



City of Madison Fire Department

314 W. Dayton St., Madison, WI 53703-2506

Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: fire@cityofmadison.com



Insurance Service Organization (ISO) Public Protection Classification (PPC)

The Insurance Services Office, Inc (ISO), recently conducted a Public Protection Classification (PPC) Survey to analyze the structural fire suppression delivery system in Madison. Although the Fire Department has not received a written report of the PPC findings, Chief Davis was notified that as a city, our rating went from a class 3/9 in March of 2013 to a class 1/9.

IOS's PPC includes numerous variables which include: locality to fire stations, staffing, equipment, response times, water supply, communications, and other variables. Areas within the service distance of 5 miles to a fire station have a PPC of 1 and should receive preferential rates. Other localities, including the southeast corner of Madison, which are beyond 5 miles of a fire station, receive a different, lower rating of 9. Those lower classified areas may receive less favorable insurance considerations along with a decrease in coverage and increased response times.

The PPC program can play an important role in the underwriting process for insurance companies, and many insurers use the PPC information as part of their decision-making in offering coverage to business. Communities where PPC rates have improved may receive lower insurance prices. Most insurers do use PPC classifications for underwriting and calculating premiums for residential, commercial, and industrial properties.

Response Data – Station 14 Coverage Area

Areas to be covered by Station 14 have seen a projected 12.1% increase in calls for service in 2016 and a 16.3% increase in fire department units dispatched to this area. The average response time for a unit responding to Station 14's territory is 9:07, the average City response time is 6:47, over 2 minutes quicker.

National Fire Protection Association (NFPA) 1710 sets response objectives of **5 minutes** for the first arriving first responder (personnel on an engine or medic unit); **5 minutes and 20 seconds** for the arriving engine on a fire call; 9 minutes for the first arriving Advanced Life Support Unit (Medic unit) and for a full alarm assignment on a fire suppression incident.

The following table shows the frequency for *all responding units* for all incidents (not just the first-in unit). City-wide data shows a cumulative frequency of 89.58% for times 9 minutes or less compared to 52.33% for Station 14's Territory.

Station 14 Territory Jan-July 2016 Responses	ALS unit	Engine	Ladder	Grand Total	Cumulative Frequency
=< 5 Min (EMS Call)	6.76%	6.67%	3.70%	6.35%	6.35%
5:01-5:20 (1st Fire Unit)	1.43%	1.62%	0.74%	1.43%	7.78%
5:21-9:00 (ALS/Full Alarm)	45.29%	45.05%	40.00%	44.54%	52.33%
9:01-10 Min	15.37%	13.13%	17.78%	14.67%	66.99%
10:01-15 Min	31.15%	33.54%	37.78%	33.01%	100.00%

Fire Department Staffing

The 1999 Fire Department Staffing Study Committee report recommended authorized strength of 1.60 firefighters per 1,000 city residents. Currently the fire department has 365 authorized commissioned members. The WI Department of Administration estimated the population of Madison to be 247,206 resulting in 1.48 Commissioned Personnel per 1,000 City Residents.

Chief Davis has recommended adding a medic unit and an engine to serve this area. This would require adding an additional 27 commissioned persons. This would result in achieving a 1.59 ratio of firefighters per 1,000 city resident ($392/247.2=1.59$).

Racial Justice & Social Equity Analysis

A Racial Equity & Social Justice Analysis took place Nov 2014 – March 2015. The analysis was compiled by Health Equity Coordinator, Jordan Bingham with Madison Fire Department members Chief Steven Davis, Division Chiefs Art Price and Johnny Winston Jr, and Captain John Fleming all participating in the analysis.

Highlights from the analysis include information about Station 14's service area:

- The Station 14 service area includes lands identified as future growth areas for the City of Madison.
- Childhood Opportunity Index is either “low” or “very low” for most of the area. This index combines measures of education opportunity, health, and environmental opportunity, and social and economic opportunities.
- The southwest portion of the service area is estimated to have a moderate level of barriers to opportunity, defined as “any combination of obstacles in the way of accessing the core opportunities”. They can range from socioeconomic barriers such as poverty, lack of English proficiency and racial disparities, to physical barriers such as lack of transit options and costs of housing and transportation.
- There is no community center located in the service area.
- Economic development: insurance costs could decrease with closer fire station; could become a catalyst for additional, second-tier development
- Education: Community education, prevention
- Gov't Practices: equity in response time
- Health: EMS service nearby; people could also access health services like blood pressure checks; could be a hub for community paramedicine
- Planning and development: this is a major project for the neighborhood, and could impact future development in the area

Fire Station Response Area

Non-Overlapping Areas Based on Drive Time

0 0.5 1 2 Miles
City of Madison, WI 02/12/2015

