Digital Divide: Connectivity, Infrastructure and Devices

March 24, 2020
Introductions

Michelle Martinez Vega  
Chief Technology Strategist

Terrence Wilson, J.D.  
Regional Policy and Community Engagement Director
Rene Gonzalez | Chief Strategy Officer
co-founder of Lit Communities
Closing the Digital Divide through Fiber Infrastructure

March 24, 2020
INTRODUCTION

Rene Gonzalez, Chief Strategy Officer

**Background:** Policy, Grants, Project Management

**Prior Companies:** Foresite Group, Neighborly, ICE, Texas Water Development Board

**Other:** Chairman & Steering Committee Member at the Digital Inclusion Alliance of San Antonio, Resident of San Antonio, TX

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**Lit Communities**

Lit Communities is a forward-thinking builder and operator of next-generation network infrastructure and a consultancy that guides Tier 2 and 3 cities across the US through the process of deploying last-mile open access fiber optic networks.

**Website**  [litcommunities.net]

**Founded**  April 2019

**Ownership**  Private

**Employees**  10

**Unique Model Transforms Communities & Builds Value:**

✓ Lit provides a full, turnkey solution for building broadband infrastructure, enabling communities to create digital equity for their residents and businesses

✓ **Open Access Networks:** Separation of the infrastructure and services

✓ Local community campaigns drive adoption and allow transparency for investors

✓ Multiple service providers (such as iFIBER and Docity) and leasing 5G small cells to mobile carriers

✓ Ability for users to instantly add and change services and receive bills through OSS/BSS platform

✓ Neutral Operator; non-ISP owned and operated

✓ Option for network exit
LIT COMMUNITIES: BRINGING OPEN ACCESS FIBER CONNECTIVITY TO THE U.S.

Problem

“To meet future broadband needs, the US needs an estimated $150 billion of fiber infrastructure over the next 5-7 years.”

Deloitte.

“Now, because of the coronavirus, we’re seeing a real focus on remote work that may very well be a tipping point in terms of wider spread adoption of full-time remote work.”

GeekWire

- Cities, towns, and municipalities want access to critical future-ready projects like fiber networks to transform their communities
- Pandemics like the Coronavirus (COVID-19) expose how critical fiber-to-the-home networks are for telecommuting, telehealth, and remote learning
- Communities are overwhelmed by the process, costs, and time required to deploy fiber projects

Lit’s Solution

- **Full Turnkey Solution for Broadband**
  Lit’s partners are ready to assist from beginning to end: design, finance, build, operate and maintain

- **Open Access Networks**
  Physical separation of infrastructure & services is more consumer-friendly and creates competition

- **Privately financed to move fast**
  No municipal money to expedite the process and avoid potential conflicts

- **CapEx & OpEx Savings for XSPs**
  Lit takes burden of building, owning, operating infrastructure allowing for substantial savings for providers, incentivizing them to participate

- **More Reliable Internet Connections**
  Fiber provides fast and stable internet connections needed for telehealth, telecommuting, remote learning, and smart home apps

- **Future-Ready & Economic Benefits**
  Fiber transforms communities with smart city applications, 5G, and allows for economic development
Open Application Networks

The separation of network infrastructure and the services offered across it

**OUR MODEL**

**Smart city and intergovernmental improvements**

Boosts the economy, workforce, tech industry flourishes, utility that is revenue generating

**Fast delivery of all services - envision the app store for homes and businesses**

Educates for the future and allows all students the same opportunity no matter where they live

Community network no matter the ownership structure
**OUR MODEL: POLICIES & PLANNING**

- Lit’s team members have experience working through key policy and planning items for fiber network deployment

<table>
<thead>
<tr>
<th>Policy/Standard</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dig Once/Open Trench Policy</td>
<td>✔️</td>
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<tr>
<td>Streamlined Permitting Process and Franchise Fees</td>
<td>✔️</td>
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<tr>
<td>Wireless and Small Cell Policy</td>
<td>✔️</td>
</tr>
<tr>
<td>One Touch Make-Ready</td>
<td>✔️</td>
</tr>
<tr>
<td>Conduit Standards for Greenfield Developments</td>
<td>✔️</td>
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<tr>
<td>Utilize GIS and Interagency Communication</td>
<td>✔️</td>
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</table>
THE PROVIDERS & THE FIBER MARKETPLACE

Internet, Voice & CATV
Anchor tenant for initial networks and wholesale fees for internet, voice, and cable TV services paid monthly

Telehealth
Services offered as per monthly fee for application and then fee per doctor visit. Wholesale fees are split between doctors, service provider, and owner

Smart Home Apps
Smart home packages from automated lighting, AC, garage doors, music controls, monitoring, schedule, health tracking, even your refrigerator will be a service wholesale fee

City & Dark Fibers
Spare dark fiber and conduits are leased to wireless providers like Verizon and we build a smart city strategy and system in place for the community for added revenue

The App Store for your home or business
DRIVING TAKE RATES WITH COMMUNITY CAMPAIGNS

- Example from Medina Fiber (Medina County, OH) Sign-Up and Survey Demand Aggregation website: [https://medina.litcommunities.net/](https://medina.litcommunities.net/)
### LIT COMMUNITIES TEAM

- **Lit's passionate and committed team possesses a depth of experience on behalf of both public and private entities in designing, financing, engineering, and constructing broadband networks.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Experience</th>
<th>Prior Companies</th>
<th>Education</th>
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</thead>
<tbody>
<tr>
<td>Brian Snider</td>
<td>Chief Executive Officer</td>
<td>15 years Engineering, Design, Project Management for AT&amp;T, Google Fiber, and Verizon projects</td>
<td>Foresite Group, Neighbory, Byers, TrueNet, AFL</td>
<td>Troy State University, ITT Technical</td>
</tr>
<tr>
<td>Lauren Bender</td>
<td>Chief Operating Officer</td>
<td>7 years Engineering, Design, GIS, Project Management</td>
<td>Foresite Group Inc., Actavo, Atlantic Engineering Group</td>
<td>Texas State University</td>
</tr>
<tr>
<td>Rene Gonzalez</td>
<td>Chief Strategy Officer</td>
<td>16 years Policy, Grants, Project Management</td>
<td>Foresite Group, Neighbory, ICE, Texas Water Development Board</td>
<td>Southwestern University, St. Edward’s University</td>
</tr>
<tr>
<td>Ben Lewis-Ramirez</td>
<td>Chief Marketing Officer</td>
<td>10 years OSP Engineer, Business Development, Permitting, Project Management</td>
<td>Foresite Group, Black &amp; Veatch, Byers</td>
<td>Southwestern University</td>
</tr>
<tr>
<td>Roger Wilson</td>
<td>Chief Deployment Officer</td>
<td>23 years Construction, Business Development</td>
<td>Foresite Group, The Broadband Group, Time Warner, Black &amp; Veatch, U.S. Army</td>
<td>Saint Mary’s College, Texas Christian University, Long Island University</td>
</tr>
<tr>
<td>Jessica Fowler</td>
<td>Chief Client Officer</td>
<td>15+ years Municipal, Operations, Construction, Municipal Finance</td>
<td>Town of Sharon, CT, Northwest ConneCT, Project Delivery Associates</td>
<td>University of Colorado Boulder, Baruch College</td>
</tr>
<tr>
<td>Lindsey Brannon</td>
<td>Chief of Staff &amp; Head of Finance</td>
<td>11 years Municipal, Investment Banking, Project Finance, Capital Raising, Asset Management</td>
<td>Neighbory, J.P. Morgan, Morgan Keegan</td>
<td>University of Chicago</td>
</tr>
<tr>
<td>Beth Fowler</td>
<td>Director of Engineering</td>
<td>32 years Engineering, Project Management, Design</td>
<td>Summit Engineering Services, AFL, BellSouth</td>
<td>University of Alabama</td>
</tr>
<tr>
<td>Dan Kupratis</td>
<td>Director of Operations</td>
<td>11 years Operations, Finance, Municipal, Project Finance, Business Development</td>
<td>Neighbory, J.P. Morgan, Credit Suisse</td>
<td>Georgetown University</td>
</tr>
<tr>
<td>John Sullivan</td>
<td>Chief Innovation Officer</td>
<td>10 years Mapping, GIS, LiDAR, Autonomous Vehicles, Data Extraction, Lane Model Delivery, Telecommunications</td>
<td>Continental Mapping, Penske</td>
<td>Art Institute of Las Vegas</td>
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</tbody>
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**OUR EXPERIENCE**

- Lit’s team members have worked with public and private entities on full fiber build-outs, design, engineering, master plans, and community assessments.
- Additionally, our team has deep financial experience working with municipalities and government entities with ranging levels of complexity.

<table>
<thead>
<tr>
<th>Full Fiber Build-Outs</th>
<th>Municipalities &amp; Utilities</th>
<th>Community Assessments</th>
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<tbody>
<tr>
<td>AT&amp;T</td>
<td>City of Ammon</td>
<td>Jackson</td>
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<tr>
<td>Digicel</td>
<td>City of Lampasas, Texas</td>
<td>Roanoke Valley</td>
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<tr>
<td>Google</td>
<td>United States Air Force</td>
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<td>Huntsville, Alabama</td>
<td>Springs</td>
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<tr>
<td>Medina County, Ohio</td>
<td>Huntville</td>
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<td>City of New Orleans</td>
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<td>verizon</td>
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**Finance**

- Watershed Management
- Cal HFA
- City of Cambridge
- City of Huntsville, PA
- chfa
- Connecticut
- New York City Housing Authority
- Illinois Housing Development Authority
- Louisiana Housing Corporation
- MFA Housing for Hawaii
- NIFA
- NYC Housing Development Corporation
- New York City Department of Housing and Community Renewal
- Ohio Housing Finance Agency
- Philadelphia Water
- Sharon Development Board
- Texas Water Development Board
- VLB
LIT’S NATIONAL PARTNERS

- Lit’s team has worked for many years with top vendors to deploy last mile fiber networks and offer best-in-class execution

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<thead>
<tr>
<th>Fiber Management &amp; Design</th>
<th>LiDAR Data Collection</th>
<th>Construction</th>
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<tbody>
<tr>
<td>VETRO</td>
<td>CONTINENTAL MAPPING</td>
<td>C&amp;AWC</td>
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<tr>
<td>FiberMap®</td>
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<td>OnTrac</td>
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<td>Mears</td>
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<td>CRALEY Group</td>
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<td></td>
<td></td>
<td>SMART</td>
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<tr>
<td></td>
<td></td>
<td>COMMUNICATIONS, LLC</td>
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<tr>
<th>Electronics</th>
<th>Fiber &amp; Conduit</th>
<th>OSS/BSS</th>
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<tbody>
<tr>
<td>NOKIA</td>
<td>CORNING</td>
<td>COS</td>
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<td></td>
<td>dura-line</td>
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<td>camvio</td>
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<td></td>
<td>COSystems</td>
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<tr>
<th>Anchor Service Providers</th>
<th>Broadband Public Policy</th>
<th>Legal</th>
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<tbody>
<tr>
<td>IFIBER Communications</td>
<td>NDIA</td>
<td>Butler</td>
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<tr>
<td>docity</td>
<td>Institute for Local Self-Reliance</td>
<td>Cooper Gale</td>
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<td>Next Century Cities</td>
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CONCLUSION

- Public entities are finding innovative approaches to developing their own fiber optic infrastructure to address significant gaps in both accessibility and affordability,

- Infrastructure isn’t built overnight, lighting up your community takes strategic planning, dedication, and resources to be successful,

- Identify near-term opportunities such as hotspot lending programs, public wifi, ISP discount programs, utilizing the E-Rate program, etc.,

- Create partnerships with experts, providers, and community organizations to ensure your projects are making the impact you intend, and

- Open Application Networks provide the greatest potential for utilization and innovation of the infrastructure.

Questions?

E-Mail Address: Rene@litcommunities.net
Let’s Light Up Communities!

www.litcommunities.net
Michelle Martinez Vega
Chief Technology Strategist
When all else fails...

Offline Options and Considerations

- Google Offline
- Remind Phone App
- FreeConferenceCall.com
Digital divide suddenly wider

As COVID-19 forces schools online, a public education involves a home computer and an internet connection, putting low-income children on shakier ground.

By Alla Malik
Photos by Billy Calzada
Q & A
Intercultural Development Research Association

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San Antonio, Texas 78228
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