



**Fire and Emergency Services Committee
Research Report**

March 17, 2010

Overview

As part of their deliberation, the Fire and Emergency Services Committee of Engage Gwinnett has asked for additional information regarding the service that Gwinnett County currently provides. Specifically, they have asked the following questions:

1. What is the financial impact of a change in the County's Insurance Services Office (ISO) rating?
2. What would be the net financial impact of privatizing the EMS transport service?
3. Is there an opportunity to leverage our internal training and provide EMS training for profit to surrounding departments?

These questions were passed on to the School of Business at Georgia Gwinnett College (GGC) and Gwinnett County's Economic Analysis Division. Given the short timeframe and lack of a budget, the amount of formal research that could be conducted was extremely limited. However, the answers provided here should be sufficient to meet the needs of the committee.

Financial Impact of a Change in the County's ISO Rating

The Insurance Services Office (ISO) is the property/casualty insurance industry's leading supplier of statistical data, analytic, and decision-support services. ISO serves insurers by offering several products and services, including data to help insurers make independent decisions about their pricing. As part of that analysis, ISO rates communities on a scale of 1 to 10 with "1" being the highest rating and "10" being the lowest. The higher a community's rating, the lower the property/casualty risk and therefore, presumably, the lower the insurance rates passed on to consumers in that jurisdiction.

In 1997, ISO surveyed Gwinnett County's resources and determined that the covered area rated a class 4 protection designation. However, the score barely qualified for the class 4 rating. For property owners, the ISO rating has a direct financial impact. Table 1 shows current pricing for a single-family home based on ISO rating from a major insurance company. These rates were reviewed by other insurance professionals and confirmed to be consistent with other national insurance companies. Table 2 provides an estimate of the financial impact to homeowners of a change in the County's ISO rating based on those prices.

Table 1: Insurance Rate Comparison for Various ISO Ratings

<u>Amount of coverage</u>	<u>Class 3</u>	<u>Class 4</u>	<u>Class 5</u>	<u>Class 9/10</u>
\$200,000	\$614	\$634	\$692	\$1,094
\$400,000	\$1,146	\$1,185	\$1,292	\$2,050
\$600,000	\$1,727	\$1,782	\$1,946	\$3,097
\$800,000	\$2,344	\$2,419	\$2,644	\$4,206
\$1,000,000	\$2,959	\$3,052	\$3,335	\$5,310

Rates provided by a major insurance carrier and based on \$1,000 deductible.

Table 2: Total Cost Impact for an ISO Class Increase on Single Family Dwellings

<u>Amount of coverage</u>	<u>Class 4</u>	<u>Class 5</u>	<u>Difference</u>	<u>Dwellings</u>	<u>Total Cost to Homeowners</u>
\$200,000	\$634	\$692	\$58	120,603	\$6,994,974
\$400,000	\$1,185	\$1,292	\$107	9,143	\$978,301
\$600,000	\$1,782	\$1,946	\$164	1,725	\$282,900
\$800,000	\$2,419	\$2,644	\$225	596	\$134,100
\$1,000,000	\$3,052	\$3,335	\$283	786	\$222,438
			Total additional premiums:		\$8,612,713

Rates provided by a major insurance carrier and based on \$1,000 deductible.

As can be seen in Table 1, as the value of the home goes up, the cost differences between the two ISO classes increase. It is important to note that the data in Table 2 represents an estimate of the cost to only single-family homeowners. Obviously, the cost to commercial property owners between the two classes would be even higher since on average, commercial property is valued much higher than residential property.

By way of comparison, assume that the increased cost to commercial property owners would be at least as large as that of residential property owners (in fact it is likely much larger). Given this assumption, the total cost to County insurance payers would be at least \$17 million per year. That would be equivalent to a millage rate increase of 0.59 mills given the 2009 net tax digest. Therefore, a 0.59 millage increase would be cost effective if it meant providing the Gwinnett County Fire Department (GCFD) with the funds needed to support the operations required to maintain a Class 4 rating.

Financial impact of privatizing the EMS transport service

Since the GCFD began providing emergency medical service, it has grown into the major function of the department. As can be seen in Table 3, EMS calls represented more than 70 percent of all emergency calls in 2009 – a situation that has existed for some time and is not likely to change in the foreseeable future.

Table 3: Emergency Calls by Type

<u>Call Type</u>	<u>2007</u>	<u>Percent</u>	<u>2008</u>	<u>Percent</u>	<u>2009</u>	<u>Percent</u>
EMS	42,668	70.7%	43,810	72.6%	43,863	73.3%
Fire	17,547	29.0%	16,377	27.1%	15,793	26.4%
Other	211	0.3%	169	0.3%	163	0.3%
Total	60,426	100.0%	60,356	100.0%	59,819	100.0%

In order to understand how privatization of EMS transport would financially impact the County, it is first important to understand that GCFD utilizes a strategy of complete fire and emergency medical services integration – every firefighter is cross trained as an EMT, and every EMT is a firefighter. There are several advantages to this strategy including, but not limited to:

1. increased work productivity/allocation of resources of firefighters
2. better ISO rating
3. decreased EMS response times due to fire station distribution
4. multiple resources and trained personnel at emergency scenes

Under a privatization scenario, GCFD would still have to respond to all of the EMS calls by sending out trucks and personnel. They would then have to wait at the scene until a private EMS transport (ambulance) arrived – often several minutes beyond the response time that GCFD provides, thus depleting resource availability for other incidents. Therefore, rather than a reduction in cost, there would actually be a slight increase in cost, and the county would lose the \$ 10+ million that it currently collects for EMS service.

The next logical question would be, “wouldn’t there be a reduction in cost since GCFD could reduce staffing levels for EMT’s?” Again, given GCFD’s strategy of fire and EMS integration, the answer is “no” for two reasons. First, if GCFD lost the 143 personnel that it is estimated could be eliminated with the privatization of EMS, that would also eliminate 143 firefighters available to respond to calls. As

mentioned above, the County barely qualified for the class 4 ISO rating. The number of personnel accounts for 15 percent of that rating and as it is, GCFD received only 7.39 of those points. Any reduction in staff would lower the score even more, and move the County to a Class 5 ISO rating, increasing costs to all property owners in Gwinnett. Second, the loss of available medic unit response would require that GCFD add an additional engine or ladder to each response to obtain the necessary personnel required to safely address any structure fire. Currently, GCFD send the following units to a structure fire:

- 3 engines with at least 3 firefighters per engine
- 1 ladder truck with at least 3 firefighters per engine
- 1 medical unit with 2 firefighters
- 1 squad with 4 firefighters
- 2 battalion chiefs

This puts a minimum of 18 firefighters on scene with two battalion chiefs to manage the operation. Losing the medical unit would drop that number to 16, which is below the minimum standard required by the National Fire Protection Association (NFPA). In order to get back above this minimum level, GCFD would need to put an additional engine on the scene. GCFD could use existing resources, which would again deplete resource availability for other incidents, or purchase additional resources, which would negate much of the cost savings from elimination of the EMS units.

Lastly, there is the always the threat that the private company will simply stop providing service for economic reasons, leaving GCFD responsible for all EMS calls without having the capacity to respond. This has occurred recently in several other jurisdictions where, due to economic circumstances, private companies can no longer provide the service for a profit and simply stop. In economics, a “market failure” occurs when the market provides too few or too many resources for a specific activity. Under privatization, the possibility of a “market failure” in EMS service in Gwinnett County is a very real possibility and may be one of the strongest arguments in favor of keeping this service as part of the function of local government.

Leveraging our Internal Training for Profit

The third and final question posed by the committee related to the ability of the GCFD to leverage the Emergency Medical Technician (EMT) training they provide for their own internal use.

Specifically, offering the EMT training to the departments of surrounding jurisdictions, for a fee, as a way of generating additional revenue.

Currently, if there are one or two open spaces in one of their internal training classes, the GCFD is willing to offer the open spots (on a fee basis) to the departments of surrounding jurisdictions as a way to fill out the class. Instructors for these training courses are GCFD employees, who, when not teaching these classes, are in the field.

If the GCFD wanted to start offering EMT training full-time to outside departments on a fee basis, they would need to hire at least 2 full-time instructors and a program coordinator at an estimated cost of \$300,000 annually including overhead and fringe benefits. At most, these two instructors could run 2 classes per year, with a maximum of 20 students each – or 40 students per year. In the private sector, the cost of this type of training is approximately \$13,000. Assuming 40 students and a tuition rate of \$13,000, the training program would gross \$520,000 per year. After the cost of instructors, this number is still \$220,000 net positive. However, GCFD would need more space at their fire academy (which already exceeds capacity) as well as more equipment, including monitors, medical mannequins, instruments, books, etc. After the capital outlay needed to deliver this program, there isn't much excess revenue for GCFD to apply toward other costs. Further, training for profit is not part of the GCFD core service, and it would put GCFD in the position of competing directly with the private sector, which is not usually considered an appropriate role for the public sector.