

2006 American Trails Conference

Quad Cities, Iowa October 19-21, 2006

Recording of concurrent and keynote speaker sessions by:

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Ontario Attendees:

Rad Whitehead, George Christie, Peter Dunbar – Town of Collingwood
Carol Oitment – Ontario Ministry of Health Promotion
Patti Longmuir, PEL Consulting
David Francis and Frieda Baldwin – Huronia Trails and Greenways

NOTES FROM CONCURRENT SESSIONS

FUNDING

How come US trails are better funded than Canadian Trails? The Federal Highway Administration funds support trail building in the USA up to \$400 million annually!!!

Federal Transportation Funds Benefit Recreation

BY Christopher Dowds, Trails and Enhancements Program Manager, Federal Highway Administration (FHWA).

- The FHWA program provides financial assistance to the States to construct and improve the national highway system, other roads, bridges and trails.
- The program provides access to and within national forests and parks, Indian reservations, and other public lands by preparing plans, letting contracts, supervision construction and inspecting bridges.
- The FHWA conducts and manages a comprehensive research, development and technology program.

FHWA initially only dealt with interstate building, but in 1991, they started to fund pedestrian and bicycle trail projects and currently spend \$400 million annually for pedestrian and bicycle related facilities, which will increase with new Safe Routes to school Program.

Recreational Trails Program uses funds generated from federal motor fuel excise tax paid by OHV users. Recreational trails funding will rise from \$60 million in 2005 to \$85 million in 2009.

Pedestrian Safety is one of the FHWA's "Vital Few" priority areas.

Key programs for trail projects

- Federal Lands Highways Program
- Surface Transportation Program (STP)
- **Transportation Enhancements (TE) Activities**

- Safe Routes to School (SRTS)
- Congestion Mitigation and Air Quality (CMAQ)
- National Scenic Byways Program
- **Recreational Trails Program (RTP)**
- TE and RTP can support Youth Corps

Which fund a broad range of eligible projects from highway construction to pedestrian and bicycle projects and transportation trails. SRTS projects are eligible within about 2 miles from elementary or middle schools, and may include trails.

Surface Transportation means all elements of the intermodal transportation system, exclusive of aviation. For the purposes of TE eligibility (see below), surface transportation includes water as surface transportation and includes eligible activities related to features such as canals, lighthouses, docks or piers connecting to ferry operations, as long as the proposed enhancement otherwise meets the basic eligibility criteria.

Transportation enhancements (TE)

10% of STP: \$800 million per year (2005-2009)

12 eligible categories for surface transportation:

1. Pedestrian and bicycle facilities
2. Pedestrian and bicycle safety and education
3. Scenic or historic easements and sites
4. Scenic or historic highway programs
5. Landscaping and scenic beautification
6. Historic preservation
7. Historic transportation building, structures or facilities
8. Railtrail conversions
9. Inventory, control and removal of outdoor advertising
10. Archeological planning and research
11. Mitigate highway water pollution and wildlife mortality
12. Transportation museums

The program is administered by State Dept. of Transportation. Each state has its own project selection process. State requirements may be stricter than Federal requirements. States are encourage to use Youth Corps. See www.fhwa.dot.gov/environment/te and www.enhancements.org.

Enhancement funds are only available for surface transportation projects, not for your typical recreational trails in the back country. It has **to provide a transportation link**. A railtrail is typical because it links communities.

Project does not require that the trails be paved, although TE-funded trail projects must have a firm and stable surface to meet accessibility requirements. Funding is also available for putting bike racks on buses, build parking facilities for bikes, Project sponsors must include various interested groups in the project development process, such as equestrians and other trail users, historic preservation advocates, etc.

Funding is a cost share program, with 80% federal share/sliding scale, with some flexibility (can be as high as 95%, particularly in the west)

Recreational Trails Program

Funds to develop and maintain recreational trails for all trail uses. (Only FHWA program to support routine maintenance).

Funding will raise from \$60 million in 2005 to \$85 million in 2009

Funds distributed by formula to States, www.fhwa.dot.gov/environment/rectrails/recfunds.htm

Represents a portion of the Federal motor fuel excise tax paid by OHV users.

Eligible projects

1. Maintain and restore existing trails (and bridges)
2. Develop and rehabilitate trailside and trailhead facilities
3. Purchase and lease trail construction and maintenance equipment
4. Construct new trails
5. Acquire easements or property for trails (willing seller only)
6. Trail assessments for accessibility and maintenance
7. Trail safety and environmental protection education
8. State Administrative costs

Each State has a State Trail Committee to assist with the program. Committees represent both motorized and non-motorized recreational trail users. Trail committees help trail groups cooperate and communicate with each other. Partnerships lead to better projects, and better maintained trails.

See also www.funoutdoors.info/rtp/home.html for the Coalition of Recreational Trails for the RTP Database.

Funding is 80% federal share, sliding scale (can be as high as 95%, particularly in the west). RTP may be matched by other Federal funds. Matching can be from other govt. levels, schools, non-profit and for-profit organizations.

How to get funds?

- Contact state RTP or TE Administrator
- Develop a workable, realistic project
- Get public support\Develop funding sources and donations
- Consider Youth Corps involvement
- Youth Corps: seek out project sponsors
- Design a good design: consider trail setting, community benefits, user needs, accessibility
- Consider potential problems: environmental impacts (Wetlands, endangered species, archaeological impacts, etc.), permits, public opposition (liability, property rights, safety, environmental impact)
- Complete project application
- If approved get to work...
- Submit an invoice if you want to get paid!

In 2005, the Surface Transportation Program was re-authorized through the Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU), which increased the funding and allowed changes to allow tribal eligibility.

For more info: www.fhwa.dot.gov/environment/rectrails/rtpstate.htm

And www.enhancements.org

There is also a fund for Highway Bridge Replacement funds (HBR) as well as funding from the Congestion and Mitigation & Air Quality (CMAQ), which are all funds set aside from federal transportation and can be used for trail building, etc.

OTHER FEDERAL/NATIONAL TRAIL SOURCES

National Trails Training Partnership www.nps.gov/nts

NTP is an alliance of federal agencies, training providers, nationwide supporters, professional contractors and providers of products and services. They offer:

- on-line training catalogue
- access to trail related resources

What is hot?

New skills in 2006: nationwide (USA) training

Accessible Trails Workshop: understanding accessibility and building better trails

Marshall University OHV Management courses

The Colorado outdoor training initiative

Etc.

Publications

Go to www.fhwa.dot.gov/environment/rectrails/publications.htm to find resource material which can be downloaded or ordered:

- Trail Planning, design, construction and maintenance guides
- Mechanized trail building equipment web site
- Technology and development program trail publications
- Technology and development program recreation publications
- Trail Accessibility guidelines
- Stabilized Engineered wood fiber for accessible trails
- Trail bridge catalog (this website is intended to help select trail bridge types, decks, rail systems, abutment systems, and materials)
- National trail drawings and specifications
- Manuals and guides for trail design, construction, maintenance, operation and signs
- Accessibility: designing sidewalks and trails for access
- Accessible sidewalks and street crossings
- Characteristics of emerging road and trail users and their safety
- Conflicts on multiple use trails
- Rails with Trails: lessons learned, current practices, conclusions (a research report about rails located near railroad and transit right of ways).
- Evaluation of safety, design, and operation of shared-use paths (coming soon!)
- Snowmobile Safety Resources
- Fuel used for off-road recreation: a re-assessment of the fuel use model (provides estimated of the relative amount of off-road recreational fuel use by State)
- Recreational Trails Program Database

Also, the US Dept. of Agriculture services provides resource materials on its website www.fs.fed.us/eng/t-d.php (user name t-d, password t-d), such as Basic Trail Maintenance, Handtools for Trailwork video, Constructing Trail Switchbacks, Preservative-treated wood and alternative products, Building Mountain Bike Trails- sustainable singletrack, Accessible Gates for Trails and Roads, Accessible Gate Latches, Improved ATV Cattle guards, etc.

TRAIL DESIGN

Planning and designing for trail safety

This session provided an overview of the state of the art in accident and crime reduction on trails.

Building and managing safer trail

by Bob Searns, Chair, American Trails

Trails are more crowded. "When you build them they will come".

Issues:

1. Areas of concern
2. Accident prevention
3. Crime and security
4. Conflict and reduction
5. Liability
6. Public perception of trails and trail safety.

Putting risk in perspective

Any activity has risk: boating, skiing, skating.

Some risk may be unnecessary and obvious.

Some risk not obvious to the sport (i.e.. bear on golf course)

Planning and design

Trails should conform to design standards, esp. trails for multiple use.

AASHTO (American Association of State Highway and Transportation Officials) Guide is available on the internet (<http://bikelib.org/roads/aashto.htm>) and provides national (USA) standards. Reference manuals are available at

<http://www.fhwa.dot.gov/environment/rectrails/manuals.htm#aashto>

Trail width: min 8 ft (10 ft for horses)

Separate uses (walkers, cyclists) where possible

A study on crashes by facility type found that it is more dangerous to be injured on a trail versus on a road, but the crashes on trails are not deadly. The rate of accidents has dropped, likely due to better design

One of the most dangerous things are rideouts where trails and roads meet.

75% of all trail accidents happen at junctions, intersections.

However, a side path to a road way (i.e. on a bike lane) is the most dangerous place to be for a cyclist.

Guiding principle – the Daughter test: ask yourself: "would a child feel safe on this trail?"

Documentation, data and info sharing

We need to start collecting the data, elicit user and public input and engage GIS and GPS technology

Next steps

1. Promote national reporting, data standards and information sharing
2. Trails safety forum to include incident and accident reports, follow up and remedies
3. AASHTO guide should be updated

Design that deals with conflict

By John Pflaum, ASCG Incorporate

Case study: Mary Carter Greenway (Denver)

- o Lane striping to divide the uses
- o Widen path
- o Parallel trails along paved trail for walkers
- o Construction of a dual trail: lime stone for walkers beside concrete for cyclists
- o 18 inch separation

Constraints: trees, bridge underpass, etc. where we may have to reduce 8 ft trail to 5 ft, Build a retaining wall, to gain more width.

Ideally, take crusher fines path completely away, which will also allow for a much better experience for all users

Underpasses are extremely difficult, because widening may not be possible and may be restricted by floodway guidelines. It may be possible to move the abutments.

Where paths connect: install rumble strip on the crusher fine path to avoid fines going onto concrete path. Note: difficult to find rumble strips that are safe for rollerblading.

Roundabouts

Use them for traffic calming (i.e. slow down bikes) at trail junctions

Make sure to landscape roundabout, or users will go straight through.

Lane striping, safety marking and signage

Speed limit 50 km

Way finding signs at approaches and intersections

Jefferson County (Colorado) Trail User Guidelines

By Kim Frederick, Jefferson county Open Space

Passive use: walking, cycling, equestrian

Currently experience 1.5 million visitors in 15 parks, 195 miles of trail

Imposed a 0.5 % sales tax to raise trail building funds

Identify primary uses (urban/rural, multi-use, motorized vs. non motorized, others)

Design trail to meet the needs of the most demanding use type

Use existing design and standards where possible

Create opportunities for clear communication with trails patrols

Sustained grade should not exceed:
Hiking and interpretive trails 10-12%
Cross county 8-17%
Equestrian: 8%

See: American trails website www.americantrails.org for guidelines for technical drawings in CAD and PDF, etc. Also, check the website of the Bureau of Land Management and of the Federal Highway Administration.

Use existing design and standards when possible
Guidelines vs. standards (a court judge will decide). If you have standards, you have significant more exposure then when you just have guidelines.

Create opportunities for clear communication with trail patrols
Be consistent with your communication
Establish multiple methods/media (for different situations, environment, rural vs. urban, etc.)

Adaptive management (learn from your mistakes)

Maintenance management

- whatever you build, be prepared to manage it
- have a plan
 - o regularly scheduled light maintenance
 - o heavy maintenance projects
 - o trail inspections
- documentation

Engage volunteer trail inspections (they have to walk 3 to 5 km on a regular basis)

Liability & Risk

The State of Colorado is being legally obliged and responsible

Exposure for the chance of injury or loss caused by a hazard or dangerous chance

Marking Trails: An innovative response to trail emergencies

By Graham Mark, Project Engineer, Lamp, Ryneanson & Associates

Project sponsored by Rotary clubs of Omaha, this Centennial project was to Celebrate 100 years of Rotary while fulfilling an important need for their areas. They selected a project that all clubs could participate in. They selected a trail marker project that helps identify the exact location of an accident for EMS purposes.

The markers are embedded into the asphalt (the trail is groomed in winter), epoxied in, and flush with the trail surface. The markers are placed at 90 degrees to the trail direction, so users from both sides can easily read it.

The marker includes

- name of trail
- sponsor name (Rotary)
- mileage from main street
- direction from main street, i.e. 1.1K south (1.1 mile south of X road on Keystone trail)

Mile markers are incorporated into the 911 system so emergency responders can pinpoint the location of an emergency or accident.

OFF ROAD VEHICLES – Approaches to manage and increase OHV opportunities

Massachusetts ORV Model

Presented by Gary Briere and Rebecca Barnes of the Massachusetts Department of Conservation and Recreation (DCR)

The explosion of ATV and ORV motorcycles sales has challenged land management agencies to protect sensitive natural areas, separate incompatible uses, and provide appropriate motorized trail opportunities. This challenge is particularly acute in eastern US states, where open space is precious and controversy over motorized access is plentiful. With nearly 100,000 motorized trail vehicles in operation in Massachusetts and nearly 200 miles of motorized trail, the state's forests and parks agency has developed a three part strategy to transform an escalating problem into a sustainable management model.

ORV (ATV + motorcycle) sales increased from 2500 in 1995 to 11,000 in 2004!
ORV population reached 85,000 in 2004, 59% male, 40% female.
40% are under 30 years old

Why ride?

- spending time with family and friends
- adventure
- challenge
- viewing scenery
- wildlife viewing

Massachusetts currently has only 185 miles of motorized trails. While most riders appreciate having legal trails, some acknowledge that only the most skilled riders can tackle the existing trail systems.

Poor design, construction and maintenance have created environmental degradation, and unsafe riding conditions.

To remedy partnering rider organizations invest over 400 hours each year to maintain trails and educate riders. However, the current system's challenges are beyond the capacity of available resources and the most dedicated volunteers.

So, is the solution to Just Say No?

- 90,000 households are seeking access to outdoor recreation
- Prohibition has proven to be ineffective
- Other states are demonstration that motorized trail use can be a component of a sustainable trails program.

An ORV working group was founded and asked to advise on three critical questions:

- What criteria should be applied to assess potential sites for ORV use?
- What design, construction and maintenance standards are required for a sustainable ORV trail system
- How do we fund the system we desire?

Three elements of effective motorized trail recreation management:

- legal and appropriate areas to ride

- effective enforcement (against illegal riding)
- consistent education from manufacturers, dealers, clubs, riders, govt. agencies

1 Legal and appropriate areas to ride:

- environmentally sustainable
- safe for rider and the community
- close enough to be attractive
- public or private land

A biomap was used to identify sites critical for the long term survival of biodiversity (rare animal habitat, rare plant habitat, natural communities). The Living Waters reports were used as well.

Resource protection areas (forest reserves, wildlands, wetlands) are prohibited.

Grade limitations:

- 40% max general terrain
- 30% max for trail layout

Environmental and resource protection: specific trail layout avoids soils restricted for trail development and slopes in excess of 30%

Trail facility design has to meet standards for design, construction and maintenance

Trail facility operation and management plan addresses operation, funding, maintenance, monitoring, enforcement.

Riders wish list:

- attempt to provide 60 or more miles of trails in each trail system
- provide an all day ride as a minimum
- want to ride more than commute to get to trail

Principles of good trail design

Primary challenge of trail designers is to protect and conserve natural resources while meeting user's expectations. (Source PA DCNR Trail Design Manual)

- trip is the purpose – give users trails they want to stay on, not ones they have to stay on
- build for rider safety and reasonable challenge
- provide multiple levels of difficulty – stacked loop design
- vary trail alignments – control speed with curvilinear design
- use contours to advantage and side slop to facilitate positive drainage across trail
- avoid ridge tops and fall lines – easily erode
- avoid flat poorly drained areas, meadows and open areas

Management options

- Public land / government operation (balance resource protection with sustainable use, supported by tax revenue, grants, fees... not for profit)
- Public land / lease to private or club (balance resource protection with sustainable use, for profit operation contingent on operating agreement and restrictions)
- Club-land/club operated (members build, maintain, operate, re-invest into trails, resource protection may be compromised)

- Private land/ private operation (for profit operation, resource protection may be compromised)
- Hybrid model (for profit, self-sustaining, resource protection, volunteer involvement, operating agreement, commitment to cooperation)

2 Enforcement

- a. Increase funding and patrols
- b. Increase penalties
- c. Require written landowner permissions

Enforcement penalties:

Non Registration \$ 100-\$500

Trespass \$100 - \$500

Improper equipment \$100 - \$500

Failure to stop \$500 or 60 days

3 Education

- a. Consumer product safety
- b. Commission launches major campaign to drive down death and serious injuries associated with All Terrain Vehicles. See <http://www.atvsafety.gov/> which uses the slogan "Before you hit the trails, Take knowledge to the Extreme". Like other activities involving high speeds and heavy machinery, riding an ATV can be risky. To help stay safe, follow common sense safety tips. Take knowledge to the extreme and learn more about these important tips for safer riding:

- | | |
|-----------------------------|----------------------------------|
| • Get trained | • Don't ride tandem |
| • Wear a helmet | • Don't ride on pavement |
| • No children on adult ATVs | • Don't ride under the influence |

Options:

- Partner with clubs, dealers, manufacturers and multiple levels of government officials to communicate consistent message
- Required Rider Safety Training
- Club Day and Volunteer patrols

Paiute ATV Trail (Utah)

By Max C. Reid mreid@fs.fed.us, Public Service Staff, Fishlake National Forest

The Paiute ATV Trail in South Central Utah is a 238 mile loop trail formed by linking old roads and trails in the Fishlake National Forest and adjacent land, that connects to 1000 miles of marked side trails and 1500 miles of side forest roads and trails.

History

The Paiute ATV Trail has been open for 16 years.

Forest Services were closing routes to protect resources in the early 80's.

Sportsmen wanted ATV use to continue getting to their favorite hunting and fishing spots.

At the same time, tourism was looking for destination recreation opportunities to draw people with money.

Solution

Tie the area to the community via a 238 miles trail, which accesses an additional 550 miles of designated side trails, and links 16 communities in 4 rural counties. The trail ranges from 5000 to 11500 ft of elevation

The Paiute Trail links with the Great Western Trail (Mexico to Canada), and to many other trail systems totaling 3000 miles, forming the largest interconnected motorized system in the USA.

If you give users a quality trail and quantity of places to ride, it's a win win for everybody:

- Win for the sportsmen (access to hunt, fish, camp, etc.)

- Quantity and quality to ride

- Win for tourism and development, because unique area to come ride, have fun and spend \$\$\$\$

What can you see along the Paiute?

3 state parks, all kinds of historical sites, wildlife, etc.

The trail is multi-purpose

- 10% of use is horseback, hiker, mountain bike and full sized ORVs (jeeps).

- The word ATV should be taken out of the name of the trail.

- 10% is motorcycle

Trail committee (50 active partners)

- Forest services and Bureau of Land Management (BLM)

- Utah state parks and recreation (3 parks)

- Economic development of 4 counties

- Communities (initially 12, now 16)

- Law enforcement

- Public health (provide healthy and safe environment)

- Clubs and riding groups

- Business

- Fishlake Discovery Association

Committee accomplishments

- Sold idea to counties and communities

- Selected name and symbol (rockart design)

- Mapped the system (main trail and side trails)

- Marketed the trail – developed brochure

- Map – can't navigate or ride it without a map

- Funding – grants, donations, fundraisers

- Volunteers and Trail Hosts help with inspections, report problems, clean up, etc.

- Marked the routes

- Win/win solutions to problems – proactive

Trail use

- 1990 start to 80,000+ in 2006

- Youth of all ages (children and adults)

- Gray wave (seniors)

- Family touring on mountain trails

Were do they come from?

2006 Rocky Mountain Jamboree had 616 participants from all states, and abroad

National survey – what does the future hold?

Vehicle sales: trend lines continue dramatically

Units build and sold

1999 700,000

2001 1 million

Nationally (1998)

Sales, services and accessories \$6 billion

Taxes, salaries, financing \$1.94 billion

Trip expenditures \$10 billion

Total economic value \$18 billion

Additional facts

Weekend, spring, summer and fall

Camp, hunt, fish

27% use ATVs to hike and backpack to get to back country

Average age is 40

Annual income is \$60,000 (1998 data)

Trail economics

80,000 riders – 60% come from outside area

Average rider spends \$110/day to ride

Trail brings \$5 million to area

Other indicators

Highway 89 bisects trail

Highway use was down 60%

Room tax revenue was up 20%

Less cars going through the county, but more tourism dollars

Mid 80s Marysville had 7 businesses

Today there are 21, mostly associated with the trail

Mayor was a trail advocate and built a campground

1996 20 units

2006 107 units

Weekend spots for next summer – already fully booked

Problems along the trail

Vandalism

Resource impacts

Rider and public safety concern

Funding

Right of way issues (how to get trails linked across private land)

User conflicts (just a few)

Community problems

.... All can be resolved

Problem resolution

- Trail committee
- Search out and implement solution
- A cattle guard design that works
- Trail hosts to adopt a segment of trail
- 4 Trail rangers patrol the trails
- Souvenir stickers, buckles, pins, etc to raise funds
- ...Partnership in its purest form

Success of the trail is due to trail committee

Summary

- Tool: put riders in the right places
- Quantity and quality place to ride and have fun
- Riders spend money
- Bigger, better, more and faster – they are coming
- ATVs are coming... babyboomers are coming
- Partnerships can and do make things happen.

Rock Run Recreation area (Pennsylvania)

By Adam Mattis, Greenways and Trails specialist, PA Dept. of Conservation and Natural Resources

The Rock Run Recreation Areas is a 6,000 acre motorized recreation area, managed by the PA Dept. of Conservation and Natural Resources, which will become the premier ATV Park in the State with over 150 miles of trails, 4 motorcross/ATV tracks a training facility and welcome centre.

The property was a coal mine prior, now used for recreation.

Initial concept

- Environmental stewardship: give riders an appropriate place to ride
- Protect sensitive areas
- Remediate past mining problem through innovative techniques
- Preserving open space through acquisition and ownership

Expanded opportunities

- 6000 acres – 160 miles in rural Pennsylvania,
- next to another 6000 acres of state park

Economic development

- Economy is dead in old mining towns
- Recreation can give them a new chance

Opportunity – partnerships

- ATV council
- Department of heritage
- County agency (owns property)

History

2002 coal mine company went bankrupt
\$4 million dollars reinvested in property
\$2 million used to buy the property

Lots of pressure in the state to provide places to ride
It took 2 years to open the park

PA has very large ATV population
250,000 registered riders
Personal property use: free
Recreation: \$10 licence fee annually
Dealer registers new owner

Rock Run Recreation Master Plan

Vision:

First class motorized recreation provides facilities and activities to meet the various needs of motorized sport enthusiasts.

Goals

Safety and security
Experience – keep user interested
Fun
Environmental friendly (machine is environmentally friendly, but rider is the problem)
Financial – area has to be self sufficient through user fees

Issue

1800 area watershed area: no trail allowed in it to protect ground water

Layout

- o South entrance
- o 250 acre campground with full hookups, and group camping area
- o Track facility for speed races, drag races, etc.
- o Had to build a new \$900,000 entrance road
- o Visitor centre: administration building for registration, class rooms
- o Safety training facility (riders under 16 must have safety certificate)
- o Maintenance facility
- o Main parking lot incl. storage facilities (to store stuff in between visits), buggy wash to rinse machines off (control where the dirt goes.. also stops dirt from falling off on the county roads)
- o Practice facilities (no racing/competition as too expensive to insure)
- o Hill climb training area
- o Trails are graduated width, depending on the difficulty of the trail
- o Trail design incl. 3 water crossings at very high angles (cannot get in the water, because ravine is too narrow and steep)
- o Set area aside for 4 x 4 trucks as additional revenue generating since entire facility is a 'pay to play' area
- o Roads are used for general use (shorted distance to go from A to B)

Construction costs and phasing

\$18 to 20 million

Target market: 500 mile radius to draw visitors from

Revenue

Park generated revenue: gate fees, annual passes, sponsor fees, merchandise, concessionaires, events

Non recreation related revenue should be considered to supplement the parks income

Seasons

Shut down for high power hunting season

Opening up again in December, shutting down in spring thaw

Expected use

2007 5000 riders

2011 25,000 riders

Construction phase 1

Access road

Admin centre: public restrooms, board room, storage areas. Blue roof will blend into sky, since facility is high up.

Huge parking lot (away from property owners, with large turn opportunity through adjacent driveway)

50 miles of track in phase 1

Layout

Tracks are two-way system with passing zones (to slow down speeds, as two-way are safer than one way systems)

Rolling dip designed to drain water, but also add fun

Easy trails are 8 ft wide

Medium 6 ft

Difficult 60"

Over 50% under tree canopy

Agency required sediment tracks at rolling dip

None of the trail is armored at this point.

One of the more difficult trails is a rock climb (constantly tossing)

Lessons learned

Partnerships are great

Capacity: county champion, partner that has staffing

Funding: diversify funding sources

Inter agency cooperation

Public participation

Volunteers

Realistic timelines

Gate fees:

\$15 per day, \$37 for 2 day, \$250 annual family pass

GIS MAPPING

Designing Trail Layouts Using GIS Software (without ever leaving the office)

By Dale Weigel, Hosier National Forest, dweigel@fs.fed.us

What do you need?

- GIS software, such as ARCGIS
- Data layers
 - o Digital elevation model (DEM)
 - o Property ownership
 - o Trails
 - o Roads
 - o Utilities
 - o Water lakes and streams
 - o Areas to avoid - cliffs, wetlands
 - o Areas to see overlooks
 - o Soils layer

DEM – converted topo lines

Ownership layer shows which areas are public land, or not

Roads and Trails (design trail route so the trails stay further away from busy highways, etc.)

Process the data

2 Different types of data: raster vs. vector

Raster: pixels to display your data

Vector: mathematical formulas for the computer to use

Rasters are easier to work with

Need to know what datum data is in

Left bottom of topo map shows datum that was used

1983 datum is used mostly, however, Canada uses NAD1927 (North American Data = NAD)

Clip layers

Clip data for a reduced area that you want to work on, otherwise it will slow down the work process, as it works with the entire data file

Reclassifying = most important step

Choice of new values

Non-monetary or monetary

(Roads + Slope) * ownership = total cost of crossing each pixel

Roads: create buffer zones (example 30 meters on either side of the road) to keep trail away from noisy highways, but allow the trail to cross the road, if necessary.

Give a higher value to areas that are more desirable.

Ownership: classify between public land (1) or other (0)

Pixels will show private ownership, roads, etc.

DEM

Have to turn data into pixels, and figure how much slope there is.
(the darker the area, the flatter, the lighter to steeper)

Convert slope to categories, such as cost to cross pixels

Slope of -1 ... value of 3 (very flat, water will not run off)

Slope of 1-6% ... value of 1

Slope of 6-10 ... value of 2

Slope of 10-15... value of 5

Slope of 15-20% ... value of 100

Slope over 20%value of 1000, i.e. very expensive to build as too steep

Need to calculate total cost to build a trail across the pixels

Need to enter a point layer to show where to start from and end.

Reclassify total cost layer from start to end, using the shortest distance, weighted cost

First result may show a route that follows the roads, because the roads were built to follow the path of least resistance. So you may want to proceed to the next possible route, or the next.

You can also design the software to find logging roads that may be suitable, etc.

You should also create a buffer for streams, wetlands, similar to roads.

You can turn your route into a profile, to show % slope (elevation), and show you areas of concern (i.e. too steep)

Next step is to load GPS and go to the field. Use topo map as well.

Load into ArcScene and display it in 3D.

Technology and Development Centers

James Groenier, Missoula Technology and Development Centre

Centre serves the National Forest System

Focus on needs of field employees

Applied technology, not research (will use what is on the market)

Responsive to funding sponsors

Accessibility Guidebook for Outdoor Recreation and Trails

A user friendly guide that implements FSTAG and FSOAG guidelines

Issued in 2006, electronic version only

Accessible gates

The Center developed an accessible gate design that allows wheelchairs, horses, and pedestrians, but not motorized traffic. Completed in 2006. Can be downloaded.

Keeping volunteers safe

Volunteers are at risk, and need to be protected.

Guidebook includes:

- Starting a volunteer program
- Volunteer recruitment
- Project planning
- Appropriate equipment and PPE (personal protective equipment)
- Training and supervising
- Awards and recognition
- Injuries
- Discipline and evaluation

Equestrian trail design guidebook for Trails, Trailheads and Campground

Planned for completion early 2007

Contents

- Urban interface equestrian trails
- Trailhead facilities for horses
- Campground facilities for horses
- Equestrian trail planning
- Liability
- Accessibility for persons with disabilities
- Gates and fences

Training to safely operate specialized equipment

The Center identified print, visual, and web media to help train employees to safely operate:

- 15 passenger vans
- 4wd vehicles
- ATVs
- Off road motorcycles
- Snowmobiles
- Trailers

Available 2007

Mechanized trail building equipment website

Web based sourcebook of mechanized trail building equipment that lists equipment by type with links to manufacturers' equipment. Also hosted on FHWA Recreational Trails Website

All terrain vehicle trail trailer

Developed a new piece of equipment designed to trailer equipment, such as to spray liquid dust control agents that can be towed by an ATV. Trailer has a dump bed with a hydraulic lift

ATV Trail Cattle Guard

Longer structure than previous model. 6 inches between bars instead of 4 inches. Proper object marker placement. Report and drawings available from website.

ATV Trail Rake

Redesigned in 2006 with new features

- Side sifter capabilities
- More dependable electrical systems
- Upgraded wheels
- More rugged
- Mini joystick on handlebars to operate
- Higher lift

Completed. Looking for manufacturer. Fabrication drawings are available. Weight 480 lbs

Effects of ATVs on soil properties

Demonstrates vehicles and tire combinations of ATVs that produce low, medium and high levels of soil disturbance, quantify erosion complications, etc. Ready fall 2006.

OHV Design Guide

Manual to assist in planning, design and maintenance
Should be available 2007

TRACS field guide for trail assessment and condition surveys

This illustrated small format field guide contains photos of all trail structures to help people to be consistent with trail survey. Not ready yet.

Trail bridge assessment

Guide to help field personnel establish condition of a bridge. Should be ready 2007

Micro blaster evaluation

- A good alternative to blasting for medium sized rocks
- No blasting certification is required.
- Requires 5/16 inch hole by 9 inches deep
- Using BMS Micro-Blaster for Trail Work
- Similar to Boulder Buster but smaller
- Equipment cost: USD \$5000 for Boulder Buster, Micro blaster costs much less

Building Mountain Bike Trails

Sustainable single track DVD in visual format that compliments IMBA's trail design and construction guide, Trail Solutions. Completed in 2006. DVD is available through FHWA

Building Mountain Bike Trails

- Sustainable singletrack
- Building partnerships and gaining permissions
- Trail building basics
- Building technical challenge with natural features
- Maintenance and reclaiming trails

Trail Bridge Catalogue

- Will be updated in 2007
- Available from t-d website of USDA Forest services

Selection and use of preservative treated wood and alternative for the Forest Service

- Oil based and waterborne preservatives
- Alternative to treated wood, shows allowable uses on CCA wood
- Handling and construction
- Corrosiveness of treatments
- Disposal
- Best management practices

Completed 2006 – free download from t-d website

Crosscut saws

Saws that sings – a guide to using crosscut saws

Selection, care, maintenance and safe operation of crosscut saws

Available now. Old vintage saws (50 years old) are best . There are no new ones.

An axe to grind... also available

Tree climbing and Rigging

To move large rocks, trees, etc.

Course offered by California State

Wilderness and backcountry site restoration guide

Developed reference guide on techniques and methods for restoring small scale impacts in backcountry and wilderness areas

Available in electronic form from website (500 pages)

- describes wilderness impacts
- Overview of plant and soil ecology
- Planning for restoration
- Art and science of restoration how to do it
- Equipment for restoration

Riparian restoration of recreations sites

To crate awareness of riparian values, what riparian ecosystems are for, etc.

Portable electric pedator = deterrent fence

Instructions for assembly, use and standards for field testing

Sign and poster guidelines for forest services

Completed and available on CD, or on website in 2006.

Comprehensive guide for trail signing (in chapter 4)

Currently only available for Forest Service staff

Trail construction and maintenance notebook

Updated and re printing guide by end of 2006. Is available electronically as well

Also avail from FDHA website

Fibre reinforced polymer (FRP) trail bridges

Study includes design and specification, testing, installation, maintenance and inspection

Currently, widely used, lightweight (largest is 90 lbs). Fibre glass is a composite of polymer resin matrix and reinforced by glass fibres

Advantages:

Light weight, high strength, resistance to corrosion, fast and easy installation due to modular components

Disadvantages

Higher cost of material compared to wood

Low modulus of elasticity leads to a deflection controlled design (does bend, giving someone the feeling the structure will fail)

Currently available designs are proprietary

Enviro-mechanical performance must be considered (temperature conditions effects, creep, impact loads, etc.

Limited FRP experience within the construction design industry

Lack of design standards and codes
Lack of performance history (only 10 years history)

Costs

Timber is still the lowest cost, but due to access issues, FRP may be an option, but same or cheaper than steel. Steel is typically twice as heavy as FRP. Decking can be timber, or FRP.

This guide includes guide to planning, ordering and installing FRP trail bridges, and forest service requirements, as well as considerations before ordering. FRP can also be used for a deck beam for a boardwalk.

Bridge parts can be carried in by equipment or by hand, or flown in.

Further testing is required, but does seem to meet the need for lightweight, strong, esthetical bridges in remote areas.

Guide is available from website, as well as many other T&D reports: <http://www.fs.fed.us/eng/t-d.php> (User name: t-d, password: t-d)

RIVER TRAILS

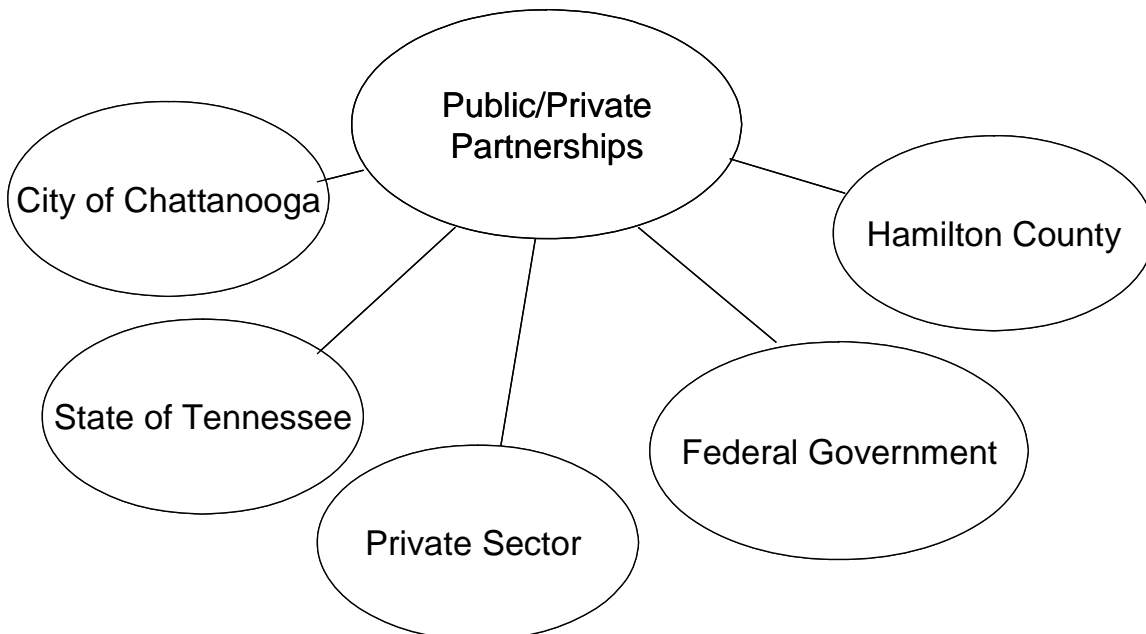
Return to the River – Riverwalks that Transform Communities

Recorded by Cory Kulczycki

The Chattanooga Renaissance - by Alison B. Bullock

- In the early 80's downtown Chattanooga was in decline, a victim of suburban flight. It was a city disconnected from its river, a 4 lane highway separated the downtown from the river.
- Vision 2000 was established in 1984
 - o More than 1700 individuals participated in public meetings to reach a consensus on development plans.
 - o Started an organization called the RiverCity Company in 1986
 - Capitalized on \$12.3 million
 - o Goal for River Trail was to be a world class trail.
- Major Milestones:
 - o Tennessee Riverwalk opens May 1989 (2 mile section).
 - First section was on mostly public land away from the downtown.
 - Also developed River Park with fishing, piers, shops and amenities.
 - o Tennessee Aquarium opens May 1992
 - \$4.5 million in private funding.
 - 1.5 million visitors in first year.
 - o Ross's Landing Plaza
 - In conjunction with aquarium to link communities. It is the start of the Trail of Tears.
 - o North & South banks of the Tennessee River are reconnected with a bridge.
 - Bridge was closed to vehicle traffic in 1978.
 - The Walnut St. Bridge opened in 1993
 - City council found funding to refurbish the bridge for pedestrians instead of deconstruction.
 - o Positive development increasing near the Aquarium.
 - o Coolidge Park opens in 1999

- Vision includes trails on both sides of the river, this was the start.
 - Climbing wall on the bridge trusses.
 - Fountains, etc. in park.
 - Blueway (water trail) opens starting at River Park.
 - Millennium Riverwalk opens in 2005 to connect the trails.
 - 4 lane highway was made into 2 lanes.
 - 2005 – New Aquarium, River Amphitheatre.
 - Downtown is now vibrant with primary housing, tourists coming, increased size of the museum and many hotels.
 - New public art installations
 - The Passage which pays homage to the Trail of Tears.
 - The Weeping Wall
 - Regatta is held to focus on outdoor recreation and increase recreation in the city.
- How the above events happened:
- Partnerships are primary.
 - Wealthy supporting organizations
 - Influencing groups and people, worked quickly to progress ideas.
 - Attitude was “when we get this done” not “if we get this done”
 - Politically oriented group.
 - Everybody got involved – reason for success – tried to get public involved.
 - Celebrated every accomplishment no matter how big or small.
- Partnerships for the Progress:



- Other points of interest:
- There is a glass bottom bridge over the highway.
 - The proposed Great Eastern Trail goes through downtown.

- The water front consist of 6 parts and 12 miles of trail brought together community and county government levels looking to create joint management organization.
- Hotel Tax is implemented and is about \$4 per night, it is bonded.
- \$120 million was given to redevelop the waterfront.
- Residential tax has decreased because of the money coming from tourists.
- People are now wanting to move from the suburbs to downtown.
- People are starting to use the water front trail to get to work.

A Return to the River: The Des Moines River Walk – by Thomas D. Heinodd

- Des Moines recreation initiative includes flood control.
- River walk to link two other trails.
- The Stone Arch Bridge and the Stone River Wall are on the National Historic Places registry.
- Grays' Lake Recreation Area has a colorful lighted bridge that attracts people.
- Court Ave. Plaza:
 - Plan to redevelop levy area for trail, shop, sitting and recreation area.
 - Phase 2 is water access.
 - Surrounding area has heritage buildings.
 - There is only one road crossing because of the building (create a setting) and for access to the shops.
- The development of the area needs to be concerned about flood protection issues.
- Center Street Bridge:
 - Arch bridge with a signature design
 - One deck for bikes and one for pedestrians.
 - Expensive to build but very low maintenance.
 - Part of the funding was from the Green Belt and Recreation Authority.
- Coordination was with a CSO project.
- Walking paths connect people to the river and downtown.

TRAIL ETIQUETTE

Recorded by Cory Kulczycki

Tread Lightly! – Stewardship and Recreation

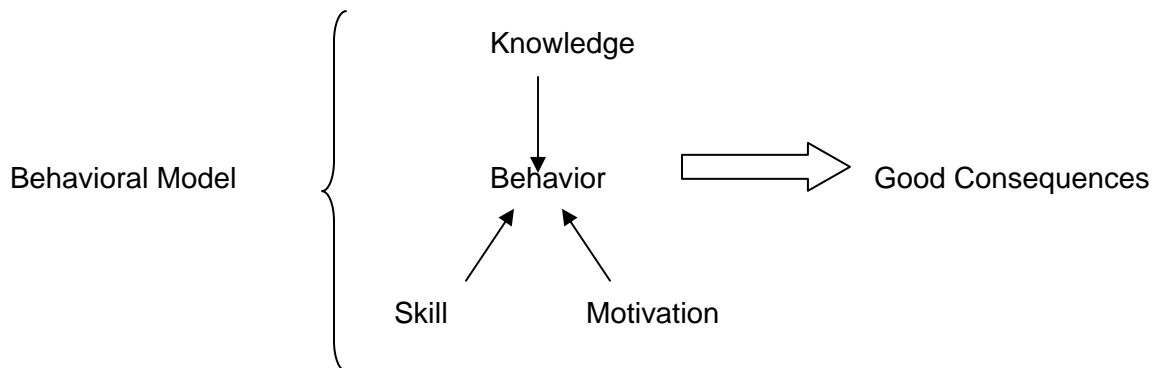
by Mary Van Buren

- They have developed a new slogan for Tread Lightly!:
 - Tread Lightly! On Land and Water
- The meaning behind the letters in TREAD:
 - T**ravel Responsibly
 - R**espect the rights of others.
 - E**ducate yourself
 - A**void sensitive areas
 - D**o your part
- There are also new principles for the land and water environments:
- Methods of Promoting the Principles:
 - Website:
 - www.treadlightly.org
 - Contains a store and resources
 - Also a website for kids: www.treadlightlykids.org
 - Has activity kit for downloading for kids.

- Online Learning Course:
 - About a 45 minute course.
 - Looking to provide incentives to get the general public interested in taking the course.
- Tread Trainer: Train the Trainer program
- Tread Lightly! Traveling Education Unit:
 - Funded through a seed grant program, sponsorship from manufacturers.
 - Operates mostly in the Western USA.
- Educational Materials
- Print and TV and Radio Public Service Announcements
- Seasonal Press Releases
 - Educational focus
- Website Banners

Tread Lightly!

- Tread Lightly! Ethic came out of the Forest Service because there was recognition of an increase in motor and mechanical use of trails.
- In the 90's the Forest Service recognized it could be better operating if it was a separate non-profit organization.
- Wanted separate identity from the Leave No Trace because they focus on pedestrian/human powered use so the motorized and mechanical users feel isolated from the Leave No Trace.
- Focuses on motorized and mechanical users, i.e. boats, ATVs, mountain bikes, etc.
- Want to influence good behavior.



- Identifying barriers & Benefits:
 - Literature review
 - Qualitative research (observations)
 - Focus groups
 - Surveys
 - Research is lacking in this area with Tread Lightly!'s types of users.
- Tools to Changing Behavior:
 - Commitments – oral and written from users
 - E.g. commitment to stay on the trail.
 - Prompts and reminders
 - Effective messages
 - Incentives
 - Removing external barriers → actual or perceived

- E.g. providing beginner to expert skill level trails.
- There is also a Friends Program
 - It is free.
 - Provides an online newsletter.

VOLUNTEERING

Recorded by Cory Kulczycki

Take Pride in America: Take Pride Overview – by Jenni Garrison

- Take Pride seeks to install, engage and support human interest in public spaces through volunteerism on all levels of public land.
- It is a broad reaching program to target different groups.
- It is a partnership program.
 - Partners Contribute:
 - Volunteers
 - Materials
 - Nation wide events
 - Special events
 - Rewards
- Mission:

1. Awareness	2. Action	3. Awards
--------------	-----------	-----------
- Programs:
 - Various States have gotten involved
 - Take Pride basically gives you aid in packaging your volunteerism.
- 1). Take Pride Cities:
 - Mayors agree to host 2 events per year.
 - Recognition given to cities for taking part.
- 2). Take Pride Schools:
 - Principals agree to host 2 events per school year.
 - Currently about 50 schools participating.
 - Events mostly held on school property
 - E.g. outdoor class room created one year then the following years maintain it.
- 3). Take Pride Gardens:
 - Supported by America the Beautiful Fund who distributes plant seeds.

EVOLUTION OF TRAILS

Recorded by Cory Kulczycki

Trail Evolution/Trail Innovation – by Woody Keen

- Troads:
 - o Trails on roads
 - o E.g. Pre-Roman construction in Wales and Roman Roads in Italy.
 - o In many cases use of old cobblestone roads as trails.
- Originally trails were for constructed for transportation.
- Before the CCC Roman and Italians were creating stone trails for recreation.
- The Civilian Conservation Corps (CCC):
 - o The US trail legacy from 1933 – 1942
 - o Created and helped to create trails, state and national parks.
 - o At 1 time there were 600,000 young men enrolled in the program.
 - o Planted over 3 billion trees.
 - o Did good and bad designs, it is possible to learn from their examples and work.
- The early thought process in building trails was “how do we get there?”.
- In design and development we need to consider the trail users’ motivations to use the trail.
- Trail managers now work to protect the heritage/nostalgia of the work done by the CCC which is about 50 years old
- Student Conservation Association does good work.

Good Trail Examples:

- Observation Point Trail in Zion National Park is a good example of good planning/design/development.
 - o E.g. died the trail material to match the surrounding soil color.
- Angles Landing Trail;
 - o Risk management is important.
 - o The trail has chains to hold onto in exposed sections.
 - o Most popular trail in Zion.
 - o Zion was choked by cars, so now they use buses to shuttle people from the parking areas.
- Thunder Mountain Trail in Bryce Canyon
 - o A mountain bike trail.
- Skyline Trail in Glacier National Park:
 - o 1930 followed the idea of rolling contours, similar to what is promoted today in trail design.
 - o Shuttle bus system is established so people can hike down the trail.
- Yellowstone:
 - o Some CCC work.
 - o Stone work on trails.
 - o Uncle Tom’s Trail to lower falls.
 - Is a sky walk (trail is on stilts, cantilevered boardwalk of rock cliff).
 - Continuous metal walkway system.
 - Benches are built into the railing.

- Johnston Canyon in Banff National Park, Canada:
 - o Evidence of some blasting of rock.
 - o Cantilevered walkway.
 - o E.g. of taking a trail to unique areas.

- Braille Trail for South Carolina School of the Blind:
 - o A connector trail with specific purpose for the students needs.
 - * Trail experience is spatial, visual, olfactory, auditory, etc.

Innovations in Trail Construction:

- Increase in armoring of trails.
- Appalachian Armoring:
 - o Combination of rock (brick, cement) and logs.
- Elevated trails:
 - o Starting to flow with landscapes.
 - o E.g. British Columbia mountain bike trails (North Shore Style – free riding).
- Blending
- Stone pitching – similar to cobblestones.

Innovations in Trail Building Equipment:

- evolution in who is providing trails:
 - o Resorts, parks, private housing developments, schools, etc.
- CCC set the standard to achieve and surpass.

Innovations in Trail Equipment:

- Gear has evolved and activities have evolved (e.g. canyoneering).
- Spikes – rubber sole shoe with carbide spikes to slip over your hiking boots for walking on ice.
- Full suspension mountain bikes, mountain unicycles, tandem mountain bikes, trail wheelchairs.
- Ultra light fast packing equipment
- Trail running shoes and equipment (currently there are approximately 40 million trail runners).
- Cellular phones and SAT phones, GPS
- Nordic skis, snowshoes, etc.
- Boardwalks through the treetops:
 - o Big Sky Montana and Whistler, British Columbia (recommended as the best trail).

Innovations in Trailheads and Interpretation Signs:

- Ways to invite people to learn about the trail and area.
- “Last Child in the Woods” – an important book on the children.
- Chimney Rock Park, N.C.:
 - o Private park.
 - o Excellent children’s interpretive trail.

The Future of Trail Building?

- Putting trails in areas we once thought they could not go.
 - o E.g. a mountain bike park under the I-5 overpass.
- Creating interest in landscapes:
 - o Similarly getting people outdoors will get people interested in conservation.

- Reclaiming previous environments, creating new ones through landscape design.
- Trends:
 - Less people backpacking.
 - People want trails closer to home.

TRAILS AND HEALTH

Recorded by Cory Kulczycki

Blazing New Trails with the Health Community

by Helen Mahan

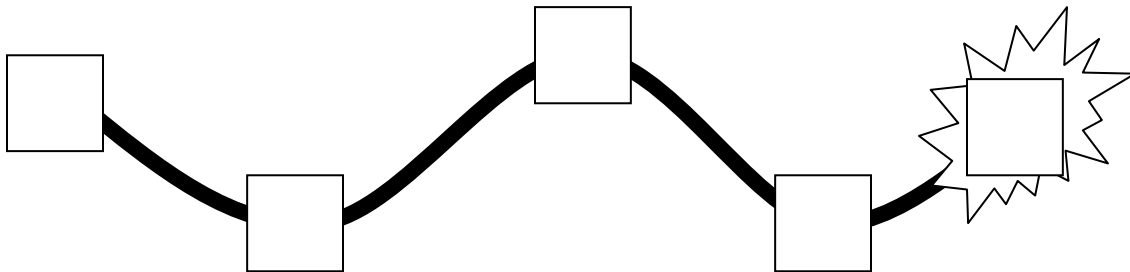
- Active Living – is a way of life, not a quick fix.
- Active By Design – at the University of Carolina
- Most of the focus is on obesity.
- There needs to be a change in conversation to consider physical inactivity.
- Focus to work with health community is to not focus on recreation amenities but on health infrastructure.
- “build it and they will come” – the trail builder’s mantra
 - The health community says “who are they?” Will people in the community who really need the trail use it?
- Public health community vs. healthcare providers/insurers
- When considering working with the health community ask:
 - What do you want from health community?
 - Be clear, get an advocate. Champion within the health community.
- 5 P’s of integration:
 - Preparation – building partnerships.
 - Promoting – our role in creating supportive opportunities, sell our skills, craft a new message, community engagement, build promotion and programming into projects, social marketing.
 - Programs – bike events, senior walking clubs, etc.
 - Policy – trail plan approval by local governments, any policy changes needed?
 - Physical projects
- website: www.activelivingbydesign.org

Upper Valley Trails for Life

by Wally Elton

- Was funded by Active Living by Design.
- 15+ local partners.
- Focus on 4 towns in Upper Connecticut River Valley, a rural area.
- Mission: keeping communities healthy through Active Living:
 - Enhance and protect the health of residents by promoting and supporting Active Living by using all types of trails.
- Encourage use from a very young age.
- Projects:
 - “Passport to Winter Fun”
 - Modeled after a real travel passport.
 - List of winter activities for kids and families.
 - Recommended kids get 1 hour per day of physical activity.
 - Use a trail through the book with square for passport stamps or stickers.
 - When child reaches a special box, it gets a new status, each box records what they did for 1 hour each day.

- For example see below:



- Goal with the books is to have kids do 40 hours – once the books are completed and returned they will get a prize (t-shirt, etc.).
 - Looking for big prize ideas also.
 - Organization also does walk to school days and lifestyle clubs.
- Encourage adults by:
 - Prescription walking club
 - Work with doctors to encourage walking
 - Working with the Dartmouth-Hitchcock Medical Centre: they added an intake question about physical activity aimed at hesitators to participation.
 - Created a brochure with a message about the importance of 30 minutes as a minimum per day can extend life by about 2 years.
 - work with employers to encourage employees to be active before and after work and at lunch
 - Created a trail guide for bike/walk to work days.
- Encourage use in all seasons:
 - Focus on skating
 - Claim the longest ice skating trail in N.A. or USA.
 - Winter Fest.
 - Skate-a-thon participants get a stamp at the completion of each circuit.
 - At the end it is written as a certificate with the accomplished distance.
- Finding Funding:
 - Local and regional funding.
 - Local business sponsors – like events.
 - Business foundations (i.e. Wal-Mart Foundation)
 - Insurance companies.

Health and Happiness: Proximity to Trails and Examined Healthy Lifestyle Benefits – by Peter Dundar (Director of Leisure Services, Town of Collingwood).

- See change in focus from economics to environmental conservation to a now growing focus on health.
- Study will be posted on the website.
- Started with a few trails and connecting paths in the city.
- In 20 years the system has expanded immensely and they are now linking to 2 nearby communities.

- Did proximity to trails increase the health of the community?
 - o YES.
 - o Reduction of stress, friendly space to get together.

KEY NOTE ADDRESS – CLOSING DAY

Recorded by Frieda Baldwin

The Path Ahead: Achieving Great Things for America's Trails

By Gil Penalosa, President, Walk and Bike for Life, Ontario, Canada.

Trails contribute positively to

Environment
Activity
Recreation for all
Transportation
Health and Happiness
 (above spells out Earth)

Trails and greenways improve our Quality of Life

Is quality of life important?

This question is the most important element of economic competitiveness
 To attract and retain highly creative and educated people is the greatest challenge for economic development

Knowledge is attached to human beings that want to live happily
 Goal is to create environments to which 'wealth creating' people are attracted.

Trails and greenways are important in creating an environment in which knowledgeable and wealthy people want to invest

Two events are being organized in Bogota to get people active out on the streets:

Bogota's Ciclovía event (Columbia, South America)

- o Roads closed on Sunday from 7 AM to 2 PM, and open for recreational activities.
- o People walk, bike, hike, in-line skate, etc.
- o Every Sunday 1.5 million participate, young and old, men and women, rich and poor, tall and short, ALL.
- o The city is now a place where people meet. New lifestyle does not allow to meet with neighbours, etc.... but the trails and greenways allow everyone to be equal.
- o Existing infrastructure: streets
- o Designed special signage, trained first aid
- o Food vendors, bike repair shops, information kiosk
- o 9 Aerobic stations (to try to beat world record!)
- o Low income citizens were amazed to see that car owners would be made to leave their cars and use public transport, or walk or bike.
- o Start with a few kilometers, it will grow....

What attracts people most would appear to be other people.
William H. Whyte

Bicycle Celebration

Since 1996, second Sunday of July is designated as Bicycle Day, with a recreational ride where over 50,000 cyclists participate. 2006 distance: 113 km

Bike path network in Bogota ... 280 km in 3 years

Why invest in trails, parks and recreation?

It is during leisure time that income differences are felt more acutely. While higher income citizens have access to large houses, clubs, country houses, restaurants, vacations, etc., lower income citizens' only alternative to television is public pedestrian space.

Cost of trails and greenways is marginal in comparison to arenas, swimming pools, etc. Example, Simon Bolivar Park in Bogota
380 acres redeveloped with trails, landscaping, etc.

A better city is a more humane one, one friendly to children, handicapped, seniors, etc.

Most decisions are not technical, but political. If there is political will, it can be done.

BRT (Bogota Rapid Transit): lanes on highways, access to bike storage, etc. .

What gives character and is memorable about a city is its pedestrian space.

Economics

Tourism is an increasingly important source of employment and economic development.

Real estate use physical activity access as the main selling point.

The value of homes is inversely proportional to the distance to greenways.

Recreation

People are moving away from organized and scheduled activities to unscheduled activities.

Recreation for all, regardless of age, background

Transportation

Just think about it... People are driving to the gym to walk on a treadmill !!!

One quarter of all trips are a mile or shorter

Need for complete streets: designed, built, maintained and operated considering pedestrians, cyclists, transit and cars (in this order!)

Health - Obesity trends

People are dying due to lifestyle: cardiovascular, diabetes, etc.

People who live within walking distance from shops weigh less

People who live close to trails have a substantially higher probability of living longer

When you **define a city around people**, you will get more people

When cars appeared, we should have built parallel paths for people.
A good city is not a matter of engineering, it is more akin to art.

A city that is good for children and old people, will be good for everyone else.

A city is only a means to a way of life.

The path ahead a wonderful opportunity to do it right

Trails for All America, every day, every way.

INTERESTING HANDOUTS

- Volunteer Position Descriptions (Jefferson County Open Space):
 - o Volunteer Park Host
 - o Volunteer Park Patroller
- Nelson Rocks Preserve – Pas Registration and Release of Liability
- Easement Grant (between municipality and boat club and between municipality and industry)
- Agreement for Easement (between railway operation and municipality)
- A Trail to Every Classroom (a place based professional development program, developed in partnership with A Forest to Every Classroom. In order to preserve volunteer management-based systems, the above programs build the capacity in trail communities to engage youth through both curriculum and nature. Teachers and trail club members are implementing curriculum for school children relative to Trails.

INTERESTING EXHIBITOR PRODUCTS

Eco-counter – people counter systems

Reliable and accurate tools specially designed to count people outdoor

www.eco-counter.com

Traffic Guard Direct

Stops unwanted vehicular traffic

New round post key lock.

877-727-7347

New Lifestyles

Pedometers, and program kits, such as

- School activity kits for physical activity
- Work site programs
- Walk away from Diabetes complications kit
- Lifestyle brochures and curriculum fact sheets
- Did you Walk 10,000 steps today? (counters, calendars, tracking logs, brochures)

www.new-lifestyles.com

Presto Geoweb cellular confinement systems

For roadway and parking area construction, for earth retention problems

www.Prestogeo.com

Boardwalks, walkways

Adaptable to flooding or ground movement from freezing and thawing
Easy to install – no hardware or assembly required
www.wickcraft.com

also see boardwalks at www.custommfginc.com

Stabilizer solutions for trail surfaces, basketball courts, etc.
www.stabilizersolutions.com

TRAIL SLOGANS

Make Trails Not Wars

Trails reveal landscapes. They open up places to explore, to experience, to take pride in, to care for. (Robert Searns, Chair, American Trails)

Speaker presentations of other concurrent sessions will be posted on the American Trails website www.americantrails.com

Next American Trails conferences:

2008 - Little Rock, Arkansas

2010 Chattanooga, Tennessee