

AUSTINTOWN TOWNSHIP FIRE DEPARTMENT SURVEY AND COMPARISONS

Prepared for

Austintown Township Trustees

Prepared by

Thomas A. Finnerty, Jr., Senior Research Project Manager
Judith Ferrett, Word Processing
Amber Nespeca, Data Processing
Center for Urban Studies
Gil Peterson, Director
Youngstown State University
Youngstown, OH 44555-3355
(216) 742-3355

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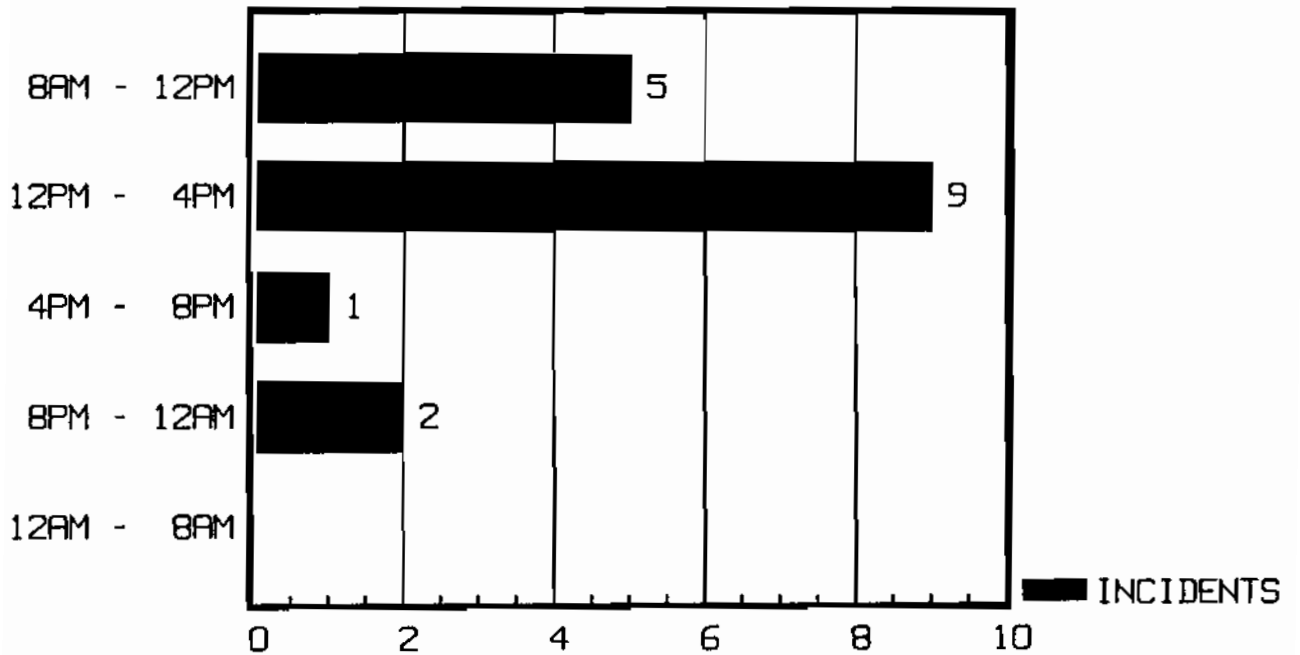
According to preliminary census figures, Austintown Township is one of the few communities in Mahoning County to experience population growth during the 1980s. With its population increasing to 38,868, Austintown remains the third largest political entity in the county, behind Youngstown and Boardman and well ahead of Poland Township and Struthers.

As any community expands and takes on more and more urban characteristics, problems associated with urban existence inevitably creep in, and the demand for services equivalent to those of the city are made. Austintown has not escaped the problems associated with urbanization. The Township recently established a police district in order to more efficiently handle the increased demand on that department and now the focus has shifted to the fire department.

Austintown's Fire Department was established when the Township was sparsely settled and, as was the common practice, a volunteer system was used. The fire department grew with the community, adding more stations and equipment, but it retained its all volunteer status. The volunteer system functions effectively as long as volunteers are available to respond to fire calls. In Austintown, the response of volunteers during daylight hours has become less than adequate (see Figure 1), and a system using full-time firefighters augmented by volunteers during daylight hours while keeping the volunteer system during other hours has been considered.

The problem associated with the use of full-time firefighters is one of costs. The fire service is a labor intensive operation. Even with the volunteer now in place, 65 percent of Austintown's Fire Department budget is spent on salaries, fringe benefits, and Workmen's Compensation. Boardman, which uses a combination of full-time and volunteer firefighters, expends 90 percent of its budget on personnel costs. Any shift toward the use of full-time firefighters in Austintown would lead to a substantial increase in the fire department budget. Within the current limits of Township government, this revenue can only be generated increasing the property tax. Voters in Austintown narrowly defeated a tax levy for the fire department in the May 1990 primary election.

Figure 1.
AUSTINTOWN FIRE DEPARTMENT
INADEQUATE VOLUNTEER RESPONSE
BY TIME OF DAY
JANUARY THROUGH JULY, 1990



Source: AFD

Before placing the levy before the voters for reconsideration, Austintown Township trustees opted to attempt to hire more volunteers who could be available for daytime duty. This tactic has met with limited success. A study comparing Austintown with similar townships and cities in Ohio was also commissioned in order to better understand the current status of the Austintown Fire Department.

Austintown and Similar Ohio Subdivisions

Andrew R. Frost, Austintown Fire Chief, sent survey forms to fire departments throughout Ohio, both in cities and townships, serving populations that were similar to Austintown. Responses came back from around the state, and the pattern indicates that the majority of the respondents, like Austintown, were suburbs of Ohio's central cities (see Figure 2). Chief Frost used two different survey forms, one for cities and one for townships. Because of differences on these survey forms, Austintown will be compared with cities and townships separately.

Survey results from the cities in Ohio (Table 1) show that all are comparable to Austintown, with populations between 30,000 and 48,000. Of the 13 cities that responded, only two, Mentor in Lake County and Fairfield in Butler County, did not have full-time fire departments. Both of these cities used a combination of full-time and volunteer firefighters. Overall, Shaker Heights exhibits the largest full-time staff with 72, while Fairfield is the lowest with 2 (see Figure 3).

The expense involved in maintaining a full-time fire department becomes obvious in this survey. The annual budgets of the full-time departments averages \$2.34 million, well in excess of Austintown's \$656,000. The two combination departments show diverse results. Fairfield, which has only two full-time firefighters, has a budget lower than Austintown at \$580,000, while Mentor, which supports 46 full-time firefighters has an annual budget of \$3.5 million. Per capita costs of operation range from a high of \$102.77 in Shaker Heights to \$14.50 in Fairfield. The per capita cost of the Austintown Fire Department is \$16.86.

Figure 2.

LOCATION OF SURVEY RESPONDENTS

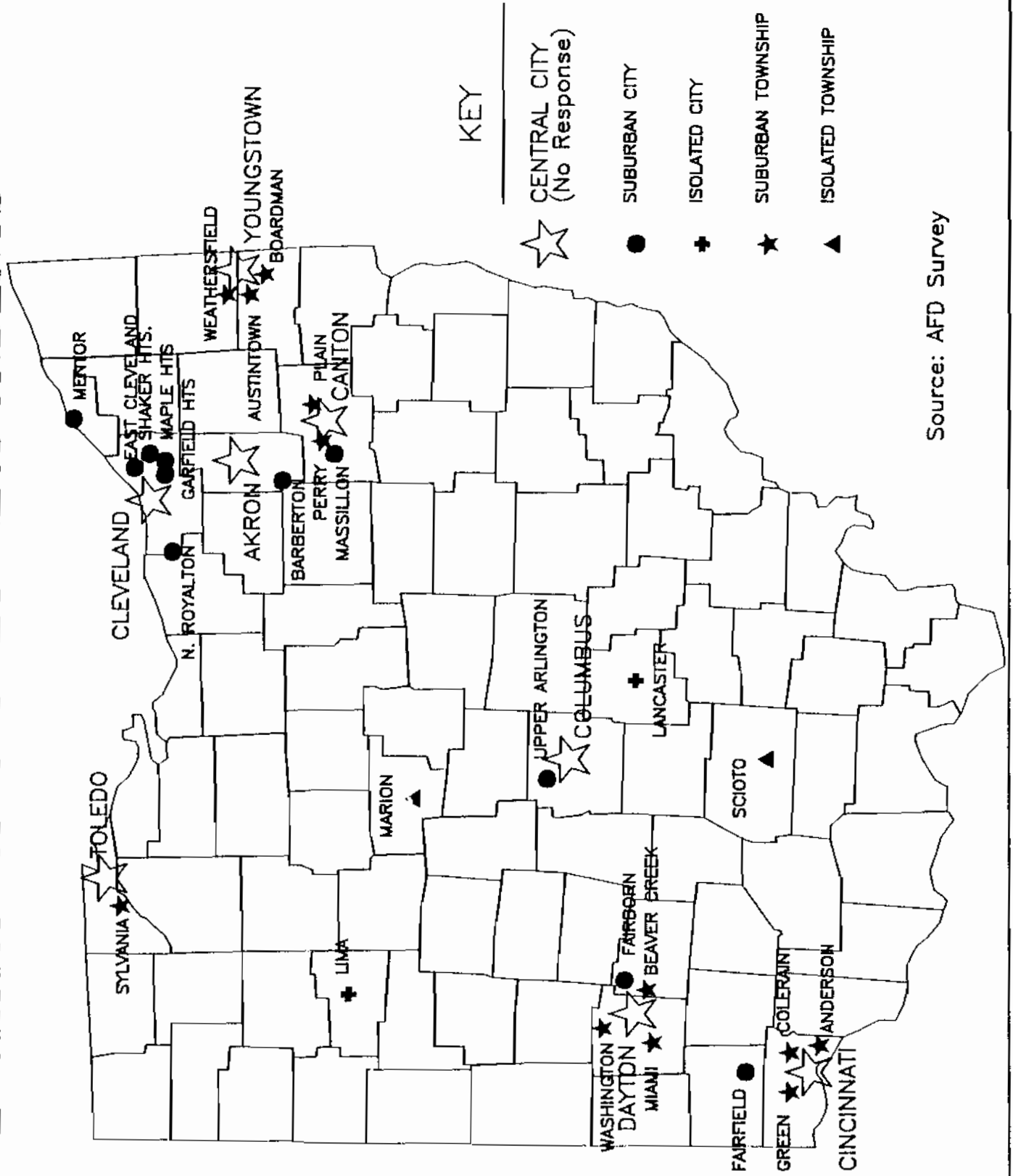


TABLE 1
FIRE DEPARTMENT COMPARISON OF AUSTINTOWN-SIZED OHIO CITIES

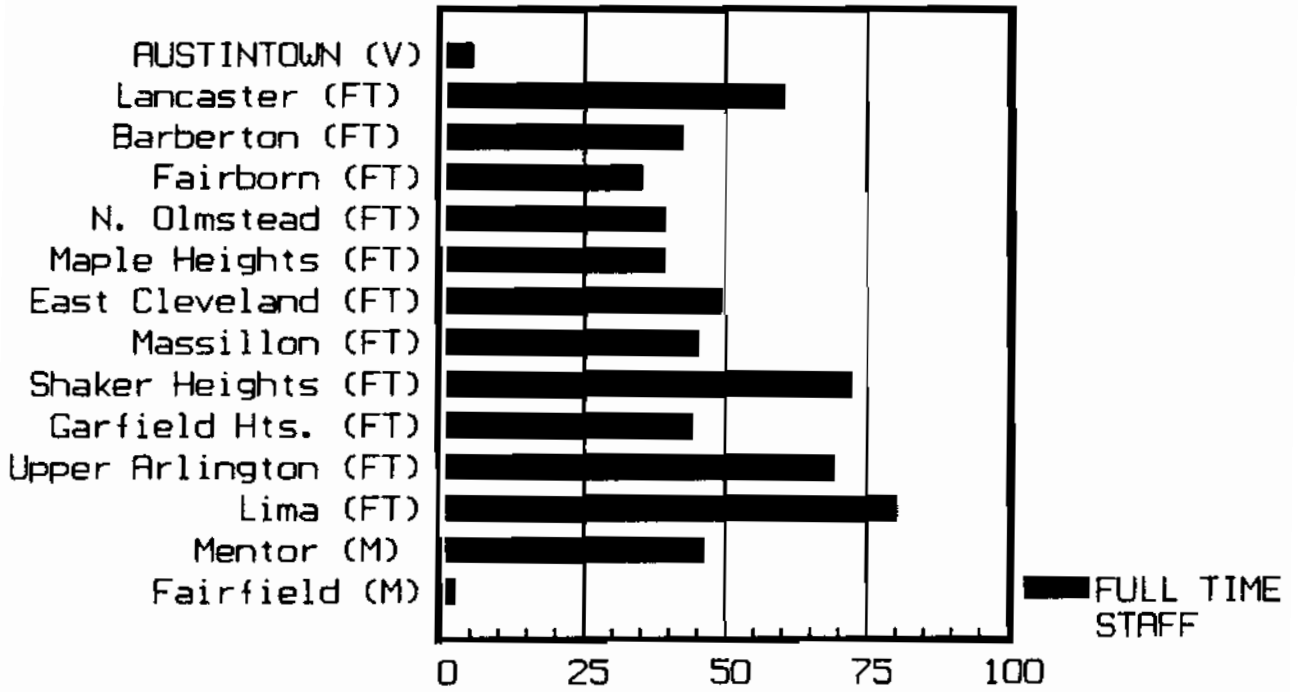
City	Pop.	Status*	Avg. Resp. Rate	Full-time Staff	Chief's Pay	Sec'y Pay	Insp. Pay	Stations	Per Capita Cost	Hour Stations	Station Crew	Fire Fighters	Fire Prev.	Annual Budget	Eng. Service	Eng. Calls	Fire Calls	Fire Loss
Arlington	37,000	1	4	69	46,000	21,172	25,014	3	94.59	3	6	50	1	3,500,000	1	2,500	1,600	270,000
Austintown	38,900	3	6.1	5	39,000	14,686	27,373	5	16.86	0	0	91	1	656,000	1	77	718	475,000
Barnorton	30,000	1	3.1	42	46,000	NR	36,200	3	36.67	3	3	42	1	1,700,000	1	1,100	230	500,000
East Cleveland	37,000	1	3.5	49	40,000	26,000	34,000	2	NR	2	5	49	1	NR	2	0	1,000	NR
Fairborn	30,000	1	3.0	NR	40,000	22,000	32,000	3	80.00	3	3	30	1	2,400,000	1	3,000	1,500	300,000
Fairfield	40,000	4	NR	2	38,000	20,000	24,000	3	14.50	3	0	41	1	500,000	1	1,520	780	900,000
Garfield Heights	36,000	1	3.0	44	44,000	8,320	35,000	2	NR	2	7	33	1	NR	1	3,000	400	225,000
Lancaster	37,000	1	3.5	60	34,700	16,000	22,000	3	62.16	3	7	59	1	2,300,000	1	3,000	650	340,000
Lima	48,000	1	4.0	80	40,000	17,000	26,000	5	52.95	5	7	57	1	2,541,719	1	1,893	1,164	289,237
Maple Heights	30,000	1	3.5	39	42,450	19,000	33,000	2	37.84	2	6	39	1	1,400,000	1	2,000	1,200	300,000
Massillon	32,000	1	3.0	45	33,000	NR	24,500	4	56.25	4	3	43	1	1,800,000	1	1,350	550	NR
Mentor	48,000	4	3.5	46	52,353	26,652	33,354	5	72.92	5	7	46	1	3,500,000	1	2,500	1,000	600,000
North Olmstead	39,000	1	4.0	39	45,000	12,000	NR	2	43.59	2	4	39	1	1,700,000	1	1,378	718	161,000
Shaker Heights	33,000	1	3.5	72	52,000	21,750	31,800	2	102.77	2	16	48	1	3,700,000	1	1,533	1,148	400,000

*1 = Full Time
2 = Part Time
3 = All Volunteer
4 = Mixed

Source: Survey conducted by Andrew Frost.

Figure 3.

FULL TIME FIRE DEPARTMENT STAFF
AUSTINTOWN AND SIMILAR SIZED CITIES



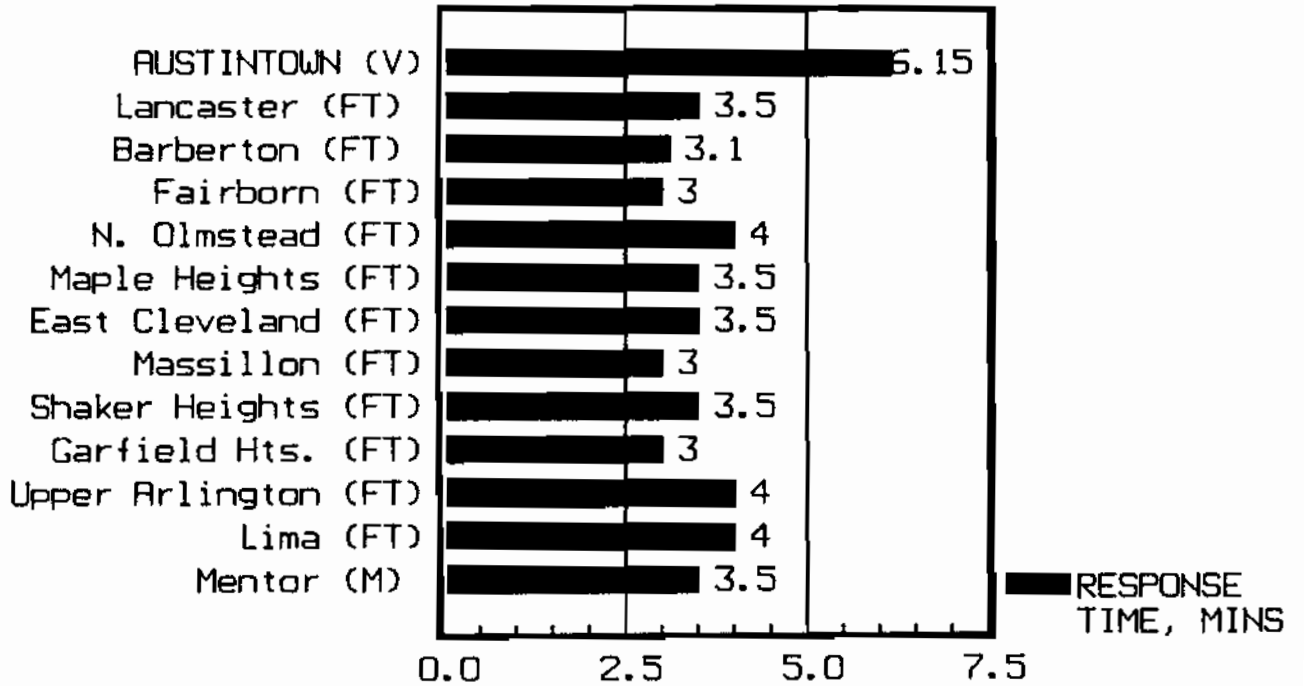
FT=full time V= vol. M=mixed
Source: AFD Survey

Also notable in the comparison of cities is the average response time (see Figure 4). The response times of full-time fire departments averaged 3.5 minutes. Mentor's combination department also averaged 3.5 minutes. Austintown's average response time of 6.15 minutes demonstrates one of the major liabilities of an all volunteer fire department. Fire fighting equipment cannot leave the station until volunteers respond. Related to quicker response time, another advantage of the full-time fire departments, as indicated by the survey, is that all stations are staffed 24 hours a day.

The survey results from townships (see Table 2) indicate that there was a greater variety in population, ranging from 8,500 in Scioto Township to 65,000 in Colerain Township. With the exception of Austintown and Perry Township in Stark County, all townships with populations in excess of 10,000 were using combinations of full-time and volunteer fire departments. The cost of operations varied with the amount of full-time staff used by each department. The largest budget of any township fire department is \$1.94 million in Anderson Township, Hamilton County, which had a full-time staff of 24. Of the larger townships, Austintown has the lowest budget at \$656,000. Boardman demonstrates the largest full-time staff with 29, while Perry Township's full-time staff of two is the smallest among the large townships (see Figure 5).

What the surveys most dramatically indicate is that political subdivisions get the services they are willing to pay for. Full-time fire departments offer fully manned fire stations and the quickest response times. They also cost the most, and of the survey respondents, all full-time fire departments are cities, presumably having access to an income tax. Combination full-time and volunteer fire departments are common in large Ohio townships and some cities. Combination departments ensure quick response time but do not necessarily guarantee a complete crew, as adequate staffing is still dependent on volunteer response. Combination departments generally have lower operating budgets than full-time departments, depending on the amount of full-time firefighters used. Volunteer fire departments are the least costly, but the tradeoff for cost is slow response time. In urban areas, response time is critical.

Figure 4.
FIRE DEPARTMENT RESPONSE TIME
AUSTINTOWN AND SIMILAR SIZED CITIES



FT=full time V= vol. M=mixed
Source: AFD Survey

TABLE 2
FIRE DEPARTMENT COMPARISON OF AUSTINTOWN-SIZED OHIO CITIES

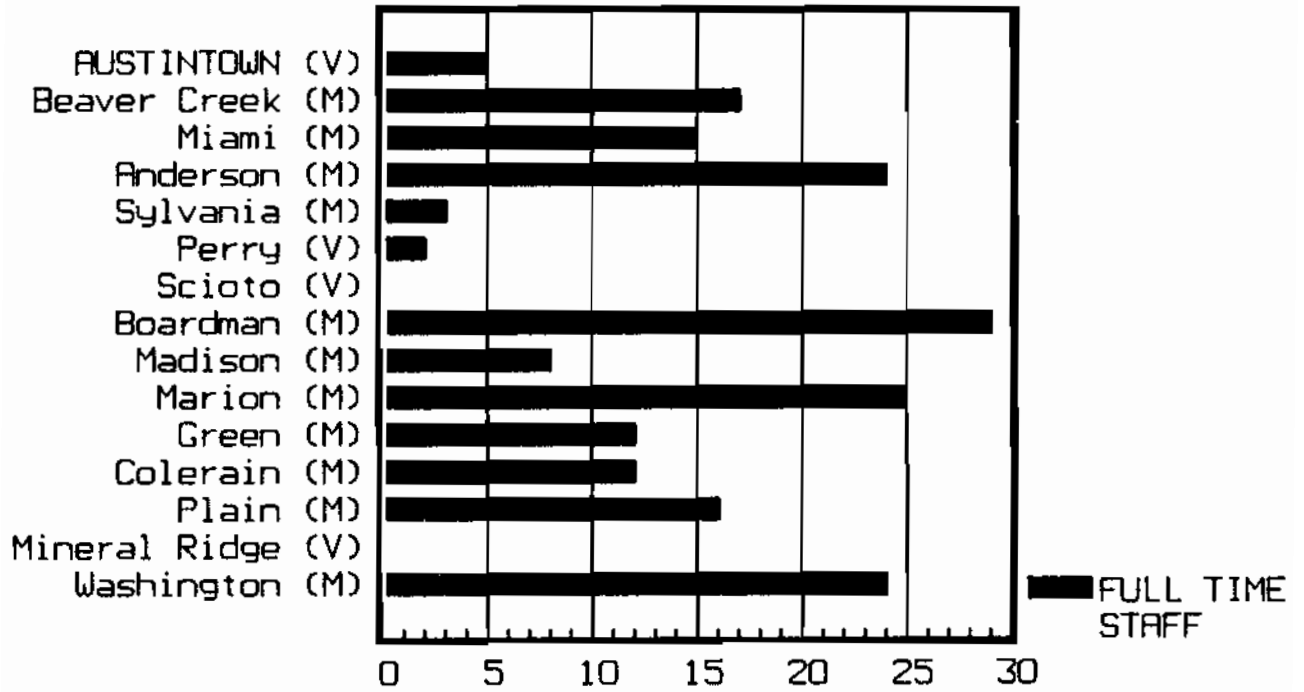
Township	Pop.	Status*	Full-time Staff	Chief's Pay	Sec'y Pay	Insp. Pay	Stations	Per Capita Cost	Fire Fighters	Fire Prev.	Annual Budget	Emerg. Service	Emerg. Calls	Fire Calls	Fire Loss
Anderson Twp.	45,000	4	24	43,750	NR	28,000	3	43.42	55	1	1,954,000	1	NR	1,051	445,432
Austintown Twp.	38,900	3	5	39,000	14,686	27,373	5	16.86	91	1	656,000	1	77	718	475,000
Beavercreek Twp.	38,000	4	17	42,016	15,641	31,324	4	34.97	15	1	1,500,000	1	1,297	544	296,565
Boonshank	48,000	4	29	32,500	16,000	24,000	3	23.23	21	1	1,150,000	1	NR	170	1,500,000
Colerain	65,000	4	12	44,000	20,000	28,000	4	27.69	98	1	1,800,000	1	2,500	1,500	1,000,000
Green	52,000	4	12	43,302	17,460	27,450	3	25.00	50	1	1,300,000	1	1,220	800	200,000
Madison	30,000	4	8	31,000	NR	21,000	5	23.33	70	1	700,000	1	NR	800	700,000
Marion	14,000	4	25	30,200	NR	NR	2	80.28	46	0	1,124,000	1	NR	300	NR
Miam	19,000	4	15	32,000	12,400	18,252	4	53.16	60	1	1,200,000	1	1,775	570	120,452
Mineral Ridge	9,500	3	0	0	0	0	2	31.57	36	0	300,000	NR	NR	90	NR
Perry	32,000	3	2	26,000	10,400	NR	4	40.63	76	1	1,300,000	1	1,200	360	3,500,000
Plain	38,000	4	16	31,142	15,330	22,711	5	26.32	125	1	1,000,000	1	1,950	450	160,000
Scioto	8,500	3	0	0	0	NR	2	13.11	29	0	111,450	NR	0	156	200,000
Sylvania	40,000	3	3	40,496	7,000	26,147	3	45.00	36	1	1,800,000	1	1,329	815	425,388
Washington	40,000	4	24	46,500	22,111	21,445	5	37.70	106	1	1,508,948	1	1,547	548	1,021,606

* 1 = Full Time
2 = Part Time
3 = All Volunteer
4 = Mixed

Source: Survey conducted by Andrew Frost.

Figure 5.

FULL TIME FIRE DEPARTMENT STAFF
AUSTINTOWN AND SIMILAR SIZED TOWNSHIPS



FT=full time V= vol. M=mixed
Source: AFD Survey

AUSTINTOWN AND INSURANCE STANDARDS

Standards for firefighter training and fire fighting equipment are established by the National Fire Protection Association, and Austintown's Fire Department follows the NFPA guidelines. Insurance companies, however, set guidelines for the number and distribution of fire stations, the water distribution system and the number of firefighters and firefighting equipment a community should have. Communities are rated as to their compliance with the standards, and these ratings are used by insurance companies when establishing fire insurance rates.

ISO Commercial Risk Services, Inc. reviewed Austintown's fire department and the available water service early 1990, and following this review, Austintown was placed in Class 4, an improvement from the previous ranking of Class 5. An examination of the grading sheet, however, would indicate that the improved rating is more due to the water supply than it is the fire department. The water supply received 70 percent of the the points available, while the fire department received 57 percent of the total points allowable.

ISO supplied several pages concerning the water system, but did not provide an explanation of its rating schedule for the fire department. Using a standard schedule developed by the American Insurance Association, it is easy to see that what Austintown's Fire Department was most lacking is manpower.

The AIA recommends that an urban district with a population of under 50,000 should have enough pumper trucks to match the formula:

$$\text{Pumpers} = 0.85 + .12P, \text{ where } P = \text{population in thousands.}$$

Using this formula, Austintown would be expected to have 5.53 pumper trucks. The 1989 Annual Report indicates there are six pumpers in use or in reserve in the Township.

The number of ladder companies is expected to meet the guidelines using the formula:

Ladder Companies - $1 + .03P$, where P = population in thousands.

Using this formula, Austintown is expected to have 2.17 ladder companies. The 1989 Annual Report indicates that the Austintown Fire Department had two aerial ladders and a snorkel truck. These trucks have a proclivity towards malfunctioning, and as is the case in Youngstown and Boardman, at any given time these trucks are apt to be out of service. In general, however, Austintown meets the equipment requirements.

Manning the equipment is where most fire departments run into rating problems. The AIA grading sheet demands a crew of four for a pumper truck (six in "high value districts") and a crew of six on an aerial truck (seven in a "high value district"). If Austintown were to qualify for maximum credit, the five pumpers and two ladder trucks would require a full-time staff of 42 on every shift. Assuming Austintown were to employ the three 24-hour shifts similar to those used by many other departments, Austintown would need 126 full-time firefighters to meet the minimum standards. This figure does not include extra men needed to fill in for vacations or call-offs, nor does it include officers. The AIA concedes very few departments meet these standards.

Credit is given for volunteers on a four-to-one ratio--four volunteers equal one full-time firefighter. To meet the standards, Austintown would need 16 volunteers to respond for each pumper truck dispatched. As was seen earlier, this type of response has not been attainable during the daylight hours in Austintown.

SUMMARY

Austintown's fire fighting equipment, the number and locations of its fire stations, and the water system all fit within insurance guidelines. Where Austintown falls short is in its manpower. Manpower is the most expensive segment in the provision of fire protection. A full-time fire department would probably prove prohibitively expensive to the citizens of Austintown. The concept of a combination of full-time and volunteer fire fighters, however, may prove to be a viable middle ground option. Response time would be cut, and the problem of lack of daytime response would be lessened, although effective fire control would still require volunteer assistance. Since the current daytime situation is a catastrophe waiting to happen, the addition of some full-time personnel would appear to be a prudent step.

OTHER OPTIONS

The Mahoning Valley has reached the stage where regionalization of specific functions is inevitable. Should public support in Austintown for any required tax increase fail to materialize, some consideration of a "metropolitan" fire department should be considered. Fire protection is one function that could benefit from the economies of scale that result from regional cooperation. The urbanized areas of Mahoning County, Youngstown, Boardman, Austintown, Poland (both), Canfield (both), Struthers, Campbell, Lowellville, and Coitsville should all consider a joint fire district independent of the political jurisdictions that now restrain the efficient provision of fire protection.