

BOONE COUNTY 5-YEAR DIGITAL INCLUSION PLAN

Made possible through the Duke Energy Foundation's Digital Inclusion grant and partnership with the Purdue Center for Regional Development



Center for Regional Development

This 5-year digital inclusion plan will serve as a guide for Boone County as we become a more digitally inclusive community for the benefit of our residents, workforce, and visitors.

Mission: To foster a digitally inclusive environment to enhance Boone County's economic and community vitality.

GOAL ONE: Address access gaps by expanding current infrastructure to provide quality, affordable connectivity for the 10.2% of the households (See Appendix A) that have no connectivity by December 2027.

Phase 1 Action Steps:

1. Promote the Indiana Farm Bureau speed tests community stakeholders to better identify infrastructure needs and gaps
2. Promote Indiana Connectivity Program to Boone County residents and businesses that have access to actual speeds less than 25Mbps/3Mbps to initiate their interest in receiving broadband internet service.
3. Complete application for Broadband Ready Communities Program to establish Boone County as a Broadband Ready Community.
4. Conduct surveys to determine current cost of internet, quality, satisfaction, and the price point residents are willing to pay with the end goal of identifying broadband investment priority areas (BIPAs) in Boone County.
5. Boone EDC will develop and manage a robust digital inclusion landing page to host all digital inclusion efforts, projects, and resources in Boone County.

Phase 2 Action Steps:

1. Analyze survey and speed test data from Phase 1. The Boone EDC will present the information to local providers for education and awareness through strategic meetings and conversation with leaders in Boone County.

Phase 3+ Action Steps:

1. Conduct a survey for the residences and businesses directly impacted from new infrastructure to provide Boone County with ongoing and relevant feedback for future projects

GOAL TWO: Educate community members on relevant digital tools and practices to create a competitive workforce and increase individual prosperity

Phase 1 Action Steps:

1. Conduct a survey targeted for major Boone County employers (primary employers) to understand what digital skills they are looking for in their current and future workforce.
2. Inventory current digital inclusion educational workshops and resources currently offered in Boone County to identify gaps and create awareness about ongoing initiatives in the community.

Phase 2+ Action Steps:

1. Expand digital inclusion marketing plan to incorporate workforce barriers associated with digital skills that will be showcased on the digital inclusion URL and relevant social media channels.
2. Encourage continuous open dialogue for employers to discuss their workforce gaps with the Boone EDC through BRE visits.



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Phase 3+ Action Step:

1. Boone EDC to connect with Purdue Extension Agriculture & Natural Resources (ANR) Educator to bring precision agriculture programming to Boone County.

GOAL THREE: Strengthen small business' ability to adopt and adapt to the digital economy.

Phase 1 Action Steps:

1. Conduct a survey to gather data on barriers to digital adoption and the current digital presence of small business owners in Boone County.
2. Certify a Boone EDC representative to teach the Purdue Extension Community Development's Digital Ready Business workshops for small business owners and entrepreneurs in Boone County.

Phase 2+ Action Steps:

1. Foster a supportive environment for small businesses and entrepreneurs in Boone County to create and expand their online presence and build their SEO.

GOAL FOUR: Create a cohesive and collaborative environment through continuous digital inclusion awareness and advocacy.

Phase 2+ Action Steps:

1. Utilize the data gathered in the surveys from Phase 1 to educate and create awareness among community stakeholders through an ongoing digital inclusion task force lead by the Boone EDC.
2. Continue to bring conversation about digital inclusion barriers, initiatives, and policies at the Boone EDC Advocacy & Policy Committee meetings.

Boone, Indiana

2019 DIGITAL DIVIDE PROFILE

The digital divide index score (DDI) ranges between 0 and 100, where a lower score indicates a lower divide. The infrastructure adoption score and the socioeconomic (see scores and indicators below) contribute to the overall DDI. State averages are shown in parenthesis.

15.77

DIGITAL DIVIDE INDEX SCORE

36.50

INFRASTRUCTURE/ADOPTION SCORE

If this score is much higher than the socioeconomic score, efforts should be made to upgrade the broadband infrastructure.



6.7
(11.3)

percent households without a computing device



10.2
(16.3)

percent households with no internet access (not subscribing)



21.6
(13.4)

percent people without access to fixed broadband of at least 100 Mbps down and 20 Mbps up



18
(24)

median maximum advertised download speed in Mbps



3
(2)

median maximum advertised upload speed in Mbps

17.52

SOCIOECONOMIC SCORE

If this score is much higher than the infrastructure/adoption score, efforts should be made to focus on digital literacy and exposing residents to the benefits of the technology



12.9
(15.4)

percent population age 65 and older



6.3
(11.2)

percent age 25 and older with less than a high school degree



9.6
(13.7)

percent noninstitutionalized civilian population with a disability



6.0
(13.4)

percent of individuals in poverty



10.0
(5.7)

internet income ratio - a higher number denotes higher inequality

Appendix B

Business Density and the 25/3 Footprint

Source: FCC Form 477 December 2019 v1

Business Density



Note: Data are mapped on a census block level.
Source: FCC Form 477 June 2020 v1; ACS 2015-2019; Reference Solutions 2021

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Participation in the digital economy starts with accessing the online world, for residents and businesses. Internet access can allow businesses of all sizes to have an online presence, conduct business online, and more. From marketing to sales to internal operations, businesses can leverage the internet in many ways.

The maps below show the footprint of access for two subscription speeds in reference to business density. The grey area has access, and the remaining area does not. The colors show the density of businesses for each census block.

2,363

Businesses are in the 25/3 footprint or 95.2%

119

Businesses are outside the 25/3 footprint or 4.8%

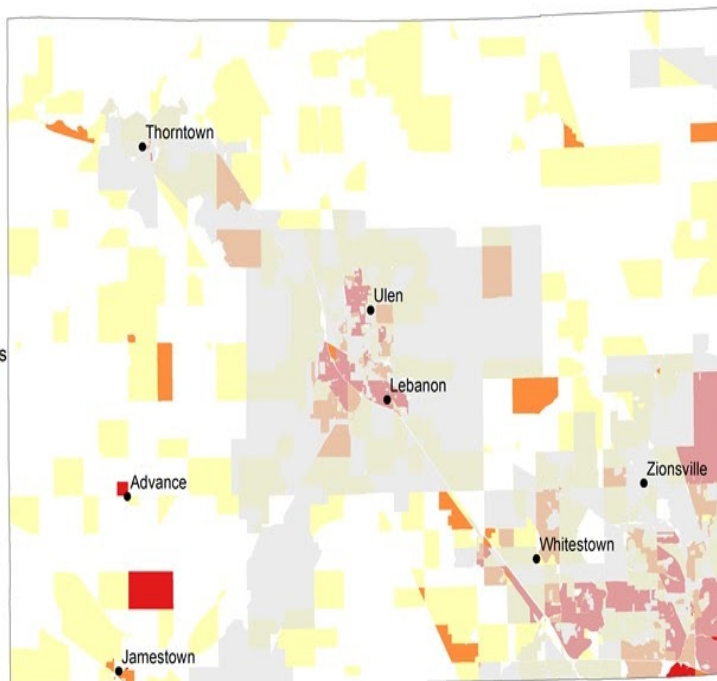
Appendix B

Business Density and the 100/20 Footprint

Source: FCC Form 477 December 2019 v1

Business Density

Businesses Per Block



Note: Data are mapped on a census block level.
Source: FCC Form 477 June 2020 v1; ACS 2015-2019; Reference Solutions 2021

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The maps below show the footprint of access for two subscription speeds in reference to business density. The grey area has access, and the remaining area does not. The colors show the density of businesses for each census block.

2,148

Businesses are in the 100/20 footprint or 86.5%

334

Businesses are outside the 100/20 footprint or 13.5%

Appendix C

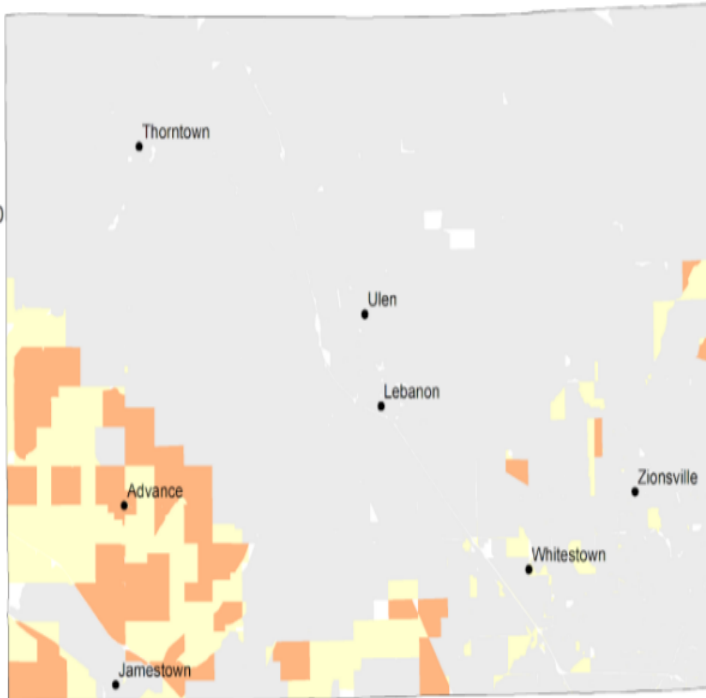
Housing Units Density Outside 25/3 Footprint

Source: FCC Form 477 December 2019
v1

Housing Units
with no access to
25/3 Mbps

Housing Units

- Less than 10
- 10 - 49
- 50 or more
- Access to
25/3 Mbps



Note: Data are mapped on a census Tract level.
Source: FCC Form 477 June 2020 v1, ACS 2015-2019



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Participation in the digital economy starts with accessing the online world. While a variety of opportunities exist for individuals to access the internet, household internet access comes with additional benefits, such as convenience. However, having access is not enough as the quality of one's connection is becoming increasingly important in the same way that roads have gone from dirt lanes to paved highways.

The maps below show the footprint of access for two subscription speeds in reference to housing density. The grey area has access, and the remaining area does not with a darker color showing more houses outside the footprint. The access footprints come from the FCC Form 477 June 2020 v1, and the housing density by census tract comes from the ACS 2015-2019.

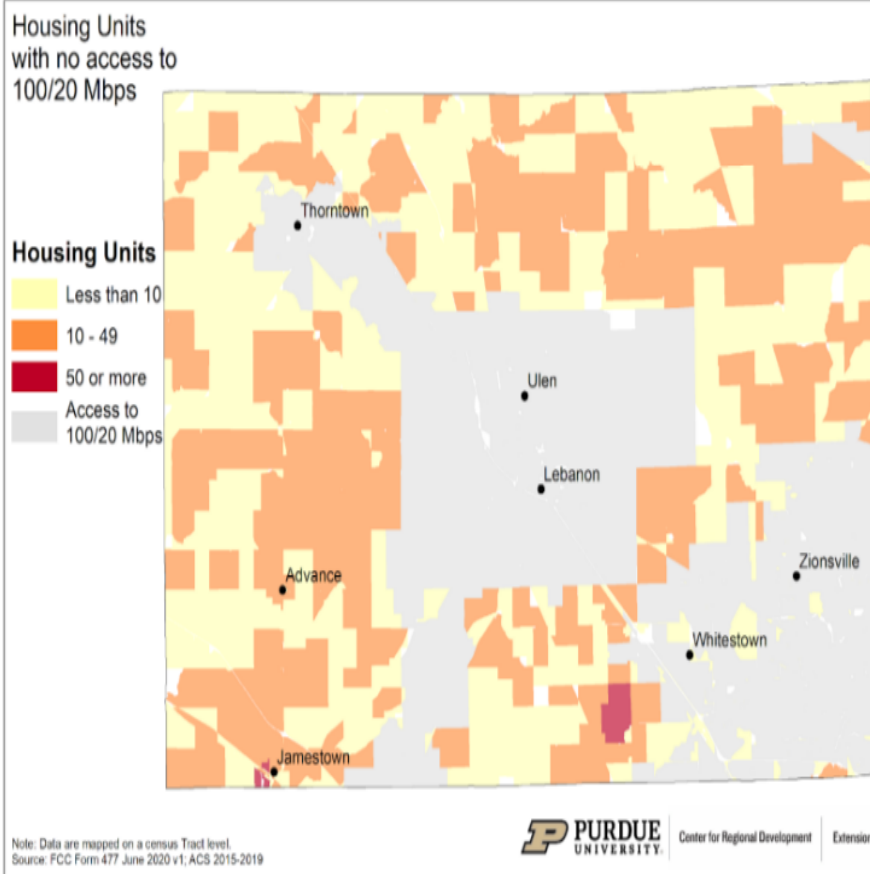
- Internet speed is measured by the amount of data in megabytes that can be transferred in one second.
- 1 minute of HD video takes 5 MB of data to store.
- Internet subscriptions are described by their download speed / upload speeds.
- 25/3 is the current FCC definition of highspeed internet.
- To stream an HD video you need at least 5 Mbps.
- 100/20 is becoming the new speed standard in order to accommodate a family working/learning from home.

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Appendix C

Housing Units Density Outside 100/20 Footprint

Source: FCC Form 477 December 2019
v1



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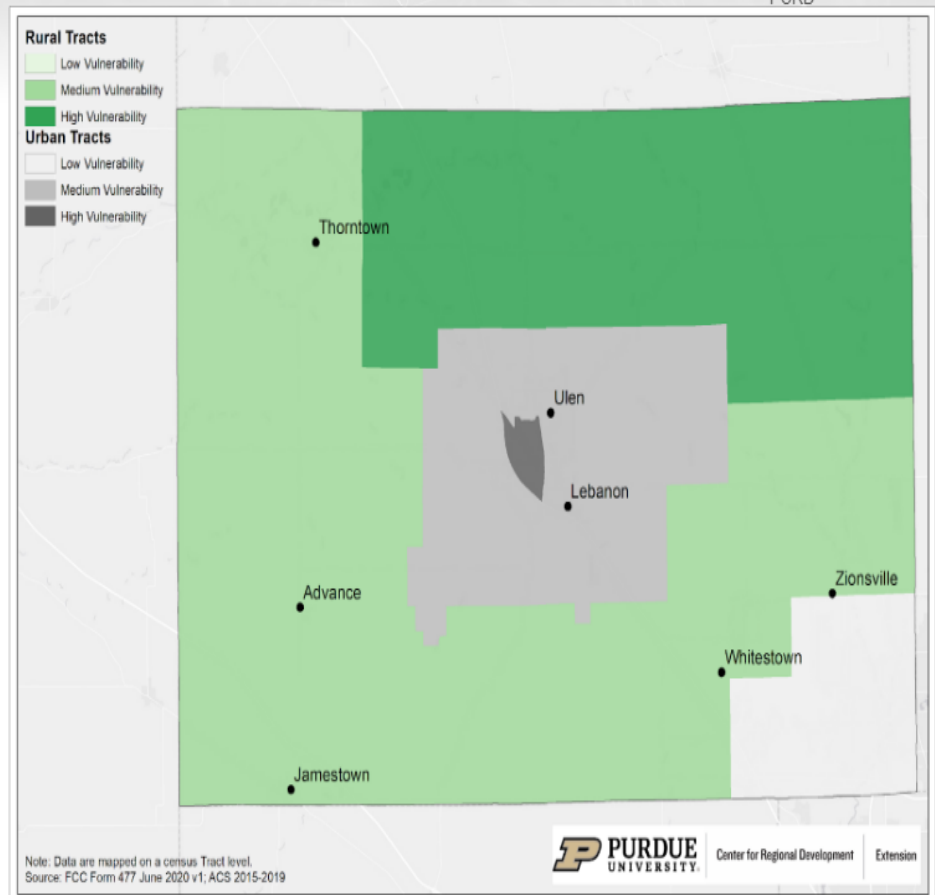
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Appendix D

Remote Work & e-Learning Vulnerability (ReV)

Source:
PCRD

The map shows census tracts divided into low, medium, and high based on their ReV (areas vulnerable to not remote work or e-learn) due to poor connectivity, homework gap, and occupations not conducive to remote work as of 2019. A darker color indicates more vulnerable areas.



Appendix D

Homework Gap

Source: U.S. American Community Survey
2015-2019

The map shows census tracts divided into low, medium, and high based on the percent of children with a computer but no internet as of 2019. A darker color indicates a higher share. Table shows the percent of children with a computer but no internet per county and the region.

6%

of households with a minor(s)
report having a computer but
no internet subscription

2%

of households with a minor(s)
report having no computer

17,369

Population under 18 years Old

27%

Child Poverty
Rate

