill Creek corridor, and (5) WUI mitigation in Timber Gap. Each carries an owner, a timeline and the Report 3 measure that will show whether it worked.

§ 02 · METHODOLOGY & DATA SOURCES

How risk is scored

A two-axis model: probability of a significant event × impact if it occurs, each axis a weighted blend of four sub-indicators scored 1–5 per zone. Every sub-indicator names the dataset that feeds it.

Probability axis

PROBABILITY SUB-INDICATOR	WEIGHT	SOURCE	WHAT IT MEASURES
HIST — incident history	.35	NFIRS 5-yr + agency CAD/RMS	5-yr incident density and structure-fire experience in the zone
EXPO — exposure	.20	Parcels · OSM · HIFLD facility layers	Occupancy density, target hazards, daytime population load
COND — conditions	.25	Parcel year-built · OSM building tags	Building age/construction, code era, terrain, access constraints
TREND — demand trend	.20	CAD/RMS annual series	Direction and rate of demand change (+2.8%/yr system-wide)

Impact axis

IMPACT SUB-INDICATOR	WEIGHT	SOURCE	WHAT IT MEASURES
LIFE — life risk	.35	ACS · CDC SVI · facility registries	Vulnerable population, congregate care, assembly and school loads
PROP — property	.25	County parcel assessments	Structure value at risk, conflagration potential, historic stock
ECON — economic	.15	LEHD-LODES · parcel valuation	Employment, tax base and continuity exposure
RESP — response capability	.25	Drive-time model · hydrant coverage	Penalty for travel-time and hydrant/water gaps (higher = weaker coverage)

Category breaks — NFPA 1750 §10.3.6

CLASS	R-SCORE BAND	MEANING
LOW	1 – 4.9	Routine risk; single-company events dominate
MODERATE	5 – 9.9	Standard structure-fire / ALS risk; full first-alarm relevant
HIGH	10 – 16.9	Target-hazard risk; High-hazard ERF (42) applies
CRITICAL	≥ 17	Not present in Fairview

Data sources — vintage, cadence, and what each feeds

SOURCE	VINTAGE	REFRESH CADENCE	FEEDS
U.S. Census ACS 5-Year	2023 5-yr (demo)	Annual	Demographics, housing, vulnerability
Census TIGERweb tract boundaries	2023 (demo)	Annual	Planning-zone geometry
FEMA National Risk Index	Mar 2025 (demo)	~18 mo	Hazard scores, EAL
CDC/ATSDR Social Vulnerability Index	2022 (demo)	Biennial	SVI themes, per-zone vulnerability
USFA NFIRS Public Data Release	2020–2024 (demo)	Annual	Fire experience, AES presence

SOURCE	VINTAGE	REFRESH CADENCE	FEEDS
Agency CAD/RMS extract	2021–2025 (demo)	Quarterly	Incident history, concurrency, EMS mix
USFA National Fire Department Registry	2025 (demo)	Annual	Agency profiles, staffing
DHS HIFLD Open	2025 snapshot (demo)	Annual	Care facilities, schools, infrastructure
County parcel / assessment roll	2026 roll (demo)	Annual	Building stock, assessed values, land use
OpenStreetMap — Overpass	Jul 2026 (demo)	On refresh	Buildings, roads, land use
Census LEHD-LODES	2022 LODES8 (demo)	Annual	Daytime population, jobs
ACS B16001 / B03001 / B02001	2023 5-yr (demo)	Annual	Languages, race & ethnicity
Water authority hydrant registry	Jun 2026 (demo)	Annual	Hydrant locations, pressure, flow tests
BTS NTAD rail network	2025 (demo)	Annual	Rail spur, crossings
EPA SDWIS · PHMSA NPMS · FCC ASR · EPA TRI	2025–26 (demo)	Annual	Water systems, gas, towers, chemical facilities
State licensing (care facilities)	2026 (demo)	Annual	Licensed beds, facility types

⚠ EVERY FIGURE IN THIS DEMO IS SYNTHETIC

The table above lists the production feed set with demo-marked vintages. In a live deployment each run is persisted as a hashed JSON artifact (`prism.cra_run/1`) that Reports 2–3 cite; here the values are generated for the fictional Fairview community to illustrate the template at full depth.

Composite R = probability × impact on the 1–25 scale. Axis values are computed from unrounded sub-indicators; displayed values are rounded. Full formula documentation: §21 appendix.

§ 03 · JURISDICTION & PLANNING ZONES

The service area, in ten zones

Fairview Fire & EMS protects a 28.4 mi² first-due area — an urban core on Mill Creek, a suburban ring, and two rural corridors — divided into ten planning zones aligned to census-tract geography.

SERVICE AREA	POPULATION	PLANNING ZONES	HOUSEHOLDS	OVERALL DENSITY
28.4 mi²	**34,800**	**10**	**13,400**	**1,225/mi²**
27.7 land · 0.7 water	38,900 daytime (est.)	4 urban · 4 suburban · 2 rural	14,100 housing units	487–3,176 by zone

Zone risk map

Fill = PRISM risk class · ● = fire stations · demo geometry (illustrative)

High · Moderate · Low

Demand-zone map — NFPA 1750 Table 7.4.2

Density classification sets each zone's response objective (adopted in Report 2)

Urban >1,000/mi² — 9:00 @ 90% · Suburban — 10:00 @ 80% · Rural — 14:00 @ 80%

Planning-zone register

ZONE	NAME	RISK CLASS	R	DEMAND ZONE	POP.	MI²	POP/MI²	FIRST-DUE	KEY RISK DRIVERS
Z-01	North Valley	LOW	4.6	RURAL	1,900	3.9	487	Station 5	Long travel · no hydrants · low density
Z-02	West Ridge	MODERATE	6.9	SUBURBAN	3,600	3.7	973	Station 4	Aging split-levels · commuter corridor MVCs
Z-03	Old Mill / Downtown	MODERATE	8.2	URBAN	5,400	1.7	3,176	Station 1	Old Mill Historic District · balloon frame · downtown assembly
Z-04	Fairview Commons	MODERATE	7.6	URBAN	4,700	1.8	2,611	Station 2	Fairview Commons Mall · garden apartments
Z-05	Maple Glen	MODERATE	6.2	SUBURBAN	3,100	3.2	969	Station 2	Single-family · school traffic

ZONE	NAME	RISK CLASS	R	DEMAND ZONE	POP.	MI²	POP/MI²	FIRST-DUE	KEY RISK DRIVERS
Z-06	Riverbend	HIGH	**11.4**	URBAN	4,900	2.1	2,333	Station 3	Riverbend Industrial Park · Lakeside Senior Living (180 beds) · rowhomes · flood corridor
Z-07	Stony Run	MODERATE	**7.1**	SUBURBAN	3,000	3.1	968	Station 3	Townhome clusters · limited secondary access
Z-08	Fox Hollow	LOW	**5.2**	SUBURBAN	900	1.2	750	Station 3	Low-density estate lots
Z-09	Academy Heights	MODERATE	**7.8**	URBAN	4,800	1.9	2,526	Station 1	School cluster (6,100 students) · multifamily infill
Z-10	Timber Gap	LOW	**5.4**	RURAL	2,500	5.1	490	Station 4	WUI corridor · single access · tanker water

Zone ↔ demo tract crosswalk

PLANNING ZONE	TRACT GEOID (DEMO)	IN-JURISDICTION	FIRST-DUE
Z-01 North Valley	99001040100	100%	Station 5
Z-02 West Ridge	99001040200	100%	Station 4
Z-03 Old Mill / Downtown	99001040300	100%	Station 1
Z-04 Fairview Commons	99001040400	100%	Station 2
Z-05 Maple Glen	99001040500	100%	Station 2
Z-06 Riverbend	99001040600	100%	Station 3
Z-07 Stony Run	99001040700	94%	Station 3
Z-08 Fox Hollow	99001040800	100%	Station 3
Z-09 Academy Heights	99001040900	100%	Station 1
Z-10 Timber Gap	99001041000	96%	Station 4

▸ ZONE ↔ TRACT CROSSWALK

Planning zones align 1:1 to census-tract geography (demo GEOIDs, fictional state/county 99-001). Two tracts extend past the service-area boundary (Z-07 94%, Z-10 96% in-jurisdiction); tract-sourced statistics are apportioned by the in-jurisdiction share, matching the production boundary-overlap method.

§ 04 · DEMOGRAPHIC PROFILE & SOCIAL VULNERABILITY

Who lives here

Population structure sets the life-risk weighting: Fairview is an aging, mostly owner-occupied community with pockets of concentrated vulnerability in the urban core.

POPULATION & VULNERABILITY	VALUE	PERSONS (EST.)
Total population	34,800	–
Households	13,400	–
Over 65 (vulnerable band)	19.2%	6,680
Under 5	5.1%	1,775
Median household income	$94,200	–
Poverty rate	6.8%	2,365
Limited-English households	3.4%	455 households
Disability (non-institutional)	11.7%	4,070

CDC/ATSDR SVI THEME (0 = LEAST, 1 = MOST VULNERABLE)	SCORE
Socioeconomic status	0.41
Household characteristics & disability	**0.44**
Racial & ethnic minority / language	0.22
Housing type & transportation	0.35
Overall	**0.38 — moderate**

Vulnerability by zone

ZONE	SVI
Z-01 North Valley	0.31 ▮▮▮
Z-02 West Ridge	0.35 ▮▮▮▮
Z-03 Old Mill / Downtown	0.47 ▮▮▮▮▮
Z-04 Fairview Commons	0.40 ▮▮▮▮
Z-05 Maple Glen	0.28 ▮▮▮
Z-06 Riverbend	0.52 ▮▮▮▮▮
Z-07 Stony Run	0.30 ▮▮▮
Z-08 Fox Hollow	0.22 ▮▮
Z-09 Academy Heights	0.38 ▮▮▮▮
Z-10 Timber Gap	0.33 ▮▮▮

▸ DAYTIME POPULATION — ESTIMATED 38,900

Inflow to the Riverbend Industrial Park (~1,850 jobs), Fairview Commons Mall (~900), and the school cluster (6,100 students) outweighs commuter outflow on weekdays. Daytime risk therefore concentrates in Z-04/Z-06/Z-09 exactly when volunteer turnout at Stations 3–5 is weakest — the coincidence that drives CRR priority 1.

▸ PROFILE FINDING

The senior population (19.2%, concentrated in Z-06's congregate living) drives both EMS demand and life-risk weighting. Household & disability vulnerability (0.44) is the highest SVI theme — fall-related EMS is the fastest-growing call type. Limited-English need is modest (3.4%) but clusters in the Z-03 walk-up apartments — public-education materials should follow.

Additional vulnerable-population metrics

ADDITIONAL VULNERABILITY METRIC	VALUE	PERSONS / UNITS	SOURCE
Population under 18	21.4%	7,445	ACS (demo)
Households without vehicle access	4.6%	615 households	ACS (demo)
Vacant housing units	4.8%	675 units	ACS (demo)

Estimated daytime population — decomposition

DAYTIME-POPULATION COMPONENT (LODES-STYLE)	VALUE
Resident population	34,800
Jobs located in the service area	11,400
— held by residents (live + work local)	2,950
— in-commuting workers (non-resident)	8,450
Resident workers (all job locations)	10,100
Work-from-home share of resident workers	18% (1,820)
Workers commuting out	5,330
Worker-adjusted daytime population	37,920
Net student / visitor load (mall + schools, est.)	+1,000
Estimated daytime population (WFH-adjusted)	**≈38,900 · swing +11.8%**

Worker components are LODES-style estimates; the student/visitor adjustment reconciles to the ≈38,900 daytime figure used in the risk weighting.

Cultural communities of interest

Boundary residents include 78.4% non-Hispanic white, 9.6% non-Hispanic Asian, 6.2% Hispanic / Latino (any race), 3.9% non-Hispanic Black, and 1.9% two-or-more-race populations (ACS B03001 & B02001, demo values).

Cultural-community organizations and faith partners are inventoried in §11 and mapped to CRR delivery in §20; public-education materials follow the language profile below.

LANGUAGE SPOKEN AT HOME (ACS B16001, DEMO)	SHARE
English only	88.9%
Spanish	4.6%
Chinese (incl. Mandarin/Cantonese)	2.1%
Korean	1.4%
Portuguese	0.9%
All other languages	2.1%

§ 05 · GEOGRAPHIC PROFILE

The ground the system operates on

Terrain, transportation and water frame every response: a creek-valley street grid in the core, ridge roads west, and a single-access wooded corridor south.

ELEMENT	PROFILE
Terrain	Mill Creek valley through the urban core; West Ridge climbs 340 ft over 2 mi; wooded ravines in Timber Gap (Z-10)
Water features	Lake Fairview (0.5 mi², reservoir + recreation) · Mill Creek and tributaries (0.2 mi²)
Road network	≈272 centerline miles — 34 arterial (SR-9 corridor), 58 collector, 180 local
Rail	One short-line freight spur serving the Riverbend Industrial Park (~2 movements/week, hazmat placarded loads)
Bridges	14 creek crossings; 2 weight-limited (North Valley Rd, Timber Gap Rd) forcing apparatus detours of 4–6 minutes
Access constraints	Single-access development in Z-10 (Timber Gap Rd) and parts of Z-07 (Stony Run cul-de-sac clusters); industrial park has one gate

⚠ TRANSPORTATION RISK

SR-9 carries ~21,000 vehicles/day through West Ridge and Riverbend, including placarded hazmat to the industrial park. The two weight-limited bridges lengthen rural response and are flagged in the run cards for TANKER 4/5.

Water supply — system inventory

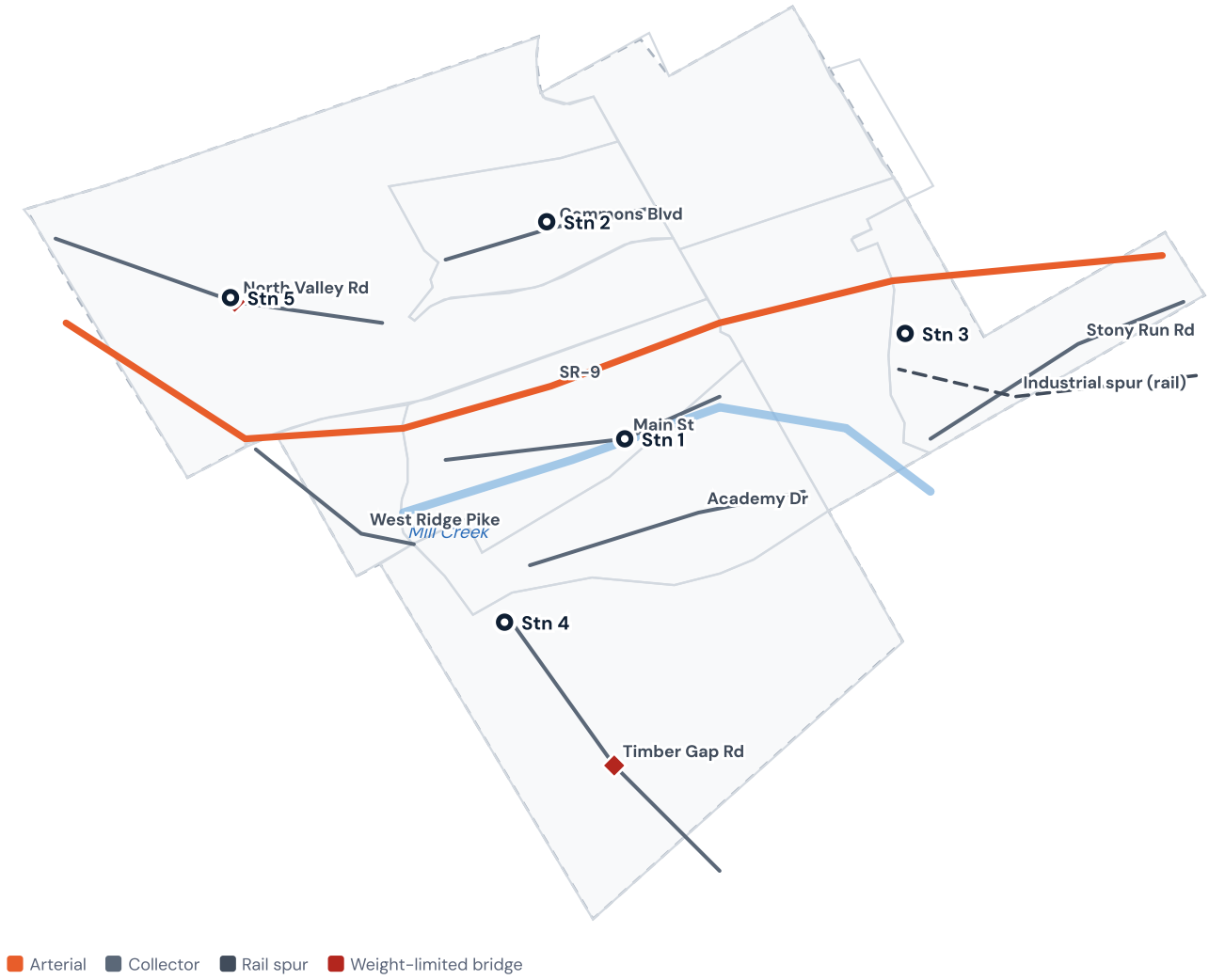
WATER SUPPLY INVENTORY	COUNT / VALUE
Municipal system hydrants (Fairview Water Authority)	1,140
Dry hydrants (static sources)	2 — Ridge Rd, Timber Gap Rd
Drafting sites	3 — Lake Fairview boat launch + 2 Mill Creek points
System storage	4.2 MG across 3 elevated tanks
Typical available residential fire flow	≈1,000 gpm @ 20 psi
Weakest creditable flow — industrial park dead-end main	1,800 gpm (below the 3,500 gpm High-hazard target)

Road network by class

HIGHWAY CLASS	CENTERLINE MILES	DEMO INVENTORY
Arterial (SR-9 corridor)	34	≈21,000 vehicles/day · hazmat route
Collector	58	Main St · Commons Blvd · North Valley Rd · Timber Gap Rd · Stony Run Rd · Academy Dr · West Ridge Pike
Local / residential	180	—
Total	**272**	

Transportation network

Roads by class · rail spur · Mill Creek · ◆ = weight-limited bridge



§ 06 · BUILDING STOCK PROFILE

What can burn, collapse, or trap

12,450 structures and 14,100 housing units; more than half the housing predates 1980.

Housing age — 14,100 units

58% of housing predates 1980 — pre-code construction, aging electrical services, and legacy balloon framing in the Old Mill Historic District (Z-03) and the Riverbend rowhome blocks (Z-06).

Building count and type

STRUCTURE TYPE	COUNT	HOUSING UNITS	NOTES
Single-family detached	9,900	9,900	70% of housing units; dominant in suburban/rural zones
Rowhomes / townhomes	1,450	1,450	Pre-war rows in Z-03/Z-06 (balloon frame, common cocklofts); 1980s–2000s towns in Z-07
Garden-apartment buildings	210	2,400	Z-04 clusters — highest life-load multifamily stock; 34% pre-code, non-sprinklered
Mixed-use (commercial + dwelling)	160	350	Main Street corridor, Z-03
Commercial	380	–	Mall + Main St storefronts + SR-9 strip
Industrial	64	–	22 in the Riverbend Industrial Park
Institutional / assembly	96	–	Schools, churches, municipal, care facilities
Outbuildings / agricultural	190	–	North Valley farm structures
Total	**12,450**	**14,100**	

▸ OCCUPANCY MIX BY LAND USE

Residential 83% of structures · commercial 4% · industrial 1% · institutional/assembly 1% · accessory 11%. The non-residential 6% carries a disproportionate share of impact risk — it is where the High-hazard classification (§19) concentrates.

Residential characteristics

RESIDENTIAL CHARACTERISTIC	VALUE
Owner-occupied	74%
Renter-occupied	26% — concentrated in Z-03/Z-04
Median year built	1974
Homes with basement fuel storage (est., rural)	≈480 — oil/propane in Z-01/Z-10
Multifamily non-sprinklered (pre-code)	≈34% of garden-apartment buildings
Manufactured homes	During onboarding, none registered in the demo dataset

Parcel layer — count, value, land use

TOTAL PARCELS	TOTAL ASSESSED VALUE	MEDIAN PARCEL ASSESSMENT	VACANCY RATE
12,940 11,020 residential	**$4.31B** county roll (demo)	**$286K** all classes	**4.8%** 675 units

LAND USE	PARCELS	SHARE	MEDIAN ASSESSED	AVG PARCEL (ACRES)
Single-family residential	9,900	76.5%	$301K	0.46
Rowhome / townhome	1,450	11.2%	$214K	0.08
Multifamily (garden apartment)	210	1.6%	$1.92M	1.6
Mixed-use (Main St)	160	1.2%	$487K	0.21
Commercial	380	2.9%	$842K	1.1
Industrial	64	0.5%	$2.35M	4.8
Institutional / exempt	96	0.7%	exempt	3.4
Agricultural / vacant land	680	5.3%	$118K	6.2

Age of construction — parcel detail

CONSTRUCTION ERA (PARCEL YEAR-BUILT)	SHARE OF PARCELS
Pre-1900	3%
1900–1949	11%
1950–1979	44%
1980–1999	28%
2000–2009	9%
2010+	5%

Residential medians

RESIDENTIAL CHARACTERISTIC (PARCEL-DERIVED)	MEDIAN
Living area	1,860 ft²
Bedrooms	3
Year built	1974
Assessed value	$292K

§ 07 · PUBLIC SAFETY RESPONSE AGENCY PROFILE

The system that answers

A single-agency, five-station combination department delivering fire suppression, EMS transport and ALS from the same dual-role workforce, backed by two automatic-aid partners.

CAREER PERSONNEL	VOLUNTEER MEMBERS	ON-DUTY CAREER STRENGTH	DAYTIME ASSEMBLE-ABLE FORCE	ISO PPC
38	**82**	**7**	**~21**	**4 / 9**
4 platoons · 7 on duty	operational roster	Stn 1 (4) + Stn 2 (3)	vs Moderate ERF 28	hydranted / unhydranted areas

Stations & apparatus

STATION	STAFFING MODEL	APPARATUS	FIRST-DUE ZONES	MODELED 4-MIN POP SHARE
Station 1 — HQ	Career (4 on duty/shift)	ENG 1 · ENG 1-2 · LAD 1 · RES 1 · AMB 1 · MEDIC 1	Z-03, Z-09 (urban core)	71%
Station 2	Career (3 on duty/shift)	ENG 2 · TWR 2 · AMB 2	Z-04 (urban), Z-05 (suburban)	64%
Station 3	Combination (2 career weekdays + volunteer)	ENG 3 · ENG 3-2 · RES 3 · AMB 3 · MEDIC 3	Z-06 (urban — High), Z-07, Z-08	48%
Station 4	Volunteer	ENG 4 · BRUSH 4 · TANKER 4 · AMB 4	Z-02 (suburban), Z-10 (rural WUI)	22%
Station 5	Volunteer	ENG 5 · TANKER 5 · AMB 5 · MEDIC 5	Z-01 (rural)	9%

Automatic & mutual aid

AGENCY	AGREEMENT	UNITS ON FAIRVIEW ASSIGNMENTS	ROLE
Millbrook Township Fire Department	Automatic aid	AID ENG 21 · AID LAD 22	Runs on all structure assignments in Z-06/Z-07; second ladder for High-hazard ERF
Twin Pines Fire-Rescue	Automatic aid	AID ENG 34 · AID MEDIC 91	Runs on structure assignments in Z-01/Z-02; ALS backfill when MEDIC units committed

▸ EMS DELIVERY MODEL

All five stations house transport-capable ambulances (AMB 1–5); ALS chase/medic units run from Stations 1, 3 and 5 (MEDIC 1/3/5). The crew on the ambulance is the crew that is not on the engine — the dual-role reality measured as concurrency in Report 3 §05.

Code enforcement

CODE ENFORCEMENT & LIFE-SAFETY INSPECTION REGIME	
Adopted code	IFC 2021 with township amendments
Staffing	1 FTE Fire Marshal + 2 part-time inspectors
Inspection cycle	Assembly, institutional, care: annual · industrial park: annual with hazmat permit renewals · mercantile: 3-yr

CODE ENFORCEMENT & LIFE-SAFETY INSPECTION REGIME	
Plan review	Fire Marshal reviews all commercial permits; sprinkler ordinance for new multifamily ≥ 4 units
Known gap	No automatic-alarm ordinance — no cost recovery or verified response for chronic AFA occupancies (CRR priority 3); short-term rentals outside the regime (watch-list)

Agency registry profiles — USFA-style

AGENCY	DEPARTMENT TYPE	STATIONS	ACTIVE MEMBERS	CAREER / VOLUNTEER
Fairview Fire & EMS Primary — all 10 zones	**Combination** USFA registry (demo)	5	120	38 / 82
Millbrook Township FD Automatic aid — Z-06/Z-07 structure assignments	**Volunteer** USFA registry (demo)	2	58	0 / 58
Twin Pines Fire-Rescue Automatic aid — Z-01/Z-02 + ALS backfill	**Combination** USFA registry (demo)	1	42	6 / 36

Station addresses

STATION	ADDRESS (DEMO)	STAFFING MODEL	FIRST-DUE / UNITS
Station 1 — HQ	101 Main Street, Fairview	Career	Z-03 · Z-09
Station 2	420 Commons Boulevard, Fairview	Career	Z-04 · Z-05
Station 3	88 Riverbend Road, Fairview	Combination	Z-06 · Z-07 · Z-08
Station 4	1240 West Ridge Pike, Fairview	Volunteer	Z-02 · Z-10
Station 5	35 North Valley Road, Fairview	Volunteer	Z-01
Millbrook Sta 21 (aid)	2 Millbrook Center Road, Millbrook Twp	Volunteer	AID ENG 21 · AID LAD 22
Twin Pines Sta 34 (aid)	500 Twin Pines Drive, Twin Pines	Combination	AID ENG 34 · AID MEDIC 91

Inspection-program status

INSPECTION PROGRAM	STATUS	NOTES
Proactive life-safety inspection regime	**Active**	Fire Marshal + 2 PT inspectors; risk-ranked schedule
Annual commercial-property inspections	**Active**	Assembly, institutional, care annual; mercantile 3-yr
Rental-unit inspection program	**None**	Gap — Z-03/Z-04 renter concentration uninspected

INSPECTION PROGRAM	STATUS	NOTES
Code-driven sprinkler / alarm / egress review	**Active**	Via permits; sprinkler ordinance for new multifamily ≥ 4 units
Automatic-alarm ordinance / cost recovery	**None**	Gap — CRR priority 3

§ 08 · RESPONSE COVERAGE & TRAVEL TIME

Where the system reaches in time

Modeled road-network travel from each station, congestion-adjusted; measured performance lives in Report 3 — this section maps the geometry the standards must work with, in population AND assessed value.

PROPERTIES MEETING 8-MIN DRIVE	PROPERTIES OUTSIDE 8-MIN	ASSESSED VALUE OUTSIDE 8-MIN	WITHIN 4-MIN DRIVE
10,790 (88%)	1,470 (12%)	$512M	5,760 (47%)
improved parcels	rural tails	dollar-weighted gap	first-engine band

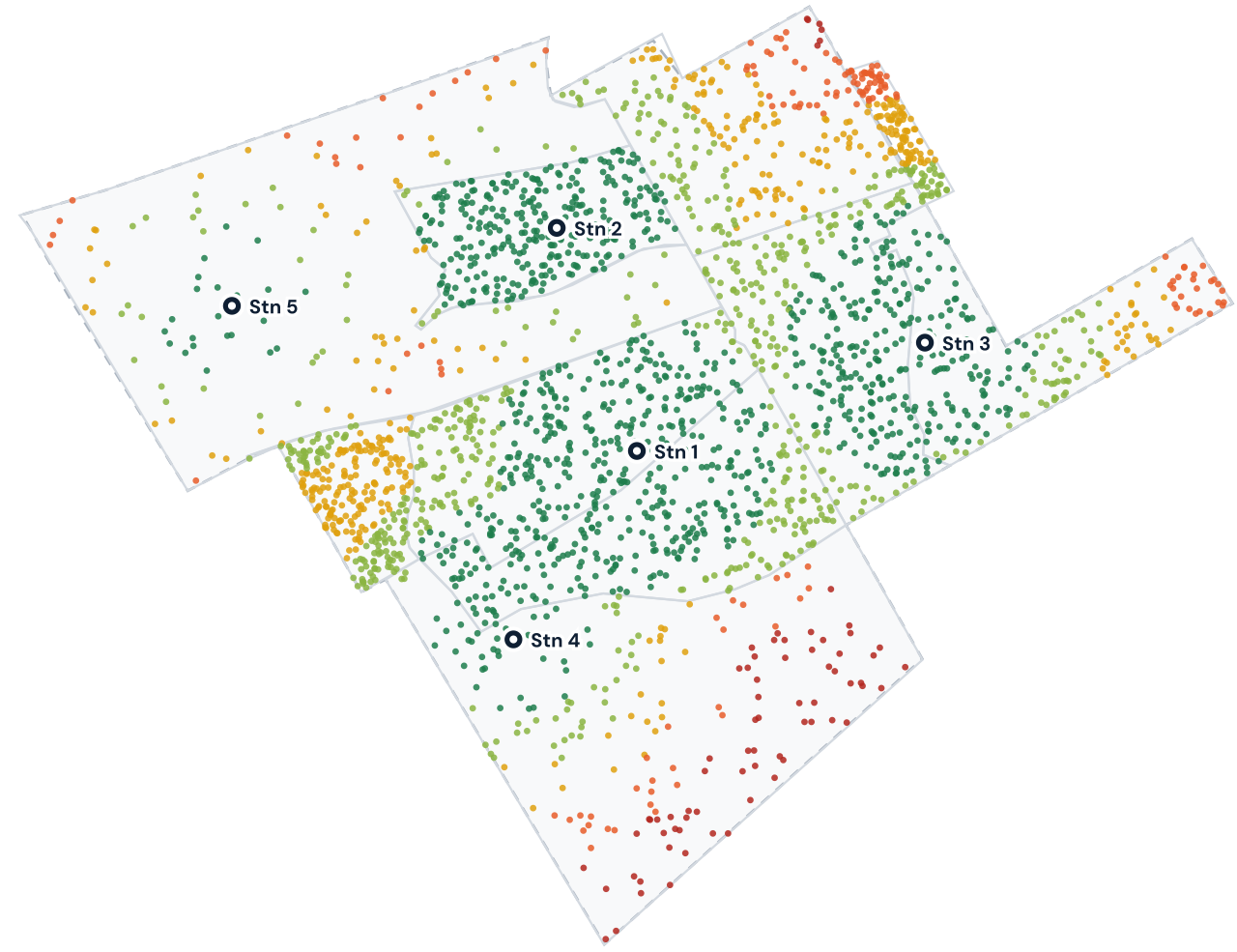
FIRST-ENGINE TRAVEL BAND (MODELED)	POPULATION SHARE	CUMULATIVE
Within 4:00	47%	47%
4:01 – 6:00	27%	74%
6:01 – 8:00	14%	88%
8:01 – 10:00	7%	95%
Beyond 10:00	5%	100% — North Valley & Timber Gap tails

Properties by drive-time band — dollar-weighted

DRIVE (MODELED)	EST. RESPONSE (CALL → ARRIVAL)	PROPERTIES	CUMULATIVE %	ASSESSED VALUE
Within 4:00	≤ 6:24	5,760	47%	$1.92B
4:01 – 6:00	6:25 – 8:24	3,310	74%	$1.21B
6:01 – 8:00	8:25 – 10:24	1,720	88%	$0.63B
8:01 – 10:00	10:25 – 12:24	860	95%	$0.34B
Beyond 10:00	> 12:24	610	100%	$0.21B
Total improved properties		**12,260**		**$4.31B**

Drive-time heat map — first-due travel

Adopted T/E rendering: every structure colored by modeled first-engine travel band · ● = stations



Structure-level heat rendering in the adopted T/E style; each dot ≈ 5 structures, synthetic locations on demo geometry. The banded tables carry the governing figures.

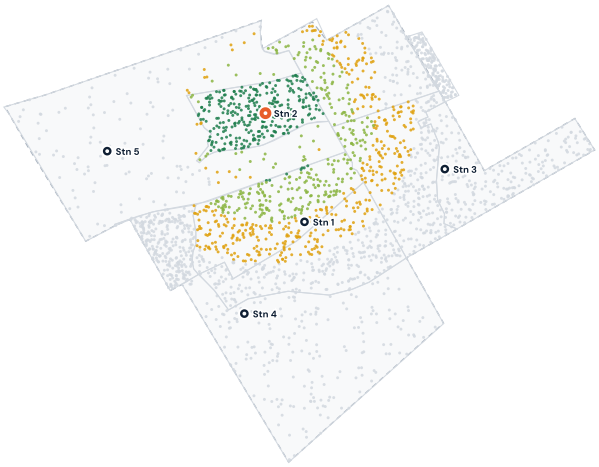
Per-station coverage

Station 1 — HQ

4-min pop share 71% · grey = beyond 8:00 from this station

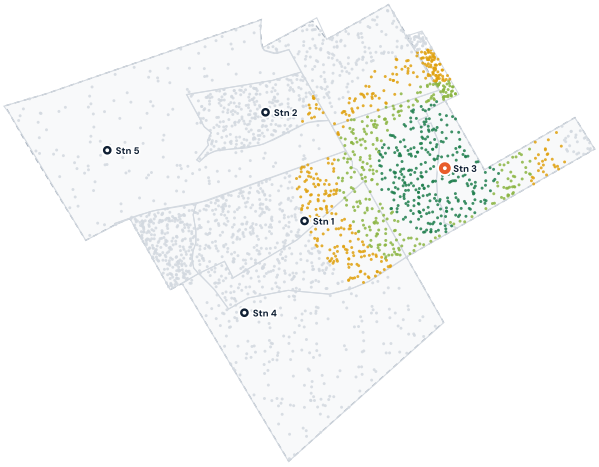
Station 2

4-min pop share 64% · grey = beyond 8:00 from this station



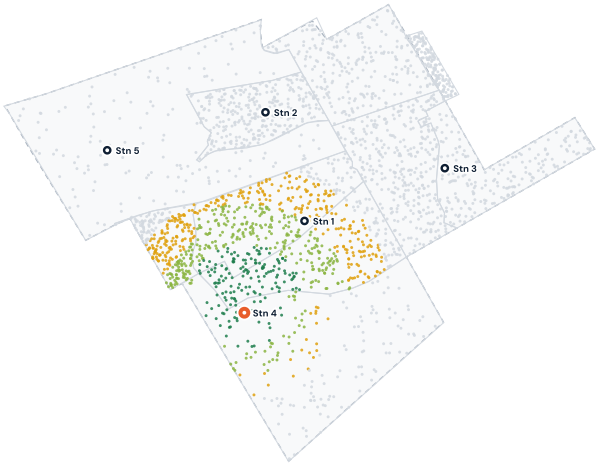
Station 3

4-min pop share 48% · grey = beyond 8:00 from this station



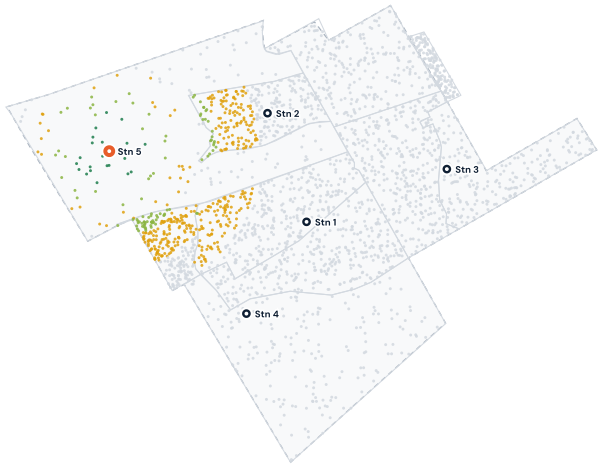
Station 4

4-min pop share 22% · grey = beyond 8:00 from this station



Station 5

4-min pop share 9% · grey = beyond 8:00 from this station



Shares overlap between stations and do not sum.

First-due travel by zone — with objective and risk

ZONE	FIRST-DUE	MEDIAN TRAVEL	90TH TRAVEL	MEETS 8-MIN (90TH)	COMPOSITE RISK	DEMAND ZONE	REPORT 2 OBJECTIVE
Z-01 North Valley	Station 5	7:50	10:00	**Marginal**	4.6 LOW	RURAL	14:00 total @ 80%
Z-02 West Ridge	Station 4	5:40	7:10	**Yes**	6.9 MODERATE	SUBURBAN	10:00 total @ 80%
Z-03 Old Mill / Downtown	Station 1	3:30	5:25	**Yes**	8.2 MODERATE	URBAN	9:00 total @ 90%
Z-04 Fairview Commons	Station 2	3:40	5:35	**Yes**	7.6 MODERATE	URBAN	9:00 total @ 90%
Z-05 Maple Glen	Station 2	5:30	7:00	**Yes**	6.2 MODERATE	SUBURBAN	10:00 total @ 80%
Z-06 Riverbend	Station 3	3:45	5:45	**Yes**	11.4 HIGH	URBAN	9:00 total @ 90%
Z-07 Stony Run	Station 3	5:50	7:20	**Yes**	7.1 MODERATE	SUBURBAN	10:00 total @ 80%
Z-08 Fox Hollow	Station 3	6:10	7:35	**Yes**	5.2 LOW	SUBURBAN	10:00 total @ 80%
Z-09 Academy Heights	Station 1	3:35	5:30	**Yes**	7.8 MODERATE	URBAN	9:00 total @ 90%

ZONE	FIRST-DUE	MEDIAN TRAVEL	90TH TRAVEL	MEETS 8-MIN (90TH)	COMPOSITE RISK	DEMAND ZONE	REPORT 2 OBJECTIVE
Z-10 Timber Gap	Station 4	7:30	9:50	**Marginal**	5.4 LOW	RURAL	14:00 total @ 80%

▸ COVERAGE FINDING

Modeled first-engine coverage: **47% of population within 4:00 travel**, 88% within 8:00 — and in dollar terms, **$512M of assessed value (12% of the roll) sits outside the 8-minute band**, concentrated in North Valley and Timber Gap. The 4-minute engine is achievable only in the urban core; the suburban ring and rural zones depend on the demand-zone totals (10:00 / 14:00) their density entitles them to — exactly how the adopted standard in Report 2 is structured.

× FORCE-ASSEMBLY GEOMETRY

Assembling the Moderate ERF of 28 requires units from at least four stations plus automatic aid; the High ERF of 42 (Z-06 target hazards) requires everything the system fields plus both aid partners. Report 3 measured only 24% of ERF-qualifying incidents assembling in time — daytime volunteer availability is the controlling variable, not road geometry.

§ 09 · WATER SUPPLY & HYDRANT COVERAGE

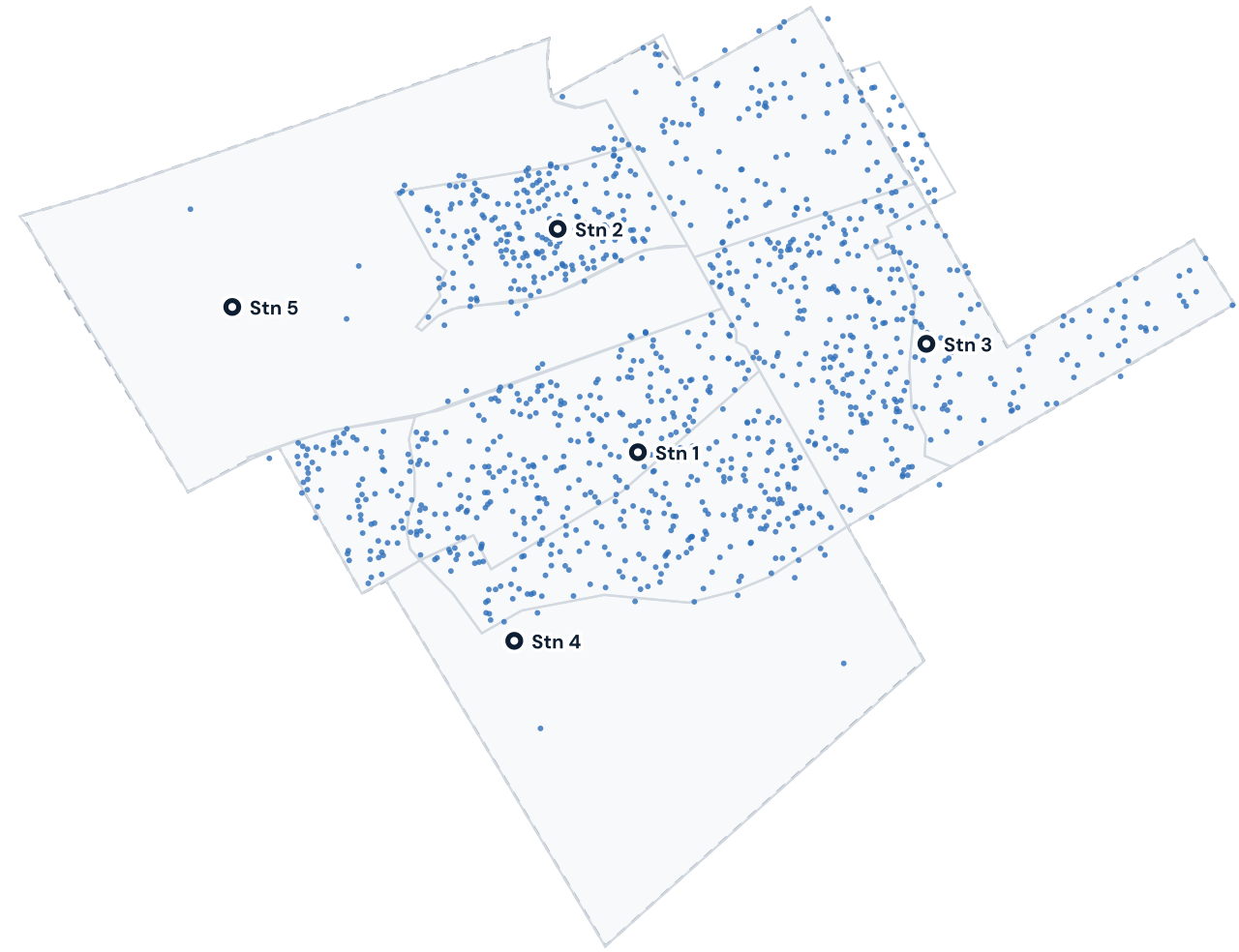
Hydrants where they exist, tankers where they don't

82.8% of homes sit within 1,000 ft of a creditable hydrant; the other 2,020 homes — $0.50B of assessed value — define the rural water problem.

HOMES WITHIN 1,000 FT	HOMES LACKING HYDRANT PROTECTION	AVG SUPPLY PRESSURE	FLOW-TARGET COMPLIANCE
9,700 (82.8%)	2,020 (17.2%)	62 psi	91%
of 11,720 homes	$0.50B assessed	authority registry (demo)	of tested hydrants

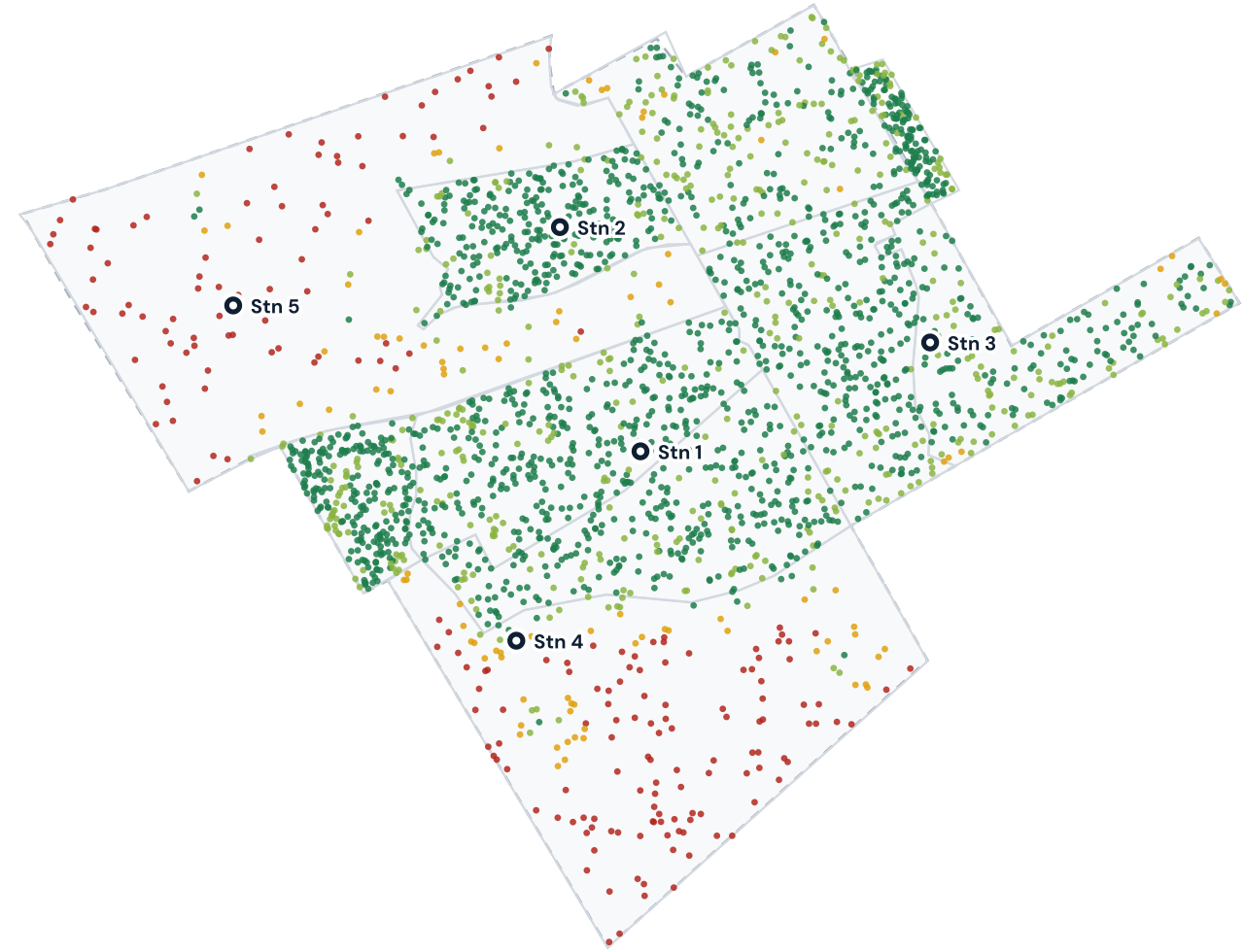
Hydrant locations — 1,140 municipal + 2 dry

Adopted T/E rendering: every hydrant plotted · ● = stations



Hydrant coverage heat map — distance to nearest hydrant

Every structure colored by distance band



Structure-level heat rendering in the adopted T/E style; each dot ≈ 5 structures, synthetic locations on demo geometry. The banded tables carry the governing figures.

Structures by distance to nearest hydrant — dollar-weighted

DISTANCE TO NEAREST HYDRANT	STRUCTURES	HOMES	% OF HOMES	CUMULATIVE %	HOME ASSESSED VALUE
Within 500 ft	8,470	8,090	69.0%	69.0%	$2.42B
501 – 1,000 ft	1,740	1,610	13.7%	82.8%	$0.46B
1,001 – 2,000 ft	1,000	900	7.7%	90.5%	$0.22B
Beyond 2,000 ft	1,240	1,120	9.5%	100%	$0.28B
Beyond creditable distance (>1,000 ft)	**2,240**	**2,020**	**17.2%**		**$0.50B**

Coverage-gap clusters — streets, value, water plan

COVERAGE-GAP CLUSTER	ZONE	NEAREST STREETS (DEMO)	HOMES W/O HYDRANT	ASSESSED VALUE	WATER PLAN
1 · Timber Gap corridor	Z-10	Timber Gap Rd · Ravine Ln	840	$186M	Tanker shuttle (TANKER 4) · Timber Gap Rd dry hydrant
2 · North Valley	Z-01	North Valley Rd · Orchard Hill Rd	630	$152M	Tanker shuttle (TANKER 5) · Twin Pines aid · lake draft
3 · West Ridge fringe	Z-02	Ridge Rd west of Summit Ave	300	$78M	Ridge Rd dry hydrant · shuttle from Station 4
4 · Fox Hollow estates	Z-08	Fox Hollow Ln · Lakeshore Dr	250	$82M	Shuttle from Station 3 · lake draft

Unhydranted structures by zone

ZONE	STRUCTURES WITHIN 1,000 FT	UNHYDRANTED STRUCTURES	COMPOSITE RISK
Z-01 North Valley	4%	700	4.6 LOW
Z-02 West Ridge	86%	320	6.9 MODERATE
Z-03 Old Mill / Downtown	99%	0	8.2 MODERATE
Z-04 Fairview Commons	98%	0	7.6 MODERATE
Z-05 Maple Glen	94%	0	6.2 MODERATE
Z-06 Riverbend	97%	0	11.4 HIGH
Z-07 Stony Run	92%	0	7.1 MODERATE
Z-08 Fox Hollow	61%	290	5.2 LOW
Z-09 Academy Heights	98%	0	7.8 MODERATE
Z-10 Timber Gap	3%	930	5.4 LOW

⚠ RURAL WATER OPERATIONS

Sustained fire flow beyond ~750 gpm in the unhydranted zones requires automatic-aid tankers — formalized in the Report 2 water-supply standard. The two dry hydrants and three draft sites are single points of failure and carry a maintenance watch-list item (§20).

§ 10 · EMS & MEDICAL RESPONSE RISK

The majority service line

EMS is 60% of Fairview demand and is delivered by the same dual-role workforce as fire suppression — it is assessed here as a co-equal service line, not an add-on.

2025 EMS RESPONSES	BLS / ALS SPLIT	WORKED CARDIAC ARRESTS	CONGREGATE-CARE VOLUME	ALS WITHIN 8:00 (MODELED)
1,445	**759 / 497**	**~30**	**≈290/yr**	**91%**
60% of all demand	+ 58 cardiac · 131 MVC	of 58 dispatched as arrest	Lakeside + Willow Court	MEDIC 1 · 3 · 5

EMS DEMAND DRIVER	ASSESSMENT
Growth	Fastest-growing category is fall-related / lift-assist — tracking the 19.2% senior share
Concentration	Z-06 (congregate care) and Z-03/Z-04 (density + age of housing) generate the highest per-capita EMS rates
Congregate settings	242 licensed beds (Lakeside 180, Willow Court 62) ≈ 290 EMS responses/yr — about 20% of the EMS service line
Transport destination	Fairview Regional Medical Center (outside the township) — ~12 min from downtown; transport commits an ambulance ~55 min median
MVC / rescue	131 responses in 2025, clustered on the SR-9 corridor interchanges (Z-02)

▸ FIRST-RESPONSE COVERAGE

The AED-equipped first responder objective (4:00 travel, 2 personnel — Report 2 §3.3) is modeled reachable for 47% of population from station locations; the engine company is the de-facto first responder in the urban core. ALS arrival within 8:00 travel is modeled for 91% of population; the gap is the same rural tail as fire coverage. Cardiac-arrest survival falls 7–10% per minute without CPR/defibrillation — public-access AED and CPR training are response-time programs (CRR priority 2 companion).

✕ THE CONCURRENCY EXPOSURE

A cardiac arrest commits 6 personnel for 45–80 minutes. With 23% of calls already beginning during another incident, EMS demand growth converts directly into fire-protection degradation — the mechanism is measured quarterly in Report 3 §05 (90th-percentile penalty on overlapped calls).

§ 11 · COMMUNITY SERVICE ORGANIZATION PROFILE

The partners the plan depends on

CRR delivery in §20 assigns roles to these organizations — they are part of the response system whether or not they wear a uniform.

ORGANIZATION	SCALE	ROLE IN THIS CRA / CRR PLAN
Fairview Area School District	6,100 students · 7 campuses	Evacuation & reunification planning · CPR/AED in curriculum
Fairview Water Authority	1,140 hydrants · 3 tanks · WTP	Hydrant maintenance & flow data · dry-hydrant program
Fairview Senior Center	≈400 active members	Falls-prevention delivery channel (CRR 2)
Township CERT	28 trained members	Shelter support · traffic · damage assessment
Red Cross — county chapter	Regional	Mass care · post-fire recovery
Meals on Wheels / faith coalition	14 congregations	Daily contact with homebound seniors — smoke-alarm canvass partner
Fairview Food Bank	Downtown Z-03	Vulnerable-household registry liaison
Lakeside & Willow Court operators	242 licensed beds	Evacuation drills · generator remediation (Willow Court)

§ 12 · TARGET HAZARDS & LIFE-SAFETY FACILITIES

The addresses that set the High-hazard standard

Occupancies whose life load, hazard content or access constraints exceed the standard first-alarm — with addresses, sources and NFPA 1750 classification per facility.

TARGET HAZARD	ZONE	CLASS	WHY IT MATTERS
Riverbend Industrial Park	Z-06	HIGH	22 occupancies · flammable-liquids storage (4 permitted) · rail spur · single access · dead-end main (1,800 gpm)
Lakeside Senior Living	Z-06	HIGH	180 beds (120 assisted living + 60 skilled) · non-ambulatory · evacuation-dependent · sprinklered
Fairview Commons Mall	Z-04	HIGH	Large-area assembly · fully sprinklered · ~900 employees · high daytime load
Fairview High School + 6 schools	Z-09	HIGH	6,100 students district-wide · peak-hour concentration · reunification planning
Old Mill Historic District	Z-03	MODERATE	Pre-war rowhomes · balloon frame · common cocklofts · exposure risk
Timber Gap WUI corridor	Z-10	MODERATE	Wildland-urban interface · single access road · no hydrants · tanker water

Target-hazard map

◆ = target hazard · ● = stations

Nursing, assisted living & care (3)

CARE FACILITY	ADDRESS (DEMO)	TYPE	CAPACITY	PROTECTION	SOURCE	NFPA 1750
Lakeside Senior Living (3 bldgs)	200 Lakeview Avenue	Assisted living + skilled	180 beds	Sprinklered · generator	State licensing (demo)	HIGH
Willow Court Personal Care	62 Willow Court	Personal care	62 beds	Sprinklered · no generator	State licensing (demo)	HIGH
Mill Creek Adult Day Services	310 Main Street	Adult day (non-resident)	~45 daily	Daytime only	AHJ-supplied	MODERATE

Schools (7)

SCHOOL	ADDRESS (DEMO)	LEVEL	ENROLLMENT	TYPE	NFPA 1750
Fairview High School	1200 Academy Drive	High	1,850	Public	HIGH
Old Mill Middle School	45 Schoolhouse Lane	Middle	840	Public	HIGH

SCHOOL	ADDRESS (DEMO)	LEVEL	ENROLLMENT	TYPE	NFPA 1750
Lakeside Middle School	300 Lakeview Avenue	Middle	810	Public	HIGH
North Valley Elementary	160 North Valley Road	Elementary	660	Public	HIGH
Maple Glen Elementary	77 Maple Glen Road	Elementary	650	Public	HIGH
Commons Elementary	510 Commons Boulevard	Elementary	670	Public	HIGH
Riverbend Elementary	120 Riverbend Road	Elementary	620	Public	HIGH
Total			**6,100**		

⚠ LIFE-SAFETY FINDING

Two facts dominate: 242 licensed congregate beds — 180 of them evacuation-dependent at Lakeside — and 6,100 students concentrated in Academy Heights on school days. Both populations are stationary, known, and pre-plannable; both are why LIFE carries the heaviest impact weight (.35) in the risk model.

§ 13 · NATURAL & TECHNOLOGICAL HAZARD PROFILE

What the region throws at us

FEMA NRI-style ratings adapted to the service area, with the exposure each hazard actually touches. Ratings are demo values.

HAZARD	RATING (NRI-STYLE, DEMO)	EXPOSURE
Winter weather	RELATIVELY HIGH	Ice-storm outage history (4-day outages, 2022) · hillside road network · EMS surge · generator gaps at care facilities
Riverine flooding	RELATIVELY HIGH	Mill Creek corridor through Z-03/Z-06 · 210 structures in the SFHA (90 in Z-03, 120 in Z-06) · industrial park at confluence
Heat wave	MODERATE	19.2% senior population · congregate living · pre-1980 housing with low AC penetration
Tornado / high wind	MODERATE	Garden-apartment clusters (Z-04) · mall assembly load · school concentration
Hazmat — fixed & transport	MODERATE	Riverbend Industrial Park (4 flammable-liquids permits) · SR-9 corridor · short-line rail spur
Wildfire (WUI)	RELATIVELY LOW	Timber Gap corridor (Z-10) · single-access development · unhydranted

× FLOOD — THE COMPOUNDING HAZARD

The Mill Creek SFHA holds 210 structures (90 in Z-03, 120 in Z-06) — including portions of the industrial park at the creek confluence. A flood event simultaneously raises demand (rescues, pumps, alarms), degrades access (creek crossings), and threatens the highest-risk zone's hazmat inventory. The 2022 ice storm produced 4-day outages and a 3× EMS surge; Willow Court (62 beds) still has no standby generator.

Full FEMA NRI 18-hazard table (demo scores)

HAZARD	NRI SCORE	EAL SCORE	RATING (DEMO)
Winter weather	92.1	88.4	RELATIVELY HIGH
Riverine flooding	89.6	86.2	RELATIVELY HIGH
Heat wave	71.3	64.8	MODERATE
Tornado	63.4	58.9	MODERATE
Strong wind	61.8	55.2	MODERATE
Hail	48.2	41.6	RELATIVELY LOW
Lightning	45.7	38.3	RELATIVELY LOW
Ice storm	68.9	62.1	MODERATE
Wildfire	34.6	28.9	RELATIVELY LOW
Drought	31.2	22.4	RELATIVELY LOW
Landslide	26.8	19.7	RELATIVELY LOW
Cold wave	44.1	36.5	RELATIVELY LOW
Earthquake	12.3	8.1	VERY LOW
Hurricane (remnant)	38.5	33.0	RELATIVELY LOW

HAZARD	NRI SCORE	EAL SCORE	RATING (DEMO)
Avalanche	–	–	Not applicable
Coastal flooding	–	–	Not applicable
Tsunami	–	–	Not applicable
Volcanic activity	–	–	Not applicable

Scores are NRI-style 0–100 composites; EAL = expected annual loss score. Curated ratings above reflect the six hazards with meaningful local exposure.

§ 14 · ECONOMIC PROFILE

What an interruption costs

The ECON impact sub-indicator (.15 weight) prices business interruption and tax-base exposure per zone.

JOBS IN SERVICE AREA	LARGEST JOB CENTER	COMMERCIAL FLOOR AREA	5-YR DIRECT FIRE LOSS
≈11,400	Riverbend	≈2.2M ft²	$4.2M
LODES-style estimate	1,850 industrial-park jobs	mall 620k · park 1.4M	§15 past-loss detail

EMPLOYER / CENTER	ZONE	JOBS (EST.)	CONTINUITY EXPOSURE
Riverbend Industrial Park (22 tenants)	Z-06	1,850	Single access · flammable liquids · rail spur — one incident can idle the park
Fairview Commons Mall	Z-04	900	Sprinklered; assembly load is a life issue more than a continuity one
Fairview Area School District	Z-09	720	7 campuses; reunification burden on major events
Lakeside Senior Living	Z-06	210	Care continuity — evacuation triggers regional bed search
Township government & authority	Z-03	180	EOC and water operations co-located downtown
Main Street district (~140 storefronts)	Z-03	≈650	Pre-war mixed-use stock; conflagration exposure

▸ ECONOMIC FINDING

Economic risk concentrates where physical risk already peaks: Riverbend holds the largest job center, the weakest creditable fire flow (1,800 gpm dead-end main) and the single-access constraint. The ECON sub-indicator therefore reinforces, rather than offsets, Z-06's High classification.

Valuation & labor indicators

ADDITIONAL ECONOMIC INDICATOR	VALUE	SOURCE
Unemployment rate	3.9%	ACS (demo)
Median gross rent	$1,480 / mo	ACS (demo)
Commercial parcels	380	Parcel roll (demo)
Industrial parcels	64	Parcel roll (demo)
Total assessed valuation (all parcels)	$4.31B	Parcel roll (demo)

§ 15 · PAST LOSS & EVENT HISTORY

What actually happens here

Five years of synthetic incident experience, 2021–2025 — the HIST sub-indicator's evidence base and the demand baseline Reports 2–3 measure against.

5-YR INCIDENTS	EMS SHARE	STRUCTURE FIRES · 5-YR	CIVILIAN CASUALTIES · 5-YR	CALL CONCURRENCY
11,600	**60%**	**214**	**2 inj**	**23%**
2021–25 · +2.8%/yr trend	1,445 EMS responses in 2025	~43/yr · $4.2M loss	0 deaths · 5 FF injuries (minor)	of calls begin while committed · peak 4

YEAR	INCIDENTS	STRUCTURE FIRES	DIRECT LOSS	NOTABLE
2021	2,238	40	$0.61M	—
2022	2,289	41	$1.32M	Riverbend warehouse fire — $0.9M, 1 civilian injury
2023	2,318	44	$0.68M	—
2024	2,345	43	$0.79M	Lakeside kitchen fire — 1 civilian injury; sprinkler-controlled
2025	2,410	46	$0.80M	—
Total	**11,600**	**214**	**$4.20M**	

2025 call mix

2025 CALL CATEGORY	RESPONSES	SHARE
EMS — BLS medical	759	31.5%
EMS — ALS medical	497	20.6%
Cardiac arrest	58	2.4%
MVC / rescue	131	5.4%
Automatic fire alarms	313	13.0%
Service / good intent	313	13.0%
Outside / vehicle fires	72	3.0%
Hazmat / gas leaks	72	3.0%
Structure fires	46	1.9%
Other	149	6.2%
Total	**2,410**	**100%**

▸ DEMAND PATTERN

Demand peaks **09:00–11:00** and **16:00–19:00** — squarely inside the daytime window when volunteer turnout at Stations 3–5 is weakest. The urban core (Z-03, Z-06, Z-09) generates 51% of volume on 42% of the population.

HISTORY FINDING — CONCURRENCY

Overlapping incidents are no longer rare events: 23% of 2025 calls began while the department was already committed, peak load reached 4 simultaneous incidents, and the system ran ≥2 simultaneous incidents for a measurable share of every week. Concurrency — not single-incident capability — is the emerging risk; it is tracked quarterly in Report 3 §05, where overlapped calls show a measurable 90th-percentile penalty against clean ones.

Notable incidents, 2021–2025 (synthetic)

EVENT	WHAT IT DEMONSTRATED
2022 — Riverbend warehouse fire ($0.9M, 1 civilian injury)	High-hazard ERF arithmetic in practice: 39 personnel on scene, both aid partners committed, dead-end-main flow limits reached; the incident that shaped the §19 High classification of the park.
2022 — December ice storm (4-day outages)	3× EMS surge, generator gaps at care facilities, impassable ridge roads — the winter-weather rating in §13 and CRR priority 4.
2024 — Lakeside kitchen fire (1 civilian injury)	Sprinkler-controlled before first-due arrival — the counterfactual for 180 evacuation-dependent beds is the reason Z-06 carries the system's highest LIFE score.

Casualty & loss summary — 5-yr

FF INJURIES · 5-YR	FF DEATHS	CIVILIAN INJURIES · 5-YR	CIVILIAN DEATHS	TOTAL PROPERTY + CONTENT LOSS
5	0	2	0	$4.46M
all minor		2022 · 2024		5-yr, all categories

Incidents by NFIRS category — intake schema, filled

NFIRS CATEGORY	5-YR COUNT	5-YR PROPERTY LOSS
Structure Fire	214	$4.20M
Vehicle / Mobile Property Fire	170	$0.14M
Natural Vegetation Fire	95	$0.02M
Outside Fire	85	$0.03M
Overpressure / Rupture / Explosion	6	$0.02M
Rescue / EMS	6,940	–
Hazardous Condition	345	–
Service Call	760	–
Good Intent	750	–
False Alarm	1,510	–
Severe Weather	115	$0.05M
Other / Special Incident	610	–
Total	**11,600**	**$4.46M**

TEMPLATE NOTE — THE TWO STATES OF THIS SECTION

This table is the production intake schema (the exact category set requested from the AHJ), shown here in its **filled** state from demo CAD/NFIRS data. When incident data is pending — as in the T/E deployment — the same table renders with [AHJ to fill] placeholders and the probability axis drops HIST/TREND, exactly per the adopted pending-data discipline.

§ 16 · CRITICAL INFRASTRUCTURE PROFILE

The systems behind the system

Failure of any of these raises demand, degrades response, or both.

SYSTEM	ASSETS	RISK INTERACTION
Electric	2 substations (Riverbend, West Ridge) · 34.5 kV distribution loops	Ice-storm outages 2022; substation fire = park + care-facility exposure
Water	Fairview WTP (Lake Fairview intake, 6 MGD) · 3 elevated tanks (4.2 MG) · 1,140 hydrants	Single WTP; tank isolation reduces fire flow on West Ridge
Wastewater	WWTP on lower Mill Creek	In the SFHA — flood event risks release + service loss
Natural gas	Gate station + transmission main along the SR-9 corridor	Third-party strike risk in the commuter corridor
Communications	2 tower sites (Ridge Rd, Township bldg) · county-dispatched (NFPA 1225)	Ridge site on generator; county PSAP handles alarm handling segment
Dams	Lake Fairview dam — state-regulated, significant-hazard class	Downstream inundation tracks Mill Creek through Z-03/Z-06
Roads/bridges	14 creek crossings · 2 weight-limited bridges	Rural apparatus detours 4–6 min; flood closes low crossings first
Emergency management	EOC at Township building (Z-03) · CERT (28)	EOC sits inside the flood-adjacent downtown it manages

Registry-derived inventory (HIFLD-style)

HOSPITALS IN SERVICE AREA	NURSING / RESIDENTIAL CARE	SCHOOLS	TRANSMISSION LINE SEGMENTS
0	**2**	**7**	**3**
nearest ED ~12 min (outside)	+1 adult day, +1 AHJ-added	7 campuses · 6,100 students	138 kV + 2× 69 kV

Electric power transmission (3 segments)

TYPE	STATUS	VOLTAGE (KV)	CLASS	OWNER
Overhead	In service	138	Transmission	Keystone Grid Co. (demo)
Overhead	In service	69	Sub-transmission	Keystone Grid Co. (demo)
Overhead	In service	69	Sub-transmission	Keystone Grid Co. (demo)

Additional lifeline layers

LAYER	INVENTORY (DEMO)	SOURCE
Public water system	Fairview Water Authority · PWSID 9900101 · 31,200 served · Lake Fairview intake, 6 MGD	EPA SDWIS (demo)
Natural gas	1 transmission main (12") along SR-9 + gate station	PHMSA NPMS public layer (demo)
Telecom towers	2 registered structures — Ridge Rd (310 ft guyed), Township bldg (180 ft monopole)	FCC ASR (demo)

LAYER	INVENTORY (DEMO)	SOURCE
Rail	Fairview Industrial Spur — Class III short line, 2.1 mi, 3 grade crossings	BTS NTAD (demo)
Chemical facilities	2 TRI reporters — Riverbend Coatings LLC (solvents) · ChemPack Distribution (warehousing)	EPA TRI (demo)

Department-supplied additions

FACILITY	ADDRESS	TYPE	RESIDENTS / BEDS	NFPA 1750
Sunrise Adult Foster Home	14 Orchard Hill Road (Z-01)	Adult foster care	4 residents	MODERATE

The additions table is the AHJ-intake mechanism: facilities the department knows that no public registry carries.

§ 17 · RISK CATEGORIZATION MATRIX

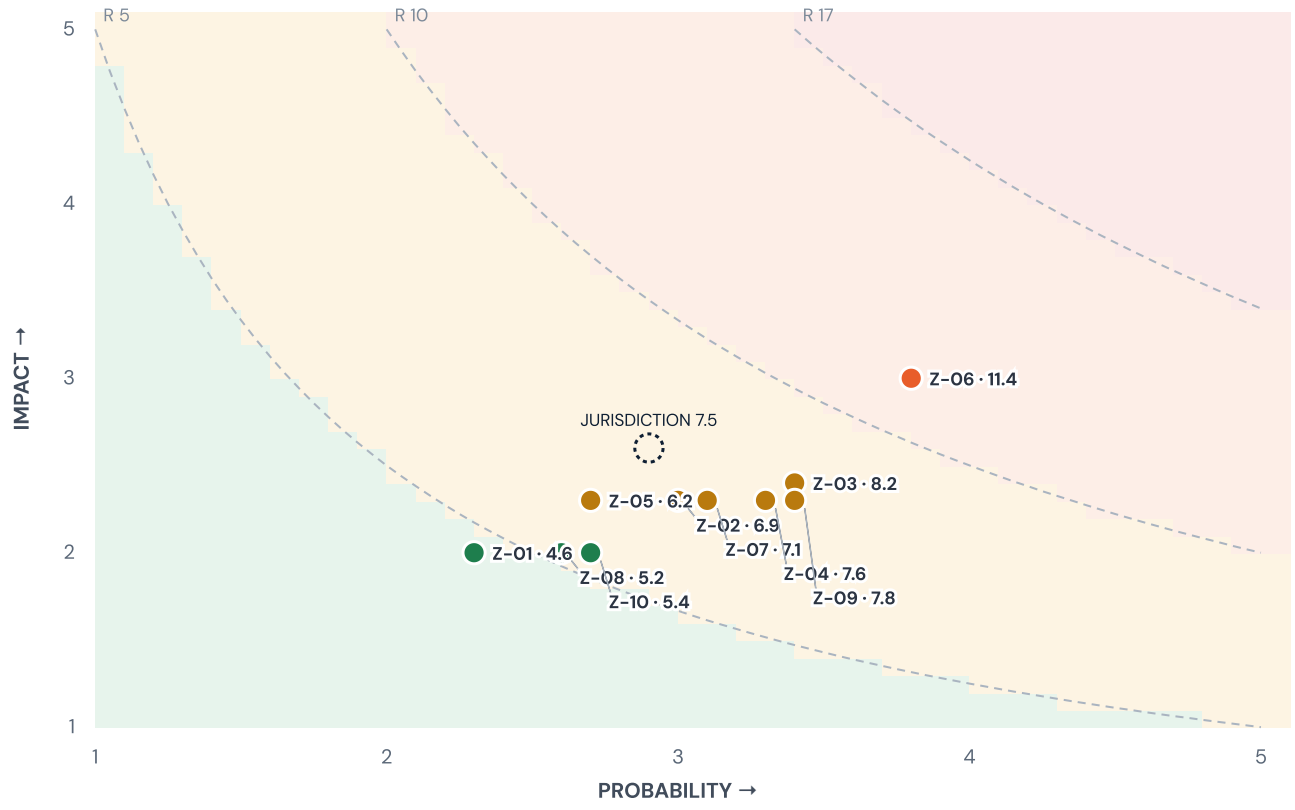
Ten zones on one grid

Every zone plotted probability × impact on the 1–25 surface, per NFPA 1750 §10.3.6. Class bands: Low 1–4.9 · Moderate 5–9.9 · High 10–16.9 · Critical ≥17.

HIGH	MODERATE	LOW	JURISDICTION COMPOSITE
1 zone	6 zones	3 zones	R 7.5
4,900 pop · 14%	24,600 pop · 71%	5,300 pop · 15%	prob 2.9 × impact 2.6

PRISM risk matrix — probability × impact

● = planning zone, positioned at its axis scores; shading = class band



⚠ DISTRIBUTION FINDING

Fairview is a Moderate system with a single High anchor. 71% of the population lives at Moderate risk — the class the standard first-alarm (ERF 28) is sized for — while the High zone concentrates the exposures that justify the 42-person ERF and both automatic-aid agreements. No zone approaches Critical.

§ 18 · PLANNING-ZONE RISK PROFILES

All ten zones, in full

The complete sub-indicator scoring matrix, then a profile for every zone — the level of detail the one-page portal register summarizes.

ZONE	HIST	EXPO	COND	TREND	P	LIFE	PROP	ECON	RESP	I	R	CLASS
Z-01	1.8	2.2	3.0	2.4	2.3	1.5	1.6	1.5	3.4	2.0	4.6	LOW
Z-02	2.9	2.8	3.3	3.0	3.0	2.2	2.2	2.2	2.6	2.3	6.9	MODERATE
Z-03	3.6	3.2	3.6	3.0	3.4	2.5	2.8	2.5	1.8	2.4	8.2	MODERATE
Z-04	3.3	3.4	3.3	3.2	3.3	2.5	2.4	2.5	1.8	2.3	7.6	MODERATE
Z-05	2.7	2.6	2.7	2.8	2.7	2.7	2.2	1.7	2.2	2.3	6.2	MODERATE
Z-06	3.7	4.0	4.1	3.4	3.8	3.3	3.2	3.3	2.2	3.0	11.4	HIGH
Z-07	3.1	3.0	3.1	3.2	3.1	2.2	2.2	2.2	2.6	2.3	7.1	MODERATE
Z-08	2.1	2.4	3.3	2.8	2.6	1.7	2.2	1.7	2.4	2.0	5.2	LOW
Z-09	3.5	3.6	3.1	3.4	3.4	2.9	2.2	1.9	1.8	2.3	7.8	MODERATE
Z-10	2.4	2.8	2.8	3.0	2.7	1.6	2.0	1.6	2.8	2.0	5.4	LOW

Sub-indicators scored 1–5. P = weighted probability axis (HIST .35 · EXPO .20 · COND .25 · TREND .20); I = weighted impact axis (LIFE .35 · PROP .25 · ECON .15 · RESP .25); R = P × I computed from unrounded values, scaled 1–25.

Zone profiles

Z-01 North Valley

LOW · RURAL · R 4.6 = P 2.3 × I 2.0

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
1,900 · 487/mi²	Station 5	7:50 / 10:00	4% within 1,000 ft

The rural northwest of the service area: large-lot homes, horse properties and working farmland along the North Valley Road corridor. No municipal water — every working fire is a tanker-shuttle operation from Station 5 with Twin Pines automatic aid. Risk is Low on both axes, but the response-capability penalty is the highest in the system: modeled first-due travel runs 7:50 at the median, and the zone sits beyond the 8-minute engine band. North Valley Elementary (660 students) is the zone's one concentrated life load.

Z-02 West Ridge

MODERATE · SUBURBAN · R 6.9 = P 3.0 × I 2.3

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
3,600 · 973/mi²	Station 4	5:40 / 7:10	86% within 1,000 ft

A post-war suburban ring of split-levels and ranches climbing West Ridge, bisected by the SR-9 commuter corridor — the zone's defining risk is the MVC load at the SR-9 interchanges, not structure fire. Housing is aging (predominantly 1950–79) with legacy electrical services. The western fringe (~320 structures) lies beyond hydrant coverage and drafts from the Ridge Road dry hydrant.

Z-03 Old Mill / Downtown

MODERATE | URBAN | R 8.2 = P 3.4 × I 2.4

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
5,400 · 3,176/mi²	Station 1	3:30 / 5:25	99% within 1,000 ft

The historic core: the Old Mill Historic District's pre-war balloon-frame rowhomes with common cocklofts, the Main Street assembly and mixed-use corridor, and Mill Creek running through the middle of it — 90 structures sit in the SFHA. Highest incident density in the system and the highest SVI outside Riverbend (0.47). Station 1 covers it with a 3:30 median first-due; the risk story is conflagration potential in the rowhome blocks and life load in the district's walk-up apartments.

Z-04 Fairview Commons

MODERATE | URBAN | R 7.6 = P 3.3 × I 2.3

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
4,700 · 2,611/mi²	Station 2	3:40 / 5:35	98% within 1,000 ft

Retail and multifamily: Fairview Commons Mall (fully sprinklered, ~900 employees, high daytime load), the garden-apartment clusters along Commons Boulevard — the highest-life-load multifamily stock in the system — and Willow Court Personal Care (62 beds, no standby generator). Daytime population roughly doubles the resident count. Alarm volume from the mall and apartments feeds the AFA problem targeted by CRR priority 3.

Z-05 Maple Glen

MODERATE | SUBURBAN | R 6.2 = P 2.7 × I 2.3

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
3,100 · 969/mi²	Station 2	5:30 / 7:00	94% within 1,000 ft

A stable single-family suburb around Maple Glen Elementary. Risk drivers are modest: school-hour traffic, an aging but well-kept housing stock, and reliance on Station 2's single engine for first-due. Scores Moderate on probability trend only because demand growth tracks the township average.

Z-06 Riverbend

HIGH | URBAN | R 11.4 = P 3.8 × I 3.0

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
4,900 · 2,333/mi²	Station 3	3:45 / 5:45	97% within 1,000 ft

The system's only High zone, and its risk anchor. Riverbend concentrates four independent High-hazard drivers in 2.1 square miles: the Riverbend Industrial Park (22 occupancies, 4 flammable-liquids permits, rail spur, single access, 1,800-gpm dead-end main), Lakeside Senior Living (180 beds, evacuation-dependent), the pre-war rowhome blocks shared with the historic district, and the Mill Creek flood corridor (120 SFHA structures — the 2022 warehouse fire and the flood exposure overlap). First-due is the combination Station 3, whose daytime staffing is 2 career — the deepest gap between risk demanded and force fielded, and the reason CRR priority 1 exists.

Z-07 Stony Run

MODERATE | SUBURBAN | R 7.1 = P 3.1 × I 2.3

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
3,000 · 968/mi²	Station 3	5:50 / 7:20	92% within 1,000 ft

Townhome and twin clusters built 1980–2005 east of Riverbend, several with single-point access off Stony Run Road. Attached construction raises exposure risk; hydrant coverage is good. First-due Station 3 shares the same daytime-staffing constraint as Z-06.

Z-08 Fox Hollow

LOW | SUBURBAN | R 5.2 = P 2.6 × I 2.0

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
900 · 750/mi²	Station 3	6:10 / 7:35	61% within 1,000 ft

Estate lots and lakefront properties around Fox Hollow — the smallest zone by population (900). Low demand, low life load, but 290 structures (39%) sit beyond creditable hydrant distance and the growing short-term-rental stock falls outside the inspection regime (watch-list item).

Z-09 Academy Heights

MODERATE | URBAN | R 7.8 = P 3.4 × I 2.3

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
4,800 · 2,526/mi²	Station 1	3:35 / 5:30	98% within 1,000 ft

Academy Heights holds the district's school cluster — Fairview HS (1,850), both middle schools, and multifamily infill housing filling in around them. 6,100 students concentrate here on school days, making evacuation, reunification and school-hour MVC response the planning drivers. Covered by Station 1 at a 3:35 median.

Z-10 Timber Gap

LOW | RURAL | R 5.4 = P 2.7 × I 2.0

POPULATION	FIRST-DUE	TRAVEL MED / 90TH	HYDRANT COVERAGE
2,500 · 490/mi²	Station 4	7:30 / 9:50	3% within 1,000 ft

Timber Gap is the WUI corridor: wooded ravine development along a single access road, no hydrants, tanker water from Station 4. Wildfire rating is Relatively Low regionally, but the combination of single access, no water and long travel makes any working incident resource-intensive — and on peak-concurrency days the zone is effectively uncovered (measured in Report 3 §05).

§ 19 · OCCUPANCY HAZARD CLASSIFICATION & ERF MAPPING

From risk class to force size

Every structure is assigned a hazard class; each class maps to the effective response force and assembly objective adopted in Report 2 §04–§05.

HAZARD CLASS	STRUCTURES	TYPICAL OCCUPANCY	ERF	ASSEMBLY OBJECTIVE (TRAVEL)
LOW	10,090	Detached single-family, outbuildings	20	8:00
MODERATE	2,326	Rowhomes, garden apartments, mixed-use, small commercial	28	8:00
HIGH	34	Industrial park (22) · care facilities (4) · mall · 7 schools	42	10:10
Cardiac (EMS)	–	Out-of-hospital cardiac arrest, anywhere	6	8:00

High-hazard inventory

HIGH-HAZARD OCCUPANCY INVENTORY (34)	ZONE	COUNT
Riverbend Industrial Park occupancies	Z-06	22
Lakeside Senior Living (3 buildings)	Z-06	3
Willow Court Personal Care	Z-04	1
Fairview Commons Mall	Z-04	1
Public schools	Z-01 · Z-04 · Z-05 · Z-06 · Z-09	7

▸ METHOD

Classification follows the critical-task logic in Report 2 §05: the class is set by the tasks a working incident at that occupancy demands simultaneously, not by square footage alone. Sprinklered status moderates probability, never the ERF — the force is sized for the day the system fails. In production, NFIRS-derived sprinkler/AES presence is tabulated per occupancy; the demo assumes the mall, Lakeside, and post-ordinance multifamily are protected.

High-hazard inventory — per building

BUILDING	ADDRESS (DEMO)	OCCUPANT LOAD	CLASSIFICATION SOURCE	CLASS
Fairview Commons Mall	1 Commons Boulevard	4,800	Fire Marshal (demo)	HIGH
Fairview High School	1200 Academy Drive	2,100	HIFLD + district (demo)	HIGH
Old Mill Middle School	45 Schoolhouse Lane	980	HIFLD + district (demo)	HIGH
Lakeside Middle School	300 Lakeview Avenue	950	HIFLD + district (demo)	HIGH
Elementary schools (4)	see §13 facilities	700–780 ea	HIFLD + district (demo)	HIGH
Lakeside Senior Living A / B / C	200 Lakeview Avenue	245 (res + staff)	State licensing (demo)	HIGH
Willow Court Personal Care	62 Willow Court	78	State licensing (demo)	HIGH
Riverbend Coatings LLC	10 Riverbend Industrial Way	85	TRI + inspection (demo)	HIGH

BUILDING	ADDRESS (DEMO)	OCCUPANT LOAD	CLASSIFICATION SOURCE	CLASS
ChemPack Distribution	22 Riverbend Industrial Way	120	TRI + inspection (demo)	HIGH
Valley Cold Storage	31 Riverbend Industrial Way	60	Inspection (demo)	HIGH
Praxis Plastics	44 Riverbend Industrial Way	140	Inspection (demo)	HIGH
Keystone Fasteners · Mill Creek Machining · NovaPrint · Beacon Foods	Riverbend Industrial Park	40–110 ea	Inspection (demo)	HIGH
14 additional park occupancies	Riverbend Industrial Park	< 60 ea	Inspection (demo)	HIGH

Sprinkler / AES presence by occupancy (NFIRS-derived, demo)

NFIRS PROP_USE	OCCUPANCY	STRUCTURE INCIDENTS · 5-YR	AES PRESENT
419	1- & 2-family dwelling	152	3%
429	Multifamily dwelling	58	41%
500	Mercantile / mall	34	88%
599	Business / office	21	76%
213 / 215	Assembly / education	9	100%
311 / 331	Care facility	6	100%
700	Industrial / manufacturing	18	61%

AES = automatic extinguishing system present at incidents in that property-use class — the evidence base behind the protection assumptions in the classification method above.

§ 20 · COMMUNITY RISK REDUCTION PLAN

Five priorities, in order

Risk-ranked from the findings of §01–§19. Each priority names an owner, a timeline, and the Report 3 measure that will show whether it worked.

#	PRIORITY	RISK BASIS	LEAD	TIMELINE	SUCCESS MEASURE
1	**Daytime effective-force staffing** Peak-demand staffing or duty-crew program at Stations 3–5	ERF assembly fails by day (Report 3: 24% meeting); demand peaks 09:00–19:00; daytime assemble-able force ~21 vs Moderate ERF 28	Fire Chief · Township Board	FY-1 pilot, FY-2 permanent	ERF % meeting (R3 §04) · daytime turnout per station
2	**Senior & aging-in-place program** Falls prevention, congregate-living pre-plans, lift-assist policy	60% EMS share; SVI household theme 0.44; Z-06 High classification; fall-related EMS fastest-growing call type	EMS Captain · Senior Services	FY-1	Fall-related EMS volume · repeat-address rate
3	**Automatic-alarm reduction** Ordinance + verified-response for chronic AFA occupancies	13% of volume (313 calls, 2025) is AFAs; each consumes first-due availability and feeds the 23% concurrency rate	Fire Marshal · Township solicitor	FY-1 ordinance	AFA volume · repeat-occupancy count
4	**Winter weather & flood readiness** Mill Creek pre-plans, generator program, swiftwater partnership	Top two NRI hazards; 210 SFHA structures; care-facility generator gap (Willow Court)	Emergency Mgmt Coord. · Water Authority	FY-1–FY-2	Pre-plans current · generator coverage at care facilities
5	**WUI mitigation — Timber Gap (Z-10)** Defensible space, second access, dry-hydrant maintenance	Single-access WUI corridor, unhydranted; peak 4-concurrency days strand the zone	Fire Marshal · Planning Commission	FY-2–FY-3	Parcels treated · second-access milestone

Secondary / watch-list priorities

WATCH-LIST ITEM	WHY IT IS WATCHED
Smoke-alarm saturation in pre-1980 stock	58% of housing predates 1980; canvass Z-03/Z-06 rowhome blocks first
Dry-hydrant & draft-site maintenance	2 dry hydrants + Lake Fairview draft points are the rural water system
Short-term rental life-safety inspections	Lakefront STR growth in Z-08/Z-10 outside inspection regime
Willow Court generator	62-bed personal-care home without standby power — heat/winter exposure

Annual trend monitoring — the signals the department will watch

- EMS share of total demand (60% in 2025) and fall-related volume
- Call concurrency — % of calls beginning while committed (23% in 2025) and peak simultaneous incidents (4)
- Daytime volunteer turnout per station (Stations 3–5)
- AFA volume and repeat-occupancy concentration
- Structure-fire count vs the 5-yr mean (~43/yr) and dollar loss
- Senior population share (19.2%) and congregate-bed count (242 licensed)

Refresh schedule

CADENCE	ACTION
Quarterly	Report 3 scorecard against the adopted standards (automatic from CAD)
Annual	Data refresh of this CRA — demographics, hydrants, inventory, incident year
Every 3 years	Full re-score of all zones; re-adoption of Report 2 standards by the governing body
On trigger	Any annexation, station change, target-hazard change, or two consecutive quarters of missed High-hazard ERF

CRR team & community partners

ROLE	SEAT
Program lead	Fire Chief
Code & inspection	Fire Marshal
EMS line	EMS Captain
Land use & mitigation	Township Planning Commission
Water supply	Fairview Water Authority
Schools	District safety coordinator
Seniors	Senior Center + Meals on Wheels coalition
Community	CERT coordinator · faith coalition liaison

Five-E intervention & measure tables — per priority

Priority 1 — Daytime effective-force staffing: Five-E interventions

E	APPLIES	INTERVENTION — OR WHY RULED OUT
Education	Yes	Officer development on ERF math; community expectation-setting on daytime response
Engineering	No	Not an engineering problem — staffing model
Enforcement	No	—
Economic	Yes	Duty-crew stipend program; peak-demand staffing budget line FY-1
Emergency response	Yes	Duty-crew pilot at Station 3 (07:00–19:00); auto-aid running cards expanded for daytime ERF

Priority 1 measures

MEASURE	DESCRIPTION	TARGET	CADENCE
ERF % meeting	Share of ERF-qualifying incidents assembling required force in time (R3 §04)	≥ 60% by FY-2	Quarterly
Daytime turnout	Avg responders per daytime call, Stations 3–5	≥ 8 by FY-2	Quarterly

Priority 2 — Senior & aging-in-place program: Five-E interventions

E	APPLIES	INTERVENTION — OR WHY RULED OUT
Education	Yes	Falls-prevention classes at Senior Center; aging-in-place home visits with Meals on Wheels
Engineering	Yes	Grab-bar / lighting install program; congregate pre-plan updates with evacuation staging
Enforcement	Yes	Annual care-facility inspections incl. drill verification

E	APPLIES	INTERVENTION — OR WHY RULED OUT
Economic	Yes	Grant-funded smoke/CO + fall-sensor bundles for 65+ households
Emergency response	Yes	Lift-assist policy (2-person minimum, no transport charge); EMS referral loop to senior services

Priority 2 measures

MEASURE	DESCRIPTION	TARGET	CADENCE
Fall-related EMS volume	Falls + lift-assist responses	Flat vs 2025 by FY-2	Quarterly
Repeat-address rate	Addresses with ≥ 3 EMS responses / yr	-25% by FY-2	Annual

Priority 3 — Automatic-alarm reduction: Five-E interventions

E	APPLIES	INTERVENTION — OR WHY RULED OUT
Education	Yes	Alarm-company and property-manager outreach on verified response
Engineering	Yes	Panel upgrades / double-knock requirement for chronic occupancies
Enforcement	Yes	AFA ordinance with escalating cost recovery (3rd false alarm/yr)
Economic	Yes	Permit-fee offsets for verified-response subscribers
Emergency response	Yes	Reduced-assignment response to chronic AFA addresses after risk review

Priority 3 measures

MEASURE	DESCRIPTION	TARGET	CADENCE
AFA volume	False-alarm category responses	≤ 250/yr by FY-2	Quarterly
Chronic occupancies	Addresses with ≥ 3 false alarms / yr	≤ 10 by FY-2	Annual

Priority 4 — Winter weather & flood readiness: Five-E interventions

E	APPLIES	INTERVENTION — OR WHY RULED OUT
Education	Yes	Flood-aware pre-plans briefed to all companies each spring; resident sandbag program
Engineering	Yes	Generator installation at Willow Court; EOC backup power audit
Enforcement	Yes	SFHA development review with Fire Marshal sign-off
Economic	Yes	FEMA BRIC / HMGP applications for Mill Creek mitigation
Emergency response	Yes	Swiftwater partnership (county team); ice-storm surge staffing plan

Priority 4 measures

MEASURE	DESCRIPTION	TARGET	CADENCE
Pre-plans current	SFHA + care-facility pre-plans reviewed in last 12 mo	100%	Annual
Generator coverage	Licensed care facilities with standby power	2 of 2 by FY-2	Annual

Priority 5 — WUI mitigation — Timber Gap (Z-10): Five-E interventions

E	APPLIES	INTERVENTION — OR WHY RULED OUT
Education	Yes	Defensible-space workshops for Timber Gap parcels; Firewise recognition
Engineering	Yes	Second-access corridor study; dry-hydrant maintenance contract

E	APPLIES	INTERVENTION — OR WHY RULED OUT
Enforcement	Yes	Driveway/access standards for new WUI construction
Economic	Yes	Chipper-day subsidies; state WUI mitigation grants
Emergency response	Yes	Pre-positioned tanker task force on red-flag days

Priority 5 measures

MEASURE	DESCRIPTION	TARGET	CADENCE
Parcels treated	Timber Gap parcels with defensible-space work	60 by FY-3	Annual
Second access	Corridor study → funded design	Design by FY-3	Annual

Signals with baselines & alert thresholds

SIGNAL	BASELINE	ALERT THRESHOLD	SOURCE
EMS share of demand	60% (2025)	> 64%	CAD/RMS
Call concurrency	23% overlapped · peak 4	> 27% or peak ≥ 5	CAD/RMS
Daytime turnout, Stns 3–5	~6 avg responders	< 5	Roster / CAD
Automatic fire alarms	313 (2025)	> 350	CAD/RMS
Structure fires	~43/yr (5-yr mean)	> 52	NFIRS
Licensed congregate beds	242	Any +40 (new facility)	State licensing

CRR team — incumbents & time commitment

ROLE	INCUMBENT (DEMO)	TIME	RESPONSIBILITIES
Program lead	Fire Chief M. Harlan (demo)	0.10 FTE	Owns plan; reports to Township Board semi-annually
Code & inspection	Fire Marshal T. Okafor (demo)	0.25 FTE	Priorities 3 & 5 enforcement; inspection data
EMS line	EMS Capt. S. Reyes (demo)	0.15 FTE	Priority 2; fall-referral loop; EMS analytics
Land use & mitigation	Planning Commission liaison	0.05 FTE	SFHA review; WUI access standards
Water supply	Water Authority engineer	0.05 FTE	Hydrant/flow data; dry-hydrant program
Schools	District safety coordinator	0.05 FTE	Drills, reunification, CPR curriculum
Seniors	Senior Center director	0.05 FTE	Priority 2 delivery channel
Community	CERT coordinator	0.05 FTE	Canvasses, storm support, outreach

Community partners — categorized, with co-delivery mapping

Schools / school district

ORGANIZATION	SOURCE	CO-DELIVERS	NOTES
Fairview Area School District (7 campuses)	District (demo)	P1 expectation-setting · P2 CPR/AED curriculum	Reunification plans on file

Faith communities

ORGANIZATION	SOURCE	CO-DELIVERS	NOTES
Fairview faith coalition — 14 congregations	AHJ inventory (demo)	P2 senior outreach · P4 shelter support	Daily contact with homebound members

Social services & community centres

ORGANIZATION	SOURCE	CO-DELIVERS	NOTES
Fairview Senior Center	AHJ (demo)	P2 falls prevention	~400 active members
Meals on Wheels	AHJ (demo)	P2 smoke-alarm canvass	Route-based daily checks
Fairview Food Bank	AHJ (demo)	P2/P4 vulnerable-household registry	Downtown Z-03
Township CERT (28 members)	AHJ (demo)	P4 storm support · P5 chipper days	Damage assessment trained

Public health

ORGANIZATION	SOURCE	CO-DELIVERS	NOTES
County health department	County (demo)	P2 falls data · heat-event outreach	SVI data partner
Red Cross — county chapter	Regional (demo)	P4 mass care · post-fire recovery	Smoke-alarm program stock

Code official / building department

ORGANIZATION	SOURCE	CO-DELIVERS	NOTES
Township building department	AHJ (demo)	P3 ordinance · P5 access standards	Joint plan review with Fire Marshal

Lifeline operators

ORGANIZATION	SOURCE	CO-DELIVERS	NOTES
Fairview Water Authority	SDWIS (demo)	P4 flood ops · hydrant program	1,140 hydrants · 3 tanks
Keystone Grid Co. · Commonwealth Gas (demo)	HIFLD/NPMS (demo)	P4 outage coordination	Critical-customer list shared

Refresh schedule — dated

CADENCE	ACTION	DUE (DEMO DATES)
Quarterly	Report 3 scorecard against adopted standards (automatic from CAD)	next: 2026-10-01
Annual review (NFPA 1750 §10.3.2.1)	Data refresh of this CRA — demographics, hydrants, parcels, incident year	due 2027-08-03
3-year re-score	Full zone re-score; re-adoption of Report 2 standards by governing body	due 2029-08-03
5-year CRA cycle	Complete reassessment	due 2031-08-03
On trigger	Annexation, station change, target-hazard change, or two consecutive quarters of missed High-hazard ERF	—

§ 21 · REFERENCES, GLOSSARY & PROVENANCE

The audit trail

Standards cited, terms defined, and the artifact this document was built from.

STANDARD	USED FOR
NFPA 1300	Community risk assessment & CRR plan structure (the seven risk profiles)
NFPA 1750 §10.3.6	Risk categorization method and class bands
NFPA 1750 Table 7.4.2	Demand-zone density classes and total-response objectives
NFPA 1225	Alarm-handling segment objectives (Report 2 §08)
CPSE/CFAI 10th Edition, Categories I–II	Community expectations & risk documentation alignment
CDC/ATSDR SVI methodology	Social-vulnerability theme scoring

Glossary

TERM	DEFINITION
AFA	Automatic fire alarm — an alarm-system activation without confirmed fire.
ALS / BLS	Advanced / Basic Life Support — paramedic vs EMT level of EMS care.
Concurrency	A call beginning while the agency is already committed to another incident.
Demand zone	Density-based planning area (urban / suburban / rural) per NFPA 1750 Table 7.4.2.
ERF	Effective Response Force — the full complement of personnel the risk class requires on scene.
First-due	The station/company expected to arrive first in a given zone.
NRI	FEMA National Risk Index — county-scale natural-hazard ratings.
R-score	PRISM composite risk = probability × impact, scaled 1–25.
SFHA	Special Flood Hazard Area — FEMA 1%-annual-chance floodplain.
SVI	CDC/ATSDR Social Vulnerability Index, 0 (least) – 1 (most vulnerable).
WUI	Wildland-urban interface — where development meets burnable vegetation.

▸ PROVENANCE (DEMO)

Artifact: `prism.cra_run/1 · cra-run_fairview-demo · synthetic seed, no external datasets` · Formula v1.3 · Rendered 2026-08-04. In production this box carries the artifact's SHA-256 content hash and source-dataset vintages; Reports 2 and 3 cite the same hash.

Data source attestation

▸ ATTESTATION (DEMO)

In production, the undersigned analyst attests that every dataset listed was retrieved from the URL shown on the access date shown, unmodified except as documented in the formula appendix. All Fairview values are synthetic; the URL column shows the production feed the template binds to.

SOURCE	PRODUCTION URL	VINTAGE / ACCESSED
Census ACS / TIGERweb / LODES / language tables	data.census.gov · tigerweb.geo.census.gov · lehd.ces.census.gov	synthetic (demo)
FEMA National Risk Index	hazards.fema.gov/nri	synthetic (demo)
CDC/ATSDR SVI	atsdr.cdc.gov/placeandhealth/svi	synthetic (demo)
USFA NFIRS + FD Registry	usfa.fema.gov/nfirs · apps.usfa.fema.gov/registry	synthetic (demo)
DHS HIFLD Open	hifld-geoplatform.hub.arcgis.com	synthetic (demo)
OpenStreetMap Overpass	overpass-api.de	synthetic (demo)
EPA SDWIS / PHMSA NPMS / FCC ASR / EPA TRI	epa.gov/sdwis · npms.phmsa.dot.gov · fcc.gov/asr · epa.gov/tri	synthetic (demo)
County parcel roll · hydrant registry · CAD/RMS	AHJ-supplied feeds	synthetic (demo)

Formula documentation — PRISM CRA v1.3

PROBABILITY WEIGHT	
HIST	.35
EXPO	.20
COND	.25
TREND	.20

IMPACT WEIGHT	
LIFE	.35
PROP	.25
ECON	.15
RESP	.25

RISK CATEGORY (NFPA 1750 §10.3.6)	R = P × I RANGE
Low	1 – 4.9
Moderate	5 – 9.9
High	10 – 16.9
Critical	17 – 25

R computed from unrounded axis values; category assigned from the unrounded composite.