



pennsylvania
DEPARTMENT OF COMMUNITY
& ECONOMIC DEVELOPMENT

PA DCED: EARLY WARNING SYSTEM

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Andrew Sheaf,
Local Government Policy Manager



ACT 47, SECTION 121

“DCED shall develop an Early Warning System utilizing necessary fiscal and socioeconomic variables to identify municipal financial emergencies before they reach crisis proportions and to notify an affected municipality appropriately. The department shall be responsible for testing the validity and reliability of these variables and shall continuously monitor them to assure their effectiveness.”

HISTORY

- In-house IT system
- Excel spreadsheet
 - Shippensburg University consultant
 - *An Analysis of Survey of Financial Condition Data*, Center for Rural Pennsylvania, 2013
 - Fiscal Management Handbook
- Needed an update
- RFP for a consultant, chose Workxpress

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IMPORTING DATA

- Annual Financial Reports (AFR)
- American Community Survey (Census)
- Act 205 Pension Distress Score

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FINANCIAL INDICATORS

- Equity as Proportion of Assets
- Operating Position
- Debt as Proportion of Revenue
- Liquidity
- Public Safety Expense as Proportion of Revenue
- Pension Factor
- 5 Year Trends

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ECONOMIC INDICATORS

- Median Household Income
- Median Housing Values
- Unemployment Rate
- % Housing Units Vacant
- % Owner-Occupied Housing Units
- 5 Year Trends

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SOCIO-DEMOGRAPHIC INDICATORS

- % Population 65+ Years Old
- % Families Below Poverty Level
- % Persons with Bachelor's Degree or Higher
- 5 Year Trends

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SCORING

- Population < 2000
- Setting the Indicator Min/Max
 - Median value for Act 47 communities
 - Produces a distress flag
- Weighing the Indicators
 - Crowdsourced expert opinions

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VALIDATING RANKINGS

- Regional staff provide 5-10 municipalities
- Pennsylvania Economy League list
- DCED Survey of Financial Condition

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DEMONSTRATION

- [Link](#)
- [Link test](#)

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FUTURE

- Outreach with municipalities
- Easily updated
- Research papers
- Statistical regression models
- Speed up data collection
- Fine-tune

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Andrew Sheaf, Local Government Policy Manager
Governor's Center for Local Government Services

717-720-1405
asheaf@pa.gov