

**Hotwire**<sup>®</sup>  
COMMUNICATIONS

**fision**<sup>®</sup>

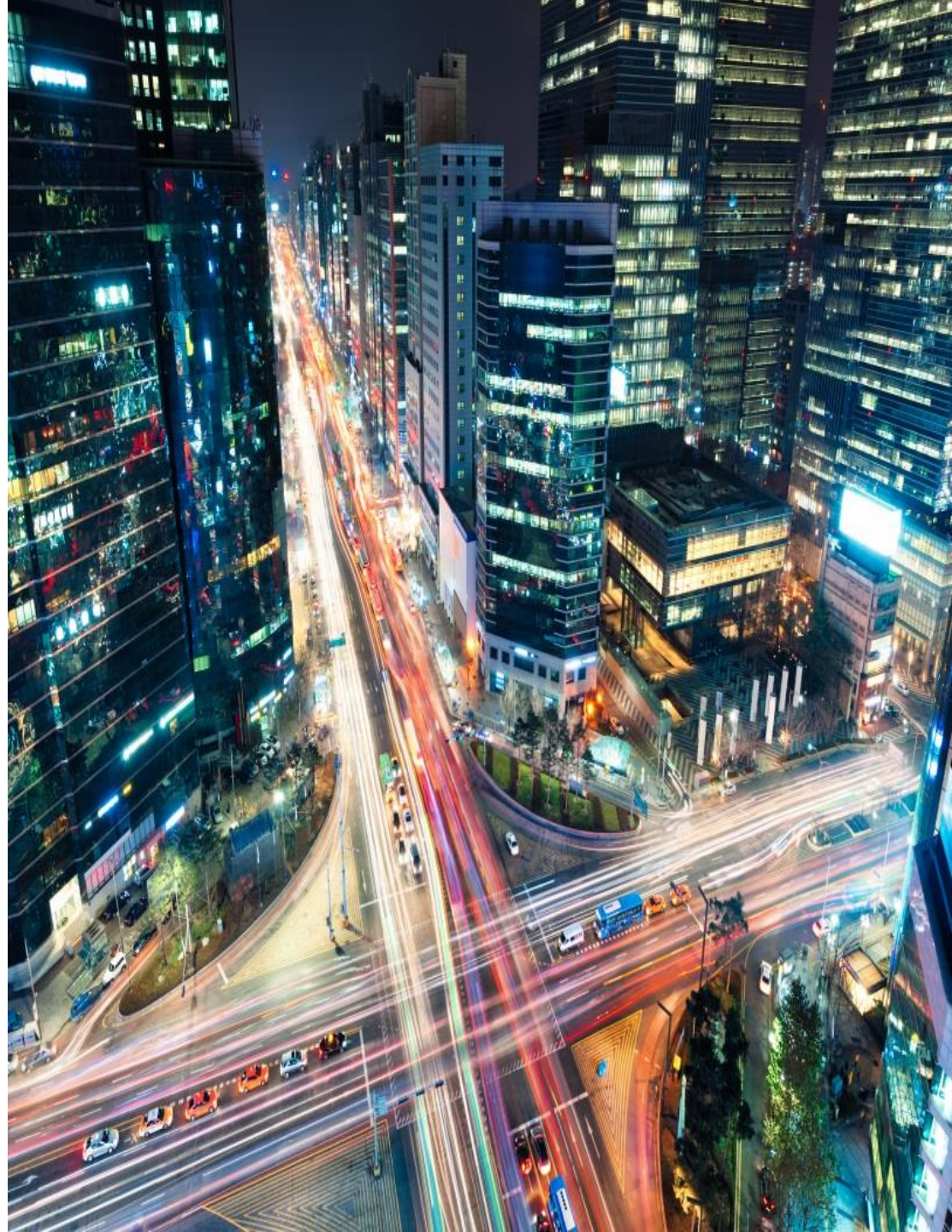
# Smart City Solutions

**Emerge Americas**  
**Booth #443**



# Population Growth

- By 2050, 68% of the population will live in cities.
- A city's infrastructure needs a fiber network.
  - Ultra Robust Bandwidth
  - Highly Secure
  - Extremely Adaptable





# Bandwidth

- Limitless Capability
- High Bandwidth Crucial
- Speeds of 10 GBPS
- High Speeds Create Seamless Interaction



# Network Security

- 24/7 x 365 monitoring
- Early detection and warning systems
- Personnel with experience across multiple industries
- Proactive approach against intrusive activity

# Fiber Optics

- Fiber Optic Links
  - greater bandwidth,
  - longer distance
  - more signal immunity
- Resistance
  - temperature fluctuations,
  - severe weather conditions
  - moisture
- Lifespan Over 100 Years
- Replace Outdated Solutions
  - Copper and twisted pair transmission
  - Traffic signal loop sensors





# City's Growing Demands

City planners are telling cities to support massive fiber optic backbones for:

- small cells and traditional cell sites
- landline phones
- internet service providers
- private communications networks for city services
- public and private WiFi
- private networks for internet connections to businesses

Infrastructures will require ever-increasing data rates

- Facilitate real time communications between a wide variety of remote field devices and control centers
- Allow for continuous interaction between the City and its many different departments

# Solutions for Traffic Control

## Real-Time Traffic Conditions

- Control the flow of traffic
- Citizen Friendly
- Diverts traffic for:
  - *Accidents*
  - *Construction*
  - *Road Debris*
  - *Events*





# Intelligent Transportation Systems

- Smart Street Lighting
- High-resolution cameras
- Smart Traffic Signals and Signs
  - Interaction with vehicles
  - Communications from the infrastructure to vehicles



# Smart City Applications



# Information Notifications

## Variable Message Signs

- Amber Alerts
- Accident Warnings
- Speed Limit Changes
- Delay Times
- ETA's
- Law Enforcement Alert Notifications





# Weather and Flood Solutions

- Sensors for Weather Conditions
  - Air Quality Sensors
- Water Levels Sensors
  - Protect against submerged roads
  - Trends during King Tides and flooding events

# Video Surveillance

- Pan-Tilt-Zoom (PTZ)
- Surveying intersections, ramps and tunnels
- Video Analytics/Sensors
  - Video Management Systems
  - Gunshot Detection
  - License Plate Recognition



# Public Services

- Create a communications and control infrastructure
  - Fire and Police
    - natural disasters
    - allocate emergency services
  - Utilities
    - more efficient and cost-effective
- Data Demands
  - Acquire, store and analyze massive amounts of data
  - Must-have commercial data centers
  - Public scalable WiFi



# Financial Benefits of Fiber

- Cost Savings Grows with Expected Inflation
- Network Inexpensively Scalable for the Future
  - Capacity
  - Additional Sites
- More Productivity with Lower Latency







# Who We Are

- We are a telecommunications company founded in 2000.
- We deliver customized fiber optic solutions to communities, businesses, municipalities, medical & educational institutions, student housing, hotels, and stadium centers across the nation.
- We own and operate a dedicated independent fiber optic backbone in all of our core markets through Fiber-to-the-Unit (FTTU) technology.
- We provide Gigabit speeds with no data caps - possible through an end-to-end fiber optic infrastructure.
- We are the largest, privately held provider of communications services in Florida.

# Ownership



**KRISTIN JOHNSON KARP**  
Co-founder & CEO



**MICHAEL KARP**  
Co-founder & Chairman



Hotwire Communications is founded to provide cable TV, internet, and phone service to multi-family apartment communities.

**2000**

Construction begins on Fiber-to-the-Home network.

**2002**

Service installations in single-family home communities begins.

**2009**

First IPTV headend in Florida is installed and Hotwire is one of the first companies in the United States to offer IPTV Video.

**2006**

Hotwire purchases its biggest competitor, Connexion Technologies, out of bankruptcy and doubles the size of the company.

**2012**

Hotwire invests state-of-the-art Microsoft Mediroom middleware. New TV Platform provides best-in-class TV service offered in the U.S.

**2013**

First and only company in Florida to offer Gigabit bandwidth speeds. Lights Atlanta and Naples markets.

**2014**

Offering 10 Gbps Residential Internet for the first time.

**2016**

Relocated our corporate headquarters to Fort Lauderdale, FL, creating 375 new jobs and investing more than \$27 million into the local community.

**2017**

## COMPANY TIMELINE

# Hotwire History



# Fiber Footprint

Over...

- 1,100 Residential and Commercial Properties
- Over 100 Hotel Properties
- Thousands of Fiber Miles of Redundancy
- Over 1,200 On-Net Buildings
- Hotwire Communications owns and operates a Gigabit fiber optic network.
- Hotwire Communications designs, builds, and provides a full suite of bundled telecommunications services.
- Competitive Local Exchange Carrier (CLEC)
- Franchised Cable Operator for construction in Public Rights-of-Way.

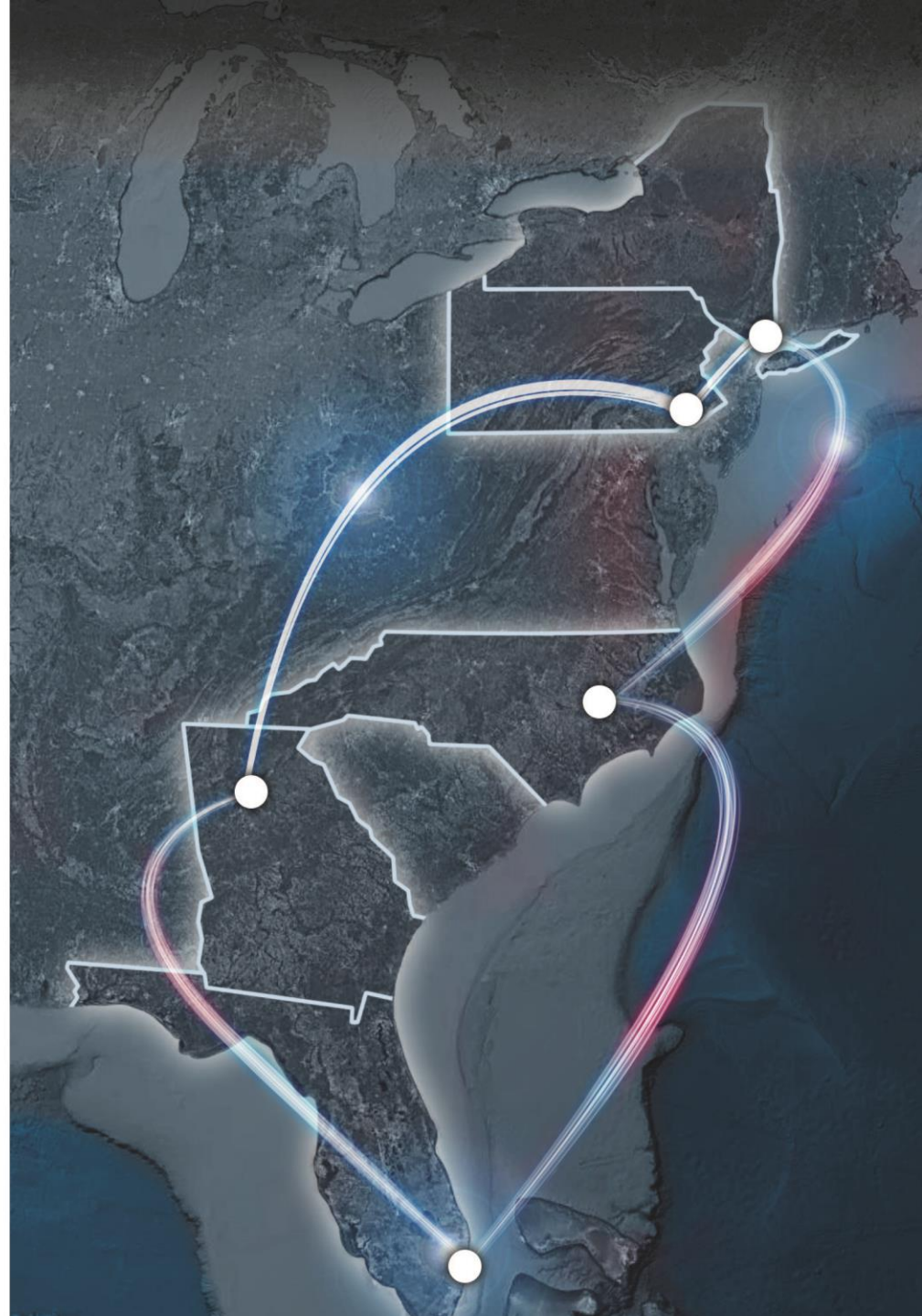
# Network Redundancy

Gigabit, geographically diverse intra-city network connecting each market with Fision

*Fiber Rings guarantee 99.999% service uptime through a reliable, redundant network. Even if one node goes out, there will be no interruption of service.*

## Fiber Strand Miles

- Backbone Fiber: 3,494
- Lateral Fiber: 57,100
- Total: 60,594



# Smart Fiber Deployments

## The Avalon

- First FTTP Fiberhood in Georgia powered by Hotwire Communications (2016)
- Offers 500,000 square feet of retail, with a 12-screen theater, boutique and full-service hotels, office space, single-family residences and luxury rental homes

## Miami Beach Smart Lighting System

- Design, Build, Operate and Maintenance SMART City street lighting system
- Designed a “Future Proof” Master Plan
  - planning for the integration of the smart services of tomorrow
- Open Platform capable of integrating with existing Smart City initiatives
- Implementations of Future technology; planned in a phased approach.

