



Guilford County Broadband Fiber Optics Gap Analysis

September 2, 2021



Guidehouse at a glance

Building trust in society and shaping a new future

Public Sector

Bringing the power of our federal, state, and local disaster recovery, grants management, and economic revitalization practices...

Private Sector

...with our deep expertise in financial management, health care and public health, and sustainability consulting in the private sector.

OUR COMPANY



50+

locations globally



10,000+

employees



OUR PEOPLE



39% racially diverse



5 generations of professionals



50%



50%

11

HRC consecutive perfect scores



5 employee affinity groups



5% Veteran & Active Duty

OUR AWARDS

4
consecutive years



Our Understanding

Addressing the lack of high-speed internet in parts of the county – especially in rural areas – is a priority of Guilford County.

- ✓ High-speed broadband and the networks that support it are essential infrastructure.
 - It attracts more capital investment into local economies.
 - The COVID-19 pandemic has made high speed internet even more essential. School children in all parts of the county need to have remote learning as an option.
- ✓ Statewide, we know that approximately **10 percent of North Carolina homes and businesses cannot access broadband-speed internet**
 - These figures that are better than the national average and among the best in the southeast.
 - However, most of these unconnected homes and businesses are in rural and economically challenged areas with low-population density.

A Gaps and Needs Infrastructure Analysis Report using the best data available from the private and public sectors will help Guilford County determine the best path forward for strategy and investment. An assessment should be more than just as diagnosis of the problem and potential solutions. **We understand that you need an assessment that also serves as:**

-  **A statement of values and priorities**
-  **A coalition of County staff, citizens, businesses, and organizations.**
-  **An investment case.**
-  **A facilitator of other County goals.**

Our Understanding

There are substantial federal and state funds available or coming available for Broadband. Guilford County needs a clear assessment and business case to be strategic, impactful and be prepared to maximize future funding opportunities.

- ✓ **Over \$7.2 billion in broadband-related funding from federal agencies**
 - Grants are available for broadband through the Economic Development Administration (EDA), Department of Housing and Urban Development (HUD), etc.
- ✓ **New Stimulus Funding from \$1.9 trillion American Rescue Plan (ARPA)**
 - The State of North Carolina and its counties will receive **\$5.4 billion** and **\$2.04 billion** to distribute respectively via Coronavirus State and Local Fiscal Funds
 - North Carolina is also set to receive an additional **\$277 million** for capitol projects including broadband infrastructure
- ✓ **~\$100 billion broadband investment proposed by future funding, incl. American Jobs & Infrastructure Plan (AJ&IP)**
 - Invests **\$80 billion** in secure and resilient infrastructure for communities nationwide, prioritizing underserved rural, suburban, and urban areas
 - Devotes **\$5 billion** for rapid deployment of home internet service and hotspots
 - Provides over **\$1 billion** to establish grant programs to close gaps in broadband adoption and digital skills and support digital inclusion projects

Essential Tasks to Receive Funding

Task 1. Identify County Gaps & Priorities, and Create County Assessment

Task 2. Develop Complementary Funding Strategy

Task 3. Assist County in ARPA and Other Funding Applications

Our approach includes three phases.

We are focused not only on what we will do, but also on why we do it

1

Data Gathering & Stakeholder Engagement Preparation

- Engagement Kickoff
- Task Force and Stakeholder Mapping
- Interviews
- Data and Documentation Gathering
- Develop Survey and Speed Test

2

Gaps and Opportunities Assessment

- Host gaps and needs meetings
- Conduct survey and speed tests
- Develop broadband Master Plan
- Conduct Leading Practice Research
- Assess Gaps and Opportunities

3

Report Writing and Presentation

- Host Approach Meetings
- Develop Solutions Universe and Prioritization Methodology
- Develop Report Recommendations
- Draft Action Plan Details

How we propose to work with you:

We have planned a **four-month engagement** to deliver a written report on the **gaps and needs of broadband** in Guilford County, extensive **stakeholder engagement** and surveying, identified opportunities and asset inventories, and a **roadmap** of actions the County can take to rapidly begin improving access, quality, and price.

Phase	Phase 1 Data Gathering & Stakeholder Engagement Preparation					Phase 2 Gaps & Opportunities Assessment					Phase 3 Report Writing & Presentation					
Activities	1a. Engagement Kickoff 1b. Task Force and Stakeholder Mapping 1c. Interview Task Force Members and Stakeholders 1d. Gather Available Data and Documentation 1e. Develop Survey and Speed Test					2a. Host Gaps and Needs Meetings 2b. Conduct Survey and Speed Test 2c. Develop Broadband Master Map 2d. Conduct Leading Practice Research 2e. Assess Gaps and Opportunities					3a. Host Strategic Approach Meetings 3b. Develop Solutions Universe and Prioritization Methodology 3c. Draft Report Recommendations 3d. Draft Action Plan Details					
Deliverables	<ul style="list-style-type: none"> Asset Inventory(ies) 					<ul style="list-style-type: none"> Five (5) gaps and needs community meetings Detailed Maps 					<ul style="list-style-type: none"> Five (5) strategic approach community meetings Gaps and Needs Infrastructure Analysis Report Gaps and Needs Action Plan Broadband Task Force 					
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase 1	█															
Phase 2						█										
Phase 3											█					

Ongoing Project Management:

Status Reports and Weekly County Check-ins (which can lead into Broadband Task Force)

Ongoing Stakeholder Engagement:

Interviews, Gaps and Needs Meetings, Strategic Approach Meetings, and others as needed



Our Broadband and COVID-19 Experience



Broadband Strategy (*Harris County, TX*)

Conducted a current state assessment, developed a short- and long-term connectivity strategy, and implemented targeted interventions throughout the community in coordination with local stakeholders. In addition to program and funding management to support broadband and digital inclusion initiatives through the pandemic.



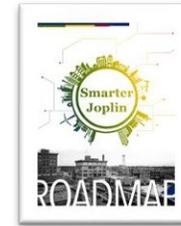
Connected Communities (*Tennessee Valley Authority*)

Developed a regional roadmap, customized guidebook, and pilot grant process to solicit community-driven solutions that address broadband access, connectivity, adoption, and other digital divide issues impacting communities across the Tennessee Valley.



Broadband and IoT Strategy (*City of San Jose*)

Conducted a current state and benchmarking assessment, facilitated multiple visioning workshops, and designed a IoT Strategy Playbook with recommendations around data, devices, privacy, and collaboration.



Broadband Gap Analysis (*City of Joplin*)

Building on Joplin's Smart City Roadmap, Guidehouse is managing a broadband gap analysis, which includes an assessment of current infrastructure, analysis of the local broadband market, service deployment recommendations, network design, and evaluation of financing options.



COVID-19 Broadband Access (*State of Vermont*)

Currently supporting the State of Vermont in the design and implementation of various CRF & ARPA funded broadband access programs, including the Vermont Broadband Subsidy Program, Line Extension Consumer Assistance Program, and Get Vermonters Connected Now Initiative (GVCNI).

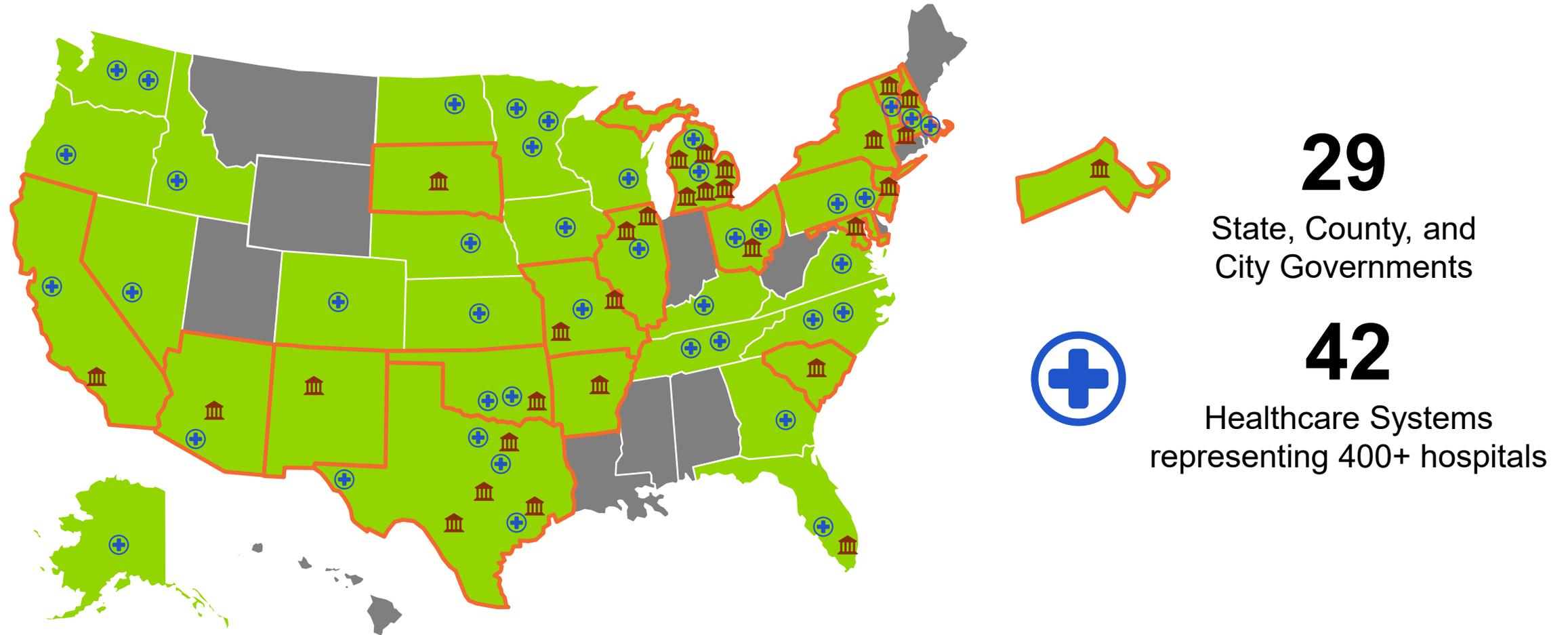


Broadband Study (*City of New York*)

Assessed the current landscape of private and public Wi-Fi service to create accurate broadband maps, developed measurable broadband indicators, projected the impacts of current and planned NYC broadband initiatives, and developed a cost-benefit model and neighborhood intervention tool to identify high-impact broadband solutions.

Our Current COVID-19 Funds Management Experience

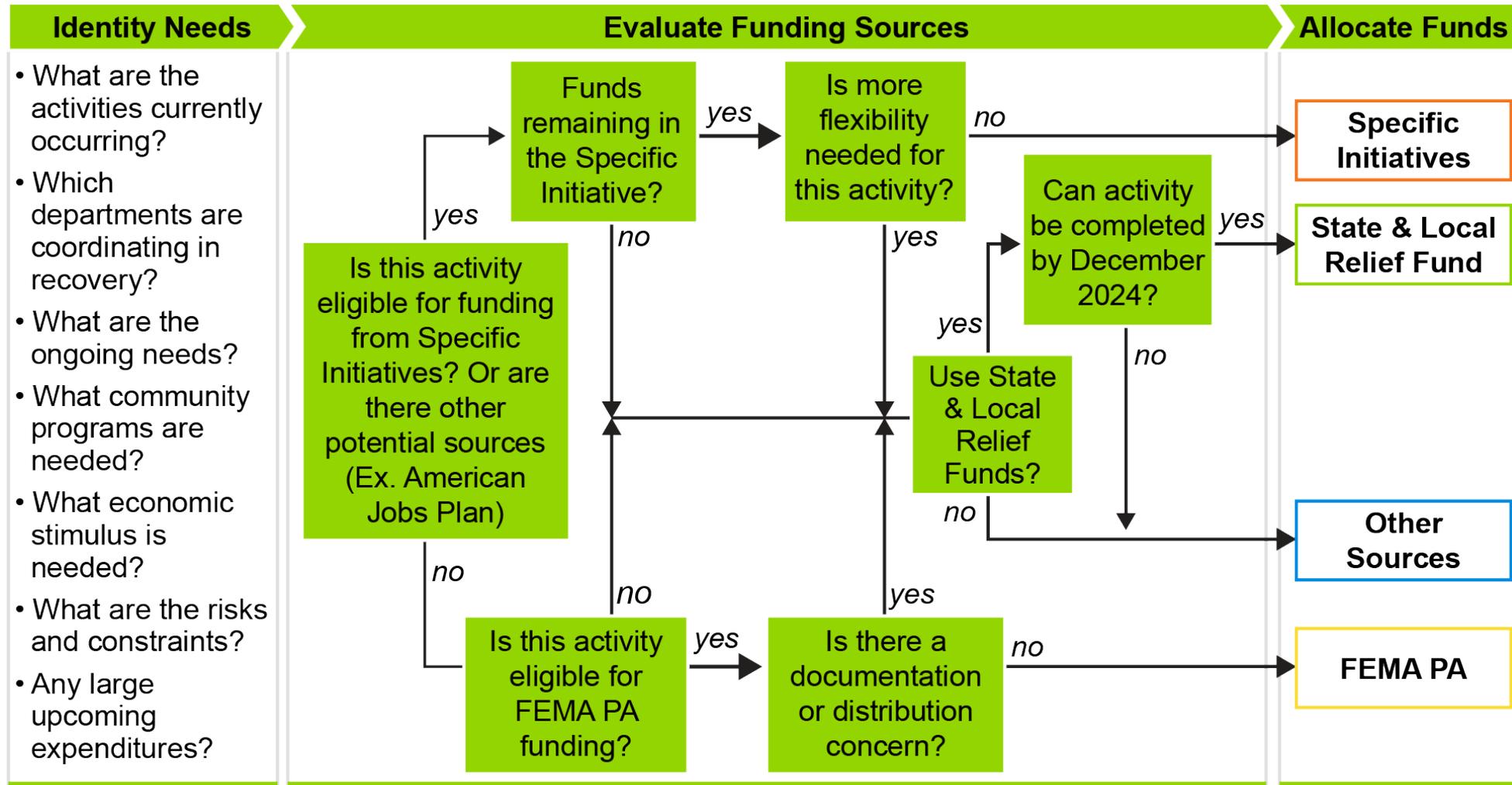
Perspectives from across the country



Questions?



Sample – Fund Mapping



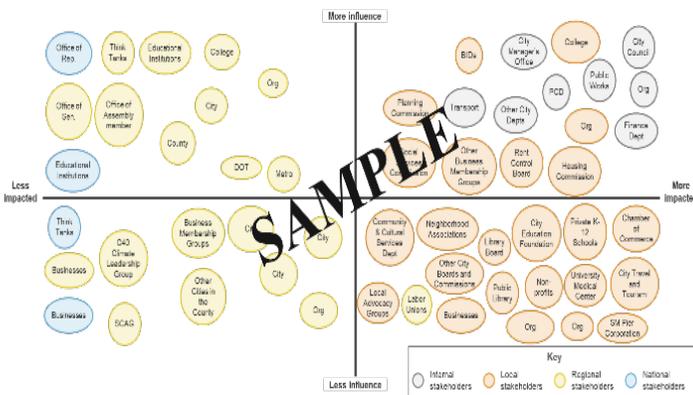
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Phase 1. Data Gathering and Stakeholder Engagement Preparation

We have organized this phase so that it starts with project planning but quickly gets into the meat of the engagement with interviews and data collection.

Launch with kickoff workshop.
Perform stakeholder mapping exercises and other detailed analysis to identify and validate areas of highest need

Stakeholder map



Interview task force members and hold community meetings to interview stakeholders.



Potential Interview Topics

- ✓ Current state of broadband needs and infrastructure in the area
- ✓ Relevant data or documentation that can be shared
- ✓ What a successful broadband fiber optics gap analysis looks like to them
- ✓ Potential strategies to address needs
- ✓ Implementation considerations such as funding or risks

Gather available data and documentation. Develop **survey** and **speed test**.



Data Gathering Activities:

- ✓ Gather past broadband planning materials, strategic plans, relevant assets or initiatives, community engagement surveys, broadband infrastructure maps
- ✓ Review all past goals, objectives, policies, and previous actions on broadband and digital equity

Sample Survey Questions:

- ✓ How many options for broadband service do you have?
- ✓ What are the price points for each one?
- ✓ Are you satisfied with your service?
- ✓ Will it fit your needs in the next 5-10 years?

Phase 2: Gaps & Opportunities Assessment

Phase 2 serves to collect more data from the public via the survey and speed test and then analyze results.



- Citizen organization, culture, and vibrancy
- Economic and social infrastructure
- Government and civic infrastructure
- Built environment and urban infrastructure
- Broadband and digital infrastructure



Phase 3: Report Writing and Presentation

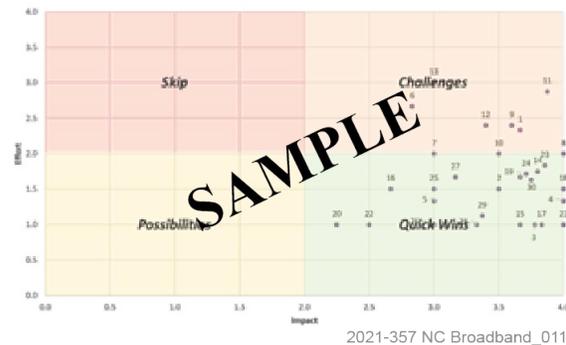
After multiple rounds of iteration and edits across the County and stakeholders, we will present the final plan. We will convene the key stakeholders for a final read-out and present next steps based on quick-win recommendations.

Host Strategic Approach Meetings

- Strategic Approach Meetings may be held **either with key stakeholders or be a broader forum for the community.**
- These sessions will be focused on expressing the desired broadband future state for Guilford County.
 - Do we understand the needs?
 - What do some potential solutions look like?
 - What are their attributes, and are there particular areas for us to focus on?

Develop Solutions Universe and Prioritize Methodology

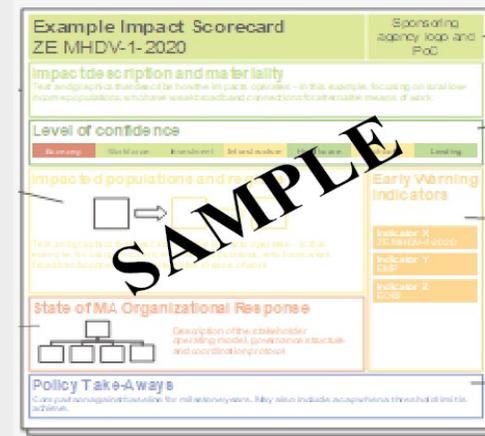
We will use the desired future state as expressed in strategic approach meetings and gaps & opportunities report to begin generating a universe of potential actions for later filtering



Draft Report Recommendations

Deck of Report Recommendation Scorecards

- Description of Recommendation
- Benefits/impact metrics
- Ease of implementation and risks
- Cost and funding



Draft Action Plan Details

1. Broadband Action Plan
2. Digital Equity
3. Implementation Roadmap

