



September 29, 2016
Presentation to RDU Airport Staff

Prepared by Rex H Schaberg

My Background / (:>)Bias(?)

- ▶ Recreation Industry (WVA whitewater entrepreneur)
- ▶ MBA Finance (UNC–Chapel Hill)
- ▶ MA Economics (NCSU)
- ▶ Ph.D. Resource Economics (NCSU)
- ▶ Academia: Research joint faculty appointment
 - Duke Nicholas School of the Environment
 - NCSU College of Natural Resources
 - Economics of Non–market ecosystem goods and services
 - Allocation and use decisions involving natural landscapes
- ▶ Semi–retired; Schaberg & Associates, Inc.
- ▶ Umstead runner; Crabtree Park mountain biker
 - Conversation with Jean Spooner (Umstead Park Coalition)
 - My Objective:
 - Urge a reconsideration of aspects of RDUVision2040

RDUVision 2040 RECONSIDERED

Four Elements:

- ▶ Brief review of RDUAA Planning/Triangle Community context from an economic perspective.
- ▶ Overview of a proposal for an RDUAA “Environmentally Friendly Product” Solution.
 - (A work in Progress...)
- ▶ Mechanisms for alternative project implementation.
 - (A work in Progress...)
- ▶ A Hypothetical Economic Example.

Enterprise (RDUAA) Planning: The Economics of Environmental Amenities

- ▶ Land Use allocation projects involving substantial environmental amenities are **inherently adversarial**.
 - Natural landscapes offer public both use and non-use benefits
 - Although environmental benefits are broadly shared, opportunity costs (development foregone) are privately borne by the owners/enterprise.
 - Asymmetry of costs and benefits may result in conflicts.
- ▶ Enterprise response:

autocratic

collaborative



Enterprise (RDUAA) Planning: Crafting Collaborative Solutions

- ▶ Identify non-negotiable RDUAA objectives.
- ▶ Identify stakeholder groups (pro & con).
- ▶ Engage with potentially contentious stakeholder groups.
 - Explore stakeholder-identified conflict issues
 - Invite proposals for alternative solutions consistent with non-negotiable RDUAA objectives.

Enterprise (RDUAA) Planning: Known Stakeholders/Concerns

- ▶ Umstead Park Coalition; Triangle Off-Road Cyclists; Others (?)
 - Area adjacent Old Reedy Creek Road
 - Future of Crabtree Park
 - Expansion of existing Rock Quarry
 - Potential water quality impacts
 - Potential impacts on Umstead State Park amenities
- ▶ Are there opportunities for a win-win solution?

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An “Environmental Product” Alternative: Rationale and Potential

- ▶ The value of environmental goods, services, and amenities has been studied and found to be substantial.
 - Exact valuations are of only academic interest.
 - That these values may be monetized is intuitively understood by marketers.
- ▶ Products capitalizing on consumer preference for “greenness” or natural amenities can be marketed *at a premium*.

“Eco–product development complex” : Idealized Attributes

- ▶ Embedded in natural landscape matrix
- ▶ Augmented by surrounding natural amenities
- ▶ Easy access
- ▶ Potential for high commercial traffic volume
 - Consumer; Corporate
- ▶ Unique, differentiated product
 - => high–end branding
- ▶ Offers an entertainment focus
- ▶ Potential for recreational participation
- ▶ Multiple price points
 - Significantly expands the potential market

“Eco–Product” Complexes

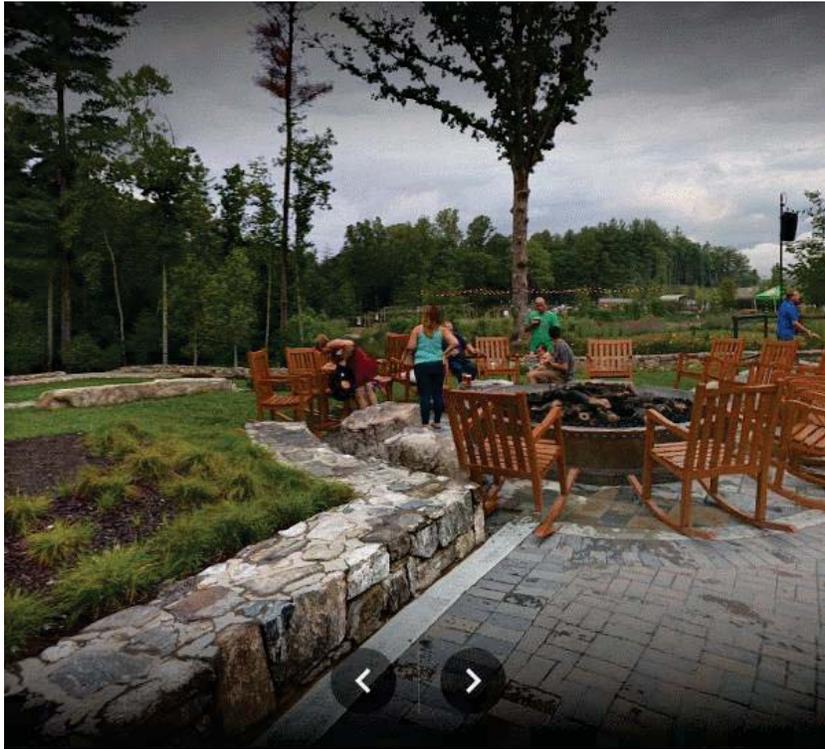
- ▶ **Sierra Nevada Brewery** (Mills River, NC)
 - Nature–embedded
 - Upscale appointments, natural amenities
 - Entertainment: brewery tour
 - Dining: multiple price points
 - Lacks: easy air access; corporate focus; lodging



Sierra Nevada Brewery, Mills River, NC



Sierra Nevada Brewery, Mills River, NC



Sierra Nevada Brewery, Mills River, NC



Sierra Nevada Brewery, Mills River, NC



Sierra Nevada Brewery, Mills River, NC



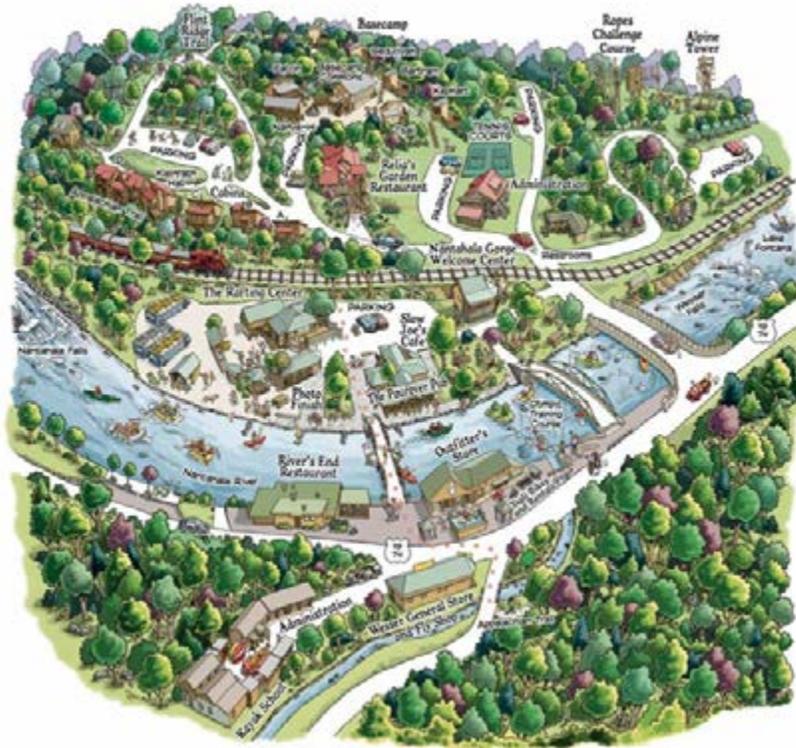
Sierra Nevada Brewery, Mills River, NC



Sierra Nevada Brewery, Mills River, NC

“Eco-Product” Complexes

- ▶ **Nantahala Outdoor Center** (Bryson City, NC)
 - Nature-embedded
 - Natural amenities
 - Entertainment: whitewater
 - Recreation: whitewater; zip-line; mountain biking
 - Simple Dining/Lodging/Training
 - Lacks: easy air access; multiple price points



Nantahala Outdoor Center, Bryson City, NC



Nantahala Outdoor Center, Bryson City, NC



Nantahala Outdoor Center, Bryson City, NC

“Eco-Product” Complexes

- ▶ **US National Whitewater Center** (Charlotte, NC)
 - Nature-embedded, campus natural amenities (limited)
 - Urban, reasonable air-access
 - Entertainment: whitewater
 - Recreation: whitewater; zip-line; mountain biking, climbing
 - Dining/Team building/Conference (limited)
 - Lacks: multiple price points; lodging, corporate focus



US National Whitewater Center, Charlotte, NC



US National Whitewater Center, Charlotte, NC



US National Whitewater Center, Charlotte, NC



US National Whitewater Center, Charlotte, NC

“Eco-Product” Complexes

- ▶ **The Swag Bed & Breakfast** (Waynesville, NC)
 - Nature-embedded, strong product differentiation
 - Exclusive appointments; natural amenities
 - Entertainment: Remote; Smokey Mountain vistas; exclusivity
 - Recreation: hiking; private setting
 - Luxury (\$450-\$900) Dining/Lodging
 - Lacks: access; corporate focus; multiple price points



The Swag, Bed and Breakfast, Waynesville, NC



The Swag, Bed and Breakfast, Waynesville, NC

A “Triangle Eco-Product” Alternative: Rationale and Potential

- ▶ Umstead State Park is a unique urban resource.
 - Old Reedy Creek parcel’s proximity offers developmental “greenness” synergies.
- ▶ RDU Airport is currently perceived as very green.
 - Public comments on RDUVision2040
 - Flight-path observations
- ▶ The Triangle is a vibrant, growing community
 - Well regarded for business in the corporate universe
 - Cary: best city in NC; # 37 in nation (Money Mag.)
- ▶ Opportunity for unique product differentiation
 - Revenues; recreation; environmental amenities; dynamic urban setting



Old Reedy Creek *Potential Site*, Cary, NC



Old Reedy Creek *Potential Site*, Cary, NC



Old Reedy Creek *Potential Site*, Cary, NC



Old Reedy Creek *Potential Site*, Cary, NC

RDU/Triangle “Eco-Product”

(Old Reedy Creek Rd. Cary, NC)

- Nature-embedded, natural amenities
- Proximate to Umstead State Park
- Some upscale appointments
 - High-end corporate lodging; conference center; executive training programs
 - Outdoor education opportunities
 - Traditional corporate leadership and skills
- Entertainment: mountain bike terrain park

RDU/Triangle “Eco-Product”

(Old Reedy Creek Rd. Cary, NC)

...Continued

- Day-Use Recreation: climbing wall; zip line, canopy walk; segway, hiking; mountain biking
 - Recreational trails
 - Destination terrain park
- Dining: multiple price points
 - Overlooking mountain bike terrain park
- Retail: bike shop; micro-brewery; boutique shopping village; ice-cream; segway rentals; bike rentals; music venue
- Lacks: **NOTHING!** (...just pretty much unique and outstanding!)

An “Eco-Product” Alternative: Summary

- ▶ Generate significant revenue for ongoing Airport operations
- ▶ Develop RDU Airport surrounds as a **brand**
 - Attract executives: corporate *destination* for meetings, conferences, and training
 - Easy access through RDU
 - Proximity to Triangle business and cultural resources
 - Adjacent to (and integrated with) Umstead State Park amenities
 - High-end, tasteful business-friendly atmosphere
 - Revenue foundation from corporate destination travelers.
 - Supplement: revenues from local recreationalists, shoppers.

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Mechanisms for Implementation

- ▶ Convene a task-force to explore options
 - RDUAA personnel
 - Stakeholder representatives (Project Ambassadors)
- ▶ Identify developers; investors; enterprises with potential interest
- ▶ Develop detailed business plan and revenue estimates

Mechanisms for Implementation

- ▶ Task-force and project allies
 - Who might be potential Project Ambassadors?
 - Umstead Park Coalition
 - Triangle Off-Road Cyclists
 - NC Nature Conservancy
 - Sierra Club
 - Members of Raleigh/Wake government
 - Members of Durham/Durham Co. government
- ▶ Role of Project Ambassadors
 - Promote, network, create enthusiasm and critical mass to successfully approach investors/developers

Mechanisms for Implementation

- ▶ Identify developers; investors; enterprises with potential interest
 - Who might be interested or excited about this?
 - Jim Goodnight (SAS) or other “deep-pocket” local investors?
 - REI? Great Outdoor Provision Co?
 - Performance Bike?
 - NC Outward Bound/Outward Bound Professional?
 - Other National Executive Training Programs?
 - Developers from Charlotte National Whitewater Center?
 - Local Governments?
- ▶ Conduct a detailed feasibility study; develop a business plan and revenue estimates

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Hypothetical “Eco–project” vs. Quarry Expansion

▶ Critical Economic Considerations

- Amount and growth (if any) of annual revenues
- Duration of Project cash flows
- Potential Impact of inflation

Hypothetical “Eco–project” vs. Quarry Expansion

▶ Impact of inflation

- Quarry is in commodity business
 - “Price taker”; price set externally by market
 - Unlikely to want to “inflation index” lease fees
- Eco–Project is a differentiated product
 - Pricing varies with overall market scarcity
 - Branding, product positioning
 - “Inflation–indexing” lease amounts is not unreasonable
 - Revenue sharing might be possible

Hypothetical “Eco-project” vs. Quarry Expansion

	Quarry	“Eco-Project”
Annual Lease Amount (Revenue)	\$1,000,000 fixed fee	? indexed
Expected Annual Inflation	2.0%	2.0%
Project Duration	20 years	50 years
Net Present Value of Economic Contribution	\$16,351,433	\$16,339,853
Purchasing Power of Terminal (20yr) Payment	\$672,971	?
Nominal Value of Terminal (20yr) Payment	\$1,000,000	\$485,600
Nominal Value of Terminal (50yr) Payment	N/A	\$879,603

Required Amount: \$333,333

Hypothetical “Eco-project” vs. Quarry Expansion

- ▶ Sensitivity Analysis; what if:
 - Ecoproject is unindexed, 50 yr: \$520,000
 - Eco-project indexed; inflation 3.2% (100 year average)
 - Quarry impact (\$14,600,000)
 - Eco-project (\$1,000,000 equivalent): \$300,000
 - Eco-project indexed; inflation 4.1% (50 year average)
 - Quarry impact (\$13,470,000)
 - Eco-project (\$1,000,000 equivalent): \$280,000

RDUreVision Conclusions

- ▶ It may be possible to create a unique asset on the Old Reedy Creek parcel with sustained and growing revenue potential.
 - ▶ It may be possible to co-opt potentially antagonistic stakeholders into a collaborative working coalition.
 - ▶ It may not require as much early years revenue as imagined to make this a superior deal for the RDUAA
 - ▶ **The Next Step** would be to explore the feasibility of a collaborative task force to explore options.
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