Nicole Coughlin
Town of Cary

Tom Snyder
RIoT

Jon Minshew
Dell Technologies

Brian Davis
Corning


ABOUT RIOT
RIoT is a 501(c)(3) brought to you by the Wireless Research Center and our sponsors.
RIoT has grown significantly since starting as a Meetup group in 2014, and while RIoT continues
to serve as a convener for the IoT community, RIoT also offers a startup accelerator, R&D lab,
educational programs, and more.

# A Network of Living Laboratories

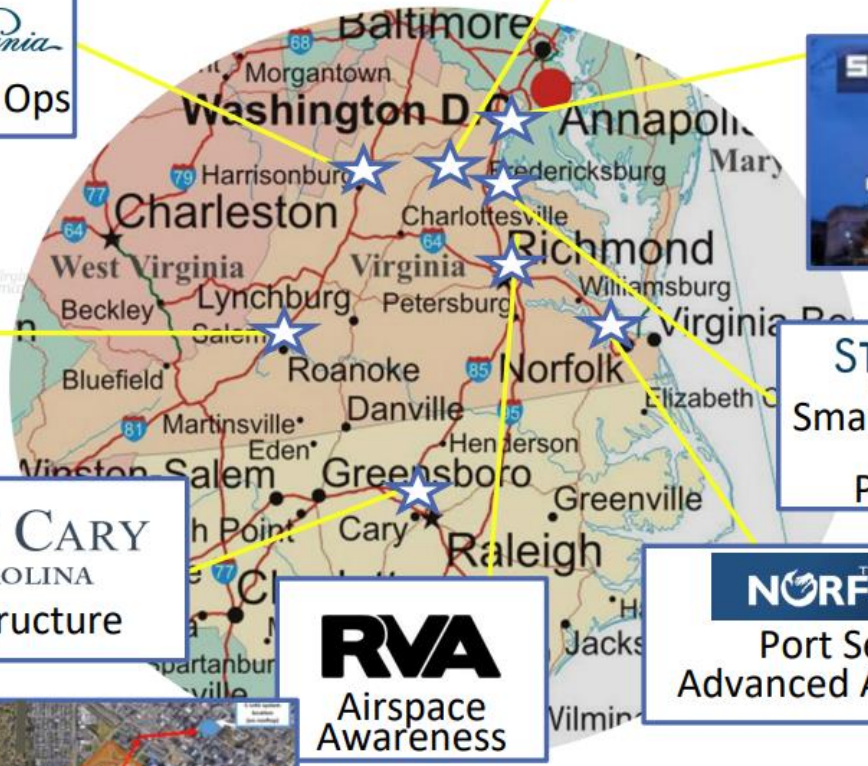
*Many made possible by DHS Support*

**Winchester Virginia**
Municipal Drone Ops


**Garrisonville**
Smart Bases
Workforce Development
AR/VR/Immersive Tech


**WASHINGTON DC**
In-Building Sensors

**ROANOKE**
Integrated
Water
Management





**STAFFORD** *Virginia*
Smart Communities
Secure IoT
Public Safety

TOWN of CARY
NORTH CAROLINA
Civic Infrastructure

**RVA**
Airspace
Awareness

THE CITY OF NORFOLK
Port Security
Advanced Air Mobility

**VIPC** | VIRGINIA INNOVATION PARTNERSHIP CORPORATION
*Connecting Innovators with Opportunity*

# A Proven Process *Entrepreneurial Support*

## RIoT Accelerator Program (RAP)

- 12-week intensive program (September 28th - December 15th) | Apply by July 29th
- Located both virtually and in person @ Virginia Smart Community Testbed | Stafford, VA
- Access to 100+ Mentors & Corporate Partners with expertise across industries
- Creative startup environment to develop fresh ideas
- Validate business viability of a new product offering
- Develop new technical capabilities and test MVPs

| **Validation** | *Startup Foundations & Customer Discovery* | **Product & Business Development** | *Prototyping & Go To Market Strategy* | **Growth** | *Storytelling & Scaling Strategy* |
|---|---|---|---|---|---|
| Week 1: Orientation - Business Best Practices, Key Performance Indicators<br>Week 2: Startup Foundations & Customer Discovery<br>Week 3: Startup Legal & Financial Management | | Week 4: MVP Strategy & Design Review<br>Week 5: Go to Market Strategy<br>Week 6: Data Engineering<br>Week 7: Sales & Branding<br>Week 8: Pitch Prep, Stakeholder Engagement | | Week 9: Growth Strategy - Team Building<br>Week 10: Growth Strategy - Funding<br>Week 11: Pitch Practice, Mock Board Meetings<br>Week 12: Pitch Night | |

Questions? Email Jennifer: jennifer@riot.org

# IoT Data Infrastructure Supports Many Types of Devices

Air Quality/ Wildfire


Weather Stations

Drone Video/Data

Smart Lighting/ WiFi


Flood


Information Kiosks

Robotic Devices

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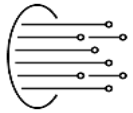
*Connecting Innovators with Opportunity*

# Digital Infrastructure

## Scalable/Interconnected

| Fiber | IoT | Cell-Macro, Small & DAS | Wi Fi | Private LTE & 5G | Smart Poles | Devices |
|---|---|---|---|---|---|---|



NB-IoT

LoRa®

LTE

Lighting +

Cameras

Kiosks

Computers/Tablets

Sensors

CORNING


# Why Go It Alone? There's Power in Partnerships

## TWN Communications & Mohave Electric Cooperative

"When business development decided to transition some of our networks to fiber deployments, we approached MEC and they asked us 'what took you so long?' – they were all in," explains TWN's VP of Sales/Marketing & Business, Ami Rodriguez.

"MEC had a desire to not only improve broadband services and increase bandwidth, but they also wanted to utilize the fiber network for several of their own infrastructure improvements."

CORNING

"I'm a big believer in taking care of issues now and not leaving problems for the future. Baldwin City's governing body and department heads have many accomplishments that I'm proud of, and chief among them is gigabit fiber. It will serve our community for the foreseeable future, helping the people and businesses in Baldwin City to realize their potential right here at home."

Marilyn Pearse, Mayor of Baldwin City

Baldwin City, Kansas

# Local leaders seize the promise of community broadband

# Smart buildings & campus: Challenges

Disparate building automation and energy systems; islands of information

No established baseline to compare asset performance and identify energy losses

Traditionally geared towards retro commissioning

Lack of diagnostic/predictive capabilities

No single view of building portfolio: Scattered information cause people to miss patterns

Solutions need to be more secure and IT-friendly

# Smart buildings & campus: Capabilities

Are the lights left on when not in use? Is the air conditioning optimized when the room is empty?

**Building automation solution provides integration to multiple systems like building controls, security, utilities, maintenance and energy monitoring systems.**

**Fault monitoring**

**Heterogeneous building systems integration**

**Energy consumption analytics**

**Bi-directional control**

**Condition-based predictive maintenance**

**Campus safety & security**

**Rule-based equipment control**

**Work order management integration**

**Edge device security**

**Digital twin**

# Smart buildings & campus: Key outcomes

**Buildings tell you when there's going to be a problem**

**You plan maintenance instead of responding to emergencies**

**Improved tenant well-being**

**Productivity measures Increase**

**Reduces your energy consumption**

**Space utilization is optimise using real-time data**

**Your buildings evolve as your occupants change**

**Occupant user experience is enhanced**

DELL Technologies


CORNING

# Reducing costs to reach fiber expansion goals

*How SaskTel partnered with Corning to reduce fiber buildout costs by 27%*

*Reducing construction costs was necessary for making rural expansion economically feasible. And partnership was the key to achieve the results*