County of El Dorado Broadband Planning

DIANE KRUSE

CEO, NEO CONNECT

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Broadband Impacts Every Sector of Industry

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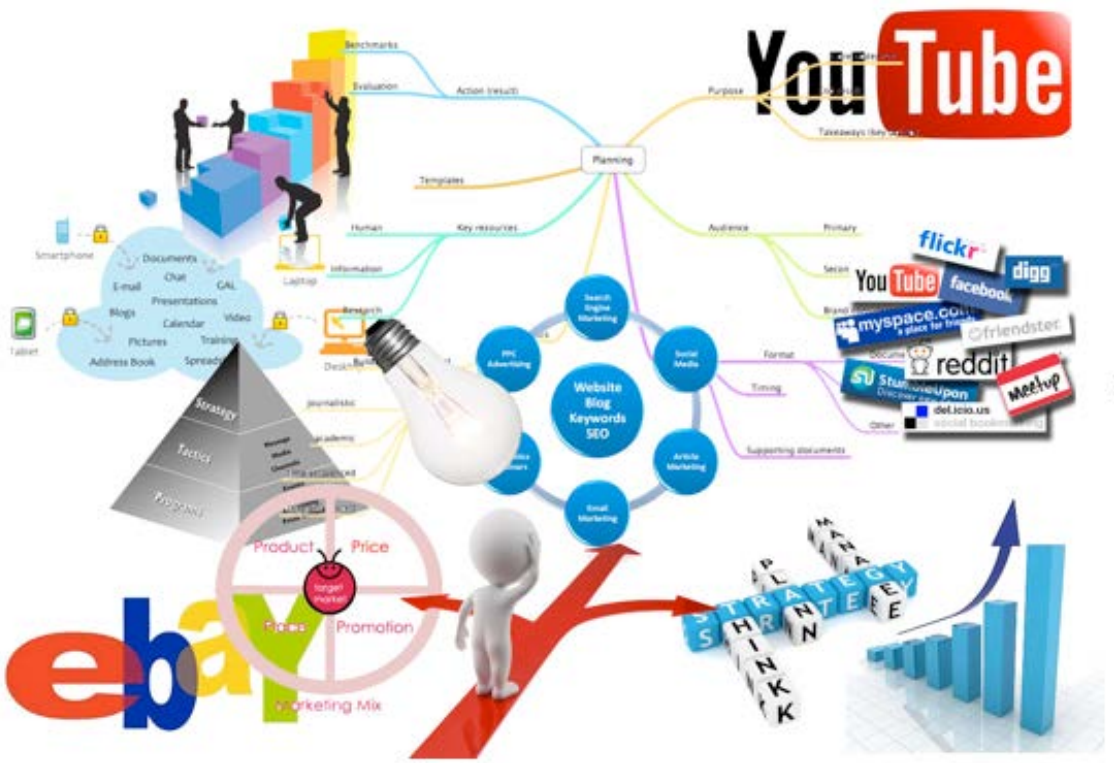
WHY IS THIS IMPORTANT?



- Economic Development
- Broadband is a critical infrastructure to support a community's vitality.
- The existing "model of scarcity" can be transformed in this process.
- Quality of life for locals, retaining and attracting people
- Broadband infrastructure is necessary to support industry, our schools and students, healthcare and local tourism.
- It impacts everything that we do.

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ATTRACT THE NEW KNOWLEDGE ECONOMY

Current Stats in El Dorado

- Average age: 44.4 years old.
- The unemployment rate: 5.40% with job growth of 2.19%. Future job growth over the next ten years is predicted to be 38.99%.
- The income per capita: $59,698

Average Salaries, by field of study:

- Computer Science: $92,300
- Visual Art: $90,390
- Sociology: $87,900
- Industrial Engineering and Management Science: $85,800
- Business Management & Administration: $83,700

Increase Home Values

Current Stats in El Dorado

- The median home value in El Dorado County, California, is $429,130.

Homes Values Increase

- 3.1% with fiber or $13,303
- 7% with Gigabit services or $30,039

COMMUTE TIMES

Current Stats in El Dorado

- The average one-way commute in El Dorado County, California, takes 28 minutes.
- 75% of commuters drive their own car alone.
- 6.6% work from home.
- Nearly 72% of survey respondents work from home or run their business from home.
- More than 64% use the internet to complete school or job training course work.

- **Less Traffic**
- **Less Pollution**
- **Less Commute Time**
- **More people working from home.**

NEO – County of El Dorado Broadband Planning, Timeline

Project Start

Oct 2017

Nov – Dec 2017

Foundation:
GIS data
CAI Addresses
Speed test, Research, Economic Studies & Plans,
Initial Meetings for Service & Utility Providers
Map Existing Assets

January 2018

Deliverables:
Current Needs Assessment, Gap Analysis, Levels of Investment, Policies and Ordinances

Feb – March 2018

Tasks and Deliverables:
Preliminary Design and Capital Cost Projections,
Levels of Investment,
Potential Partnerships,
Financial Modeling,
Funding

April – May 2018

Deliverables:
Written Plan and Strategies, Recommendations and Wrap Up

Broadband Planning

- ✓ Policies, Ordinances
  - Dig Once, Shadow Conduit, Abandoned Conduit, One Touch for Make Ready
  - Permitting, Budget or Funding Set Aside
- ✓ Surveys and Community Engagement
- ✓ Identifying Assets and Gaps, Potential Partners, Preliminary Design
  - Government applications, Energy Companies, Caltrans, Service Providers
- Design & Engineering, Various Levels of Investment
- Financial Modeling and Best Options to Further Explore
- Recommendations and Plan Forward

✓ Broadband planning activities underway

CURRENT SPEEDS AND SERVICES

Although wireline services are available along the densely populated sections of Highway 50, many of the rural areas in the County rely heavily on fixed wireless and satellite broadband services.

ATT DSL, Comcast and/or Charter Cable Services
Cal.Net, Consolidated, RemotelyLocated, RockyRidge.net, Hughes.Net and ViaSat

60% of Speed Tests Conducted Meet FCC Minimum 25/3 Mbps

Gold Standard is 1,000/1,000 Mbps or Gigabit Speeds

Level of Investment

1) Facilitation through Broadband Friendly Policies and Ordinances, Tax Incentives and Use of Existing Assets

2) Smart Conduit Construction to Gain Assets and Attract Partners

3) Connecting Community Anchor Institutions, Smart City applications, Coordination with Public Works and other projects

4) Connecting Key Business and Industrial Park Locations

5) Connecting Homes and Businesses, Fiber to the Premise

Policies and Ordinances to Consider

- Dig Once/Shadow Conduit
- Joint Trench/Shared Costs
- GIS As-builts and Funding Set Aside
- One Touch Make Ready
- Land Use Policies, Conduit Placement

Dig Once and Shadow Conduit

- Incremental Cost To Install Shadow Conduit Is $2 - $7 Per Foot.

- Cost To Install New Conduit As A Standalone Project Is $25 - $35 Per Foot.

- Typically, Shadow Conduit Represents 1-2% Of A Road Improvement's Total Project Budget.

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Recommended Next Steps

- NEO will work with Transportation Department to Identify CIP Projects
- Identify Capital Costs of Shadow Conduit
- Set Aside in the Budget for Inclusion in CIP Projects
- Policy and Ordinance Language
- Land Use Policy

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QUESTIONS?

Diane Kruse
CEO, NEO Connect
970-309-3500
diane@NEOconnect.us