ROCKY MOUNTAIN
LAND USE INSTITUTE

FINDING THE BALANCE

The Role of Telecommunications
In Transportation & Land Use Planning

By Michael Shear, President/CEO
March 2007
Issues We Are Struggling With

- Transportation
- Sprawl
- Air Pollution
- Global Warming
- Reliance on Oil
- Emergency Preparedness
- Continuity of Operations Planning
- Economic Viability
- Quality of Life
“We can’t solve problems by using the same kind of thinking we used when we created them”

– Albert Einstein
Changing perception is sometimes a matter of changing the way we look at things.
"Accessibility is a key ingredient of well-being and prosperity in contemporary societies."

AIR POLLUTION FROM GROUND TRANSPORTATION - 2002
UN and World Bank

Access Methods

Transportation = Mobility

Land Use = Proximity

Telecommunications = Connectivity

Long Lead Times
5-7 Years

Short Lead Times
1-2 Years

3 Methods of Access
2 Key Elements of Today’s Information Economy

Information & Time
Shifting Paradigms
Nature and Form of Work

- Industrial Worker
  - Deliverables are physical goods
  - Elements of production need to be gathered at a physical location
  - Transportation consumes time and gasoline

- Knowledge Worker
  - Deliverables are information based
  - Elements of production are assembled in cyberspace
  - Uses time to ‘create’ value by processing information and producing knowledge
Shifting Paradigms
Location of Work

Industrial Age Model
= Single Location

Information Age Model
= Networked Multiple Locations
Networked
Distributed Work Centers
POCKETS Site

Office and mixed-use facilities

Connectivity integrates with clients main leased-line, Frame Relay or other Wide Area Network strategy. MAN and LAN options include Wireless, Ethernet or Optical links.

Design for LAN/MAN/WAN connections include traffic-engineering to allow for Data, integrated Voice (VoIP) and Video Conferencing Capability. These will be as extensions of client’s services into POCKETS sites as remote office locations for clients.

Partner Company Offices

with

POCKETS client services

Internet

POCKETS will engineer and coordinate connectivity from Partners and Clients to POCKETS Main-Office or other POCKETS locations.

Partner Company Offices with

POCKETS client services

Local Metro Main Office

Integrated VoIP

POCKETS

Multi-Office Building

POCKETS Site

POCKETS Communities

Designed Workplace Network Concept Metro-Area Topology

Connectivity to other Intra- and Inter-state

internet

Design for LAN/MAN/WAN connections include traffic-engineering to allow for Data, integrated Voice (VoIP) and Video Conferencing Capability. These will be as extensions of client’s services into POCKETS sites as remote office locations for clients.
<table>
<thead>
<tr>
<th>Factors</th>
<th>Single Location</th>
<th>Telework</th>
<th>Distributed Workplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Attraction &amp; Retention</td>
<td>0</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Lower absenteeism</td>
<td>0</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Reduced stress</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Employee satisfaction</td>
<td>0</td>
<td>½</td>
<td>1</td>
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<tr>
<td>Environmental impact</td>
<td>0</td>
<td>½</td>
<td>1</td>
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<tr>
<td>Security—people, systems, data</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Time &amp; money savings to employee</td>
<td>0</td>
<td>½</td>
<td>1</td>
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<td>Business continuity</td>
<td>0</td>
<td>½</td>
<td>1</td>
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<tr>
<td>Management Oversight</td>
<td>1</td>
<td>½</td>
<td>1</td>
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<tr>
<td>Family emergencies, inclement weather, work-life balance</td>
<td>0</td>
<td>½</td>
<td>1</td>
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</tbody>
</table>
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Where Do We Go From Here?
Responding to Change in the Information Economy

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March 2007
Contact Information

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