Metadata for ECON 398 Project – Kien Vu

A. Massachusetts Data:

1. Staff Retention Rates 2012-2015 by District (staffretain15.xlsx):

This data ranging from school year 2012 to 2015 was obtained on February 22nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/staffingRetentionRates.aspx>.

*Steps to obtain a copy of staffretain15.xlsx (data for year 2015):*

- Visit <http://profiles.doe.mass.edu/statereport/staffingRetentionRates.aspx>.

- Choose Report Type “District” and Year “2015”.

- Click the “Export” icon to the right of the table heading, then save the document as *staffretain15.xlsx*.

- Delete Column I-J, then C-G. We are interested in % retention of principals and teachers.

This data displays the percent of superintendent, principal, or teacher who remains working in the same position from one year to the next.

2. Per Pupil Expenditures (All Funds) 2012-2015 by District (expen15.xlsx):

This data ranging from year 2012 to 2015 was obtained on February 22nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/ppx.aspx>.

*Steps to obtain a copy of expen15.xlsx (data for year 2015):*

- Visit <http://profiles.doe.mass.edu/statereport/ppx.aspx>.

- Choose Year “2015”.

- Click the “Export” icon to the right of the table heading, then save the document as *expen15.xlsx*.

- Delete Column F-G, then C-D. We are interested in the per-pupil expenditures only.

This displays in-district expenditures per pupil and total expenditures per pupil, which includes in-district and out-of-district spending and enrollment. Per pupil expenditures are calculated by dividing a district's operating costs by its average pupil membership (FTEs).

3. MCAS Achievement Report 2013-2016 by District (mcas.xlsx):

This data ranging from year 2013 to 2016 was obtained on March 2nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/mcas.aspx>.

*Steps to obtain a copy of mcas16.xlsx (data for year 2016):*

- Visit <http://profiles.doe.mass.edu/statereport/mcas.aspx>.

- Choose Report Type “District”, Year “2016”, Grade “All”, Student Group “All Students”.

- Click the “Export” icon to the right of the table heading, then save the document as *mcas16.xlsx*.

- Delete Column D-N. We are interested in the performance level percentages only.

The data displays overall MCAS measures of performance for each district across all grade levels. Results of each subjects are included for each district as well. The explanation of each measure is included here:

A+P = Advanced or Proficient  
A = Advanced  
P = Proficient  
NI = Needs Improvement  
WF = Warning/ Failing

CPI: 100-point Composite Performance Index

SGP: 100-point Student Growth Percentiles

Achievement level percentages are not calculated for groups with fewer than 10 students. Average student growth percentiles (SGP) are not calculated if the number of students included in the aggregated SGP is less than 20. Further clarifications on CPI and SGP measures are included here: <http://profiles.doe.mass.edu/accountability/report/aboutdata.aspx>.

4. Teacher Salaries 2012-2016 by District (teachwage.xlsx):

This data was obtained on March 12nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/teachersalaries.aspx>.

*Steps to obtain a copy of teachwage1516.xlsx (data for year 15-16):*

- Visit <http://profiles.doe.mass.edu/statereport/teachersalaries.aspx>.

- Choose Year “2015-2016”.

- Click the “Export” icon to the right of the table heading, then save the document as *teachwage1516.xlsx*.

- Delete Column E, then column C. We are interested in the average salary only.

This displays the average teacher salary for each district during school year 2015-2016. Total teaching salaries, divided by the number of full-time equivalent teachers, equals the average teacher salary. During analysis the author found erroneous reporting of the District code, and thus changed it for North Shore from 8530000 to 8540000 and Essex Agricultural Technical from 9100000 to 9130000.

5. Math Class Size by Gender and Selected Population Data 2012-2016 by District (classsize1516.xlsx):

This data ranging from school year 2012-2013 to 2015-2016 was obtained on March 12nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/classsizebygenderpopulation.aspx>.

*Steps to obtain a copy of classsize1516.xlsx (data for year 15-16):*

- Visit <http://profiles.doe.mass.edu/statereport/classsizebygenderpopulation.aspx>.

- Choose Report Type “District”, Year “2015-2016” and Subject “Mathematics”.

- Click the “Export” icon to the right of the table heading, then save the document as *classsize1516.xlsx*.

The data presents information on Mathematics instruction for each district, including average class size, percent of gender, and percent of selected groups. This contains percentage of English Language Learners, students with disabilities and economically disadvantaged students. Further clarifications can be found at <http://profiles.doe.mass.edu/help/data.aspx?section=students#indicators>.

6. Student Discipline Rate – All Students 2012-2016 by District (discp.xlsx):

This data ranging from school year 2012-2013 to 2015-2016 was obtained on March 27nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/ssdr.aspx>.

*Steps to obtain a copy of discp1516.xlsx (data for year 15-16):*

- Visit <http://profiles.doe.mass.edu/statereport/ssdr.aspx>

- Choose Report Type “District”, Year “2015-2016”, Offense “All Offenses”, and Student Group “All Students”.

- Click the “Export” icon to the right of the table heading, then save the document as *discp1516.xlsx*.

- Delete Column E-J. We are interested in student disciplined measures only.

This data presents the number of Massachusetts public high school students who was disciplined.

7. Student Discipline Rate for non-Criminal Offenses – All Students 2012-2016 by District (discpn.xlsx):

This data ranging from school year 2012-2013 to 2015-2016 was obtained on March 27nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/ssdr.aspx>.

*Steps to obtain a copy of discp1516n.xlsx (data for year 15-16):*

- Visit <http://profiles.doe.mass.edu/statereport/ssdr.aspx>

- Choose Report Type “District”, Year “2015-2016”, Offense “non-drug, non-violent, and non-criminal-related Offenses”, and Student Group “All Students”.

- Click the “Export” icon to the right of the table heading, then save the document as *discp1516n.xlsx*.

- Delete Column E-J. We are interested in student disciplined measures only.

This data presents the number of Massachusetts public high school students who was disciplined for non-drug, non-violent, and non-criminal-related offenses.

8. Math Classroom data by Licensed and Quality Instruction rate 2012-2016 by District (teachdat.xlsx):

This data ranging from school year 2012-2013 to 2015-2016 was obtained on March 12nd, 2020 from the Massachusetts Department of Elementary and Secondary Education’s School and District Profiles website. Link: <http://profiles.doe.mass.edu/statereport/teacherdata.aspx>.

*Steps to obtain a copy of teachdat1516.xlsx (data for year 15-16):*

- Visit <http://profiles.doe.mass.edu/statereport/teacherdata.aspx>.

- Choose Report Type “District”, Year “2015-2016” and Subject “Mathematics”.

- Click the “Export” icon to the right of the table heading, then save the document as *teachdat1516.xlsx*.

- Delete Column G, then E, C respectively.

The data presents information on Mathematics instruction for each district, including percentage of licenced teacher in the subject and the percentage of core classes taught by a high-quality instructor.