CALSTATE DISABILITIES TRENDS 2001-2017

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Goal: To identify trends in the number of students with disabilities and services for these populations over time (2001-2016)

Graphic displays: by disability totals, services totals, by small/medium/large size campuses, by individual campuses, by specific disabilities per 10,000 students

Data notes:

- The categorization of disabilities was refined in 2010 such that the term “other” disabilities, was dropped, replaced by the specific addition of ADHD, ASD, brain injury, communications disabilities, and psychological disabilities. Therefore, some frequencies change significantly at that point.
- Data points occasionally have deep “dips,” which is probably due to irregular data collection methods.
- To more easily see data trends, campuses were divided into 3 clusters by total student enrollment: small (<15K), medium (15-25K), large (>25K) (Figure 6).

System-Level Findings:

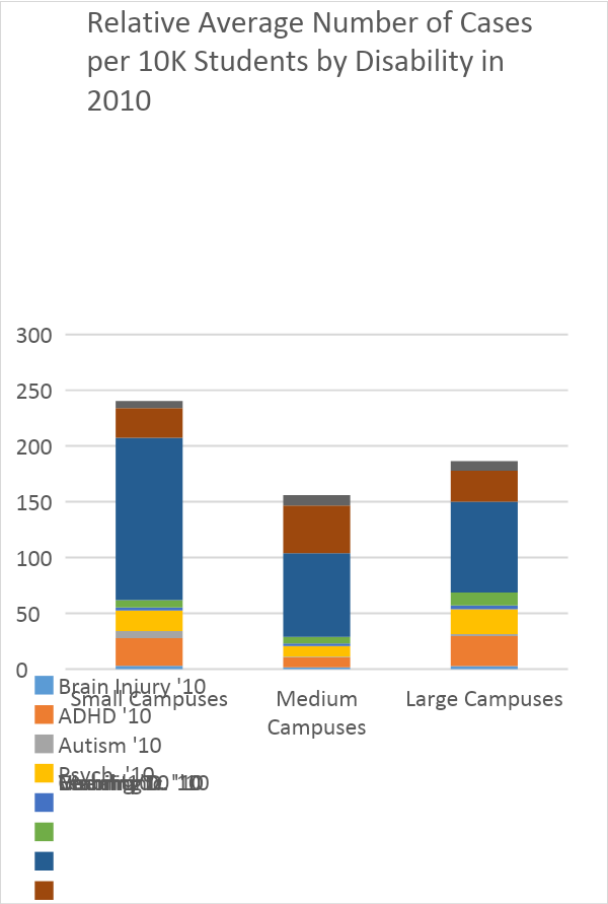
Total number of CSU students who self-reported having at least one disability was stable 2001-2009 (10.5K-10.4K), then rose slightly each year (16.4K by 2016). Likewise, the percentage of CSU students who self-reported having at least one disability was stable 2001-2009 (2.6%-2.4%), then rose slightly each year thereafter (3.4% by 2016) (Figure 1). The specific addition of other disabilities may have impacted that rise.

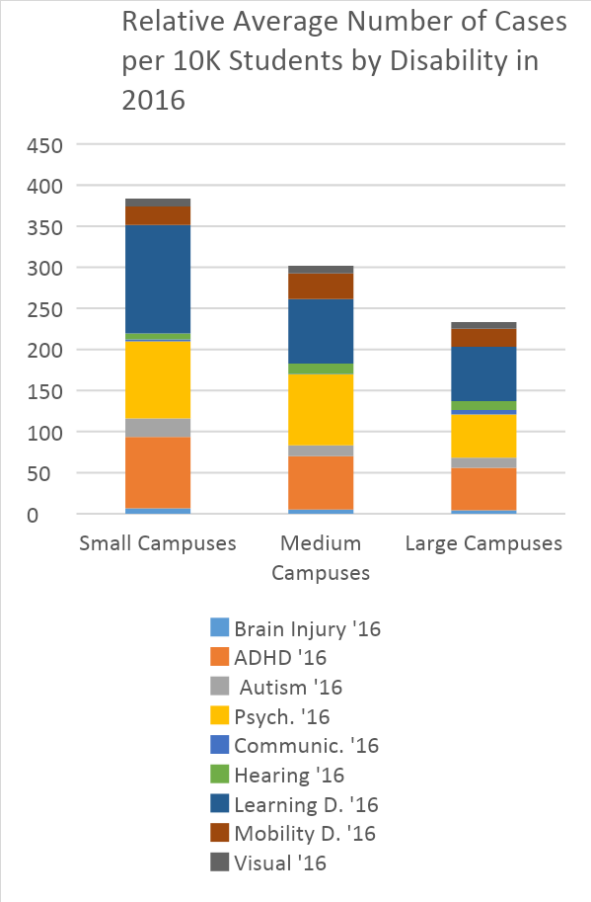
Overall, the total number of CSU students receiving disabilities remained relatively stable or rose slightly from 2001-2016 (Figure 2).

The proportion of CSU students (relative to the total enrollment) receiving disabilities varied significantly from 2001-2016 (from 0-7%). However, each campus has a unique trend pattern (Figure 3). To more easily discern patterns, campuses were clustered by relative stability (16 campuses listed in Figure 4) and by upward increase (7 campuses listed in Figure 5). Interestingly, campus size did not impact proportion trend over time.

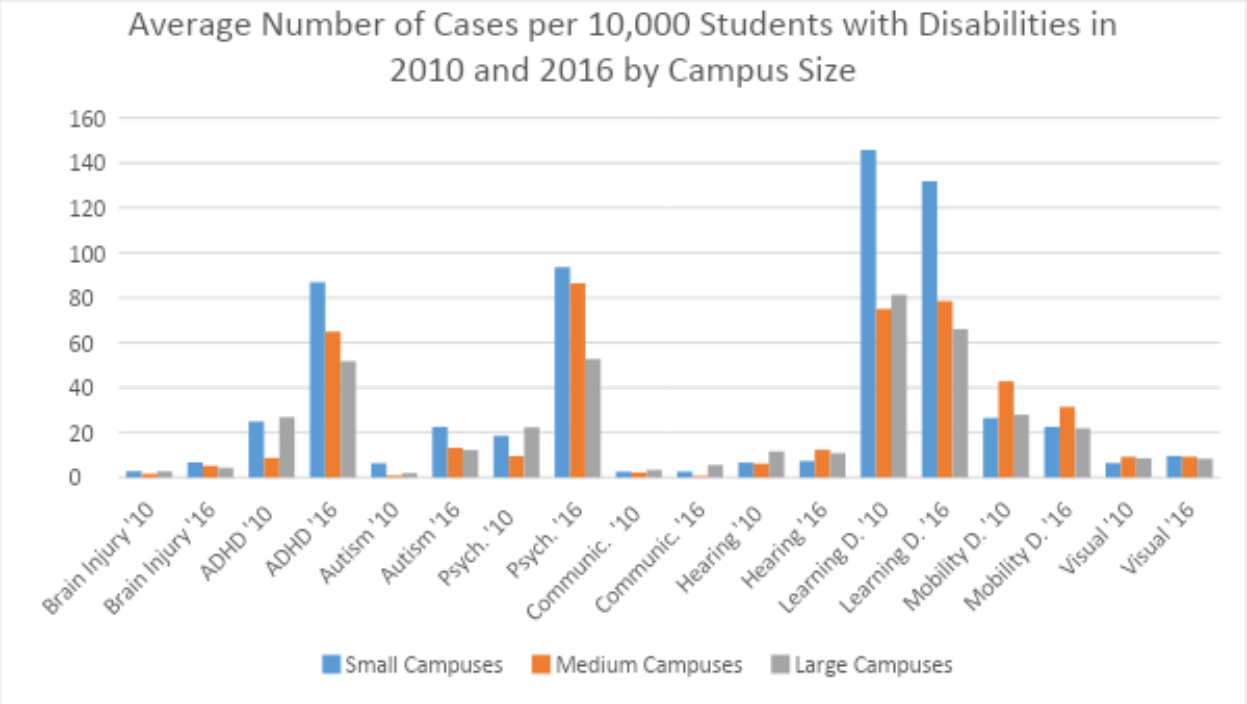
Smaller campuses tended to have a higher proportion of students with self-reported disabilities, and medium-sized usually had the lowest proportion (not counting 2016). Larger campuses tend to have less variability over time; small campuses have the greatest variance (Figure 7). The ratio of students self-disclosing at least one disability was averaged, then the percentage difference for each size campus (small, medium, large) was calculated.

Disability-Specific Findings:





As noted above, the average number of cases of self-reported disabilities increased from 2010 to 2016, with the highest proportion existing in smaller campuses. Learning disabilities constituted the greatest proportion of disability, followed by ADHD and psychological disorders. The latter two grew significantly relatively in 2016, while the numbers for learning disabilities and mobile limitations decreased.



Brain injury: The CSU average number of students with self-reported brain injury rose from about 2.5 in 2009 to a spread in 2016 of 4.3-6.7 students per 10,000 students. Occurrences in smaller campus rose more than for medium or large campuses (Figures 8-10).

ADHD: The CSU average number of students with self-reported ADHD increased appreciably from 2009 to 2016: doubling in large campuses from 27 to 52 students per 10,000 students, tripling in small campuses from 25 to 87 students per 10,000 students, and expanding about 7 times from 9 to 65 students per 10,000 students in medium-sized campuses. Considering the campuses' relative sizes, though, smaller ones showed the greatest proportional increase (Figures 11-13).

Autism Spectrum Disorders (ASD): Examining the number of students with self-reported ASD at each campus, the proportion of students and the spread over time varied significantly. However, most campuses did report increases from 2009 to 2016. In small campuses the number rose from an average of 1 to 13 students per 10,000 students, in medium-sized campuses the number rose from an average of 6 to 22 students per 10,000 students, and in large campuses the number rose from an average of 2 to 12 students per 10,000 students,. Considering the campuses' relative sizes, smaller ones showed the greatest proportion from the start (2010) as well as greatest proportional increase throughout this time frame (Figures 14-15).

Psychological Disorders: Examining the number of students with self-reported ASD at each campus, the proportion of students and the spread over time varied significantly. However, most campuses did report increases from 2009 to 2016. In small campuses the number rose from an average of 22 to 94 students per 10,000 students, in medium-sized campuses the number rose from an average of 9 to 86 students per 10,000 students, and in large campuses the number rose from an average of 18 to 53 students per 10,000 students. Considering the campuses' relative sizes, smaller ones showed the greatest proportion from the start (2010), and larger campuses showed a relatively smaller proportional increase from medium and small campuses (Figures 16-17).

Communication Disorder: The number of students with self-reported communication disorder was minimal (fewer than 10 per 10,000 students) with two campuses showing outlier numbers (Fullerton in 2002-2003, and Bakersfield in 2014-6). A significant variance was revealed over this time period, probably because of the low numbers (Figures 18-19).

Hearing Impairment (Deafness): The number of students with self-reported hearing impairment was minimal (an average of fewer than 11 per 10,000 students). However, Northridge had a much greater number: 61 cases per 10,000 students in 2002, with a gradual reduction to 35 cases per 10,000 students in 2016. Because of that one campus, the average in 2002 for large campuses was relatively much higher (13 cases per 10,000 students) than for medium (2.7 per 10,000 students) or small campuses (3.7 per 10,000 students). However, large campus number decreased over time (down to 11 per 10,000 students) while small campuses (7 per 10,000 students) and medium campuses (12 per 10,000 students) increased their numbers over time (Figures 20-21).

Learning Disabilities (LD): Medium and large campuses had similar proportions of cases per 10,000 students of self-reported LD, which held fairly steady from 2002 (106 for medium/90 for large) to 2016 (79 for medium/67 for large). The degree of decline as a linear regression for small campuses was similar, but the variation was much greater, changing year to year, and relative proportion was higher than for other campuses: 124 cases per 10,000 students in 2002 to 131 cases per 10,000 students in 2016 (Figures 22-23).

Mobility Disabilities: The number of cases per 10,000 students with self-reported mobility disabilities for campuses of all sizes decreased about 50% from 2006 (ranging from an average of 35 to 47) to 2016 (ranging from an average of 22 to 31). Both small and medium size campus numbers varied significantly over the time frame, in the early years especially for small campuses' large campuses showed less variance (Figures 24-25).

Visual Limitations: The number of cases per 10,000 students with self-reported visual limitations for campuses of all sizes held somewhat steady overall from 2006 (ranging from an average of 7 to 12) to 2016 (ranging from an average of 8 to 10). However, all campus sizes showed some variation during that time period, especially for small campuses (Figures 26-27).

Campus-Specific Trends:

	Brain Injury	ADHD	Autism	Psych-ology	Commun-ication	Hearing	Learning D.	Mobility D.	Visual
Bakersfield								↘↘	↘↘
Channel Islands	↗↗	↗↗	↗↗	↘↗			vary	vary	vary
Chico				↗↗		↗↗		↘↘	
Dominguez Hills									
East Bay				→↗				↘↘	↘↘
Fresno								→↘	
Fullerton				↗				↘↘	

Humboldt			↗	↗↗↗			↘↘	↘↘↘	vary
Long Beach			↗	↗↗				↘↘	
Los Angeles			↗	↗↗				↘↘	
Maritime Academy			↗↗	↗↗			vary	→↗	
Monterey Bay	↘↘	↘↘		↗↗			↘	↘↘	vary↘
Northridge				↗		↘↘			
Pomona									
Sacramento							↘	vary	
San Bernardino				↗				↘	
San Diego				↗					
San Francisco							→↘	↘↘	→↘
San Jose					↗↗		↗↘	↘↘	
San Luis Obispo				↗↗			↘	vary	↘↘
San Marcos	↗↗	↗↗	↗↗	↗↗		vary		vary	
Sonoma	↗↗	↗↗	↗↗	↗↗	↘↘	vary	↘↘	↘↘	
Stanislaus				↗↗			↘	↘	↘↗

LEGEND:
↗=slight increase; ↗↗= increase; ↗↗↗=high increase; ↘=slight decline; ↘↘= decline; ↘↘↘=deep decline

This chart summarizes the changes over time for each campus in terms of the number of students self-identifying at least one disability. Several findings are revealed.

- Channel Islands and San Marcos had the most disabilities rising in frequency.
- Monterey Bay had the greatest number of declines for the most disabilities.
- Sonoma had the most movement, both rising and declining, for the most disabilities.
- Communications disorders experienced the least change over time.
- Psychological disorders increased the most in terms of the number of campuses.
- Mobility limitations decreased the most in terms of the number of campuses.

Recommendations:

Some data findings showed great variability from year to year following recommendations are suggested.

- Analyze the data yearly, in combination with prior year(s) data to identify trends or anomalies.
- Include in the yearly survey, questions about possible changes in the service, such as staff, budget, location or operating hours.
- In the study survey, ask students the reason for choosing their university: was size, location, reputation, disabilities services, university outreach, or counseling a factor?
- Identify high-service campuses, and interview them to find out their practices, which can then be shared with the other campuses.

Figure 1.

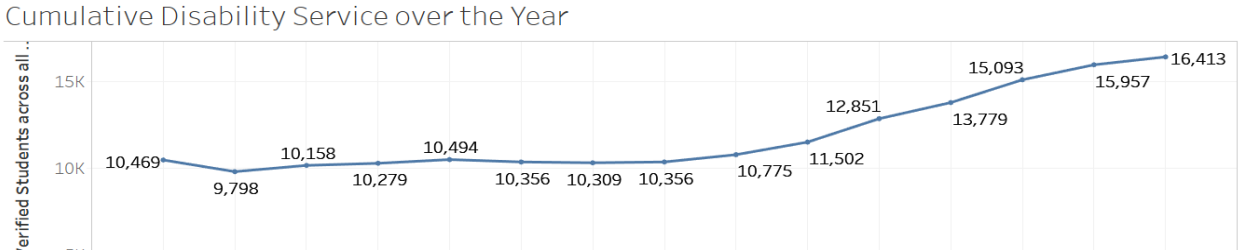


Figure 2.

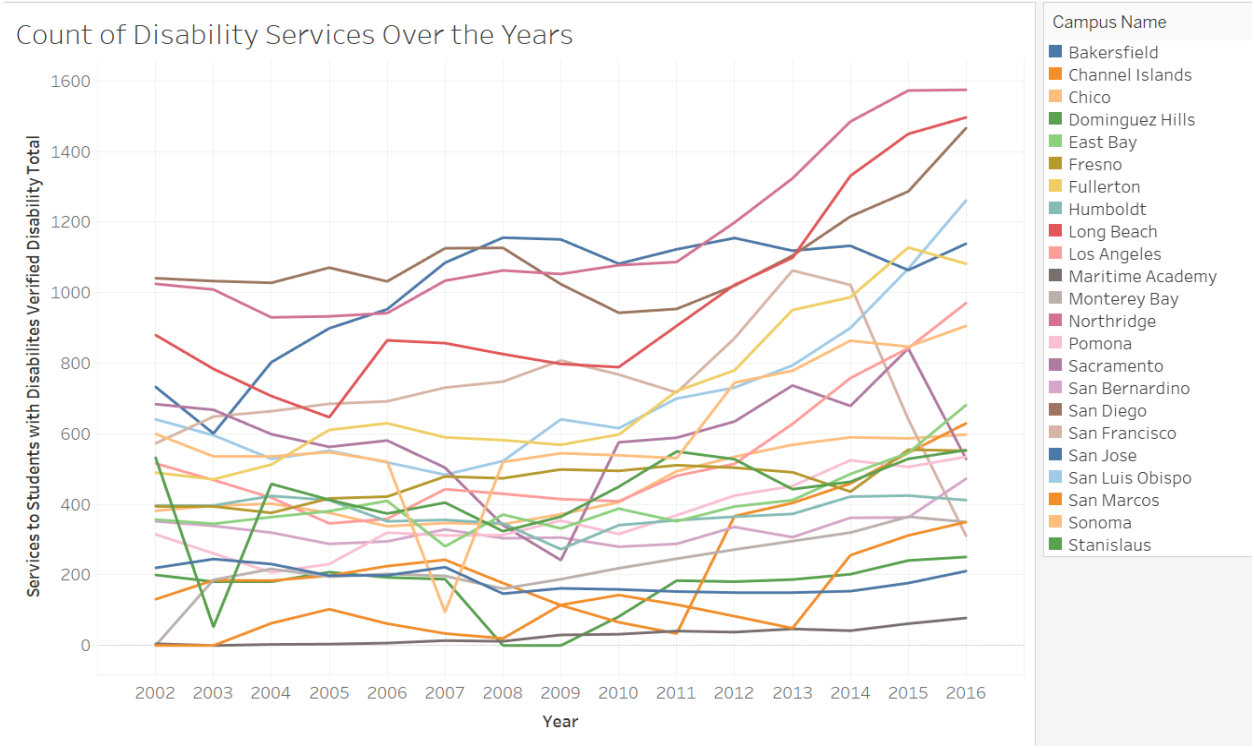
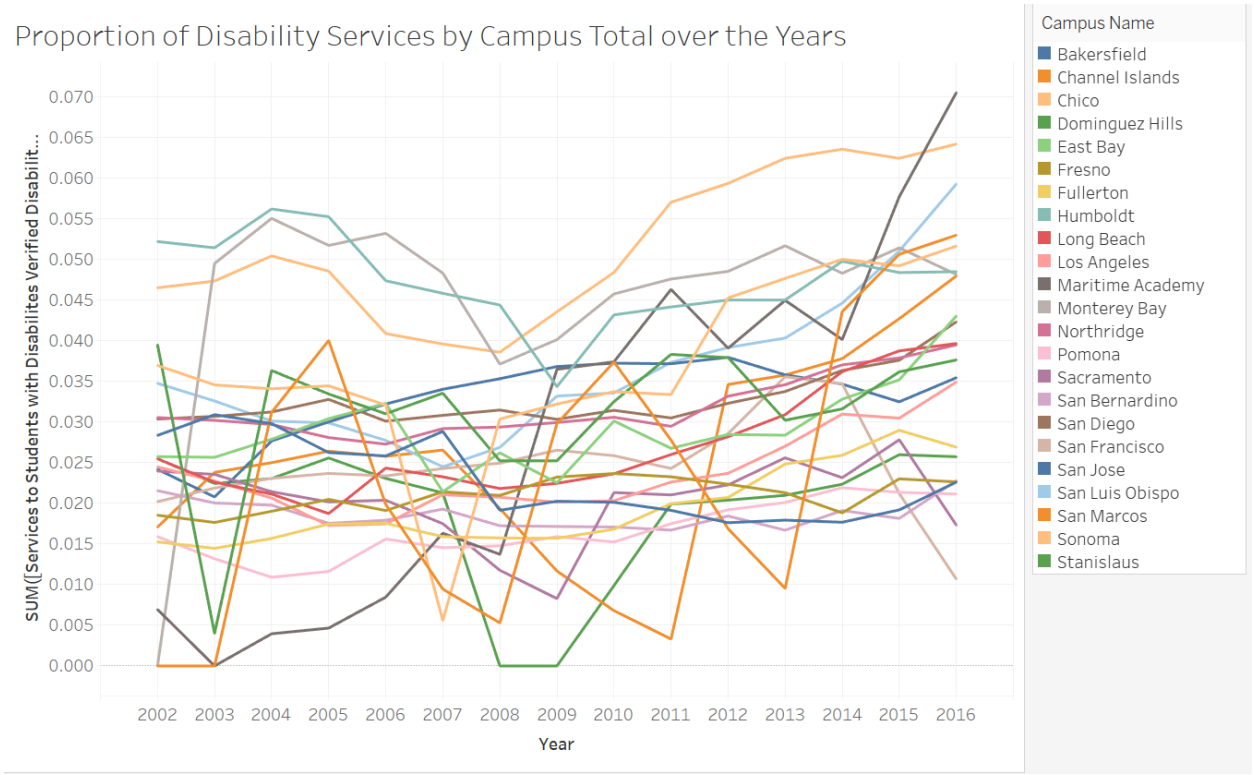


Figure 3.


Proportion of Disability Services by Campus Total over the Years
SUM([Services to Students with Disabilites Verified Disabilit...
0.070
0.065
0.060
0.055
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0.045
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0.030
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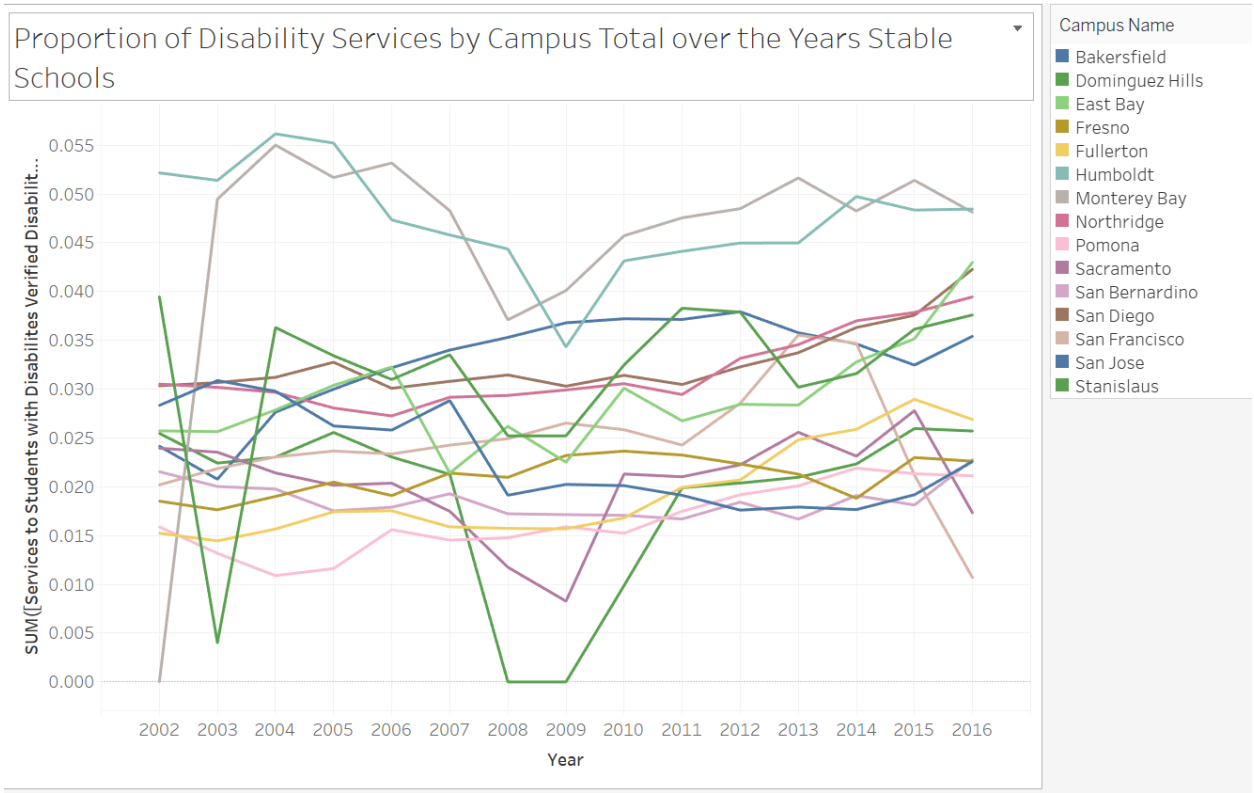
0.000
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
Year
Campus Name
Bakersfield
Channel Islands
Chico
Dominguez Hills
East Bay
Fresno
Fullerton
Humboldt
Long Beach
Los Angeles
Maritime Academy
Monterey Bay
Northridge
Pomona
Sacramento
San Bernardino
San Diego
San Francisco
San Jose
San Luis Obispo
San Marcos
Sonoma
Stanislaus

Figure 4.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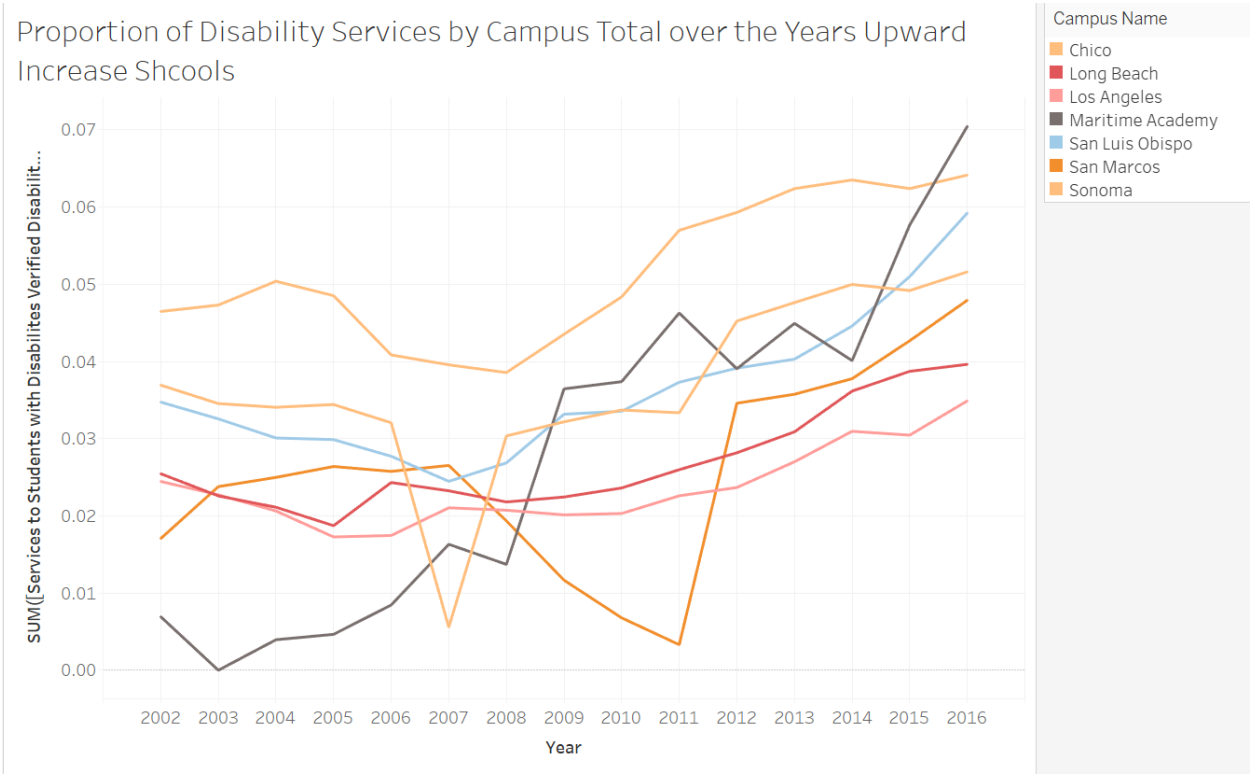
Year
Campus Name
Bakersfield
Dominguez Hills
East Bay
Fresno
Fullerton
Humboldt
Monterey Bay
Northridge
Pomona
Sacramento
San Bernardino
San Diego
San Francisco
San Jose
Stanislaus

Figure 5.


Proportion of Disability Services by Campus Total over the Years Upward Increase Shcools
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2002
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2004
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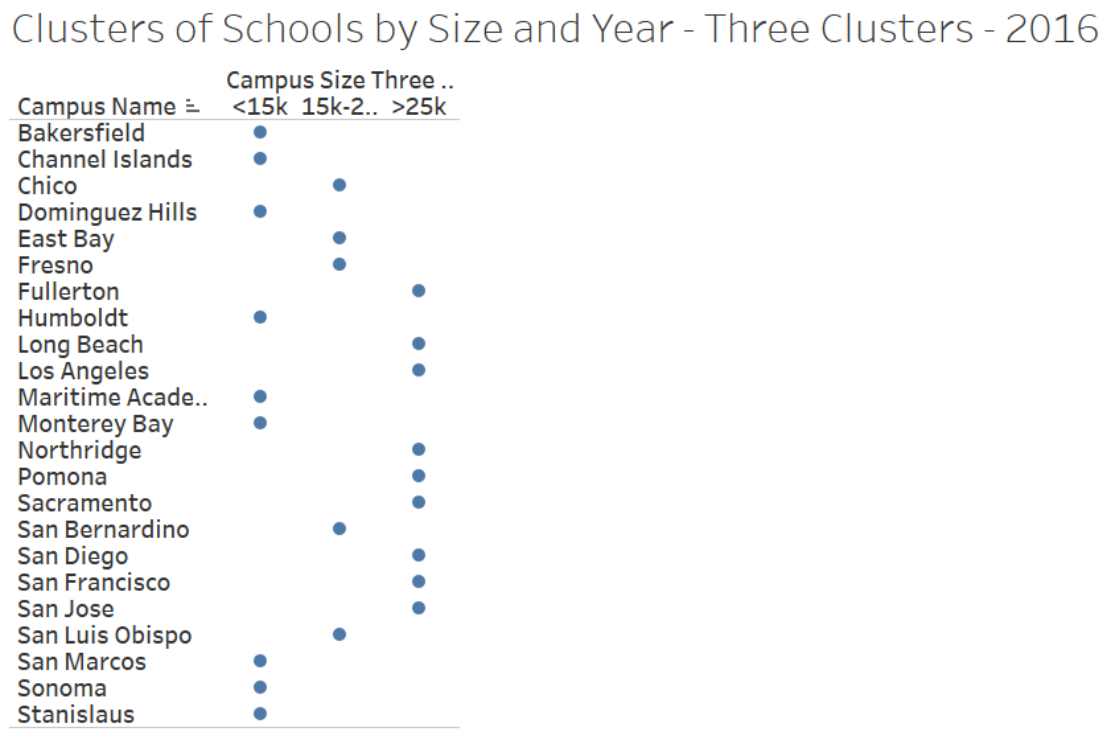
Year
Campus Name
Chico
Long Beach
Los Angeles
Maritime Academy
San Luis Obispo
San Marcos
Sonoma

Figure 6.



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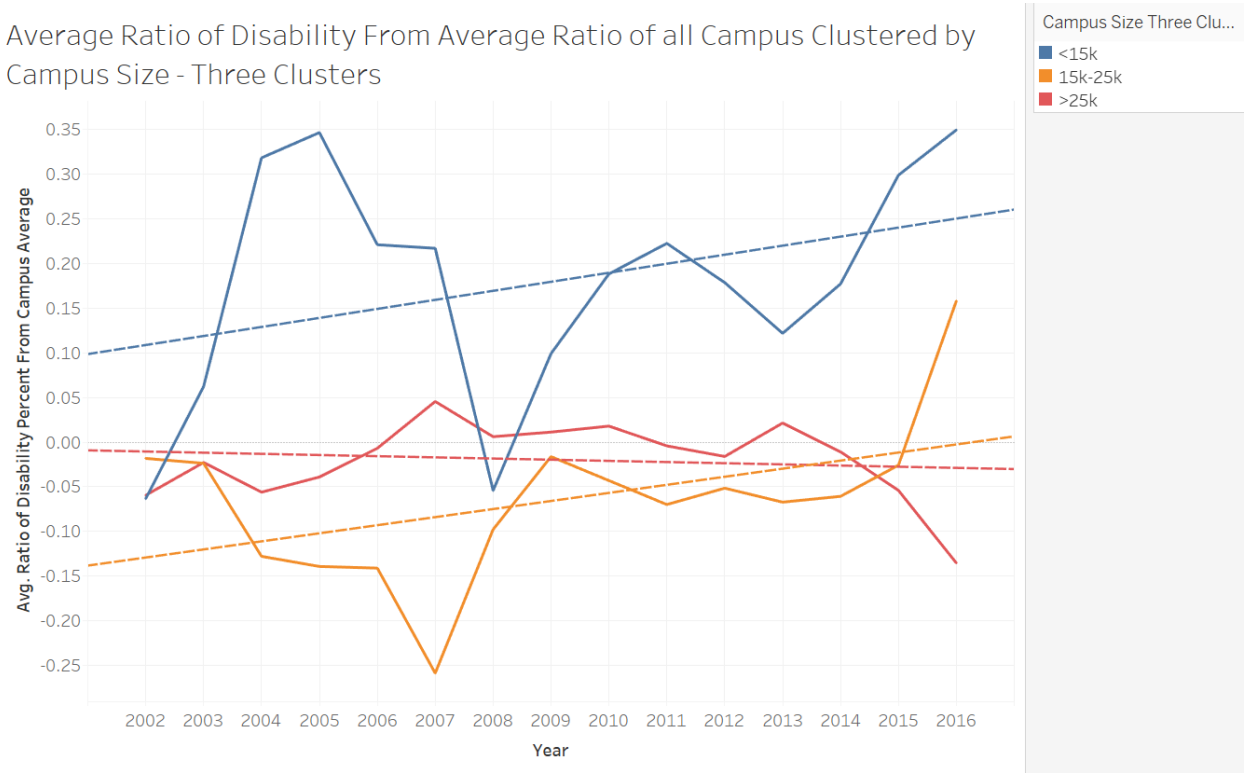

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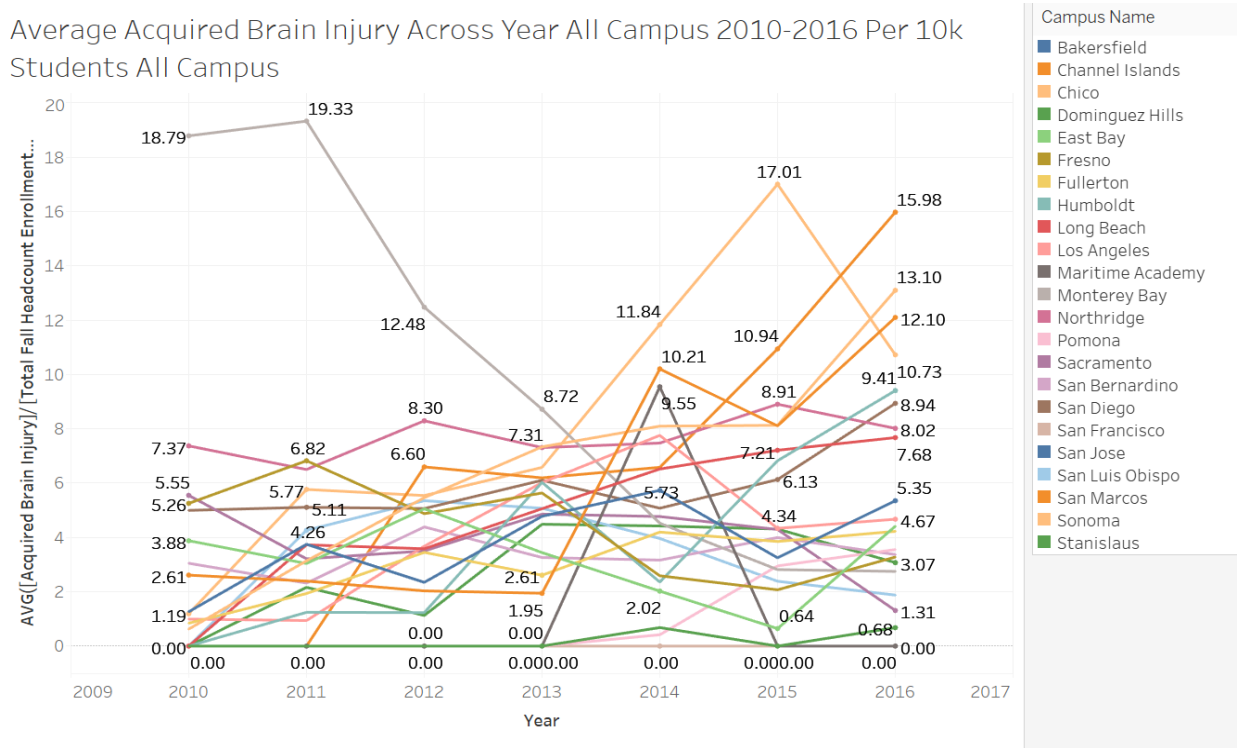

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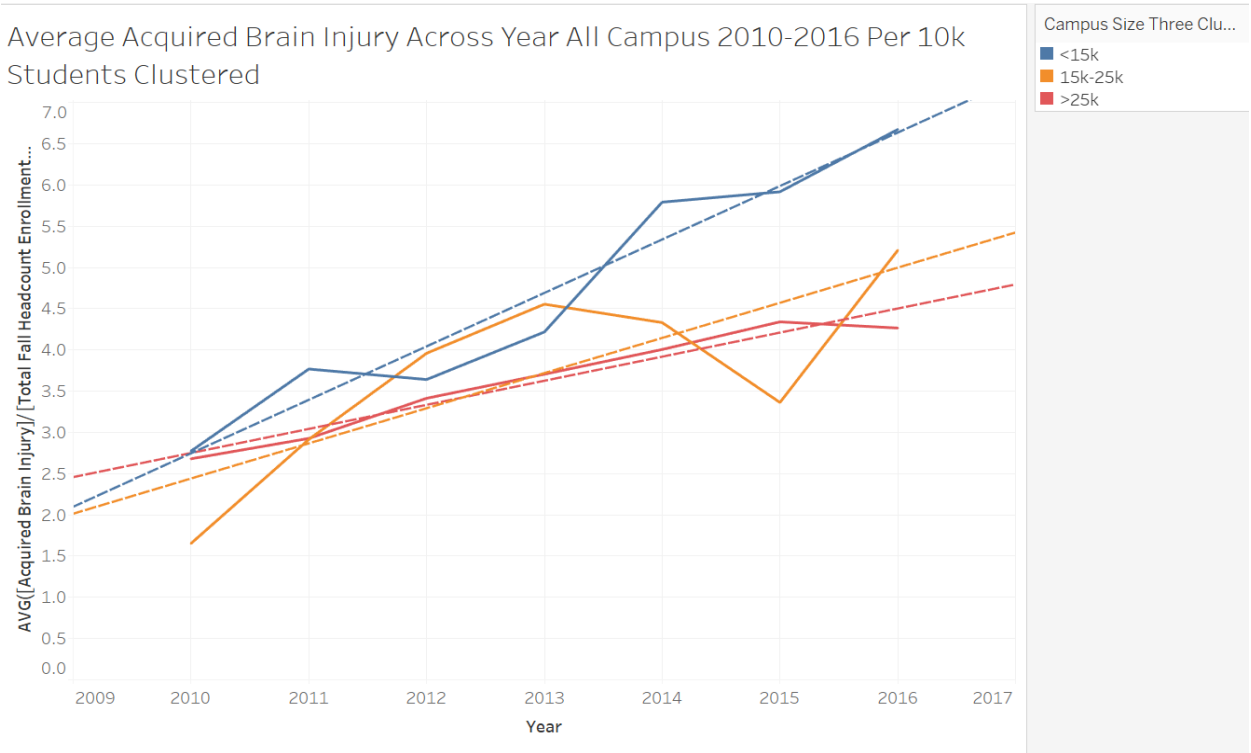

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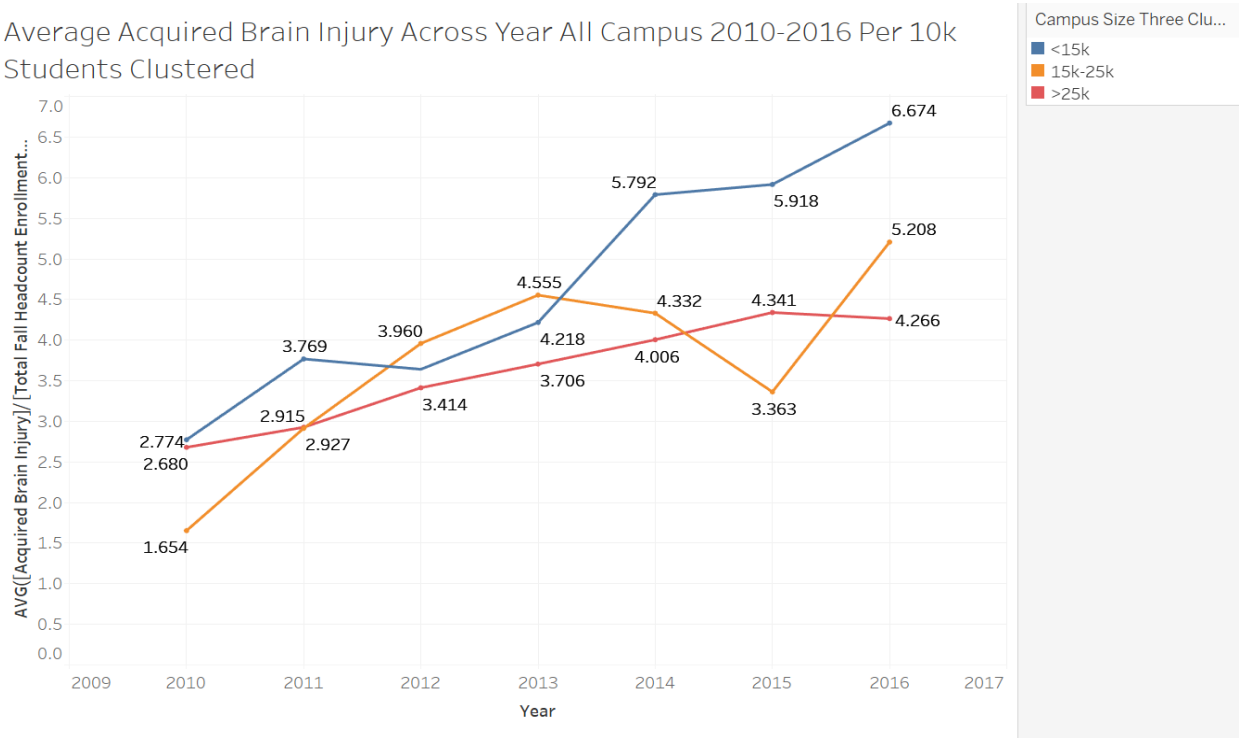

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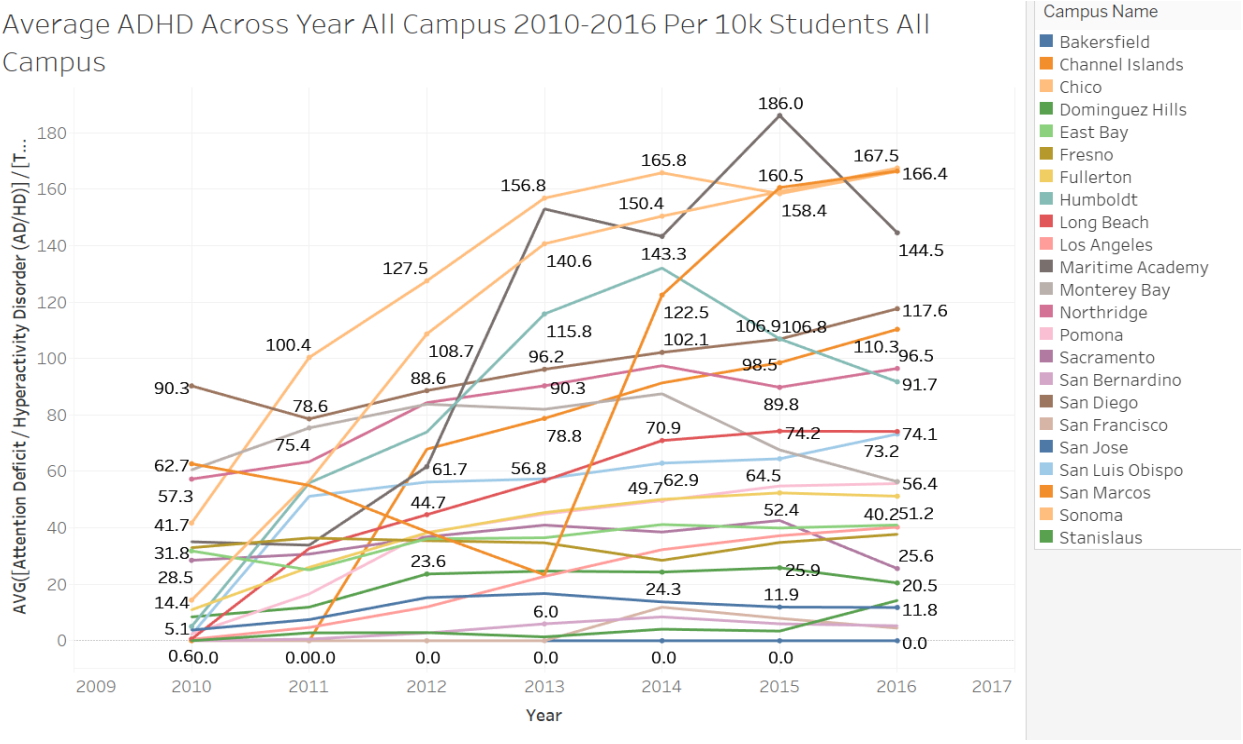

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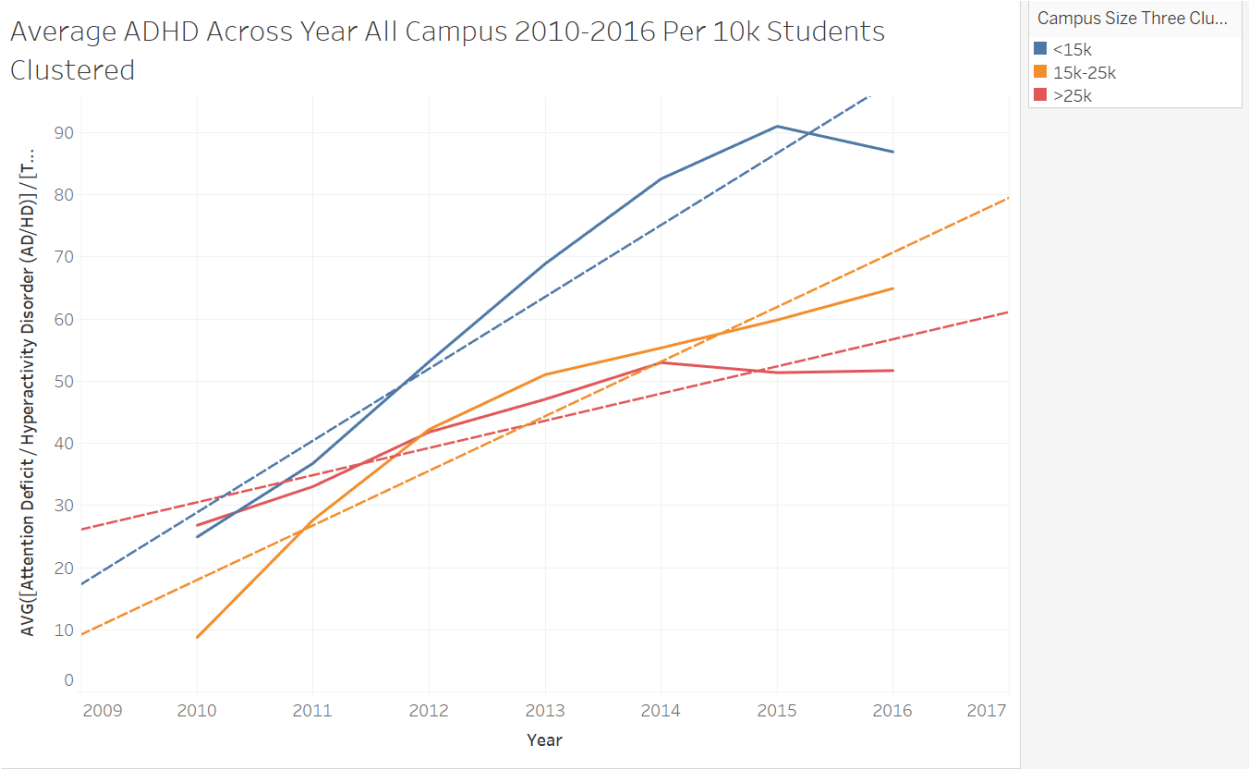

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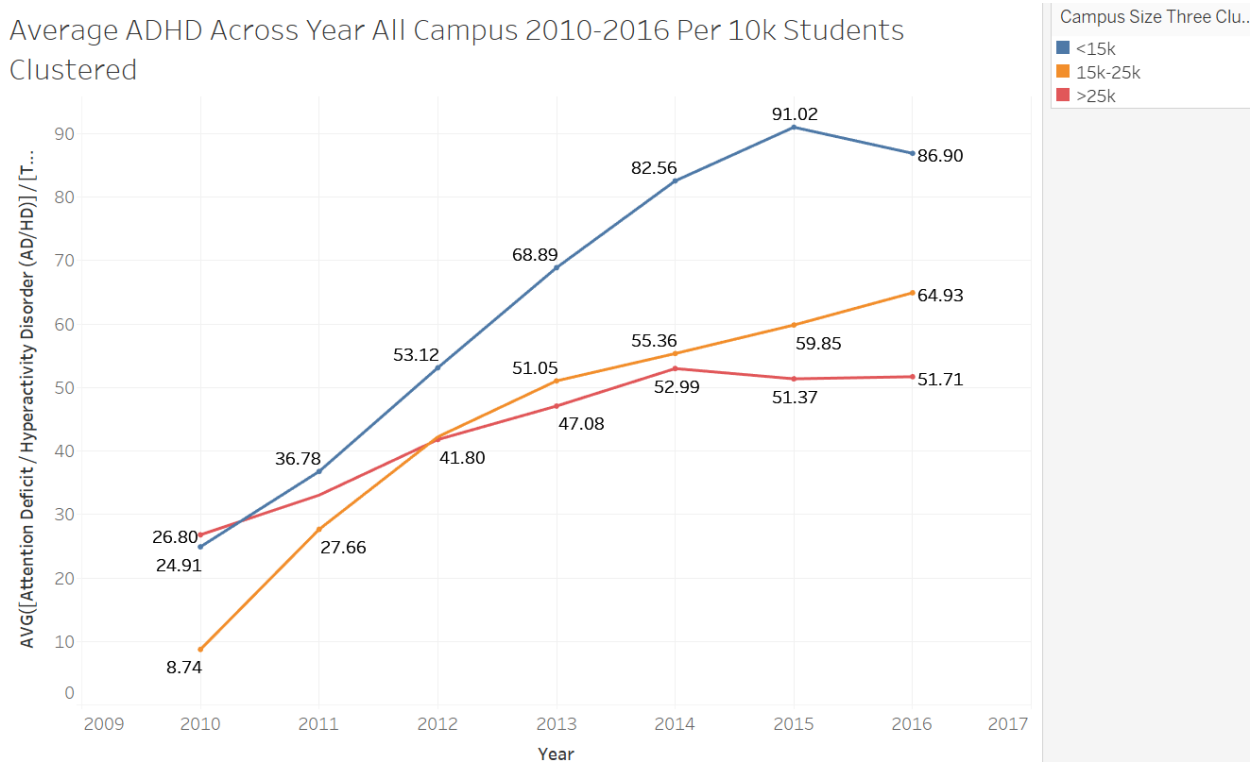

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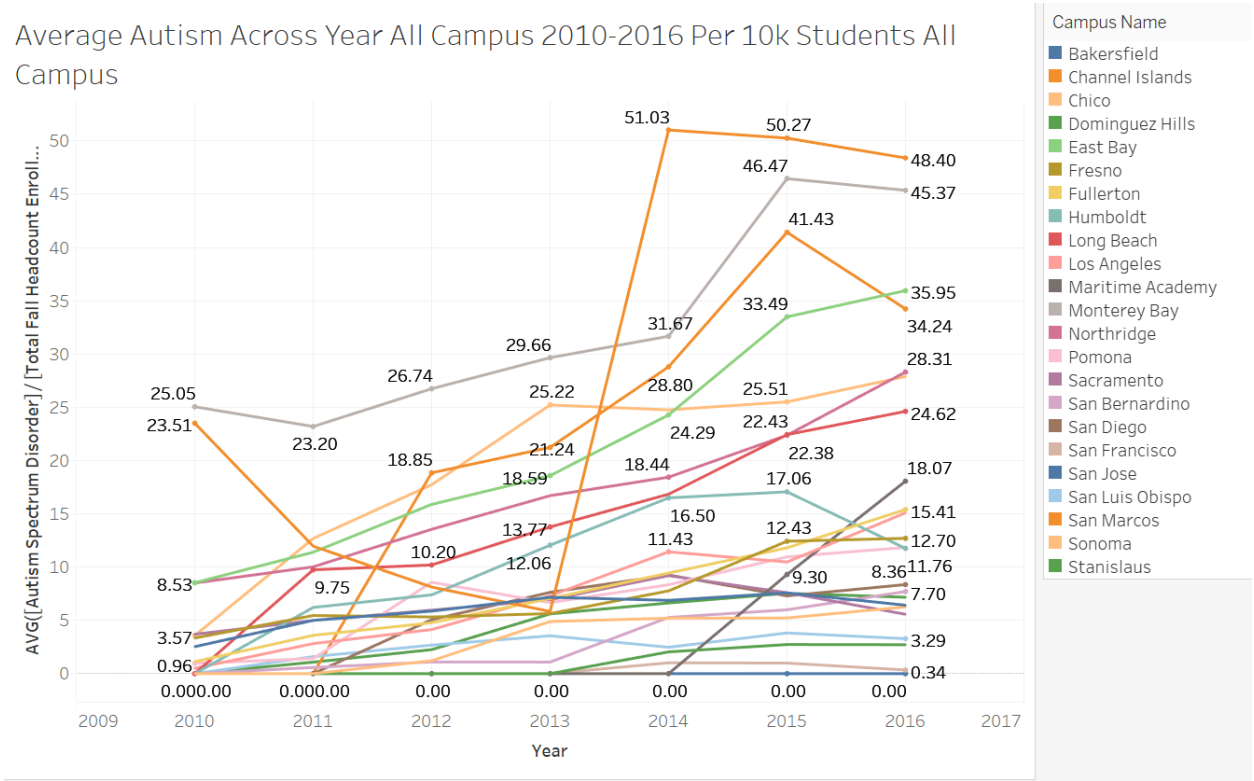

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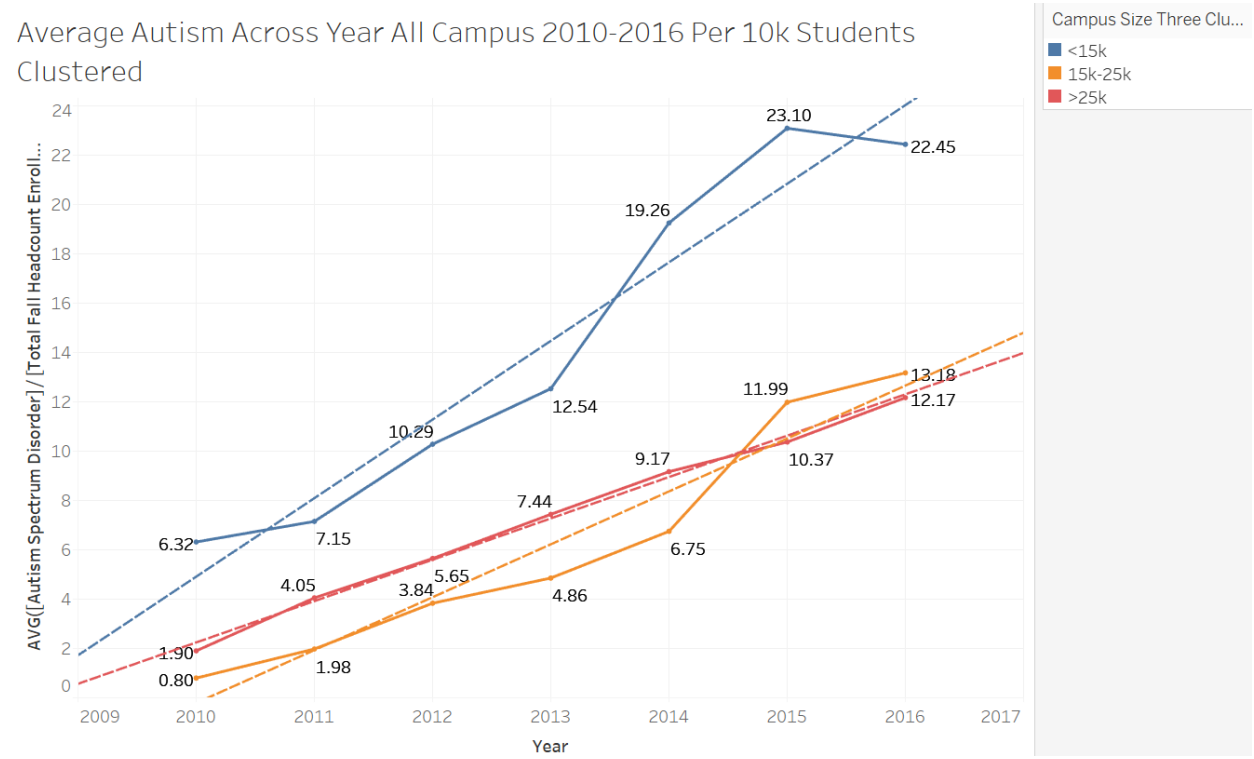

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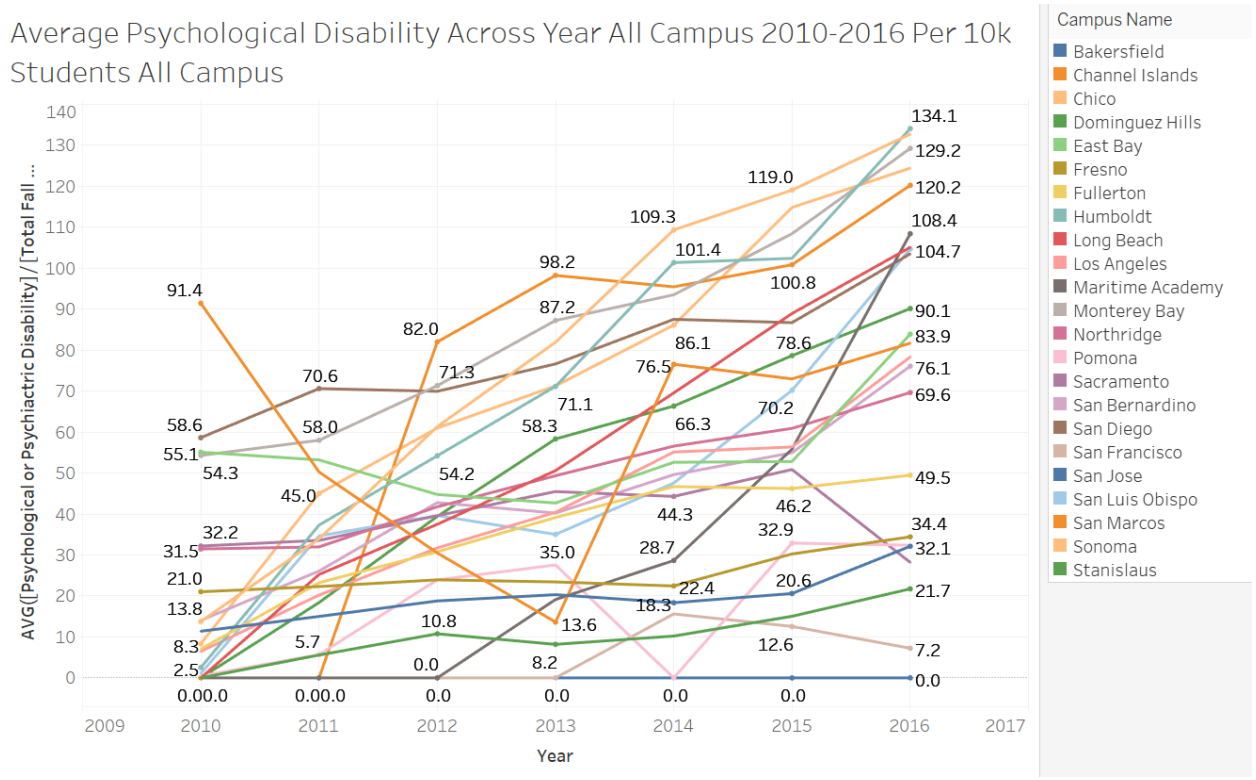

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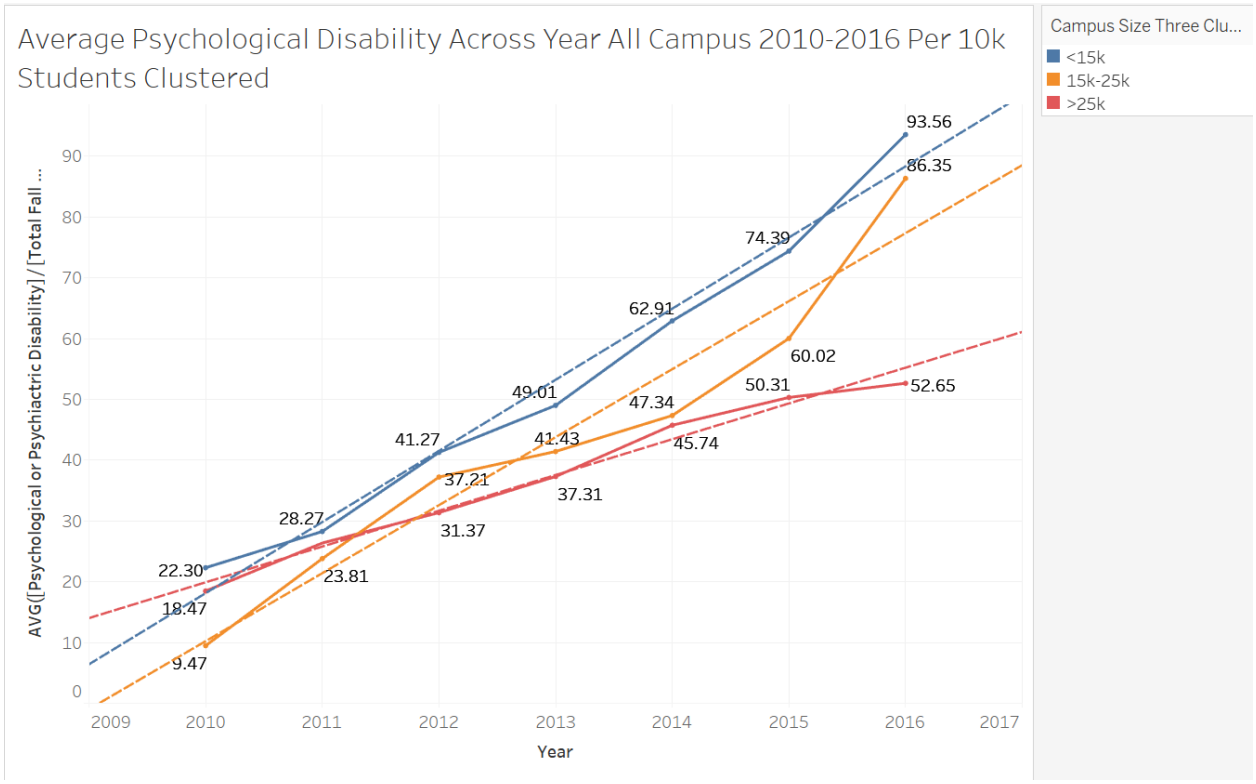

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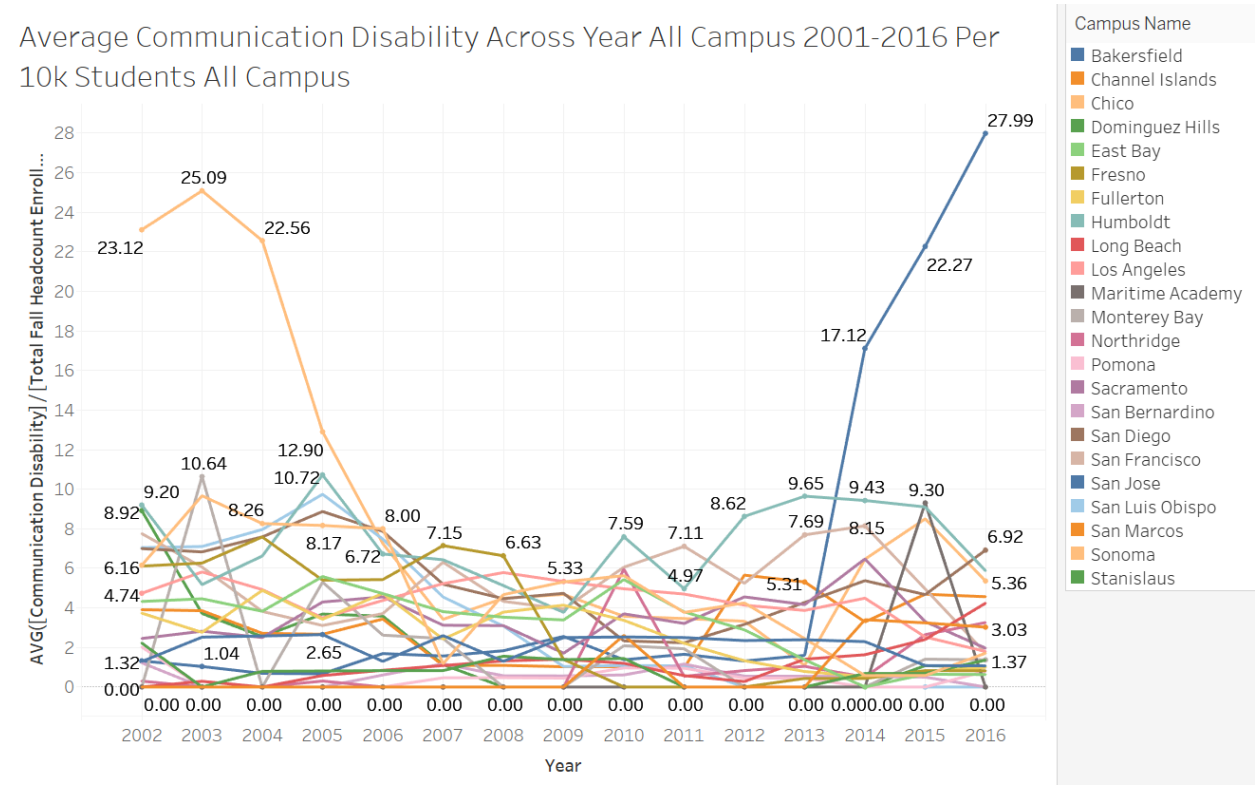

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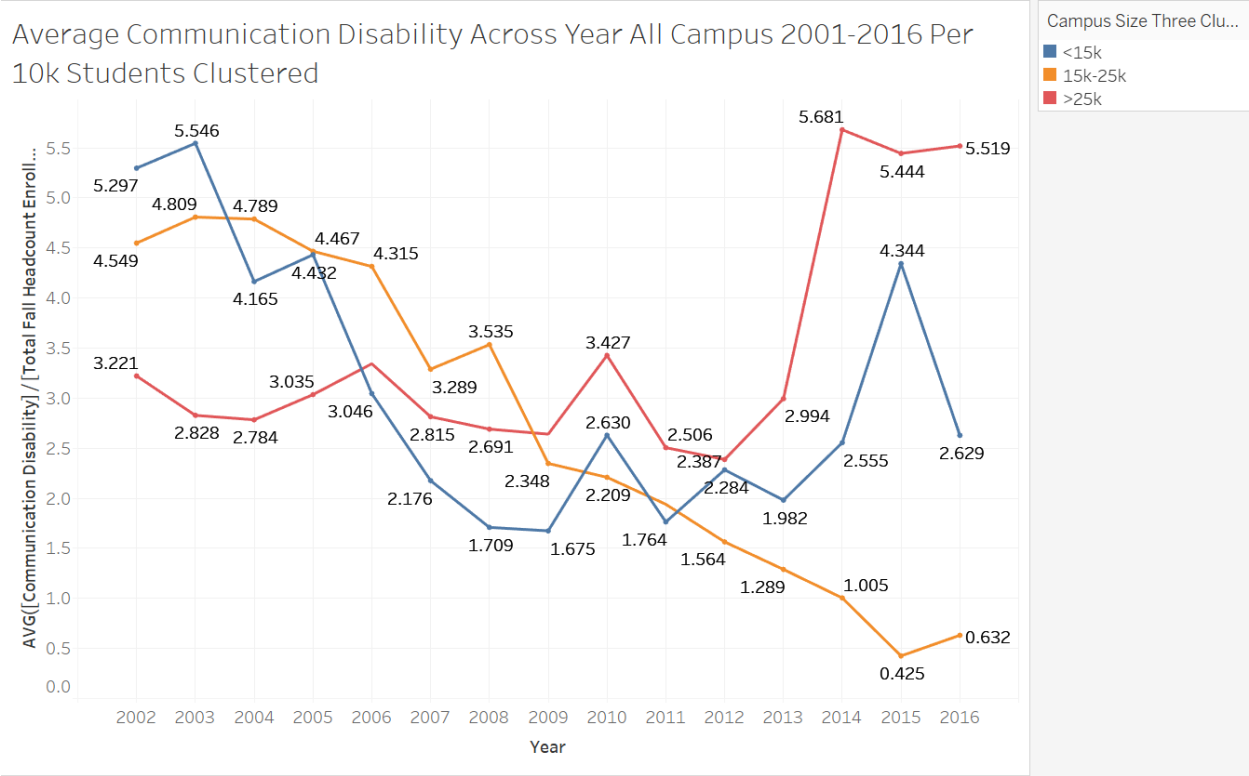

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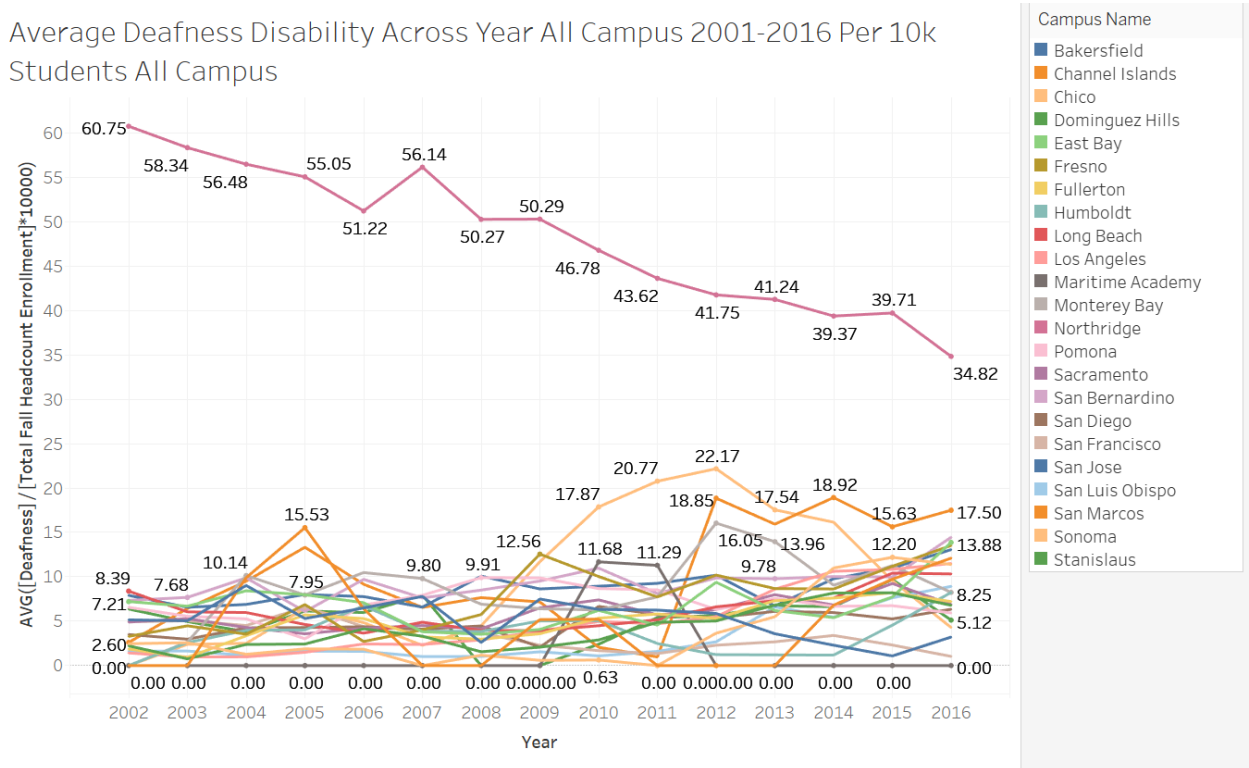

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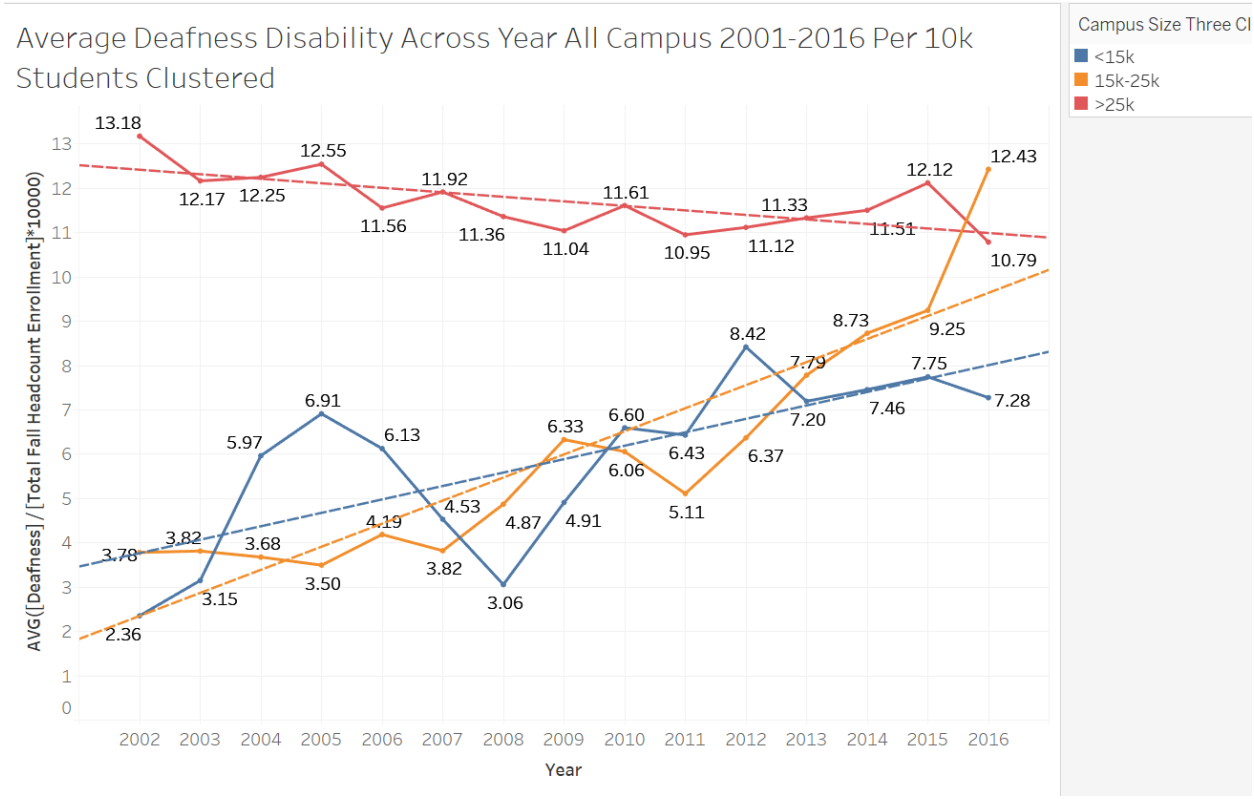

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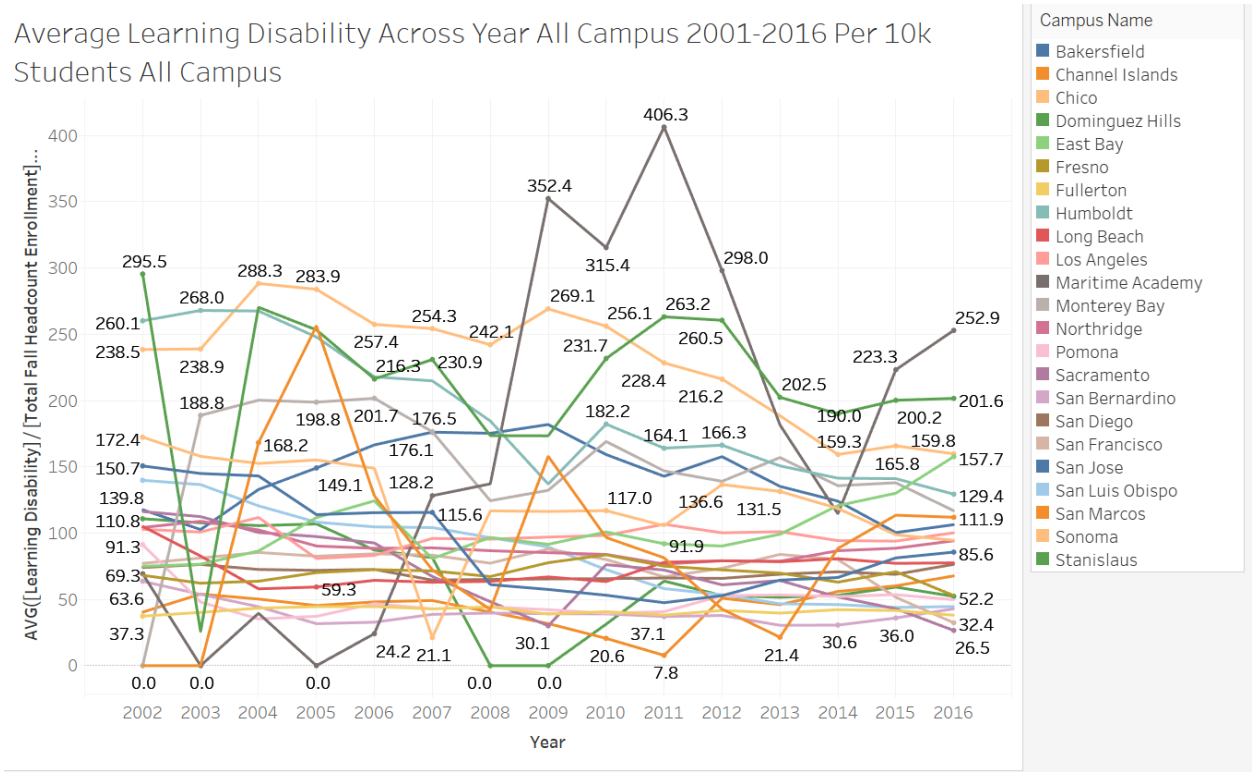

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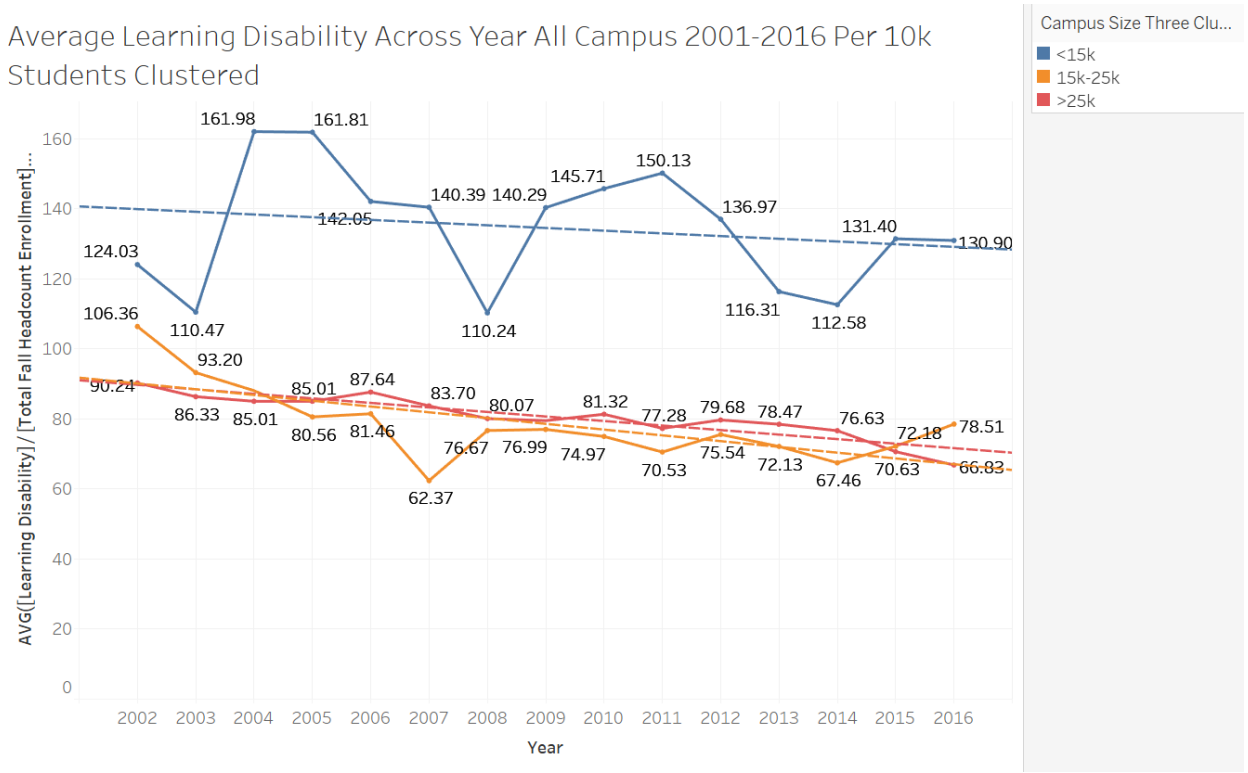

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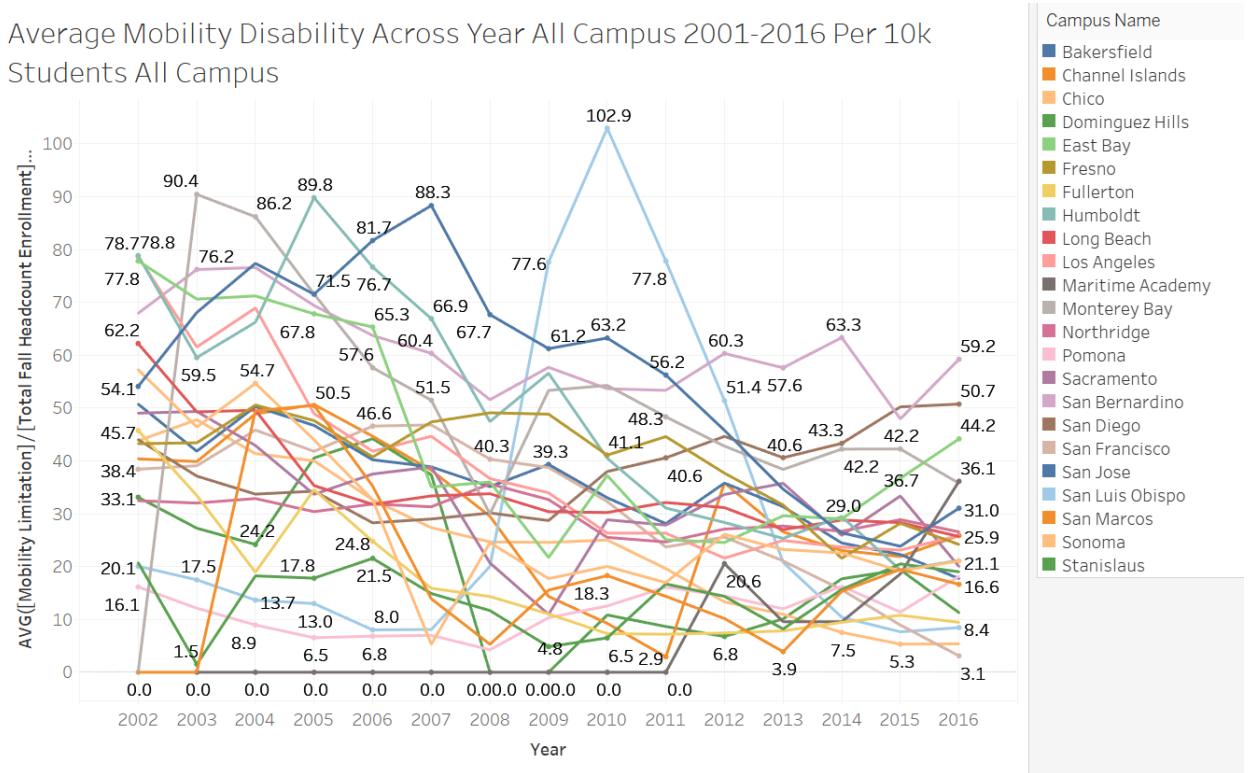

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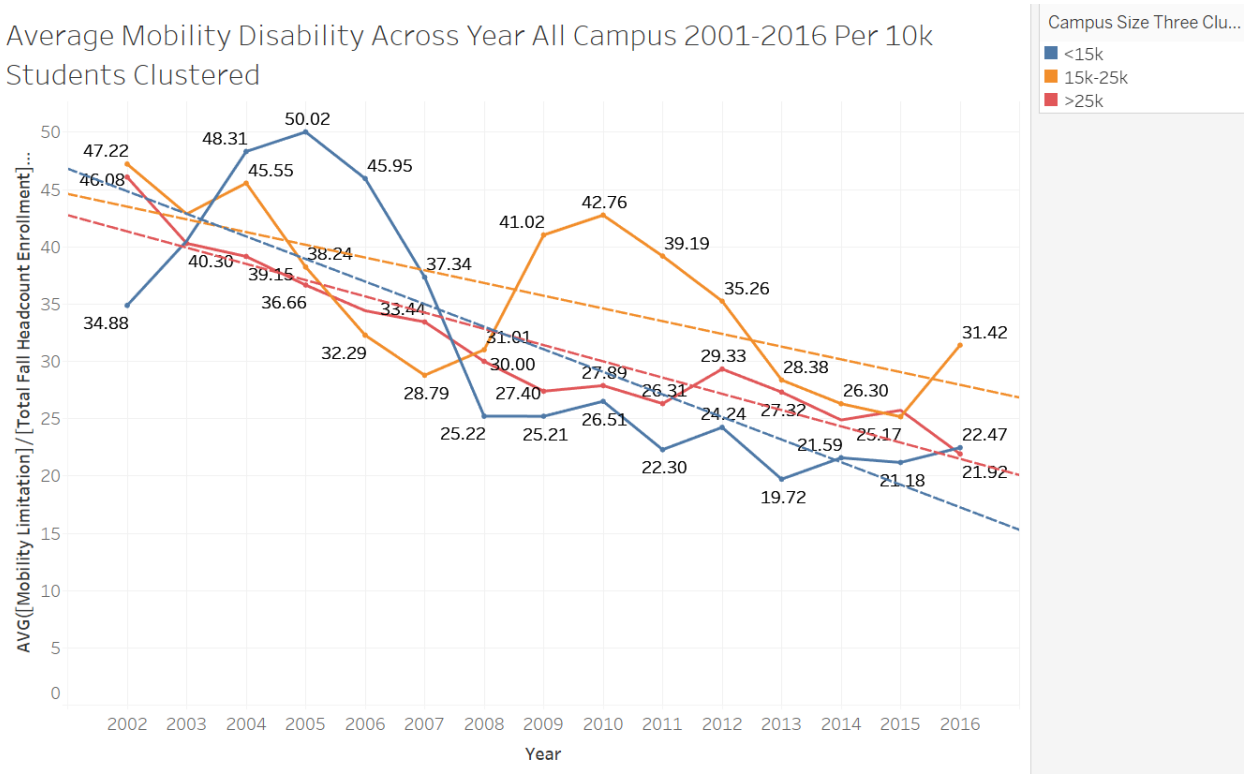

Average Mobility Disability Across Year All Campus 2001-2016 Per 10k Students Clustered
AVG([Mobility Limitation])/[Total Fall Headcount Enrollment]...
Year
Campus Size Three Clu...
<15k
15k-25k
>25k

Figure 26.

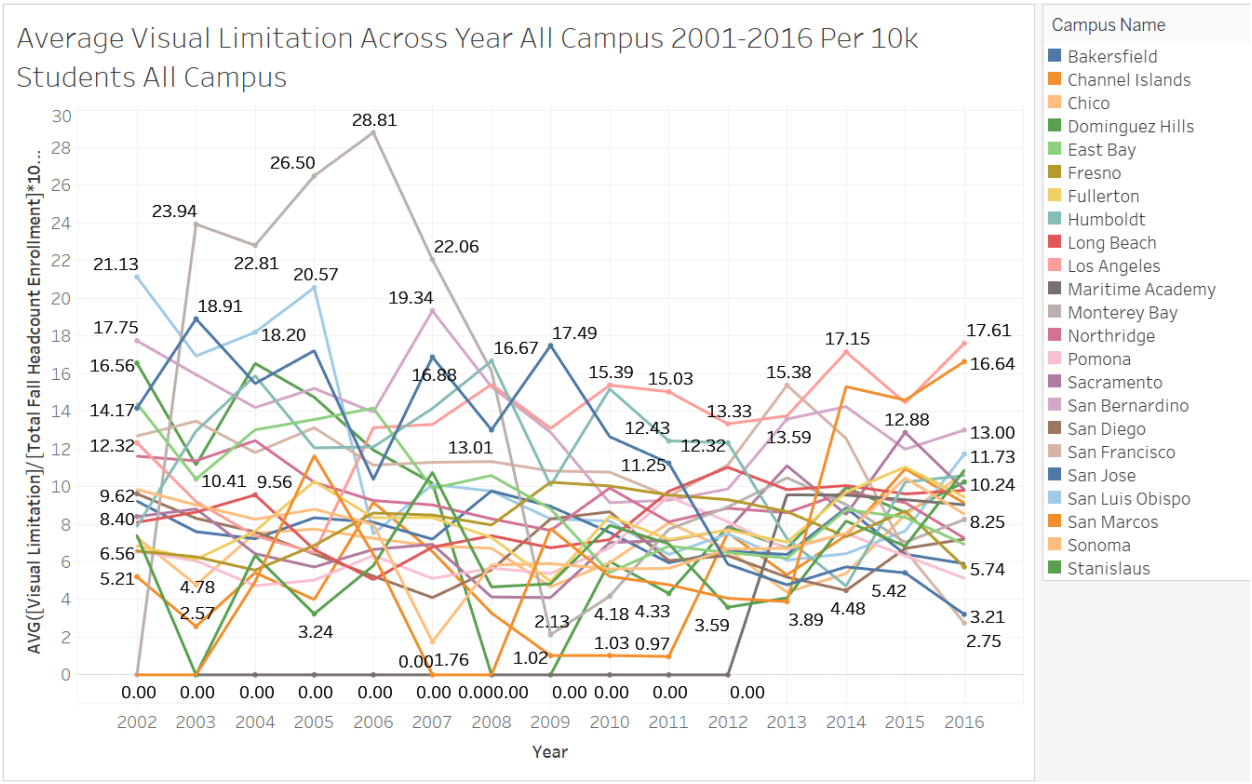
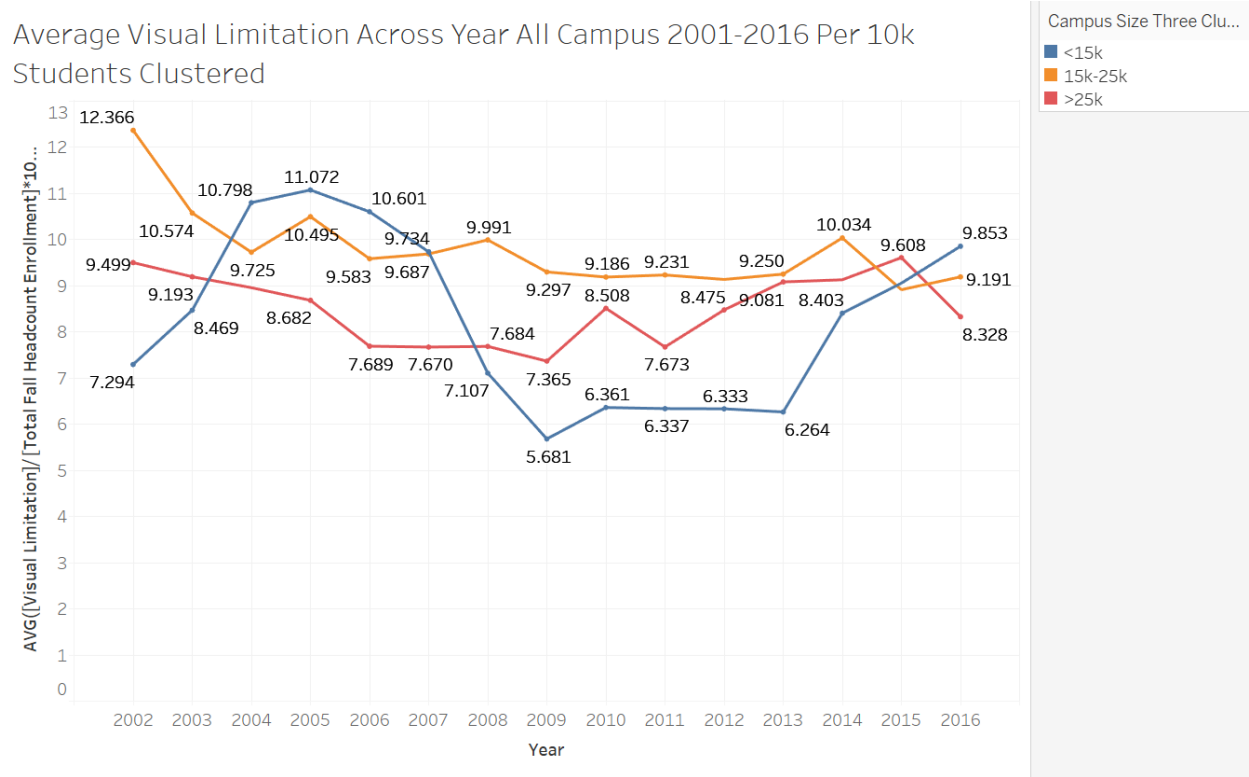

Average Visual Limitation Across Year All Campus 2001-2016 Per 10k Students All Campus
AVG([Visual Limitation])/[Total Fall Headcount Enrollment]*10...
Year
Campus Name
Bakersfield
Channel Islands
Chico
Dominguez Hills
East Bay
Fresno
Fullerton
Humboldt
Long Beach
Los Angeles
Maritime Academy
Monterey Bay
Northridge
Pomona
Sacramento
San Bernardino
San Diego
San Francisco
San Jose
San Luis Obispo
San Marcos
Sonoma
Stanislaus

Figure 27.


Average Visual Limitation Across Year All Campus 2001-2016 Per 10k Students Clustered
Campus Size Three Clu...
<15k
15k-25k
>25k
AVG([Visual Limitation]/[Total Fall Headcount Enrollment]*10...
Year
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
12.366
10.574
9.725
10.495
9.583
9.687
9.991
9.297
9.186
9.231
9.250
10.034
9.608
9.191
9.499
9.193
8.682
7.689
7.670
7.684
7.365
8.508
7.673
8.475
9.081
8.403
8.328
7.294
8.469
10.798
11.072
10.601
9.734
7.107
5.681
6.361
6.337
6.333
6.264
9.853