

Landscapes2 INDEX REPORT CARD

2015

DECEMBER 2016

Landscapes2



[▶ Landscapes2 Index](#)
page 6



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Introduction

Purpose

The Landscapes2 Index measures progress in achieving the goals of *Landscapes2, the Chester County Comprehensive Policy Plan*. This “report card of progress” is published annually by the Chester County Planning Commission.

Background

Landscapes2, as adopted by the Board of County Commissioners, commits the county to the vision of preserving and enhancing the unique character of Chester County’s landscapes by concentrating growth in the most appropriate areas. The plan provides a framework for managing growth by encouraging sound economic development, revitalizing urban centers, and protecting open space and agricultural resources. The plan includes goals for eleven elements to guide development of policies and actions, and refinement of the Livable Landscapes Map. The plan established three initiatives for change:

- Build working partnerships
- Create sustainable communities
- Keep Chester County green

These initiatives promote the accomplishment of the principles of Landscapes2.

With the adoption of Landscapes2, the Planning Commission updated the Landscapes Index to closely reflect the new plan. The Planning Commission developed the original Landscapes Index to measure the progress toward achieving the goals of Landscapes and to keep the plan in the forefront of community discussion. The Landscapes Index measured changing conditions from 1996 to 2010. The current Landscapes2 Index continues the function of monitoring progress toward the goals of Landscapes2. since 2009

Landscapes2 Index and Measures

The Landscapes2 Index consists of sixteen measures within seven categories related to the goals of Landscapes2 and the three initiatives for change. Each measure reflects the status of an element of the Landscapes2 plan. Positive trends in a measure signify improvement. Negative trends reveal deficiencies that should be addressed.

The selected measures must meet several criteria. They must be relevant to the goals of Landscapes2. The data must be understandable and clearly indicate whether the trend is positive or negative for Landscapes2. All measures are based on reliable data that is updated every year and reported in a consistent manner. An increasing value must signify a positive trend for Landscapes2.

The Landscapes2 Index serves as a barometer of many diverse trends. The index provides a snapshot of current conditions compared to conditions as they existed in 2009 when Landscapes2 was adopted. The component measures show trends for specific subjects and help to show why the index improved or regressed. Over time the trend line created by the annual index shows the degree of progress being made to achieve the goals of Landscapes2.

Calculating the index

Each of the sixteen measures has base year data to serve as a starting point for establishing a trend and developing the Landscapes2 Index. Nine of the measures have 2009 data for the base year. One measure has 2013 as the base year. The remaining six measures use 2008 for the base year because that was the latest data available at the time the index was established. Most of the measures use a three year average calculated with the base year and the two preceding years. This statistical technique minimizes short term dips or spikes that may not be typical of the trend. This establishes a more reliable base value for future comparison.

The data for each measure is converted to a base year value of 100 for the index. This provides a common initial value for each measure. Every year after the base year, the latest comparison data for each measure is divided by the base year data to calculate the new value for that measure. All measures are calculated so that an increasing value represents a positive trend and a decreasing value represents a negative trend. The Landscapes2 Index is calculated as the average of all component values.

Key features of the index:

- Value of each measure = (Current year/Base year) x 100
- The base year value is 100.
- In each following year:
 - Above 100 shows improvement
 - Below 100 shows decline
- Landscapes2 Index = average of all 16 measures

The Index is the average of

16 measures within
7 categories

related to the

3 initiatives for change in
Landscapes2:

- Build working partnerships
- Create sustainable communities
- Keep Chester County green

Highlights

Summary of Findings from the 2015 index

From 2014 to 2015, the Landscapes2 Index rose modestly from 100 to 102, indicating no major overall change in conditions since the base years. However, there have been some noteworthy changes within the specific subjects.

Eight of the measures were above 100 (indicating improvement), while seven measures were below 100 (indicating declining conditions). Six measures showed a change ranging from between -3 and +3, and so are largely unchanged. Four measures—Sewer Infrastructure, Traffic Safety, Travel Time, and Small Business Loans—showed a gain or loss of +/- 4 or +/-5. Over the past six years, Sewer Infrastructure, Traffic Safety, and Travel Time have fluctuated without showing any long term increases or decreases. However, Small Business Loans has shown a consistent gradual increase from 2009 to 2015.

▲ Measures showing noteworthy progress include:

- From 2014 to 2015, the Air Quality indicator increased from 88 to 122, a positive increase. Air quality is based on data for the entire Philadelphia-Camden-Wilmington area and it can be altered by activities outside of Chester County. The American Lung Association State of the Air report for 2015, noted (page 41–42) that Philadelphia was one of “five cities that had their lowest year-round particle pollution.” These improvements were generally attributed to the continued cleanup of power plants and the reduction of diesel vehicles. The air quality increase of 34 may reflect this finding.
- In 2015, the score for Proposed Housing Units in Growth Areas increased by 6, which continues a modest upward trend beginning in 2010. This trend is consistent with CCPC observations that there are increasing numbers of multiple family and rental units in growth areas, like the Kennett Square, Malvern, and Phoenixville areas.

▼ Measures showing noteworthy decreases:

- From 2014 to 2015, Housing Density in Growth Areas decreased by 10, from 107 to 97. This continued a decreasing trend that began in 2011 when the indicator was 150. Since then the indicator dropped each year by an average of 13.25. This indicator only relates to new single-family units (detached and attached) proposed in growth areas, but not multi-family units. Thus, this indicator does not reflect overall housing density, which likely has risen in recent years due to the increase in multi-family developments. These findings should be viewed cautiously because the absolute number of single family developments has dropped in the past few years. Thus, a small number of large-lot units could skew the average.
- From 2014 to 2015, Proposed Non-Residential Development in Growth Areas decreased from 119 to 113. Since 2012, this indicator has dropped at a modest rate. This indicator only addresses new non-residential development proposed in growth areas, and it may not reflect countywide growth. The recent multi-year trend (2010–2015) is of the same scale as the modest up and down trends in the 2000s.

The 2015
Landscapes2 Index

rose to **102**,
meaning there has been
modest improvement
in conditions since
the base years.

Landscapes2 Index Report Card 2015

The *Landscapes2 Index Report Card 2014* measures progress that has been made to achieve the goals of *Landscapes2, the Chester County Comprehensive Policy Plan*.

[Click](#) on each measure for detailed information.

Category	Measure	2014	2015
Preserved land	▶ Protected Farmland	134	135
	▶ Protected Open Space, Non-farmland	106	107
Development	▶ Proposed Housing Units, in Growth Areas	127	133
	▶ Proposed Non-residential Development, in Growth Areas	119	113
	▶ Sewer Infrastructure	122	118
Housing	▶ Housing Affordability	99	102
	▶ Residential Loans, in Urban Areas	84	89
	▶ Housing Density, in Growth Areas	107	97
Transportation	▶ Traffic Safety	98	94
	▶ Public Transportation Access	77	78
	▶ Travel Time	101	97
Economy	▶ Farm Production	NA	NA
	▶ Small Business Loans	44	48
Resources	▶ Stream Quality	95	95
	▶ Air Quality	88	122
Partnership	▶ Municipal Ordinance Amendments	104	106

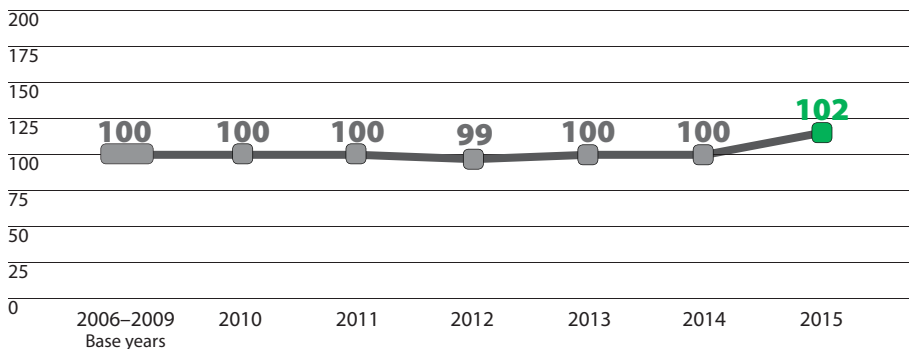
NA: Data not available due to discontinuation of data source.

102

Landscapes2 Index 2015

The index is the average of all 16 measures.

Landscapes2 Index



Protected Farmland

135

Index Value

Purpose Statement

Preservation of farmland is important to maintain the agricultural industry, productive soils, and cultural heritage of Chester County. The amount of eased farmland is an indication of the commitment of property owners and the public sector to preserve land for agricultural production.

Description

Cumulative acres of farmland protected by easement purchases.

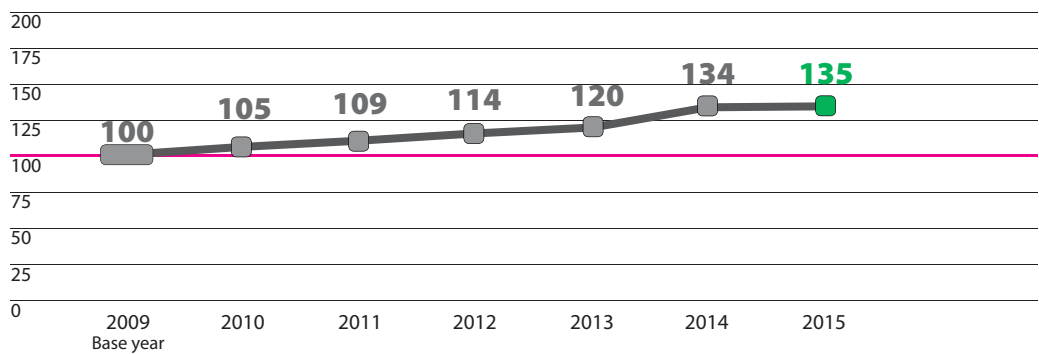
Base year	2009	26,710 Acres
	2010	28,140
	2011	29,020
	2012	30,560
	2013	32,050
	2014	34,660
	2015	36,140

Data Source: Chester County Department of Open Space Preservation

Index value formula:
$$\left(\frac{\text{Current year Acres}}{\text{Base year Acres}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{36,140}{26,710} \right) \times 100 = 135$$

Index trend line



Interpretation

There were 1,480 acres placed under easement protection in 2015 through the state and Chester County farmland easement grant programs. These programs include municipal funding, also. The number of acres eased in 2015 represents a steady growth in farmland protection. All but one of the past five years since the 2009 base year added over 1,400 acres of eased farmland. The number of eased acres in 2015 was quite similar to that of 2012 and 2013. Farmland easement purchase programs have been successfully protecting Chester County farmland since 1990.

Protected Open Space, Non-farmland

107

Index Value

Purpose Statement

Open space protection is necessary to maintain the balance between growth and preservation. Open space protects natural resources, provides land for recreation, and enhances the quality of life. The amount of protected land is an indication of the commitment of the public sector, organizations, and land owners to preserve open space.

Description

Cumulative acres of open space protected by public ownership, land trusts, or home owners associations (excluding agricultural conservation easements).

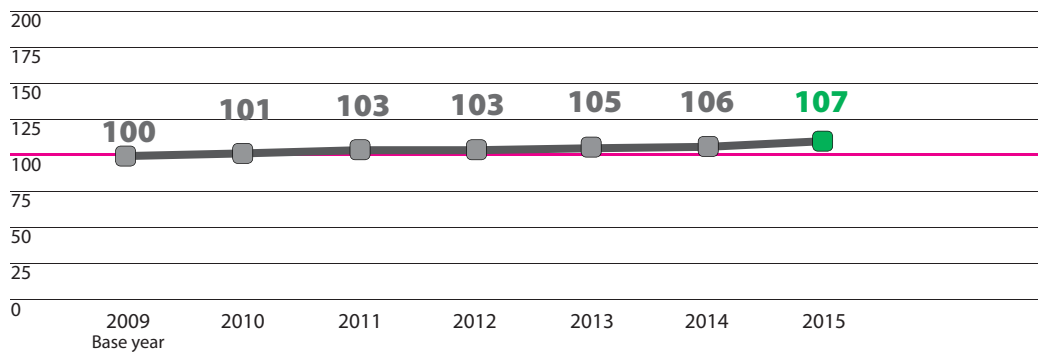
Base year	2009	87,520 Acres
	2010	88,690
	2011	89,980
	2012	90,520
	2013	91,690
	2014	92,590
	2015	93,660

Data Source: Chester County Planning Commission, annual open space inventory

Index value formula:
$$\left(\frac{\text{Acres Current year}}{\text{Acres Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{93,660}{87,520} \right) \times 100 = 107$$

Index trend line



Interpretation

The amount of land protected as non-farm open space increased by 1,070 acres in 2015. This is comparable to the increases in acreage in recent years but is somewhat more than last year when 900 additional acres were protected. The amount of protected open space in Chester County is 129,800 acres which covers over 26% of the County's land area.

Proposed Housing Units, in Growth Areas

133

Index Value

Purpose Statement

The Livable Landscapes map is divided into two core areas, growth areas and rural resource areas. The growth areas consist of the urban and suburban landscapes and suburban centers. The county encourages future development to be concentrated in these landscapes. Proposed housing development is an indication of whether new residential development is located in the appropriate areas.

Description

Percent of total proposed housing units in designated growth areas.

Base years	2007–2009	74%	of housing units in growth areas
	2010	76%	
	2011	91%	
	2012	91%	
	2013	84%	
	2014	94%	
	2015	98%	

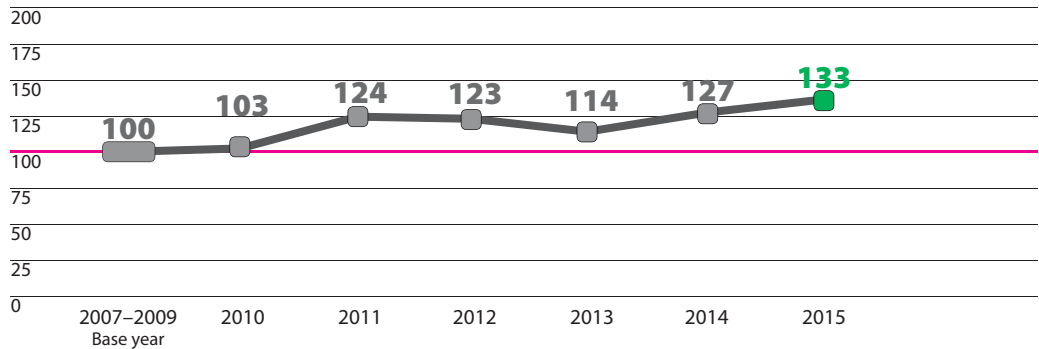
Data Source: Chester County Planning Commission reviews of subdivision and land development plans

Index value formula:

$$\left(\frac{\text{Percent in growth areas Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

(98% ÷ 74%) X 100 = 133

Index trend line



Interpretation

The percentage of proposed housing units in the growth areas rose to 98% in 2015. Over the long term there continues to be a high percentage in the growth areas, well above the base year level of 74%. The percentage of new housing units in the rural resources areas was less than one percent, reflecting a continued pattern of growth that focuses on suburban and urban areas.

Proposed Non-residential Development, in Growth Areas

113

Index Value

Purpose Statement

The Livable Landscapes map is divided into two core areas, growth areas and rural resource areas. The growth areas consist of the urban and suburban landscapes and suburban centers. The county encourages future development to be concentrated in these landscapes. The location of proposed non-residential development is an indication of whether new development is occurring in the appropriate areas.

Description

Percent of total proposed non-residential structure square feet in designated growth areas.

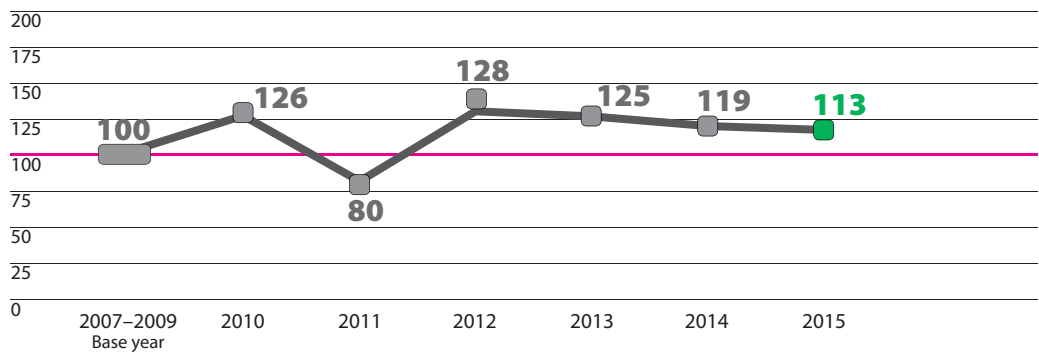
Base years	2007–2009	74% of non-residential development in growth areas
	2010	93%
	2011	59%
	2012	95%
	2013	93%
	2014	88%
	2015	84%

Data Source: Chester County Planning Commission reviews of subdivision and land development plans

Index value formula:
$$\left(\frac{\text{Percent in growth areas Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{84\%}{74\%} \right) \times 100 = 113$$

Index trend line



Interpretation

The percentage of proposed structural non-residential growth areas in terms of square feet was 84% in 2015, a minor decrease from 88% in 2014. This level of development in growth areas is consistent with Landscapes2. Except for 2011, over 80% of non-residential development has been located in growth areas since the base level years. Non-residential development was primarily proposed in suburban landscapes (65%).

Sewer Infrastructure

118

Index Value

Purpose Statement

Concentrating development in designated growth areas and limiting it in rural resource areas is essential to balancing growth and preservation. Public sewer systems support concentrated development in growth areas. Wastewater facilities protect groundwater, other natural resources, and public health. Planned sewer projects consistent with Landscapes2 indicate coordination between wastewater and land use planning.

Description

Percent of Act 537 sewer project reviews consistent with Landscapes2 map and policies.

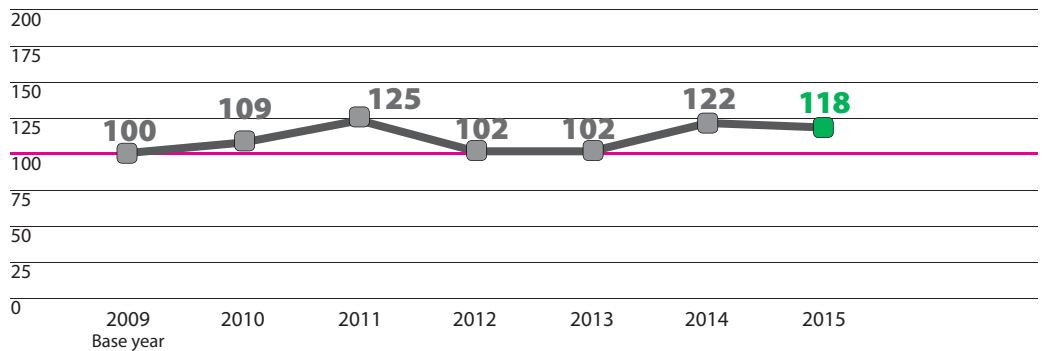
Base year	2009	77%	of sewer projects consistent with Landscapes2
	2010	84%	
	2011	96%	
	2012	79%	
	2013	79%	
	2014	95%	
	2015	91%	

Data Source: Chester County Planning Commission, Act 537 reviews

Index value formula:
$$\left(\frac{\text{Percent of sewer projects consistent with Landscapes2 Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{91\%}{77\%} \right) \times 100 = 118$$

Index trend line



Interpretation

The percentage of public sewer projects consistent with Landscapes2 declined slightly to 91% in 2015. Thirty of the 33 public sewer facility proposals reviewed were deemed consistent with Landscapes2. As with 2014, this was one of the highest percentages since the base year, 2009. A higher percentage of consistency indicates better coordination between sewer infrastructure and the growth pattern proposed by Landscapes2.

Housing Affordability

102

Index Value

Purpose Statement

Landscapes2 identified affordable housing as one of the most important issues facing Chester County. A good indicator of housing affordability is monthly housing costs as a percentage of household income. Housing is generally considered affordable if the household is paying less than 30% of its income for monthly housing costs. These households are not considered to have a cost burden.

Description

Percent of households paying less than 30% of monthly household income for housing costs. Households include owners with a mortgage, owners without a mortgage, and renters. The most recent data available for this index is 2014.

Base Years	2006–2008	67.0%	of households paid less than 30% of income for housing costs
	2009	66.4%	
	2010	66.8%	
	2011	64.0%	
	2012	66.0%	
	2013	66.6%	
	2014	68.5%	

Data Source: U.S. Census Bureau, American Community Survey, Chester County 1-yr. estimates

Index value formula:
$$\left(\frac{\text{Percent of households in affordable housing Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{68.5\%}{67.0\%} \right) \times 100 = 102$$

Index trend line



Interpretation

In 2014, the percentage of households paying **less** than 30% of their income for housing costs rose above 100 for the first time since the base year level. The total number of households that paid less than 30% of income for housing cost was 125,905 which is almost 4,000 higher than in 2013.

Residential Loans, in Urban Areas

89

Index Value

Purpose Statement

Maintenance and revitalization of urban areas is important to achieving the vision of Landscapes2. Investment to rehabilitate existing housing, construct new housing, and preserve historic homes is crucial to accomplish that goal. This measure indicates the proportion of residential loans that are committed to houses in urban areas.

Description

Percentage of residential loans located in urban areas relative to the percentage of housing units located in urban areas. A value over 1 means the share of loans in urban areas is greater than the share of housing units in urban areas. The most recent data available for this index is 2014.

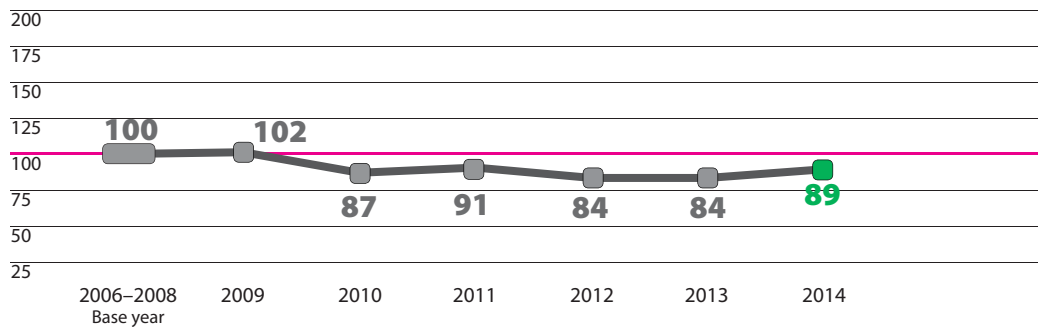
Base years	2006–2008	0.88 (ratio of percentage of urban loans to percentage of urban housing units)
	2009	0.89
	2010	0.77
	2011	0.79
	2012	0.74
	2013	0.74
	2014	0.78

Data Source: Home Mortgage Disclosure Act (HMDA) Aggregate Report, provided by Federal Financial Institutions Examination Council (FFIEC)

Index value formula:
$$\left(\frac{\text{Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{0.78}{0.88} \right) \times 100 = 89$$

Index trend line



Interpretation

The total number of housing loans in the county increased modestly in 2014, continuing a three year trend. The proportion of loans in urban areas increased, but only slightly. The urban areas are receiving a similar share of the total investment in housing as in previous years.

Housing Density, in Growth Areas

97

Index Value

Purpose Statement

Landscapes2 encourages compact development in designated growth areas to reduce sprawl. Increased density of new housing units in the growth areas is an indication of development on smaller lots in the appropriate areas.

Description

Average density (units/acre) of new single-family housing units (attached and detached) located in growth areas.

Base Years	2007–2009	1.64	housing units per acre
	2010	1.64	
	2011	2.47	
	2012	2.33	
	2013	1.92	
	2014	1.75	
	2015	1.59	

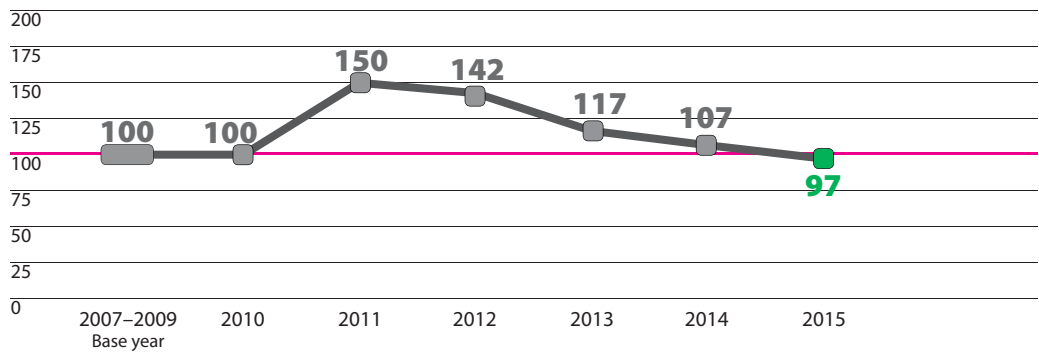
Data Source: New housing unit data from the Chester County Department of Assessment

Index value formula:

$$\left(\frac{\text{Housing units per acre Current year}}{\text{Housing units per acre Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{1.59}{1.64} \right) \times 100 = 97$$

Index trend line



Interpretation

The average density for new single-family housing units in the growth areas decreased in 2015 for the fourth straight year. However the recent rise in multi-family development is not accounted for in this indicator. Thus, this indicator does not reflect overall housing density, which likely has risen in recent years. Nonetheless, the average density was below two units per acre and is now quite similar to the base period density. Approximately 55% of the new single-family housing units were detached units, which have a lower density than attached (i.e. townhouse) units.

Traffic Safety

94

Index Value

Purpose Statement

The safety of the transportation system for all users is a concern of Landscapes2. The number of crashes with property damage, injuries or fatalities is an indication of the safety of the transportation system.

Description

Total number of reportable crashes relative to vehicle miles traveled (VMT). This measure is expressed as VMT per crash. It is calculated by dividing the total VMT by the total number of crashes. An increase in the measure means there are fewer crashes relative to total miles of travel, a positive trend. The most recent data available for this index is 2014.

Base Years	2006–2008	2,605	vehicle miles traveled per crash
	2009	2,666	
	2010	2,805	
	2011	2,575	
	2012	2,690	
	2013	2,558	
	2014	2,457	

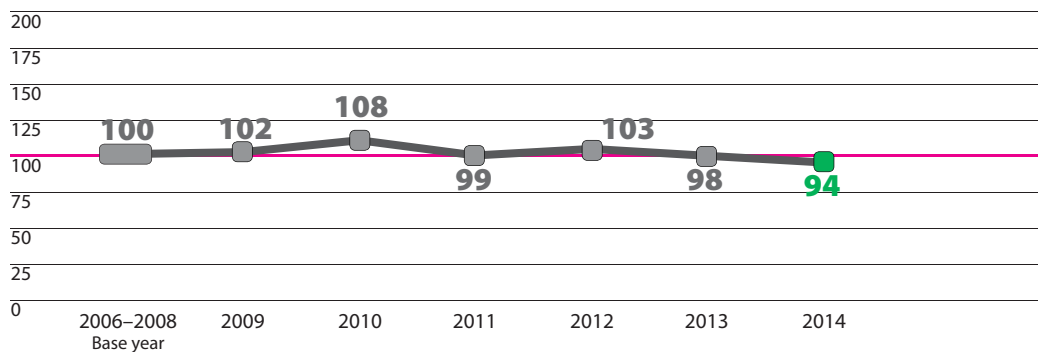
Data Source: Pennsylvania Department of Transportation, Pennsylvania Crash Facts and Statistics, and Pennsylvania Department of Transportation, Pennsylvania Highway Statistics

Index value formula:

$$\left(\frac{\text{Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{2,457}{2,605} \right) \times 100 = 94$$

Index trend line



Interpretation

The total number of crashes increased by 4% in 2014, including 33 fatal crashes, the same number of fatal crashes as in 2013. The total number of daily vehicle miles traveled decreased to the lowest level in six years, resulting in a decrease in the total number of miles traveled per crash. In other words, in 2013, one crash occurred with every 2,558 miles of travel by motor vehicles. In 2014 one crash occurred for every 2,457 miles of travel by motor vehicles, which means crashes occurred more often.

Public Transportation Access

78

Index Value

Purpose Statement

Expanding transportation opportunities, including alternatives to automobile travel, is a priority of Landscapes2. Public transportation can expand mobility, support appropriate land use diversity, and alleviate congestion. Access to public transportation service is an indication of existing alternative transportation options.

Description

Total weekday daily vehicle route miles of all transit routes in the county in December of each year.

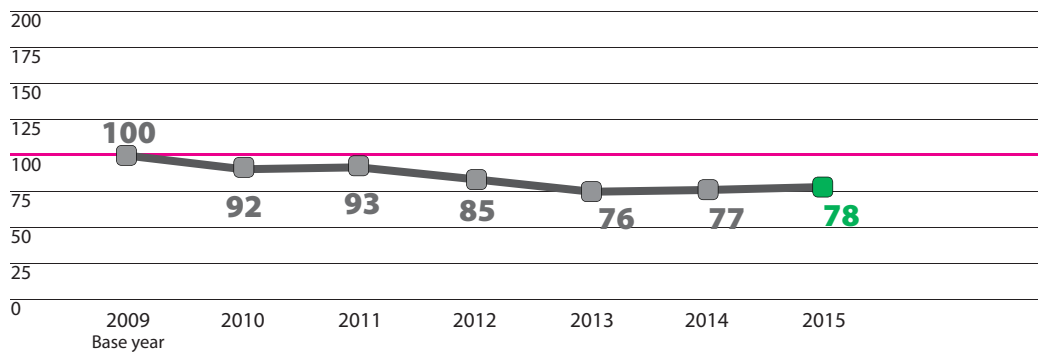
Base Years	2009	8,951	daily route miles
	2010	8,244	
	2011	8,298	
	2012	7,641	
	2013	6,787	
	2013	6,787	
	2014	6,911	
	2015	6,963	

Data Source: Chester County Planning Commission

Index value formula:
$$\left(\frac{\text{Daily route miles Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{6,963}{8,951} \right) \times 100 = 78$$

Index trend line



Interpretation

The number of route miles increased by 0.7% in 2015 reflecting a leveling off in service after several years of continued decline. Rail service miles remained close to the same as the previous year. Bus service underwent modest route modifications, but with no significant net increase or decrease of service.

Travel Time

97

Index Value

Purpose Statement

Traffic congestion was a leading issue identified by the survey and focus groups during the development of Landscapes2. Travel time is an indication of traffic congestion and factors affecting congestion, such as travel alternatives and transportation/land use connections.

Description

Average travel time on six selected highways (US 1, US 30, US 202, US 422, PA 100, and I-76) at 7:00 AM to 8:00 AM and 5:00 PM to 6:00 PM on weekdays. The average is calculated from travel throughout the entire year. This measure is expressed as average miles traveled per unit of time (30 minutes) so an increase reflects less travel time: a positive trend. As travel time on the fixed sample routes goes down, the distance traveled in 30 minutes will go up.

Base years	2011–2013	23.4 miles traveled in 30 minutes
	2014	24.6
	2015	23.6

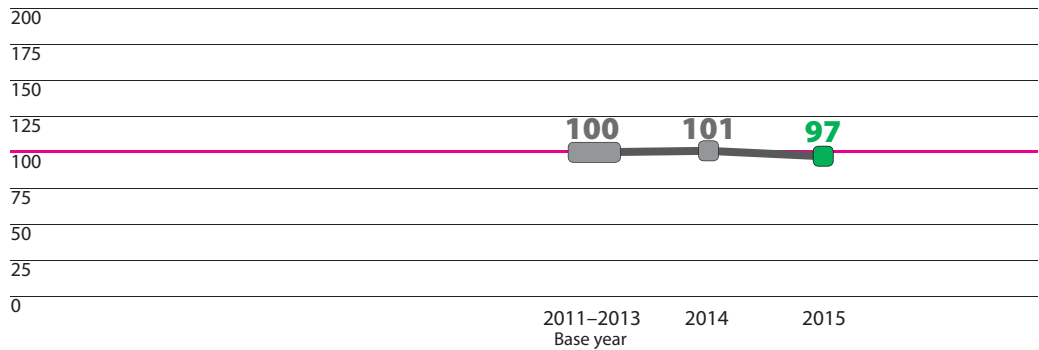
Data Source: Traffic.com, daily AM and PM peak travel time estimates for the selected routes

Index value formula:

$$\left(\frac{\text{Miles traveled in 30 minutes Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{23.6}{24.4} \right) \times 100 = 97$$

Index trend line



Interpretation

Travel time data sources changed in 2013 so that information is now gathered relating to six highway locations instead of four. This new methodology indicates that from 2014 to 2015, the average amount of mileage one could cover in a 30 minute trip dropped from 24.6 miles to 23.6 miles.

Farm Production

NOT AVAILABLE

Index Value

Purpose Statement

Maintaining agriculture as an important component of the county economy and culture is a goal of Landscapes2. The value of agricultural production in the county compared to the total state value is an indication of whether the county is maintaining its agricultural importance.

Description

Total market value of Chester County agricultural products as a percentage of total value in the state.

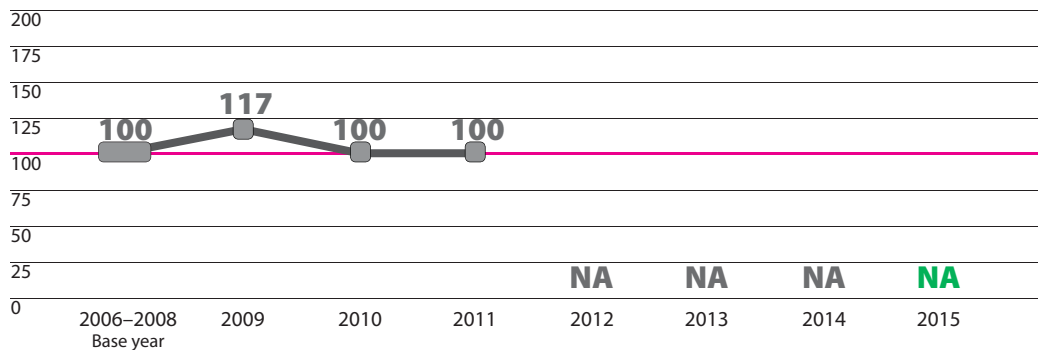
Base Years	2006–2008	8.9%	Chester County percentage of total value of agricultural products in Pennsylvania
	2009	10.5%	
	2010	9.0%	
	2011	8.9%	
	2012–2014	NA	

Data Source: U.S. Department of Agriculture, National Agricultural Statistics Service, Pennsylvania Office, Annual Statistical Bulletin

Index value formula:
$$\left(\frac{\text{Percent is produced in Chester County Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

(NA % ÷ 8.9%) X 100 = NA

Index trend line



NA: data not available

The National Agricultural Statistics Service (NASS) has discontinued the estimation program for county level cash receipts by commodity. These data are now available only from the Agriculture Census in 5 year intervals, which indicate that Chester County's percentage of total value in the state was 8.6% in 1997, 8.9% in 2002, 11.4% in 2007, and 8.9% in 2012.

Small Business Loans

48

Index Value

Purpose Statement

A strong and diverse economy, a goal of Landscapes2, is necessary to maintain the quality of life of Chester County. The health and growth of businesses is critical to the economy. Access to credit is vital to small business survival. The number of loans is a measure of the interest and ability of businesses to update and expand their operations.

Description

Total number of small business loans made to businesses in Chester County. Small business loans are business loans whose original amounts are \$1 million or less. The most recent data available for this index is 2014.

Base years	2006–2008	22,647 loans originated (annual average)
	2009	9,264
	2010	8,537
	2011	10,130
	2012	10,753
	2013	10,006
	2014	10,952

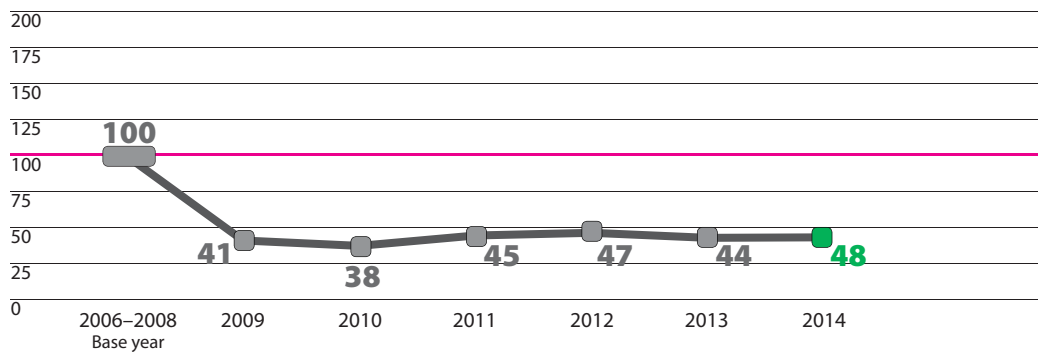
Data Source: Community Reinvestment Act (CRA), Aggregate Report Table 1-1, provided by the Federal Financial Institutions Examination Council (FFIEC)

Index value formula:

$$\left(\frac{\text{Loans originated Current year}}{\text{Loans originated Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{10,952}{22,647} \right) \times 100 = 48$$

Index trend line



Interpretation

The number of small business loans issued in Chester County increased by 9.5% in 2014. The overall level of borrowing is a sign of the continuing recovery from the recession of 2009. The economy was booming with record numbers of loans during the base years so it is likely to take many years to return to that level of loan activity.

Stream Quality

95

Index Value

Purpose Statement

Protecting the network of natural resources is a goal of Landscapes2. Sustaining and enhancing water quality is an important objective. Stream quality is an indication of the safety of our water supply, condition of aquatic habitats, and status of the environment. Biological integrity is an excellent measure of stream quality.

Description

Average Chester County Index of Biological Integrity (CC-IBI) rating of eighteen stream samples in the county. The CC-IBI gives ratings for benthic-macroinvertebrate samples collected from sites in the Stream Conditions of Chester County Biological Monitoring Network. The sites are rated on a scale of 0 to 100 with 100 being the best quality. The measure uses the average of the ratings for the eighteen sample sites. The most recent data available for this index is 2014.

Base Years	2006–2008	62 (average CC-IBI rating)
	2009	59
	2010	63
	2011	58
	2012	64
	2013	58
	2014	58

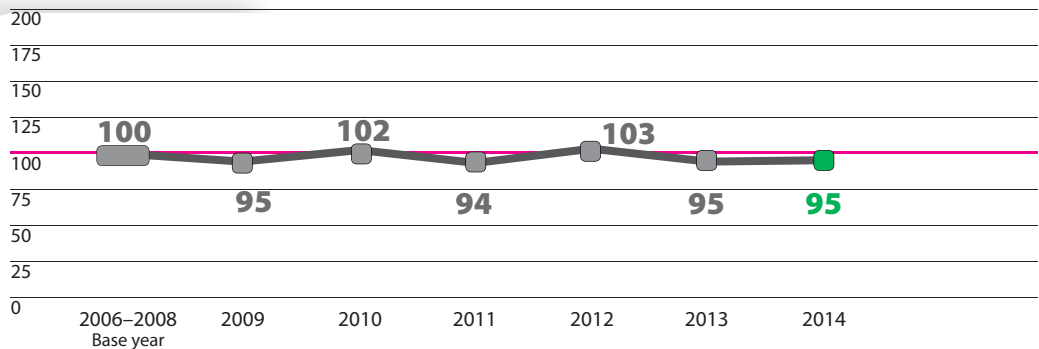
Data Source: Chester County Water Resources Authority providing U.S. Geological Survey data

Index value formula:

$$\left(\frac{\text{Average CC-IBI rating Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{58}{62} \right) \times 100 = 95$$

Index trend line



Interpretation

Stream quality ratings went up at eleven of the eighteen monitored sites from 2013. However, quality went down at six streams and was unchanged at one. This measure has fluctuated between slightly above and slightly below the base period without showing substantial change in overall stream quality.

Air Quality

122

Index Value

Purpose Statement

Protecting, restoring, and maintaining the network of natural resources is a goal of Landscapes2. Air quality in the Philadelphia region is a signal of the magnitude of pollutants and their impacts on the environment and public health.

Description

Percent of days with an Air Quality Index (AQI) rating designated as “good” for both ozone and fine particle pollution (PM2.5) in the Philadelphia-Camden-Wilmington CMSA. The AQI is an index for reporting daily air quality. Ground-level ozone and airborne particles pose the greatest threat to health. Days rated “good” indicate satisfactory air quality with air pollution posing little or no risk to public health. The region is used because of the regional nature of air quality.

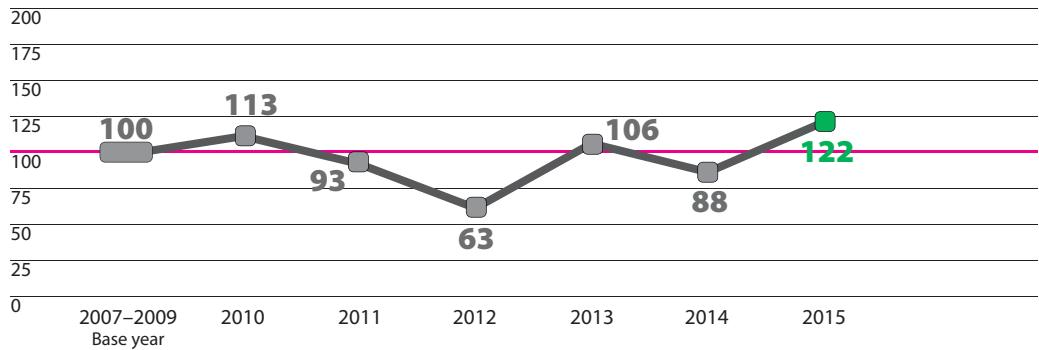
Base years	2007–2009	28.5%	of days rated good for both ozone and particulate pollution
	2010	32.1%	
	2011	26.6%	
	2012	18.0%	
	2013	30.1%	
	2014	25.2%	
	2015	34.8%	

Data Source: U.S. Environmental Protection Agency (EPA), Air Quality Index (AQI)

Index value formula:
$$\left(\frac{\text{Percent of days rated good for air quality Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{34.8\%}{28.5\%} \right) \times 100 = 122$$

Index trend line



Interpretation

The percentage of days rated good for both ozone and fine particulate matter by the AQI rose by 9.6% from 2014 to 2015. Almost all of the days that rated “less than good” were designated as moderate, which means air quality is acceptable; however, there may be a moderate health concern for a very small number of people. There were 28 days when the air was considered unhealthy for “sensitive” groups because of elevated levels of either ozone or fine particulate pollution, an increase from 13 days in 2014.

Municipal Ordinance Amendments

106

Index Value

Purpose Statement

The county must work in partnership with the municipalities to implement Landscapes2. Municipalities have the authority to regulate land use and development. Municipal plans and ordinances regulating development that are consistent with Landscapes2 policies indicate cooperation to achieve the desired development pattern.

Description

Percent of relevant municipal plan and ordinance amendments adopted that are consistent with Landscapes2 policies.

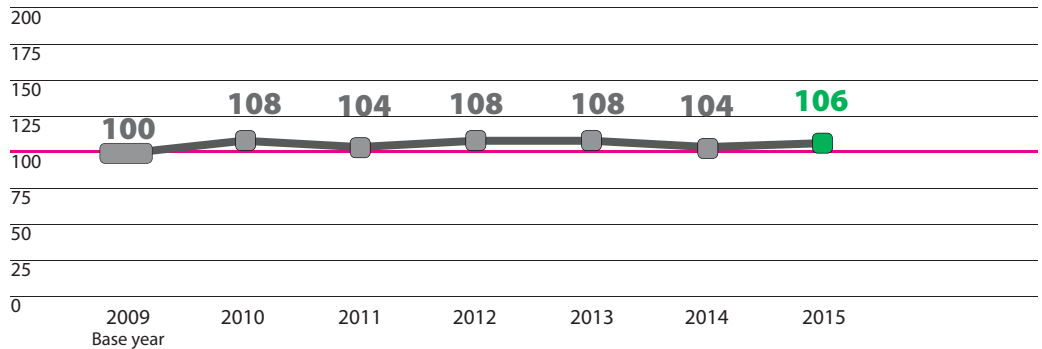
Base Years	2009	92.9%	of amendments consistent with Landscapes2
	2010	100%	
	2011	96.6%	
	2012	100%	
	2013	100%	
	2014	96.8%	
	2015	98.5%	

Data Source: Chester County Planning Commission

Index value formula:
$$\left(\frac{\text{Percent of adopted amendments consistent with Landscapes2 Current year}}{\text{Base year}} \right) \times 100 = \text{Index value}$$

$$\left(\frac{98.5\%}{92.9\%} \right) \times 100 = 106$$

Index trend line



Interpretation

In 2015, 66 of 67 amendments adopted by municipalities were consistent with Landscapes2. This was the sixth consecutive year that over 96% of reviewed amendments were consistent with Landscapes2. This consistency is critical for successfully implementing the goals of Landscapes2.