Integrated Approaches to Planning Substance Abuse/Chemical Dependence Prevention and Treatement Services in Erie County

Impact Assessment Report

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Summary of Impact Assessment Trend Analysis

The analysis of trends in the data classified the most four- or five-year period of a -nual observations based on comparisons between sub-regional and countywide data. Maps highlight differences in trends between sub-regions and the relationship between sub-regional trends and the county as a whole. Red colors indicate increasing risk, while blue colors indicate decreasing risk. Risk was determined indicator-by-indicator. An increasing trend in graduation rate indicates decreasing risk, while an increasing trend in the rate of poor grade 8 English performance indicates increasing risk.

Trends represent the generalized rate of change per year in an indicator, taking account of fluctuations over the time-period. In certain instances, though the indicator in the most recent year may have increased or decreased from the initial year, the trend may be in the opposite direction. In these cases, there have been large fluctuations over the five-year time periods. Trends are illustrative and should not be used to forecast future indicators.

# Erie County Prevention Planning Impact Assessment Sub County Regions
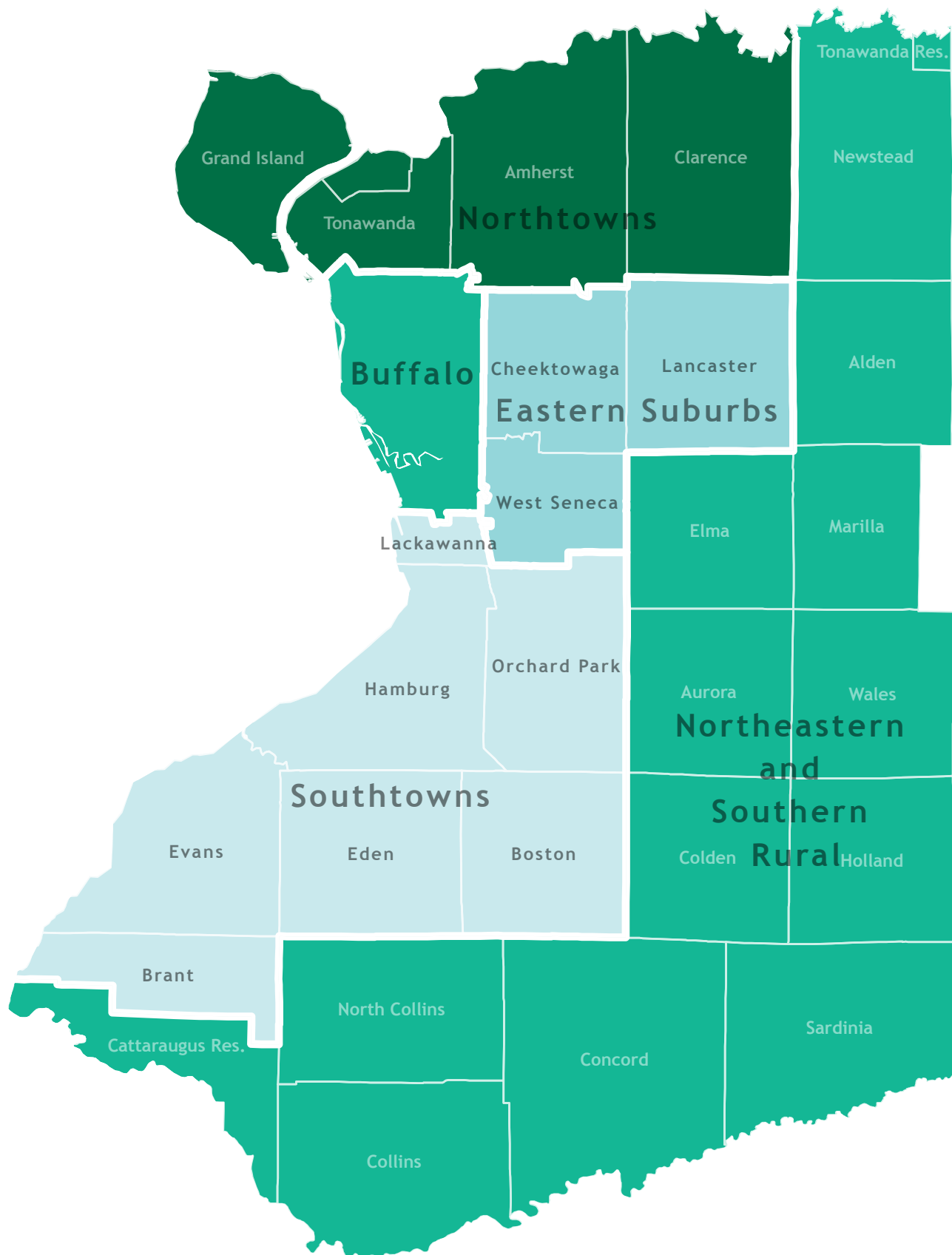
1. Absentee rate

NOMs Domain: Employment/Education

Data Source: New York State Education Department (NYSED), School Report Cards

Data Description: Data were gathered from NYSED, which reports on the attendance rate and enrollment for each school district within Erie County. Data were reported for school districts, which largely correspond to the Planning Areas. Where districts overlap Planning Area boundaries, a population-weighted areal interpolation was applied to the data. School district-wide attendance rates were multiplied by total enrollment in order to compute the average attendance in a district. This was then subtracted from the district's enrollment to calculate average number of absences. Average absences were then aggregated by Planning Area and divided by Planning Area enrollment.

Trend Analysis: There was little change in the absentee rate in Erie County between 2010 and 2014. The region as a whole saw very small declines in absenteeism. Between 2012 and 2013, the City of Buffalo saw a sharp decline in the absenteeism, however absenteeism rose as sharply between 2013 and 2014.
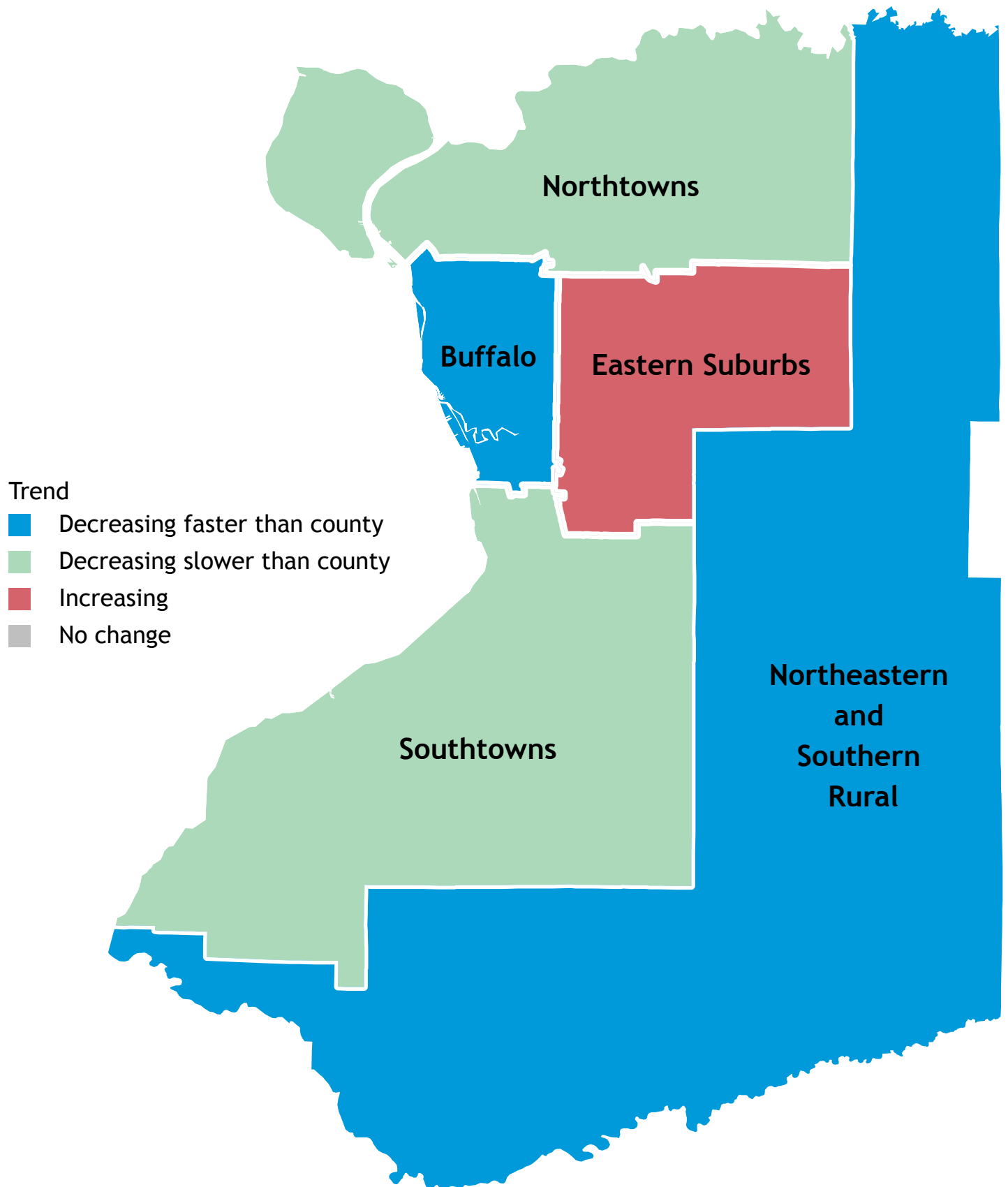
Absentee Rate
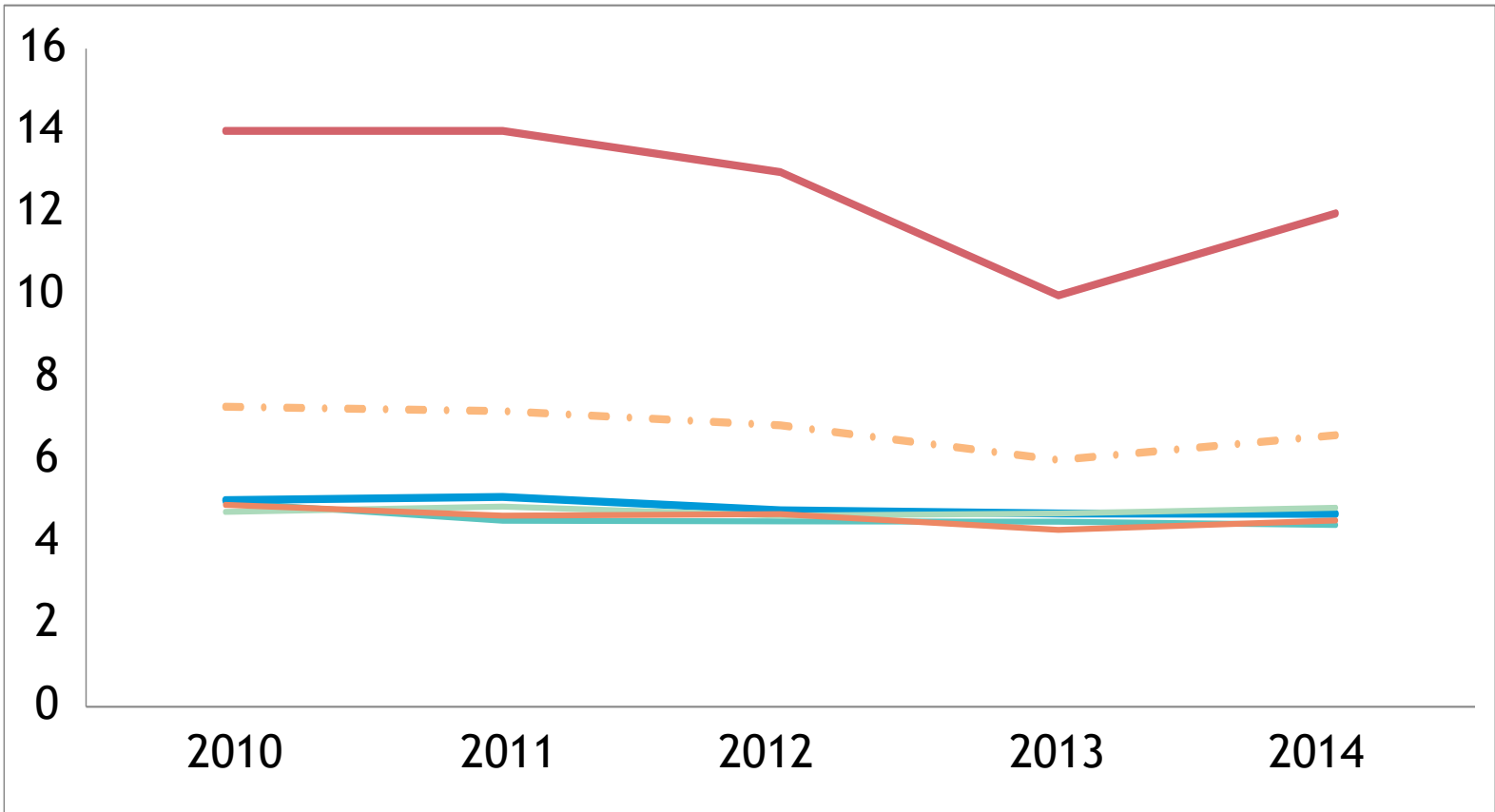
	2010	2011	2012	2013	2014
Northeastern and Southern Rural	4.97	4.52	4.51	4.50	4.42
Southtowns	5.02	5.10	4.78	4.70	4.69
Eastern Suburbs	4.74	4.87	4.65	4.69	4.30
Northtowns	4.91	4.65	4.69	4.30	4.53
City of Buffalo	14.00	14.00	13.00	10.00	12.00
Erie County	7.29	7.19	6.84	6.00	6.60
Erie County (No Buffalo)*	4.90	4.77	4.66	4.50	4.62

*Not in chart

Absentee Rate 2010-2014

County trend: Decreasing 0.02 percent per year

Northtowns

Buffalo

Eastern Suburbs

Southtowns

Northeastern and Southern Rural

Trend
- ■ Decreasing faster than county
- ■ Decreasing slower than county
- ■ Increasing
- ■ No change

2. Graduation Rate

NOMs Domain: Employment/Education

Data Source: New York State Education Department (NYSED), School Report Cards

Data Description: Data were obtained from NYSED, which reports the graduation rate for each school district within Erie County between 2011 and 2015. The native geographies of the data are school districts, which largely correspond to the Planning Areas, but required a population-weighted areal interpolation to distribute nonaligned data between Planning Areas.

Trend Analysis: From 2011 to 2015, there was a decreasing trend in graduation rates throughout the county. The City of Buffalo saw a sharp decrease between 2013 and 2014, and a slight increase from 2014 to 2015.*

*NOTE: NYSED now reports graduation rates by four- and five-year cohorts. Prior to 2013, graduation rates were reported by total Grade 12 enrollment.
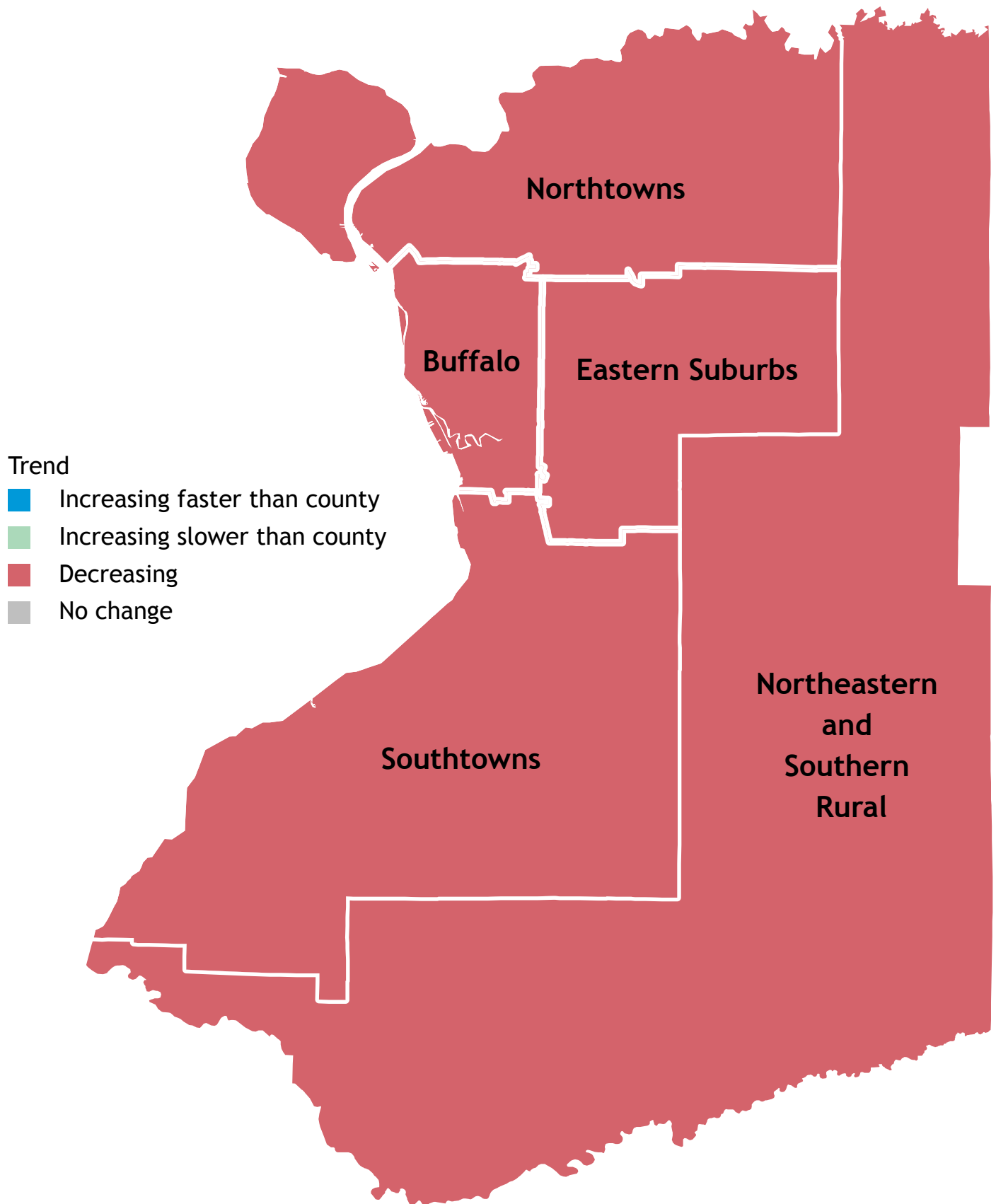
Graduation Rate
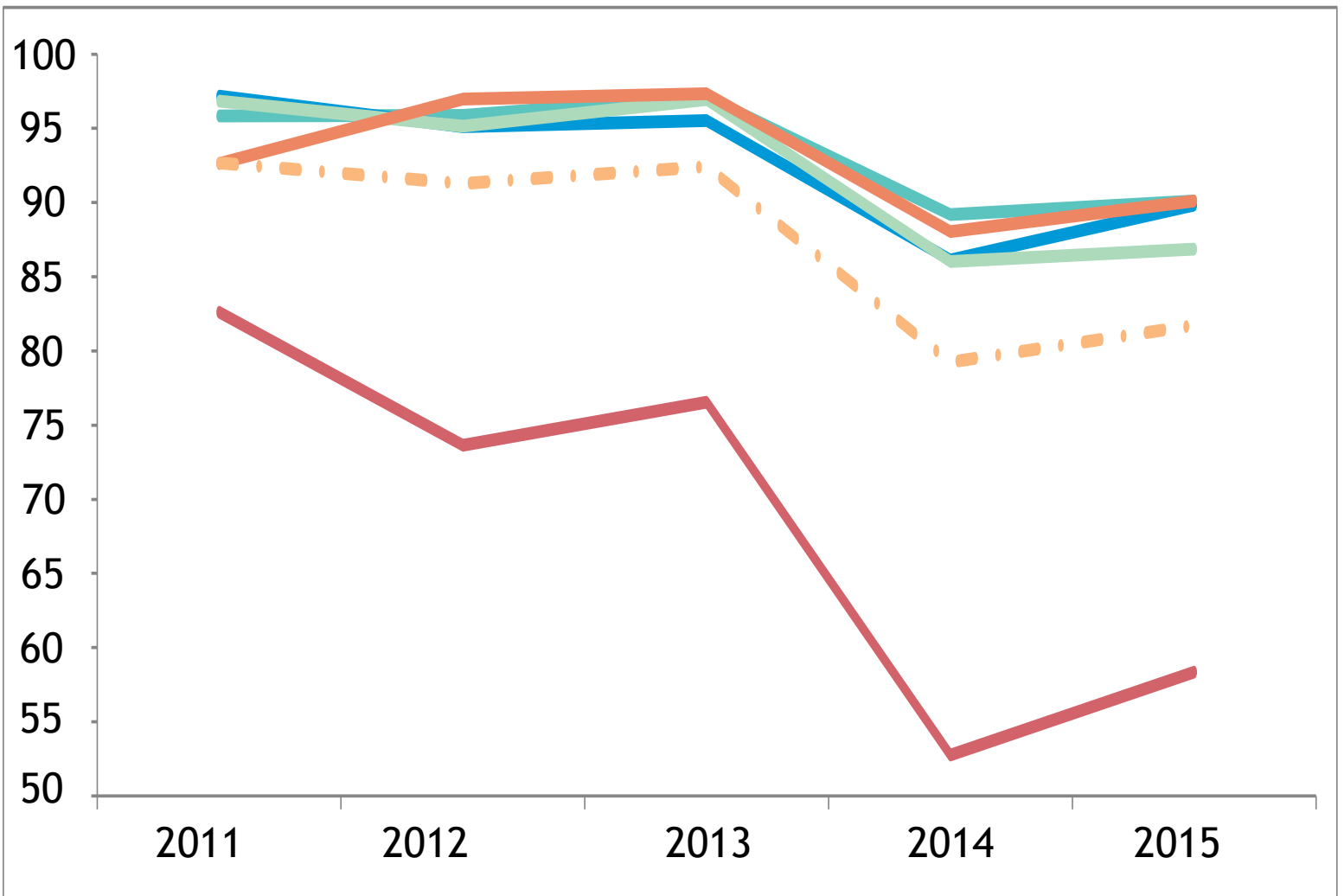
		2011	2012	2013	2014	2015
	Northeastern and Southern Rural	95.86	95.89	97.14	89.20	90.12
	Southtowns	97.18	85.13	95.53	86.14	89.84
	Eastern Suburbs	96.85	95.14	96.95	86.03	86.87
	Northtowns	92.63	96.98	97.34	88.05	90.12
	City of Buffalo	82.62	73.66	76.56	52.76	58.36
	Erie County	92.68	91.29	92.44	79.25	81.73
	Erie County (No Buffalo)	95.17	95.94	96.84	87.86	89.27

Graduation Rate 2011-2015

County trend: Decreasing 0.03 percent per year

Northtowns

Buffalo

Eastern Suburbs

Trend
- ■ Increasing faster than county
- ■ Increasing slower than county
- ■ Decreasing
- ■ No change
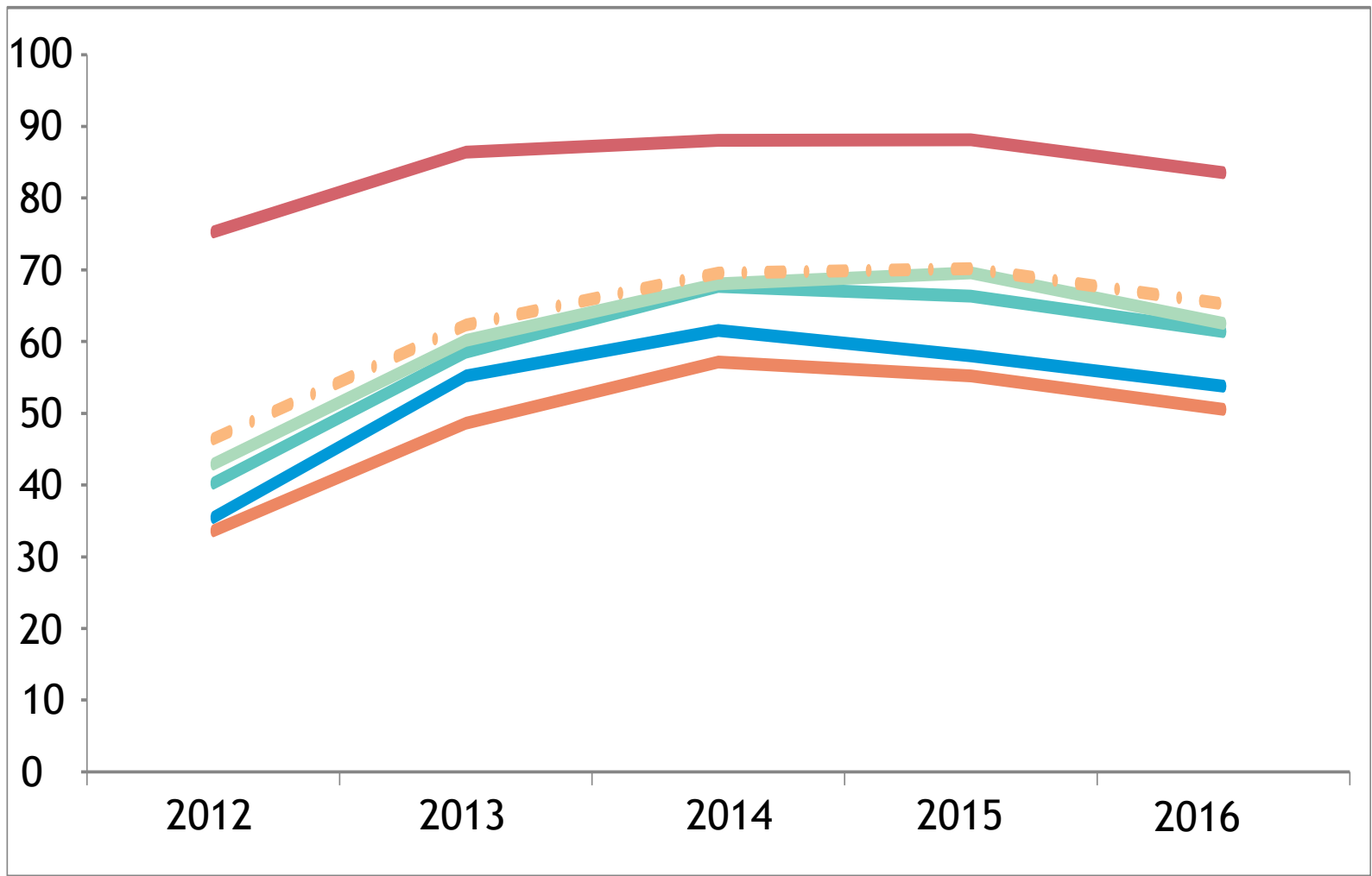
Southtowns

Northeastern and Southern Rural

3. Rate of Poor Grade 8 English Performance

NOMs Domain: Employment/Education

Data Source: New York State Education Department (NYSED), School Report Cards

Data Description: Data were obtained from NYSED, which reports the aggregate scores on standardized tests for each school district within Erie County be-tween 2012 and 2016. The rate of poor grade 8 English performance was taken from the share of students scoring at Level 1 and Level 2. The native geographies of the data are school districts, which largely correspond to the Planning Areas, but required a population-weighted areal interpolation to distribute nonaligned data between Planning Areas.

Trend Analysis: Overall, the county saw an increase in poor grade 8 English performance, though the rate has seen a slight decrease since 2015. The greatest rate of increase was seen between 2012 and 2013, with the Eastern Suburbs seeing the greatest increase.

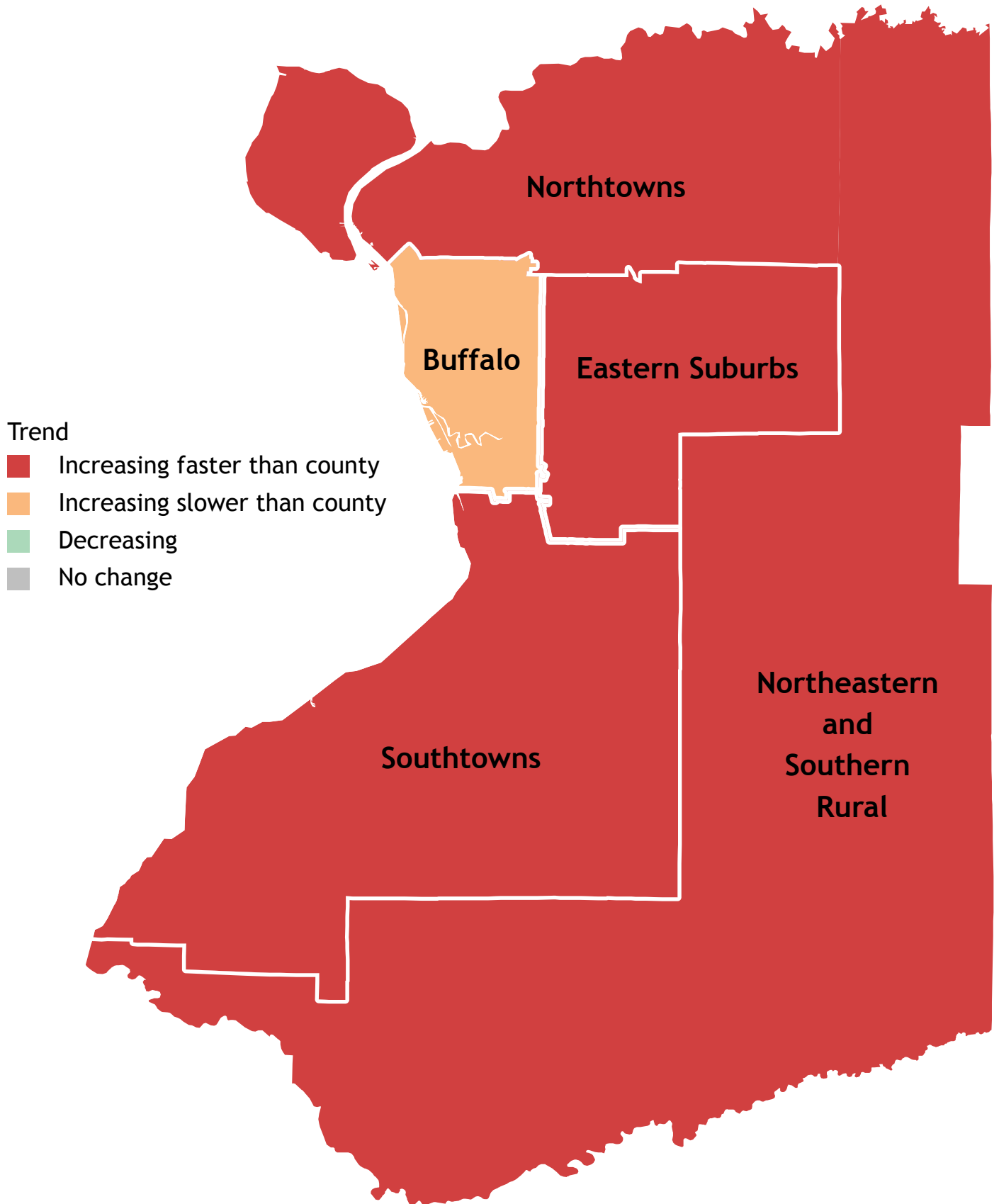# Rate of Poor Grade 8 English Performance

	2012	2013	2014	2015	2016
Northeastern and Southern Rural	40.25	58.50	67.69	66.35	61.40
Southtowns	35.47	55.21	61.56	58.02	53.75
Eastern Suburbs	42.91	60.20	68.03	69.59	62.51
Northtowns	33.61	48.65	57.15	55.25	50.59
City of Buffalo	75.29	86.43	88.09	88.14	83.55
Erie County	46.43	62.29	70.17	65.27	65.27
Erie County (No Buffalo)	37.55	54.53	62.40	60.87	55.73

Rate of Poor Grade 8 English Performance 2012-2016
County trend: Increasing 0.07 percent per year

Trend
- Increasing faster than county
- Increasing slower than county
- Decreasing
- No change

Northtowns

Buffalo

Eastern Suburbs

Southtowns

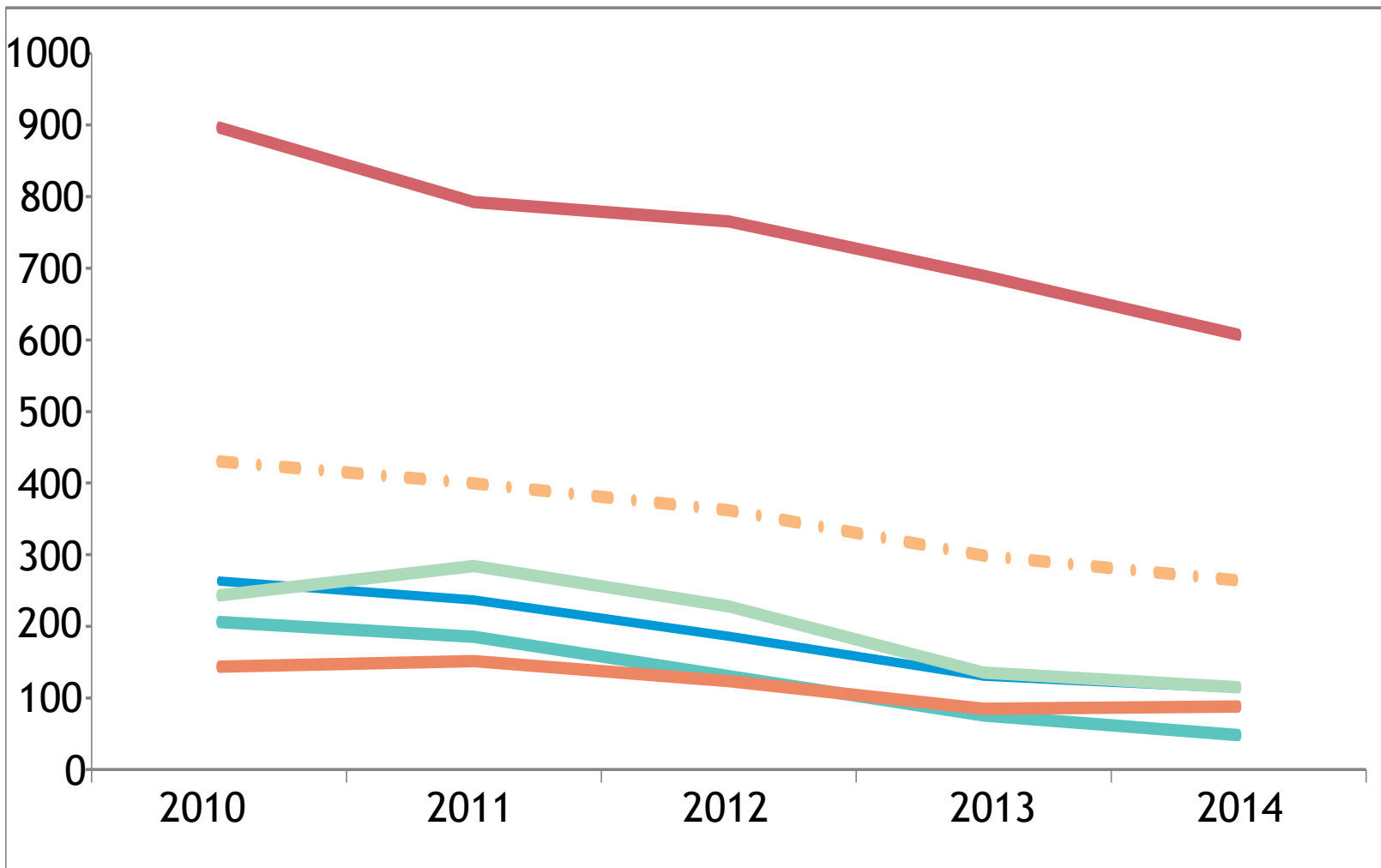Northeastern and Southern Rural

4. Adolescent Pregnancy Rate

NOMs Domain: Reduced Morbidity

Data Source: Erie County Department of Health

Data Description: Data for the years from 2010 to 2014 were obtained from the Erie County Department of Health of counts of all pregnancies to mothers aged 15 to 19. These data are available at the municipal area spatial scale, so no modification or interpolation was necessary.

Trend Analysis: Adolescent pregnancy rates have declined sharply county-wide since 2011, with the Northeastern and Southern Rural area seeing the greatest rates of decrease over the five-year period.
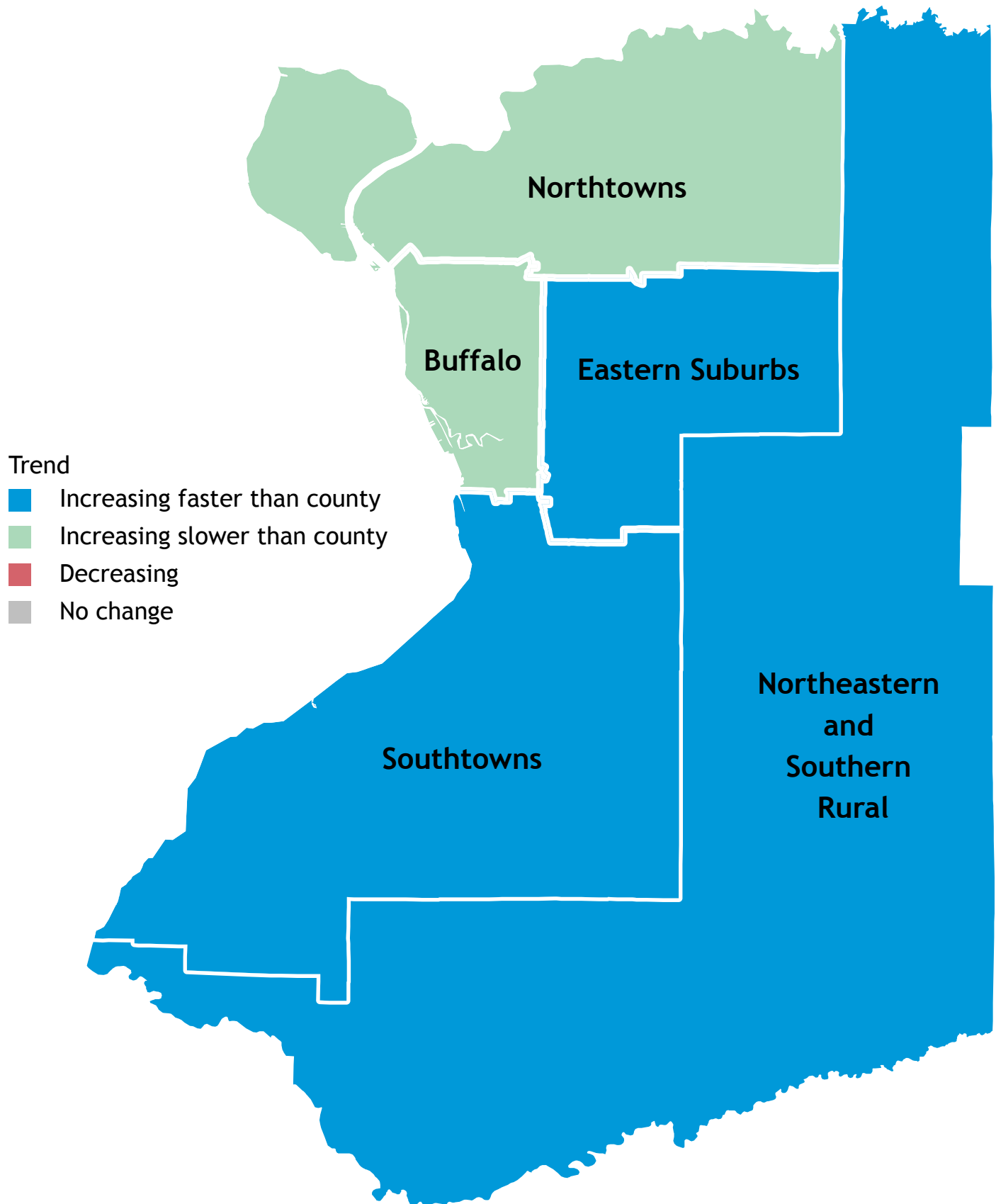
Adolescent Pregnancy Rate

		2010	2011	2012	2013	2014
	Northeastern and Southern Rural	206.04	185.44	130.49	75.57	48.09
	Southtowns	263.22	236.66	185.95	130.40	113.49
	Eastern Suburbs	242.85	284.26	227.79	135.54	114.83
	Northtowns	143.90	151.42	123.50	84.83	88.06
	City of Buffalo	896.65	792.36	765.36	689.94	607.07
	Erie County	430.33	399.48	361.85	298.61	264.06
	Erie County (No Buffalo)	204.83	199.29	216.36	104.72	94.11

Adolescent Pregnancy Rate 2010-2014

County trend: Decreasing 0.11 pregnancies per 10k each year

Northtowns

Buffalo

Eastern Suburbs

Trend
- Increasing faster than county
- Increasing slower than county
- Decreasing
- No change

Southtowns

Northeastern and Southern Rural

5. Property Crime Rate

NOMs Domain: Crime and Criminal Justice

Data Source: NYS Department of Criminal Justice Services (DCJS), Uniform Crime Report

Data Description: Data were obtained from DCJS of the counts for reported crimes by jurisdiction. While the native geographies of the data are police jurisdictions, these largely correspond to municipal boundaries, resulting in a relatively straightforward interpolation. Property crimes were used because Central Police Services was not responsive in supplying data on Criminal Mischief, which was our desired Impact Assessment Measure. Property crimes include burglary, larceny, theft, motor vehicle theft, arson, shoplifting, and vandalism and are the closest proxy for our desired measure.

Trend Analysis: Property crimes were on the decrease in most areas of the county between 2011 and 2015, with the exception of the Southtowns, which saw a slight increase in the property crime rate over the five-year period.
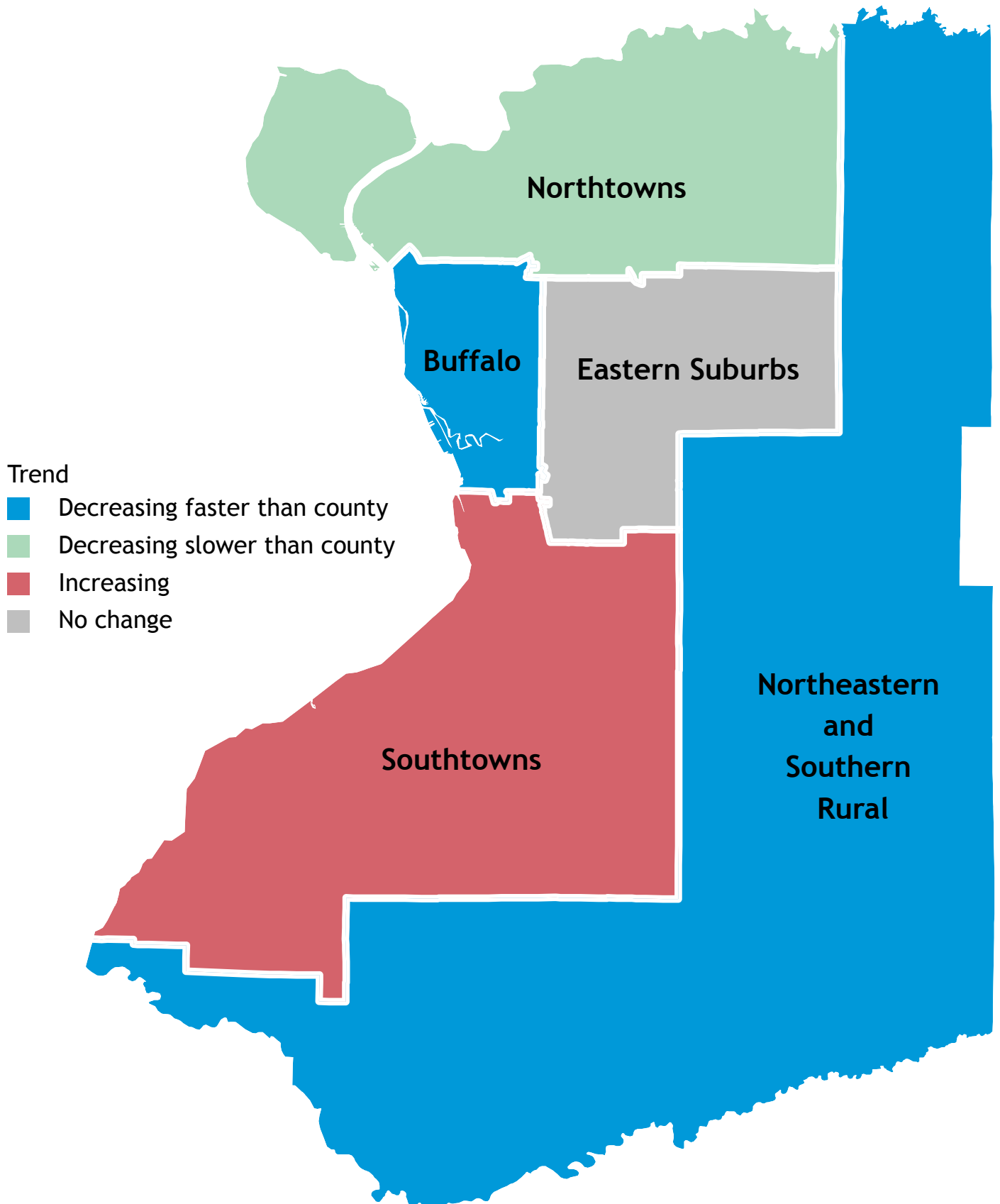
Property Crime Rate
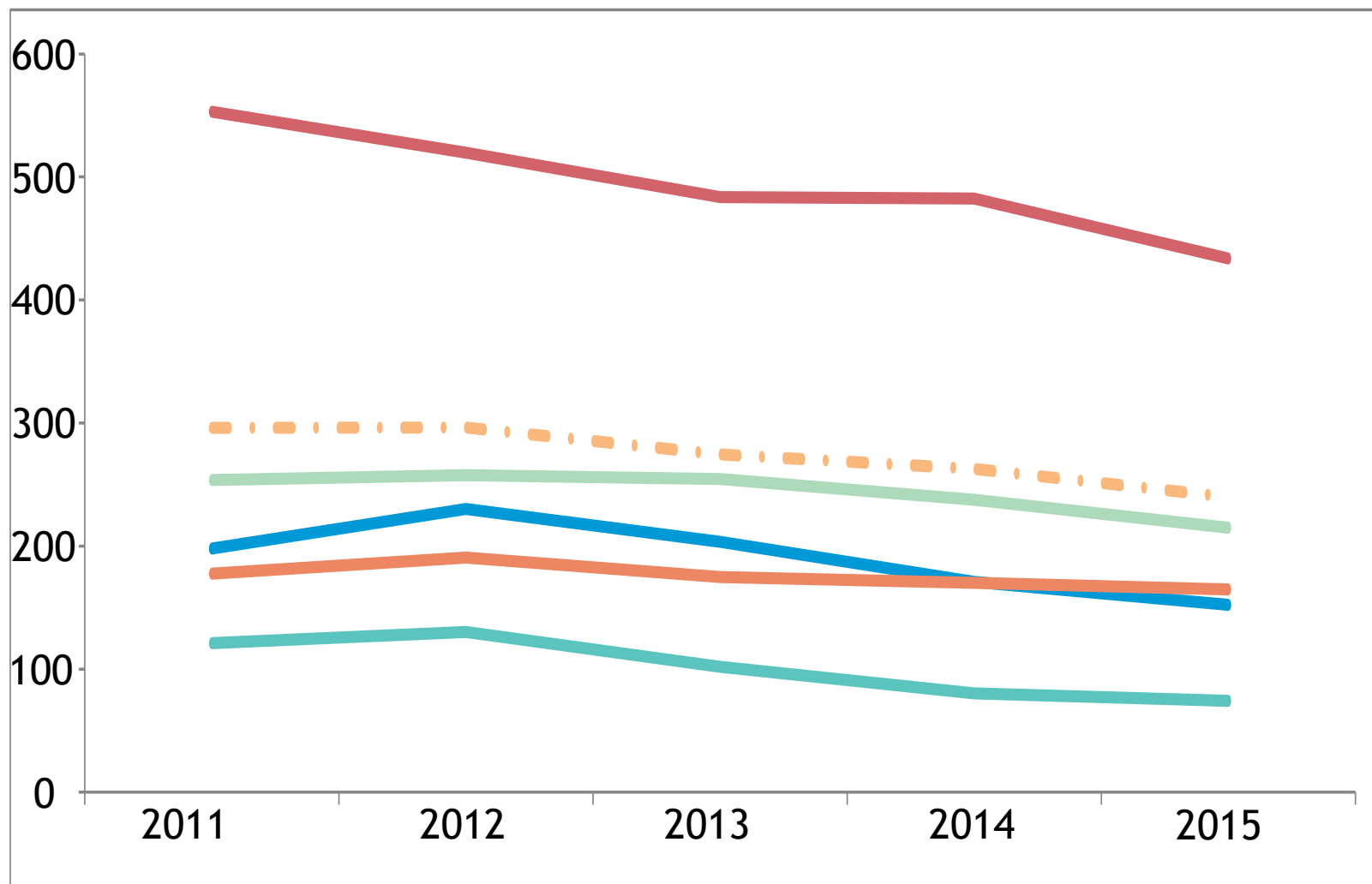
		2011	2012	2013	2014	2015
	Northeastern and Southern Rural	121.28	130.23	101.75	80.29	74.19
	Southtowns	198.18	230.19	203.42	170.86	152.29
	Eastern Suburbs	253.78	257.66	254.58	237.52	214.92
	Northtowns	177.75	190.65	174.75	170.27	164.77
	City of Buffalo	553.16	519.93	483.77	482.44	443.82
	Erie County	296.07	296.07	274.40	262.79	239.89
	Erie County (No Buffalo)	193.78	207.28	191.12	175.53	162.86

Property Crime Rate 2011-2015
County trend: Decreasing 0.04 crimes per 10k each year

Northtowns

Buffalo

Eastern Suburbs

Trend

- Decreasing faster than county
- Decreasing slower than county
- Increasing
- No change

Southtowns

Northeastern and Southern Rural

6. Trauma Death Rate

NOMs Domain: Reduced Morbidity

Data Source: Erie County Department of Health

Data Description: Data were obtained from the Erie County Department of Health for counts of deaths from trauma by municipality for the years from 2010 to 2014. These data are available at the municipal area spatial scale, so no modification or interpolation was necessary.

Trend Analysis: The rate of trauma deaths increased throughout the county, with the exception of the Northtowns, which saw a decrease in the number of trauma death rates over the five-year period.
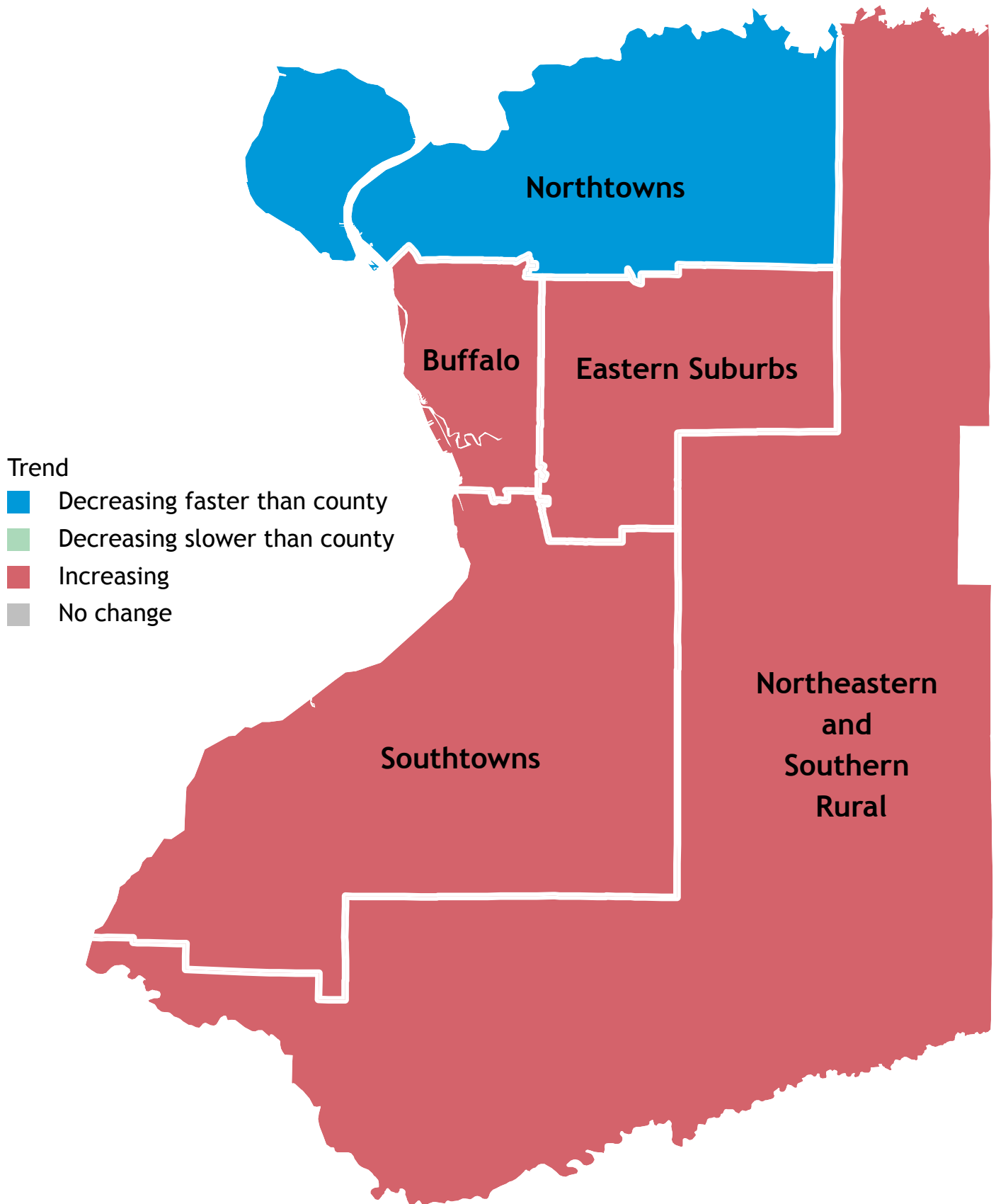
Trauma Death Rate
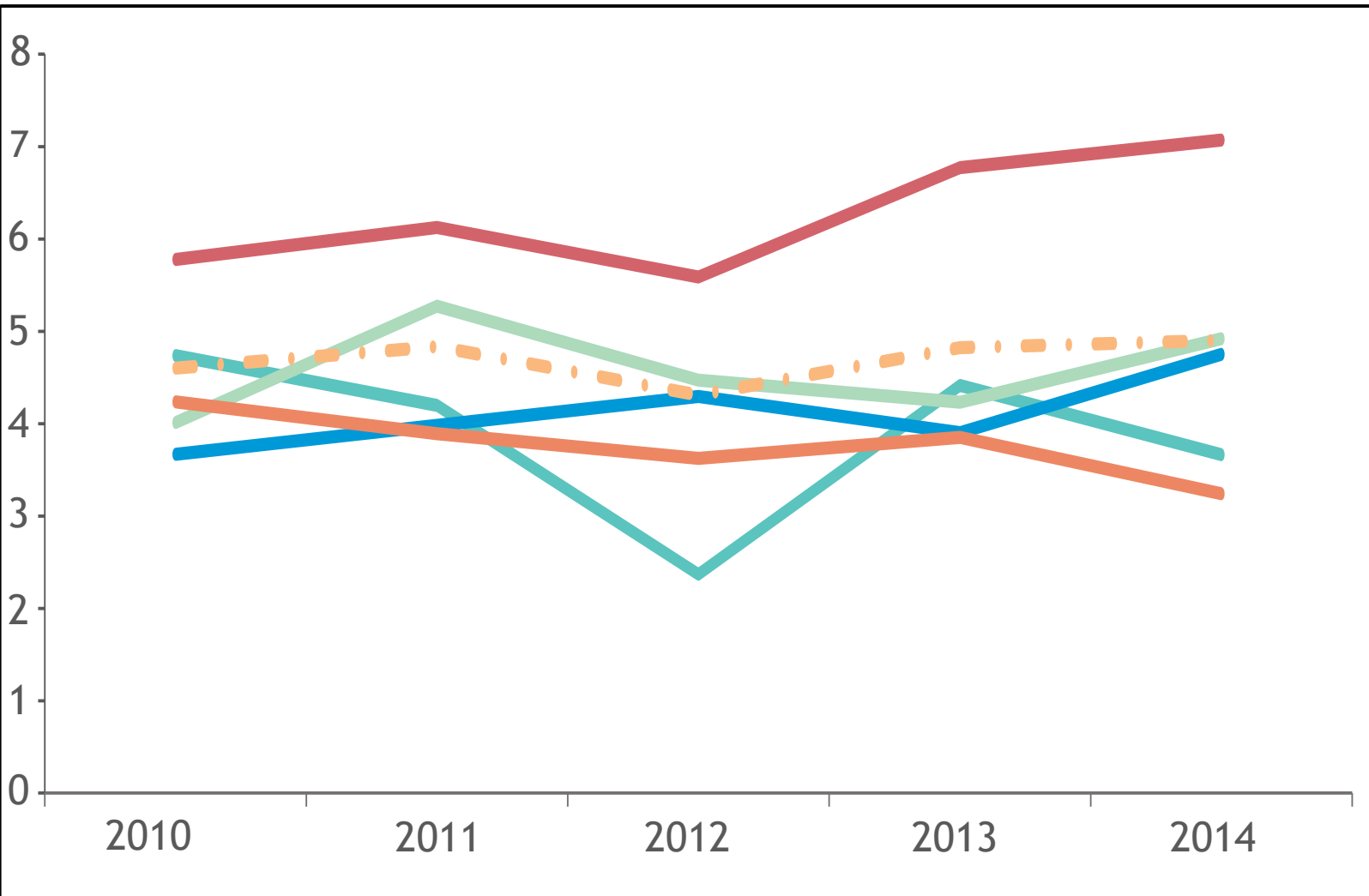
	2010	2011	2012	2013	2014
Northeastern and Southern Rural	4.20	4.74	4.20	2.37	3.66
Southtowns	3.20	3.67	3.98	4.29	4.75
Eastern Suburbs	4.13	4.01	5.27	4.47	4.92
Northtowns	4.01	4.23	3.89	3.62	3.24
City of Buffalo	5.70	5.78	6.12	5.59	7.07
Erie County	4.42	4.60	4.83	4.31	4.90
Erie County (No Buffalo)	3.91	4.14	4.32	3.80	4.04

Trauma Death Rate 2010-2014

County trend: Increasing 0.02 deaths per 10k each year

Northtowns

Buffalo

Eastern Suburbs

Southtowns

Northeastern and Southern Rural

Trend

■ Decreasing faster than county
■ Decreasing slower than county
■ Increasing
■ No change

7. Violent Crime Rate

NOMs Domain: Crime and Criminal Justice

Data Source: NYS Department of Criminal Justice Services (DCJS), Uniform Crime Report

Data Description: Data were obtained from DCJS of the counts for reported crimes by jurisdiction from 2011 to 2015. While the native geographies of the data are police jurisdictions, these largely correspond to municipal boundaries, resulting in a relatively straightforward interpolation. Violent crimes include murder, sexual offenses, robbery, and aggravated assault.

Trend Analysis: Violent crimes have remained relatively steady over the five year period. The Northtowns and the Eastern Suburbs have seen an increase, while the City of Buffalo has seen a decrease in violent crimes since 2012.
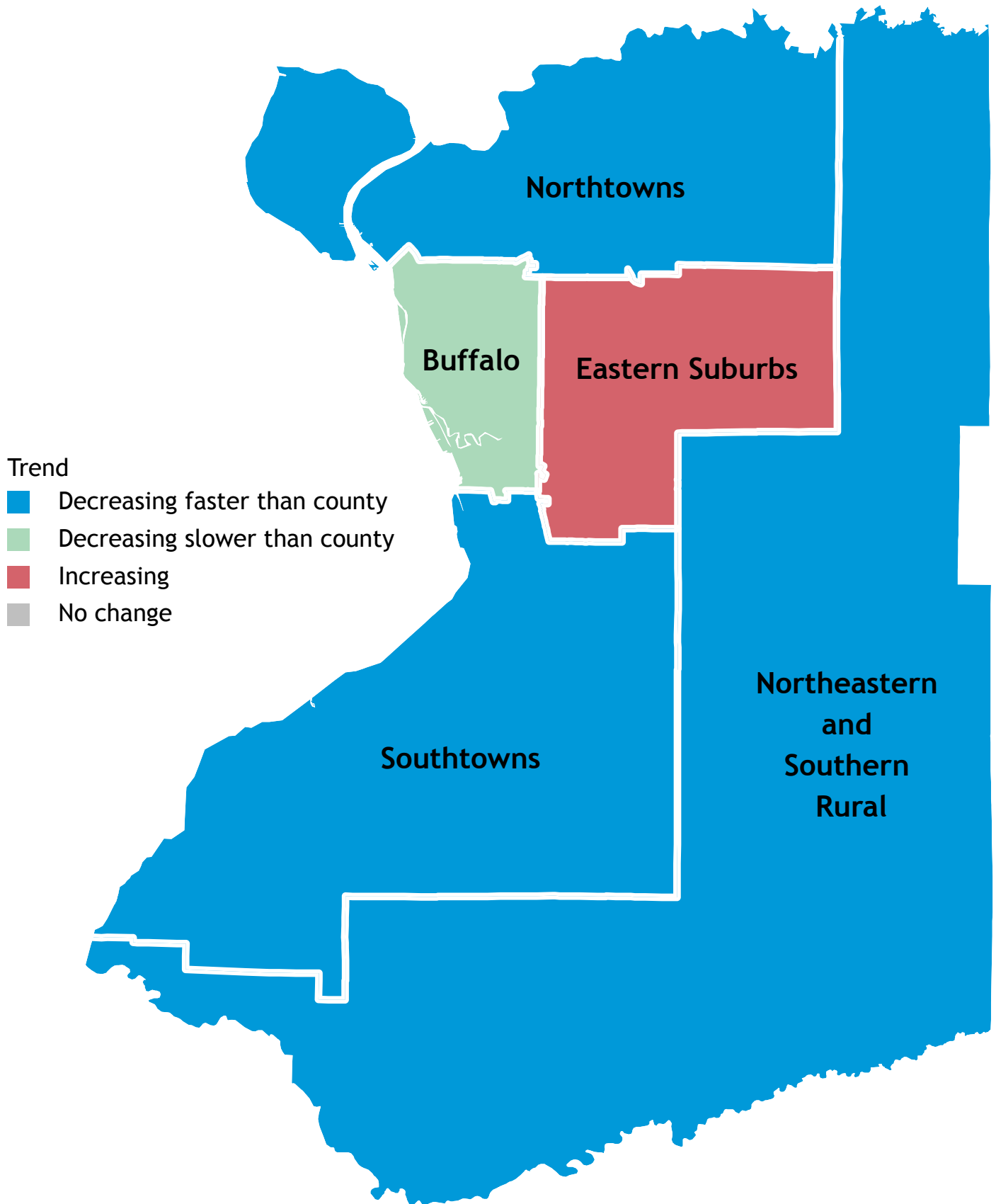
Violent Crime Rate
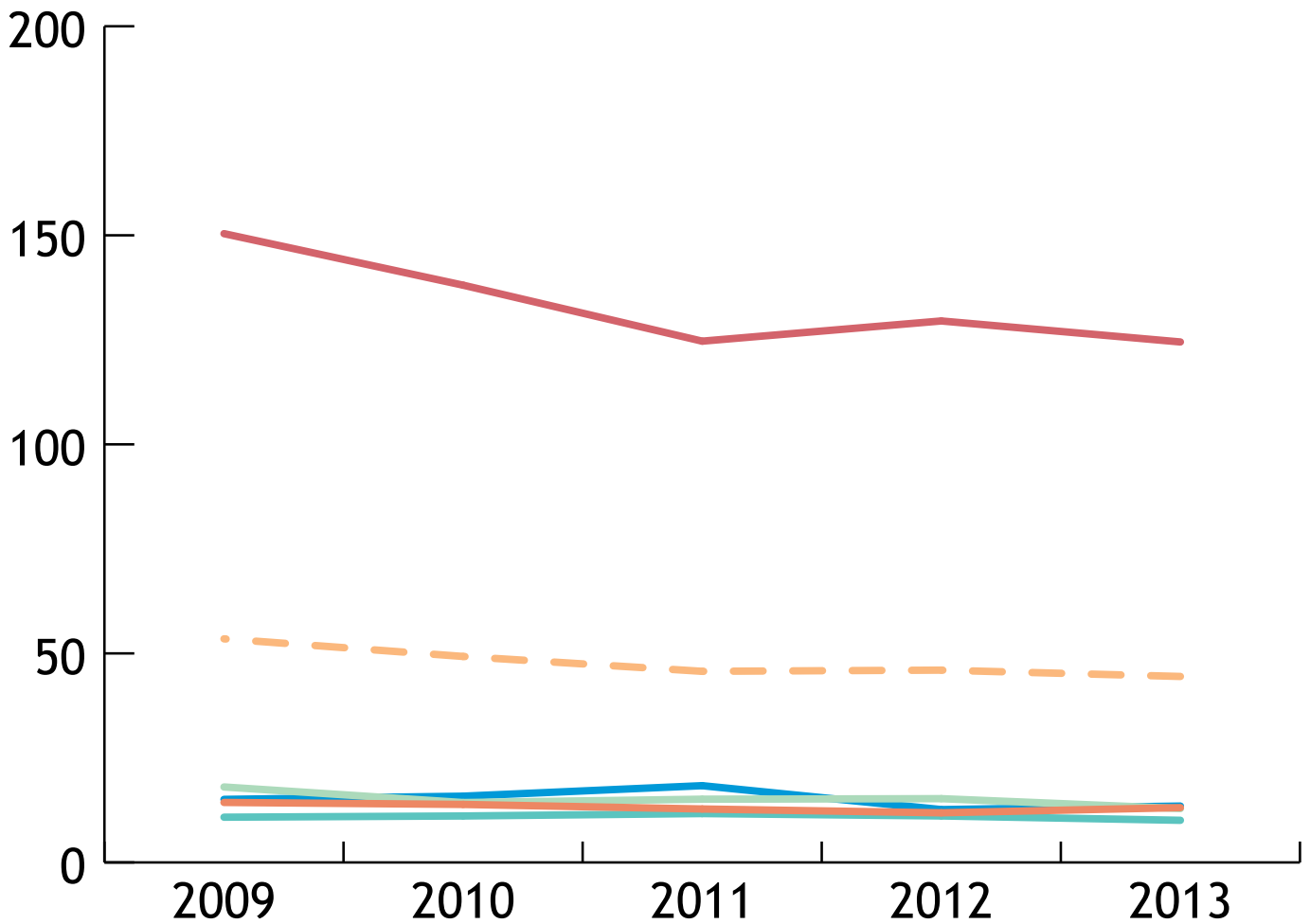
	2011	2012	2013	2014	2015
Northeastern and Southern Rural	11.69	11.12	10.08	7.36	6.97
Southtowns	18.36	12.64	13.48	13.26	13.10
Eastern Suburbs	15.13	15.25	12.89	14.25	16.11
Northtowns	12.78	11.87	13.11	11.12	13.37
City of Buffalo	124.68	129.51	124.49	119.46	111.02
Erie County	45.71	45.99	44.48	42.44	40.97
Erie County (No Buffalo)	14.34	12.80	12.70	11.84	13.15

Violent Crime Rate 2011-2015

County trend: Decreasing 0.03 crimes per 10K each year

Northtowns

Buffalo

Eastern Suburbs

Trend

Decreasing faster than county

Decreasing slower than county

Increasing

No change

Southtowns
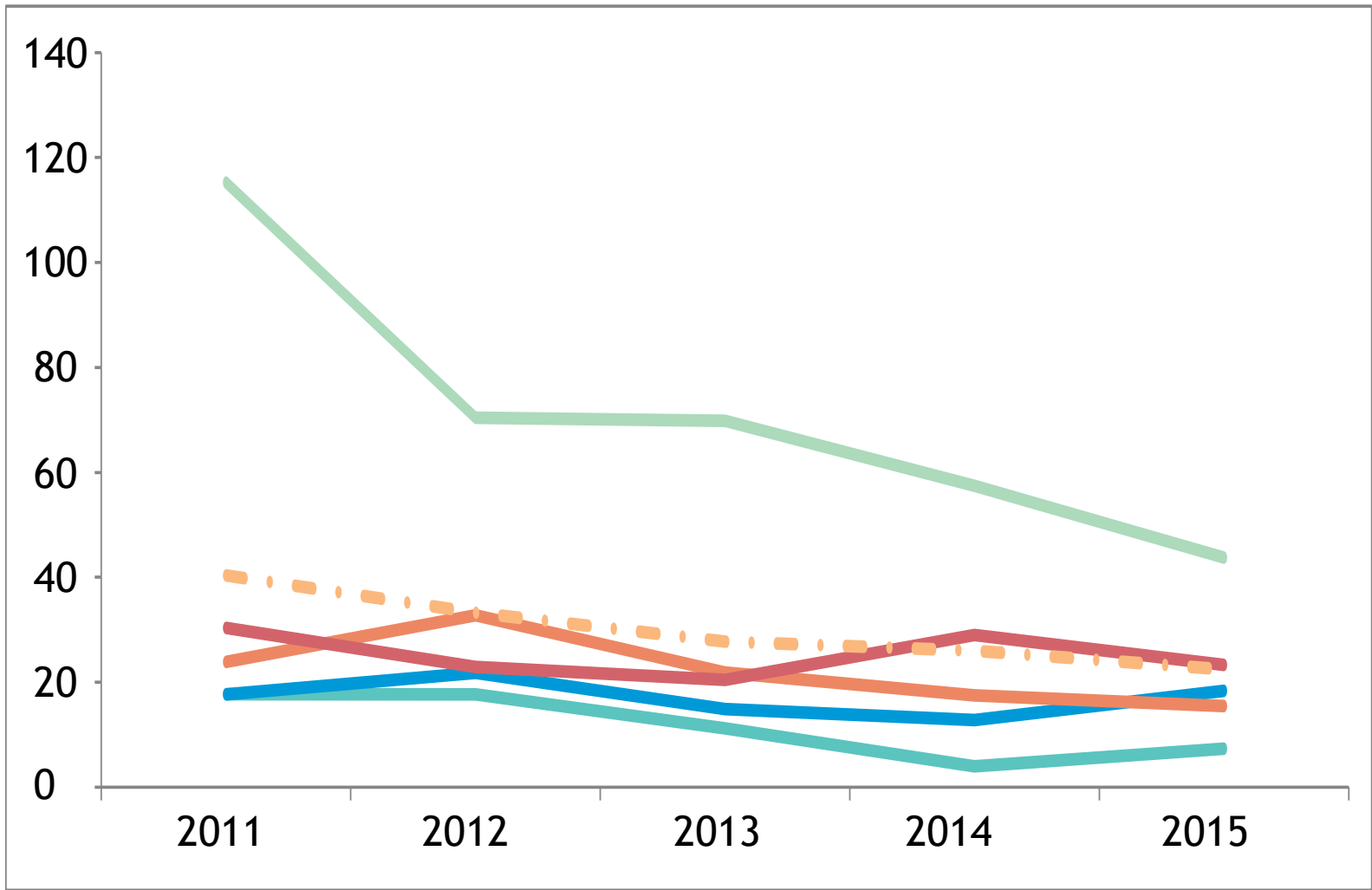
Northeastern and Southern Rural

8. Juvenile Part 1 Crime Rate

NOMs Domain: Crime and Criminal Justice

Data Source: NYS Department of Criminal Justice Services (DCJS), Uniform Crime Report

Data Description: Data were obtained from DCJS of the counts for reported crimes by jurisdiction between 2011 and 2015. While the native geographies of the data are police jurisdictions, these largely correspond to municipal bound-aries, resulting in a relatively straightforward interpolation. Part 1 Crimes are made up of Property and Violent Crimes. Property crimes include burglary, lar-ceny, theft, motor vehicle theft, arson, shoplifting, and vandalism and are the closest proxy for our desired measure. Violent crimes include murder, sexual offenses, robbery, and aggravated assault.

Trend Analysis: The juvenile crime rate stayed relatively the same over the five-year period. The Eastern Suburbs also decreased, though they had an average of 21.6 crimes per 10,000 juveniles over the five-year period.

Juvenile Part 1 Crime Rate

	2011	2012	2013	2014	2015
Northeastern and Southern Rural	17.72	17.71	11.17	3.98	7.38
Southtowns	17.72	21.80	14.87	12.80	18.41
Eastern Suburbs	115.27	70.42	69.85	57.41	43.76
Northtowns	23.85	32.77	21.84	17.51	15.47
City of Buffalo	30.37	22.90	20.46	29.02	23.26
Erie County	40.36	33.23	27.75	26.04	22.46
Erie County (No Buffalo)	95.17	95.94	96.84	24.71	22.10

Juvenile Part 1 Crime Rate

2011-2015

County trend: Increasing 1.00 crimes per 10K each year

Trend
- ■ Decreasing faster than county
- ■ Decreasing slower than county
- ■ Increasing
- ■ No change

Northtowns

Buffalo

Eastern Suburbs

Southtowns

Northeastern and Southern Rural
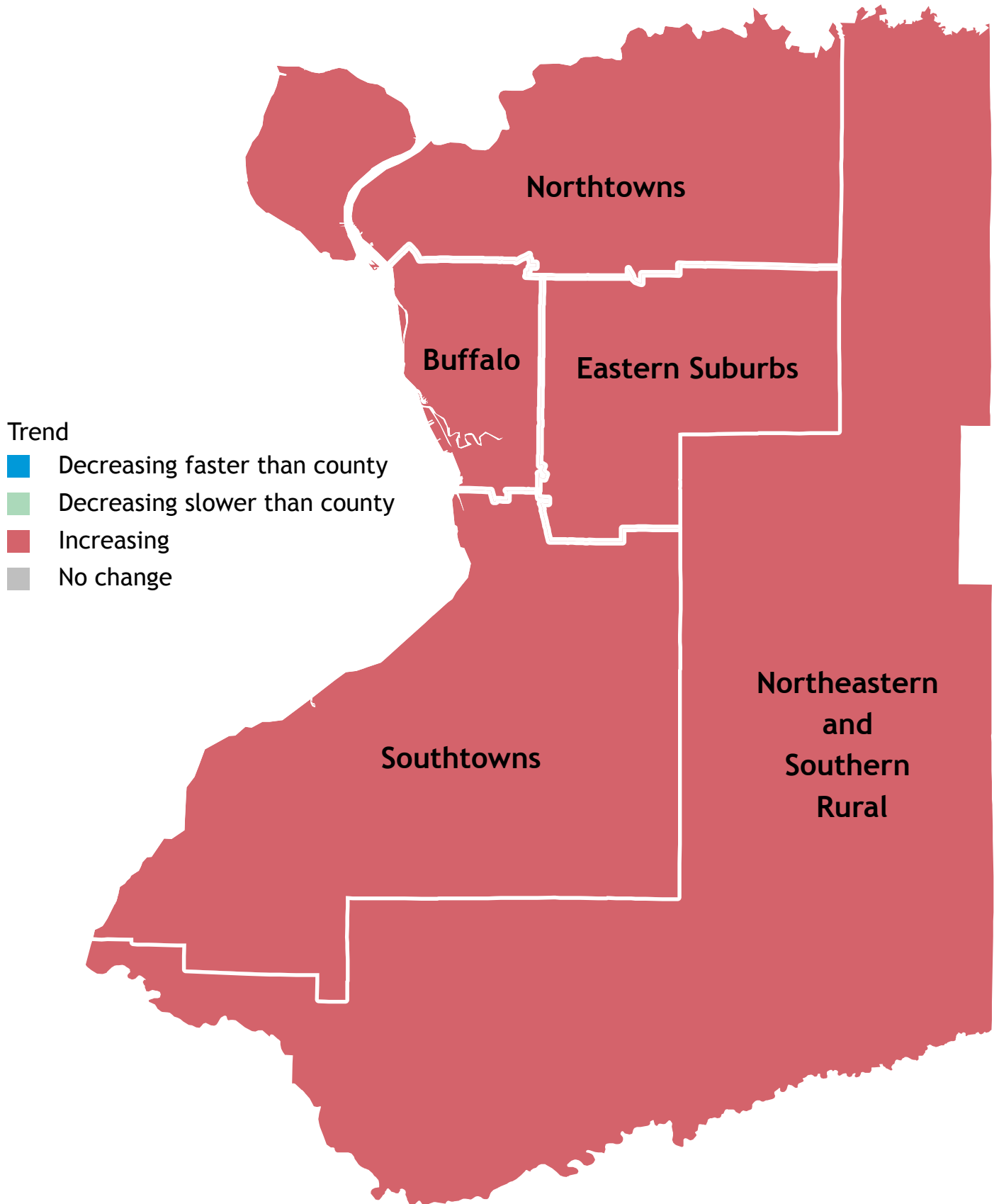
Trend Analysis Summary

Year-on year rates of change, 2011 to present

Region	Absentee rate	Graduation Rate	Rate of Poor Grade 8 English Performance	Adolescent Pregnancy Rate	Property Crime Rate	Trauma Death Rate	Violent Crime Rate	Juvenile Part 1 Crime Rate
Northeastern and Southern Rural	-0.03	-0.01	0.09	-0.30	-0.07	0.04	-0.12	1.64
Southtowns	-0.02	-0.02	0.09	-0.19	0.02	0.07	0.07	1.55
Eastern Suburbs	0.01	-0.03	0.09	-0.15	0.00	0.07	0.02	5.97
Northtowns	-0.02	-0.01	0.09	-0.10	-0.01	-0.06	0.02	1.24
City of Buffalo	-0.03	-0.07	0.02	-0.09	-0.06	0.06	-0.03	0.35
Erie County	-0.02	-0.03	0.07	-0.11	-0.04	0.02	-0.03	1.00