



# Developing Rural Connectivity with Mothership Communications

11 Sept 2018

**Littleton, NC Town Board**

# Summary

- Mothership Communications Inc. is a connectivity startup company that provides Internet to:
  - Outdoors Festivals
  - Emergency Relief
  - Rural Businesses and Communities
- Mothership Communications is working on a technology grant proposal to bring inexpensive broadband Internet to rural communities
  - Technology grant is funded by the US Department of Agriculture
  - 24 Oct 2018 is the grant deadline
- We are looking to partner with rural leaders to bring broadband internet to their communities



# U.S. Dept of Agriculture (USDA) Research Topic Call

## Objective of the topic area:

- Improve the quality of life in rural America
  - by **creating and commercializing technologies that address important economic and social development issues or challenges in rural America.**
- Applications must also include an objective to assess the impacts of the proposed project on the environment or the socio-economic development of rural areas.
- The applications need not be centered on agriculture, but may be focused on any area that has the potential to provide significant benefit to rural Americans.
- USDA seeks a balanced portfolio that appropriately mixes high risk, high reward innovations with new applications of existing technologies.



# Mothership Communications – Who We Are

- Mothership provides internet and cell service for people in remote areas
  - Three person company
  - Founded in 2017
  - One of the co-founders has ties to the Littleton, NC area
- Examples of commercial work
  - Providing broadband internet at outdoor events
  - Boosting cell network signal for a sporting event
- Key technology
  - M-Link aerial platform: a floating aerial platform that connects to faraway cell towers and Internet sources, and brings this connectivity to a desired area
  - An M-Link prototype is currently being developed

# Mothership Communications Team



Bryan Chan  
Chief Executive Officer



Michael Clanton  
Chief Strategy Officer



Daniel Sors Raurell  
Chief Technical Officer

# The Rural Connectivity Problem

- Historically, there has been less development of communications infrastructure into rural areas compared to urban areas
  - Example: cell towers, fiber Internet lines
- As a result, Internet speeds and cell signal quality in rural America are generally low and more costly
- Rural communities are being left out of the digital economy
  - Faster and inexpensive Internet can expand economic opportunity in rural areas
- Mothership Communications intends to develop technology to solve this issue

# USDA Connectivity Grant - The Opportunity

- To further develop our technology, Mothership is seeking funding from the rural and community development sector of the US Department of Agriculture (USDA)
  - Mothership is responding to a specific grant called “Expanding broadband access in rural communities”
  - When awarded, USDA would invest \$100K to \$600K over three years to fund M-Link technology development
- As part of this development, we propose to invest a portion of this funding directly into the local economy
  - Investment in infrastructure
  - Job creation
  - Helping the local economy during visits
- We are looking to partner with a rural town to develop this next-generation technology and bring inexpensive broadband Internet to rural residents

# Project Work Timeline

- Short to Mid-Term (0 to 2 years)
  - **Conduct a 6-month program to provide a free, high-speed Internet connection to 200+ Littleton residents**
  - Survey community leaders and local residents about high-speed Internet needs
  - Continue developing aerial M-Link platform to enable high-speed Internet service
  - Establish a satellite office in Littleton and contribute to the local business economy
  
- Long Term (3 years and beyond)
  - Build permanent communications infrastructure to improve Internet service for Littleton and surrounding area
  - Hire local residents for construction efforts and technical guidance
  - Provide inexpensive, and high-speed Internet and reliable cell service for all residents and businesses
    - Contribute to the regional and state business economy

# Littleton Support Request: Local Government and Business

1. Partner with Mothership Communications on the USDA grant proposal
2. Letter of support to:
  - a. Acknowledge efforts of Mothership Communications and its positive impact on the local community
  - b. Informally provide permission for Mothership to perform aforementioned activities
  - c. Help work through local government regulations on an as-needed basis



A top-down view of a white ceramic coffee cup filled with a frothy latte, sitting on a dark green handle. The cup is placed on a round, rustic wooden table. A black napkin is tucked behind the cup, with the word 'Thanks!' written in white cursive script. The scene is warmly lit, creating a cozy atmosphere.

*Thanks!*

Your Questions are Welcome

# Notes: Questions to Ask Board

1. *A priority is to provide businesses internet – can you expand on this?*
2. *For instance, does this mean business owners want faster/cheaper Internet speeds, Wi-Fi, and/or cell service for their customers?*
3. *What's the average monthly cost that citizens pay for Internet service? Any idea on the speeds? Any common complaints?*
4. *Is high-speed fiber available for public use? Would that be a valuable project to undertake*
5. *Reference for other communities in the region*
  - a. *What other communities can you refer*

[Mothership Communications would like to partner with the location business community](#)

