

# Dreams Deferred: The Economic Cost of Learning Loss in Wisconsin

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February 2021

The Wisconsin Department of Public Instruction (DPI) recently released a report that detailed school district responses to arrival of the COVID-19 pandemic in the spring of 2020. The report includes key information on the extent to which school districts were able to complete their curriculum during the spring 2020 semester. This is among the first statewide data made publicly available to help determine exactly how much learning may have been lost due to school closures.

Using common methods from education research, we attempt to estimate the lifelong earnings cost of this lost learning. It is difficult for students and schools to make up for lost learning and this can have long-term spillover effects on the earnings of those who are subjected to long periods out of school.

## **Key Takeaways**

Schools failed to complete more than 10% of curriculum on average. Averaging across all districts, about 12.5% of curriculum went incomplete during the 2020 spring semester. Larger districts completed marginally less curriculum on average.

The lifetime cost of spring 2020 school closures tops \$7 billion. From just the earliest portion of the pandemic, this report estimates that those in school will lose \$7 billion in lifetime earnings as a result of learning lost during the pandemic.

**Curriculum completion varies across districts.** Some districts report completing 100% of curriculum, while others report completing as little as 61% of curriculum.

**Districts with more low-income students completed less curriculum.** A district with 100% low-income students would be expected to complete 7% less curriculum than a district with no low-income students.

**Policymakers should work to get students back for in-person learning.** The cost to lifetime earnings of the pandemic just in the spring of 2020 should open the eyes of those who do not see an urgent need to get children back into the classroom. Earnings costs will be borne not only by the individual, but also by the state through lost tax revenue and economic activity.

#### Introduction

The COVID-19 pandemic disrupted American life in fundamental ways. While the loss of life is first and foremost among the costs, the disruption to American schools and the loss of learning may prove to have far reaching consequences. Despite strong scientific evidence — including a recent CDC study in Wood County Wisconsin<sup>1</sup> — that it is safe for schools to open for in-person learning, every school in America has become a battleground in the debate between the educational needs of children and the interests of teachers' unions.

Now, recent data from the Wisconsin Department of Public Instruction (DPI) offers a window into what Wisconsin can expect to learn once a full accounting of how COVID-19 school closures affected student learning and curriculum completion. As required by Act 185, DPI produced a report<sup>2</sup> that surveyed Wisconsin school districts on their experiences during the pandemic. Among the key questions was one that required districts to estimate the extent to which they were able to complete their curriculum in the 2020 spring semester. Disturbingly, many districts failed to complete significant portions of their curriculum.

We know from existing education research that lost learning is difficult to make up. It can have long-term consequences for individuals on their ability to achieve life goals and is correlated with the amount of money individuals can expect to make in their lifetime. Across the world, the average economic return on a year of school is 9% per year. In this study, we take advantage of the recently-released DPI report to estimate the economic consequences of learning loss during the early portion of the pandemic.

# Background

The report produced by DPI, as required by Act 185, includes a wealth of information about education in Wisconsin when the pandemic arrived in the 2020 spring semester. For example, districts were required to list their savings and additional costs of the pandemic, showing a net savings of almost \$40 million statewide<sup>3</sup>, primarily in reduced personnel costs and transportation.

Another set of questions asked for districts to estimate, by grade level, the share of their curriculum they were able to complete. This question is critical because many complaints from parents early on in the pandemic were related to the notion that new learning had essentially been frozen as schools attempted to adjust to the "new normal" of virtual education. A WILL survey<sup>4</sup> of parents conducted in April 2020 found that 16.7% of families reported that teachers taught no new material, while 44% reported a mix of new and old material. Time spent on education also declined dramatically in the spring, with 40% of parents reporting that their child was spending 10 hours or less on school work, and 80% reporting less than 21 hours.

Because DPI's survey was conducted during the 2020 spring semester, districts were instructed to use 75% as a floor on the amount of curriculum that was completed (however, note that a few districts did report a lower percentage). For this study, we averaged those responses across grade levels kindergarten through 12<sup>th</sup> grade to get an estimate of the average share of curriculum completed across the district.

## **Methods**

The methodology we apply is from Hanushek and Woesmman (2020)<sup>5</sup>, which equates three years of schooling to one standard deviation in test scores. So, for example, in Adams-Friendship School District, which completed 85% of its curriculum, we would calculate the share of learning loss in standard deviations as:

$$\sigma loss = (1-.85)*.333 = .0495$$

This means that about 5% of a standard deviation of learning loss would be expected in Adams-Friendship. We combine this with data on earnings in Wisconsin, and the cost to lifetime

earnings of the recent learning loss in standard deviations. For wages, we use the average wage for the state of Wisconsin calculated in May 2019 from the Bureau of Labor Statistics<sup>6</sup>. According to this data, the average annual wage in Wisconsin is \$48,850. Similar to the calculation of the economic benefit of school choice in DeAngelis and Flanders (2018)<sup>7</sup>, we assume that the average Wisconsinite will spend 46 years in the workforce. Further assumptions in this model are that, following Hanushek 2011<sup>8</sup>, a 1-standard-deviation-change in lifetime earnings is associated with a 13% increase in lifetime earnings and that approximately 70% of learning is retained from year-to-year in K12 education.

Lost Lifetime Earnings = 
$$(\$48,850*46)*\{(\sigma loss)*.13)*.70\}$$

Plugging our Adams-Friendship example into this would yield:

The result indicates that the average student in the district would be expected to lose \$10,122 in lifetime earnings due to the loss of learning as a result of school closures in the spring of 2020. In our final analysis, we multiply this per student amount by the enrollment in the district.

#### Results

In this section, we calculate the losses for all students in each district in the state based on the modeling assumptions above, and the share of curriculum that each district reports having completed. The sum total of the economic cost to the state is staggering. As a result of the school closures in the spring of 2020, it is estimated that Wisconsin students cumulatively lost \$7.7 billion in lifetime earnings. This not only represents a cost to the students individually, but potentially to the state in tax revenue and the downstream effects of lost spending. The table and figure below list the top ten districts in terms of monetary losses. A list of the estimated losses for all districts in the state is found in the Appendix to this study.

Obviously, this number trends closely with enrollment. However, many of these districts were the least able to continue instruction after school closure, exacerbating the problem further. For example, Milwaukee reports completing only 82% of its curriculum on average. Even worse, Racine reports only completing 75% of its curriculum for the year. Given that districts were told to assume that they had completed 75% by the time of school closure, this represents a total loss of new learning in Racine.

Table 1. Aggregate Cost of Learning Loss, Wisconsin Spring 2020

Milwaukee	-\$899,769,516
Racine Unified	-\$295,716,040
Kenosha	-\$280,165,179
Madison	
Metropolitan	-\$271,696,387
Appleton Area	-\$271,288,130
Green Bay Area	
Public	-\$268,013,514
Waukesha	-\$169,011,442
Eau Claire Area	-\$155,960,731
Janesville	-\$100,198,291
Sun Prairie Area	-\$97,222,405

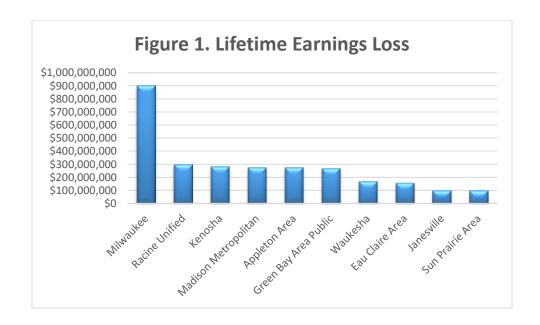


Table 2 reports the top 10 districts that reported the highest learning loss. While we must give these districts credit for their honest reporting here, the numbers should be quite concerning to taxpayers and families. The lifetime cost of lost learning in Randolph is estimated at \$26,732 per student—more than twice the state average.

Table 2. Curriculum Completion, Spring 2020 Wisconsin

District	Curriculum Completion	
Randolph		-39%
Lac du Flambeau #1		-32%
Fontana J8		-31%
Evansville		
Community		-30%
Gresham		-30%
Southwestern		
Wisconsin		-29%
North Lakeland		-28%
Norwalk-Ontario-		
Wilton		-26%
Dodgeville		-26%
Racine Unified		-25%

So what factors are predictive of more lost learning? In an attempt to answer that question, we use a regression analysis that includes three key factors in education research: the share of low-income students, the share of minority students, and the size of the district.

**Table 3. Predictors of Learning Loss** 

VARIABLES	Learning Loss Share
VARIABLES	Learning Loss Share
Enrollment (1000s)	-0.00102
	(0.000748)
Low Income Share	-0.0711***
	(0.0193)
Minority Share	0.00854
	(0.0252)
Constant	-0.0998***
	(0.0254)
Observations	421
	0.047
R-squared	s in paranthasas

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Of these variables, the share of low-income students is the only one that significantly predicts learning loss. Going from a hypothetical district with no low-income students to one with 100% low-income students would be expected to decrease curriculum completion by 7%.

This is disconcerting, as an extensive body of research has found that low income students already struggle to keep pace with their peers.

#### **Solutions**

The best solution to stem the tide of learning loss is to get students back into the classrooms. Studies have found that children are far less likely to spread the virus<sup>9</sup>, and that there is little evidence that reopening schools has led to extensive community spread. WILL's own research<sup>10</sup> has shown that reopening decisions had little to do with local COVID-19 rates, and more to do with local teachers' union power.

When schools reopen, there will have to be an intense focus on helping students "catch up." Wisconsin's choice and charter schools could offer traditional public schools effective models for doing so. A long-term study<sup>11</sup> of Wisconsin's parental choice programs by scholars at the University of Arkansas found that participation in one of the three choice programs increased academic growth among participants. WILL research<sup>12</sup> found higher growth rates in both charter schools and the state's voucher schools using data from the 2018-19 school year. All of this is achieved at a lower cost to taxpayers.

## Conclusion

The results here are based on the very conservative assumption that simply getting through curriculum means that as much learning is retained as would be the case during traditional periods of instruction. As was reported in the Appleton Post-Crescent<sup>13</sup>, many districts that reported completing curriculum still reported immense difficulties with home-based learning. Moreover, these only represent losses that occurred during the spring semester. The continued closure of schools into the fall semester, and spring in many districts, will only serve to exacerbate this problem.

The pandemic will no doubt have long-lasting effects on the state, national, and world economies. The numbers here show the potential cost to the state from even the earliest period of school closures. But we ought not exacerbate these problems by continuing to keep schools shut down when the scientific evidence suggests that it is safe to open them.

#### **Endnotes**

https://dpi.wi.gov/sites/default/files/imce/policybudget/pdf/Report on Virtual Instruction and School Ops.pdf

 $\frac{https://hanushek.stanford.edu/sites/default/files/publications/Hanushek\%202011\%20EER\%2030}{\%283\%29.pdf}$ 

<sup>&</sup>lt;sup>1</sup>Falk, Amy, Alison Benda<sup>,</sup> Peter Falk, Sarah Steffen Zachary Wallace Tracy Beth Høeg. 2021. COVID-19 Cases and Transmission in 17 K–12 Schools — Wood County, Wisconsin, August 31–November 29, 2020. *CDC Morbidity and Mortality Weekly Report*. https://www.cdc.gov/mmwr/volumes/70/wr/mm7004e3.htm

<sup>&</sup>lt;sup>2</sup> Faith, Erin, Justin Meyer, Dan Bush, Jennifer Kammerud and Robert Soldner. 2021. "Report on Virtual Instruction and School Opertaionts during the Public Health Emergency." *Wisconsin Department of Public Instruction*.

<sup>&</sup>lt;sup>3</sup> Flanders, Will and Jessica Holmberg. "School Closures Saved Schools Money. But Where Did it Go?" *Wisconsin Institute for Law & Liberty Blog*. <a href="https://willlawandliberty.medium.com/school-closures-saved-schools-money-but-where-did-it-go-98d7ace6aae4">https://willlawandliberty.medium.com/school-closures-saved-schools-money-but-where-did-it-go-98d7ace6aae4</a>

<sup>&</sup>lt;sup>4</sup> Flanders, Will. 2020. COVID 19 Survey Results. Wisconsin Institute for Law & Liberty. <a href="http://www.will-law.org/wp-content/uploads/2020/05/survey20presentation20final.pptx.pdf">http://www.will-law.org/wp-content/uploads/2020/05/survey20presentation20final.pptx.pdf</a>

<sup>&</sup>lt;sup>5</sup> Hanushek, Eric and Ludger Woessmann. 2020. "The Economic Impacts of Learning Loss." *OECD Working Paper*. <a href="https://www.oecd.org/education/The-economic-impacts-of-coronavirus-covid-19-learning-losses.pdf">https://www.oecd.org/education/The-economic-impacts-of-coronavirus-covid-19-learning-losses.pdf</a>

<sup>&</sup>lt;sup>6</sup> Bureau of Labor Statistics. 2020. "May 2019 State Occupational Employment and Wage Estimates Wisconsin." https://www.bls.gov/oes/current/oes\_wi.htm#00-0000

<sup>&</sup>lt;sup>7</sup> Flanders, Will and Corey DeAngelis. 2018. "Mississippi's Game Change: The Economic Impact of School Choice on Mississippi." Mississippi State University Institute for Market Studies. <a href="http://www.will-law.org/wp-content/uploads/2018/02/flanders\_and\_deangelis\_ims\_small.pdf">http://www.will-law.org/wp-content/uploads/2018/02/flanders\_and\_deangelis\_ims\_small.pdf</a>

<sup>&</sup>lt;sup>8</sup> Hanushek, Eric. 2011. "The Economic Value of Higher Teacher Quality." Economics of Education Review.

<sup>&</sup>lt;sup>9</sup> Munro, Alasdair and Damian Roland. 2020. "The Missing Link?" Children and the Transmission of SARS-COV-2. *Don't Forget the Bubbles*. <a href="https://dontforgetthebubbles.com/themissing-link-children-and-transmission-of-sars-cov-2/">https://dontforgetthebubbles.com/themissing-link-children-and-transmission-of-sars-cov-2/</a>

<sup>&</sup>lt;sup>10</sup> Flanders, Will. 2020. "Politics in the Pandemic: The Role of Unions in School Reopening Decisions." *Wisconsin Institute for Law & Liberty Policy Brief*. <a href="http://www.will-law.org/wp-content/uploads/2020/11/unions-reopening.pdf">http://www.will-law.org/wp-content/uploads/2020/11/unions-reopening.pdf</a>

Wolf, Patrick. 2012. "The Comprehensive Longitudinal Evaluation of the Milwaukee Parental Choice Program: Summary of Final Reports." *University of Arkansas School Choice Demonstration Project*. <a href="http://www.uaedreform.org/downloads/2012/02/report-36-the-comprehensive-longitudinal-evaluation-of-the-milwaukee-parental-choice-program.pdf">http://www.uaedreform.org/downloads/2012/02/report-36-the-comprehensive-longitudinal-evaluation-of-the-milwaukee-parental-choice-program.pdf</a>

<sup>&</sup>lt;sup>12</sup> Flanders, Will. 2019. "Apples to Apples III." Wisconsin Institute for Law & Liberty Policy Report. <a href="http://www.will-law.org/wp-content/uploads/2019/06/applestoapplesstudyiii.pdf">http://www.will-law.org/wp-content/uploads/2019/06/applestoapplesstudyiii.pdf</a>

<sup>&</sup>lt;sup>13</sup> West, Samantha. 2021. "Report paints bleak picture of K-12 learning last spring, with some Wisconsin school districts reporting no progress after shutdown." *Appleton Post-Crescent*. <a href="https://www.postcrescent.com/story/news/education/2021/01/15/wisconsin-schools-covid-19-shutdown-slowed-learning-dpi-report-shows/4098174001/">https://www.postcrescent.com/story/news/education/2021/01/15/wisconsin-schools-covid-19-shutdown-slowed-learning-dpi-report-shows/4098174001/</a>

# **Appendix. Learning Loss by District**

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Abbotsford	-8.46%	-\$5,710	747	-\$4,265,281
Adams-Friendship Area	-15.00%	-\$10,122	1435	-\$14,525,159
Albany	0.00%	\$0	338	\$0
Algoma	-10.00%	-\$6,748	704	-\$4,750,621
Alma	-10.77%	-\$7,267	241	-\$1,751,376
Alma Center	-11.15%	-\$7,527	598	-\$4,500,944
Almond-Bancroft	-11.15%	-\$7,527	377	-\$2,837,551
Altoona	-14.54%	-\$9,811	1702	-\$16,697,665
Amery	-25.00%	-\$16,870	1514	-\$25,541,336
Antigo Unified	-25.00%	-\$16,870	2125	-\$35,848,969
Appleton Area	-25.00%	-\$16,870	16081	-\$271,288,130
Arcadia	-20.00%	-\$13,496	1274	-\$17,194,009
Argyle	-5.00%	-\$3,374	288	-\$971,718
Arrowhead UHS	-6.25%	-\$4,218	2112	-\$8,907,415
Ashland	-16.92%	-\$11,420	2095	-\$23,924,402
Ashwaubenon	-13.15%	-\$8,876	3274	-\$29,060,907
Athens	-10.00%	-\$6,748	407	-\$2,746,453
Auburndale	-10.00%	-\$6,748	816	-\$5,506,402
Augusta	-15.00%	-\$10,122	627	-\$6,346,533
Baldwin-Woodville Area	-12.69%	-\$8,565	1714	-\$14,680,104
Bangor	-10.00%	-\$6,748	601	-\$4,055,573
Baraboo	-15.00%	-\$10,122	2916	-\$29,515,933
Barneveld	-17.31%	-\$11,679	452	-\$5,279,045
Barron Area	-12.50%	-\$8,435	1208	-\$10,189,542
Bayfield	-5.00%	-\$3,374	403	-\$1,359,730
Beaver Dam Unified	-10.00%	-\$6,748	3466	-\$23,388,711
Beecher-Dunbar-Pembine	-15.00%	-\$10,122	224	-\$2,267,342
Belleville	-20.38%	-\$13,756	915	-\$12,586,395
Belmont Community	-10.00%	-\$6,748	380	-\$2,564,256
Beloit	-5.00%	-\$3,374	6347	-\$21,414,909
Beloit Turner	-10.00%	-\$6,748	1595	-\$10,763,126
Benton	-7.54%	-\$5,087	206	-\$1,047,919
Berlin Area	-3.50%	-\$2,362	1567	-\$3,700,963
Big Foot UHS	-0.50%	-\$337	486	-\$163,977
Birchwood	-10.00%	-\$6,748	300	-\$2,024,412
Black Hawk	-15.00%	-\$10,122	375	-\$3,795,773
Black River Falls	-6.92%	-\$4,672	1714	-\$8,007,330
Blair-Taylor	-18.85%	-\$12,717	644	-\$8,190,046

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Bloomer	-20.00%	-\$13,496	1298	-\$17,517,915
Bonduel	0.00%	\$0	736	\$0
Boscobel Area	-11.15%	-\$7,527	773	-\$5,818,109
Bowler	-20.00%	-\$13,496	352	-\$4,750,621
Boyceville Community	-13.00%	-\$8,772	722	-\$6,333,712
Brighton #1	-10.00%	-\$6,748	208	-\$1,403,593
Brillion	-5.92%	-\$3,997	956	-\$3,821,052
Bristol #1	-15.00%	-\$10,122	851	-\$8,613,875
Brodhead	-15.00%	-\$10,122	1018	-\$10,304,259
Brown Deer	-9.23%	-\$6,229	1552	-\$9,667,348
Bruce	-18.08%	-\$12,198	445	-\$5,428,280
Burlington Area	-10.00%	-\$6,748	3125	-\$21,087,629
Butternut	-10.00%	-\$6,748	179	-\$1,207,899
Cadott Community	-7.69%	-\$5,191	832	-\$4,318,746
Cambria-Friesland	0.00%	\$0	363	\$0
Cambridge	-9.62%	-\$6,489	928	-\$6,021,329
Cameron	-15.00%	-\$10,122	1132	-\$11,458,174
Campbellsport	-10.00%	-\$6,748	1321	-\$8,914,163
Cashton	-5.00%	-\$3,374	622	-\$2,098,641
Cassville	-10.00%	-\$6,748	204	-\$1,376,600
Cedar Grove-Belgium Area	-10.00%	-\$6,748	958	-\$6,464,624
Cedarburg	-21.85%	-\$14,742	3167	-\$46,687,518
Central/Westosha UHS	-10.00%	-\$6,748	1098	-\$7,409,349
Chequamegon	-10.00%	-\$6,748	719	-\$4,851,842
Chetek-Weyerhaeuser Area	-11.15%	-\$7,527	981	-\$7,383,655
Chilton	-10.38%	-\$7,008	1129	-\$7,911,559
Chippewa Falls Area Unified	-12.31%	-\$8,305	4987	-\$41,418,439
Clayton	-14.54%	-\$9,811	327	-\$3,208,071
Clear Lake	-15.00%	-\$10,122	601	-\$6,083,359
Clinton Community	-16.35%	-\$11,030	1147	-\$12,651,929
Clintonville	-21.92%	-\$14,794	1236	-\$18,285,116
Cochrane-Fountain City	-10.38%	-\$7,008	607	-\$4,253,602
Colby	-13.46%	-\$9,084	958	-\$8,702,378
Coleman	-20.00%	-\$13,496	727	-\$9,811,652
Colfax	-17.46%	-\$11,783	790	-\$9,308,663
Columbus	-10.62%	-\$7,163	1297	-\$9,290,807
Cornell	0.00%	\$0	403	\$0
Crandon	-5.00%	-\$3,374	847	-\$2,857,795
Crivitz	-15.00%	-\$10,122	786	-\$7,955,941
Cuba City	-9.92%	-\$6,696	653	-\$4,372,575

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Cudahy	-11.54%	-\$7,786	2296	-\$17,877,119
Cumberland	-18.85%	-\$12,717	1006	-\$12,793,767
D C Everest Area	-8.46%	-\$5,710	6017	-\$34,356,355
Darlington Community	-18.85%	-\$12,717	852	-\$10,835,278
De Forest Area	-5.00%	-\$3,374	3951	-\$13,330,756
De Pere	-10.92%	-\$7,371	4553	-\$33,559,878
De Soto Area	-12.92%	-\$8,721	508	-\$4,430,037
Deerfield Community	-10.38%	-\$7,008	761	-\$5,332,769
Delavan-Darien	-15.00%	-\$10,122	1976	-\$20,001,194
Denmark	-13.27%	-\$8,954	1575	-\$14,102,757
Dodgeland	-15.38%	-\$10,382	750	-\$7,786,202
Dodgeville	-25.69%	-\$17,337	1217	-\$21,099,464
Dover #1	-5.00%	-\$3,374	92	-\$310,410
Drummond Area	-10.00%	-\$6,748	349	-\$2,355,066
Durand-Arkansaw	-5.85%	-\$3,945	945	-\$3,728,033
East Troy Community	-19.85%	-\$13,392	1590	-\$21,293,704
Eau Claire Area	-20.00%	-\$13,496	11556	-\$155,960,731
Edgar	-3.46%	-\$2,336	601	-\$1,403,852
Edgerton	-10.00%	-\$6,748	1877	-\$12,666,074
Elcho	-20.00%	-\$13,496	273	-\$3,684,431
Eleva-Strum	-12.69%	-\$8,565	656	-\$5,618,523
Elk Mound Area	-10.00%	-\$6,748	1184	-\$7,989,681
Elkhart Lake-Glenbeulah	-9.62%	-\$6,489	458	-\$2,971,734
Elkhorn Area	0.00%	\$0	3567	\$0
Ellsworth Community	-15.00%	-\$10,122	1650	-\$16,701,402
Elmbrook	-10.00%	-\$6,748	7401	-\$49,942,254
Elmwood	-7.23%	-\$4,879	315	-\$1,536,996
Erin	-12.22%	-\$8,248	424	-\$3,496,985
Evansville Community	-30.00%	-\$20,244	1807	-\$36,581,132
Fall Creek	-15.00%	-\$10,122	835	-\$8,451,922
Fall River	-15.00%	-\$10,122	474	-\$4,797,857
Fennimore Community	0.00%	\$0	806	\$0
Flambeau	-17.08%	-\$11,524	537	-\$6,188,162
Florence County	-20.00%	-\$13,496	392	-\$5,290,464
Fond du Lac	-18.38%	-\$12,406	7050	-\$87,462,401
Fontana J8	-30.77%	-\$20,763	196	-\$4,069,588
Fort Atkinson	-25.00%	-\$16,870	2768	-\$46,696,446
Fox Point J2	-8.70%	-\$5,871	808	-\$4,743,603
Franklin Public	-15.00%	-\$10,122	4782	-\$48,403,700
Frederic	-15.23%	-\$10,278	440	-\$4,522,226

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student .	Enrollment	Total Earnings Loss
Freedom Area	-13.85%	-\$9,343	1577	-\$14,734,608
Galesville-Ettrick-	-18.46%	¢12.4F0	1426	\$17.764.007
Trempealeau		-\$12,458		-\$17,764,997
Geneva J4	-12.22%	-\$8,248	176	-\$1,451,579
Genoa City J2	-15.00%	-\$10,122	497	-\$5,030,665
Germantown	-11.92%	-\$8,046	3920	-\$31,539,307
Gibraltar Area	-11.65%	-\$7,864	551	-\$4,332,813
Gillett	-25.00%	-\$16,870	516	-\$8,704,973
Gilman	-20.00%	-\$13,496	311	-\$4,197,282
Gilmanton	-14.69%	-\$9,914	159	-\$1,576,394
Glendale-River Hills	-16.67%	-\$11,247	1038	-\$11,674,111
Glenwood City	-15.00%	-\$10,122	669	-\$6,771,659
Goodman-Armstrong Creek	-20.00%	-\$13,496	101	-\$1,363,104
Grafton	-6.62%	-\$4,464	2047	-\$9,137,990
Granton Area	-15.00%	-\$10,122	226	-\$2,287,586
Grantsburg	-6.15%	-\$4,153	1541	-\$6,399,219
Green Bay Area Public	-19.62%	-\$13,237	20248	-\$268,013,514
Green Lake	-12.00%	-\$8,098	309	-\$2,502,174
Greendale	-20.38%	-\$13,756	2741	-\$37,704,162
Greenfield	-10.00%	-\$6,748	3552	-\$23,969,043
Greenwood	-15.00%	-\$10,122	358	-\$3,623,698
Gresham	-30.00%	-\$20,244	270	-\$5,465,913
Hamilton	-5.54%	-\$3,737	4909	-\$18,346,782
Hartford J1	0.00%	\$0	1660	\$0
Hartford UHS	-5.00%	-\$3,374	1333	-\$4,497,570
Hartland-Lakeside J3	-15.00%	-\$10,122	1192	-\$12,065,498
Hayward Community	-13.46%	-\$9,084	2065	-\$18,758,257
Herman-Neosho-Rubicon	0.00%	\$0	330	\$0
Highland	-15.00%	-\$10,122	302	-\$3,056,863
Hilbert	-15.00%	-\$10,122	473	-\$4,787,735
Hillsboro	-21.54%	-\$14,534	561	-\$8,153,710
Holmen	-17.69%	-\$11,939	3916	-\$46,752,506
Holy Hill Area	-12.11%	-\$8,173	553	-\$4,519,463
Horicon	-10.00%	-\$6,748	718	-\$4,845,094
Hortonville Area	-5.00%	-\$3,374	4146	-\$13,988,690
Howards Grove	-3.85%	-\$2,595	906	-\$2,351,433
Howard-Suamico	-15.00%	-\$10,122	6101	-\$61,754,700
Hudson	0.00%	\$0	5609	\$0
Hurley	-10.00%	-\$6,748	563	-\$3,799,147
Hustisford	-6.08%	-\$4,101	388	-\$1,591,084

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Independence	-25.00%	-\$16,870	420	-\$7,085,443
Iola-Scandinavia	-10.00%	-\$6,748	638	-\$4,305,250
Iowa-Grant	-15.46%	-\$10,434	735	-\$7,668,630
Ithaca	-20.00%	-\$13,496	434	-\$5,857,300
Janesville	-15.00%	-\$10,122	9899	-\$100,198,291
Jefferson	-15.00%	-\$10,122	1821	-\$18,432,275
Johnson Creek	0.00%	\$0	646	\$0
Juda	-15.38%	-\$10,382	293	-\$3,041,809
Kaukauna Area	0.00%	\$0	3936	\$0
Kenosha	-20.00%	-\$13,496	20759	-\$280,165,179
Kettle Moraine	0.00%	\$0	3780	\$0
Kewaskum	-6.92%	-\$4,672	1827	-\$8,535,234
Kewaunee	-12.73%	-\$8,589	945	-\$8,116,811
Kickapoo Area	-12.85%	-\$8,669	505	-\$4,377,662
Kiel Area	0.00%	\$0	1190	\$0
Kimberly Area	-15.00%	-\$10,122	5231	-\$52,948,506
Kohler	-16.15%	-\$10,901	738	-\$8,044,703
La Crosse	-20.00%	-\$13,496	6449	-\$87,036,237
La Farge	-7.69%	-\$5,191	231	-\$1,199,075
Lac du Flambeau #1	-32.22%	-\$21,744	527	-\$11,458,924
Ladysmith	-14.62%	-\$9,863	803	-\$7,919,605
Lake Country	-2.70%	-\$1,822	533	-\$971,111
Lake Geneva J1	-10.00%	-\$6,748	1959	-\$13,219,413
Lake Geneva-Genoa City				
UHS	-10.00%	-\$6,748	1355	-\$9,143,596
Lake Holcombe	-25.00%	-\$16,870	310	-\$5,229,732
Lake Mills Area	-15.00%	-\$10,122	1615	-\$16,347,130
Lakeland UHS	-13.75%	-\$9,279	737	-\$6,838,296
Lancaster Community	-19.62%	-\$13,237	980	-\$12,971,812
Laona	-25.00%	-\$16,870	274	-\$4,622,408
Lena	-10.00%	-\$6,748	420	-\$2,834,177
Linn J4	-16.00%	-\$10,797	105	-\$1,133,671
Linn J6	-8.89%	-\$5,998	148	-\$887,742
Little Chute Area	-10.38%	-\$7,008	1611	-\$11,289,214
Lodi	-13.46%	-\$9,084	1516	-\$13,771,195
Lomira	-7.31%	-\$4,931	1088	-\$5,365,212
Loyal	-16.92%	-\$11,420	492	-\$5,618,523
Luck	0.00%	\$0	440	\$0
Luxemburg-Casco	-10.00%	-\$6,748	1925	-\$12,989,980
Madison Metropolitan	-15.00%	-\$10,122	26842	-\$271,696,387

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Manawa	-9.23%	-\$6,229	632	-\$3,936,703
Manitowoc	-19.23%	-\$12,977	4987	-\$64,716,311
Maple	-14.62%	-\$9,863	1324	-\$13,057,979
Maple Dale-Indian Hill	-12.22%	-\$8,248	457	-\$3,769,156
Marathon City	-6.92%	-\$4,672	734	-\$3,429,043
Marinette	-15.00%	-\$10,122	1996	-\$20,203,636
Marion	-17.69%	-\$11,939	434	-\$5,181,458
Markesan	-10.00%	-\$6,748	799	-\$5,391,685
Marshall	-15.00%	-\$10,122	1001	-\$10,132,184
Marshfield Unified	-10.00%	-\$6,748	4034	-\$27,221,599
Mauston	0.00%	\$0	1468	\$0
Mayville	-8.92%	-\$6,021	1068	-\$6,430,780
McFarland	-20.00%	-\$13,496	5076	-\$68,506,115
Medford Area Public	0.00%	\$0	2804	\$0
Mellen	-16.54%	-\$11,160	283	-\$3,158,343
Melrose-Mindoro	-15.23%	-\$10,278	782	-\$8,037,229
Menasha Joint	-15.00%	-\$10,122	3349	-\$33,898,785
Menominee Indian	-25.00%	-\$16,870	923	-\$15,571,105
Menomonee Falls	-8.15%	-\$5,502	3970	-\$21,843,929
Menomonie Area	-10.00%	-\$6,748	3406	-\$22,983,829
Mequon-Thiensville	-10.00%	-\$6,748	3717	-\$25,082,470
Mercer	-15.00%	-\$10,122	158	-\$1,599,286
Merrill Area	-23.46%	-\$15,832	3233	-\$51,184,672
Merton Community	-10.00%	-\$6,748	854	-\$5,762,827
Middleton-Cross Plains Area	-12.00%	-\$8,098	7534	-\$61,007,692
Milton	-7.69%	-\$5,191	3420	-\$17,752,539
Milwaukee	-17.85%	-\$12,048	74683	-\$899,769,516
Mineral Point Unified	-19.62%	-\$13,237	763	-\$10,099,482
Minocqua J1	-10.00%	-\$6,748	611	-\$4,123,053
Mishicot	-11.08%	-\$7,475	878	-\$6,562,834
Mondovi	-13.85%	-\$9,343	953	-\$8,904,300
Monona Grove	-13.46%	-\$9,084	3515	-\$31,929,915
Monroe	-10.69%	-\$7,215	2349	-\$16,948,536
Montello	-17.69%	-\$11,939	675	-\$8,058,719
Monticello	-25.00%	-\$16,870	333	-\$5,617,744
Mosinee	-15.00%	-\$10,122	1993	-\$20,173,269
Mount Horeb Area	-10.00%	-\$6,748	2520	-\$17,005,064
Mukwonago	-20.00%	-\$13,496	4503	-\$60,772,860
Muskego-Norway	-6.92%	-\$4,672	4854	-\$22,676,533
Necedah Area	-12.31%	-\$8,305	719	-\$5,971,497

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Neenah Joint	-10.00%	-\$6,748	6702	-\$45,225,373
Neillsville	-8.85%	-\$5,969	929	-\$5,545,592
Nekoosa	-10.00%	-\$6,748	1205	-\$8,131,390
New Auburn	-15.00%	-\$10,122	309	-\$3,127,717
New Berlin	-5.00%	-\$3,374	4362	-\$14,717,478
New Glarus	-3.85%	-\$2,595	1034	-\$2,683,644
New Holstein	-15.00%	-\$10,122	1018	-\$10,304,259
New Lisbon	-18.46%	-\$12,458	646	-\$8,047,818
New London	-3.46%	-\$2,336	2248	-\$5,251,014
New Richmond	-14.77%	-\$9,966	3539	-\$35,270,870
Niagara	-18.08%	-\$12,198	438	-\$5,342,891
Nicolet UHS	-10.00%	-\$6,748	1079	-\$7,281,137
Norris	0.00%	\$0	25	\$0
North Cape	-7.00%	-\$4,724	189	-\$892,766
North Crawford	-15.00%	-\$10,122	436	-\$4,413,219
North Fond du Lac	-10.00%	-\$6,748	1505	-\$10,155,802
North Lake	-7.78%	-\$5,248	325	-\$1,705,755
North Lakeland	-28.33%	-\$19,119	160	-\$3,059,112
Northern Ozaukee	-13.46%	-\$9,084	1065	-\$9,674,355
Northland Pines	-11.15%	-\$7,527	1310	-\$9,859,926
Northwood	-13.85%	-\$9,343	319	-\$2,980,558
Norwalk-Ontario-Wilton	-25.77%	-\$17,389	633	-\$11,007,353
Norway J7	0.00%	\$0	95	\$0
Oak Creek-Franklin Joint	-15.00%	-\$10,122	6472	-\$65,509,985
Oakfield	-15.00%	-\$10,122	551	-\$5,577,256
Oconomowoc Area	-16.92%	-\$11,420	5280	-\$60,296,344
Oconto Falls Public	-21.92%	-\$14,794	1648	-\$24,380,154
Oconto Unified	0.00%	\$0	981	\$0
Omro	-12.00%	-\$8,098	1118	-\$9,053,172
Onalaska	-15.77%	-\$10,641	3171	-\$33,743,061
Oostburg	-6.15%	-\$4,153	1015	-\$4,214,930
Oregon	-14.23%	-\$9,603	4108	-\$39,449,049
Osceola	-19.62%	-\$13,237	1672	-\$22,131,499
Oshkosh Area	-10.00%	-\$6,748	9747	-\$65,773,159
Osseo-Fairchild	-11.77%	-\$7,942	821	-\$6,520,321
Owen-Withee	-15.00%	-\$10,122	506	-\$5,121,763
Palmyra-Eagle Area	-9.08%	-\$6,125	647	-\$3,962,969
Pardeeville Area	-16.00%	-\$10,797	836	-\$9,026,180
Paris J1	-25.00%	-\$16,870	281	-\$4,740,499
Parkview	-3.00%	-\$2,024	775	-\$1,568,920

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Pecatonica Area	-5.77%	-\$3,893	386	-\$1,502,737
Pepin Area	-10.00%	-\$6,748	243	-\$1,639,774
Peshtigo	-22.69%	-\$15,313	1132	-\$17,334,161
Pewaukee	-10.00%	-\$6,748	3010	-\$20,311,604
Phelps	-7.15%	-\$4,827	117	-\$564,811
Phillips	-15.08%	-\$10,174	762	-\$7,752,565
Pittsville	-2.31%	-\$1,557	581	-\$904,757
Platteville	0.00%	\$0	1551	\$0
Plum City	0.00%	\$0	253	\$0
Plymouth Joint	-10.00%	-\$6,748	2172	-\$14,656,746
Port Edwards	-12.69%	-\$8,565	466	-\$3,991,207
Port Washington-Saukville	-10.00%	-\$6,748	2659	-\$17,943,042
Portage Community	-11.00%	-\$7,423	2315	-\$17,183,887
Potosi	-14.62%	-\$9,863	331	-\$3,264,495
Poynette	-4.46%	-\$3,011	1072	-\$3,227,432
Prairie du Chien Area	-13.46%	-\$9,084	1158	-\$10,519,158
Prairie Farm Public	-12.69%	-\$8,565	393	-\$3,365,975
Prentice	-15.00%	-\$10,122	366	-\$3,704,675
Prescott	-7.08%	-\$4,776	1303	-\$6,222,525
Princeton	-10.00%	-\$6,748	331	-\$2,233,602
Pulaski Community	-16.54%	-\$11,160	3808	-\$42,498,126
Racine Unified	-25.00%	-\$16,870	17529	-\$295,716,040
Randall J1	-15.56%	-\$10,497	715	-\$7,505,321
Randolph	-39.62%	-\$26,733	561	-\$14,997,003
Random Lake	-5.00%	-\$3,374	742	-\$2,503,523
Raymond #14	-5.56%	-\$3,749	411	-\$1,540,803
Reedsburg	-9.15%	-\$6,177	2872	-\$17,740,497
Reedsville	-10.38%	-\$7,008	562	-\$3,938,261
Rhinelander	-5.00%	-\$3,374	2403	-\$8,107,772
Rib Lake	-13.31%	-\$8,980	488	-\$4,382,282
Rice Lake Area	-7.69%	-\$5,191	2259	-\$11,726,019
Richland	-12.69%	-\$8,565	1307	-\$11,194,222
Richmond	-6.67%	-\$4,499	432	-\$1,943,436
Rio Community	-5.00%	-\$3,374	387	-\$1,305,746
Ripon Area	-10.00%	-\$6,748	1676	-\$11,309,717
River Falls	-20.00%	-\$13,496	3517	-\$47,465,723
River Ridge	-17.69%	-\$11,939	545	-\$6,506,669
River Valley	-12.31%	-\$8,305	1197	-\$9,941,422
Riverdale	-15.00%	-\$10,122	732	-\$7,409,349
Rosendale-Brandon	-5.00%	-\$3,374	1032	-\$3,481,989

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Rosholt	-14.08%	-\$9,499	512	-\$4,863,573
Royall	-10.77%	-\$7,267	525	-\$3,815,239
Saint Croix Central	-6.92%	-\$4,672	1778	-\$8,306,320
Saint Croix Falls	-9.62%	-\$6,489	1096	-\$7,111,397
Saint Francis	-8.46%	-\$5,710	1078	-\$6,155,252
Salem	-6.67%	-\$4,499	1020	-\$4,588,668
Sauk Prairie	-11.73%	-\$7,916	2833	-\$22,425,947
Seneca Area	-12.00%	-\$8,098	271	-\$2,194,463
Sevastopol	-14.69%	-\$9,914	597	-\$5,918,915
Seymour Community	-15.00%	-\$10,122	2151	-\$21,772,555
Sharon J11	-10.00%	-\$6,748	246	-\$1,660,018
Shawano	-20.00%	-\$13,496	2414	-\$32,579,543
Sheboygan Area	0.00%	\$0	10058	\$0
Sheboygan Falls	-10.77%	-\$7,267	1616	-\$11,743,668
Shell Lake	-23.85%	-\$16,091	683	-\$10,990,483
Shiocton	-13.08%	-\$8,824	696	-\$6,141,756
Shorewood	-15.00%	-\$10,122	2043	-\$20,679,373
Shullsburg	-14.92%	-\$10,070	339	-\$3,413,782
Silver Lake J1	-5.56%	-\$3,749	469	-\$1,758,240
Siren	-3.77%	-\$2,543	445	-\$1,131,854
Slinger	-12.50%	-\$8,435	3334	-\$28,122,462
Solon Springs	-11.15%	-\$7,527	277	-\$2,084,885
Somerset	-13.85%	-\$9,343	1509	-\$14,099,254
South Milwaukee	-5.00%	-\$3,374	3021	-\$10,192,916
South Shore	-10.00%	-\$6,748	179	-\$1,207,899
Southern Door County	-11.23%	-\$7,579	1021	-\$7,737,719
Southwestern Wisconsin	-29.23%	-\$19,725	555	-\$10,947,399
Sparta Area	-12.08%	-\$8,150	2959	-\$24,114,541
Spencer	-10.00%	-\$6,748	684	-\$4,615,660
Spooner Area	-3.08%	-\$2,076	1111	-\$2,306,792
Spring Valley	-10.00%	-\$6,748	765	-\$5,162,252
Stanley-Boyd Area	-6.15%	-\$4,153	1104	-\$4,584,515
Stevens Point Area Public	-15.00%	-\$10,122	7159	-\$72,463,842
Stockbridge	-5.00%	-\$3,374	196	-\$661,308
Stone Bank	0.00%	\$0	333	\$0
Stoughton Area	-10.00%	-\$6,748	2906	-\$19,609,808
Stratford	-8.46%	-\$5,710	877	-\$5,007,566
Sturgeon Bay	-11.04%	-\$7,449	1123	-\$8,365,002
Sun Prairie Area	-17.00%	-\$11,472	8475	-\$97,222,405
Superior	-10.00%	-\$6,748	4538	-\$30,622,611

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
Suring Public	-11.92%	-\$8,046	384	-\$3,089,565
Swallow	-15.00%	-\$10,122	432	-\$4,372,731
Thorp	-10.00%	-\$6,748	614	-\$4,143,297
Three Lakes	-5.77%	-\$3,893	503	-\$1,958,230
Tigerton	-14.04%	-\$9,473	253	-\$2,396,723
Tomah Area	-14.62%	-\$9,863	3136	-\$30,928,869
Tomahawk	-12.31%	-\$8,305	1216	-\$10,099,222
Tomorrow River	-8.46%	-\$5,710	1182	-\$6,749,079
Trevor-Wilmot Consolidated	-20.00%	-\$13,496	541	-\$7,301,381
Tri-County Area	-12.92%	-\$8,721	601	-\$5,241,048
Turtle Lake	-15.00%	-\$10,122	469	-\$4,747,247
Twin Lakes #4	-15.00%	-\$10,122	302	-\$3,056,863
Two Rivers Public	-10.00%	-\$6,748	1720	-\$11,606,631
Union Grove J1	-15.00%	-\$10,122	785	-\$7,945,819
Union Grove UHS	0.00%	\$0	1012	\$0
Unity	-16.69%	-\$11,264	920	-\$10,362,915
Valders Area	-11.54%	-\$7,786	980	-\$7,630,477
Verona Area	-20.00%	-\$13,496	5741	-\$77,481,010
Viroqua Area	-14.31%	-\$9,655	1155	-\$11,151,398
Wabeno Area	-10.00%	-\$6,748	380	-\$2,564,256
Walworth J1	-13.00%	-\$8,772	426	-\$3,737,065
Washburn	0.00%	\$0	598	\$0
Washington	0.00%	\$0	73	\$0
Washington-Caldwell	-25.00%	-\$16,870	187	-\$3,154,709
Waterford Graded J1	-5.56%	-\$3,749	1534	-\$5,750,831
Waterford UHS	-10.00%	-\$6,748	1064	-\$7,179,916
Waterloo	-5.00%	-\$3,374	769	-\$2,594,622
Watertown Unified	-10.00%	-\$6,748	3577	-\$24,137,744
Waukesha	-20.00%	-\$13,496	12523	-\$169,011,442
Waunakee Community	-12.00%	-\$8,098	4375	-\$35,427,217
Waupaca	-7.00%	-\$4,724	2116	-\$9,995,199
Waupun	-10.00%	-\$6,748	1961	-\$13,232,909
Wausau	-13.00%	-\$8,772	8149	-\$71,486,725
Wausaukee	-16.15%	-\$10,901	397	-\$4,327,571
Wautoma Area	-12.31%	-\$8,305	1358	-\$11,278,572
Wauwatosa	0.00%	\$0	7231	\$0
Wauzeka-Steuben	-11.54%	-\$7,786	255	-\$1,985,481
Webster	-12.69%	-\$8,565	693	-\$5,935,421
West Allis-West Milwaukee	-10.00%	-\$6,748	8020	-\$54,119,291
West Bend	-12.69%	-\$8,565	6309	-\$54,035,460

	% Curriculum	Earnings Loss Per		
District	Incomplete	Student	Enrollment	Total Earnings Loss
West De Pere	-12.54%	-\$8,461	3628	-\$30,696,528
West Salem	-10.00%	-\$6,748	1838	-\$12,402,900
Westby Area	-11.92%	-\$8,046	1061	-\$8,536,532
Westfield	-20.00%	-\$13,496	1048	-\$14,143,895
Weston	-8.60%	-\$5,803	296	-\$1,717,781
Weyauwega-Fremont	-15.77%	-\$10,641	836	-\$8,895,995
Wheatland J1	-12.22%	-\$8,248	548	-\$4,519,688
White Lake	-15.77%	-\$10,641	149	-\$1,585,530
Whitefish Bay	-10.77%	-\$7,267	3018	-\$21,932,172
Whitehall	-20.00%	-\$13,496	771	-\$10,405,480
Whitewater Unified	-19.62%	-\$13,237	1997	-\$26,433,375
Whitnall	-5.00%	-\$3,374	2465	-\$8,316,961
Wild Rose	-7.23%	-\$4,879	588	-\$2,869,060
Williams Bay	-15.00%	-\$10,122	726	-\$7,348,617
Wilmot UHS	-15.00%	-\$10,122	979	-\$9,909,499
Winneconne Community	-15.00%	-\$10,122	1759	-\$17,804,707
Winter	-6.92%	-\$4,672	251	-\$1,172,602
Wisconsin Dells	-10.00%	-\$6,748	1777	-\$11,991,269
Wisconsin Heights	-15.00%	-\$10,122	777	-\$7,864,842
Wisconsin Rapids	-18.85%	-\$12,717	5112	-\$65,011,668
Wittenberg-Birnamwood	-17.15%	-\$11,575	1146	-\$13,265,507
Wonewoc-Union Center	-10.38%	-\$7,008	334	-\$2,340,532
Woodruff J1	-5.00%	-\$3,374	520	-\$1,754,491
Wrightstown Community	-5.00%	-\$3,374	1371	-\$4,625,782
Yorkville J2	-10.00%	-\$6,748	420	-\$2,834,177