Doing Transportation & Economic Development Differently
About NADO

- National association for 540 regional development organizations, including emerging network of Rural Transportation Planning Organizations (RTPOs or RPOs)

- Promote public policies that strengthen local governments, communities and economies through the regional strategies, coordination efforts and program expertise of the nation’s regional development organizations
About NADO

- Through the NADO Research Foundation, develop training and resources related to:
  - Rural/small metro transportation planning, RPO America
  - Small business finance
  - Economic development planning
  - Regional resiliency
  - Developing quality of place
Regional Transportation Planning Models
Economic Resilience

• Comprehensive Economic Development Strategies (CEDS) Guidelines released in 2015 by U.S. Economic Development Administration, required economic resilience for the first time

• Economic resilience becomes inclusive of three primary attributes:
  – the ability to recover quickly from a shock
  – the ability to withstand a shock
  – the ability to avoid the shock altogether
Economic Resilience

According to EDA:

• Steady-state initiatives tend to be long-term efforts that seek to bolster the community or region’s ability to withstand or avoid a shock.

• Responsive initiatives can include establishing capabilities for the economic development organization to be responsive to the region’s recovery needs following an incident.

• Visit: [www.eda.gov/CEDS](http://www.eda.gov/CEDS) & NADO’s [https://www.cedscentral.com/](https://www.cedscentral.com/)
Connecting Economic Resilience & Transportation

Economic development in transportation involves deliberate interventions to produce tangible benefits that are specific to the context, are sustained over time, and make a place more resilient.
Doing Economic Development Differently

WealthWorks is an approach to community-driven economic development that:

• aligns local assets around a shared set of values and goals
• seeks new business opportunities in response to changing markets
WealthWorks: Doing Economic Development Differently

- Local Ownership
- Multiple Forms of Wealth
- Improved Livelihoods for Everyone

Demand-driven community and economic development
WealthWorks Combines Economic and Community Development

A systems approach to identify and pursue business opportunities

Asset-based development that is rooted in local people, market demand and wealth

Slide credit: Rural Development Initiatives
The WealthWorks Difference

<table>
<thead>
<tr>
<th>Traditional Economic Development</th>
<th>WealthWorks Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focuses on economic growth</td>
<td>• Focuses on creation of multiple forms of wealth</td>
</tr>
<tr>
<td>• Focuses on quantity of jobs</td>
<td>• Focuses on quality - inclusive, living-wage jobs</td>
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<tr>
<td>• Brings in outside firms</td>
<td>• Develops local assets for the benefit of local residents</td>
</tr>
<tr>
<td>• Often supports absentee and elite ownership</td>
<td>• Promotes local, broad-based ownership</td>
</tr>
<tr>
<td>• Focuses on short term gains</td>
<td>• Focuses on long term sustainability</td>
</tr>
</tbody>
</table>

*Slide credit: Rural Development Initiatives*
Drawing on Many Fields of Expertise

- Asset Based Community Development
- Michael Porter’s Value Chains
- Business clusters and networks
- Collective Impact/Backbone Organizations
- BALLE: Business Alliance for Livable Local Economies
- Economic Justice: Inclusion of people on economic margins
- Cooperatives
- Triple Bottom line Investment

Slide credit: Barbara Wyckoff, Creative Disruptors
WealthWorks is a National Movement
WealthWorks Goal

To improve the livelihoods of people and communities by creating wealth through market interactions that are owned, controlled, and reinvested locally.

*Slide credit: Rural Development Initiatives*
Eight Forms of Wealth

01 INDIVIDUAL
health, well-being, and skills of the population

02 INTELLECTUAL
knowledge, creativity, and innovativeness in the region

03 NATURAL
land, plants, animals, water, and air

04 BUILT
buildings, roads, telecommunications

05 FINANCIAL
cash and financial investments

06 POLITICAL
connections and influence of individuals and organizations

07 SOCIAL
trust, relationships and networks between people and organizations

08 CULTURAL
values, traditions, and identity

Slide credit: Rural Development Initiatives
Evaluating Your Community’s Wealth

As a group at your table, rate your community / region’s wealth across all 8 forms of capital by completing the spider diagram (0=lowest, 5=highest)

Remember, it is only wealth if it is healthy and fully functional and if the region owns or controls it and can make decisions about how to maintain it and use it.

Discussion:
What does this have to do with transportation?

• Where does transportation appear in the capitals?
• How does transportation interact with or support the capitals?
Uses of the Capitals Framework

• Assess assets in your community
• Define the strategy & make investment decisions
• Measure your impact
Economic & Transportation Resilience

Engagement, Tools, Support

Erica Anderson, AICP
Director, Economic & Community Development
Asheville, NC
Who We Are:

Land of Sky Regional Council is a multi-county, local government planning and development organization. We reach across county and municipal borders providing technical assistance to local governments and administer projects and programs which benefit our region’s citizens.
Land of Sky Regional Council is recognized by the Appalachian Regional Commission (ARC) and the Economic Development Administration (EDA) as the Lead Economic Development District for regional economic development planning and activities in our four county area.
Comprehensive Economic Development Strategy

High Priorities:
- High-Speed Broadband Access
- Transportation
- Housing Options
- Workforce Solutions

www.landofsky.org/ceds
2015 - 2019 Comprehensive Economic Development Strategy
Buncombe, Haywood, Henderson, Madison, and Transylvania Counties
Sponsored by EDA
REGIONAL FACT SHEET
Includes Buncombe, Haywood, Henderson, Madison and Transylvania counties.

POPULATION
- Female: 52%
- Male: 48%
- Median Age: 44.9
- Total Population: 503,754
- Minority: 10.8%
- Under 16: 18.9%
- 16-64: 64.4%
- 65+: 11.7%

HOUSING
- Median Home Value: $172,600
- Homeowner Vacancy Rate: 2.1%
- Rental Vacancy Rate: 2.2%
- Occupied Housing Units: 196,167

ECONOMIC
- Median Household Income: $44,480
- Per Capita Income: $24,175
- Per Capita Living Wage: $20,934
- County Property Tax: N/A
- % of Families Below Poverty Level: 11%
- Food Insecurity Rate: 13.9%

LARGEST INDUSTRIES
- Health Care and Social Assistance: 29,826 / 32,631
- Retail Trade: 24,928 / 26,617
- Accommodation and Food Services: 20,651 / 23,890
- Manufacturing: 18,920 / 19,966
- Construction: 13,272 / 11,041
- Other Services (except Public Administration): 10,920 / 11,752
- Admin, Waste Mgmt, & Remediation Services: 10,453 / 11,633
- Professional, Scientific, & Technical Services: 7,416 / 8,549
- Wholesale Trade: 5,224 / 5,142

LARGEST PRIVATE SECTOR EMPLOYERS
1. Memorial Mission Hospital, Inc.
2. Ingles Market, Inc.
4. Eaton Corporation
5. The Biltmore Company
6. Blue Ridge Paper Products
7. Park Ridge Health
8. Margaret R Pardee Memorial Hospital

HIGHER EDUCATION
- UNC Asheville
- Mars Hill University
- Warren Wilson
- WCU Biltmore Park
- South College
- LeTourneau University
- Brevard College
- Blue Ridge Community College
- Wingate University
- Hendersonville
- Haywood Community College
CEDS IMPLEMENTATION CREATES REGIONAL WEALTH

INDIVIDUAL CAPITAL
Knowledge of business opportunities in target sectors, Awareness of capital sources, business training, workforce development and sector services.

INTELLECTUAL CAPITAL
Certificate programs and degrees offered for value-chain careers in target sectors.

SOCIAL CAPITAL
Collaborative networks. Stronger relationships among organizations, businesses, and government entities. Regional collaboration through industry member groups. CarolinaWest, economic and tourism development, educational institutions, and agencies.

NATURAL CAPITAL
Sustainable practices implemented for processing, sourcing, and manufacturing. Opportunities for land kept or returned to agricultural production and forestry. Conservation based business growth.

BUILT CAPITAL
Reclaiming vacant buildings for manufacturing, commercial, or housing. Shared infrastructure for product delivery to lower individual costs. Increase opportunities for public transportation, bicycle and pedestrian travel, vehicles, and regional connections. New understanding of supply and demands on water/wastewater, broadband, and other regional infrastructure.

POLITICAL CAPITAL
New understanding of the regulatory framework and policies that help or hinder growth of target sectors in WNC. Partnership with elected officials, local government, businesses, and agencies to foster target sector growth.

FINANCIAL CAPITAL
New business opportunities for target sector and value-added products. New capital investment and training available for entrepreneurs. Increased knowledge of opportunities for capital in urban and rural areas.

LOCAL OWNERSHIP AND CONTROL
Shared sourcing of inputs and value-chains. Increase in ancillary businesses and value-added product development. Locally owned and operated businesses with support from local entities. Workforce development partnerships with businesses for program and certification support.

BETTER LIVELIHOODS
New job opportunities and product development. Expansion of training and certification programs for workforce growth. Increase in childcare services, housing options, and aging services. Greater understanding of the demand for services and gaps in current support services.
Regional Transportation Planning

Legend
Highways
- Interstate
- US Route
- NC Route
- County Boundary
- Municipal Boundaries
- FRRPC Boundary: 2013
- Land of Sky MPO

METROPOLITAN TRANSPORTATION PLAN 2015-2040
FRENCH BROAD RIVER METROPOLITAN PLANNING ORGANIZATION

LAND OF SKY RURAL PLANNING ORGANIZATION
Regional Public Transportation

Goal: Decrease congestion and emissions
- Workforce Transportation solutions
- Vanpools
- Rideshares
- Transit Connectivity
- Alternative fuel fleet vehicles

Public Transportation Support for Buncombe County:
- Non-Emergency Medicaid Transportation Operations
- Mountain Mobility Public Transportation Administration
Regional Realities: Non-Climate Stressors

- Regional growth nearly 7%
- Developing rapidly – 23% increase in Construction jobs in region
- Congestion on roads increasing
- Development & Industry along roads
- City housing costs high – pushes out to region
- Farmland conversion
- Stormwater impacts
Regional Realities: Climate Stressors

- More severe Storms – intense Rainfall, Wind, or Drought
- Wildfires
- Landslides
- Rockslides
- Flooding
- Topography
- Rivers
- Forests
Documented 3,290 landslides prior to 2011
Landslides
Landslides

I-40 Rockslide in 2009 = $10.4M
Economic Impact = $1M/day
Total economic impact = $200M
Landslides

Economic Impact of Rockslides in Tennessee and North Carolina
Prepared in 2010 by HDR for Appalachian Regional Commission

Table 1: Total Transportation Costs of I-40 and US-64 Rock Slides

<table>
<thead>
<tr>
<th></th>
<th>I-40 Rockslide</th>
<th>US-64 Rockslide</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Operating Costs</td>
<td>$56.9</td>
<td>$7.2</td>
<td>$64.1</td>
</tr>
<tr>
<td>Diversion Travel Time Costs</td>
<td>$65.2</td>
<td>$10.7</td>
<td>$75.9</td>
</tr>
<tr>
<td>Emissions Costs</td>
<td>$4.5</td>
<td>$0.5</td>
<td>$5.0</td>
</tr>
<tr>
<td>Congestion Travel Time Costs</td>
<td>$43.8</td>
<td>$3.5</td>
<td>$47.2</td>
</tr>
<tr>
<td>Pavement Maintenance Costs</td>
<td>$4.6</td>
<td>$0.3</td>
<td>$4.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$174.9</strong></td>
<td><strong>$22.1</strong></td>
<td><strong>$197.0</strong></td>
</tr>
</tbody>
</table>

*Source: HDR Decision Economics calculations*
Landslides

Workers block off lanes of I-40 near Old Fort, N.C., May 30, 2018 after heavy rains from the fringes of Subtropical Storm Alberto caused a mudslide Tuesday evening. Chuck Burton, AP
Landslides

June 5, 2018  Henderson County
Major landslide NC 9 – closed indefinitely
Landslides

May 31, 2018  Watauga County
Neighbors heard loud boom ahead of 2 dying in Watauga County mudslide.
Slide hit house, causing gas leak and explosion
Flooding

Storm Alberto moves inland causing mudslides and flooding

Bitmore Avenue in Asheville, N.C is completely flooded on May 30, 2018 as a result of heavy rain throughout Western North Carolina. Thousands of people were evacuated in North Carolina amid mudslides and flooding as Alberto, now a tropical depression, continued its sodden march inland.
Flooding

May 30, 2018 – Asheville, NC
Flooding

Just to illustrate how serious the flooding is in western NC: Water swept an NCDOT tandem dump truck off the road overnight in McDowell County. Two people were rescued. Stay off the roads and avoid flooded areas. If you see standing water, turn around. bit.ly/2Iufu89
Flooding

May 16, 2018 - Wilson Road, Transylvania County
Wildfires

Summer/Fall 2016 – WNC Wildfires
Over 20 fires burning – most due to human & arson
Wildfires
Regional Resilience

What can we do?
Data-driven process to evaluate risk in our economic and transportation assets in the region. This is an implementation of the CEDS and addresses new requirements for the transportation planning processes.

Stakeholder Driven:
- Strategies for reducing community vulnerability and risk to impacts from extreme weather events, climate change, and increasing rates of growth
- Partner with Community groups, municipal staff, nonprofits, agencies
- Critical that process has broad input – under-represented communities are often impacted the most
Regional Resilience
A Cross-Sectoral Partnership

NEMAC, NOAA and other partners have developed a framework to guide communities through the process of planning and implementing resilience-building projects.

Steps to Resilience:
1. Identify threats from climate and non-climate stressors
2. Analysis of impacts to key assets
3. Quantifiable evaluation of exposure, vulnerability, and risk (scoping)
4. Identify actionable and prioritized options

Land of Sky Region:

*Exposure Analysis of Regional Economic and Transportation Assets*
1. Assets exposed to both climate and non-climate hazards
2. Basis for vulnerability and risk-scoping analyses
Social Vulnerability by Census Tract

NOTE: This is a preliminary analysis and should not be used for any official or legal purposes.

DRAFT 5/22/2019


Land of Sky Regional Council
Workforce Commuting by Census Tract

NOTE: This is a preliminary analysis and should not be used for any official or legal purposes.

Data source: Federal Highway Administration, derived from American Community Survey (2006–2010)
Where We Are Now

Next Steps:

1. Include additional threat/stressors to analysis:
   - Energy/Fuel - Pipeline, Natural Gas
   - Water Resources/Stormwater

2. Direct engagement of significantly impacted communities

3. Move to evaluation of exposure, vulnerability, and risk (scoping)

4. Identify actionable and prioritized options

5. Incorporate actions into CEDS, MTP, Mitigation Plans

6. Application to become FEMA Cooperating Technical Partner
Thank you and Come Visit!
Connecting Wealth Creation and Transportation

• Support for economic resilience

• For your region, how does transportation:
  – Build the stocks of the region’s assets, using the 8 capitals?
  – Intentionally address equity and inclusion?
    • How are you addressing equity in your public participation plan?
    • How do the priority projects address equity?
    • How does performance measurement address equity?
  – Support local ownership and control of assets?
Long-range Transportation Plans

• Does wealth creation align with your region’s vision and goals?
• Do you have opportunities to align/brand/combine transportation plans with economic development plans?
• Do you know how transportation supports important economic sectors in your region?
  – What are we asking transportation to do?
  – What gaps or bottlenecks are in the transportation system?
Prioritizing Projects

• How does a project end up being highly ranked for your region?
• How do your criteria stack up against the 8 capitals? Are you missing any capitals?
• Is equity embedded in your ranking system?
• Who is IDing and ranking projects?
  – People who haven’t traditionally been at the table
  – People engaged in building capitals
Public Participation Plan

- Intentionally including people at the economic margins?
- Using accessible language?
- Connecting to outcomes that are meaningful to people?
- Showing how proposed projects build capital and livelihoods?
Support for Economic Sectors

• Does the transportation network (and proposed future projects) support economic sectors identified in the local and regional plans that exist?

• Can transportation do more to support sectors that have a potential for root ownership and control within the region?

• Can transportation do more to promote economic resilience, including planning for mobility in the event of an extreme natural disaster, or changes resulting from an economic dislocation?
Strategies to Sustain Wealth Building

• Start with market demand!
• Choose market opportunities with the greatest “wealth-building” potential
• Connecting community assets to real market demand—
  – Start by serving local demand
  – it may be more flexible
• Find regional customers / demand partners to bring initiative to scale
• Map process and partners from input to end customer (value chain is a great tool)
• Identify the gaps
  – Create opportunities for new entrepreneurs

*Slide credit: Appalachian Center for Economic Networks*
Some Vocabulary

*Supply Chains* focus on the operational steps to get a product from its original form to the consumer.

*Value Chains* focus on adding value at each step to meet consumer expectations.

*WealthWorks Value Chains*, like all value chains, are demand driven, but focus on building local ownership, equity, and multiple forms of wealth.
WealthWorks Value Chains

Traditional value chains focus on financial profitability and the amount of financial value added at each stage of the chain.

WealthWorks value chains consider the whole system and respond to gaps in the market where multiple forms of wealth can grow.
ON THE ROAD TO PROSPERITY

Building Wealth Through A Value Chain

VCs can link local assets to demand

VCs can identify opportunities for strengthening multiple forms of wealth

VCs can uncover more opportunities for inclusion
Sample Value Chain Roles

There are 3 primary types of partners in a value chain, and they each play different roles.

1. **Demand partners** are the buyers.
2. **Transactional partners** are the sourcers, producers, and distributors.
3. **Support partners** provide the transactional partners with technical support and assistance.

*Slide credit: Appalachian Center for Economic Networks*
Value chains do not self-organize

A coordinator should be willing to take on these functions:

• Holds and steward the vision and values
• Builds relationships among and between partners
• Guides activities and partnerships to build multiple forms of capital
• Ensures low-income people and places participate and benefit
• Measurement: develops clear measures early on; focuses collaborating partners and strengthens impacts

Slide credit: Appalachian Center for Economic Networks
Welcome to the Chain!

Value Chain Example

Slide credit: Appalachian Center for Economic Networks
ON THE ROAD TO PROSPERITY

Rural Livelihoods Created
- Financial: Jobs and Income
- Built: Sound structures
- Natural: Fewer GhGs
- Political: Legislative change
- Social: Relationships built
- Intellectual: Utilities change

Wealth Created

Demand
- Residential
- Commercial
- Industrial

PSC (and AG)
- Change Policy
- Change Utility Behavior
- Create Examples
- Communications

KY Legislature
- KYSEA
- How$mart
- E3
- EKPC Collaborative

Strategies
Interventions

Utilities

Supply

Environmental Groups

Slide credit: Mountain Association for Community and Economic Development
Exercise 2: Building a Value Chain

• Using the cards at your table, work with your neighbors to build a value chain
• Start with demand: who represents demand for the product or services associated with your sector?
• Who are the transactional partners? (suppliers, distributors, etc.)
• Who are support partners? (investors, public sector, nonprofits, others)
• Who is missing?
Exercise 2 Discussion

• What surprised you about the value chain?
• How does transportation fit into supporting a particular sector?
• What about your value chain seems resilient?
• Are there gaps and opportunities?
Value Propositions: Who Cares?

• Rationale for why a person or organization/enterprise would want to be involved in a value chain
• What might their role be?
• What do they bring to the table (besides money)?
• How does/could the value chain help them do their work or align with their goals?
Coordinator’s Role

• Who else might or should care about this?
• Why might they care? Ask them: Why do they care?
• Will they help move the dial on the issues that matter to the value chain?
• Track your progress! But don’t worry about who gets the credit.
Exercise 3: Value Propositions

• Using cards from your value chain, role play with neighbors at your table.
• Create a value proposition for each of the cards.
• Consider a role that you and your agency or the potential partners on the cards could take on to advance the value chain goals.
• Share your assumptions about how a specific role could help them do their work or meet their goals—what’s in it for them.
• Ask them if your idea resonates or is off track.
For more information

Integrating Economic Resilience in Performance-based Transportation Planning

January 2018


https://www.nado.org/regional-wealth-creation-case-studies/
For more information

• Case studies, videos, and how-to guides at www.WealthWorks.org

• Brand new videos on selecting a sector to work in, analyzing market demand, and more, at https://www.wealthworks.org/economic-development-resources/wealthworks-videos

• http://www.rupri.org/areas-of-work/nea-lab/

• Additional case studies and evaluation framework coming soon!
Hub Network

- **Rural Development Initiatives (RDI)**: California, Idaho, Oregon, Washington

- **Region Five Development Commission**: California, Idaho, Oregon, Washington

- **RCAC**: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

- **Communities Unlimited**: Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

- **Community Roots**: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont

- **Central Appalachian Network**: Kentucky, North Carolina, Ohio, Tennessee, Virginia, West Virginia
ON THE ROAD TO PROSPERITY

Resources for Regional Planning

Rural Transportation News

Learn about new resources on RTPO planning. NADO awards, safety, health, connected and autonomous vehicles, and more!

NADO Research Foundation Releases 2017 Regional Transportation Planning Organizations Peer Exchange Summary

The NADO Research Foundation has released a summary of the Regional Transportation Planning Organizations Peer Exchange (PDF) that occurred on June 30, 2017 in conjunction with the National Regional Transportation Conference. The document synthesizes discussions that occurred in four smaller groups, which were organized by multi-state region. The summary documents discussions of themes around evolving RTPO planning with new practices and recent successful developments, connecting transportation planning and economic resilience, funding and partnerships, opportunities and concerns from transformative innovation, and participants' hopes.

Regional Transportation Planning Organizations Peer Exchange Summary

Click on the image to view more details.
Resources for Regional Planning

Integrating Economic Resilience in Performance-based Transportation Planning

Planning for Transportation Together: Collaborating to Address Transportation and Economic Resilience

Regional Rural Transportation Planning: State Models for Local Consultation, Regional Coordination, and Regional Transportation Planning Organizations
Contact us

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• National Association of Development Organizations Research Foundation
• ckissel@nado.org
• 202-643-9560
• www.RuralTransportation.org
• www.NADO.org
Who to Engage

- Explorers and planners
- Producers or suppliers
- Employees
- Owners of assets
- Consumers
- Beneficiaries
Proposed Wealth Creation Alpha Metrics

• **Cultural Capital**
  • Stories related to culture and evolving regional identity (qualitative measure; stories are broadly defined; content may matter more than number)
  • Number of successions and new entrants in locally owned businesses in sectors that are important to regional identity (demonstrate new activity in economy)

• **Political Capital**
  • Number of organizations and networks engaged in supporting policy change aligned with value chain strategies
  • Number of policies and programs supporting value chain strategies (to demonstrate systems change)

• **Social Capital**
  • Number of value chain members (measured as organizations/enterprises)
  • Decisions made together by the value chain members (qualitative; this measure demonstrates purpose of social capital)
Proposed Wealth Creation Alpha Metrics

- **Financial Capital**
  - $ of investment
  - Number of enterprises created or expanded

- **Built Capital**
  - Amount of new/improved infrastructure that supports the value chain

- **Intellectual Capital**
  - Number of partners implementing new ideas ("partners" could mean other beneficiaries beyond value chain members; implementation of new ideas will be specific to each value chain)

- **Natural Capital Alpha:**
  - Land: acreage meeting value chain goals (in production, conservation, restored)
  - Watersheds protected or water quality restored due to value chain activities

- **Individual Capital**
  - Change in behavior due to new skills and insights
  - Increased engagement in value chain activities
  - FTE jobs (seasonal and year-round)