Closing the Digital Divide:
A Framework for Meeting CRA Obligations

Jordana Barton, MPA
Federal Reserve Bank of Dallas
jordana.barton@dal.frb.org

Westchester County Association
Rye, New York
August 15, 2017
The Future of Work

- Technological advancements are transforming work
- Growth of automation & technological complexity are changing required job skills (i.e., manufacturing)
- E-commerce and the disruptions in brick and mortar retail
- Artificial intelligence advancements (augment labor → replace labor)
- Remote models for provision of services (i.e., Telemedicine, Banking)
- Growth in contingent workforce (i.e., gig economy)
- 3D printing
- Self-driving vehicles
Broadband is included as a form of infrastructure investment—an essential community service.

Under the CRA service test, banks should show evidence that their “alternative delivery systems” using online banking and financial technology are being adopted and are effective in providing services to LMI individuals.

Economic development:

- Added workforce development/job training examples
- Added small business training example
Broadband: A Platform for all Areas of CRA & Community Development

- Essential Infrastructure
- Workforce Development and Education
- Access to Financial Services
- Small Business Development
- Affordable Housing
- Health Care
What is the Digital Divide?

The gap between people who have access to broadband services and know how to use the internet and those who do not have such access or knowledge.
<table>
<thead>
<tr>
<th>City</th>
<th>Median household income</th>
<th>Percent of households with no internet access</th>
<th>City</th>
<th>Median household income</th>
<th>Percent of households with no internet access</th>
<th>City</th>
<th>Median household income</th>
<th>Percent of households with no internet access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit</td>
<td>$24,820</td>
<td>39.9</td>
<td>Omaha</td>
<td>$47,512</td>
<td>22.9</td>
<td>Boston</td>
<td>$53,583</td>
<td>19.9</td>
</tr>
<tr>
<td>Miami</td>
<td>$31,070</td>
<td>36.8</td>
<td>Albuquerque</td>
<td>$46,357</td>
<td>22.9</td>
<td>Denver</td>
<td>$51,089</td>
<td>19.2</td>
</tr>
<tr>
<td>Cleveland</td>
<td>$26,096</td>
<td>36.1</td>
<td>Pittsburgh</td>
<td>$42,004</td>
<td>22.7</td>
<td>Arlington</td>
<td>$51,400</td>
<td>18.9</td>
</tr>
<tr>
<td>New Orleans</td>
<td>$36,631</td>
<td>33.8</td>
<td>Tampa</td>
<td>$42,649</td>
<td>22.4</td>
<td>St. Paul</td>
<td>$49,469</td>
<td>18.6</td>
</tr>
<tr>
<td>Buffalo</td>
<td>$32,392</td>
<td>32.6</td>
<td>Fort Wayne</td>
<td>$39,878</td>
<td>22.2</td>
<td>Long Beach</td>
<td>$52,116</td>
<td>18.6</td>
</tr>
<tr>
<td>Memphis</td>
<td>$36,722</td>
<td>32.3</td>
<td>St. Petersburg</td>
<td>$43,894</td>
<td>22.2</td>
<td>Orlando</td>
<td>$41,345</td>
<td>18.1</td>
</tr>
<tr>
<td>St. Louis</td>
<td>$34,488</td>
<td>31.9</td>
<td>Corpus Christi</td>
<td>$49,666</td>
<td>22.1</td>
<td>Charlotte</td>
<td>$51,034</td>
<td>18.0</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>$35,186</td>
<td>31.2</td>
<td>Tucson</td>
<td>$35,720</td>
<td>22.0</td>
<td>Minnesota</td>
<td>$50,563</td>
<td>18.0</td>
</tr>
<tr>
<td>Baltimore</td>
<td>$42,266</td>
<td>30.4</td>
<td>New York</td>
<td>$52,223</td>
<td>21.9</td>
<td>Lexington-Fayette</td>
<td>$47,535</td>
<td>17.6</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>$34,605</td>
<td>30.3</td>
<td>Mesa</td>
<td>$47,561</td>
<td>21.8</td>
<td>Lincoln</td>
<td>$49,419</td>
<td>16.7</td>
</tr>
<tr>
<td>Toledo</td>
<td>$31,907</td>
<td>29.8</td>
<td>Greensboro</td>
<td>$41,150</td>
<td>21.8</td>
<td>Aurora</td>
<td>$49,142</td>
<td>15.6</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>$36,836</td>
<td>29.6</td>
<td>Fort Worth</td>
<td>$52,430</td>
<td>21.8</td>
<td>San Francisco</td>
<td>$77,485</td>
<td>14.9</td>
</tr>
<tr>
<td>El Paso</td>
<td>$41,129</td>
<td>28.7</td>
<td>Los Angeles</td>
<td>$48,466</td>
<td>21.7</td>
<td>Austin</td>
<td>$56,351</td>
<td>14.9</td>
</tr>
<tr>
<td>Dallas</td>
<td>$41,978</td>
<td>28.5</td>
<td>Nashville-Davidson</td>
<td>$46,803</td>
<td>21.5</td>
<td>Portland</td>
<td>$55,571</td>
<td>14.8</td>
</tr>
<tr>
<td>Fresno</td>
<td>$40,179</td>
<td>27.0</td>
<td>Oklahoma City</td>
<td>$46,232</td>
<td>21.4</td>
<td>Raleigh</td>
<td>$55,170</td>
<td>14.4</td>
</tr>
<tr>
<td>Wichita</td>
<td>$43,538</td>
<td>26.6</td>
<td>Jacksonville</td>
<td>$47,424</td>
<td>21.1</td>
<td>Henderson</td>
<td>$60,819</td>
<td>13.5</td>
</tr>
<tr>
<td>Tulsa</td>
<td>$41,495</td>
<td>26.2</td>
<td>Sacramento</td>
<td>$48,034</td>
<td>21.1</td>
<td>Colorado Springs</td>
<td>$53,550</td>
<td>13.2</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>$41,361</td>
<td>26.0</td>
<td>Las Vegas</td>
<td>$49,289</td>
<td>20.9</td>
<td>Madison</td>
<td>$49,546</td>
<td>12.9</td>
</tr>
<tr>
<td>San Antonio</td>
<td>$45,399</td>
<td>25.3</td>
<td>Atlanta</td>
<td>$46,485</td>
<td>20.8</td>
<td>Anchorage</td>
<td>$79,045</td>
<td>12.8</td>
</tr>
<tr>
<td>Chicago</td>
<td>$47,099</td>
<td>24.9</td>
<td>Urban Honolulu CDP</td>
<td>$61,559</td>
<td>20.8</td>
<td>Seattle</td>
<td>$70,172</td>
<td>12.2</td>
</tr>
<tr>
<td>Houston</td>
<td>$45,353</td>
<td>24.9</td>
<td>Bakersfield</td>
<td>$54,763</td>
<td>20.8</td>
<td>San Diego</td>
<td>$63,456</td>
<td>12.0</td>
</tr>
<tr>
<td>Kansas City</td>
<td>$45,551</td>
<td>24.4</td>
<td>Oakland</td>
<td>$54,394</td>
<td>20.2</td>
<td>San Jose</td>
<td>$80,977</td>
<td>11.6</td>
</tr>
<tr>
<td>Phoenix</td>
<td>$46,601</td>
<td>24.1</td>
<td>Columbus</td>
<td>$44,426</td>
<td>20.0</td>
<td>Virginia Beach</td>
<td>$62,855</td>
<td>10.5</td>
</tr>
<tr>
<td>Louisville/Jefferson County</td>
<td>$44,893</td>
<td>24.0</td>
<td>Washington, D.C.</td>
<td>$67,572</td>
<td>20.0</td>
<td>Plano</td>
<td>$80,448</td>
<td>7.7</td>
</tr>
</tbody>
</table>

**SOURCE:** Census Bureau, 2013 American Consumer Survey.
Who does not have access?

Low-income households are less likely to have broadband access than high-income households.
Who does not have access?

Households with less education have lower rates of broadband adoption.
The likelihood that a household has a broadband connection varies greatly depending upon its location. Generally, metropolitan households are more likely to have broadband access than households in rural areas.
Who does not have access in San Antonio, Texas?
The Internet Economy and Workforce Development

- Broadband access → Ability to participate in internet economy
- Digital literacy → Participation in internet economy as consumers
- Financial literacy → Participation in internet economy through online personal finance
- Computer technical skills training → Participation in internet economy as a skilled worker
- Computer programming → Participation in internet economy as an entrepreneur

SOURCE: Federal Reserve Bank of Dallas.
Workforce Development

▪ Digital skills & access to broadband required for accessing jobs & training
▪ 70% of jobs are posted online
▪ Job training programs increasingly offered online
▪ 8 in 10 middle skills jobs require digital skills (32% of labor market demand)
▪ Digitally intensive middle skills jobs have grown twice as fast as other middle skills jobs in the past decade (higher wages)
▪ The skills mismatch in the digital economy
The Homework Gap

- 1/3 of households with incomes below $50,000, with school age children, do not have high speed internet access at home (40% of all families with school-age children)
- Only 8% of households with incomes of $50,000 or more lack broadband at home
“Uber, the world’s largest taxi company, owns no vehicles. Facebook, the world’s most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world’s largest accommodation provider, owns no real estate. Something interesting is happening.” -Tom Goodman, Havas Media
Access to Financial Services

- More and more banking services are now available without making a trip to a branch—online banking, mobile banking, remote deposit
- 61 percent of total internet users bank online (Pew, 2013)
- 43 percent of adults with mobile phones and bank accounts reported using mobile banking, an increase of 4 percentage points from the previous year (Federal Reserve System, 2016)
- Total number and density of banking offices declined during the post-2008 Great Recession (FDIC, 2015)
Access to Financial Services

- Impact of technology strongest among younger consumers
- Branch transactions have declined—1993-2012 teller transactions per office declined by 45 percent
- Paper checks fell from 43 percent of non-cash payments to 15 percent (2003-2012) (FDIC, 2015)
- Mobile financial services are found to help banks address many of the core financial services needs of underserved consumers (FDIC, 2016)
Benefits of Broadband for Rural Communities

- **Education**: Distance learning for students and adults in rural areas and preventing the “brain drain”
- **Attracting Business**: Basic infrastructure for doing business
- **Healthcare**: Telemedicine/Telehealth for treating patients at rural clinics and accessing health records
- **Employment**: Connections to global markets and the ability to work remotely or seek job opportunities
- **E-Commerce**: Provide a bigger market for small, local businesses to buy and sell goods or provide secondary income
To achieve success, it is critical to invest in community programs that include all of the “three legs of the stool” of broadband adoption.

- **Broadband access**
- **Computer access**
- **Training & technical assistance**
Broadband is Essential Infrastructure and the Prerequisite for Closing the Digital Divide
Best Practices

▪ When there is an opportunity, banks can blend or layer the types of investments they make in broadband to include the “three legs of the stool”.
▪ Measure outcomes to identify what works.
▪ Digital inclusion programs need to consider the barriers to adoption people experience.
▪ Training programs for youth and adults should cover the subject of internet safety and security.
▪ Communities should consider the internet speed that will meet their economic development goals.
▪ Local governments should create their digital inclusion plans as part of their economic development plans.
Tips for Preparing Your Case

Part Four: Helping tips on preparing your case

• An overview of critical sections of the CRA Q&A
• A list of CRA Reference Guides

Closing the Digital Divide
A Framework for Meeting CRA Obligations

Prepared by the Federal Reserve Bank of Dallas
Community Development

Tips for Preparing Your Case

• The Community Development (CD) definition (under the CRA) includes activities that deliver affordable rental housing and affordable, stable housing for low-income families. A bank could receive credit for helping to develop or upgrade affordable rental units, such as enhancing access to banking services, local services, health care and educational activities. The bank would have to meet the definition of CD loan, investment, service, examined, and determine whether the activities are consistent with the community’s formal or informal plans for the revitalization and stabilization of the low- or moderate-income geography.

• Q&A 6. Large banks that are committed to revitalizing low- or moderate-income geography and activities that deliver affordable rental housing and affordable, stable housing for low-income families. A bank could receive credit for helping to develop or upgrade affordable rental units, such as enhancing access to banking services, local services, health care and educational activities. The bank would have to meet the definition of CD loan, investment, service, examined, and determine whether the activities are consistent with the community’s formal or informal plans for the revitalization and stabilization of the low- or moderate-income geography.

• An overview of critical sections of the CRA Q&A

• A list of CRA Reference Guides

Part four of the new publication includes:

• Helpful tips on preparing your case

• An overview of critical sections of the CRA Q&A

• A list of CRA Reference Guides
Telling Your CRA Story

A Template for Financial Institutions to Tell Their CRA Story

PART FIVE

Your Financial Institution’s Community Development Story

Section A: Background

I. Your mission and/or purpose

II. Your geographic market(s)

A discussion of demographic data related to income, deposit market share, Home Mortgage Disclosure Act market share, CRA small business and farm share and identified needs. For demographic information, a bank can see the Census Bureau datasets of which is provided in this report; the broadband map and the community’s economic development plan.

III. Define the CRA

Below is sample text:

・ “Under the Community Reinvestment Act (CRA), it is our responsibility to identify and invest in low- and moderate-income (LMI) communities. These activities must benefit both our financial institution and these communities.”

・ “The CRA defines community development as all that encompasses affordable housing (including multifamily rental housing) for LMI individuals, community services targeted to LMI individuals, activities that promote economic development by financing businesses or farms that meet the size eligibility standards of the Small Business Administration’s Development Company or Small Business Investment Company programs or have gross annual revenues of $1 million or less, or activities that revitalize LMI geographies, designated disaster areas or depressed or underserved nonmetropolitan middle-income geographies designated by the Federal Reserve Board of Governors, the Federal Deposit Insurance Corporation (FDIC) and the Office of the Comptroller of the Currency (OCC).”

IV. Examples of how your financial institution has met your CRA obligations

Below is sample text:

・ “There is a distinct digital divide in our assessment area, see NTIA broadband map for our assessment area behind and this is how LMI people are affected. Our work with (give name of partner, such as nonprofit economic development center or school) to bring broadband infrastructure to LMI communities is designed to revitalize and stabilize the LMI geography. (Provide evidence of impact on workforce development, access to healthcare and teledermatology, small business development or improved educational outcomes.)

・ “Specifically, we provided a grant (amount) to offer home WiFi and computers, as well as training for students at the local high school to help close this homework divide. The majority of students at the high school are LMI. 95 percent of the students qualify for free and reduced lunches.”
Digital Opportunity for the Rio Grande Valley (DO4RGV): The Role of Local Governments

- A community-led initiative to design and implement an effective model for closing the digital divide in the Rio Grande Valley on the South Texas Border.

- A middle mile (government to government) demonstration project with Pharr-San Juan-Alamo School District (PSJA) and the City of Pharr to provide an adaptable and replicable model for the border.

- A digital inclusion program at PSJA for parents and students.
Conclusion

- Income and wealth inequality are at the highest levels since the Great Depression.
- The Digital Divide creates a structural barrier to closing the income and wealth gaps—and a barrier to LMI individuals’ ability to move up the economic ladder.
- Investing in broadband infrastructure and digital inclusion can help us prevent downward mobility.
- By working with nonprofits and other local partners to bring broadband access and adoption to LMI communities, banks can have a powerful impact on the “infrastructure of opportunity” in this country.
Q & A

Jordana Barton, MPA
Federal Reserve Bank of Dallas
jordana.barton@dal.frb.org

“Closing the Digital Divide”
www.dallasfedcomdev.org