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Developing an Early Warning System for Michigan's Schools

MSU Extension White Paper

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Background

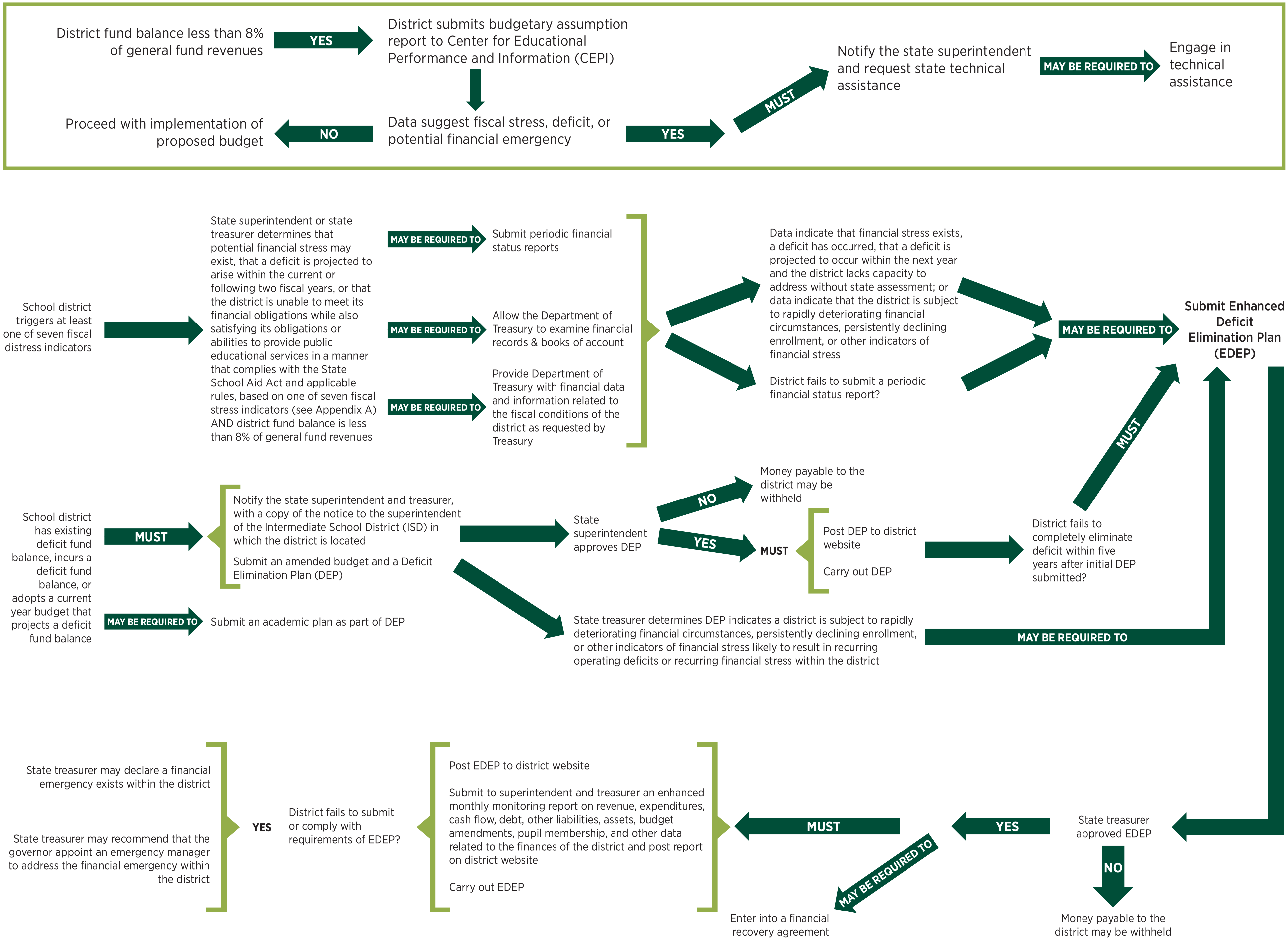
The development of a system that alerts school districts of potential fiscal distress and assists those approaching fiscal distress is essential in the current context in which an increasing number of Michigan schools in this position. On March 11, 2015, State Representatives Earl Poleski, Al Pscholka, Lisa Lyons, Patrick Somerville, and Tim Kelly introduced House Bills 4325, 4326, 4327, 4328, 4329, and 4330, which contribute to the development of an early warning system. After some of the bills were amended on April 23, 2015, the House of Representatives passed this package of bills. The bills now sit in the Michigan Senate awaiting a hearing and potentially a vote.

To in fact provide early warning of imminent fiscal distress, an early warning system must incorporate strong predictors of fiscal distress. Unfortunately, the currently proposed system may not. In fact, using three of the quantitative indicators of fiscal distress in the proposed system, less than a third of districts that are in deficit would be identified. Moreover, these indicators of fiscal distress will quite likely inaccurately identify many schools as approaching fiscal distress that will then be subject to additional administrative and oversight requirements.

Figure 1 depicts the process that ensues for districts that are fiscally stressed. In addition to the implementation of the system depicted in **Figure 1**, the package of bills would, among other things:

- Mandate that a district that is required to submit periodic financial reports and that uses a state loan while doing so submit periodic financial reports for at least four years after the date of the issuance of the loan.
- Allow a district to no longer be required to submit periodic financial status reports if the state treasurer determines that the reports indicate that potential financial stress does not exist within the district, that a deficit is not projected to arise within the district within the current or following two school fiscal years, and that the district will be able to meet its financial obligations while also satisfying the district's obligations or abilities to provide public educational services in a manner that complies with the State School Aid Act and applicable rules.
- Appoint the state treasurer as the state financial authority of a district subject to a Deficit Elimination Plan (DEP). (Previously, the state financial authority for districts was the superintendent of public instruction [SPI] under the Local Financial Stability and Choice Act [LFSCA].)
- Make the state financial authority's confirmation of the existence of any financial stress factors prima facie evidence that probable financial stress exists for a district.
- Move the provision that prohibits a district to adopt or operate under a deficit budget and not incur an operating deficit in a fund during a school fiscal year to the School Aid Budget. (Previously this provision was part of the State School Aid Act.)
- Move the provision that requires the Michigan Department of Education (MDE) to prepare a report of deficits incurred or projected by districts in the immediately preceding fiscal year and the progress made in reducing those deficits as well as quarterly interim reports concerning the progress made by districts in reducing those deficits to the School Aid Budget. (Previously this provision was part of the State School Aid Act.)

Figure 1: Early Warning Finance System Process



Analyzing the Consequences of the Proposed Early Warning System

As seen in **Tables 1 and 2**, numerous predictors of fiscal distress in HB 4325 do a poor job of identifying fiscally distressed districts. **Table 1** assesses the accuracy of the proposed predictors by applying three predictors in HB 4325 to districts in the years previous to the 2014-15 school year and comparing these with the districts' actual 2014-15 deficit status. In 2014-15, 42 school districts were in deficit. In summary:

- The predictor of experiencing an increase in expenditures per pupil by 5 percent or more from 2013 to 2014 identifies 77 school districts; just seven of the 42 school districts in deficit in 2014-15 would have been identified by this predictor and more than 70 school districts would have been potentially mislabeled as at risk of deficit when, in 2014-15, they did not experience a deficit.[1]
- The predictor of experiencing an enrollment decline of 5 percent or more from 2012 to 2013 captures 97 school districts; however, it accurately captures just 18 of the 42 school districts that were in deficit in 2014, mislabeling 69 school districts as potentially at risk for fiscal distress when, in 2014-15, they did not experience a deficit.
- The predictor of experiencing an enrollment decline of 15 percent or more from 2010 to 2013 captures 33 school districts; however, it accurately captures just three of the 42 school districts that were in deficit in 2014, mislabeling 30 school districts as potentially at risk for fiscal distress when, in 2014-15, they did not experience a deficit.
- When taking all three predictors into account, the system captures 21 of the 42 districts (less than 50 percent) that were in deficit in 2014.

The House-introduced version of HB 4325 would subject districts that were identified by the fiscal distress predictors to potential periodic financial status reporting in a form and manner and on a periodic basis prescribed by the state treasurer. The analysis of the House-introduced HB 4325 (columns 1-4 four in Table 1) shows that many districts would be identified as being in potential fiscal distress when, in fact, they may not have been, given that they were not in deficit in 2014-15. Moreover, the analysis of the House-introduced HB 4325 indicated that some districts that would in fact be in fiscal distress would not have been identified using the predictors of fiscal deficit within the bill.

1 These 42 districts are those Michigan public schools districts with deficits for fiscal year ending June 30, 2014 according to both the Michigan Department of Education report Fiscal Year 2014 Deficit District Information and the general fund balance provided in the Michigan Department of Education's Bulletin 1101. Public school academies are not included in this analysis.

On April 23, 2015, a substitute bill for HB 4325 was introduced, which exempted any district that maintained an 8 percent fund balance from being required to submit periodic financial status reports regardless of whether data indicated that they hit one of the predictors of fiscal distress. This exemption would ostensibly remove many districts that would have been falsely identified under the House-introduced HB 4325 from consideration of periodic financial reporting requirements. However, an analysis of the substitute H-3 of HB 4325 (columns 4 and 6 in Table 1) shows that the 8 percent fund balance exemption actually introduces a host of other issues related to: (1) districts with less than an 8 percent fund balance that hit a predictor of fiscal distress but potentially are not in danger of fiscal distress (Type I error – labeled as being in danger of fiscal distress when they are not), (2) districts with less than 8 percent fund balance that do not hit a predictor of fiscal distress but that are in danger of fiscal distress (Type II error), and (3) districts with more than an 8 percent fund balance that are exempt from periodic financial reporting even if they hit a predictor of fiscal distress but that are in danger of fiscal distress (Exempt Type II error). In summary:

- Seventeen districts had less than an 8 percent fund balance and are captured by one of the predictors of fiscal distress; however, they may not be in danger of fiscal distress (Type I error).
- Thirteen districts had less than an 8 percent fund balance but did not hit a predictor of fiscal distress and thus were not required to do periodic financial reporting; however, they are in danger of fiscal distress (Type II error).
- Fourteen districts had more than an 8 percent fund balance and, thus, were exempt from periodic financial reporting even if they hit a predictor of fiscal distress; however, they are in danger of fiscal distress (Exempt Type II error).

Making Type I errors, Type II errors or both have important implications for the school districts. These errors are often discussed in medicine: a Type I error would be subjecting a patient to treatment when the treatment is unnecessary, while a Type II error would be misidentifying a patient as healthy when in fact he or she needed treatment. In the case of Michigan schools, Type I error districts would be subject to periodic financial reporting and an increase in administrative costs when it may be unnecessary. Type II error districts would not be subject to periodic financial reporting when it may be necessary to assist them in reducing their risk of fiscal distress or eliminating fiscal distress.

Table 1: List of districts in deficit and districts captured by proposed predictors of fiscal distress in HB 4325

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Experience increase in expenditures per pupil by 5% or more from 2013 to 2014	Experienced enrollment decline by more than 15% between 2010 and 2013	Experience enrollment decline by more than 5% between 2012 and 2013	Fund balance 2012-13	In deficit 2014	Error Type
Akron-Fairgrove Schools				0.25	x	Exempt (II)
Alanson Public Schools	x		x	0.13		Exempt
Albion Public Schools	x		x	0.02	x	-
Allendale Public Schools		x		0.07		I
Alma Public Schools	x			0.09		Exempt
Almont Community Schools	x		x	0.07		I
Alpena Public Schools				-0.03	x	II
Arenac Eastern School District			x	0.10		Exempt
Arvon Township School District	x	x		1.82		Exempt
Ashley Community Schools			x	-0.07	x	-
Atherton Community Schools	x		x	0.15		Exempt
Atlanta Community Schools			x	0.04		I
Au Gres-Sims School District	x	x		0.15		Exempt
Baldwin Community Schools	x	x	x	0.22		Exempt
Bangor Public Schools (Van Buren)			x	0.17	x	Exempt (II)
Bay City School District	x			0.04		Exempt
Bay-Arenac Community High School	x		x	0.21		Exempt
Beaver Island Community School	x	x	x	0.39		Exempt
Beecher Community School District			x	-0.03	x	-
Bentley Community School District	x		x	0.13		Exempt
Benton Harbor Area Schools	x		x	-0.45	x	-
Berlin Township S/D #3	x		x	1.79		Exempt
Berrien Springs Public Schools		x		0.35		Exempt
Bessemer Area School District	x			0.05		I
Big Bay de Noc School District		x		0.32		Exempt
Big Jackson School District			x	0.47		Exempt
Big Rapids Public Schools		x		0.08		I
Bloomingdale Public School District			x	0.16		Exempt
Bois Blanc Pines School District			x	2.11		Exempt
Boyne Falls Public School District	x			0.54		Exempt

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Experience increase in expenditures per pupil by 5% or more from 2013 to 2014	Experienced enrollment decline by more than 15% between 2010 and 2013	Experience enrollment decline by more than 5% between 2012 and 2013	Fund balance 2012-13	In deficit 2014	Error Type
Bridgeport-Spaulding Community School District				-0.17	x	II
Brighton Area Schools				0.22	x	Exempt (II)
Brimley Area Schools		x		0.17		Exempt
Bronson Community School District			x	0.13		Exempt
Buchanan Community Schools	x			0.67		Exempt
Bullock Creek School District		x		0.25		Exempt
Burt Township School District	x		x	0.29		Exempt
Camden-Frontier School	x			0.12	x	Exempt (II)
Capac Community Schools			x	0.06		I
Caro Community Schools		x		0.35		Exempt
Carson City-Crystal Area Schools			x	0.06		I
Carsonville-Port Sanilac School District			x	0.18		Exempt
Cassopolis Public Schools	x			0.46		Exempt
Central Lake Public Schools	x			0.29		Exempt
Central Montcalm Public Schools			x	0.05		I
Centreville Public Schools			x	0.15		Exempt
Charlevoix Public Schools			x	0.09		Exempt
Cheboygan Area Schools	x			0.07	x	-
Clarenceville School District				0.24		Exempt
Climax-Scotts Community Schools			x	0.17		Exempt
Clintondale Community Schools			x	-0.06	x	-
Colfax Township S/D #1F	x			2.34		Exempt
Coloma Community Schools	x		x	0.52		Exempt
Columbia School District			x	0.07		I
Comstock Park Public Schools		x	x	0.49		Exempt
Corunna Public Schools			x	0.11		Exempt
Covert Public Schools			x	0.03		I
Dearborn Heights School District #7				-0.06	x	II
Deckerville Community School District			x	0.74		Exempt
Delton Kellogg Schools	x			0.03		I
DeTour Area Schools	x	x		0.27		Exempt

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Experience increase in expenditures per pupil by 5% or more from 2013 to 2014	Experienced enrollment decline by more than 15% between 2010 and 2013	Experience enrollment decline by more than 5% between 2012 and 2013	Fund balance 2012-13	In deficit 2014	Error Type
Detroit City School District			x	-0.07	x	-
Detroit Community Schools			x	0.26		Exempt
Dollar Bay-Tamarack City Area Schools	x		x	0.16		Exempt
Dryden Community Schools			x	0.10		Exempt
East Detroit Public Schools				-0.07	x	II
East Jackson Community Schools	x			0.07		I
Easton Township Community Schools	x			0.98		Exempt
Eaton Rapids Public Schools	x		x	0.22		Exempt
Eau Claire Public Schools		x		0.42		Exempt
Ecorse Public Schools		x		-0.01	x	-
Elkton-Pigeon-Bay Port Laker Schools	x		x	0.17		Exempt
Elm River Township School District			x	0.43		Exempt
Essexville-Hampton Public Schools				0.06	x	II
Excelsior Township S/D #1	x		x	1.28		Exempt
Fennville Public Schools	x	x		0.13		Exempt
Flint, School District of the City of			x	-0.05	x	-
Forest Area Community Schools	x			0.20		Exempt
Fulton Schools	x			0.31		Exempt
Garden City School District				0.09	x	Exempt (II)
Glen Lake Community Schools	x	x		0.76		Exempt
Glenn Public School District	x			0.42		Exempt
Grandville Public Schools	x			0.08		Exempt
Grant Public School District			x	0.09		Exempt
Grant Township S/D #2	x		x	1.40		Exempt
Hagar Township S/D #6	x		x	0.15		Exempt
Hale Area Schools	x		x	0.09		Exempt
Hamilton Community Schools	x			0.36		Exempt
Hamtramck, School District of the City of				-0.06	x	II
Hancock Public Schools				-0.02	x	II
Hanover-Horton School District	x			0.14		Exempt
Harbor Beach Community Schools	x	x	x	0.79		Exempt
Harper Creek Community Schools	x			0.16		Exempt

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Experience increase in expenditures per pupil by 5% or more from 2013 to 2014	Experienced enrollment decline by more than 15% between 2010 and 2013	Experience enrollment decline by more than 5% between 2012 and 2013	Fund balance 2012-13	In deficit 2014	Error Type
Harrison Community Schools	x		x	0.17		Exempt
Hartford Public Schools			x	0.19		Exempt
Hazel Park, School District of the City of			x	0.09	x	Exempt (II)
Highland Park City Schools	x		x	0.15	x	Exempt (II)
Hillsdale Community Schools	x		x	0.15		Exempt
Inland Lakes Schools			x	0.12		Exempt
Ionia Township S/D #2	x	x		1.07		Exempt
Iron Mountain Public Schools			x	0.51	x	Exempt (II)
Ironwood Area Schools of Gogebic County	x			0.11		Exempt
Jonesville Community Schools		x		0.17		Exempt
Kaleva Norman Dickson School District			x	0.21		Exempt
Kensington Woods High School			x	0.30		Exempt
Kent City Community Schools	x			0.13		Exempt
Kingsley Area Schools	x			0.36		Exempt
Kingston Community School District		x		0.42		Exempt
Lakeshore School District (Berrien)	x			0.67		Exempt
Lakeview School District (Calhoun)	x			0.22		Exempt
Lakeville Community School District	x		x	0.35		Exempt
L'Anse Area Schools			x	0.12		Exempt
Lapeer Community Schools	x			0.14		Exempt
Leland Public School District	x		x	0.31		Exempt
Lincoln Consolidated School District				0.08	x	Exempt (II)
Litchfield Community Schools	x			0.11		Exempt
Mackinaw City Public Schools				-0.10	x	II
Marcellus Community Schools	x		x	0.10		Exempt
Marshall Public Schools	x			0.43		Exempt
Mayville Community School District			x	0.23		Exempt
Melvindale-North Allen Park Schools		x		0.56		Exempt
Mendon Community School District			x	0.09		Exempt
Menominee Area Public Schools			x	0.03		I
Mesick Consolidated Schools			x	0.21		Exempt

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Experience increase in expenditures per pupil by 5% or more from 2013 to 2014	Experienced enrollment decline by more than 15% between 2010 and 2013	Experience enrollment decline by more than 5% between 2012 and 2013	Fund balance 2012-13	In deficit 2014	Error Type
Milan Area Schools			x	0.08		Exempt
Morley Stanwood Community Schools			x	0.11		Exempt
Mount Clemens Community School District				-0.10	x	II
Mt. Morris Consolidated Schools		x		0.21		Exempt
Mt. Pleasant City School District	x			0.23		Exempt
Muskegon Heights School District	x		x	0.12	x	Exempt (II)
Napoleon Community Schools			x	0.49		Exempt
Negaunee Public Schools		x		0.20		Exempt
New Haven Community Schools				0.32	x	Exempt
NICE Community School District			x	0.13		Exempt
North Adams-Jerome Public Schools	x		x	0.09	x	Exempt (II)
Northwest Community Schools	x			0.68		Exempt
Onekama Consolidated Schools			x	0.23		Exempt
Ontonagon Area School District			x	0.07		I
Owendale-Gagetown Area School District	x			0.13		Exempt
Perry Public Schools			x	-0.07	x	-
Pewamo-Westphalia Community Schools	x			0.13		Exempt
Pickford Public Schools	x		x	0.10		Exempt
Pinckney Community Schools				0.20	x	Exempt (II)
Pinconning Area Schools	x			0.09		Exempt
Pontiac City School District		x	x	-0.65	x	-
Posen Consolidated School District No. 9			x	0.32		Exempt
Potterville Public Schools			x	0.17		Exempt
Public Schools of Calumet, Laurium & Keweenaw	x			0.16		Exempt
Quincy Community Schools	x		x	0.14		Exempt
Rapid River Public Schools		x		0.54		Exempt
Reese Public Schools			x	0.22		Exempt
River Valley School District	x			0.35		Exempt
Romulus Community Schools			x	-0.03		I

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Experience increase in expenditures per pupil by 5% or more from 2013 to 2014	Experienced enrollment decline by more than 15% between 2010 and 2013	Experience enrollment decline by more than 5% between 2012 and 2013	Fund balance 2012-13	In deficit 2014	Error Type
Roscommon Area Public Schools			x	0.20		Exempt
Royal Oak Schools		x		0.32		Exempt
Rudyard Area Schools			x	0.05		I
Saginaw, School District of the City of				-0.005	x	II
Sandusky Community School District			x	0.25		Exempt
Saranac Community Schools	x	x		0.12		Exempt
Shelby Public Schools			x	0.22		Exempt
Sigel Township S/D #3F	x		x	3.94		Exempt
Sigel Township S/D #6	x		x	2.69		Exempt
South Lake Schools				0.09	x	Exempt (II)
Southfield Public School District		x		0.28		Exempt
Southgate Community School District				-0.08	x	II
Sparta Area Schools			x	0.12		Exempt
St. Ignace Area Schools			x	0.39		Exempt
Standish-Sterling Community Schools	x			0.30		Exempt
Stephenson Area Public Schools		x	x	0.26		Exempt
Suttons Bay Public Schools				0.10	x	Exempt (II)
Taylor School District				-0.11	x	II
Tecumseh Public Schools		x		0.19		Exempt
Van Dyke Public Schools			x	0.15		Exempt
Vanderbilt Area Schools		x	x	-0.07	x	-
Verona Township S/D #1F	x	x		0.52		Exempt
Walkerville Public Schools			x	0.19		Exempt
Warren Consolidated Schools				0.05	x	II
Wells Township School District			x	0.49		Exempt
Westwood Community School District			x	-0.22	x	-
Westwood Heights Schools	x		x	0.06		I
White Cloud Public Schools			x	0.04	x	-
Wolverine Community School District	x			0.18		Exempt

Additionally, as seen in **Table 2**, correlation analyses between district deficit and each of two predictors of distress in the proposed early warning system related to enrollment decline show there is just one significant correlation at the α=0.05; however, the one significant relationship is weak (see **Table 2**). There is also a statistically significant correlation between district deficit and a third predictor of deficit in the proposed early warning system related to increase in expenditures per pupil: the relationship between an increase in expenditures per pupil by 5 percent or more from 2012 to 2013 and deficit in 2013 was significant at the α=0.05. However, this correlation of just 0.1276 indicates that there is no systematic relationship between a district being labeled as at risk for fiscal distressed using this fiscal indicator with a district actually being fiscally distressed.

Table 2: Correlation Between Select Proposed Measures of Fiscal Distress and District Deficit

Relationship Analyzed	Correlation	Significance
One year of more than 5% decline in enrollment from 2009 to 2010 *with* in debt in 2010	0.0851	0.0452
One year of more than 5% decline in enrollment from 2010 to 2011 *with* in debt in 2011	-0.0240	0.5797
One year of more than 5% decline in enrollment from 2011 to 2012 *with* in debt in 2012	0.0016	0.9704
One year of more than 5% decline in enrollment from 2012 to 2013 *with* in debt in 2013	-0.0128	0.7638
Decline in enrollment of 15% or more over a period of three consecutive years from 2009 to 2012 *with* in debt in 2012	0.0528	0.2144
Decline in enrollment of 15% or more over a period of three consecutive years from 2010 to 2013 *with* in debt in 2013	-0.0659	0.1212
Increase in expenditures per pupil by 5% or more from 2012 to 2013 *with* in debt in 2013	0.1276	0.0026

An alternative measure not currently used in the proposed early warning finance system as an indicator of fiscal distress is a district's assets-to-liabilities ratio. As a district's assets-to-liabilities ratio nears one, the total liabilities the district holds approaches the same amount of the total assets the district holds. It seems plausible that a district with assets that far outpace its liabilities would be relatively fiscally healthy, while one with liabilities that are either more than its assets or are nearing the same amount as its assets would be relatively fiscally strained. **Table 3** shows the correlation between three consecutive years of more than a 0.9 assets-to-liabilities ratio and deficit in the third year. For every year in which data was publically available, there is a positive, statistically significant correlation (α=0.05). For the final four years, there is a strong correlation between a district receiving an at-risk label using this assets-to-liabilities ratio indicator and actually being fiscally distressed.

Table 3: Correlation Between Alternative Measure of Fiscal Distress (Assets-to-Liabilities Ratio) and District Deficit

Relationship Analyzed	Correlation	Significance
Three consecutive years of assets-to-liabilities ratio of greater than 0.9 in 2006, 2007, and 2008 *with* in debt in 2008	0.1435	0.0007
Three consecutive years of assets-to-liabilities ratio of greater than 0.9 in 2007, 2008, and 2009 *with* in debt in 2009	0.1408	0.0009
Three consecutive years of assets-to-liabilities ratio of greater than 0.9 in 2008, 2009, and 2010 *with* in debt in 2010	0.6343	0.0000
Three consecutive years of assets-to-liabilities ratio of greater than 0.9 in 2009, 2010, and 2011 *with* in debt in 2011	0.7844	0.0000
Three consecutive years of assets-to-liabilities ratio of greater than 0.9 in 2010, 2011, and 2012 *with* in debt in 2012	0.7058	0.0000
Three consecutive years of assets-to-liabilities ratio of greater than 0.9 in 2011, 2012, and 2013 *with* in debt in 2013	0.6799	0.0000

Yet another alternative measure not currently used in the proposed early warning system as an indicator of fiscal distress is an increase in Michigan Public School Employees Retirement System (MPSERS) payments. One of the central reasons a district's MPSERS payments would increase would be an overall increase in employee salaries. MPSERS obligations are one area of a district's budget that cannot easily be altered; thus, it seems plausible that a district that has increasing MPSERS obligations may become fiscally stressed. **Table 4** shows the correlation between two consecutive years of more than a 5 percent increase in MPSERS payments and deficit in the second year. For every year in which data was publically available, there is a significant, positive correlation at the α=0.05.

Table 4: Correlation Between Alternative Measure of Fiscal Distress (MPSERS) and District Deficit

Relationship Analyzed	Correlation	Significance
Two consecutive years of a 5% or more increase in MPSERS payments from 2009-10 and 2010-11 *with* in debt in 2011	0.1668	0.0001
Two consecutive years of a 5% or more increase in MPSERS payments from 2010-11 and 2011-12 *with* in debt in 2012	0.1534	0.0003
Two consecutive years of a 5% or more increase in MPSERS payments from 2011-12 and 2012-13 *with* in debt in 2013	0.1916	0.0000

Conclusion

The development of a system that alerts school districts of potential fiscal distress and assists those approaching and in fiscal distress is essential in Michigan's current context of an increasing number of schools in this position. However, an early warning system is only helpful to the extent that the measures used as predictors of impending fiscal distress accurately identify those that are at high risk of going into deficit. In addition to alerting and working with districts that are at risk of, or are experiencing, fiscal distress, an effective early warning system must take into account the inherent difficulties school districts encounter in addressing school fiscal matters, including time required to effectively and efficiently prevent or address fiscal distress and feasible options for districts to reduce fiscal distress while still fulfilling their obligation to provide educational services in a manner that complies with both the Michigan Constitution as well as state law.

The analyses presented in this paper suggest that the development of an effective and efficient early warning system for school districts in Michigan will take time, and additional research is necessary to fully understand the data and factors that will accurately predict fiscal distress in a timely fashion. While the currently proposed system assumes that changes in enrollment and expenditures per pupil may be predictors of fiscal distress, statistical analyses indicate that these factors may not be highly correlated with future fiscal distress. Moreover, the 8 percent fund balance exemption introduces a whole host of issues when it comes to identifying districts as fiscally distressed that are not and identifying districts as not fiscally distressed that are fiscally distressed. The analyses presented here also suggest that there may be other factors – such as the district's assets-to-liabilities ratio and change in management and labor costs such as MPSERS – that may be better predictors of district fiscal distress.

In conclusion, any early warning system must address several tradeoffs facing policymakers. For one, policymakers face burdening districts with more reporting requirements in an effort to identify potential problems and in doing so impose potentially unnecessary costs on districts that are in fact fiscally healthy. The other tradeoff is designing a system that is less reporting intensive and restrictive but misses some districts that are potentially at risk of fiscal distress. A measure such as using the 8 percent fund balance rule introduces one set of tradeoffs. This unavoidable tradeoff means that the state must decide which risk it is better equipped to deal with in addressing the problem of the fiscal distress of school districts.

Appendix A: Financial Distress Indicators From HB 4325

House Bill 4325 would allow the superintendent of public instruction or state treasurer to require a district to submit periodic financial status reports if the superintendent or treasurer determines that potential financial stress may exist within a district, that a deficit is projected to arise within the district during the current fiscal year or the following two school fiscal years, or that the district may be unable to meet its financial obligations while also satisfying the district's obligations or abilities to provide public educational services in a manner that complies with the State School Aid Act, and applicable rules, based upon one or more of the following:

- The school district has failed to pay a required obligation once or more in a school fiscal year.
- The school district has expended or distributed tax revenue in a manner prohibited by law.
- The school district's pupil enrollment has declined by 5 percent or more in a single school fiscal year or by 15 percent or more over a period of three or more fiscal years and the school district failed to reduce expenditures in a manner that addressed the enrollment decline.
- The school district's expenditures per pupil have increased by 5 percent or more in the most recent school fiscal year as compared to the immediately preceding school fiscal year.
- The school district's actual enrollment for a school fiscal year was 96 percent or less of the enrollment used in the district's budgetary assumptions report and the school district has failed to adopt an amended budget reflecting the actual enrollment for the school fiscal year by November 15 of the fiscal year.
- The school district's actual foundation allowance for a school fiscal year was 98 percent or less of the district's budgetary assumptions report and the school district has failed to adopt an amended budget reflecting the actual foundation for the school fiscal year by November 15 of the fiscal year.
- The school district has applied for a loan under the Emergency Municipal Loan Act (MCL 141.931 to 131.942).

Adapted from the *Financially Distressed School Districts* by the House Fiscal Agency, April 2015. Retrieved from http://www.legislature.mi.gov/documents/2015-2016/billanalysis/House/htm/2015-HLA-4325-CD89DE1F.htm