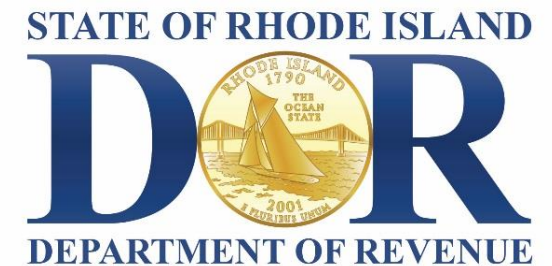


Presentation to Education Funding Formula Task Force

November 2019

Stephen Coleman
Chief, Division of Municipal Finance



Task Force Questions Posed to DMF

1. What is Municipal Finance's role in the share ratio?
2. What goes into the valuation and wealth measures used in the AEWAV, including how non-profits and tax treaties are valued?
3. What causes the volatility of the personal income measure and what, if anything, can be done to fix it?
4. Do the wealth measures and calculations reflect a community's ability to raise revenue to pay for education?
5. An introduction to the portal, with necessary disclaimers.

Question 1

- DMF produces the Adjusted Equalized Weighted Assessed Valuation (AEWAV). The Rhode Island Department of Education (RIDE) utilizes this report to determine the State Share Ratio Community (SSRC)
 - It is important to note that DMF provides the AEWAV data to RIDE who calculates the [SSRC](#). However, to help answer some of the questions posed by the task force the division has added some slides explaining the [SSRC](#)

Question 1: State Share Ratio Community (SSRC)

- SSRC takes the AEWAV by municipality divided by the enrollment for that municipality's school district and compares this ratio to that of the state as a whole
 - $(1 - ((M \text{ AEWAV} / M \text{ Enrollment}) / (S \text{ AEWAV} / S \text{ Enrollment})) * .475)$
- If calculation results in something less than 0 law requires the SSRC to be 0
- Essentially, any municipality with a AEWAV “wealth” per student that is greater than 2.105 times that of the state “wealth” per student will result in a 0 SSRC
 - [FY20 Education Aid](#), 8 municipalities with a 0 SSRC

Question 1: SSRC Quadratic Mean

- The SSRC by itself does not determine the percent of Total Foundational state funding
- The results of the SSRC are one half of the determining factor, the [SSRC Quadratic Mean](#) is ultimately what determines percent of state funding
 - The second half is Pre-K through 6 poverty as a percent of enrollment
- The Quadratic mean of the ratio for Pre-K through 6 and the SSRC is used to determine the amount of state funding to the local district. This is achieved by multiplying the SSRC Quadratic Mean by the Total Foundation amount that RIDE calculates based on enrollments and the per pupil cost

Question 2

- Two main laws set the parameters for DMF's calculation of the AEWAV
 - R.I. Gen. Laws §16-7-21
 - R.I. Gen. Laws §45-13-14
- Three main data sources
 - DOA/Classification of Tax Roll Report (assessments)
 - Sales Abstract File (Used to generate ratio of assessment)
 - Tax Treaty information (Items and adjustments to DOR/Classification of Tax Roll Report)

Question 2: AEWAV Data

- FY21 Education Aid utilizes:
 - 2017 AEWAV submitted August 1, 2019 is based on:
 - 12-31-16 assessments
 - 2016 and 2015 sales
 - 2017 Median Family Income
 - Made available by US Federal Census American Community Survey in December 2018

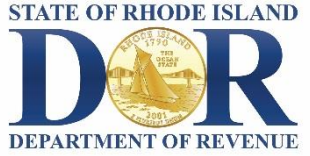
Question 2: R.I. Gen. Laws §16-7-21

- Section (1) Assessed value as of December 31 of the third preceding calendar year
 - Weighted by bringing the valuation to the “true and market value”
- Section (3) EWAV adjusted by ratio of median family income
 - Median family income as reported in the “latest available federal census data”

Question 2: R.I. Gen. Laws §45-13-14

- When computing “relative wealth” for the purpose of distributing state aid in accordance with title 16
 - It shall be based on “the full value of all property”
 - Exemptions to full value of assessment for the following:
 - State Aid PILOT Assessments
 - Tax treaty/tax stabilization/PILOT entered prior to May 15, 2005
 - Any property exempt from taxation under state law (mandatory not permissive)
 - Any property subject to chapter 27 of title 44

Question 2: DOA/Classification of Tax Roll Report



- DOA Report and the Classification of Tax Roll Report group assessments by tax classification code (reflect assessment and number of parcels)
 - DOA Report is generated by local assessors software system
 - Classification of Tax Roll Report is a manual report formatted by the state several years ago
- Both reports utilize a tax classification code structure (two digit code, 01 through 99) including but not limited to:
 - Code 1 = Residential One Family
 - Code 2 = Two to Five Family
 - Code 3 = Apartments

Question 2: Sales Abstract File

- Structured text file that is electronically generated by the municipality
- File contains all sales for the submitting municipality for a given time period
 - DMF utilizes “arms length” transactions to determine the ratio of assessment
- DMF utilizes this text file to feed the “Boomer” software system
 - Software calculates sales ratios to be utilized in AEWAV which are ultimately reflected as the Ratio of Assessment
 - Software contains preset parameters, e.g. Any individual sale with a sales ratio less than 30 or greater than 140

Question 2: Tax Treaty Information

- Report sent to DMF by local assessor reflecting assessments and levy generated from properties that are not taxed at 100%
- Each municipality reports these types of properties differently
 - DMF works with the assessors to refine data submissions

Question 2: AEWAV results

- Essentially, [AEWAV](#) takes assessments from a specific point and time and determines a total state assessment. This total state assessment is then redistributed based on a municipalities sales and median family income.

Question 3

- R.I. Gen. Laws §16-7-21 requires that the AEWAV include median family income as reported in the “latest available [federal census data](#)”
- Available federal census data on median family income
 - 1-year estimates
 - Only available for areas with populations of 65,000 or more
 - Based on 2017 population data only 4 municipalities would be available
 - 1-year supplemental estimates
 - Only available for areas with populations of 20,000 or more
 - Based on 2017 population data only 18 municipalities would be available
 - 5-year estimates (Used in AEWAV)
 - Available for all areas
 - DMF utilizes the 5 year estimate for the AEWAV

Question 3: 5-Year Estimate Fluctuations YOY change in Median Family Income

- State median family income year over year change from 2014 to 2017
 - 0.69, 1.13%, 2.17%, 4.48%
- Average median family income for all municipalities year over year change from 2014 to 2017
 - 1.31%, 0.37%, 2.03%, 4.00%
- 2017 municipal year over year change
 - High, 16.34% (West Greenwich)
 - Median, 3.86% (Cranston)
 - Low, -18.45% (Little Compton)
 - Standard Deviation, 5.63%

Question 3: Solution

- If the state wanted to minimize fluctuations in median family income it would require a legislative change to allow DMF to utilize something other than the “latest available federal census data”
 - A possible suggestion would be to do a 3 to 5 year smoothing

Question 4

- This question cannot be directly answered by DMF. If the question was: Does the AEWAV reflect the relative wealth of a municipality? The answer would be yes
 - However, the AEWAV is not the sole data point utilized in the determination of the State Share Ratio Quadratic Mean, as a result the AEWAV cannot be entirely representative of how much education funding will ultimately will come from state versus local dollars
 - Currently, state funding is determined by multiplying the Total Foundational amount (which in theory would represent total education expense at local level) by the SSRC Quadratic Mean which weights PK-6 poverty at the same level as the AEWAV per student ratio (SSRC)
 - It could be argued that a municipality's ability to raise revenue for any service provided to its citizens are limited by two main factors, the tax levy cap and the tax capacity of its citizens
 - The AEWAV is a metric approximating the latter; although the AEWAV feeds the SSRC Quadratic Mean the ultimate funding level percentage derived can be different

Question 4: AEWAV Outcomes

- AEWAV ultimately redistributes the assessments for all municipalities by adjusting assessments by sales and median family income
- The 5 largest redistributions of assessments downward, 2017 AEWAV
 - Central Falls, 40% (AEWAV assessment / Original assessment before adjustments)
 - Woonsocket, 50%
 - Pawtucket, 63%
 - Providence, 64%
 - West Warwick, 81%
- The 5 largest redistributions of assessments upward, 2017 AEWAV
 - Exeter, 126%
 - Narragansett, 131%
 - Jamestown, 137%
 - Barrington, 154%
 - East Greenwich, 162%

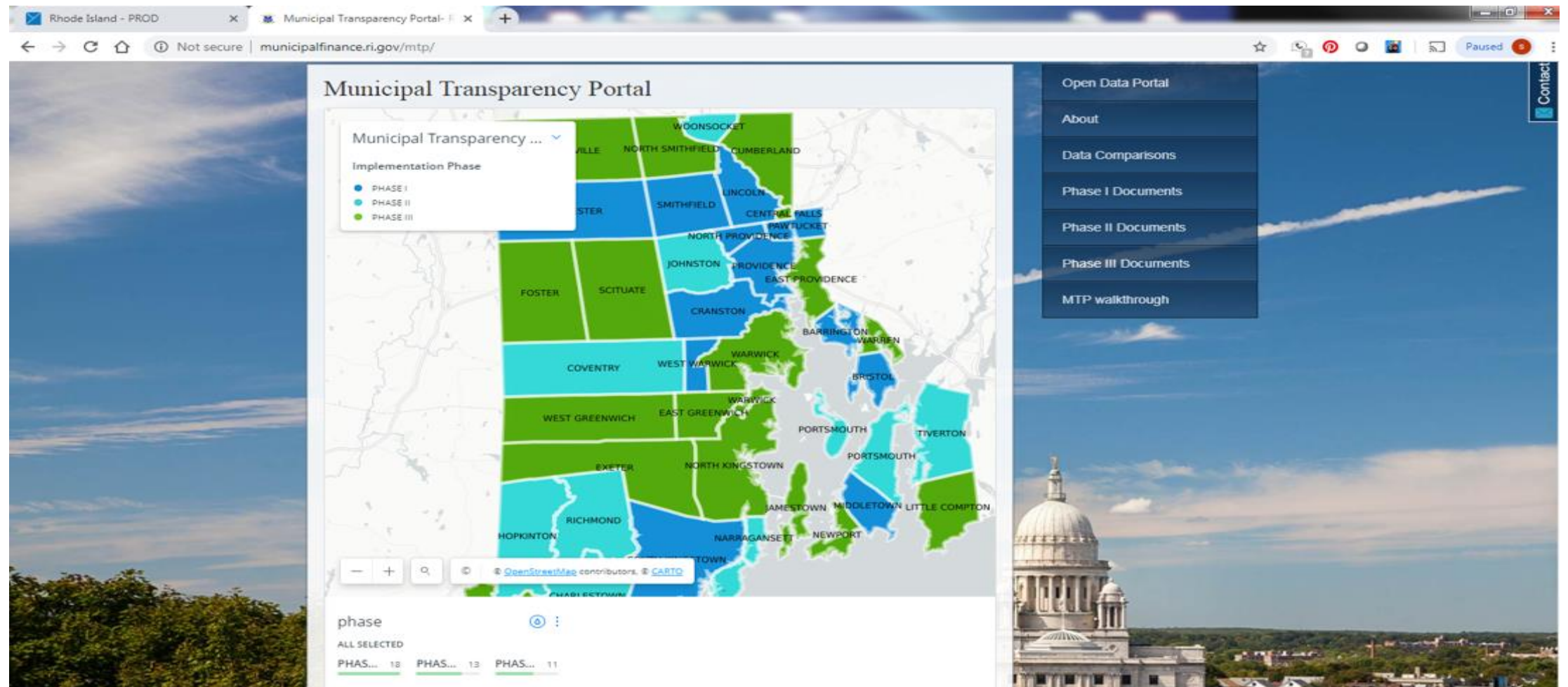
Question 4: Moody's ratings as of 11/14/19

- Moody's rates 34 municipalities (Exeter, Foster, Little Compton, Glocester, and West Greenwich excluded)
- The 5 largest redistributions of assessments downward, 2017 AEWAV
 - Central Falls, Ba1 (rank lowest)
 - Woonsocket, Baa3 (rank 2nd from lowest)
 - Pawtucket, A3 (rank 5th from lowest)
 - Providence, Baa1 (rank tied for 3rd from lowest)
 - West Warwick, Baa1 (rank tied for 3rd from lowest)
- The 5 largest redistributions of assessments upward, 2017 AEWAV
 - Exeter, N/A (rank N/A)
 - Narragansett, Aa2 (rank tied 2nd from highest)
 - Jamestown, Aa1 (rank tied for highest)
 - Barrington, Aa1 (rank tied for highest)
 - East Greenwich, Aa1 (rank tied for highest)

Question 5

- The Municipal Transparency Portal was part of the governor's budget passed for FY2017
- The Municipal Transparency Portal (MTP) creates a centralized location for municipal financial information – an important effort to enhance transparency and provide citizens with a clear and uniform view of key financial data for their city or town. It also provides the ability to make meaningful comparisons among communities, foster collaboration, and facilitate exploration of shared services among communities.

Municipal Transparency Portal links



^This visualization allows user to select their municipality which will present user with link to that municipalities datasets. Additionally, they can click on links to right of map visualization to navigate to different portions of the portal (Data.ri.gov) 21

Municipalities and Regional School Districts

Phase I Municipalities/Regional School Districts



Barrington



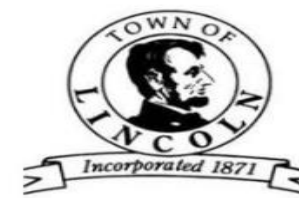
Bristol



Cranston



Gloucester



Lincoln



Middletown



North Providence



Pawtucket



Providence



Smithfield



South Kingstown



West Warwick



Bristol Warren
Regional School
District

Datasets

- Each municipality and or regional school district has datasets by fiscal year, which will include:
 - PDF Transparency Reports for:
 - Municipal Data Report (Audit)
 - Adopted Budget Survey
 - Budget to Actual (1, 2, and 3)
 - .CSV file (essentially excel)
 - Raw audited data file
 - In the future we will include budget and projected data for municipalities and school districts
 - Dataset Visualization

Dataset Visualization



License

License Not Specified

Other Access

The information on this page (the dataset metadata) is also available in these formats.



via the [DKAN API](#)

Social

[Twitter](#)

[LinkedIn](#)

[Reddit](#)

Barrington | Finance Data FY2018

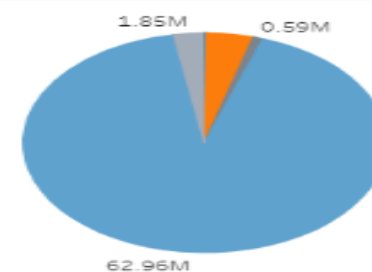
Finance and Budgeting

Barrington | Finance Data FY2018

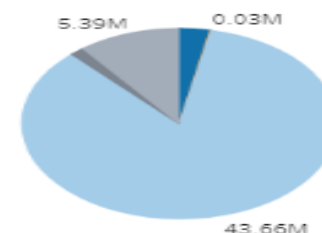
< Revenue & Sources by Class Description Expense & Uses by Group Description >

Entity Description

Barrington



Barrington school district



Class Description

- Federal Aid
- Financing Sources: Debt
- Financing Sources: Other
- Financing Sources: Transfers
- Local Non-Property Tax Revenues
- Municipal Education Appropriation
- Other Revenue
- Property Tax
- State Aid

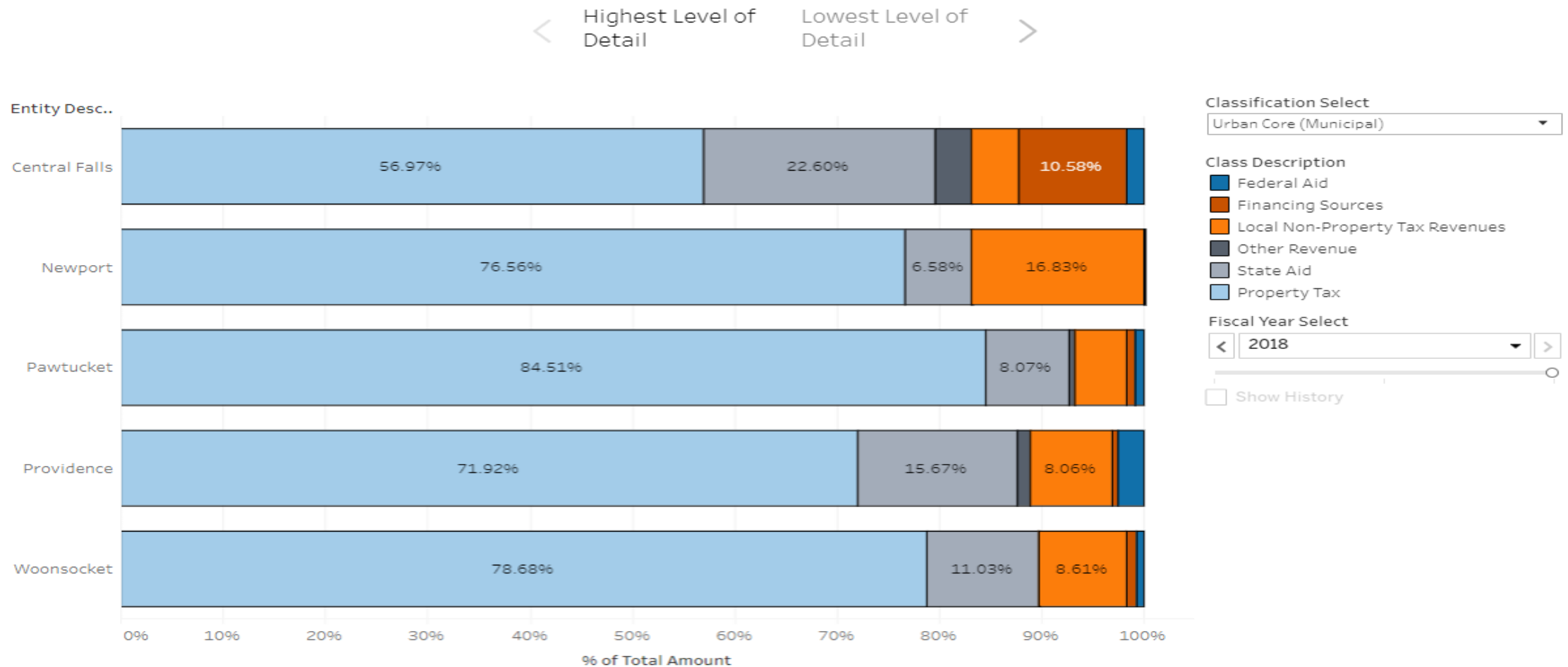
Definitions for descriptions presented in this visualization can be found @ <https://data.ri.gov/dataset/rhode-island-municipal-finance-data-dictionary>

^Each dataset has a pie chart visualization, separated by revenues and expenses (one for municipality and one for school district)

Data Comparison Visualizations

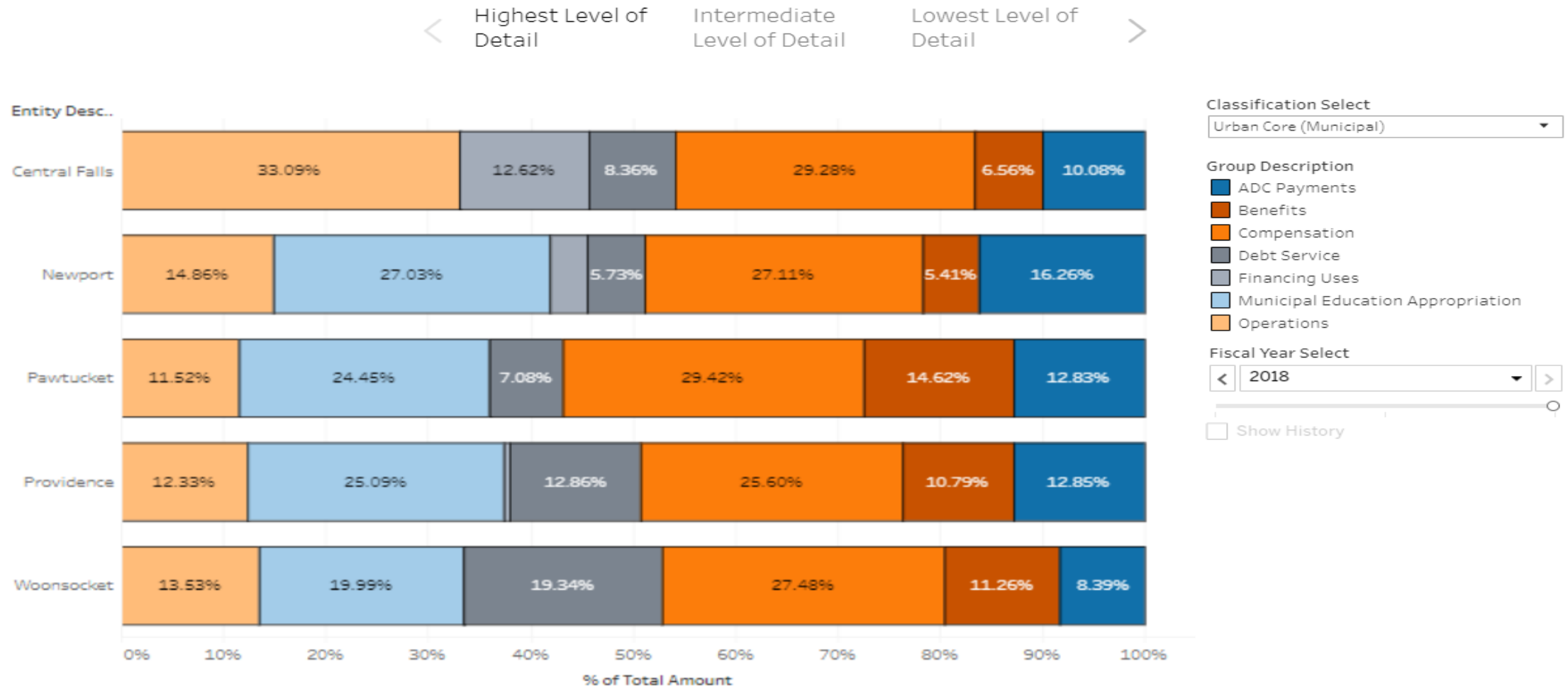
- All data comparison visualizations on data.ri.gov (all slides following)
 - Give user the ability to segment represented municipalities or school districts by Rural, Suburban, Urban Core, Urban Ring, and just Regional School Districts
 - Give user the ability to sort data by fiscal year
 - FY2016 was first year of portal and had 12 participants, FY2017 was second year with 25, FY2018 all fully phased into portal with 43 entities (39 municipalities, 4 regional school districts)
 - Give user the ability to hover over item to get description and amounts (tooltip)
 - All tooltips include selection criteria from visualization (classification, legend item, fiscal year, ect..)
 - Some tooltips also include definitions for legend item
 - Give user the ability to include or exclude legend items
 - Give user the ability to choose the depth of data represented by selecting the highest level of detail or the lowest level of detail (Expense visualization has an intermediate level)
 - All visualization color schemes are created based on color blindness (as result some colors are duplicated)
 - However, user can select legend item to highlight only that item from the visualization

Revenue/Source Data Comparisons for all Municipalities and School Districts



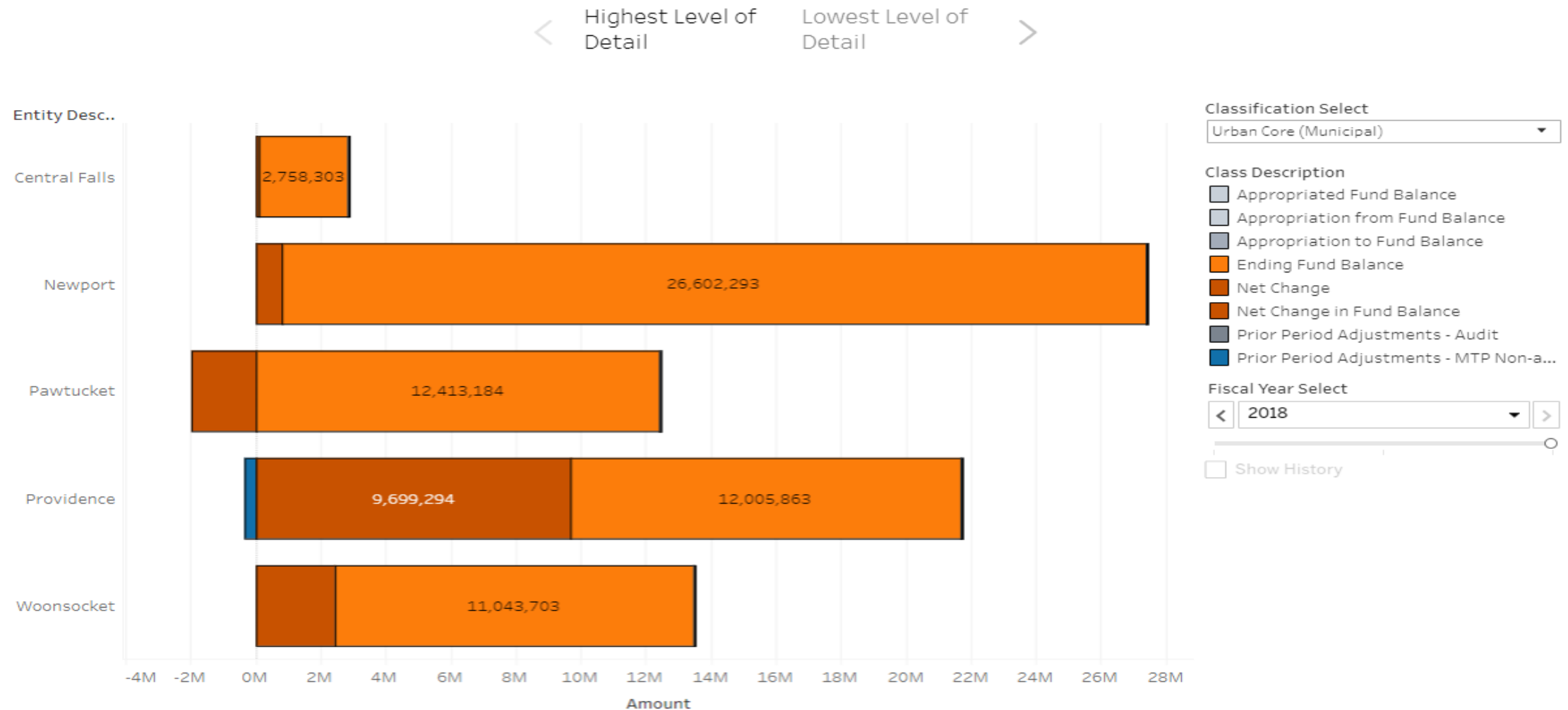
^This visualization shows a user, on a broad level, where the different major revenue streams are derived from for a given municipality

Expense/Uses Data Comparisons for all Municipalities and School Districts



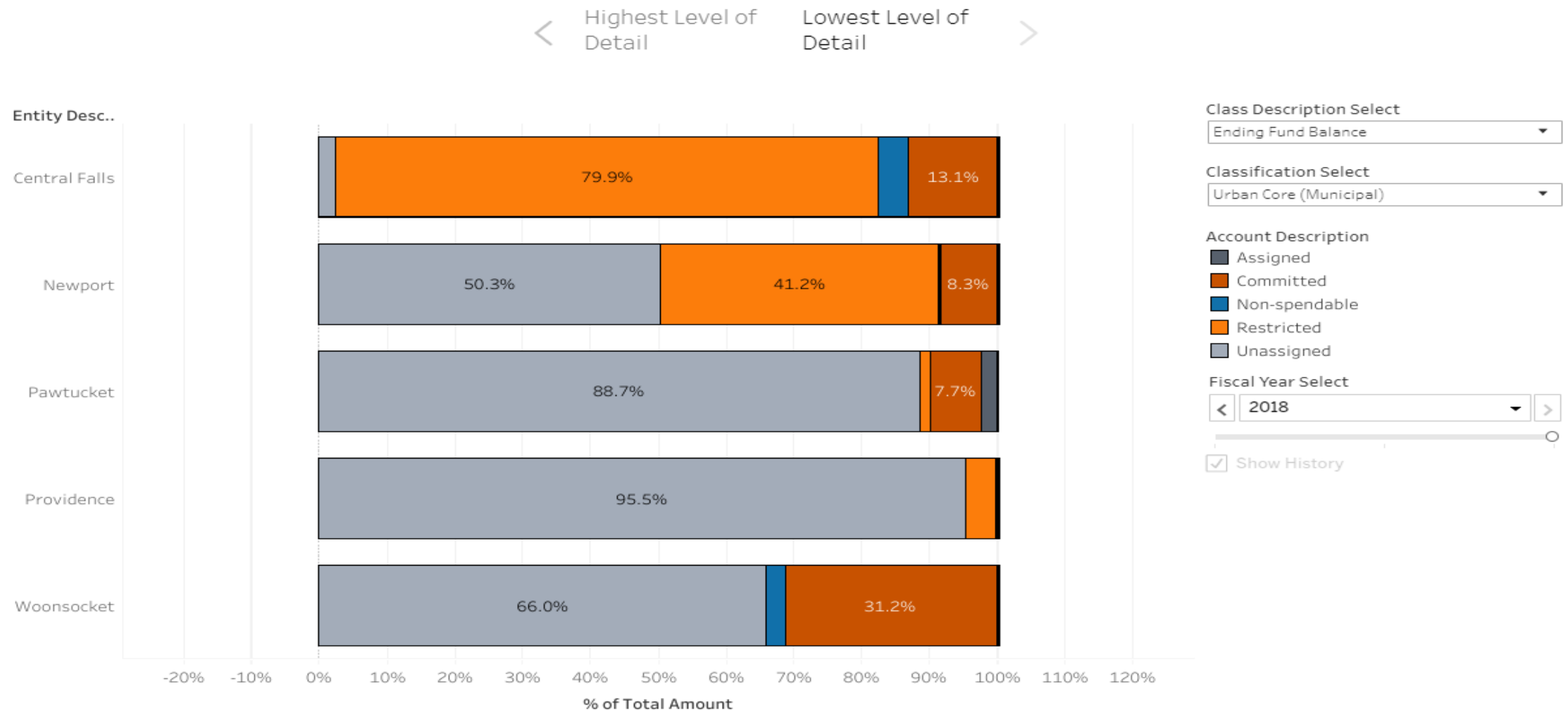
^ This visualization shows a user the total expenses spent on each category

Fund Balance Data Comparisons for all Municipalities and School Districts



^This visualization allows user to see the current status of fund balance available to the municipality

Fund Balance Data Comparisons for all Municipalities and School Districts



^This visualization allows user to drill down to determine what makes up the broader categories of fund balance