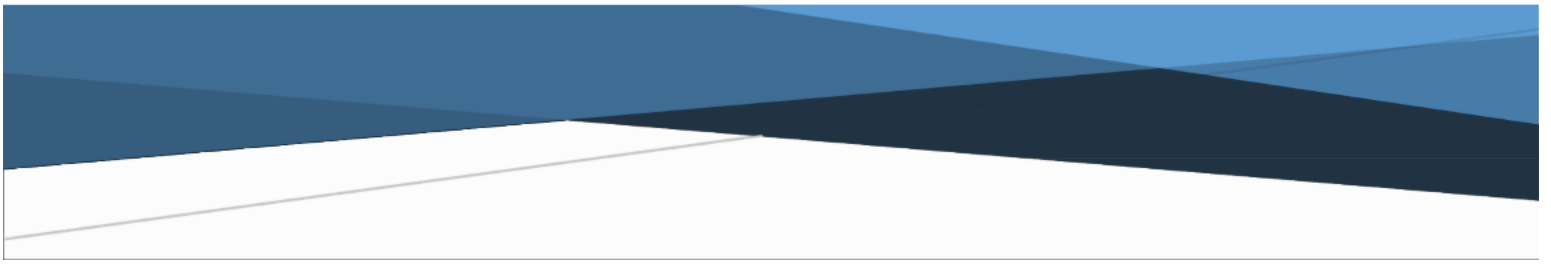




# Stronger Economies Together

Doing Better Together

Broadband: Session 2



# SET COACHES' GUIDE

Broadband: Session 2

# DEVELOPING A COMMUNITY BROADBAND ROADMAP

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## OVERVIEW

**Purpose:** The sessions today will include guidance on how partnerships can play an important role in developing your community broadband roadmap as well as best practices and case studies based on our experience.

**Estimated Time to Complete:** 2.5 hours

**Materials Needed:** None

**SLIDE 1**  
**INSTRUCTIONS**

Have this slide up when participants enter the room.

Thank you for joining us today for our second SET training on bringing high speed broadband to your community.



SLIDE: 1

TIME: 1 MINUTE

SUPPLIES: NONE

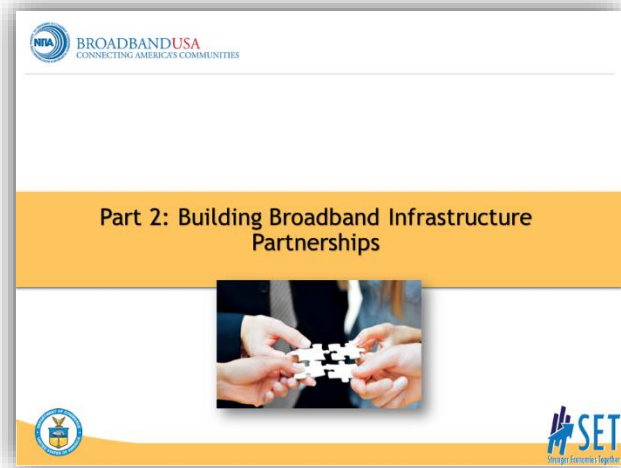
HANDOUTS: NONE

## SLIDE 2

## INSTRUCTIONS

Continue to reinforce the importance of Broadband planning.

The sessions today will include guidance on how partnerships can play an important role in developing your community broadband roadmap as well as best practices and case studies based on our experience.



SLIDE: 2

TIME: 1 MINUTE

SUPPLIES: NONE

HANDOUTS: NONE

## SLIDE 3

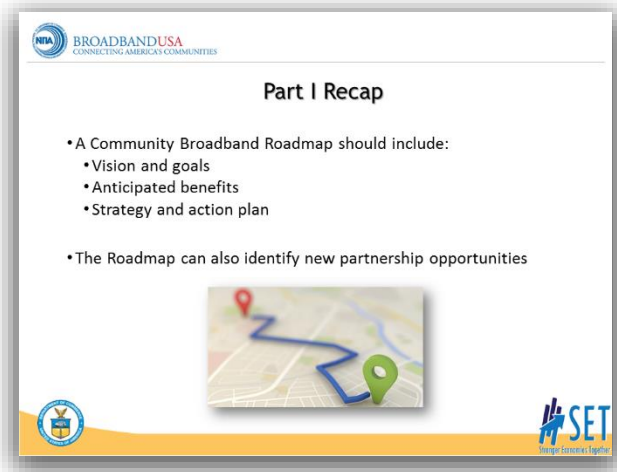
## INSTRUCTIONS

In Part 1 of this series, we discussed why and how to develop a Community Broadband Roadmap.

A Community Broadband Roadmap should include:

- A vision (and goals) for the broadband initiative
- Anticipated benefits of program offerings
- The strategy and action plan necessary to achieve the vision

The Roadmap can also help identify new opportunities for partnerships and collaborations that can help spur community achievement and growth. This session will equip communities with the know-how to implement their broadband projects with partners who can provide resources and expertise to ensure success.



SLIDE: 3

TIME: 2 MINUTES

SUPPLIES: NONE

HANDOUTS: NONE

## SLIDE 4

## INSTRUCTIONS

In Part II, we will discuss the very important why and how's of building partnerships that are vital to getting the project off the ground and ensure the best way to make it sustainable.

Consider what your community hopes to gain from a partner:

- Would they fill a knowledge gap?  
Remember you do not need to become an expert at everything.
- Could they help build project support by reaching new stakeholders?
- Do they have access to additional funding sources?

Identify potential partners that would increase or expand:

- Cost-Sharing
- Revenue Potential
- Expertise and Support
- Institutional Collaboration

As you can see, forming strategic partnerships may be used for filling gaps in expertise, extending the project's impact and providing the greatest opportunity for long term sustainability. Rural areas may have significantly higher infrastructure deployment costs due to low population density, the need to build infrastructure further into unserved areas, and challenging terrain. Forming a partnership with a cost-sharing component is a way to decrease these deployment costs for each partner.

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### Part II: Building Partnerships

- What will you gain from a partner?:
  - Filling a knowledge gap
  - Reaching new stakeholders
  - Accessing additional funding sources?
- Identify potential partners that increase:
  - Cost-Sharing
  - Revenue Potential
  - Expertise and Support
  - Institutional Collaboration

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SLIDE: 4

TIME: 10 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

## SLIDE 5

## INSTRUCTIONS

Each community can work through four key steps to form broadband partnerships. The partnerships your community will form will be based on the assets, needs, and resources of your particular community and broadband market.

1. Understand typical broadband partnership structures
2. Find the right broadband partners
3. Determine each partner's contribution
4. Develop the partnership framework

**4 Key Steps to Forming Partnerships**

-  **Step 1.** Understand Partnership Structures
-  **Step 2.** Find the Right Partners
-  **Step 3.** Determine Each Partner's Contribution
-  **Step 4.** Develop a Framework

SLIDE: 5

TIME: 2 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE



## SLIDE 6

## INSTRUCTIONS

Partnerships can take many forms, but four models are the most common:

1. Private Sector-led – Commercial broadband provider (private or non-profit) builds, owns and operates the broadband infrastructure
2. Government-led and Private Supported – Public entity owns the network; either private or nonprofit partners construct, operate and maintain the broadband infrastructure
  - Exclusive contract to ISP (reward/risk sharing)
  - Open access network (any ISP can purchase capacity)
3. Government-led and Nonprofit Supported – Government initiates with city departments and nonprofit service organizations carrying out the mission
  - Public entity facilitates access to row, conduit, poles, easements, etc.
  - Public entity provides financial (subsidy, loans, etc.) or assets (conduit, fiber etc.)
  - Revenue support – demand aggregation (bulk capacity and/or revenue commitment)
4. Joint Ownership Model – One or more public or private commercial broadband providers and government entity jointly invest in network infrastructure and share capacity

Market Basis (example) – Joint capacity sharing with public entity serving community institutions and private entity serving business and residents

Network Basis (example) - Public entity owns middle-mile and private entity owns laterals

Partnerships are based on the users and type of services to be provided

- What is the approach to the market?
  - Household, enterprise, community institution
- Last-mile Services Approach
  - Retail vs wholesale (carrier's carrier)
  - Services: broadband, voice, video
- Wholesale services
  - Backhaul, IP transit, lit services, dark fiber

**Step 1: Partnership Structures**

<b>Private Sector-Led</b>	Commercial provider builds, owns, and operates the infrastructure
<b>Government-Led &amp; Private Supported</b>	<ul style="list-style-type: none"> <li>• Public entity owns the network</li> <li>• Private or nonprofit partners construct, operate and maintain the infrastructure</li> </ul>
<b>Government-Led &amp; Non-Profit Supported</b>	<ul style="list-style-type: none"> <li>• Government initiates with city</li> <li>• Non-profit organizations carry out the mission</li> </ul>
<b>Joint Ownership Model</b>	Public or private commercial providers and government entity jointly invest in infrastructure

SLIDE: 6

TIME: 15 MINUTES

SUPPLIES: NONE

HANDOUTS: NONE

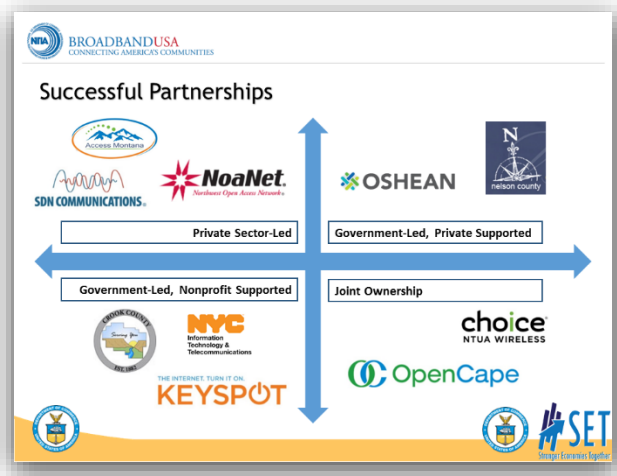
SLIDE 7

INSTRUCTIONS

**Example of successful partnerships:**

**Private Sector-led:** Communities might support the private sector-led partnership in several ways, including contributing the vision, strategic plan, facilities, monetary and regulatory support, as well as aggregating demand for potential customers and offering commitments to use the network before its construction.

- South Dakota network is partnership among 17 telecommunications providers
- NoaNet is a consortium of private, government, tribal, and non-profit partners
- Ronan Telephone Company is an independent telecommunications provider- all offer networks to education, health, government, agriculture across rural parts of their states.



SLIDE: 7

TIME: 15 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

**Joint Ownership:**

- Open Cape Corp built a 475 mile network and data center to serve southeastern MA, Cape Cod and nearby islands. Open Cape is a nonprofit entity owned the system and operates the data center and CapeNet the operating partner sells broadband and services and maintains the network.
- The Navajo Tribal Utility Authority partnered with Comnet Wireless to form NTUA Wireless to build and operate a broadband network to serve the Navajo Nation which covers portions of Arizona, Utah, and New Mexico.

**Government-led, Nonprofit Supported:** NYC formed operational partnerships with community anchor institutions with a presence in low-come areas.

- Brooklyn Public Library, New York Public Library, Queen Borough Public Library, New York City Department for the Aging which carried out its training activities through Older Adult Technology Services (OATS), New York City Housing Authority, New York City Parks Computer Resource Center

By partnering with city departments and non-profits, New York built on existing social and physical infrastructure, filling in gaps as needed, to bring services to residents in all five boroughs through 100 neighborhood centers. In addition to the neighborhood centers, the city outfitted three Digital Vans.

**Government-led, Private Supported:** Government led partnerships often stem from collaboration among local, state, regional or federal entities.

- Ocean State Higher Education Economic Development Administration network was founded by non-profits and state agencies to connect Rhode Island and MMA community anchor institutions. They partnered with a cable company, a municipal electric provider and a broadband service provider.
- Nelson County, Virginia built a fiber network to spur economic development. The County partnered with an engineering firm to operate and maintain the network on a day to day basis.

## SLIDE 8

## INSTRUCTIONS

**Step 2:** A community can consider the right broadband partners to fit their project. Based on the primary objectives of the project, it can be helpful to develop a core team to support planning efforts and propel the project forward. A team can be assembled based on mission and include a mix of skills, varying backgrounds or viewpoints, and/or interest in a common goal.

For example, if your goal is to increase economic growth, there are a number of stakeholders in the community that could use their experience and point of view to shape the plan. Business leaders can share the challenges they face, government leaders know the regulatory climate, economic development organizations can share their insights into successful strategies for growth, and telecom leaders can offer thoughts on what speed and capacity will support the growth. Communities may be able to determine that there is a possibility for a public-private partnership with the incumbent operators to expand its network footprint or capabilities.

Pick partners carefully based on the many assets and skill sets your project will need. Engage a comprehensive set of partners. Not all partners will be of the same importance but all should be necessary to the success of the network.

Teams should include:

- a mix of skills
- Varying backgrounds or viewpoints
- Interest in a common goal; the exact goal of each will vary but all should view the network as vital to their own goals and mission

Characteristics of a Broadband Partnership

- Win-win relationship
- Credibility with intended stakeholders
- Capacity to add technology or services
- Ability to bring significant numbers of users into the project
- Agreements on communication and reporting
- Compliance with local/state/federal regulations
- Diversity

**Step 2: Consider the Right Partners**

- Pick partners carefully
- Engage a comprehensive set of partners
- Team should include:
  - A mix of skills
  - Varying backgrounds
  - Common goal

**Characteristics of a Broadband Partnership**

- Win-win relationship
- Credibility with stakeholders
- Capacity to add technology
- Ability to bring users
- Agreements on communication
- Compliance with regulations
- Diversity

SLIDE: 8

TIME: 10 MINUTES

SUPPLIES: NONE

HANDOUTS: NONE

SLIDE 9

INSTRUCTIONS

Asses each partner’s strengths to determine how that partner can support the project.

**Awareness:** Increase credibility and awareness of the project and service offerings. For example if the school system is involved this enables low cost reach out to all families with children in the system

**Market Reach:** Facilitate the delivery of services to places or people that a community is trying to reach.

**Expertise:** Accelerate the deployment of new services and decrease expenses.

**Funding:** Increase a project’s long-term sustainability through financial support or in-kind contributions.

**Operational Efficiency:** Improve the project’s effectiveness and value to the community.

**Quality:** Add a sounding board that can improve the overall quality and worth of the project

Broadband partnerships develop in different ways. Some grow out of the planning process that engages potential partners, solutions and partnerships. Others emerge when partners come together to solve a particular problem or achieve ta goal the parties are uniquely qualified to address. Communities may also seek partners for specific purposes, such as providing expertise the community lacks.



SLIDE: 9

TIME: 10 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

**SLIDE 10**  
**INSTRUCTIONS**

The benefits of a partner can vary by the type of organization and should help your project fill gaps. An effective partnership spreads the risks and costs related to necessary capital investment, operations, executions challenges and adoption hurdles between the partners. The type of project and partnership model will influence which attributes will create the right blend of experience, qualification, vision, and other characteristics for the partnership to be successful.

**Private-Sector Broadband Providers or Engineering Firms:** Infrastructure expertise, broadband capacity, network interconnection, technical expertise.

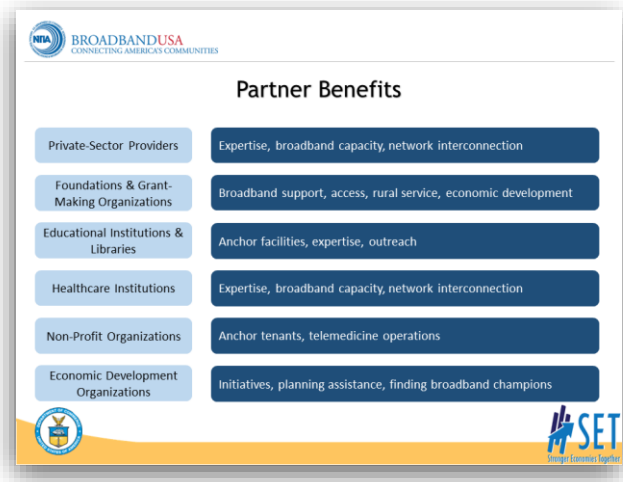
**Foundations and Grant-Making Organizations:** Support for broadband adoption, access, rural service, economic development.

**Educational Institutions and Libraries:** Anchor facilities, teaching and training expertise, outreach to rural areas, operational expertise

**Healthcare Institutions:** Anchor tenants, telemedicine operations

**Non-Profit Organizations:** Close ties to targeted populations, facilities

**Economic Development Organizations:** Broadband adoption initiatives, planning assistance, help finding broadband champions



Partner Type	Benefits
Private-Sector Providers	Expertise, broadband capacity, network interconnection
Foundations & Grant-Making Organizations	Broadband support, access, rural service, economic development
Educational Institutions & Libraries	Anchor facilities, expertise, outreach
Healthcare Institutions	Expertise, broadband capacity, network interconnection
Non-Profit Organizations	Anchor tenants, telemedicine operations
Economic Development Organizations	Initiatives, planning assistance, finding broadband champions

SLIDE: 10

TIME: 10 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

SLIDE 11

INSTRUCTIONS

**Step 3:** A community can determine each partner's contribution to the project overall

Consider what each party gains and contributes to the project. It can be helpful to develop a graphic illustration of the funding, resource and asset contributions. Allocate risk, rewards, costs according to resources and skill set of the partners.

Community:

Funding → Project planning

Resources → Management staff

Partner 1:

Funding → Network build

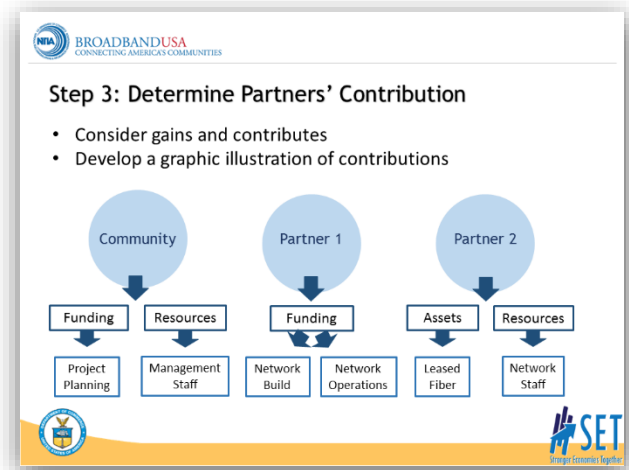
Network operations

Partner 2:

Assets → Leased fiber

Resources → Network staff

Mapping these contribution flows with the partnership framework will assist the parties in answering key questions about their relationships and agreeing upon commitments before the project begins. Each contribution will have a significant impact upon the project or business plan.



SLIDE: 11

TIME: 10 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

**SLIDE 12**  
**INSTRUCTIONS**

Potential investors, funders and partners will use the project plans to better understand your team and your vision, but will then focus on the implementation strategy to see if the plans are realistic. They want to know how you will achieve your goals and if you have the resources in place to get there. For example, if you choose to work with a provider to extend or build the network, consider sharing maps that overlay existing and potential service areas or outlining the potential customer base. If you plan to run the network on another provider's network, consider showcasing the types of organizations you will connect and a timeline for getting service to them. For the most complex option, building or extending a network, consider including network diagrams, build out timelines and mitigation strategies.

We will discuss implementation efforts during a future webinar or workshop, but the planning for any deployment effort should also consider what the eventual project implementation will look like.

An organization should consider the contributions from partners that they need to be successful.

**Funding**

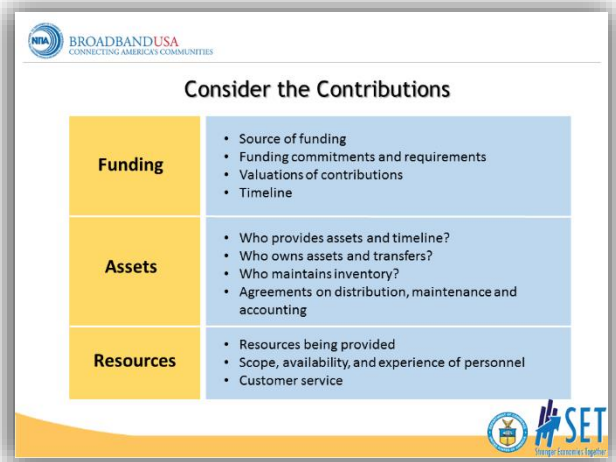
- The source of funding required for operations.
- Each partner's funding commitments and requirements.
- Precise valuations of each partner's in-kind contribution.
- The agreed-upon timeline of all financial and in-kind contributions

**Assets**

- Which party provides each specific asset and timelines associated
- Which party owns each asset and any expected transfers
- Which party maintains the collective inventory of assets
- Agreements on asset distribution, maintenance and accounting

**Resources**

- The specific resources being provided and the timing.
- Scope, availability and experience of supporting personnel
- Customer service or data analytics provided



SLIDE: 12

TIME: 15 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

SLIDE 13

INSTRUCTIONS

**Step 4:** The community can develop the partnership framework to manage the relationship

The framework helps communities:

- Develop formal or informal partnership agreements
- Assess the regulatory and operational context
- Maintain strong partner relationships

Partnerships can range from informal to formal.

Generally, partnerships with a high degree of interdependency, or where funds were exchanged, require more formal partnership agreements, such as Memorandums of Understandings or contracts. If parties are not transferring funds or assets or the partner's deliverables are not central to the projects goals, then a more informal agreement may suffice.

**Step 4: Develop the Partnership Framework**

- Frameworks help communities:
  - Develop partnership agreements
  - Assess the regulatory and operational context
  - Maintain strong relationships

**Informal** ←-----→ **Formal**

Handshake    Mutual Agreement    Memorandum of Understanding    Written Contract    Contract with Performance Penalties

SLIDE: 13

TIME: 10 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE



## SLIDE 14

## INSTRUCTIONS

**Pricing** is a key piece of any broadband network and will also shape planned revenues.

Typically, you can choose one of the four price options:

1. **Cost-Based** - You can plan pricing based on service offering type. This straightforward option identifies the cost to you and builds in fees for maintenance, costs and sustainability.
2. **Value-Based** - Consider basing price on community preferences. If your needs assessment shows that potential customers are more concerned about quality over price, they will place a higher value on the speed or capacity available.
3. **Penetration** - Consider market prices when deciding on a structure to fill gaps or meet needs that aren't covered currently.
4. **Service-Based** - You can provide services that focus on meeting community goals. For example, if a community lacks lower-price options, putting in a high-speed network that will require high subscription costs will not meet the needs. A partnership contract can help involved parties clearly identify roles and responsibilities.

Key Components of a Partnership Contract: on slide

The procurement rules and regulations that apply to contracts, MOUS, IRUS and other instruments used for partnership should be assessed. A thorough understanding of the required procurement procedures will help evaluate what each potential partner brings to the table during the partner selection process.

**Key Components of a Partnership Contract**

- A partnership contract can help parties identify roles and responsibilities
- Parties involved
- Roles and responsibilities
- Project timeline
- Cost-sharing, rates, charges
- Procedures to manage changes
- Expectations
- Expected deliverables
- Dependencies/risks
- Intellectual property rights
- Terms for dispute resolution

SLIDE: 14

TIME: 15 MINUTES

SUPPLIES: NONE

HANDOUTS: NONE

## SLIDE 15

## INSTRUCTIONS

It is important to remember that all partnerships should be memorialized in a contract so all parties have a clear understanding of their responsibilities. As communities work through the four steps, consider...

- What types of partners should be considered for a broadband project?
- What criteria should drive partner selection?
- What methods should be used to formalize the partner-selection process?
- What project functions would be best implemented through a partnership and what type of contract would be most appropriate?

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As communities work through the four steps, consider...

- What types of partners should be considered?
- What criteria should drive partner selection?
- What methods should be used to formalize the selection?

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SLIDE: 15

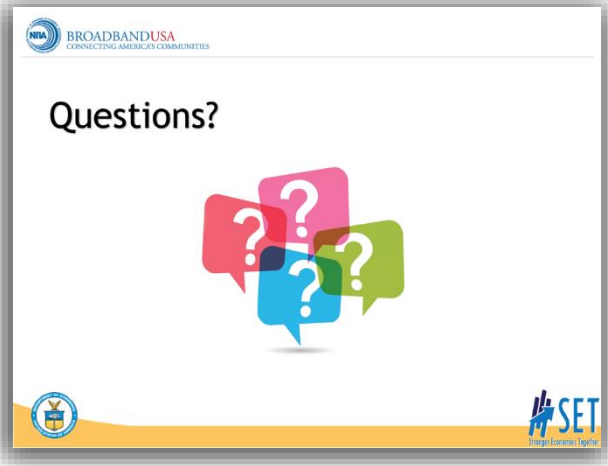
TIME: 2 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

**SLIDE 16**  
**INSTRUCTIONS**

Allow participants to ask questions.



SLIDE: 16

TIME: 5 MINTUES

SUPPLIES: NONE

HANDOUTS: NONE

**SLIDE 17**

**INSTRUCTIONS**

Include any additional contact information.

Additional resource on broadband partnerships:

[http://www2.ntia.doc.gov/files/powerbroadband\\_070517.pdf](http://www2.ntia.doc.gov/files/powerbroadband_070517.pdf)

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**Resources**

- [Federal Funding Guide](#)
- [https://www2.ntia.doc.gov/files/powerbroadband\\_070517.pdf](https://www2.ntia.doc.gov/files/powerbroadband_070517.pdf) (note – please put link to new toolkit: the Power of Broadband partnerships)
- [Public-Private Partnerships Guide](#)
- [Community Broadband Roadmap Toolkit](#)
- [Introduction to Stakeholder Outreach](#)

**For General Information:**

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SLIDE: 17

TIME: 1 MINTUE

SUPPLIES: NONE

HANDOUTS: NONE