Benchmarking

Introduction

This is a new section in the City’s annual budget. Performance measures and benchmarking go hand in hand in determining the success of city programs. By themselves, the performance measures can be difficult to interpret. By measuring our programs against the performance of other units of government, users of the budget will have a better understanding of our performance.

Finding good comparative data for benchmark can be a challenge. The City of Alma uses a number of different sources for its benchmarking. First, the City is a member of Michigan Local Government Benchmarking Consortium. This is a consortium of approximately thirty communities committed to benchmarking their performance. Not every community participates in all fifteen program areas. Not every community collects data on all the measures. However, as a whole, the data is consistent and likely the best collection of performance measures for Michigan cities. Next, we use the comprehensive annual financial reports (CAFR) for all cities in the State of Michigan with a population plus or minus 2,000 of the City of Alma. We have excluded the communities in Wayne, Oakland and Macomb counties. Those three countries are part of a major metropolitan area. The dynamics of their operation is often different that ours. The CAFRs are collected and posted by the Michigan Department of Treasury. Finally, the State of Michigan collects data from most city operations. Where publically available, these measures have been included.

When reading the measures, it is often important to understand that communities often have special circumstances that affect the measures. For example, communities with high tourism industries often have higher crime and accident rates. Communities with major industries will have major water and sewer customers that can affect water and sewer rates. Regional efforts have affect customer volumes or per capita data. With a little understanding of the communities included in the benchmarking, it is possible have a clearer picture about the City’s performance.

In the graphs below, the blue bars are cities. The red bars are townships. The green bars are counties.
Public Safety

Police Services

The first measure for the police department will be the per capita cost of providing police services to a community. It should be noted that the sheriffs in the counties are also providing coverage to the cities and the townships. Based on the data of the Consortium communities, the City of Alma spends below average for police services. Compared to just the other cities, Alma spent the second lowest.

![Cost per Capita- Police/Sheriff Services](image)

The next measure is the cost per having one officer. This measure includes all wages and benefits plus all overhead such as vehicles, computers, and clerical staff.

![Cost per Officer FTE](image)

Under this measure, our cost per officer is still below average but the City of Alma is closer to the average. Alma is ranked fourth from the bottom for cities and sixth from the bottom overall.
While finance measures are important, the real measure of the department is how fast the department responds when a Priority 1 call is made.

![Average Response Time for Priority 1 Calls](chart1)

By this measure, Alma ranked second overall in fast response time. The City of Lathrup Village was faster but they are also more compact than Alma.

From a residents perspective, have a low crime rate is important. Using the number of UCR Part 1 crimes per 10,000 population provides a good measure that is adjusted for the different populated sizes.

![UCR Part 1 Crime Rate per 10,000 Population](chart2)

Alma had the second lowest part 1 crime rate with a rate of 2.13 per 10,000 capita. The City of Walker was lower at 1.07 per 10,000 capita.
Since serious crime is not a major issue in the Alma area, another area of concern is traffic safety. The police in Alma strive to make traffic safety a focus of their traffic stops. Not every motorist that is stop receives a traffic ticket.

Alma has one of the lower number of traffic tickets issued per capita of Consortium cities. The question is how this translates into traffic safety. The graph below shows the number of crashes per 1,000 populations.

Alma is has the lowest number of traffic accident per capita of the Consortium cities. One county had a lower per capita number of accidents.
The number of fire runs is one of the major measures for any fire department. It may not measure efficiency or effectiveness but it is a key component in how busy a department is and how it needs to be staffed.

![Number of Fire per 1,000 Population](image)

Alma ranks fifth in the number of fires per 1,000 population. The Alma has 4.11 fires per 1,000 population. For all the communities, the average is 2.64 fires per 1,000 population. The Alma Fire District includes property in four townships. The Alma only territory is had 2.14 fires per 1,000 population. It should be noted that the fire runs include mutual aid runs. The Alma Department had 8 mutual runs. The number mutual runs for the other departments are not known. The average response time for the Alma Fire District is 5:50 minutes. This includes two mutual aid runs which took over 20 minutes to arrive at the scene. For fires in the City of Alma, the average response time was 3.58 minutes.
Property Maintenance

Cemetery

Once a city owns a cemetery, they are likely to own the cemetery forever. Not every city owns a cemetery. For those that do, the cemetery becomes a major budgetary commitment for the future. Cities can elect different levels of maintenance for their cemetery. Cemeteries also differ in size. The graph below shows the expenditures our benchmark communities spent on their cemetery.

Cemetery Expenditures

The average expenditure on cemetery operations is $187,724. The City of Alma spent $174,218. Eight of the fourteen communities spent more than the City of Alma. Five spent less.
Parks

Park systems are important to communities. The first metric for parks is the number acres of parks in a community.

![Acres of Mowable Park](image)

The average for all the communities is 153 acres. The City of Alma has 110 acres of park land. We ranked ninth out of the sixteen communities. Some of the communities are much larger and some are smaller. The graph adjusts the data for acres per capita.

![Passive Park Acres per 1,000 Population](image)

In this graph, the City of Alma moved up to seventh place. The average number of acres per 1,000 population was 19.65. Alma had 5.22 acres per 1,000 population. It should be noted that Petoskey is a real outlier by this measure. Without Petoskey, the average number of acres per 1,000 population drops to ~10 acres per community.

The next question is: how does the city compare in terms of park maintenance budget compared to the other benchmark communities?
The average of all the communities is $30.24 per resident. Alma spends $16.80 per resident for parks maintenance. There are five communities spend more per resident for park maintenance. Three of the five, Manistee, Petoskey, and Saint Joseph, are lakefront tourist communities. There are six spending less per resident that the City of Alma. Alma is the median.

An alternative way of looking at is: how much is being spent per park acres?

Alma spent $1,506 per acre. The average was $1,604 per acre. Six communities spent more per acre than Alma. Five spent less per acre than Alma. The median was between Alma and Saline.
Environmental Services

Water and Sewer

Water and sewer systems can be a difficult area to benchmark accurately. Depending on the water source, some cities are required to treat the water with a water filtration plant. Some cities can use the raw water as is. And, some cities treat and soften the water. Central softening can be cheaper than each home owner having a water softener. Water districts do not always follow jurisdictional lines. Many cities either buy or sell their water to other communities. Major industry or other major users can affect benchmarking.

As with water treatment, there are many types of wastewater treatment facilities. Some have basic lagoons. Others have full treatment plants. Some include industrial pretreatment. The sewer district often does not overlap exactly with the water districts. It is not unusual for either water district or the sewer district to be larger than the other.

The first set of benchmarks use the data from the Michigan Local Benchmarking Consortium. With this data, the service population is known and used to adjust the data for population. The first graph compares the cost of water service divided by the service population.

$/$Service Area Population for Water

For the cities, Alma has the third lowest cost of service. Wyoming has a much larger service population. Lathrup Village purchases their water from another system. Three of the four townships have lower cost of water per population than does Alma.
The next graph is similar but it is sewer service.

The City of Alma has the second lowest cost of service among the cities and third lowest overall.

One issue in Alma is the large volume of inflow and infiltration our sewer system has been experiencing. Inflow and infiltration is clean water as storm water getting into our sewer system. Ideally the there should be a one to one ratio of water into to sewer out.

By far, Alma has the biggest problem with inflow and infiltration. Alma has treats twice as much sewage as water. The other communities are much closer to the desired one to one ratio.
One other measure of efficiency is the administrative cost per million gallons of water and sewage treated.

![Water and Sewer Administrative Cost per million gallons](image)

The City of Alma is in the middle of the pack for administrative costs. We are slightly below the average Consortium community in terms of administrative costs.

With the consortium data, the data was controlled for the size of the community. The data was reviewed by experts at Michigan State University. Many potential errors were caught and eliminated. Below are some graphs using data from the audited comprehensive annual financial reports from cities roughly our size.

![Water Operating Expenses FY 2011](image)

The above graph displays the operating expenses for the water fund of the listed cities. Alma at $1,183,828 was below average of $1,475,487. In the mix, are some cities will wells and treatment plants like Alma. Some have wells but no treatment plant. Some draw from the Great Lakes and use a treatment plant.
The next graph has the operating expenses for sewer funds for similar size communities.

**Sewer Operating Expenses FY 2011**

The average sewer operating expense was $1,413,657. The City of Alma spent $1,105,517. The cities used different technologies to treat their wastewater. Some have simple lagoons. Others have treatment plants. Some even provide industrial pre-treatment.

Some cities combine their water and sewer operations into one fund. There are methods of allocating costs among different funds. These facts along with many other factors mean that looking at the combined operating expenses can provide additional insight.

**Water and Sewer Operating Expenses FY 2011**

The average combined water and sewer operating expenses was $2,941,282. The City of Alma spent $2,289,345 for the same year. Overall, Alma's operating expenses for the two utilities was 22% lower than the other benchmark communities.
Transportation

Streets

Good data for benchmarking the performance of street operations is difficult. Few communities collect the data needed to make good comparison. It is likely that there is a pronounced selection bias in the street benchmarking data. One of the key metrics is the condition of the streets. The PASER rating system is a standardized system used to rate roads and streets in the State of Michigan. All federal eligible streets are required to be rated using the PASER scale. Fewer communities rate all the streets in their system. Using the data available, the average PASER ratings are as follows:

![Average PASER Rating](image)

The best possible condition is a 10. The worst possible condition is rated a 1. Of the thirteen communities listed, the average was 5.6. Alma's streets are average rating was 5.9. Five communities had higher average ratings. Seven had lower average ratings.

There are a couple maintenance metrics that compare the efforts of several road agencies. In comparing the efforts, the road commission maintain to a different level than do most city street agencies. The first metric is total man hours of pothole repair per lane mile.
The average number of hours was 7.72 man hours per lane mile. Alma had 9.81 man hours per lane mile. Another metric is the number of tons of cold patch used per lane mile.

The average was .52 tons per lane mile. Alma used .54 tons per lane mile. Alma was slightly above the average for all the road agencies. Only three road agencies reported more tons per lane mile.
Recreation and Cultural Services

Library

For the library benchmarking data, the Michigan Library had a better set of data than the Michigan Local Government Benchmarking Consortium. This section uses the data from the 2011 data set. Most of the libraries in this group are district libraries. The Alma Public Library is a municipal library. The district libraries serve a larger population and have additional sources of revenue. The first measure is just the size of the library. The more space allows larger collection size and more community meeting space.

![Square Feet of Library](image)

The Alma Public Library is the second largest library in the comparison group. The largest library is in Grand Haven which has a district library serving a larger population and tax base.

The next measure is the hours available to the public. From a user perspective this is very important.

![Hours Library Open](image)
Three of district library are open longer. Cadillac has branch libraries in addition to the main library. The Cadillac hours add the open hours of the branch libraries to the main library. Alma is open 3,108 hours per year.

The last metric is the number of books per capita.

The Alma Public Library has 6.44 per capita. This is by far the largest collection per capita of the comparison communities. The average collection has 3.13 books per capita.
Executive Administration

Clerk

Good metrics for clerk operations is difficult. The duties of the clerk operations can vary significantly from one municipality to another. One basic measure is the cost of operations.

Clerk Operating Costs per Capita

The average cost per capita is $11.34. Alma spent $3.44. It is likely that Alma does a better job allocating the clerk costs to where the time is actually spent.

One common task of all clerks is to distribute board agenda packets before the meeting.

Business Days before Meeting
Agenda Packets Available
The average number of business days prior to the meeting when the packets are available is 3.21. Alma distributes its packets 2 business days prior to the meeting. Since many of the communities, including Alma, distribute the packets electronically, business days may be should be changed to total days. Our agendas are on our website over the weekend. Alma's agenda are available four days prior to the meeting but only two business days.

Following the meeting, the questions becomes how quickly will the preliminary minutes be available.

The average community has the minutes available in 4.53 days. In Alma, the minutes are available the next day.
Fiscal Services

Assessing

Comparing one community to another in assessing can be very difficult. The market forces of the local real estate market can affect many of the benchmarks. For example, the graph below shows the changes in taxable value for the consortium communities. Taxable value is a capped value of the state equalized value which attempts to measure relative market value.

![Taxable Value % Change from 2010 to 2011](image)

The two lake front communities saw increases in their taxable value. Everyone else experienced a decrease. The City of Alma had a 2% loss in taxable value. Alma ranked fourth in taxable value change. Because Alma never experienced the sharp increase in property value there was not the corresponding fall of values many communities experienced.

A better measure might be the change in taxable value from 2008 to 2012. This would measure what has happened since the great recession.

![% Change in Taxable Value from 2008 to 2012](image)
The data shows that most cities in our size experienced on average a 8.6% loss in taxable value. There were five cities that had an increase in taxable value over this timeframe. Alma was one of the communities with an increase. Alma's taxable value increased by 1.42% from 2008 to 2012. According to the Michigan Department of Treasury, the total taxable value of real and personal property declined by 13% over this same time period.

There are many ways to look at the cost of assessing a community. One basic metric is looking at the assessment cost per capita.

The City of Alma is just below the average assessment cost per capita. The average cost is $12.67. The City of Alma cost is $12.57 per capita.
Another way to look at the subject to compare the assessment cost per parcel.

![](Assessment_Cost_per_Parcel)

From this perspective, Alma cost per parcel is above the average of $26.24 per parcel. In Alma, the cost is $32.38 per parcel.
Finance

It is difficult to find good metrics to compare finance departments between cities. One measure used internally is the commitment to excellence as evidenced by participation in the Government Finance Officers Association award programs. The GFOA offers three awards for excellence. The first is for Achievement for Excellence in Financial Reporting. In this program, peers review the Comprehensive Annual Financial Report (CAFR) for adherence to all accounting standards. The second program is for a Distinguished Budget Presentation. And the final program is for the Popular Annual Financial Reporting Award (PAFR). All three awards are difficult to achieve and require a commitment from the organization.

As of the 2011 reporting period, most of the similar sized communities had no participation in any of the award programs. Alma had the award for the CAFR and the budget. The City has received word that their 2012, PAFR has received the third award.
Information Technology

The information technology benchmarking is difficult to do. The data we have collected leaves a number questions unanswered. For example, the complexity of the systems being maintained can vary significantly. The more sophisticated system may cost more to maintain but may save the organization overall. The types of users also can affect the cost. Public users such as in a public library require more staff time than employee users who tend to protect their workstation. Below is a graph of the IT costs per FTE.

It should be noted that Alma has one IT employee with fewer number of users than other communities with only one employee.

The next graph compares the operating expenditures compared to the number of workstations maintained.

Alma is spending below average in the cost to maintain our number of workstations. The City of Alma has 85 workstations to maintain.
Fleet Maintenance

The benchmarks for the fleet maintenance may not be accurate. The low numbers and the high numbers both seem unrealistic and may measure the same efforts as the other communities. The measure is the per vehicle cost of maintaining a heavy piece of equipment.

![Maintenance $ per Heavy Equipment](chart)

Alma spends $1,404 per heavy piece of equipment for maintenance. If we eliminate both the high and the low reports, the average for the benchmark communities is $2,068. The cost of annual maintenance can be affected by the age of the equipment which is unknown for the other communities.

The next metric compares of maintenance expenditures per light or medium vehicles.

![Maintenance $ per Light/Med. Vehicle](chart)

The City of Alma spent $1,867.50 per light/medium vehicle for maintenance. Again, if we remove both the high and the low reports, the average for the benchmark communities is $1,157. This raises a number of questions which cannot be answered from the data. How does the age of our fleet compare to others? Do we do a better job of maintaining the vehicles or are we just more expensive?
The last measure for Fleet Maintenance is the cost to maintain a police vehicle.

The City of Alma spends $1,868 per police vehicle for maintenance. The average benchmark community (less Saline) spent $2,221. Alma was a spent a little less than the average.