



COMMONWEALTH OFFICE  
OF BROADBAND OUTREACH  
AND DEVELOPMENT  
*Promoting a 21st century economy*



# Commonwealth of Kentucky Broadband Central Planning Session May 31, 2012



## Map Descriptions and Details



# Multi - Map PDF Template



The screenshot shows Adobe Acrobat Pro displaying a PDF document titled "02 - CPS - Unsaved.pdf". The interface includes a menu bar (File, Edit, View, Document, Comments, Forms, Tools, Advanced) and a toolbar with icons for Create, Combine, Collaborate, Secure, and Sign. The main content area shows a map with a legend. The legend is titled "Legend" and contains the following information:

Color	Range
Light Green	35 - 121
Medium Green	122 - 284
Light Blue	285 - 758
Dark Blue	759 - 1706

Below the color ranges, the legend defines boundary types:

Boundary Type	Description
Solid black line	Region
Dashed black line	ADD
Thin grey line	County

A yellow callout box points to the bookmark icon in the toolbar, containing the text: "Bookmarks: Go to specific points of interest using bookmark links".

The left sidebar shows the "Bookmarks" panel with a tree view:

- State: Kentucky
  - Region: West
    - ADD: Purchase
    - ADD: Pennyrile
    - ADD: Green River
  - Region: Central
    - ADD: Lincoln Trail
    - ADD: Barren River
    - ADD: Lake Cumberland
  - Region: North
    - ADD: KTPDA

## 1. Select Bookmark Icon

## 2. Select Map to Display

- 21 Map Pages (11"x17")
- State Map
- 5 Regional Maps
- ADD Maps each Region



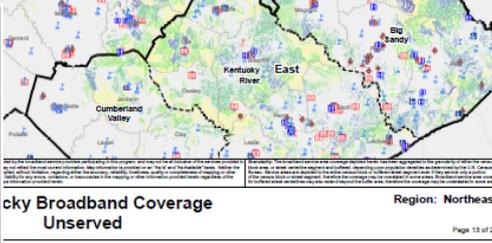
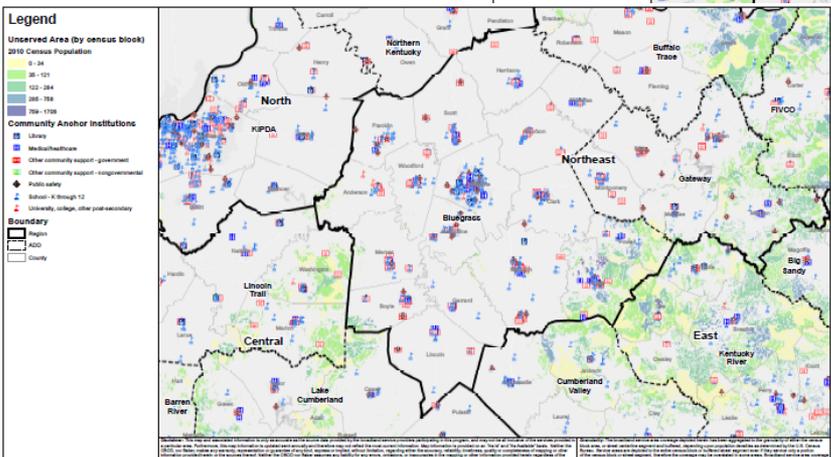
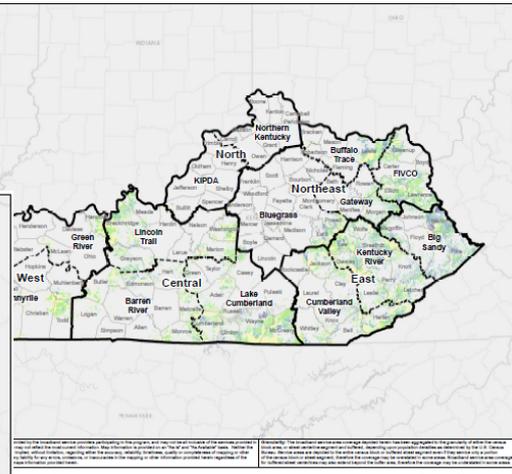
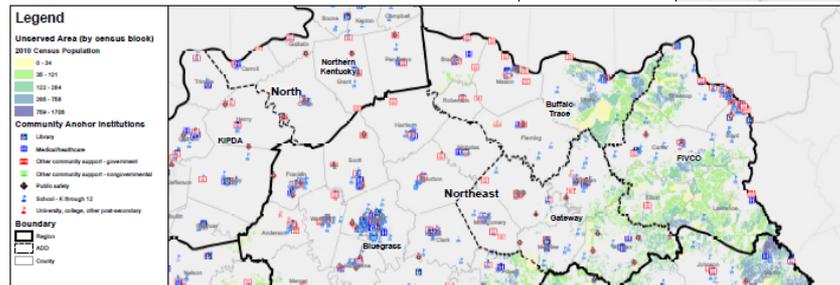
# Multi - Map PDF Template



## State Map

## Regional Map

## ADD Map



West Kentucky Broadband Coverage Unserved State: Kentucky Page 1 of 21

East Kentucky Broadband Coverage Unserved Region: Northeast Page 13 of 21

Central Kentucky Broadband Coverage Unserved ADD: Bluegrass Page 14 of 21





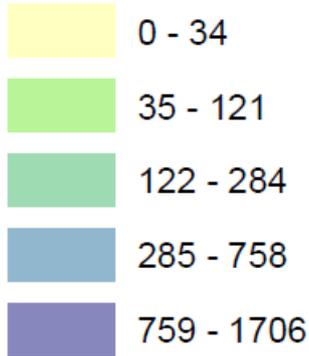
# Map Legend



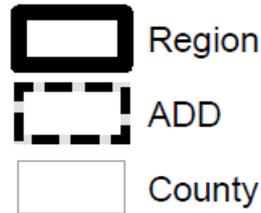
## Legend

### Unserved Area (by census block)

#### 2010 Census Population



#### Boundary



### Community Anchor Institutions

-  Library
-  Medical/healthcare
-  Other community support - government
-  Other community support - nongovernmental
-  Public safety
-  School - K through 12
-  University, college, other post-secondary

- Color coded areas representing various data ranges or types.
- Varies by map type.
- Boundary lines depicting 3 types of areas represented on the maps.
- Typical for all maps.
- Symbols representing 7 types of Community Anchor Institutions (CAI).
- CAI symbols displayed on Regional and ADD maps only.
- Typical for all maps.



# CPS Map Types



## Kentucky Broadband Central Planning Session

May 31, 2012

### Data Analysis Maps

No.	Map Name	Type of PDF	PDF Name
1	Planning Regions: Depicts the five regions created for the Commonwealth of Kentucky Broadband Planning Project color coding.	Single State Map	01 - CPS - KY Region (Color).pdf
2	Unservd Areas: Depicts areas within the Commonwealth that are totally unserved (excluding satellite) delineated by Census Block Population color coding.	Multi - Map	02 - CPS - Unservd.pdf
3	Underserved Areas: Depicts areas within the Commonwealth that are underserved (excluding satellite) delineated by Census Block Population color coding.	Multi - Map	03 - CPS - Underserved.pdf
4	Unservd/Underserved Areas: Depicts areas within the Commonwealth that are unserved and underserved (excluding satellite) delineated by unserved and underserved area color.	Multi - Map	04 - CPS - Unservd Underserved.pdf
5	Population Change: Depicts the difference in population from 2000 to 2010 for each County color coded by percent of change ranges.	Multi - Map	05 - CPS - County Pop Chng.pdf
6	Web Survey Results - Business/Organization: Depicts the number of web surveys received from Businesses and Organizations for each County color coded by number of survey ranges.	Single State Map	06 - CPS - Broadband Web Survey Results - Business Org.pdf
7	Web Survey Results - Household: Depicts the number of web surveys received from Households for each County color coded by number of survey ranges.	Single State Map	07 - CPS - Broadband Web Survey Results - Housholds.pdf
8	Non-Adoption Survey Results: Depicts the number of Non-Adoption (paper) surveys received for each County color coded by number of survey ranges.	Single State Map	08 - CPS - Broadband Non-Adoption Survey Results.pdf
9	Regional Availability/Utilization Survey Scores - Business/Organization: Depicts each Planning Region DEi score color coded by DEi score range in areas with adequate broadband availability (> 3mbps).	Multi - Map	09 - CPS - Broadband Availability - Utilization Org.pdf
10	Regional Availability/Utilization Survey Scores - Household: Depicts each Planning Region DEi score color coded by DEi score range in areas with adequate broadband availability (> 3mbps).	Multi - Map	10 - CPS - Broadband Availability - Utilization HH.pdf
11	Projected Adoption/Utilization - Organization: Depicts projected adoption/ utilization potential for improvement by county color coded on a scale of one to five. Projections are based on industry sector and size of organization.	Multi - Map	11 - CPS - Org Utilization Proj by County.pdf
12	Projected Adoption/Utilization - Household: Depicts projected adoption/ utilization potential for improvement by county color coded on a scale of one to five. Projections are based on age and income of households.	Multi - Map	12 - CPS - HH Utilization Proj by County.pdf

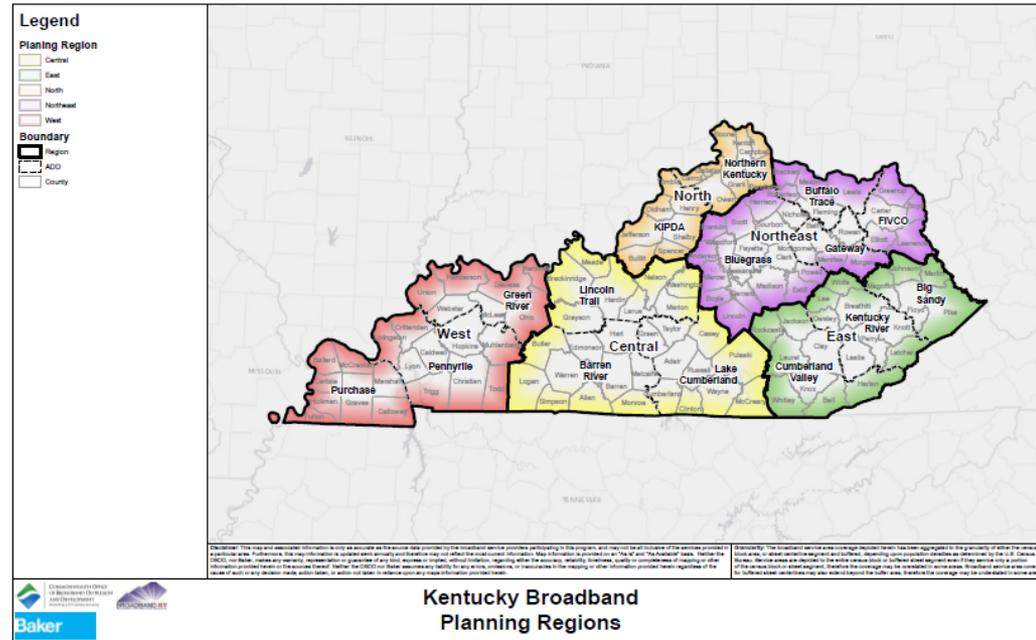


## General Notes

- Broadband supply side data from State Broadband Initiative (SBI)
- Broadband demand side data from web surveys to targeted businesses, organizations and households, as well outreach to the general public
- Ancillary map layers from KYGEONET and Census Bureau
- Map granularity to SBI specifications
- Satellite service not included

## 1. Planning Regions

- 5 regions
- Entire Commonwealth Coverage
- 2 to 3 ADDs/Region
- Region boundaries set by ADDs



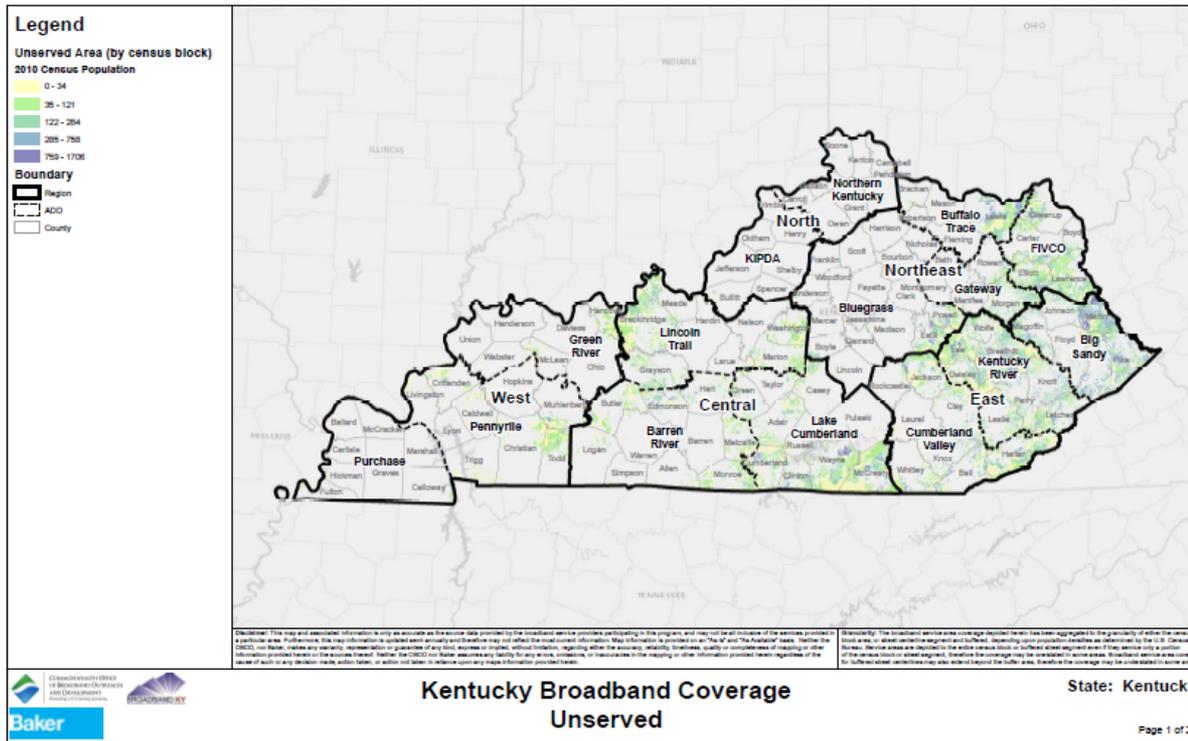


# Map Details



## 2. Unserved Areas

- No broadband service availability (totally unserved)
- Color coded by 2010 Census Bureau population range/census block
- Commonwealth unserved area = 13%
- Commonwealth unserved population = 3%
- Unserved breakdown by Region and County available



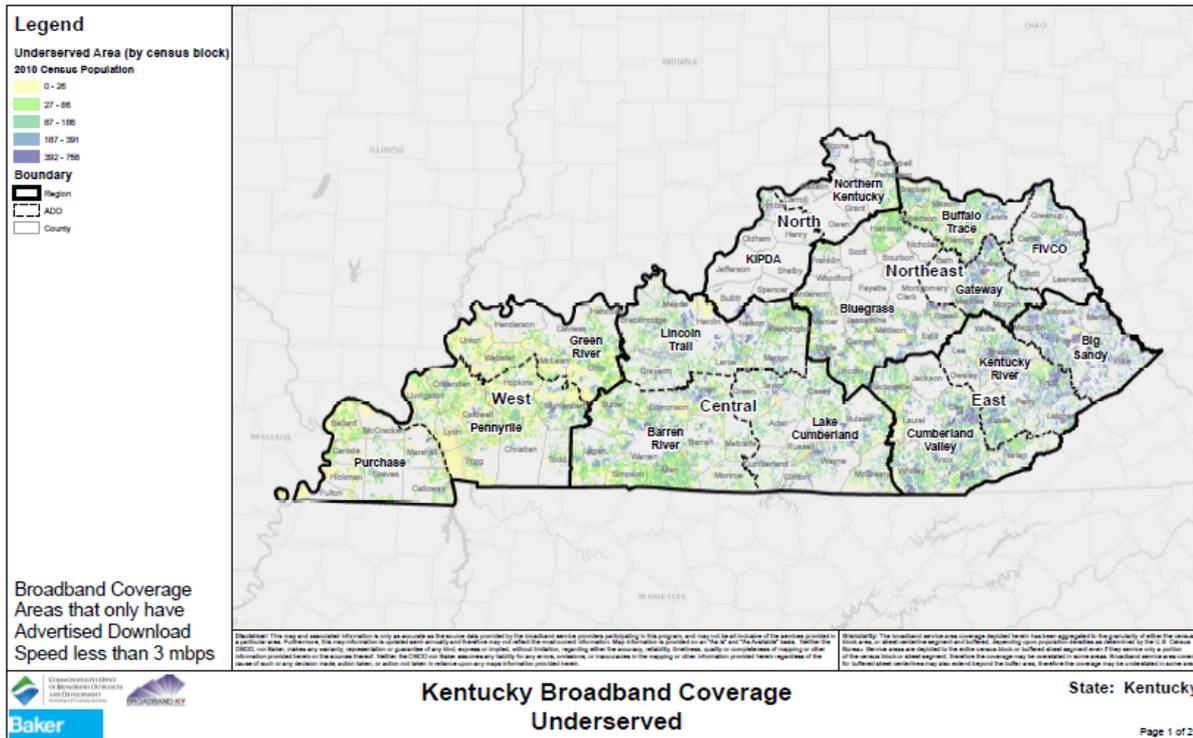


# Map Details



## 3. Underserved Areas

- Broadband service availability less than 3 mbps
- Color coded by 2010 Census Bureau population range/census block
- Commonwealth underserved area = 35%
- Commonwealth underserved population = 9%
- Underserved breakdown by Region and County available



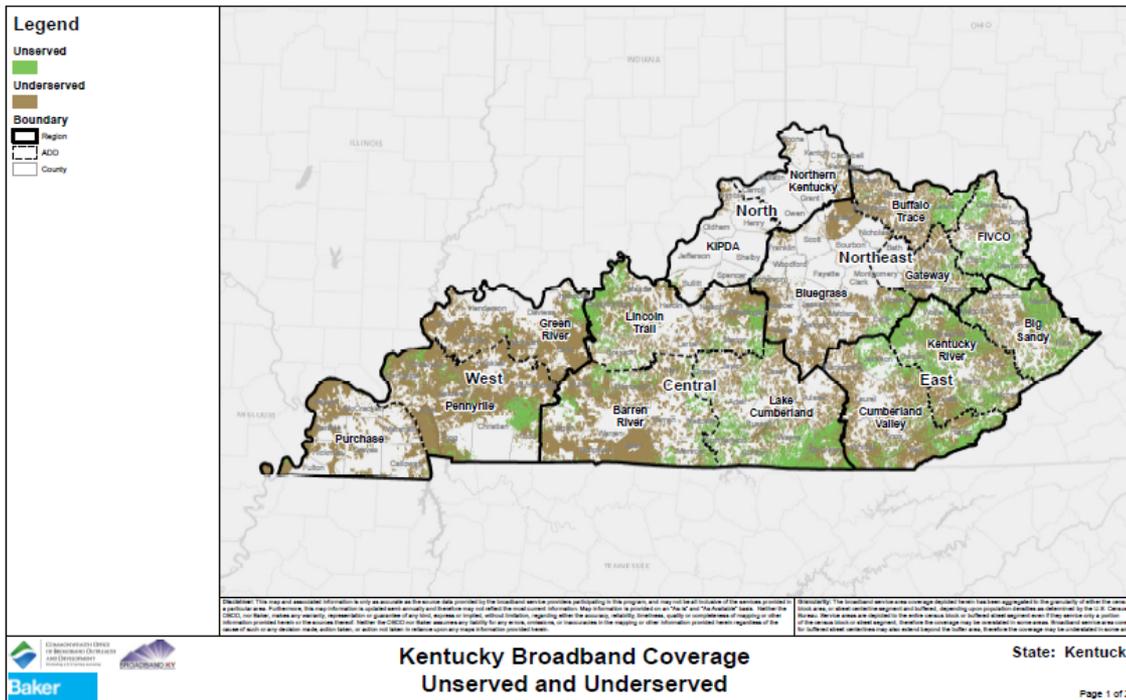


# Map Details



## 4. Unserved/Underserved Areas

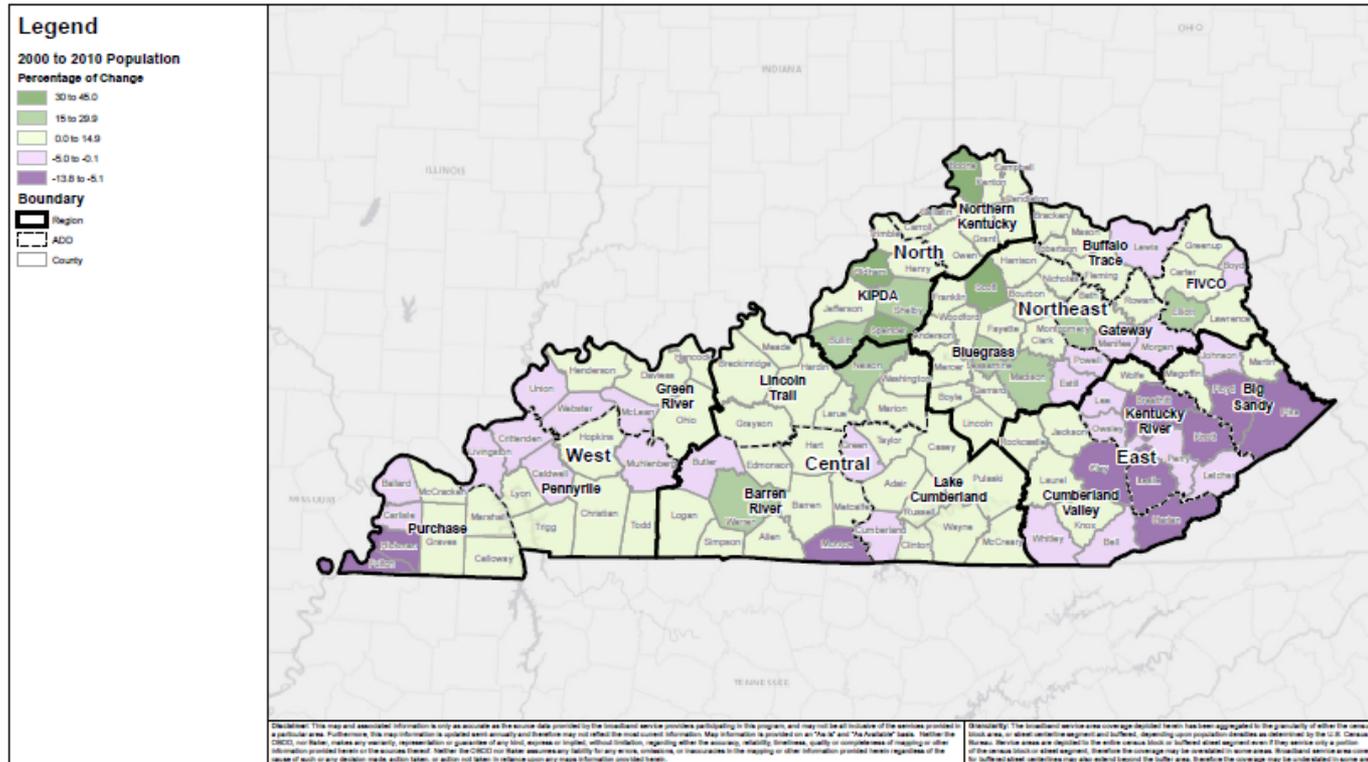
- Combined no broadband service availability (totally unserved) and Broadband service availability less than 3 mbps
- Color coded by unserved and underserved area
- Commonwealth **unserved/underserved area = 48%**
- Commonwealth **unserved/underserved population = 12%**
- Unserved **breakdown by Region and County available**





## 5. Population Changes

- Changes in Kentucky County population from 2000 to 2010
- Based on 2000 and 2010 Census data
- Color coded by percent of population change ranges



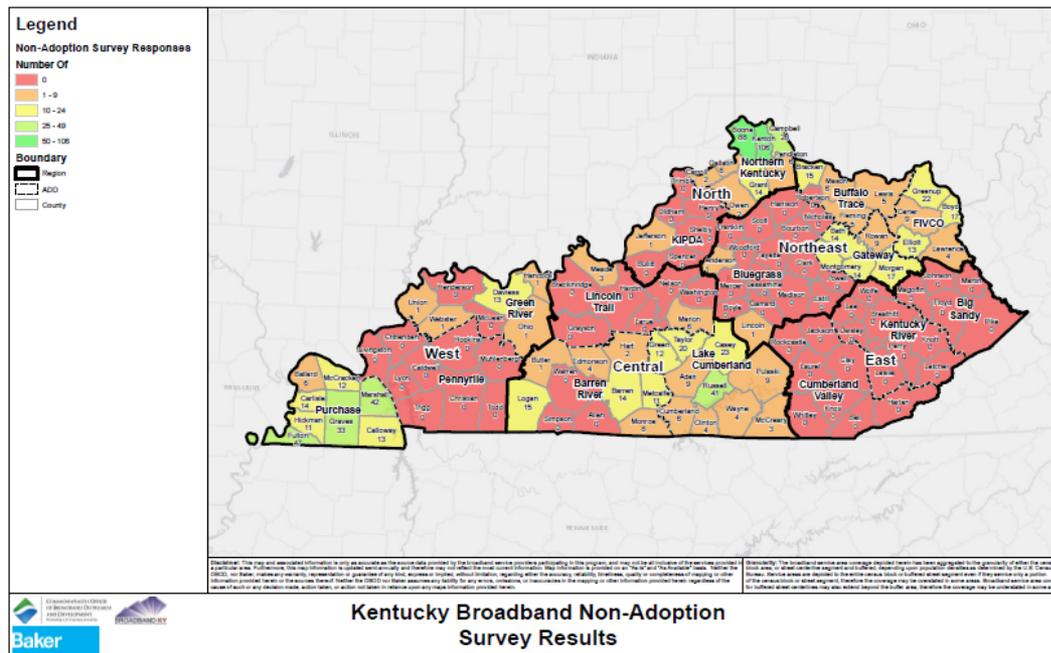






## 8. Non-Adoption Survey Results

- Paper surveys received from households that have not adopted broadband and unable to complete web surveys
- Color coded by ranges of number of surveys received for each County
- Distributed to non-adopters by the ADDs to various district agencies
- Returned surveys entered into database and geocoded into Geographic Information System (GIS)
- A total of 916 surveys currently geocode



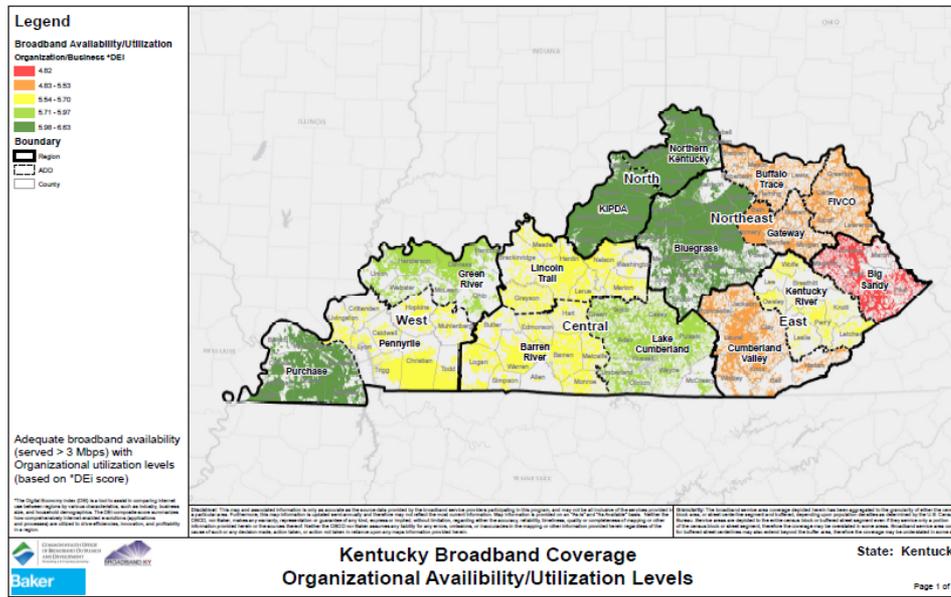


# Map Details



## 9. Regional Availability/Utilization Survey Scores – Business/Organization

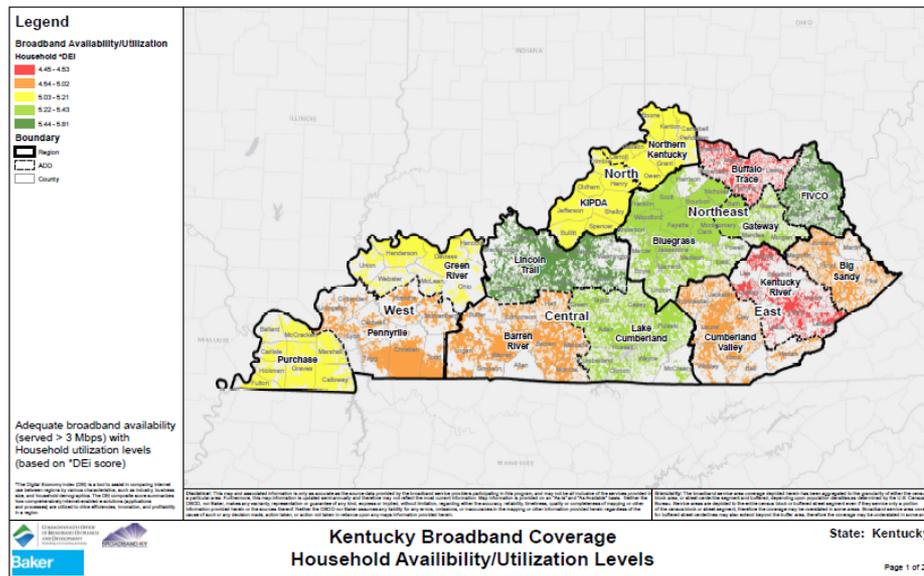
- Average businesses and organization broadband utilization per Region in adequately served areas (> 3mbps)
- Utilization measured from web survey DEi score averaged for each Region
- The DEi composite score ranges from 0-10, and summarizes how comprehensively Internet-enabled applications and processes are utilized. It can be used to compare Internet use between regions.
- Color coded by ranges of average DEi score for each Region





## 10. Regional Availability/Utilization Survey Scores – Household

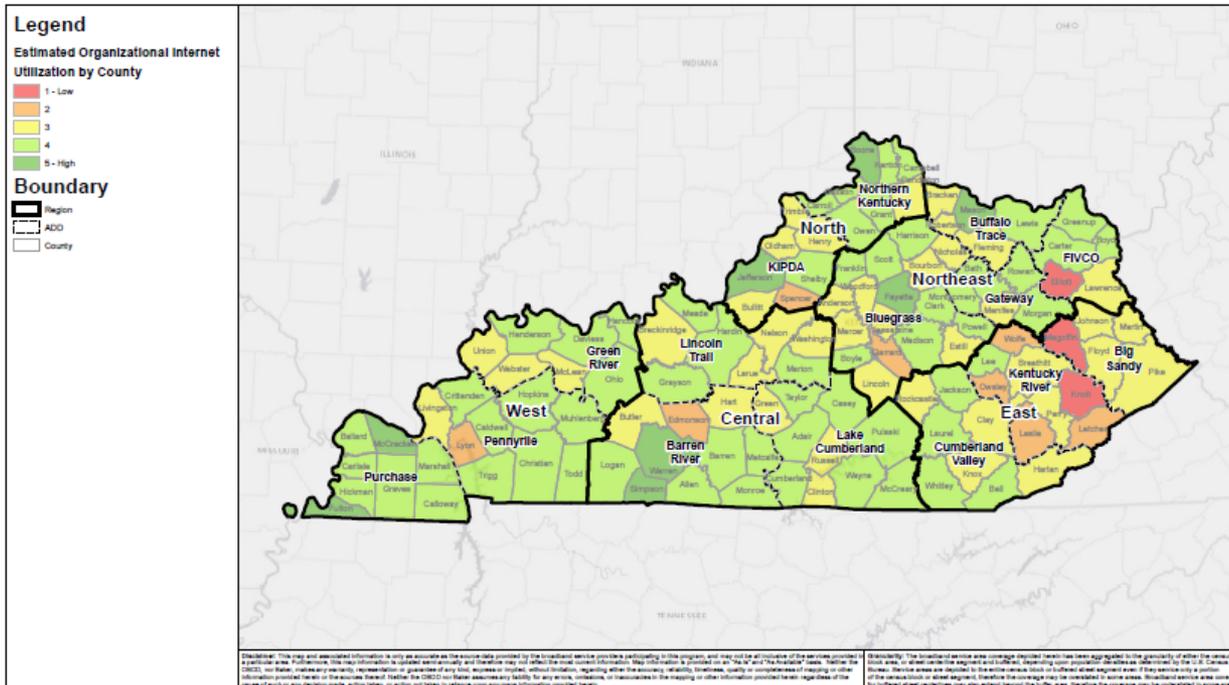
- Average household broadband utilization per Region in adequately served areas (> 3mbps)
- Utilization measured from web survey DEi score averaged for each Region
- The DEi composite score ranges from 0-10, and summarizes how comprehensively Internet-enabled applications and processes are utilized. It can be used to compare Internet use between regions.
- Color coded by ranges of average DEi score for each Region





## 11. Projected Organizational Utilization

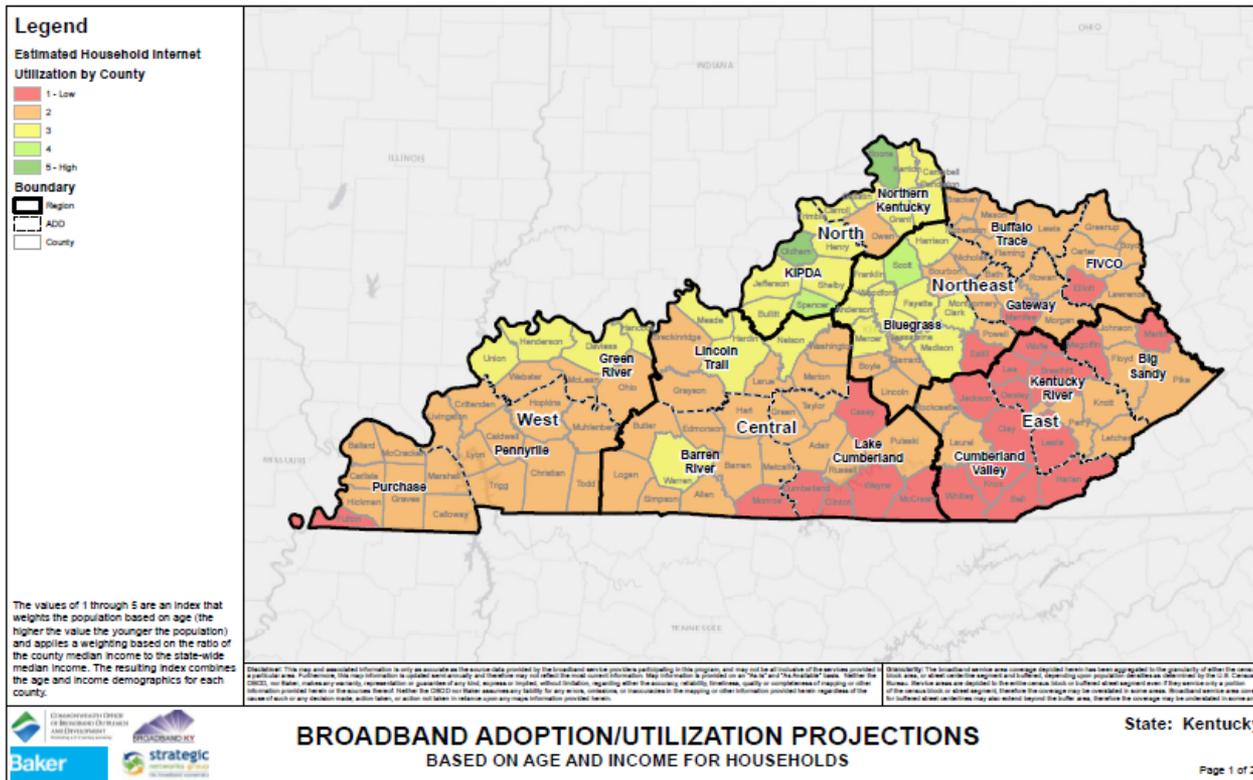
- Projected organizational broadband utilization improvement potential per County.
- Estimates based on industry sector and size of organization.
- Color coded on a scale of 1 to 5 (5 is highest potential)





## 12. Projected Household Utilization

- Projected household broadband utilization improvement potential per County.
- Estimates based on age and income of organization.
- Color coded on a scale of 1 to 5 (5 is highest potential)





# Mobility Fund Eligible Areas



<https://tiles.mapbox.com/baker/map/map-96sfr0ng>

## North East Region

Unserved Blocks: **3791**

Unserved Tracts: **56**

Unserved Road Miles: **3653.21**

Unserved Population: **45231**

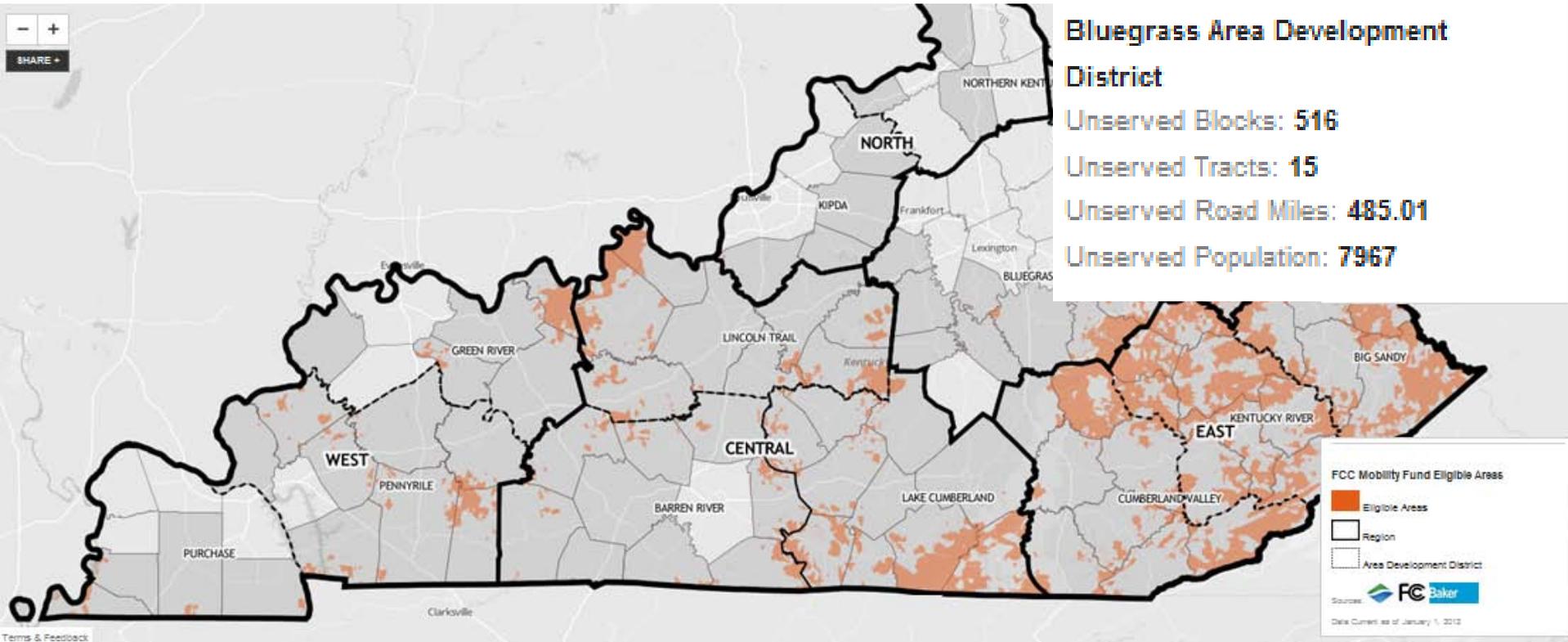
## Bluegrass Area Development District

Unserved Blocks: **516**

Unserved Tracts: **15**

Unserved Road Miles: **485.01**

Unserved Population: **7967**



FCC Mobility Fund Eligible Areas

- Eligible Areas
- Region
- Area Development District

Source: FC Baker

Date Current as of: January 1, 2012