

To: Comprehensive Plan Committee
From: Mark Eyerman
Subject: A Framework for Thinking About Municipal Service Costs
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During our discussions, there have been a number of different questions raised about the fiscal implications of various types and patterns of development. There are no easy answers to many of those questions – too often it depends on the specifics – so broad generalizations can sometimes be misleading. It can also be dangerous to look at what was found somewhere else and assume that the same applies to Auburn. To help us think about these issues, I have put together a framework for thinking about the municipal service costs associated with development and the fiscal implications of the development.

A. Overall Valuation and Costs

It is important to understand the relative scale of the numbers we are talking about. In 2008, the total City assessed value of all taxable property in Auburn was a little over \$2 billion. Therefore to have any measurable impact on the total assessed valuation and therefore the potential revenue from property taxes, the value of new development has to be large. \$20 million in new valuation represents a 1% increase in total assessed value.

Similarly, the existing cost base is large. In 2008, the total budget for municipal and school services was about \$65 million with about \$34 million for education and \$31 million for municipal operations. Property taxes contributed around \$41 million toward funding the total budget.

This information isn't to suggest that the committee shouldn't be concerned about costs and fiscal impacts. Rather it is to suggest that we need to recognize that we are working at the margins of the cost and revenue structure of the City and that cost and fiscal implications need to be considered incrementally and over the long term.

B. State Aid to Education

The State's system of providing General Purpose Aid (GPA) for education has to be considered in thinking about the fiscal implications of development. Under the current funding formula, the state assumes that a community can pay about \$8 per \$1000 of state valuation to operate its schools. Essentially, the state determines the education aid

Auburn gets by calculating the theoretical cost of operating the school system based on state standards and then deducting the amount that it says the community can afford to pay for education (see above). The difference is the amount of the state GPA. So if the state says the theoretical cost for operating the Auburn schools should be \$2 million and the community can afford to pay \$1 million based on the state valuation of property in the City, the schools get \$1 million in state aid.

New development increases the state valuation and the amount that the State says the City can afford to pay for education. So unless the cost side for education goes up under the state model as a result of more students, better qualified teachers, or similar factors, the amount of state aid the City receives goes down when valuation increases. This system makes many of the “common knowledge” assumptions about the fiscal impacts of development not apply to Maine.

This is where Tax Increment Financing (TIF) comes into the fiscal equation – increased valuation in a TIF District is “sheltered”. This means it is not included in the state valuation that is used to compute aid-to-education. It is also not included in the state revenue sharing calculation or the county tax computation. So there is a financial interest on the City’s part in “sheltering” new valuation through TIFs. The City essentially keeps all of the new property tax revenue since state education aid is not reduced. However the revenue resulting from the sheltered property can only be used for specific purposes.

The benefit of sheltering is a function of the community’s “full value tax rate” or the theoretical tax rate if it was based upon state valuation rather than local valuation. The lower the full-value tax rate, the bigger the benefit from sheltering new valuation. In rough terms, it appears that the City “loses” about a third new property tax revenue from development in reduced state education aid unless that development results in increased education costs.

In terms of the AG/RP discussion, TIFs do not come into play but they do when we are talking about the relative benefits of non-residential development.

C. Factors Influencing Municipal Costs

It is important to think about the factors that influence municipal costs as we think about this issue. Here are some broad, general considerations:

1. Level of Service – The level of service that a community chooses to provide in the various service areas impacts the costs of providing the service. We often don't think in these terms, but it is a key factor that drives cost. For example, if a community says that the pupil to teacher ratio in the elementary grades should be not more than 12:1, that cost more than if the desired ratio is 18:1. The smaller the class size, the more teachers and classrooms that are needed and the higher the costs. While a "level of service" is often not explicitly set out, it is there. For example, volunteer fire departments in rural communities typically provide a much lower level of service with lower costs. Fire people say that to save lives in a structure fire you need to respond in say 5 minutes and to save a structure you need to be on the scene within say 7-8 minutes. If you get there 15 minutes after the call, you may not be able to do much other than keep other structures from being involved.

2. Amount of Service – The total cost of providing municipal services is a function of how many units of service you have to provide. Costs for say snowplowing are a function of how many lane miles the City has to plow. Typically, the more units of service, the higher the total cost for providing a given level of service. So in terms of new development, the question becomes how does it influence the number of units of service that must be provided – and this may vary from service to service. A residential condo may not increase the amount of road that has to be plowed but still increases the number of calls for fire services.

3. Type of Development – The impacts of various types of development on municipal services varies widely. For example, a new age-restricted condo development probably has virtually no impact on the need for educational services since no children live there. Or there may be an increase in the number of police calls for things like shoplifting, traffic accidents, etc. related to retail development. A number of years ago, the Kittery Police chief documented the increased demand on the police department resulting from the outlet malls and it was substantial.

4. Location of the Development – The cost of providing municipal and school services can also be influenced by where the development occurs. This applies primarily to those aspects of government where the service is delivered to the location. For example, in terms of education, about 3% of the total costs for operating the system relate to transportation of students while 97% of the costs are essentially location neutral. The transportation costs may not increase if all students in a new development can walk to school but may go up if they have to be bused long distances. Section F below looks at the locational impacts in more detail.

D. Fiscal Impact Analysis

Fiscal Impact Analysis is a way of looking at the implications of various development scenarios on the municipal balance sheet – what does it generate in new revenue and how does that compare with the cost of providing services. If you go on the Internet, you will find an overwhelming amount of information about fiscal impacts including methodologies and fiscal impact studies. Most of this work is focused on answering one of the following questions:

- How will a specific development proposal impact the municipality's finances? What will the project generate in new revenues and what services will it require be provided and how much will that cost and will it be a fiscal asset or liability for the municipality?
- Does new residential development "pay for itself"? Will new residential development generate enough additional revenue to cover the costs for providing services to the development?
- Does it make fiscal sense for a community to preserve open space rather than allow it to be developed? Or put in other terms, if residential development is a fiscal loss for the community, is it cheaper to preserve the land than allow it to be developed?

Most of these types of studies assume that the level of service will remain the same and focus on the costs and revenues associated with new development (a change in the amount of service need or the type of development being serviced) but they don't typically address the question that has been asked in terms of the AG/RP discussion, and that is what are the differential cost implications of having essentially the same amount and type of development but changing how it is distributed over the landscape. In very simple terms we might phrase the question as – Are there any differences in the costs of providing educational and school services to 100 new single-family homes if those homes are built in new subdivisions on the fringe of the developed area or if they are built along existing rural roads in outlying areas? There is very little good data that addresses this issue. Most operating departments simply do not keep records in this form and it is hard to keep the other factors constant. I have tried to look at that question in broad terms in the following two sections.

E. Incremental versus Systemic Change

An initial consideration is whether the pattern of residential development (scattered in rural areas vs. more concentrated in the fringe areas) forces the City to change the way that it delivers municipal services from the current system. Typically, as the demand for service increases, we first use up available capacity if any is available. For example,

the fire department may be able to answer additional calls in the built-up area with their existing facilities, equipment and manpower. In some areas, we can then expand the capacity to provide services by expanding incrementally – if there is an increase in the need for snowplowing, public works may be able to meet this need by extending each plow route a little and paying more overtime, and then adding another plow route with a truck and driver. But in some other areas, the City may have to change how it delivers services depending on where the development is located. For example, Brunswick built a fire sub-station at Cook’s Corner to provide adequate service to the development in that area (this is both an amount of service and location of service issue). Similarly, some “urban fire departments” that have relied on hydrants as their primary water supply have had to revise their system and equipment to provide coverage in areas without hydrants connected to the water supply system such as increasing their capacity to carry and secure water in those areas.

In the following section, I have tried to consider if the pattern of development could have any long term implications on how services are delivered.

F. Possible Impacts of the Pattern of Development

I have tried to look at the question posed above – how do service costs vary for dispersed rural development versus more concentrated development on the fringe. This assumes that the number and type of housing built is similar with a similar number of occupants and a similar assessed value. It also assumes that the dispersed homes are located primarily along existing roads or on private ways and that the more concentrated homes are located in subdivisions with public streets. So the objective is to try to isolate the cost implications of the location and pattern of development. This is based upon my somewhat limited knowledge of the City’s operating systems and costs and may need to be adjusted to reflect more refined information but I think it provides us with a framework for looking at this issue.

1. Education Services – The operation of the school system absorbs about 52% of the total budget. The service is provided in a number of locations that students come to. The costs for delivering these services including central administration are not dependent on the pattern of development. Transportation is provided for some students. Transportation costs are about 3% of the total school budget. The City participates in a fleet management program with the state to provide for the regular replacement of the school bus fleet and the state shares in this cost. At this point in time, the schools run buses to pick up children throughout the entire outlying area.

Therefore the pattern of development could impact school transportation costs in two ways but this is likely to be a very small impact:

- if the residential development occurs in areas where children can walk to school, increased transportation costs are avoided but if it is located in “bus areas” transportation must be provided whether the development is dispersed or concentrated.

- over time, dispersed development may result in the “time on the bus” becoming too long resulting in the need to create additional bus routes but this is a tough issue to assess. The department limits the maximum time a child can be on a bus to 50 minutes. Currently the bus routes serving outlying areas are controlled by this time limit not the capacity of the bus. Routes typically operate at only 60% of their seating capacity and can absorb additional riders. But if there are too many additional riders, then the route may become too long from a time perspective.

2. Municipal Services – The municipal side of the budget is about 48% of the total. In the Fiscal Resources inventory section there is a breakdown of the budget by major expense categories. Here is an overview of how the pattern of development could impact various aspects of municipal service costs:

- 1) *General Administrative Services* – Most of these functions are not dependent on where development is located. The Clerk’s Office, financial functions, personnel, etc. are not impacted by the pattern of development.

- 2) *Recreation Services* – During our discussions on the need for recreation facilities, there appeared to be a focus on minimizing dispersed facilities and programming by having users come to more central locations. In broad terms, the pattern of residential development will probably have no short term impact on recreation costs. In the longer term, if there is significant development in outlying areas there may be pressure for the development of local/neighborhood recreation facilities but this is probably unlikely. I think that the experience of suburbanizing communities has been to typically continue to provide central facilities to minimize maintenance and scheduling issues.

- 3) *Library Services* – This service is not dependent on the pattern of development.

4) *Planning, Codes, Assessing Services* – These functions primarily occur in Auburn Hall but do require City staff to travel to provide some of the services. Since a significant portion of this activity involves new development, where new development occurs can impact the cost of providing these services. There is probably a small incremental cost increase the further the property is from Auburn Hall.

5) *Public Works* – This is a major cost center in the municipal budget. Road maintenance costs are driven by the length of road and type of road maintained by the City. Concentrated development in subdivisions with public streets increases the overall lane mileage that must be maintained by the City and increases costs. Dispersed development along existing roads avoids this additional cost but the proliferation of driveways and mailboxes may result in some increased costs for maintenance of roadside drainage and as a result of reduced plow speeds. Garbage collection is probably a wash since the City already picks up in all areas and the controlling cost factor is the number of additional stops that the truck has to make not where they are located.

6) *Police Services* – This is an area where the pattern of development may have an impact on the costs of delivering services but that is difficult to objectively assess. In various settings, the Chief has suggested that the current patrol system with 4 districts is stretched and patrol officers spend too much time simply getting to and from calls because of the geographic coverage of the patrol districts. He has also talked about re-aligning the patrol districts to address this situation. I am unclear as to how much of this issue relates to geography and how much relates to increased calls for service especially with respect to commercial areas and the airport. In the big picture, new residential development will produce a very small increment of calls for police services. At the same time, if more calls originate in the outlying areas and this requires more time to respond to, this will have an incremental impact on the cost of providing police services over time. There has been some suggestion that this could lead to the need for an additional patrol route but dispersed residential development by itself should not create enough additional calls to make that necessary but it could become the proverbial “straw that . . .” but that is a judgment call.

7) *Fire and Emergency Medical Services* – Response time is a key issue in both fire suppression and emergency medical services. At this point, the City provides a relatively high level of service with low response times in the built-up area. Response times in the outlying area are longer and thus the level of service currently provided is lower. If more dispersed residential development occurs

in the outlying areas, there may be a demand over time to reduce those response times through re-arranging the department's facilities or adding a substation but that is probably a long range issue. In some other communities, I have heard proposals to require residential sprinkler systems in the "slow response" areas as a way of providing adequate service. I think there is some sense that with residential sprinklers, the response time concern is addressed.

A second potential cost issue with fire protection is water supply in outlying areas. My understanding is that the City currently operates what we might call an "urban department" that primarily relies on water from hydrants for fire suppression. As such, I believe the department has limited capacity to "deliver" fire suppression water in outlying areas either through tank trucks for initial supply or long distance pumping and relies on departments in other communities for this to some extent. If significant additional development occurs in outlying areas this becomes more of an issue including the need to potentially acquire different types of equipment to fight "rural" fires. This could be a long term cost implication for development outside of the public water service area. Some communities have addressed this by developing water supplies such as fire ponds with dry hydrants in these outlying areas and requiring subdivisions that are not served by public water to provide a fire protection water supply such as a fire pond or underground tank. In addition, residential sprinklers can also address this issue.

G. Conclusion

We really don't have the data to make a definitive conclusion about the relative impacts of dispersed versus more concentrated residential development on the cost of providing municipal services. In the short term, with limited amounts of development, there does not appear to be a significant difference in the costs of the two patterns. Lower public works costs for dispersed development along existing roads offsets the potential for somewhat higher costs in other areas. Over the longer term, if a significant amount of residential development occurs in these outlying areas, there could be a cost differential. Some of that cost differential might be able to be overcome through requiring new homes in outlying areas to be equipped with residential sprinkler systems if that mitigate the impacts on the fire department.

This analysis is based upon the dispersed development occurring primarily along existing roads or on private accesses that do not involve the construction of new public streets. If the City were to create the opportunity for residential subdivisions with

public streets in the outlying areas, this would increase the road maintenance costs resulting in marginally higher costs for the dispersed pattern.