CHANGING THE RURAL PLANNING PARADIGM

APA-PA 2015 Annual Conference
October 18, 2015
RURAL PLANNING INDICATORS: Recognizing the Changing Rural Paradigm

What Is Rural In The USA? In PA? In Your Community?

How Is the Face of Rural PA Changing?
RURAL PLANNING INDICATORS:
National Population Trends

SHARES OF U.S. POPULATION

Rural U.S. population will continue to decline in both share of population and in total number...

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>2010</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban</td>
<td>45.0%</td>
<td>51.0%</td>
<td>54.0%</td>
</tr>
<tr>
<td>Urban</td>
<td>30.0%</td>
<td>33.0%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Rural</td>
<td>25.0%</td>
<td>17.0%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

source: US DOT via citylab.com
PERCENT CHANGE IN POPULATION IN UNITED STATES AND RURAL AND URBAN PENNSYLVANIA COUNTIES 1980 TO 2040 (projected)

- Growth rate in rural PA counties has consistently lagged growth rate in urban PA counties.
- Growth rate in rural PA counties expected to decline to 0% by the 2030’s.

Sources: U.S. Census Bureau and Pennsylvania State Data Center.
Trivia Question - what’s the least-dense county in PA?

Answer - Cameron County, w/13 persons per square mile

sources: U.S. Census Bureau (data); Center for Rural Pennsylvania (graphic)
PA COUNTY GROWTH RATES FROM 2000 TO 2010

- 2000 to 2010, PA’s urban counties increased by about 347,000, or 4%
- From 2000 to 2010, PA’s 48 rural counties gained about 74,300 residents, a 2% increase
- PA’s rural population grew an average of 7% in the east, but declined 1% in the west

source: Pennsylvania State Data Center
PA COUNTY GROWTH RATES FROM 2010 TO 2040

- 13 counties are projected to grow at a rate of greater than 15%
- 35 counties will grow by 0-15%
- 19 counties are projected to decline in population
- Most counties in western PA, northern tier, and northeast projected to have relatively flat or declining growth rates over the next 25 years

source: Pennsylvania State Data Center
From 2000-2010, PA rural counties gained 2% in population. Most of the gain was in the eastern counties.

Counties in the western part of the state had a decline of 1%

These trends were reflected here in the southwestern part of the state and in the tri-state (PA, OH, WV) region.
Natural increase component of population change (births minus deaths) has reversed and the gap will rapidly increase as PA’s population continues to age...

- 1980’s-mid 90’s, births exceeded deaths, often by a wide margin
- Mid 90’s-mid 2020’s, births and deaths projected to be roughly equal
- Mid 2020’s- 2040, deaths projected to rapidly outstrip births
POPULATION GROWTH TRENDS

• From 2010 to 2040, Pennsylvania population projected to increase by 1.42 million people:
  - 90% in urban counties
  - 10% in rural counties

• Furthermore, projections for 2010-2040 indicate that:
  - U.S. population increase by 23%
  - PA urban counties by 14%
  - PA rural counties by 4%

data source: Center for Rural Pennsylvania
PENNSYLVANIA CHILDREN AND SENIORS

- In 2010, Pennsylvania was:
  - 43rd in the U.S. in percent under 18
  - 4th in percent of persons 65 or older

- During 2010-2040, in Pennsylvania:
  - Seniors in rural counties to increase 54%
  - Rural under-18s to decline 3%
  - Seniors in urban counties to increase 72%
  - Urban under-18s to increase 5%

RURAL PLANNING INDICATORS:
Pennsylvania Population Trends
MINORITY POPULATION GROWTH
2000 TO 2010

• Rural non-white population increased 56%
• Rural white/non-Hispanics decreased 0.1%
• Urban non-white population increased 25%
• Urban white/non-Hispanics decreased 1.0%
• In 2010, the estimated average age of:
  - minorities was 30 years old
  - white/non-Hispanics was 41 years old
PA MIGRATION PROJECTIONS
2010 TO 2040

- Population of Pennsylvania projected to increase from 12.7 million in 2010 to 14.1 million in 2040
- 72% of the increase will be domestic net-migration or overseas migrants, with...
  ...overseas migrants accounting for more than 85% of this increase
- 28% of the increase from 2010-2040 due to natural increase

data source: Center for Rural Pennsylvania
### Amish Population Changes 1992-2013

**Largest Population Increases (by number)**

<table>
<thead>
<tr>
<th>State</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>32,560</td>
</tr>
<tr>
<td>Ohio</td>
<td>30,645</td>
</tr>
<tr>
<td>Indiana</td>
<td>25,665</td>
</tr>
<tr>
<td>New York</td>
<td>11,880</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>9,345</td>
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</table>

### Amish Population Change 1992-2013

**Largest Population Increases (by percentage)**

<table>
<thead>
<tr>
<th>State</th>
<th>Increase</th>
<th>1992</th>
<th>2012</th>
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<tbody>
<tr>
<td>Virginia</td>
<td>1,160%</td>
<td>75</td>
<td>945</td>
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<tr>
<td>New York</td>
<td>293%</td>
<td>4,050</td>
<td>15,930</td>
</tr>
<tr>
<td>Minnesota</td>
<td>267%</td>
<td>1,135</td>
<td>4,160</td>
</tr>
<tr>
<td>Kentucky</td>
<td>257%</td>
<td>2,625</td>
<td>9,375</td>
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<tr>
<td>Missouri</td>
<td>187%</td>
<td>3,745</td>
<td>10,765</td>
</tr>
<tr>
<td>Tennessee</td>
<td>183%</td>
<td>750</td>
<td>2,125</td>
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Young Center for Anabaptist and Pietist Studies, Elizabethtown College
### AMISH HOUSEHOLD MIGRATION 2008–2012

#### Top Eight Gainer States

<table>
<thead>
<tr>
<th>State</th>
<th>In</th>
<th>Out</th>
<th>Net Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>405</td>
<td>141</td>
<td>+264</td>
</tr>
<tr>
<td>Kentucky</td>
<td>281</td>
<td>152</td>
<td>+129</td>
</tr>
<tr>
<td>Illinois</td>
<td>115</td>
<td>74</td>
<td>+41</td>
</tr>
<tr>
<td>Maine</td>
<td>42</td>
<td>1</td>
<td>+41</td>
</tr>
<tr>
<td>Nebraska</td>
<td>48</td>
<td>7</td>
<td>+41</td>
</tr>
<tr>
<td>Colorado</td>
<td>41</td>
<td>9</td>
<td>+32</td>
</tr>
<tr>
<td>Minnesota</td>
<td>93</td>
<td>64</td>
<td>+29</td>
</tr>
<tr>
<td>Kansas</td>
<td>41</td>
<td>14</td>
<td>+27</td>
</tr>
</tbody>
</table>

#### AMISH HOUSEHOLD MIGRATION 2008–2012

#### Top Eight Loser States and Provinces

<table>
<thead>
<tr>
<th>State</th>
<th>In</th>
<th>Out</th>
<th>Net Loss</th>
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</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>121</td>
<td>476</td>
<td>-355</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>202</td>
<td>327</td>
<td>-125</td>
</tr>
<tr>
<td>Ohio</td>
<td>214</td>
<td>266</td>
<td>-52</td>
</tr>
<tr>
<td>Indiana</td>
<td>115</td>
<td>162</td>
<td>-47</td>
</tr>
<tr>
<td>Missouri</td>
<td>207</td>
<td>242</td>
<td>-35</td>
</tr>
<tr>
<td>Delaware</td>
<td>8</td>
<td>39</td>
<td>-31</td>
</tr>
<tr>
<td>Maryland</td>
<td>11</td>
<td>35</td>
<td>-24</td>
</tr>
<tr>
<td>Ontario</td>
<td>18</td>
<td>29</td>
<td>-11</td>
</tr>
</tbody>
</table>

Data source: “Amish Household Migration Summary 2008-2012.” Young Center for Anabaptist and Pietist Studies, Elizabethtown College
COMPONENTS OF RURAL INCOME

• Wage earnings in rural PA continue to lag wages in urban counties

• Reflecting the aging of PA’s rural areas, as a share of personal income, transfer payments make up 22% of personal income in rural areas versus 16% in urban areas

• Medicare, Medicaid, and Social Security account for about 80% of all transfer payments
PENNYSYLVANIA EDUCATION ATTAINMENT

- Only 45% of rural adults (ages 25-64) today have more than a high school degree versus 56% in urban areas.
- Only one in five rural Pennsylvanians 25-64 has a college degree, compared with almost one in three in urban Pennsylvanians.

PERCENTAGE OF LAND BASE CLASSIFIED AS
LAND IN FARMS

- Between 1945 and 1970, Pennsylvania went
  from approximately 50% land in farms to
  30% land in farms
- Acreage dropped from approximately 15
  million acres to 8.9 acres
- This dropped further to 7.2 million in 1997,
  but increased to 7.7 million in 2012 due to
  Ag Census's redefinition of agriculture after
  1997

source: USDA Census of Agriculture

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S.</th>
<th>PA</th>
<th>Lancaster County</th>
</tr>
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<tr>
<td>1925</td>
<td>49%</td>
<td>57%</td>
<td>87%</td>
</tr>
<tr>
<td>1945</td>
<td>60%</td>
<td>52%</td>
<td>84%</td>
</tr>
<tr>
<td>1974</td>
<td>45%</td>
<td>28%</td>
<td>66%</td>
</tr>
<tr>
<td>1997</td>
<td>41%</td>
<td>25%</td>
<td>65%</td>
</tr>
<tr>
<td>2012</td>
<td>40%</td>
<td>27%</td>
<td>70%</td>
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# RURAL PLANNING INDICATORS:
## Agricultural Production Trends

<table>
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</tr>
</thead>
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<tr>
<td><strong>WHEAT (ACRES PLANTED)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>50.9M</td>
<td>58.3M</td>
<td>63.0M</td>
<td>58.8M</td>
<td>49.0M</td>
</tr>
<tr>
<td>PA</td>
<td>1,100,000</td>
<td>905,000</td>
<td>267,000</td>
<td>168,000</td>
<td>145,000</td>
</tr>
<tr>
<td>Lancaster County</td>
<td>102,000</td>
<td>80,000</td>
<td>27,600</td>
<td>11,900</td>
<td>12,470</td>
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<tr>
<td><strong>CORN (ACRES PLANTED)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>82.3M</td>
<td>84.4M</td>
<td>72.3M</td>
<td>69.8M</td>
<td>94.6M</td>
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<tr>
<td>PA</td>
<td>1,300,000</td>
<td>1,400,000</td>
<td>1,400,000</td>
<td>971,000</td>
<td>998,000</td>
</tr>
<tr>
<td>Lancaster County</td>
<td>92,000</td>
<td>102,000</td>
<td>160,000</td>
<td>95,000</td>
<td>101,000</td>
</tr>
<tr>
<td><strong>DAIRY COWS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>17.7 M</td>
<td>22.8M</td>
<td>10.7M</td>
<td>9.1M</td>
<td>9.3M</td>
</tr>
<tr>
<td>PA</td>
<td>860,000</td>
<td>873,000</td>
<td>670,000</td>
<td>622,000</td>
<td>532,000</td>
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<tr>
<td>Lancaster County</td>
<td>39,000</td>
<td>54,000</td>
<td>78,000</td>
<td>99,000</td>
<td>111,000</td>
</tr>
<tr>
<td><strong>HOGS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>U.S.</td>
<td>58.5M</td>
<td>46.7M</td>
<td>45.5M</td>
<td>61.2M</td>
<td>66.0M</td>
</tr>
<tr>
<td>PA</td>
<td>735,000</td>
<td>757,000</td>
<td>493,000</td>
<td>1,100,000</td>
<td>1,135,000</td>
</tr>
<tr>
<td>Lancaster County</td>
<td>43,000</td>
<td>50,000</td>
<td>131,000</td>
<td>350,000</td>
<td>360,000</td>
</tr>
</tbody>
</table>

Source: USDA Census of Agriculture
LANCASTER COUNTY’S AGRICULTURAL ECONOMY
The Economic Value of Agriculture

- Lancaster County is among the top 20 U.S. counties in a number of agricultural production categories
  - Value of agricultural products sold ($1.072B) (#18)
  - Value of livestock, poultry, and their products ($922M) (#10)
  - Value of sales of poultry ($303M) (#16)
  - Value of sales of milk and dairy ($387M) (#10)
  - Acres in corn for silage (68,238) (#3)
  - Number of layers (7M) (#4)
  - Number of pullets (2M) (#3)
  - Number of cattle and calves (270T) (#20)

- Lancaster County leads PA or is second in 20 of 28 categories

- The largest preserver of farm land in the U.S.

data source: Lancaster County Workforce Investment Board
LANCASTER COUNTY’S AGRICULTURAL ECONOMY
The Economic Multiplier Effect

• Production agriculture - 5,000 jobs and nearly $1.1B in sales

• Support services for crop and animal agriculture - 1,200 employees and nearly $63M in sales

• Food manufacturing - 7,860 jobs and $3.3B in sales

• Food wholesaling - 2,000+ jobs with sales of $260M

• Food retailing - over 8,500 jobs with sales of $495M

That’s about 27,500 Lancaster County jobs that can be directly attributed to agriculture (9.4% of the workforce)...

And about $4.7B in sales or roughly 13.3% of the regional economy annually

data source: Lancaster County Workforce Investment Board
BLUE RIBBON COMMISSION FOR AGRICULTURE
Leadership In Planning Rural Development

- Ad-hoc BRC established in 2005 by Lancaster County BOC to find creative and innovative ideas to “Keep Lancaster County Farming”
- A fact-finding process, with input from many Lancaster County ag-industry sectors
- Recommendations ranged from short-term to far-reaching suggestions, addressed the following key topics:
  - Economic Development
  - Communications and Leadership
  - Farmland Preservation
  - Tax Equity
  - Zoning
- BRC’s findings led to the formation of Lancaster County Agriculture Council by multiple ag partners
How Will You Know It When You See It?

RURAL PLANNING ANALYTICS: Understanding the Changing Rural Paradigm
DEVELOP LOCAL DATA SOURCES FOR UNDERSTANDING RURAL AREAS

- Establish and maintain consistent baseline data
- Analyze periodically the trends presented by the data
- Evaluate current land use allocations by ag, rural non-ag, urban, natural resource
- Inventory your secondary farm-based businesses
- Track lands devoted to crop vs. animal production
- Identify your ag-rural industrial support infrastructure
- Track your rural (and urban) roadway and bridge deficiencies
MONITOR COMMUNITY TRENDS IN AG AND RURAL LAND CONVERSIONS

- Ag-conservation lands consumption by big-box schools, churches, warehouses, ag entertainment uses, ex-urban primary or secondary housing
- Conversion from crop land to poultry barns and other non-soil-based ag activities
- Acreage and soil impacts of rural and ag support businesses
FIRST DETERMINE WHAT IS RURAL AND WHAT IS URBAN

- Began by defining Designated Growth Areas (DGAs), which comprise both urban areas and rural centers
- Everything else – the photo negative – was deemed “rural”
- 85% of new residential is to occur in Urban Growth Areas (UGA’s)
- 15% is to be outside UGA’s (about 260 residences per year)
- Rural Centers are not intended to stimulate growth in rural areas, but rather to “capture” growth that would otherwise occur as “rural sprawl"
THE LANCASTER COUNTY RURAL STRATEGY

Goals

• Protect resources in Designated Rural Areas
• Focus growth in Rural Centers
• Support the rural economy

Rural Focus

• Create Designated Rural Areas on par with the county’s Designated Growth Areas
• Rural areas more detailed and fine-grained than just “those areas that aren’t urban”
RURAL PLANNING ANALYTICS: The Lancaster County Rural Planning Strategy

Step 1: Identify Resources With GIS Mapping
- Agricultural Lands
- Natural Resources
- Built Environment
- Aerial Photo

Step 2: Establish Designated Rural Areas
- Model Agricultural Zoning
- Model Conservation Zoning
- Identification Guide

Step 3: Adopt Policies and Action Measures
- Conservation Measures Package
- Governance Implementation
- Rural Community Handbook

NOTE: This illustration was prepared only for the purpose of exemplifying the DRA process. The areas shown should not be construed to be part of an official planning process or boundaries suggested by LOPC to Brooknock Township.
RURAL PLANNING ANALYTICS:
The Lancaster County Rural Planning Strategy

RURAL STRATEGY

DESIGNATED RURAL AREAS

- Designated Agricultural Areas
  - Agricultural Zoning Guidelines
  - Agri-Tourism Guidelines
  - Transfers of Development Rights
  - Agricultural Security Areas Tool
  - Agricultural Access Network Study
  - Noxious Plants for Agricultural Livestock Guide
  - Agricultural Advisory Councils

- Designated Natural Areas
  - Model Conservation Zoning
  - Environmental Advisory Councils
  - Stream Bank Protection Guidelines

- Designated Rural Centers
  - Community Character Criteria for Built Areas
  - Wastewater Treatment Alternatives Study
  - Existing Rural Villages Zoning Inventory
MEASURING RURAL LANDS COMPATIBILITY-CONFLICT

- A methodology for:
  - Identifying rural planning trends
  - Measuring potential conflict and compatibility between farmland and non-agricultural land uses at the land parcel level

- Intent is to facilitate the continued viability of commercial agriculture in Lancaster County

- Identifies critical masses of productive agricultural areas

- Measures the levels of compatibility or threat associated with adjacent land parcels for consideration in future land-use planning

- Helps define what is truly rural and identifies areas potentially in transition from rural to growth area

RURAL PLANNING ANALYTICS: Rural Lands Analysis
The Value of Measuring Agricultural Compatibility and Conflict In Rural Planning and Land Use

THIS ANALYSIS PROVIDES AN APPROACH FOR:

- Designating Core Agricultural Areas for sustainable protection
- Identifying General Rural Areas for consideration in future planning and zoning decisions
- Measuring potential compatibility and conflict between farmland and non-agricultural land uses at the land parcel level for planning resolution
- Applying currently available data sources rather than requiring new data research
Rural Planning and Land Use
Compatibility- Conflict Evaluation Criteria

- **Soil Productivity Class**
  The predominance of classes I thru IV or of other soil classes

- **Parcel Size**
  10 acres or greater, between 2 and 10 acres, or less than 2 acres

- **Current Land Use**
  Agricultural, natural resource or non-farmland

- **Current Zoning**
  Effective agriculture, natural resource or other

- **Planned Future Land Use**
  Agriculture, natural resource or other

- **Agricultural Security Area Status**
  Either designated or not

- **Farmland Preservation Status**
  Either preserved or not
Criterion #1 – Soil Productivity Classes

Class 1 Soils
Class 2 Soils
Class 3 Soils
Class 4 Soils
Class 5 Soils
Class 6 Soils
Class 7 Soils
Class 0 Soils
Criterion #2 – Land Parcels Grouped By Size

10 Acres Or Greater
2 to 10 Acres
Less Than 2 Acres
Criterion #3 – Current Land Uses Grouped By Type

- Agriculture
- Conservation
- Parks/Recreation
- Institutional
- Residential
- Commercial
- Industrial
- Transportation / Utility
Criterion #4 – Township Zoning Districts

- Agricultural
- ES Ecological
- OS Woodland
- RR Rural Residential
- SR Special Residential
- VC Village Residential
- VC Village Center
- I-C Industrial-Commercial
Criterion #5 – Twp Comprehensive Plan’s Future Land-Use Designations

Future Land Use: West Cocalico Township

Agriculture
Conservation
Rural Holding
Rural Residential
Suburban Residential
High Density Residential
Mobile Home Park
Village Residential
Village Commercial
Industrial
Parks-Recreation
Quarry / Mining

Source: Lancaster County GIS, Copyright (c) 2014. This map is to be used for reference or illustrative purposes only. This map is not a legally recorded plan, survey, or engineering schematic and it is not intended to be used as such.
Criterion #6 – Township Agricultural Security Area Status

- Designated ASA
- Not Designated

![Map of agricultural security areas in West Cocalico Township](image-url)
Criterion #7 – Farmland Preservation Status

- Preserved Farm
- Not Preserved
Sample Parcel Scoring

- Criteria are scored individually with plus-one (compatible), zero (neutral) or minus-one (in conflict)...
- ...and are weighted equally
- Examples shown would result in:
  - A core agricultural parcel
  - A compatible natural resource parcel
  - A residential parcel under 10 acres, considered to be in conflict with farmland
- Sample is illustrative; data can be compiled in an Excel spreadsheet

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Evaluation Criteria</th>
<th>Parcel #</th>
<th>Parcel #</th>
<th>Parcel #</th>
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<td>1687522000000</td>
<td>1674231500000</td>
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<tr>
<td>Classes I thru IV (&gt;50%)</td>
<td>1</td>
<td>+1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other classes (&gt;50%)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parcel Size</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10 acres+</td>
<td></td>
<td>+1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2 to &lt; 10 acres with current ag land use</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Less than 2 acres with current ag land use</td>
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<td>-1</td>
<td>-1</td>
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</tr>
<tr>
<td>Land Use</td>
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<tr>
<td>Agricultural</td>
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<td></td>
</tr>
<tr>
<td>Fallow agriculture (less than 5 yrs)</td>
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<td>0</td>
<td>0</td>
<td></td>
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<tr>
<td>Woodland, other natural resource</td>
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<tr>
<td>Fallow agriculture (+5 yrs)</td>
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<td>-1</td>
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<td>Zoning</td>
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<td>+1</td>
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<tr>
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<td>Designated as an ASA</td>
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<td>Not designated as an ASA</td>
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<tr>
<td>Subject to natural resource easement</td>
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<tr>
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<td>Net Total</td>
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Compatibility and Conflict Scoring, By Parcel

-7 - Ag Compatible
-6 – Ag Compatible
-5 – Ag Compatible
-4 – Ag Compatible
-3 – Ag Neutral
-2 – Ag Neutral
-1 – Ag Neutral
0 – Ag Neutral
-1 – Ag Incompatible
-2 – Ag Incompatible
-3 – Ag Incompatible
-4 – Ag Incompatible

Designated Growth Area

Legend
- Scoring Index
- Development Areas
- Designated Growth Area

Source: Lancaster County GIS, Copyright (c) 2014.
This map to be used for reference or illustrative purposes only. This map is not a legally recorded plan, survey or engineering schematic and it is not intended to be used as such.
Scoring and Mapping

- **CAG - CORE AGRICULTURAL AREAS**
  Scoring range of +4 thru +7

- **ARA - AGRICULTURAL-RESOURCE AREAS**
  Scoring range of 0 thru +3

- **GRA - GENERAL RURAL AREAS**
  Scoring range of -1 thru -2

- **EXU - EX-URBAN AREAS**
  Scoring range of -3 thru -4

Scoring can also be applied and mapped on a parcel-by-parcel basis in order to:
- Make detailed subarea evaluations
- Determine precise zoning district or future land-use boundaries
Generalized Agricultural and Rural Lands Scoring, By Category

CAG - Core Agricultural Areas
scoring range of +4 thru +7

ARA - Ag-Resource Areas
scoring range of 0 thru +3

GRA - General Rural Areas
scoring range of -1 thru -2

EXU - Ex-Urban Areas
scoring range of -3 thru -4
Using This Rural Planning Tool

THIS ANALYSIS CAN HELP:

• **Designate** critical masses of core agricultural areas
• **Delineate** rural area boundaries
• **Identify** areas that are potentially transitioning to more intensive development
• **Match** planning and zoning decisions more closely to actual land uses and parcel boundaries
• **Assist** decision-making for prioritizing and funding farmland preservation
• **Guide** the selection of sending areas for transfers of development rights
RURAL PLANNING ANALYTICS:
The Lancaster County Zoning Lexicon

WHY A ZONING LEXICON?

• MPC amendment in 2000 promoted consistency in local zoning terminology
• Original LCPC follow-up to MPC oriented toward municipal zoning buy-in
• Current lexicon reconfigures it as an LCPC research and analysis tool
• Enables countywide or regional research and analysis of municipal zoning

KEY POINTS

• Consolidates 600+ municipal zoning districts into 25 lexicon categories
• Incorporates special planning topics such as DGA and rural status, big-box retail, TDR areas, and LCPC policy on density and mixed use
• Can be used for countywide or regional:
  - Land use analyses
  - Build-out analyses
  - Growth tracking
  - Population forecasting
RURAL PLANNING ANALYTICS:
The Lancaster County Zoning Lexicon

- Analyzed industrially zoned land along highway corridors straddling multiple municipalities
- Categorized “industrial” zoning districts into five groupings, including mixed commercial-industrial and village settings
- Used to advise local economic development organization
RURAL PLANNING ANALYTICS: The Lancaster County Zoning Lexicon

- Individual zoning lexicon data sheets prepared in support of the tool
- Data sheets used to illustrate and communicate typical development characteristics and patterns associated with each lexicon category
RURAL PLANNING ANALYTICS: The Lancaster County Planning Lexicon

KEY POINTS

• Provides similar analytic capabilities for future land-use designations of municipal comprehensive plans as the Zoning Lexicon

• Enables regional and countywide perspectives on local long-range land-use planning

• Consolidates 80+ municipal future land-use categories into 25 lexicon categories

• Underlying land use groupings and planning principles (e.g., DGA vs. rural) are shared with the Zoning Lexicon
PROVIDENCE TOWNSHIP
FISCAL IMPACT ANALYSIS

• Focused only on the fiscal impacts of new residential development on municipal and school district budgets
• Not an economic impact analysis
• Used 20 municipal and school district cost and revenue factors in the analysis
• Results were intended to be part of a larger discussion about the overall impact of potential development on the township
• Used a methodology developed by Penn State University’s College of Agricultural Sciences Cooperative Extension
RESIDENTIAL ZONING BUILD-OUT ANALYSIS
GENERAL ASSUMPTIONS

• Build-out **outside** UGAs was projected based on:
  - Single-family dwellings built on a 1-1/2 acre lots
  - Parcels < 5 acres considered fully developed
  - 75% of undeveloped parcels could be developed
  - Only the number of new lots, not the associated acreage, were counted in the Agricultural District.

• Build-out **inside** UGAs was projected based on:
  - Single- and multi-family dwellings
  - Average density of 4 dwellings per acre
  - 75% of undeveloped parcels could be developed.
Analysis examined three possible growth scenarios for 2013-2040 based on the existing and proposed zoning ordinance and map.

Build-out scenarios of new residential development are thru 2040:
- High Growth: 3,175 new lots
- Medium Growth: 2,328 new lots
- Low Growth: 1,166 new lots
RURAL PLANNING TOOLS-STRATEGIES:
Responding to the Changing Rural Paradigm

How Can You Develop Your Own Rural Planning Vision And Strategy?
WHAT IS A RURAL AREA AND HOW DO YOU KNOW WHEN YOU GET THERE?

Designated Rural Areas in Lancaster County
• Overarching goal is to protect Lancaster County’s individual resources in addition to entire landscapes through a holistic approach to conservation

Identify the specific components of your rural areas
• Craft plans and land-use regulations that reflect and recognize the unique development patterns of your rural area
RURAL PLANNING TOOLS-STRATEGIES:
EPA's 10 Essential Smart Growth Fixes

- Determine Areas for Growth and for Preservation
- Incorporate Fiscal Impact Analysis in Development Reviews
- Reform Rural Planned Unit Developments
- Use Wastewater Infrastructure Practices That Meet Development Goals
- Right-Size Rural Roads
- Encourage Appropriate Densities on the Periphery
- Use Cluster Development to Transition From Town to Countryside
- Create Development Policies and Standards That Preserve Rural Character
- Protect Agricultural and Sensitive Natural Areas
- Plan and Encourage Rural Commercial Development
RURAL PLANNING TOOLS-STRATEGIES: Traditional Tools For Rural Planning

- Adopting zoning regulations for effective agricultural and conservation zoning
- Establishing SALDO standards for farmland encroachment and flag lot proportions
- Adopting SALDO controls for on-site sewerage and wellsite locations and buffering areas
- Buffering new development and agriculture by distance or screening
- Preserving agricultural areas thru purchases of development rights
- Using cluster subdivisions or “development-supported agriculture” land development design techniques
- Regulating farming practices at the state or local level
- Being “good” neighbors by sharing farm products with nearby residences
LANCASTER COUNTY'S INITIAL RURAL PLANNING WORK

• LCPC first prepared sample agricultural zoning provisions in 1978

• Since that time 39 of 40 townships have adopted some form of effective agricultural zoning, at one lot for at least every 20 acres

• 11 of those 40 townships have adopted agricultural zoning that limits subdivisions to no more than one lot for every 50 acres owned
TODAY’S RESIDENTIAL SUBDIVISION RECOMMENDATIONS

• Minimum Lot Size: 1 acre
• Maximum Lot Size: 2 acres or per DEP min
• Minimum Farm Size: 25 acres
• Number of Lots or Dwellings Permitted: 1 lot per 50 acres
• Limit ag land committed to institutional uses
• Adopt transfer of development rights provisions
• Adopt natural resource protection standards
Any tourism experience in the rural and agricultural areas of the County...

“...must be directly related to supporting the primary agricultural use of the farm by interpreting the agricultural heritage of the county and providing a distinctly Lancaster County experience.”
Examples of Appropriate Agritourism Enterprises

- Farm museum
- Farm market
- Corn maze
- Christmas tree farms
- Wineries
- Farm stays
- Pick your own
RURAL PLANNING TOOLS-STRATEGIES:
Natural Resources Planning
RURAL PLANNING TOOLS-STRATEGIES:
Natural Resources Planning

Rural Green Infrastructure Examples

Wetlands
Rare Species Habitat
Forest Land
Floodplains
THE PRIMARY GOALS OF THE LANCASTER COUNTY GREEN INFRASTRUCTURE PLAN

Preservation: Preserve Lancaster County’s exceptional natural resources

Conservation: Conserve natural resources and the ecological services they perform throughout Lancaster County

Restoration: Restore ecological connections and natural resources throughout Lancaster County

Recreation: Provide accessible outdoor recreation opportunities throughout Lancaster County
LOCAL IMPLEMENTATION GUIDELINES

Introduction

Table of Contents

Model Ordinance Provisions

• Forest Blocks and Interior Forests
• Karst Topography
• Natural Heritage Areas
• Riparian Corridors
• Steep Slopes and Highly Erodible Soils
• Unique Geologic Features
• Wetlands

Conservation Zoning District

The Legal Framework

Also developed policies to use in advisory SALDO reviews for municipal consideration
**EPA’s Rural Community Categories**

- **Gateway Communities**: Adjacent to high-amenity recreational areas, such as national parks, national forests, and coastlines.

- **Resource-dependent Communities**: Often home to single industries, such as farming or mining, so their fortunes rise and fall with the market value of that resource.

- **Edge Communities**: Located at the fringe of metropolitan areas and typically connected to them by state and interstate highways; residents have access to economic opportunities, jobs, and services.

- **Traditional Main Street Communities**: Have a central commercial street as the focus of the town, with adjacent, compact, established neighborhoods.

- **Second Home and Retirement Communities**
LANCASTER COUNTY’S RURAL STRATEGY IDENTIFIES FOUR TYPES OF RURAL CENTERS:

- Village Growth Areas
- Crossroads Communities
- Rural Business Areas
- Rural Neighborhoods

- Growth Management Plan expects about 67% of new rural dwelling units will be in Village Growth Areas
- Remaining 33% will be in rural areas
- The Rural Strategy recommends that non-farm housing development be focused in Villages, Crossroads Communities, and Rural Neighborhoods
Explore the history of your community’s founding and use it to guide its future...

RURAL PLANNING TOOLS-STRATEGIES:
Rural Centers Planning

HISTORIC FORM AND COMMUNITY FUNCTION
RURAL PLANNING TOOLS-STRATEGIES:
Rural Centers Planning

ACTION STEPS

STEP #1: Do you want your Rural Centers to grow?
ACTION STEPS

RURAL PLANNING TOOLS-STRATEGIES: Rural Centers Planning

ACTION STEPS

STEP #3: Do you have the infrastructure to allow for additional development in your Rural Centers?
RURAL PLANNING TOOLS-STRATEGIES: Rural Centers Planning

ACTION STEPS

STEP #4: What should new development look like in your Rural Centers?
ALTERNATIVE WASTEWATER MANAGEMENT SYSTEMS

- Response to potential growth impacts on rural southern Lancaster County from the Aberdeen Proving Grounds expansion
- Rural Strategy of County’s Growth Management Plan doesn’t support provision of public sewer outside of designated Village Growth Areas
- Major goal of study was to develop a WWM evaluation process for local use in identifying feasible, environmentally sound WWM alternatives
- F.X. Browne report included a pilot study and analysis of WWM alternatives for rural Colerain Township

Fig 9: Infiltrator Chamber Distribution System
Source: Infiltrator System, Inc.
Colerain Township study addressed:

- The need for and feasibility of providing wastewater disposal system alternatives to specified geographic areas, based on soils, slopes and other physical attributes,
- The feasibility of serving existing developed areas as well as future development using current county and municipal policies,
- The applicability of the identified wastewater management options in this study is for use throughout Lancaster County.
LANCASTER COUNTY TDR PRACTITIONER’S HANDBOOK

- Joint project of LCPC, Warwick Township, Brandywine Conservancy
- Provides a basic framework for a TDR system, a TDR ordinance, and administrative set-up for municipal use

CAERNARVON-EAST EARL JOINT TDR PROGRAM

- Two townships and Brandywine Conservancy developed program to implement land use goals of a regional comprehensive plan
- Includes a unique rural-to-rural option developed by LCPC
- Adoption of program remains pending

RURAL PLANNING TOOLS-STRATEGIES: Transfers of Development Rights
GOAL:
Identifying areas with the best opportunities for long-term agricultural viability

IMPLEMENTATION STRATEGY:
• Similar to LCPC’s Compatibility-Conflict Evaluation, York County utilizes four criteria to determine what areas of the county have the best remaining base of large agricultural parcels
  • The analysis evaluates:
    - The number of large parcels in a Township
    - The existence of agricultural protection zoning
    - Soil quality ranking
    - Adjacency to existing preserved farms
Pennsylvania Wilds

- 12 counties, 6 million acres - 1/3rd of which are public lands
- Visitors spend an estimated $1.7 billion in the region annually, has one of the fastest-growing rates of tourism spending in Pennsylvania
- Offers an extensive resource center, including PA Wilds Design Assistance Program
At the core of the program is the PA Wilds Design Guide for Community Character Stewardship.

Supplies a basis upon which comprehensive plans, zoning ordinances, subdivision and land development ordinances, and other land use and design standards can be prepared and revised to reflect unique characteristics of the region and its communities.

Where appropriate, use wood as a primary building material
RURAL PLANNING TOOLS-STRATEGIES:
Pennsylvania Wilds Design Guidelines

Use Regional Thematic Elements...

- History and patriotism
- Water
- Wildlife
- Architectural styles
- Wood and timber
- Glass
- Stone
"Preserve Mail Pouch Tobacco barns as rural icons..."

"Remove abandoned structures when they become a clear visual nuisance or a safety hazard..."
RUGBY, NORTH DAKOTA (POPULATION 2,000)

- Town’s agricultural and government services sector declined in 1980’s and 90’s
- Town worked with a statewide technical assistance provider to create a low-cost computer training program
- Within 6 years, 1/3rd of the Town’s workforce completed the training
- Resulted in at least three new businesses that needed tech-proficient workforce
- Allowed an existing business experiencing computer problems to stay open
PURPOSES OF THE AGRICULTURAL PROTECTION PLAN

- Analyze and understand the foundations of the agricultural economy in Duplin County; and
- Create a forward looking plan that not only addresses a suite of issues facing farmers and citizens in the County today, but also sets the stage for agricultural growth

MAIN TOPICS OF THE PROTECTION PLAN

- **Agricultural Development Needs**, such as ag workforce and youth entrepreneurship training, public outreach and marketing, and improved infrastructure to attract agribusiness cluster
- **Agricultural Protection Needs**, such as farm transition programming, improving nuisance-suit protection at the county level, strengthening SALDO protections for farms
- **Land Use Control Needs**, such as protective water-use policies, incentives for clustered development, and development of a regional rural transportation policy
SUPPORT DEVELOPMENT OF A REGIONAL RURAL TRANSPORTATION POLICY

**Goal:** Improve rural traffic conditions and limit the liability exposure of farmers moving equipment

**Implementation Strategy:**
- Work to identify critical transportation improvements such as road widening, shoulder improvements, intersection upgrades, and bridge improvements
- Explore changes in County and State policy relative to road improvements requirements for new development including ingress/egress lanes, improved placement of mailboxes, and enforcement of overhead height regulations for cable and wiring
- Identify regulatory improvements in weight limit flexibility, rural road design standards (to accommodate agricultural equipment), and left turn liability would offer regulatory and liability relief to agricultural operations
RURAL PLANNING TOOLS-STRATEGIES:
Yates County NY Agriculture Development and Farmland Enhancement Plan

CORE PRINCIPLES

• Farming is More Than Just Raising Animals and Crops
• Buffers Between Farm and Residential Uses Are Essential
• Prime Farmland Should Be Protected from Development
• First, Do No Harm to Agriculture

The Yates County checklist that follows was based on resources presented by The New Hampshire Coalition for Sustaining Agriculture and UNH Cooperative Extension

image credits: www.yatescounty.org
RURAL PLANNING TOOLS-STRATEGIES:
Yates County NY Agriculture Development and Farmland Enhancement Plan

JUST HOW FARM FRIENDLY IS YOUR TOWN?

Comprehensive Planning Questions:
• Does your Comprehensive Plan specifically provide for agriculture or only rely upon vague statements about "preserving rural character?"
• Does your Plan document not only traditional farming and crops but also greenhouses, farm stands and specialty enterprises?
• Does your economic development strategy address agricultural opportunities and is the industry represented on these committees?
• Does your Plan recognize ag’s open space and natural resource protection benefit, encourage Ag Security Areas and promote techniques such as preservation easements?
• Does your Plan avoid calling for infrastructure extensions in or near farmland?
JUST HOW FARM FRIENDLY IS YOUR TOWN?

Zoning Questions:
• Does your zoning allow for small crop, nursery and greenhouse activities in non-ag zones?
• Does it provide for seasonal ag sales and activities, such as farm stands and Christmas tree sales, and provide for development standards tailored to ag, such as parking or temporary signage?
• Does it allow for ancillary ag-support uses, such as equipment dealers and feed mills, in proximity to agricultural uses?
• Does it define agriculture to include niche businesses, storage, repair, processing and sales activities?
• Does it provide for the large and unusual structures needed in agricultural operations (e.g., high grain elevators, large riding arenas, manure storage facilities)?
• Does it establish site plan review criteria for non-farm uses in agricultural districts that encourage houses to be located away from productive cropland, upwind of farm activities and in such manner as to not interfere with agricultural operations?
CHANGING THE RURAL PLANNING PARADIGM:
Who We Are

“GABBY”
FRANK P. BEHLAU, AICP
Lancaster County Planning Commission
behlauf@co.lancaster.pa.us

“HARMONY”
DEAN S. SEVERSON, AICP
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