Adjusted for inflation and population growth, local government spending in Anchorage for general government services and education has fluctuated between $2,100 and $2,200 since the early 1990s. At the same time however the share of the cost of government paid by residential property has been growing, as state assistance for general government and education continues to fall, growth in the commercial property tax base stagnates, and exempt property increases.

Local Government Spending I.—The City

Population growth and inflation have driven up local government spending over time. Since 1970 the population of Anchorage has doubled and a gallon of milk that cost $1 in 1970 now sells for $3.60. To keep pace with both the growing population and inflation the budget would have increased more than sevenfold over this interval. The $339 million budget in 1999 delivers the same per capita services as $45 million spent in 1970. During this 30 year period of rapid economic and demographic change Anchorage general government expenditures per capita have fluctuated between $1,100 and $1,500 and today are in the middle of that range at $1,300 (1999$). Spending was on the low side of the range when population growth was particularly fast in the early 1980s, and on the high end of the range when the population was falling in the later half of the 1980s. In more recent times, particularly between 1994 and 1998 spending has been growing. (Figure 1.)
The largest general government expenditure is the transfer of property tax revenues to the school district. In 1999 this was just about 1/3 of the total budget, $113 million. The remaining $226 million represents spending for general government functions in Anchorage. Per capita spending for these functions has ranged between $800 and $1,100 since the mid 1970s and today is in the lower portion of that range at about $875 (1999 $).

The city budget has been increasing faster than spending for general government because per capita transfers from general government to the school district have been on the rise since the early 1990s (Figure 2.) In the last eight years real per capita transfers of property tax revenues from the city to the school district have increased by about 50 percent. They now stand at the highest level they have been in the last 25 years. The level of transfers was lowest in the early 1980s when the population was growing rapidly and state assistance was high. In the late 1980s transfers peaked as population in Anchorage fell and state assistance was cut back.
The city has 3 categories of revenues—property taxes, shared revenue from the state, and other (including the bed, tobacco and auto taxes, the contribution from the Municipality of Anchorage Trust Fund [capitalized by the sale of Alaska Telephone Utility], and the utility contribution [MUSA—the municipal utility service assessment]). Over time the share of revenues coming from the property tax has increased, not so much because the size of the overall budget has grown, but rather because state shared revenues has been falling since the early 1980s and other revenues have merely maintained their share of the total (Figure 3). In fact in the peak year of 1982, the share of city revenue contributed by state assistance was the same as the share contributed by property tax revenues—40 percent. Since that time, shared revenues have continuously fallen to the point where today they make up about 4 percent of the total. Growth in the property tax share has offset the decline in shared revenue so that today the city gets about 80 percent of its general government revenues from the property tax compared to 64 percent as recently as 1990 (Figure 4.)
Figure 3. MUNICIPALITY OF ANCHORAGE BUDGET: REVENUE SOURCES

SOURCE: MOA, ANNUAL FINANCIAL REPORT.
The bottom line for the city budget is that upward pressure is the result of a larger share being transferred to the school district at the same time that a smaller share is being paid by state assistance (Figure 5.). The result is upward pressure on property tax revenues—the primary source for financing local government in the city.
Local Government Spending II.—The School District

School district spending in 1999 was $342 million for instruction plus debt service—just under $7,100 per student enrolled. Spending increased during the 1970’s and early 1980s and in the last 15 years has ranged between $7 and $8 thousand per student (1999 $).(Figure 6.). Today it is near the low end of the most recent 15 year average.

The three categories of revenues for the school district are the state foundation program, local property taxes (transferred from the city budget), and other. Historically the bulk of revenues have come from the foundation program, but in recent years foundation program revenues have not kept up with growth in total spending. Property tax revenues have been increasing to maintain spending per student (Figure 7). The shift is more pronounced in revenues per enrolled student (Figure 8.) As a consequence the share of revenues for education contributed by the property tax has been increasing. (Figure 9.)
Figure 6. ANCHORAGE SCHOOL DISTRICT BUDGET: SPENDING PER STUDENT

SOURCES: ASD, 2000-01 PRELIMINARY FINANCIAL PLAN
BUDGET EXCLUDES NON-INSTRUCTIONAL EXPENSE EXCEPT DEBT SERVICE
Figure 7. ANCHORAGE SCHOOL DISTRICT BUDGET: REVENUE SOURCES

SOURCE: ASD, 2000-01 PRELIMINARY FINANCIAL PLAN
BUDGET EXCLUDES NON-INSTRUCTIONAL EXPENSE EXCEPT DEBT SERVICE
Figure 8. ANCHORAGE SCHOOL DISTRICT BUDGET: REVENUES PER STUDENT

SOURCE: ASD, 2000-01 PRELIMINARY FINANCIAL PLAN
BUDGET EXCLUDES NON-INSTRUCTIONAL EXPENSE EXCEPT DEBT SERVICE
Local Government Spending III--The Future

State revenue assistance to general government and education has been shrinking as a share of local revenues to the both the city and the school district. Because state petroleum revenues continue to fall, there is no reason to presume that a reversal of these long established trends will occur. In order to maintain a constant real per capita public expenditure level as population grows and inflation drives up prices expenditures must increase. This in turn places greater demand on local revenue sources, currently the property tax, to fund local government.

The Property Tax Base—Anchorage Assessed Values

Property tax revenues depend upon the value of taxable property in the community and the tax rate (mill rate) that is set each year to reach the predetermined revenue target. The overall assessed value of property in Anchorage has been trending upward, although during the 1980s and early 1990s it went through a long period of boom, bust, and recovery from which it has only recently (and apparently) emerged. Furthermore residential property is a large, and rapidly increasing, share of total assessments. This has important implications for who pays the property tax.
**Volatility** Property in Anchorage is assessed at true market value. In a growing community the value of property should grow with the number of households and commercial establishments. In addition it should grow with the increasing wealth of the community. For example the typical new single-family house built in Anchorage today is larger and has more amenities than a house built in the past. New office buildings also have features not available in the past. Finally the value of property should increase with the price level. These factors should determine the trend in assessed values.

However assessed values are also very sensitive to the supply and demand of housing and commercial space. It takes time to build new buildings when the demand goes up and buildings stand empty when the demand falls. The price of real estate fluctuates to bring supply and demand back into balance when these situations arise. Thus an economic boom or bust in an economy is dramatically reflected in swings in the price of real estate, and consequently in the assessed value of property.

This has clearly been the case for Anchorage which experienced an economic boom in the early 1980s which led to accelerated population and employment growth, followed starting in 1986 with a decline in population and employment. Assessed values skyrocketed in the early 1980s, nosedived in the second half of the decade, and slowly recovered in the 1990s (Figure 10).

![Figure 10. Anchorage Commercial and Residential Property Value](image)

This volatility has two important consequences.
First, the ratio of assessed value to personal income changes from year to year. Assessed value tends to grow faster than personal income when the economy is expanding rapidly or recovering from a slump. Assessed value tends to grow slower than personal income, or even decline, when the economy is not doing well. Since assessed value is the base for the property tax, but personal income is the source for paying the tax, this is a shortcoming of the property tax.

Second, any characterization of the growth rate in assessed value is sensitive to the starting date for the calculation. The calculated growth rate will be slow, or negative, if the start date is at a high point in the cycle and fast if the start date is at a low point in the cycle. (The growth rate of assessed value will of course also be influenced by variation over time in the rate of inflation and the rate of population growth.) For example the annual growth rate in real assessed value (including personal property) starting from different past years is shown in Table 1.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Annual Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975-99</td>
<td>3.0%</td>
</tr>
<tr>
<td>1980-99</td>
<td>1.5%</td>
</tr>
<tr>
<td>1985-99</td>
<td>-2.2%</td>
</tr>
<tr>
<td>1990-99</td>
<td>3.2%</td>
</tr>
<tr>
<td>1995-99</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

**Residential Assessed Value** The assessed value of residential property today accounts for 65 percent of the total. (Commercial accounts for 24 percent and personal property the remaining 11 percent.) This share has been increasing over time, as reflected in Figure 10. The annual growth rates are presented in Table 2. in nominal and real dollars as well as real dollars per dwelling unit and real dollars per existing unit (net of new additions to the stock). If we pick a low point in the Anchorage business cycle from which to calculate the growth rate, such as 1980, the annual growth rates are high. If on the other hand we choose a point in time at the top of the boom, such as 1985, then the growth rates are low or even negative.

The growth rates are higher starting from the 1990s because this is a time of relatively low assessed value. This is clear by looking at the residential assessed value per housing unit (Figure 11.) In 1991 the average was the lowest it has been since 1975 (1999 $). By 1998 it had just returned to the high of 20 years earlier, but it was still $40 thousand below the high of the mid 1980s.
In the last column of Table 2, we see the growth rate in the assessed value of existing property, netting out annual additions. This growth rate is slower than the overall per unit growth rate because new additions to the housing stock tend to be larger and have more features that give them a higher value than older units which are also depreciating as they age.

One concern with the property tax is that residential assessments might be increasing faster than the ability of homeowners and renters to pay. Although the assessed value of existing units has been increasing since 1990, the rate of growth is not obviously inconsistent with the growth of personal income. However the growth rate has clearly accelerated in the last few years, increasing public awareness of the property tax.

There are several other considerations when analyzing ability to pay.

First the recent growth in assessed value is from a depressed level. Property values were depressed in the late 1980s as evidenced by higher than normal vacancy rates and prices below replacement cost. After such a time the growth in assessed value represents a return to a condition where supply and demand are in balance in the market.

Second, the best measure of ability to pay is personal income. If personal income is increasing at the same time and at the same rate as assessed value then the ability to pay property taxes based on assessed value is not reduced. The ratio of residential assessed value to personal income peaked in 1986 and bottomed out in 1991. Since that time it has increased but by 1999 was still within the historical range of the late 1970s (Figure 12.) Another measure of the relationship between income and housing values comes from the Alaska Housing Finance affordability index—the ratio of the average monthly house payment (principal and interest) to the average monthly wage rate in Alaska. This
index increased between 1993 and 1997 but has trended downward in the last two years. The level of this index suggests that the relationship between housing prices and income has remained fairly constant in recent years.

![Figure 12. RESIDENTIAL ASSESSMENTS % OF PERSONAL INCOME](chart.png)

Third, ability to pay should be evaluated in relation to other places. According to the National Association of Home Builders, Anchorage had the most affordable housing among metropolitan areas on the west coast and was the 50th most affordable housing location among 184 metropolitan areas in the entire US in the second quarter of 2000. This would suggest that the ratio of assessed value to personal income would be much higher in these other metropolitan locations than in Anchorage.

Fourth, the growth in assessed value per unit is an average across all housing units. In reality the value of some housing units will increase faster than the average while others will not grow as fast as the average. Homeowners who experience faster than average assessment growth are not mollified to hear that the average homeowner had a slower assessment growth rate.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Nominal</th>
<th>Real Per unit</th>
<th>Real per unit (old units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-99</td>
<td>8.3%</td>
<td>4.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>80-99</td>
<td>5.8%</td>
<td>2.8%</td>
<td>.5%</td>
</tr>
</tbody>
</table>
Commercial Assessed Value  By any measure the growth in commercial assessed value has not kept up with residential. Table 3. presents growth rates calculated from various starting years similar to residential assessments in Table 2. The total assessed value of commercial property is less today than it was in 1980, after adjusting for inflation. The stagnation of commercial assessed value is clearly demonstrated by calculating the commercial assessed value per worker. After increasing through the boom of the early 1980’s the commercial assessed value per worker has fallen, first precipitously and then more gradually, for the last 15 years. Today it is at its lowest level since at least the early 1970s. This is true whether we consider all private workers (including the self employed) or only private wage and salary workers (Figure 13).

![Figure 13. Commercial Assessed Value per Worker](image)

Table 3. Annual Growth Rates of Commercial Assessed Value  
(Calculated from Start Year Through 1999)

<table>
<thead>
<tr>
<th>Interval</th>
<th>Nominal</th>
<th>Real</th>
<th>Real Per job</th>
<th>Real per job (existing property)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-99</td>
<td>5.8%</td>
<td>1.6%</td>
<td>-1.4%</td>
<td>na</td>
</tr>
<tr>
<td>80-99</td>
<td>2.3%</td>
<td>-.7%</td>
<td>-3.6%</td>
<td>-5.4%</td>
</tr>
<tr>
<td>85-99</td>
<td>-1.5%</td>
<td>-3.9%</td>
<td>-5.3%</td>
<td>-7.9%</td>
</tr>
<tr>
<td>90-99</td>
<td>5.2%</td>
<td>2.6%</td>
<td>.4%</td>
<td>-2.8%</td>
</tr>
</tbody>
</table>

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As a consequence of this stagnation, the commercial share of assessed property value has fallen steadily while the residential share are trended upward (Figure 14.) In the early 1970s the shares were 33 percent commercial and 50 percent residential (with personal property the balance). By 1999 the shares were 24 percent commercial and 65 percent residential.

What accounts for this absolute decline in assessed value of commercial property? There are several contributing factors, but we do not have a complete and satisfactory answer.

First, a large portion of the economic activity in the city is exempt from the property tax. This includes the military, federal civilian, state and local government, and the non-profit sector. This would account for the relatively low commercial share of total assessed value.

Second, the jobs added to the economy in recent years have been relatively low wage and in labor intensive industries. For example it is likely that the real property per employee is lower in the retail trade sector than in the petroleum industry. Thus these new jobs are not adding as much to the property tax roles as jobs added in prior years. This would account for the downward trend in assessments per worker.
Third, many of the newly added jobs are among the ranks of the self employed who may work out of their homes, thus adding no commercial tax base.

Fourth, since the value of commercial property depends upon its income generating potential, the reduced prospects for growth of the economy compared to earlier years may have permanently reduced property values. This could account for the fact that in the aggregate real commercial assessed value is less today than it was 20 years ago. For this to be true however the reduction in the value of old property would need to more than completely offset the value of newly added property.

Fifth, the commercial real estate market might still not have fully recovered from overbuilding during the boom in the 1980s.

Sixth, there could be underassessment of commercial property compared to market value.

**Property Tax Revenues**

Total property tax revenues in 1999 were $258 million, consisting of three categories—residential, commercial, and personal property (Figure 15.). Historically the tax bill per resident has fluctuated within the range of $600 to $900 per person, except for a period in the early 1980s when it dipped below $600 when state assistance was high, and in the last few years when it has increased to close to $1,000 (Figure 16.).

More interesting are the calculations of residential property tax revenues per housing unit (Figure 17.) and the commercial property tax revenues per job (Figure 18.). Following assessments, residential revenues per unit have been increasing while commercial revenues per job have been falling.
Figure 15. PROPERTY TAX REVENUES

Figure 16. PROPERTY TAX REVENUES PER CAPITA
Figure 17. RESIDENTIAL PROPERTY TAX REVENUE
PER HOUSING UNIT

Figure 18. COMMERCIAL PROPERTY TAX REVENUE
PER JOB
Residential Revenues  There are four distinct periods in the history of residential property tax revenues, distinguished by the level of tax collections as a percentage of income—the effective tax rate (Figure 19.).

In the 1970s before state oil revenues, the effective tax rate, the ratio of residential property taxes to income fluctuated around 1.5%.

In the decade between 1978 and 1987 the effective tax rate dropped by half and then returned to its former level. High state fiscal assistance in the early part of the cycle as well as growth in residential assessed value faster than income allowed the rate to fall.

From 1987 through 1993 the effective tax rate fell, due to the decline in assessed values in the wake of the economic recession as well as the decline in per capita government spending.

Since bottoming out in 1993 the effective tax rate has trended upward, and in the last few years has surpassed the historical highs of former years. Since the mill rate has been fairly constant since 1989, the growth is primarily due to growth in assessed values. Since the effective rate has started to climb in 1993 the annual real rate of increase per unit has been 6.5 percent (Table 4.). The rate of increase for existing units would of course be somewhat less than this.

Table 4. Annual Growth Rate in Residential Property Tax Collections Since 1993
As a consequence of this rapid growth, the share of the property tax paid by the residential sector has reached an all time high, rising from 58 percent in 1993 to 65 percent in 1999. Tax collections per residential unit have increased from $1,163 (1999$) in 1993 to $1,698 in 1999—a 46 percent increase (Figure 20.).

Several reasons help to explain the rapid growth in residential property taxes since 1993. Increasing real public expenditures per resident is not one of them. Table 5. shows that compared to 1993 the real per capita general government expenditures in 1999 were unchanged and real per capital school expenditures were down by 1 percent. The falling level of state assistance for both general government (down to 64 percent of the 1993 level) and education (down to 96 percent of the 1993 level) is one. The rapid growth of the senior property tax exemption is another. Since 1990 foregone property tax revenues due to the senior exemption have increased 14 percent annually while property tax revenues have grow only 5.6 percent annually. This exemption adds a 6 percent premium on every tax bill.

Table 5. Index of Selected Real Per Capita Budget Items
1999 Compared to 1993
The District of Columbia annually compares the tax burden in the largest city in every state. Their analyses show that the residential property tax burden in Anchorage is comparable to other cities. For example for 1996 the effective property tax rate for Anchorage was estimated to be equal to the median for all 50 cities. When the other major state and local government taxes are included—income, sales, and automobile taxes—Anchorage typically ranks at the bottom with the lowest overall burden, because of the absence of either a state income tax or a local property tax.

Other studies of comparative tax burden also demonstrate that Anchorage’s reliance on the property tax results in a very regressive tax structure compared to other places. This means that lower income households pay a larger share of their income in state and local taxes than do higher income households. This is based largely on the notion that expenditures for housing rise slower than income.

**Commercial Revenues** Whereas residential property tax collections have been growing more rapidly that the number of households, real commercial property tax revenue growth since 1993 has barely kept pace with the increase in jobs (Table 6. and Figure 21.)
Table 6. Annual Growth Rate in Residential Property Tax Collections Since 1993

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal</td>
<td>5.1%</td>
</tr>
<tr>
<td>Real</td>
<td>3.1%</td>
</tr>
<tr>
<td>Real Per Job</td>
<td>.7%</td>
</tr>
</tbody>
</table>

**Mill Rate**

The mill rate is determined by the assessed value of property and the revenue target. As a consequence it varies over time. When the revenue requirement fell in the early 1980s because of increased fiscal assistance from the state the mill rate fell. The drop was compounded by the rapid growth in assessed value of property. In the late 1980s and the 1990s the mill rate has moved back up as state assistance and assessed values fell. In recent years the mill rate has hovered in the same range it had in the late 1970s (Figure 22.).
The Future Role of the Property Tax

Absent identification of a new revenue source, reliance on the property tax will continue to grow for several reasons identified in this analysis. Demand for government services will increase with population and an expanding economy. The continuing decline in state assistance under existing programs of support for general government and education will reduce an importance source of revenue for local government. The continued growth in the senior citizen tax exemption will continue to erode the property tax base. In addition the slow growth in the assessed value of commercial property will continue to shift the responsibility for paying the property tax onto households.