

# Community Risks in Rural America:



## What Matters?

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# Define Community

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The physical structures, behaviors, demographic characteristics, and attitudes of the people and places that are located within the *school district boundaries*.

# Community Context: What do we know?

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- Poverty
- Crime
- Mobility
- Substance use norms
- Availability of substances
- School context

# The Present Study

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- ❑ Expand community-level research to the rural and small town context
- ❑ Focus on community-level predictors to community-level outcomes
- ❑ Bridge community context with individual-level outcomes
- ❑ GIS Technology and Multi-level Modeling

# Hypotheses

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- ❑ Communities with higher levels of risks will also have higher rates of adolescent substance use and delinquency.
- ❑ The risk level of the more immediate geographic area in which adolescents live will relate to their individual adolescent substance use and delinquency



Method

# Method: Community Sample

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- ❑ PROSPER Project: 28 School Districts
- ❑ Rural, small town, large town, urban fringe
- ❑ Community Prevention Boards / Teams
- ❑ Empirically validated youth & family programs

# Method: Community Sample

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Demographics	National	PROSPER	PROSPER Min	PROSPER Max
Percent White	75.1%	95.6%		
Poverty	9.2%	6.8%		
Mobility	45.9%	37.7%		
Dual-parent	68.0%	77.3%		
Population Density	Urban = 3000 Rural = 2000	373.0		



# Method: Community Sample

Demographics	National	PROSPER	PROSPER Min	PROSPER Max
Percent White	75.1%	95.6%	87.8%	99.0%
Poverty	9.2%	6.8%	1.8%	10.7%
Mobility	45.9%	37.7%	25.4%	45.5%
Dual-parent	68.0%	77.3%	66.0%	87.0%
Population Density	Urban = 3000 Rural = 2000	373.0	22.03	2890.3

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# Method: Community Risks

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Risk	How Assessed?	Mean	SD
Economic Risk	1. Percent Poverty (Census) 2. Free/Reduced Lunch (Dist)	6.8% 29.6%	1.93 8.96

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<b>Mobility</b>	% Move w/in last 5 years (Census)	<b>37.7%</b>	<b>6.15</b>

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Economic Risk	1. Percent Poverty (Census)	6.8%	1.93
	2. Free/Reduced Lunch (Dist)	29.6%	8.96
Residential Instability	% Move w/in last 5 years (Census)	37.7%	6.15
Substance Risk	1. Perceived Availability (TM)	3.11	0.26
	2. Density of Alcohol Outlets (GIS)	0.94	0.88
	3. Density of Tobacco Outlets (GIS)	0.59	0.52
	4. Perceived Norms (TM)	2.61	0.30

# Method: Substance Risk

	Density of Alcohol	Density of Tobacco	Perceived Access to Alcohol	Perceived Access to Tobacco	Norms of Alcohol & Tobacco Use
Density of Alcohol Retailers	1.00				
Density of Tobacco Retailers	<b>.93**</b>	1.00			
Perceived Access to Alcohol	.32 <sup>+</sup>	.27	1.00		
Perceived Access to Tobacco	.47**	.52**	.51**	1.00	
Norms of Alcohol & Tobacco Use	.31 <sup>+</sup>	.38*	.19	.19	1.00

# Method: GIS & Substance Risk

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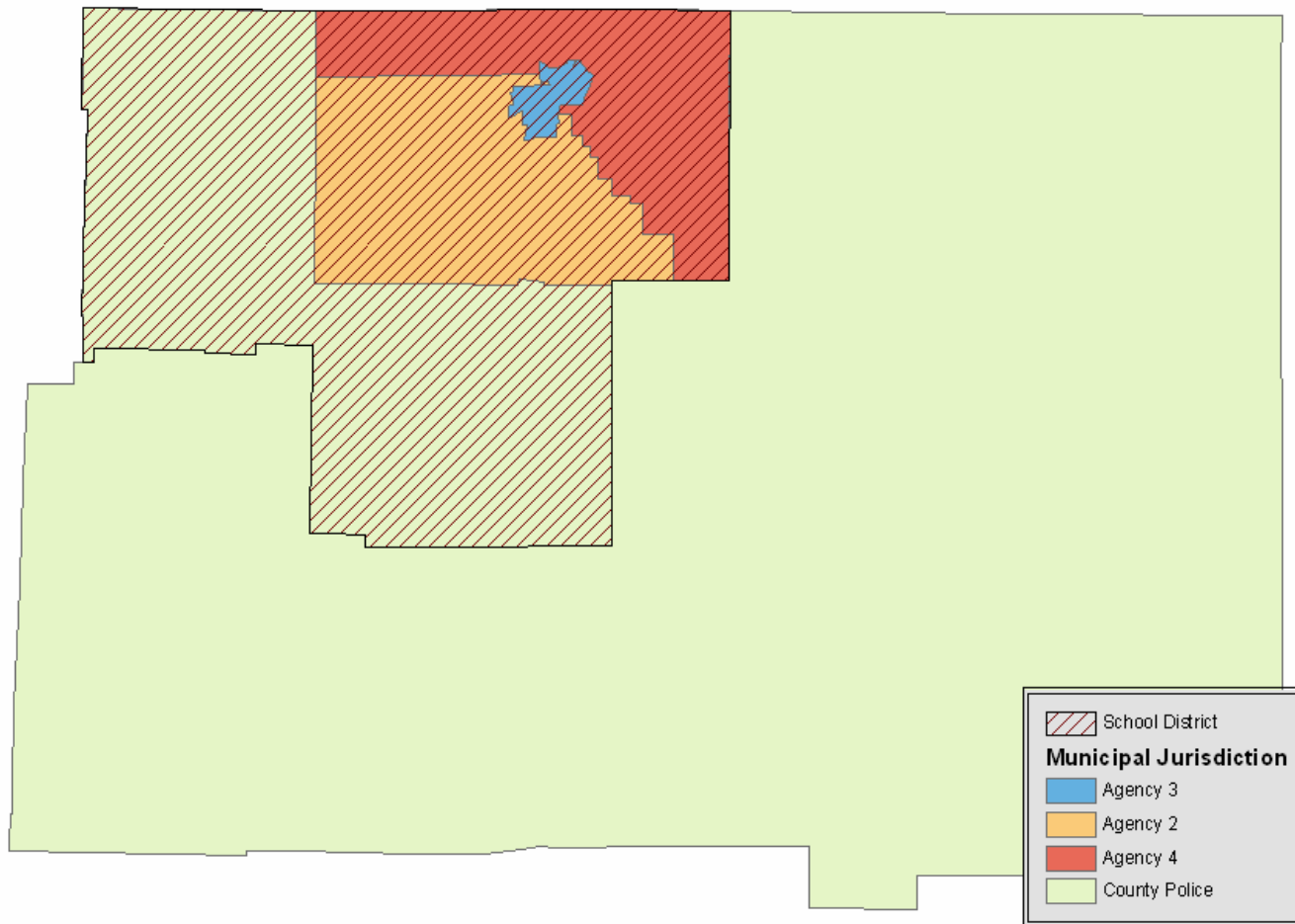
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Crime Rates	1. Violent Crime (State / FBI)	284.73	197.35
	2. Property Crime (State / FBI)	2617.19	1357.17
	3. Narcotic Crime (State / FBI)	267.28	135.46

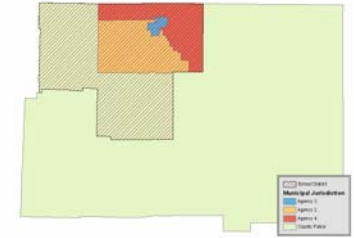


# Method: GIS & Crime Rates

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# Method: GIS & Crime Rates



Crime Jurisdiction	Square Miles of Jurisdiction	Square Miles within School District	Percent of Area w/in SD	Number of Property Crimes	Weighted Number of Property Crimes
County Police	836.80	147.02	17.57%	150.67	26.47
Agency 2	55.98	55.98	100.00%	52.33	52.33
Agency 3	3.46	3.46	100.00%	201.00	201.00
Agency 4	46.43	46.43	100.00%	58.00	58.00
Total Number in District					337.80
District Population					21772
Yearly Rate of Property Crimes (Per 100,000)					1551.55

# Method: Construct Validity of Crime

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## *Pearson Correlations*

	Economic Risk	Mobility	Substance Risk	Population Density
Crime	.43*	.30 <sup>+</sup>	.42*	.29 <sup>+</sup>

+  $p < .15$ ; \*  $p < .05$

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<b>School Risk</b>	<b>1. District Academic Risk (Dist) 2. School Problems (TM &amp; AD)</b>	<b>7.50 2.49</b>	<b>3.65 0.34</b>

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School Risk	1. District Academic Risk (Dist)	7.50	3.65
	2. School Problems (TM & AD)	2.49	0.34

# Method: Community Student Sample

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- N=5261 Eighth-grade students
  - Average age 14.3 years old
  - 50% Female
  - 87% White
  - 27% Free or reduced lunch

# Method: Community 8<sup>th</sup> Grade Outcomes

Behavior	How Assessed?	Mean	SD
Lifetime Alcohol Use	Drunk more than a few sips of alcohol?	45.1%	7%

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12 Month Aggressive Behavior	Beat up someone or physically fought with someone, or thrown objects...to hurt or scare them?	32.7%	5%

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<b>12 Month Property Destruction</b>	<b>Purposely damaged or destroyed property that did not belong to you?</b>	<b>21.3%</b>	<b>5%</b>

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# Hypothesis 1: Results

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- ❑ Substance risk did not relate to any of the four community rates of adolescent problem behaviors
- ❑ Crime predicted higher community rates of adolescent property destruction
- ❑ School district risk was the most consistent community-level risk
- ❑ Mobility predicted higher community rates of adolescent Aggressive Behavior & Property Destruction

# Hypothesis 2

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Proximity of alcohol and tobacco outlets

Crime rate of jurisdiction

# Descriptive Statistics

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Variable	N	M	SD	
1mi Opportunities for Access	5003	17.0	16.36	
Crime Rates of Jurisdiction	68	238.90 2161.84 266.45	265.57 2002.50 215.60	
Problem Behavior Index	5003	1.29	1.33	

# Descriptive Statistics

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Variable	N	M	SD	% w/0
1mi. Opportunities for Access	5003	17.0	16.36	20.8
Crime Rates of Jurisdiction	68	238.90 2161.84 266.45	265.57 2002.50 215.60	
Problem Behavior Index	5003	1.29	1.33	39.4

## Hypothesis 2: Results

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- Number of opportunities for access within 1 mile of students' homes additively and positively predicts their engagement in problem behaviors
- Level of crime of municipality, township, or borough additively and positively predicts youth engagement in problem behaviors

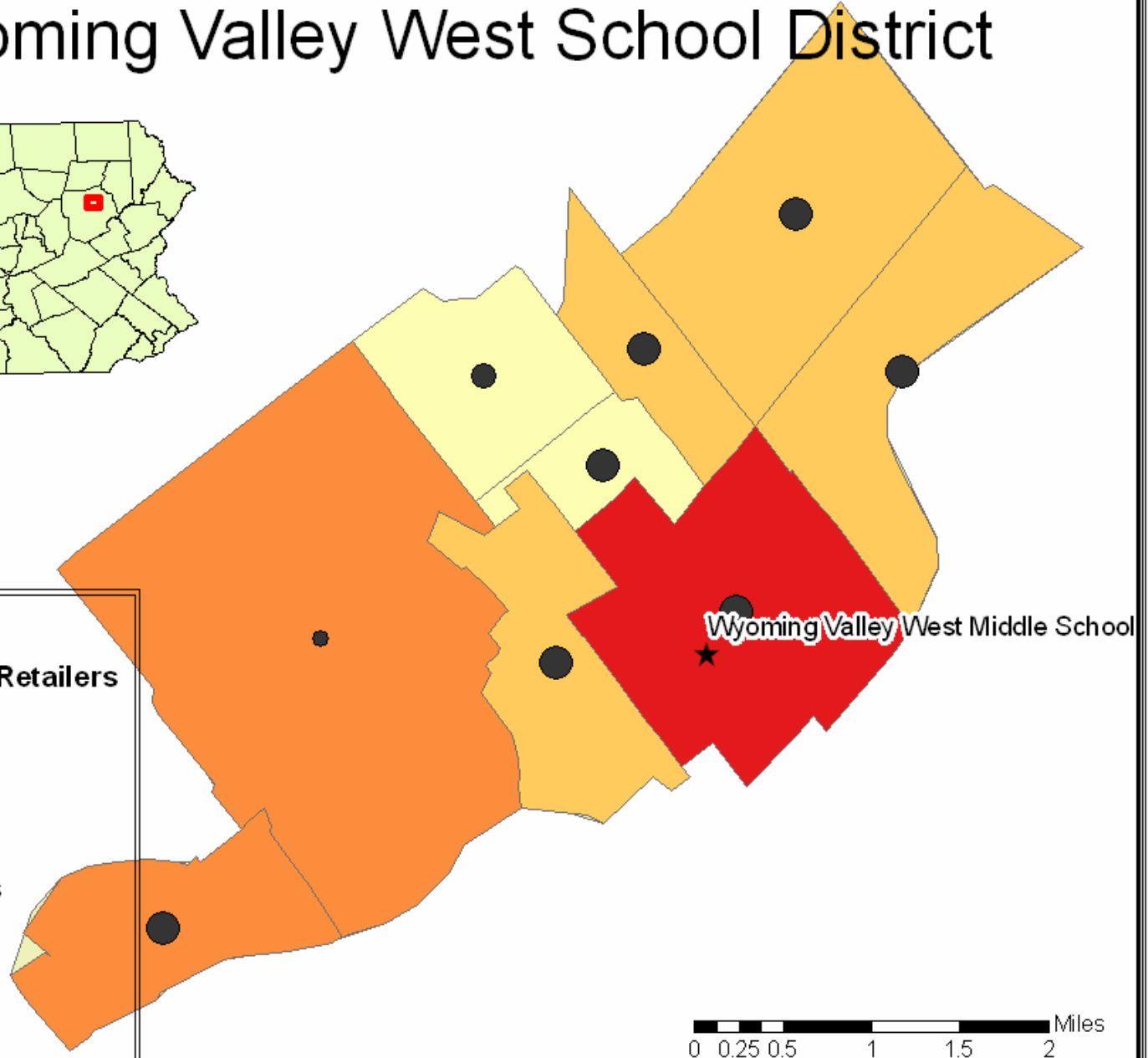
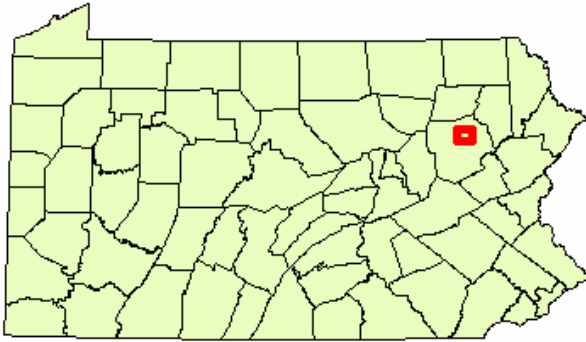


# Implications for Intervention

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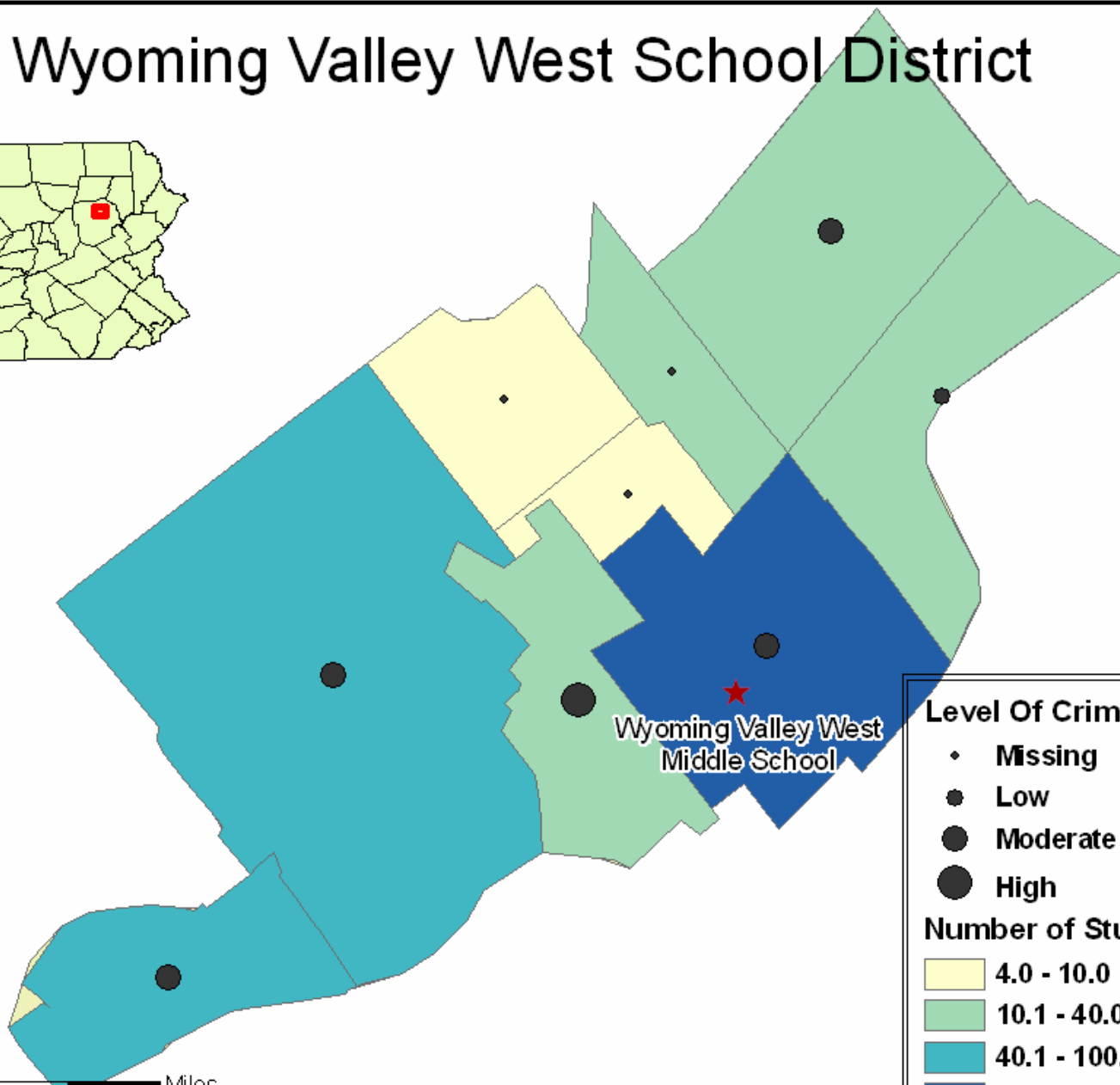
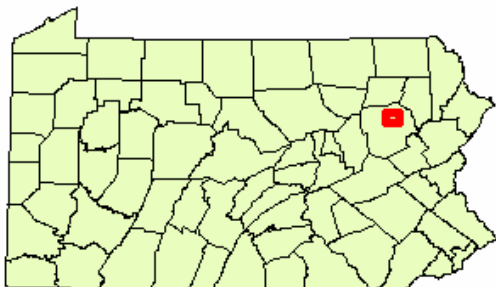
- ❑ Community-level characteristics may be good targets for intervention
- ❑ Continue improving schools
- ❑ Sub-sections of communities may help community collaborations in prevention planning

# Wyoming Valley West School District



Wyoming Valley West Middle School

# Wyoming Valley West School District

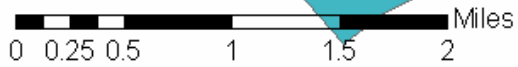


**Level Of Crime**

- Missing
- Low
- Moderate
- High

**Number of Students**

- 4.0 - 10.0
- 10.1 - 40.0
- 40.1 - 100.0
- 100.1 - 120.0



Thank you!

