

The logo for usignite features a grey circle with an orange lightning bolt on the left, followed by the text "usignite" in a sans-serif font. "us" is grey and "ignite" is orange.

usignite

The logo for Utah Ignite features a grey square with a yellow lightning bolt on the left, followed by the text "Utah Ignite" in a serif font. "Utah" is grey and "Ignite" is yellow. Below it is the tagline "Utah's Smart City and Smart Gigabit Community" in a smaller grey font.

Utah Ignite
Utah's Smart City and Smart Gigabit Community

April 21, 2020

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Agenda Overview

- US Ignite
 - Background
 - Related Programs
 - Smart Gigabit Communities program

Utah Ignite

- Participants
- Activities



is a **nonprofit**
accelerating the **smart community movement**
and creating **value** for an entire **ecosystem**
by **guiding communities** into the **connected future**,
creating a path for **private sector growth**,
and **advancing technology research**
that's at the heart of **smart community development**.

Strategy: Building the foundation for smart and connected communities



Infrastructure

- Wired: SGC
- Wireless: PAWR
- DTS
- EdgeNet

Applications & Services

- SGC
- PAWR
- US Ignite Forum
- DOD

Big Data

- EAGER
- ATIS Data Exchange

Tools

- Summit
- New web modules
- Knight & Federal funding sources

SMART COMMUNITY FOUNDATION

\$100M Platforms for Advanced Wireless Research



Northeastern
University

PAWR Industry Consortium Members



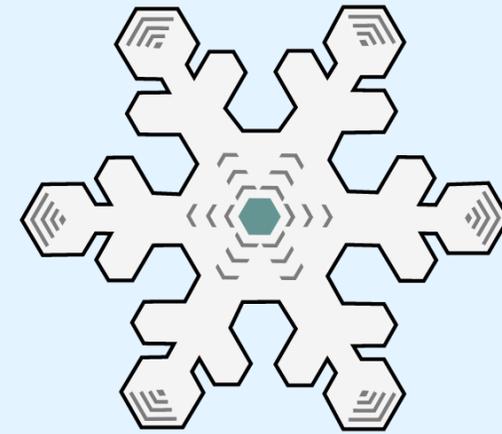


POWDER

Powder (the **P**latform for **O**pen **W**ireless **D**ata-driven **E**xperimental **R**esearch) is a facility for experimenting on the future of wireless networking in a city-scale "living laboratory."

Powder is run by the [University of Utah](#) in partnership with [Salt Lake City](#) and the [Utah Education and Telehealth Network](#). In addition to state-of-the-art off-the-shelf equipment, Powder will deploy cutting-edge radio hardware and software being developed by the [RENEW](#) team lead by [Rice University](#).

Powder-RENEW is part of the National Science Foundation's [PAWR](#) program and is funded in part by NSF award [CNS-1827940](#) and the [PAWR Industry Consortium](#).



Supported By



Platforms for Advanced
Wireless Research



US Ignite Forum

BACKGROUND

System shocks and unexpected setbacks have always been a part of the governing process, but communities are facing new challenges today that threaten their ability to bounce back from negative events. In particular, climate change is intensifying and increasing the frequency of high-impact storms, and the continued digitization of government systems is putting municipalities at greater risk of a cyberattack.

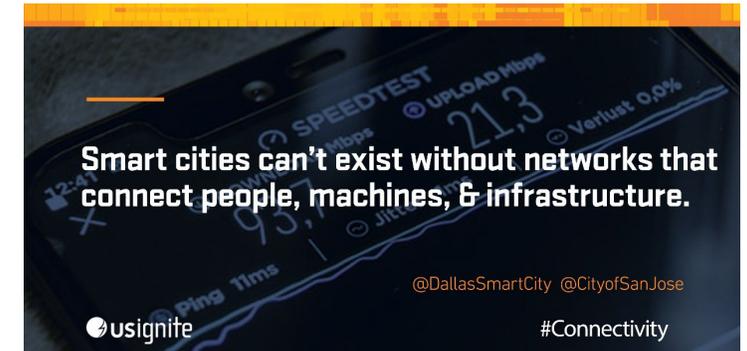
To help communities strategize on ways to improve their capacity for resilience, US Ignite hosted a Smart City Resiliency workshop focused on the specific difficulties posed by climate change and the vulnerability of municipal information systems. The day's presentations and discussions highlighted how communities can create frameworks to address priority issues, as well as what technology and policy levers can be applied to ensure cities are as prepared as possible for both natural and man-made disasters.

On the topic of flood management and storm impacts, the workshop covered lessons learned in previous natural disasters, the use of data combined with spatial mapping representations to improve development strategy, the importance of community building and outreach, and the use of cities as innovation labs for creating technology-driven solutions.

On the topic of cyber resilience, speakers outlined the anatomy of a variety of network attacks, emphasized the importance of disaster training, highlighted potential weaknesses in data backup strategies, and pointed to available counterattack measures.

The US Ignite workshop on Smart City Resiliency took place on October 7, 2019 in National Harbor, Maryland, just outside of Washington, D.C. Along with representatives from the District of Columbia, the workshop featured community leaders from St. Petersburg, Florida; Norfolk, Virginia; and Pearland, Texas – plus experts from Deloitte and Mitre Corporation, and additional university, industry, and non-profit partners.

This playbook shares their experiences and conclusions.



- Convene small, curated workshops enabling communities to share information
- Focus on smart city challenges, lessons learned, and best practices
- Identify funding sources for community projects
- Develop and release topic-specific playbooks

Smart Cities Connect and US Ignite Application Summit *November 17-19, 2020*

fall.smartcitiesconnect.org



2019 Results

- April 9-11, 2019
- 1700+ Attendees (200 Cities)
- ~30 software demos and 100+ exhibitors

Communications and Outreach

Monthly Newsletter and Videos

- Delivered to more than 6,000 subscribers

Blog & Social Media

- >3,000 followers on Twitter, ~1,000 on Facebook, ~600 on LinkedIn

Website

- More than 20K pageviews in first 2 months of 2020, 96 videos

Events (14K participants)

- Annual conference
- Reverse pitches
- Speaking engagements



JUNE 25, 2020

US Ignite Forum, Smart Utility Partnerships

Austin - This Forum workshop will consider where utilities and smart cities intersect. How can utility infrastructure and services play a role in smarter development, and what are the best ways to partner across the smart city ecosystem?



SEPTEMBER 17, 2020

US Ignite Forum, Smart Venues

St. Petersburg, FL - This workshop will examine successful community efforts to pair strategic venue development (stadiums, theaters, retail venues, innovation hubs) with greater connectivity and services to support wrap-around smart city initiatives.

The Digital Town Square effort was created as part of the US Ignite Smart Gigabit Communities project to address one part of the broadband access challenge. For many communities, problems arise because there isn't a robust link between local network infrastructure and the midhaul and backbone networks that connect those communities to the rest of the Internet. With funding from the National Science Foundation, US Ignite has helped build stronger interconnection links by deploying Digital Town



 **Analytics** Home Tweets More ▾

Top Tweet earned 3,865 impressions

The [@washingtonpost](#) likes [@OurStreetsApp](#) for improving traffic safety and coordinating w/local governments. The app grew out of the DCx Innovation Challenge ([@OCTODC](#), [@US_Ignite](#) & [@NSF](#)) & won the [@awscloud](#)/[@US_Ignite](#) startup competition. [#IgniteAWS19](#) [washingtonpost.com/local/traffic...](#) [pic.twitter.com/JbLb662LQa](#)



Communications & Outreach: Videos

96 YouTube videos engage and unite science, industry, and community-based stakeholders

- Building the SGC Network
 - <https://www.youtube.com/watch?v=Xt2Mj6FltbQ>
- Poultry Patrol
 - <https://www.youtube.com/watch?v=SWrXuvH2mtI>
- Bridging the Gap Between Rural Schools and STEM Professionals
 - <https://www.youtube.com/watch?v=9RWaE5LogU4>
- Smarter Maps (Dryver underground utilities AR + LocaleIQ)
 - <https://www.youtube.com/watch?v=4OL-l i7Pqc>
- Air Quality and U
 - <https://www.youtube.com/watch?v=mAfGIOjF0k8>
- Smart and Connected Energy (Karava)
 - <https://www.youtube.com/watch?v=sci6E2j1sEM>
- San Diego SGC Launch
 - <https://www.youtube.com/watch?v=KOEXakzwcwv>
- Connected Autonomous Vehicles (Sartipi)
 - <https://www.youtube.com/watch?v=-cHoB-FYam0&t=5s>
- Smart Future
 - <https://www.youtube.com/watch?v=UQsJqQBRUhQ&t=12s>



Installation of artificial reef
with marine sensors in
Clam Bayou

St Petersburg / Innovation District

1. Smart city initiatives:
Selected smart streetlights and immersive education as key projects
2. Smart city communications infrastructure:
Facilitated sessions w/ academic, private, civic & industry leaders
3. Broad-based community involvement in innovation ecosystem:
St. Pete Business Partnership, seeking NOAA and NSF \$
4. Strong potential innovation leadership:
Selected St Pete Innovation District as a robust well-connected facilitator
5. Strong likelihood of City-Spectrum partnering to drive sales:
MSO donated product and services for 4 Smart LED poles, scale-up and purchase likely to follow

SGC Testimonials of Economic Impact



- "US Ignite's partnership provided our small west coast city added credibility and visibility. Subsequently we were able to recruit new tech companies here, creating hundreds of new high-paying jobs that are nearly double the region's median wage. In 2016 there were 418 tech companies here, today there are over 500."
- Matt Sayre, Managing Director, Onward Eugene
- "EPB's fiber optic network generated \$1.3 billion of community benefits and 5,200 extra jobs in its first five years."
- Bento Lobo, University of Tennessee at Chattanooga.
- "In Red Wing, we've been able to assemble a local angel fund of approximately \$500,000, a Startup School partnership with a prominent venture capital group featuring a \$600,000 fund for rural innovators, and a new partnership with the Center on Rural Innovation's Opportunity Zone Fund of \$5,000,000."
- Adam Gettings, Executive Director, Red Wing Ignite

Smart Communities Team



Lee Davenport
Director of Community Development



Meghan Hstand
Director of Program Operations



Arnold Liyai
Program Manager



Glenn Ricart
CTO



Scott Turnbull
Director of Technology



Bill Wallace
Chairman



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SMARTGIGABITCOMMUNITIES

SGC: Matching city needs to partner strategies

Smart Security

- Surveillance 
- Simulation modelling & crime prediction 

Smart Buildings

- Automation 
- HVAC 
- Lighting 

Smart Infrastructure

- Digital Water and Waste Management 
- Ubiquitous connectivity  
- Smart Lighting 
- Smart Trash  



Smart Governance / Education

- e-Government  
- e-Education  
- Disaster Management Solutions  

Smart Transport

- Traffic management / road pricing  
- Parking  
- Public transit tracking  

Smart Energy

- Smart Grids 
- Smart Meters 
- Intelligent Energy Storage 

Smart Healthcare

- Telemedicine  
- eRecords  
- Connected devices  
- Stay-at-home care  

Primary Use Case Benefit

-  Increased Revenue
-  Decreased Costs
-  Government Efficiency
-  Citizen Experience / Safety

Typical SGC city benefits

- National visibility
- Economic development opportunities
- Incentives to build next-gen apps/services
- National partners and grant funding sources
- Smart community best practices and tool kits
- Smart city playbook
- Driving innovation ecosystem to create new services, jobs, startups, and investments

Interconnect local digital economy and leverage advanced cyberinfrastructure at the edge: Digital Town Square

Local, settlement-free digital economy interconnection point and edge computing location

Participating industry partners in DTS

Juniper Networks, AWS, Google Fiber, Chattanooga Electric Power Board, Everstream

Universities and nonprofit partners in DTS

University of Utah, University of South Australia, UVM, UT-Chattanooga, UL-Lafayette, Duke/North Carolina State University, UT-Dallas, University of Illinois Champaign-Urbana; Utah Education Network, BTV Ignite, The Enterprise Center, MCNC/NCNGN, CMI Hub

Example Advanced Smart and Connected Community Cyberinfrastructures

AERPAW in NC (autonomous drones)

POWDER in Utah

2500 smart instrument packages in streetlights (San Diego)

Support from The Quilt for Digital Town Square and Cyberinfrastructures

KVASIR (augmented reality training) in Lafayette, LA

STEM 360 (augmented learning tools) in North Carolina

60 GHz radio to the unconnected (Cleveland)

10 Gbps fiber to the home (Chattanooga)

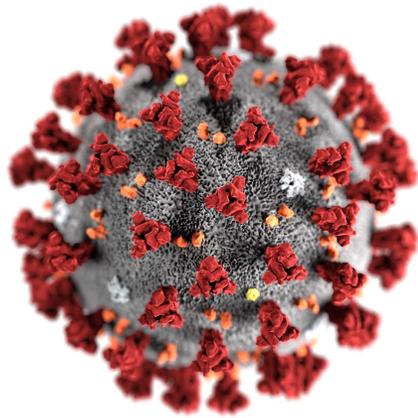
Autonomous shuttles (Columbus, Las Vegas, Colorado Springs)



Smart City Apps, Projects and Services Commercialized and Deployed

- Packetized Energy (Burlington, VT) [Energy]
- WeCounsel (Chattanooga, TN) [Healthcare]
- PlanIT Impact (Kansas City, KS & MO) [Education]
- SightDeck (Kansas City, KS & MO) [Education]
- Immersive VR for Medical and Anatomical Education (KC, MO) [Education]
- Medelight (NC Ignite) [Healthcare]
- CAP Science Labs (NC Ignite) [Public Safety]
- Smart Pavement System (Kansas City, KS & MO) [Transportation]
- Bloxmob (Austin, TX) [Big Data]
- The Path to Python (Austin, TX) [Education]
- Just-In-Time-VR (Austin, TX) [Public Safety]
- Docity (Chattanooga, TN) [Healthcare]
- iNotify (Richardson, TX) [Public Safety]
- SaasCharge (NC Ignite) [Transportation]
- Hydroid Meter (Austin, TX) [Water]
- LocaleIQ (San Francisco, CA) [Transportation]
- Blockchain to Protect the Vote (Phoenix, AZ) [Other]
- Live VR for STEM Education (NC Ignite) [Education]
- Drone Supported Emergency Management (NC Ignite) [Public Safety]
- STEM Workforce Development with AR (Madison, WI) [Education]
- Enpira (NC Ignite) [Energy]
- All The Farms (Eugene, OR) [Ag Tech]
- DeepWalk Research (Urbana-Champaign, IL) [Transportation]
- Archethought (Colorado Springs, CO) [Sound sensing]
- Coaster (Richardson, TX) [Transportation]
- Helix Health (Kansas City, KS & MO) [Healthcare]
- How's My Driving (Washington, D.C.) [Transportation]
- MVP Studio (Eugene, OR) [Urban planning]
- Noble Smart, LLC (Washington, D.C.) [Ag Tech]
- Particle Space (Kansas City, KS & MO) [Urban planning]
- Snowbird R.I.D.E. (Salt Lake City, UT) [Transportation]
- Road Reader (San Diego, CA) [Transportation]

- Cipher (Adelaide, Australia) [Education]
- Underground Infrastructure (Burlington, VT) [e-Government]
- 4k Microscope (Chattanooga, TN) [Education]
- 60GHz wireless (Cleveland, OH) [Education]
- Fort Carson AV shuttle (Colorado Springs, CO) [Transportation]
- EUGNet (Eugene/Springfield) [Economic Development]
- Stop and Freeze (Flint, MI) [Public Safety]
- 4K microscope (Jackson, TN) [Education]
- Disaster Resilient Smart Grid (Joplin, MO) [Public Safety]
- Gigabots (Kansas City, MO & KS) [Education]
- LEARN (Lafayette, LA) [Education]
- Regional govt data DTS (Las Vegas, NV) [Transportation]
- GonioSense (Madison, WI) [Health Care]
- Hathority (Phoenix, AZ) [e-Government]
- Poultry Patrol (Red Wing Ignite, MN) [Ag Tech]
- Emotive Virtual Patient (Richardson, TX) [Health Care]
- Transit Visual Information System (San Francisco, CA) [Transportation]
- "Guardians of the Gulf" (project with Boys & Girls Club) (St Petersburg, FL) [Education]
- City Data Visualization (Gigabit Girls) (Urbana Champaign, IL) [Education]
- Air Quality and U (Utah Ignite) [Health Care]
- Urban Planning (Vaughan, Ontario) [e-Government]
- PA 2040 (Washington, DC) [e-Government]



Covid-19 Response

3D Printing & COVID-19: Crowdsourcing the Supply Chain

3D Printing & COVID-19

Crowdsourcing the supply chain in crisis

Join us for an online discussion with experts using 3D printing to support their local community during the COVID-19 crisis

The meeting will start in a moment ...

April 2nd, 2020
Thursday
3:00 PM – 4:00 PM EST
Join via Zoom:
<https://bit.ly/2WXX0MU>

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0:05 / 55:05

QA Record

Data & COVID-19 Support

Community approaches to communication and coordination

Join us for an online discussion with experts using Data to support their local community during the COVID-19 crisis

156,400
142

Total Deaths
5,833

Total Recovered
73,968

April 16th, 2020
Thursday
3:00 PM – 4:00 PM EST
More info: us-ignite.org

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QA Record

Connecting the Unconnected

Utah Ignite

Utah's Smart City and Gigabit Community

Government Grants, Local and National Networking/Community, Smart City Resources

Membership

Drew Clark: Utah Ignite exists to find new light bulbs for the Internet age

By Drew Clark | May 17, 2015, 3:56pm MDT

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Utah Governor's Office of
Economic Development
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Utah Ignite

Utah's Smart City and Smart Gigabit Community



SMART CITIES LUNCHEON
 February 18th / 11:45AM AT THE SALT MINE, SANDY, UT
 PRESENTERS: Utah Ignite Grant Recipients – Virtual Reality, Big Data, Air Quality (7984 S 1300 E, Sandy, UT 84094)

Sponsored by: Utah Ignite, usignite, Salt Mine, CHAMBER, DVU



SMART CITIES LUNCHEON
 with *Spencer Cox*
 DECEMBER 17TH * 11:45AM
 @ MOUNTAIN AMERICA HQ IN SANDY, UT 11TH FLOOR

Sponsored by: usignite, Salt Mine, CHAMBER, DVU, Syngma



SMART CITIES LUNCHEON
 with *John Saeg*
 January 21st / 11:45AM AT THE SALT MINE, SANDY, UT

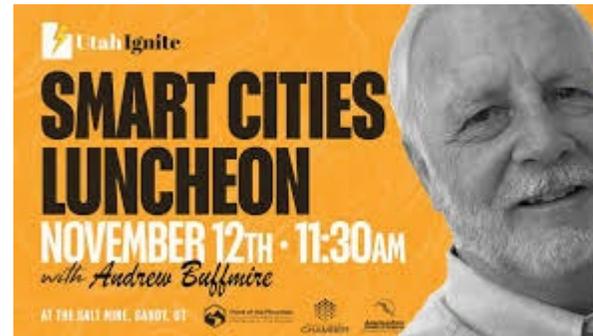
Sponsored by: usignite, Salt Mine, CHAMBER, DVU, NTT



Tuesday, March 17th 11:30-1:00 PM
 Hilton Garden Inn, Lehi
 3150 NORTH FORBES LANE, LEHI, UT 84043

SMART CITIES LUNCHEON
 Guest Speaker: *Roger Timmerman*
 (UTOPIA FIBER)

Sponsored by: usignite, Salt Mine, CHAMBER, DVU, UTOPIA FIBER



SMART CITIES LUNCHEON
 with *Andrew Buffnire*
 NOVEMBER 12TH - 11:30AM
 AT THE SALT MINE, SANDY, UT

Sponsored by: usignite, Salt Mine, CHAMBER, DVU



SMART CITIES LUNCHEON
 Guest Speaker: *Scott Frigaard*
 (All-Brand Fiber Center for the City of Lehi, Utah)

April 21st, 2020 • 11:30-1:00 PM • Lehi Hyatt Hotel
 (3700 Outlet Parkway, Lehi, UT 84043)

Sponsored by: usignite, Salt Mine, CHAMBER, DVU, Convergent Technology



SMART CITIES LUNCHEON
 Oct 15, 11:30-1:00
 Salt Mine Productive Workspace
 7984 S 1300 E, Sandy

Learn how Smart City solutions contribute to the effective management of urban areas - improving connectivity, sustainability, and livability.

Guest Speaker: *Taft Arnold*
 (Siemens)

In partnership with the American Park, Point of the Mountain, and South Valley Chambers of Commerce

Sponsored by: usignite, Salt Mine, CHAMBER, DVU, American Park, Point of the Mountain, South Valley



Utah's Technology Response to ...

Utah's TECH Response to COVID-19



By Mike Hussey,
State of Utah CIO



Register Via
Zoom

Sponsored by:



Utah Smart Cities Directory

This directory includes any companies that have been involved in Utah Internet of Things, Gigabit, or Smart Cities Meetups, Conference, or other programs.

Find listings for <keywords> [Advanced Search](#)

Displaying listings from all locations.

- [Accelerators/Make Spaces/Incubators](#)
- [Broadband](#)
- [Components](#)
- [Cybersecurity](#)
- [Emergency](#)
- [Engineering](#)
- [Grants](#)
- [Hosting](#)
- [Internet of Things](#)
- [Manufacturing](#)
- [Operating Systems/IoT Platforms/Big Data/Artificial](#)
- [Agricultural/Environmental IoT](#)
- [Communications](#)
- [Computing](#)
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- [Energy](#)
- [Government/Universities](#)
- [Health Tracking and Wearables](#)
- [Industrial IoT](#)
- [IoT](#)
- [Media](#)
- [Sensors](#)

Recent Posts

Drum roll, please: presenting the 2020 Smart 50 Awards recipients

Demo at the 2020 US Ignite Application Summit

Utah December Smart Cities Luncheon with Lt. Governor Spencer Cox

Start up at the 7th Annual Smart Cities Startup Challenge!

City Innovate

Recent Comments

A WordPress Commenter on Utah Ignite exists to find new light bulbs for the Internet age

Archives

February 2020

December 2019

November 2019

October 2019

September 2019

May 2019

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Utah Ignite
Utah's Smart City and Smart Gigabit Community

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