Peer City Review

 There are two basic kinds of measurements that one may make of cities. The first is the measurement of changes in characteristics or performance over time. The second is comparative--one that evaluates characteristics or

 performances, either currently or over time, among similar cities

 This paper deals with comparative measures—namely, how does Jacksonville compare with its peers. Why the comparative approach? The reason is simple. The author believes that competition with other cities could be an important way of making Jacksonville a better place and that gathering and presenting facts about other cities is crucial to the process.

 Nine cities similar to Jacksonville in population and type of government (combination city-county governments) were selected for study along with Jacksonville. These are Baton Rouge, Boston, Denver, Indianapolis, Jacksonville, Lexington (Ky), Louisville, Nashville, New Orleans and San Francisco.

 The year selected for the study is 2019, the latest for which data were available. The sources for the data are the United States Census Bureau, the FBI, the National Weather Bureau, city and school district budgets, annual certified financial reports from agencies, reports from city and educational departments, various state reports, and miscellaneous on-line resources such as Wikipedia.

 There are one hundred twenty-six points of comparison in the study.

These include population demographics and educational levels, physical aspects such as climate, land area and miles of road, and economic characteristics such as average and median individual and household incomes and gross domestic income. Local government statistics on income, expenditures and employee counts were examined in detail.

 We will proceed by first examining the physical aspects of the cities, their land area, miles of road, water area, geography and climate. Then we will look into the demographics, the population density, the age distribution, the education levels of the residents and the crime rates of the cities. Finally, we will review the key economic statistics: real property value, personal income, household income and gross domestic product.

 All of this is the background for an analysis of the vital statistics of the city governments, both individually and collectively. The size and distribution of city income, expenditures and work force tell much about the priorities of a city, but even more important is the relationship between the income of city residents and local government expenditures. For example, the residents of a city who spend 5% of their income on public activities value them more highly than those of a city who spend only 3% even though the latter may spend more in actual dollars.

1. The Background

 **Environment**. The average physical area of the cities is 337 square miles of which 277 are of land (82.1%) and 60 (17.9%) are of water. Overall, the areas range in size from 89 square miles to 875, including water areas. The land areas range from 48 square miles to 747.

 The physical area of Jacksonville is 875 square miles of which 85.4% is land and 14.6% is water. It is 59.6% more than the city total area average and 69.7% more than the land area average. In brief, Jacksonville has by far the largest area of the cities (indeed, it is the largest city by land area in the continental United States).

 Climate is an important element in the livability of any city. With respect to temperature the past decade, the cities averaged 60 degrees with minimums that averaged 51 degrees and maximums that averaged 71 degrees. Jacksonville had an overall average of 69 degrees and an average annual range of 67 degrees to 71 degrees.

 Annual precipitation for the cities averaged 48 inches and ranged from an annual low of 14 inches to an annual maximum of 64. Comparable figures for Jacksonville are 50 average inches and 33 to 70 inches.

 Average annual days of sunshine and days of precipitation for the cites are 214 and 108, respectively. For Jacksonville, they are 221 and 113 days.

 Overall, the Jacksonville climate is considerably hotter than the peer city average. Otherwise, it has about average precipitation and numbers of sunshine and rainy days.

 The physical areas of the cities are served by road/highway systems that range from 988 miles in length to 5,930 miles and average 2,484 miles. The number of road/highway miles per square mile of land area range from 4.6 to 24.3 miles and average 11.5 miles.

 The Jacksonville road-highway system is 3,403 miles in length and averages 4.6 road-highway miles per mile of land area. This overall length is 37.0% more than the ten-city average while the road-highway system miles per mile of land area are 54.5% less. It appears from this that Jacksonville is far less urbanized than that its peers.

 **Demographics.** Putting aside the environmental/geographical aspects of the peer cities, we will turn next to their inhabitants. We will first look at total populations and then at their age distribution. The averages and medians will be given both for cities considered individually and collectively.

 The populations of the peer cities ranged from 320,601 to 952,755 and averaged 668,364. The average age for the residents of individual cities ranged from 32.6 to 38.5 and, as a group, 36.7 years. The median age range for individual cities was 32.6 to 38.5 and 36 years overall. For the collective peer city population, the average age was 36.7 and the median age, 36.0.

 The population of Jacksonville was 952,755, the highest of the group.

The average age of Jacksonville residents was 36.9 and the median age, 36.4 —both slightly older than the comparable peer-city figures.

 Looking at the peer city population age distribution, 6.1% were preschool age (0-4), 16.6% kindergarten through high school age (5-19), 7.3 % college age (20-24), 56.4% work force age (25-64) and 13.8 % retirement age (=> 65).

 The comparable figures for Jacksonville are: 6.7% preschool age, 18.1% kindergarten through high school age, 6.4% college age, 54.3% work force age and 14.4% retirement age. Overall, Jacksonville has proportionately somewhat fewer people of work force age and proportionately more in dependent status (youngest and oldest ends of the spectrum).

 Population density is probably the best measure of urbanization. For the peer cities considered as a whole, population density per square mile of land ranged from 1,129 to 13,813 and averaged 2,410. The population density for Jacksonville is 1,275 per square mile of land, 52.9% of the ten-city average. Only Lexington, Kentucky at 1,129 per square mile is less dense.

 The number and size of households has significance because it is a basic economic unit that allows sharing of common expenses among household members. The number of residents per household for the peer cities ranges from 2.0 to 3.0 and averages 2.5. Jacksonville averages 2.6, a little higher than the peer city average.

 Violent crime is a subject of importance to urban dwellers and often is considered to be one of the prime factors in the desirability of a city.[[1]](#footnote-1) The violent crime rate per 100,000 in the peer cities ranged from 296.6 to 1,248.0 and averaged 812.3. By contrast the rate per 100,000 for Jacksonville was 647.4, 20.3% below the average rate giving it third place among the least violent of the peer cities.

 Education is often described, for good reason, as human capital.

It probably has a greater effect upon earnings than any other variable except, perhaps, age. The Census Bureau publishes extensive educational attainment statistics for the population that is twenty-five years or older. It divides attainments into five general categories, namely: less than or equal to 8th grade, high school, some college, college degree and advanced degree. These, in turn are broken down into a myriad of sub-categories.

 Considering only the college degree and non-degree statistics, the peer city population averaged 42.8% with degrees and ranged from 28.1% to 63.1%. The Jacksonville population which has 28.1% with degrees is at the bottom of the range. However, Indianapolis is close with 28.4% and it is worth noting that Jacksonville has the highest proportion of residents who have had some college, but no degree.

 **Economics.** The economic statistics reviewed here are of three types: those that apply city-wide, those that apply to households and those that apply to individual residents. The city-wide statistics are estimated real property value, estimated personal income and gross domestic product. The household statistics are income based — total income, average income and income ranges. The personal statistics cover personal income, ranges, averages and medians.

 The estimated real property values of the peer cities range from $33,213,875 M to $238,211,395 M and average $99,625,922 M. The real property value for Jacksonville is $78,455,803 M, 79% of the average. Ranking the peer cities low to high, Jacksonville is in fifth place.

 Perhaps more meaningful is the real property value per capita. For the peer cities, the per capita real property values range from $54,462 to $272,254 and average $144,455. The real property value per capita for Jacksonville is $82,346, 43% below the combined cities average. Ranking the cities low to high, Jacksonville is also in fifth place. It should be noted that the extraordinary high average real property value per capita for San Francisco distorts the peer city average to some degree. If San Francisco is eliminated from the calculation, the average for the remaining nine cities would be $125,850 and Jacksonville would be 35% below average.

 The per capita personal income for the peer cities ranged from $47,475 to

$139,405 and averaged $69,608. Per capita personal income for Jacksonville was $47,475—at the bottom of the ranking and 32% below the average.

 Household income for the ten cities ranged from $68,886 to $160,301

and averaged $94,503. The average household income for Jacksonville was $73,335, 22% below average. Jacksonville ranked ninth among the peer cities

 The distribution of earnings is an important factor in any analysis of earnings. If high average overall earnings are the result of a few very high earners then the majority of the population is clearly worse off than in a city in which the role of high earners is less dominant.

 There are a number of ways to measure the extent to which a distribution is skewed, but the one used here is the ratio of median earnings to average (mean) earnings. If the median value of a distribution of earnings is greater than the average (mean) value, the distribution is skewed in favor of low earners. Conversely, if the median value is less than the average, the distribution is skewed in favor of high earners.

 The peer city ratios of median earnings to average earnings range from 1.1 to 2.1 and average 1.6. The ratio for Jacksonville is 1.4, lower than the average city ratio indicating that Jacksonville average earnings are not unduly influenced by a minority of high earners. It ranked third among the peer cities.

 Gross domestic product is generally considered the ultimate measure of economic activities. The GDP for the peer cities ranged from $18,340M to $178,606M and averaged $102,972M. Jacksonville with $60,170M ranked fifth.

 Looking at per capita GDP, the peer city average stood at $96,275 with a range of $57,095 to $204,130. The average for Jacksonville was $62,824-- seventh place among the peer cities.

II. Government and the Public

 We will begin by first considering the general topics of assets, income and expense, then expenditures divided among eight groups and finally the number of employees divided among the same groups.

 **Capital, Revenue and Expenses.** The capital assets of the peer cities ranged from $2,404M to $26,845M and averaged $9,131M. Jacksonville’s assets totaled $10,869M, 19% above the average.

 On a per capita basis, the capital asset range for the peer cities was $4,972

to $30,681 with an average of $12,878. For Jacksonville, per capita capital assets were $11,348, 12% lower than that average. However, it ranked fifth among the peer cities.

 The relatively high peer city average is a reflection of the impact of asset-heavy San Francisco. If San Francisco were excluded, the nine-city average would fall to $10,182 and the Jacksonville per capita average would be 8.3% above that of the other peer cities, although its number five rank would stay the same.

 Perhaps a more significant statistic is the ratio of city capital to total real property—since this represents how heavily a community is willing to invest its assets in public capital. The city ratio ran from .015 to .336 and averaged .125. The ratio for Jacksonville was .125, the same as the average for the entire group. Jacksonville also ranked fourth in the peer city group

 Turning next to revenue and expense, the revenues of the peer cities ranged from $1,097M to $12,528M and averaged $4,564M. Jacksonville with revenues of $2,684M, ranked fifth. Expenses ranged from $1,255M to $12,517M and averaged $4,327M. Here, Jacksonville ranked ninth with expenses of $6,700M.

 In terms of per capita revenue and expense, the range for revenue was $1,562 to $9,067 and the average, $4,995. Expenses, ranged from $1,565 to $12,881 and averaged, $5,910. For Jacksonville, per capita revenue of $6,018 was 2% above the average and per capita expense of $5,422 was 8% below average.

 Of relevance, is the proportion of the personal income of peer city residents that went towards public expenses. This is an indication of the relative value that those residents assign to public services. In 2019 peer city residents spent an average of 8.5% of personal income on public expenditures. The range ran from 5.9% to 12.9%. Jacksonville spent 11.5%, second highest of the peer cities.

 **Expenditure Details.** This study divides public expenditures into eight broad categories. These are: Public Protection (Police, Fire and Emergency); Public Works; Transportation & Commerce; Community Health; Cultural and Recreation; General Administration & Finance; and Component Units. The later, Component Units, are organizations or corporations like JEA or JTA that are under partial or full control by city government, but not actually a part of it.

 Privately owned public services that were not counted by the reports as component units were included as such for our purposes.

 Table 1, below, gives the breakdown on expenditures, by category, for the peer cities and, separately, for Jacksonville. As the table indicates, Jacksonville falls below average for all expenditure categories except “Component Units.” This is less a shortcoming than a reflection of the fact that Jacksonville provides many of its services through component units that many other cities provide directly through the city government.

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| --- | --- | --- | --- |
| Expense Category | Peer-Cities | Jacksonville | Difference |
| Public Protection | 15.9% | 16.6% | .7% |
| Public Works, Transportation & Commerce | 14.6% | 9.2% | -5.3% |
| Human welfare & Neighborhood Development | 3.3% | 2.6% | -0.7% |
| Community Health | 5.0% | 0.5% | -4.5% |
| Cultural and Recreation | 3.1% | 1.7% | -1.4% |
| General Administration & Finance | 11.9% | 5.4% | -6.5% |
| Schools | 29.6% | 25.6% |  -4.0% |
| Component Units | 16.6% | 38.3% |  21.7% |

 Table 1. Percentage of total expenditures by category.

 The per capita expense for each expense category is important.

Schools with a per capita average of $1,788 stood at the top. The range for

schools ran from $1,494 to $2,214. Public works, transportation & commerce were second at $1,126 with a range of $381 to $4,550. Component units, which includes a wide variety of expenditures, was third at $971, barely ahead of public protection at $944. The range for component units was $20 to $2,910. For public protection, it was $601 to $1,710.

 See Table 2 for more details.

 **Public Employees.** There are 227,527 city, school and component unit employees in the peer cities. The average per city was 16,611 and the range ran from 10,869 to 24,552. The total for Jacksonville was 21,125 which puts it in fifth place among the peer cities.

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| --- | --- | --- | --- | --- |
| Expense Category | Jacksonville | City | Difference | Percent |
|  |  | Average |  |  |
| Total Expenses  | $5,422 | $5,910 | $488 | 8.3% |
| Public Protection | $905 | $944 | $39 | 4.3% |
| Public Works, Transportation & Commerce | $503 | $1,126 | $623 | 123.7% |
|  |  |  |  |  |
| Human welfare & Neighborhood Development | $141 | $304 | $163 | 116.3% |
| Community Health | $29 | $405 | $377 | 1307.2% |
| Cultural and Recreation | $93 | $218 | $125 | 133.8% |
| General Administration & Finance | $296 | $698 | $402 | 135.7% |
| Schools | $1,393 | $1,633 | $240 | 17.2% |
| Component Units | $2,082 | $971 | -$1,111 | -53.4% |

 Table 2. Per Capita Expenses by Expense Category

 Focusing on the proportion of public employees to peer city populations, overall, there were 3,078 public employees per 100,000 peer city residents with a range of 2,206 to 4,043. Schools, which averaged 1,649 per 100,000 ranked first, public protection (465), second and component units (453) third.

 Jacksonville had 2,206 public employees per 100,000. Broken down by expense category, schools with 1,197 per 100,000 were first, public protection, (500), second and component units (308), third.

 If the various expenditure categories are viewed from the standpoint of what proportion of the personal income of residents goes toward each category, schools rank first at 2.6%; component units at 1.7% are second, and public protection and public works, transportation and commerce are tied for third at 1.4%. For Jacksonville, component units (4.4%) are first, schools (2.9%) second and public protection (1.9%) third.

 Table 3 below has additional details.

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| **Expense Category** | **Cities** | **Jacksonville** | **Difference** | **Pct. Diff.** |
| All Expenses | 9.7% | 11.6% | 1.9% | 19.6%  |
| Public Protection | 1.4% | 1.9% | 0.5% | 34.4% |
| Public Works, Transportation & Commerce  | 1.4% | 1.1% | -0.3% | -23.3% |
| Human Welfare & Neighborhood Development | 0.3% | 0.3% | 0.0% | -6.1% |
| Community Health  | 0.4% | 0.1% | -0.4% | -86.3% |
| Cultural and Recreation | 0.3% | 0.2% | -0.1% | -31.8% |
| General Administration & Finance | 1.0% | 0.6% | -0.4% | -40.0% |
| Schools  | 2.6% | 2.9% | 0.3% | 13.5% |
| Component Units  | 1.7% | 4.4% | 2.7% | 161.4% |

 **Table 3. Expenditure Category as Percent of Personal Income**

 **Productivity.** The usual measure of productivity is units of output per man hour. However, in the present case, we have no actual measure of output of units but some other measures, while not as good, are still useful.

 A unit of production has a cost and if the number of units is unknown, a broad-brush measure like expenditures per employee might be used. This, however, is not without problems. Most notably, it assumes that costs per unit are about the same among different organizations or cities, even though this might not always be the case.

 A second but unrelated problem is that much construction work is done by contractors for whom we have no employee data. This would cause the employee/expense ratio to be excessively high regardless of the output measure. However, unless the proportion of work contracted out varies substantially among the cities, valid comparisons could be made.

 With these caveats, we used average expenditure per employee as a rough guide to productivity.

 Over all, the average expenditure per employee was $144,111 with a range of $97,497 to $290,691. Jacksonville had an average expenditure of $183,581, 27% above the city average.

 Looking at individual expense categories, public works, transportation & commerce was the highest, averaging $609, 041 per employee. Next was community health with an average of $464,239. Human welfare & community development was third at $359,828. The corresponding numbers for Jacksonville are $1,238,972, $889,903 and $494,875, all well above average, implying that Jacksonville is either extraordinarily efficient or contracts out considerably more of its work than most of the peer cities.

 Table 4 gives more details

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| **Expense Category** | **Cities** | **Jacksonville** | **Difference** | **Pct. Different** |
| All Expenses | $171,907 | $183,581 | $11,674 | 6.8% |
| Public Protection | $228,719 | $181,228 | -$47,491 | -20.8% |
|  Public Works, Transportation & Commerce  | $522,918 | $1,238,972 | $716,054 | 136.9% |
| Human Welfare & Neighborhood Development | $340,786 | $494,875 | $154,089 | 45.2% |
| Community Health  | $378,318 | $889,903 | $511,585 | 135.2% |
| Cultural and Recreation | $172,308 | $155,590 | -$16,718 | -9.7% |
| General Administration & Finance | $294,064 | $425,782 | $131,718 | 44.8% |
| Schools  | $137,236 | $116,410 | -$20,826 | -15.2% |
| Component Units  | $249,016 | $676,488 | $427,472 | 171.7% |

 **Table 4. Expenditures per employee by expense category.**

 **High Income vs. Low Income Cities.** In theory, if choices by residents between different financial elements did not change at different levels of personal income, assets, revenues and expenditures per capita should vary directly and proportionately with average personal income. That is to say, if all residents, on average, spend 5% of personal income on taxes for public protection, those in lower income peer cities will also spend 5% of personal income on taxes for public protection, albeit at a lower actual dollar amount.

 On the other hand, if some expenditures are deemed more important than others, the percent of taxes spent on them will be higher in low-income peer cities than in average or high-income peer cities and expenditures on other categories will be lower.

 If the peer cities are divided into five lower-income cities and five higher-income cities, the difference between the average personal income is 65%, that is, the average personal income of the higher-income peer cities is 65% higher than that of the lower-income peer cities. The assets per capita for higher-income peer cities are at 131%, disproportionately higher than that of lower-income peer cities.

 Looking at revenues, the average per capita for higher-income peer cities is 118% higher than that for lower-income cities. Expenses per capita show a similar trend. The average per capita expense for higher-income peer cities is 113% higher than lower-income peer cities.

 These statistics indicate that the relative levels of basic financial elements-- assets, revenues and expenses-- are not directly proportionate to average personal incomes. What seems to be the case is that there is a proportionate relationship ­after a basic minimum amount has been added to the average personal income.

 Total expenses as a percent of personal income in higher-income peer cities are 11.9% higher than they are in lower-income cities. This appears to be the additive that must be made to the average income of lower income peer cities before their expenditures become proportionate to those of higher income peer cities.

 III. Summary and Conclusions

 How best to describe Jacksonville? With respect to climate and location, it is one of four peer cities with warm winters. It is one of two that are located on coasts. It has to be assigned a superior rank as to climate and location.

 While Jacksonville is largest in terms of area, it is second from the bottom as to population density—more nearly rural than urban. The low miles of roads per square mile of land is another such indicator (4.6 vs. 12.8).

 Turning to demographics, the number of people per household in Jacksonville is slightly below average. The segment of the population that is of working age is also slightly below average. The median age is a little higher than the average age, a sign that the proportion of the older is higher than that of the younger.

 In Jacksonville, 51.6 % of the working age population were in the work force with an unemployment rate of 4.4%. For the peer cities, 55.4% were in the work force with 5.5% unemployed. It would appear that a greater proportion of the working age residents of Jacksonville have opted out of working but that the rest have had better success at employment.

 In terms of violent crimes, the “murder capital” does considerably better than its peers. Only two have lower violent crime rates than Jacksonville.

 In other areas, Jacksonville does not do so well. Among the cities it ranked at the bottom for its proportion of residents with college degrees. The group average is 41.7% versus 28.1% for Jacksonville. Personal income is also low. The average personal income in Jacksonville was $47,475. For the peer cities, it was $69,022, close to twice as much.

 On a broad economic scale, the peer cities averaged $70.111 B in gross domestic product. Jacksonville ranked fifth, but was 14% below the peer city average. On a per capita basis it ranked eighth with $62,284, 35% below the peer city average of $96,675. Looking at real property, Jacksonville ranked fourth with $93,419 M, but slightly below (4.5%) the peer city average of $101,222 M.

 Jacksonville as a whole is blessed with a superior location and a relatively low violent crime rate, but it is short on production, property, money and education.

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 At the local government level, Jacksonville ranked second behind San Francisco in capital assets, and on a per capita basis, it ranked a solid fourth. ($10,237 vs. $10,900). Public expenses for Jacksonville put it in third place, behind Denver and San Francisco. On a per capita basis it was in fifth place with $5,422, about 8% below average. As to revenues, Jacksonville ranked ninth in per capita revenue, 37% below the peer cities average of $6,636.

 One thing that cannot be said is that Jacksonville residents spend too small a share of their personal income on public services. In fact, they spend a higher proportion than in all but one of the peer cities. If Jacksonville is to spend more, it probably will have to rely on outside funds. This is not to say, however, that a reordering of spending priorities might not be in order.

 Look at how Jacksonville spends its money. It spends 4% more on Public Protection than the city average, but 45% less on Cultural and Recreation, and 90% less on Community Health just to mention the more prominent disparities. A modest reordering of spending priorities certainly might be desirable. Certainly, community health warrants more attention.

 Higher education is one area that needs improvement. Jacksonville is at the bottom of the ranking in people who have college degrees, but it is highest in those who have some college but for one reason or another have dropped out. Money spent in helping these people finish what they started would be well spent. So would funds that would expand UNF and other colleges to better serve the north and eastern parts of Florida and, also, southeast Georgia. Jacksonville has world-class beaches, yet it is far from being a prime tourist destination. Here again, some serious restructuring and investment is needed.

 Another change might be in the allocation of funds for economic development. Jacksonville is well on its way to becoming an important regional medical and insurance center. Spending to hasten development in these areas would be a better investment than in the miscellaneous collection of small enterprises that are usually targeted.

 Finally, a modest amount should be spent in continuing this effort to compare Jacksonville with peer cities and publicizing the results. It is needed to spur our competitive spirit and make us seek out areas in which to improve.

1. Violent crime is defined as murder, non-negligent homicide, rape, robbery and aggravated assault. [↑](#footnote-ref-1)