

National Forests in North Carolina
NON-MOTORIZED TRAILS STRATEGY
WHY NOW?



NFNC TRAILS BY DESIGN?

Most NFNC trails were not designed, but inherited from historic use patterns.

- **Many follow old logging or woods roads.**
- **Typically in poor locations along creeks or ridge lines, rather than side-hill alignments.**
- **Many have inadequate drainage features, such as log water bars rather than grade dips.**

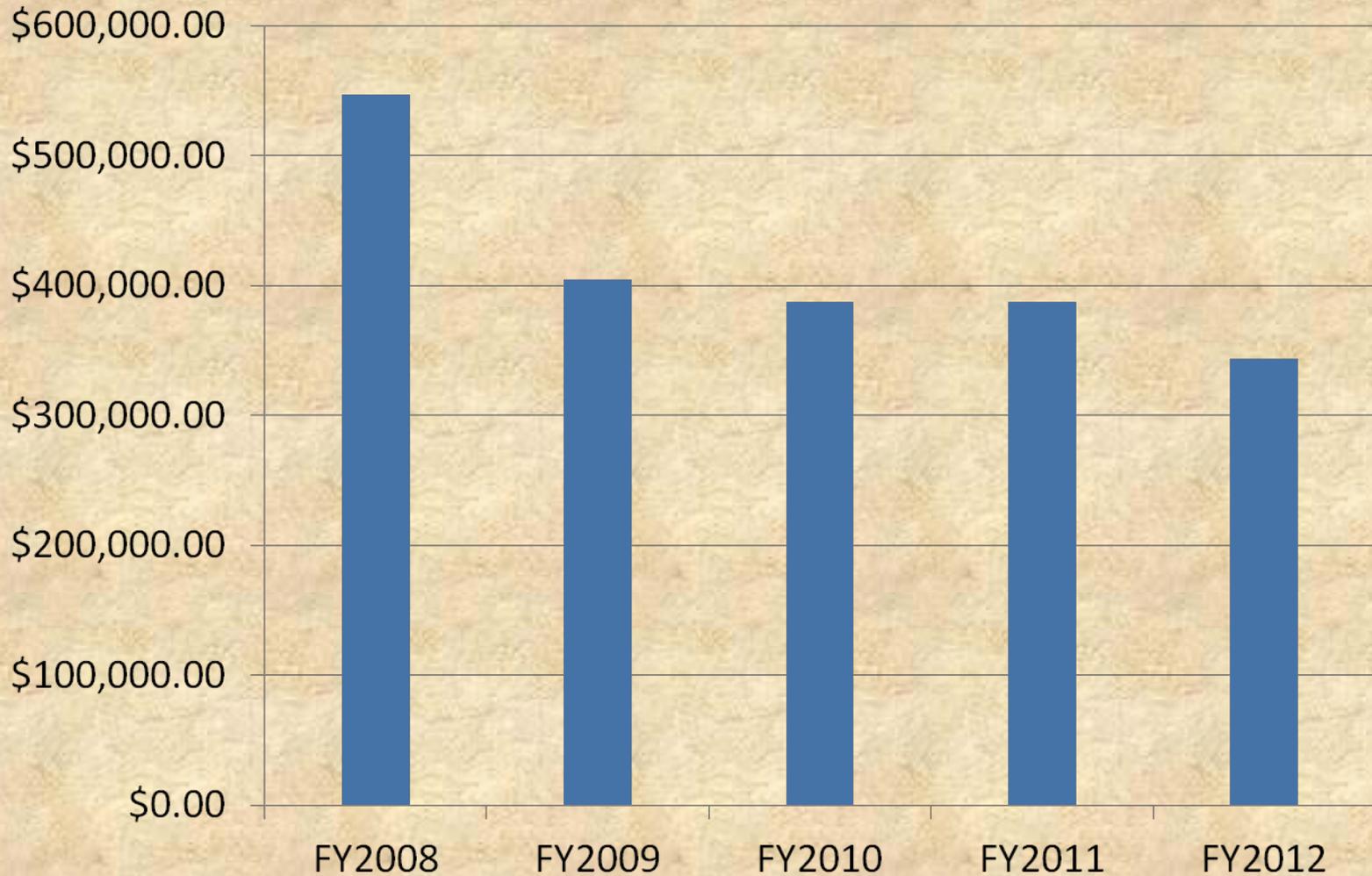
NFNC TRAILS BY DESIGN? NO!



NFNC TRAILS BY DESIGN? YES!



NFNC APPROPRIATED TRAIL BUDGETS



NFNC RECREATION STAFFING

- **Nantahala NF**

- Tusquitee & Cheoah RDs: 2 staff & 3 trail technicians
- Nantahala RD: 1 staff, 2 trail technicians

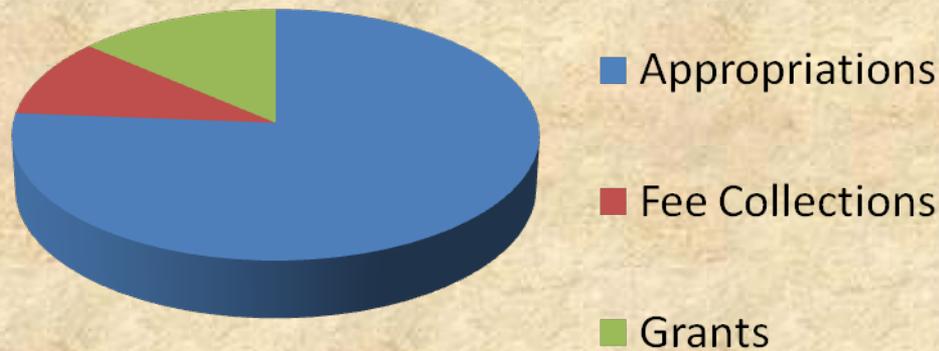
- **Pisgah NF**

- Pisgah RD: 1 staff, 3 trail technicians
- Appalachian RD: 1 staff, 1 trail technician
- Grandfather RD: 1 staff, 1 trail technician

Note: All district recreation staff and technicians have shared duties with trails, dev. rec., fire, volunteer coord., etc.

NFNC FUNDING SOURCES & COSTS

FY2011 Trail Funding*

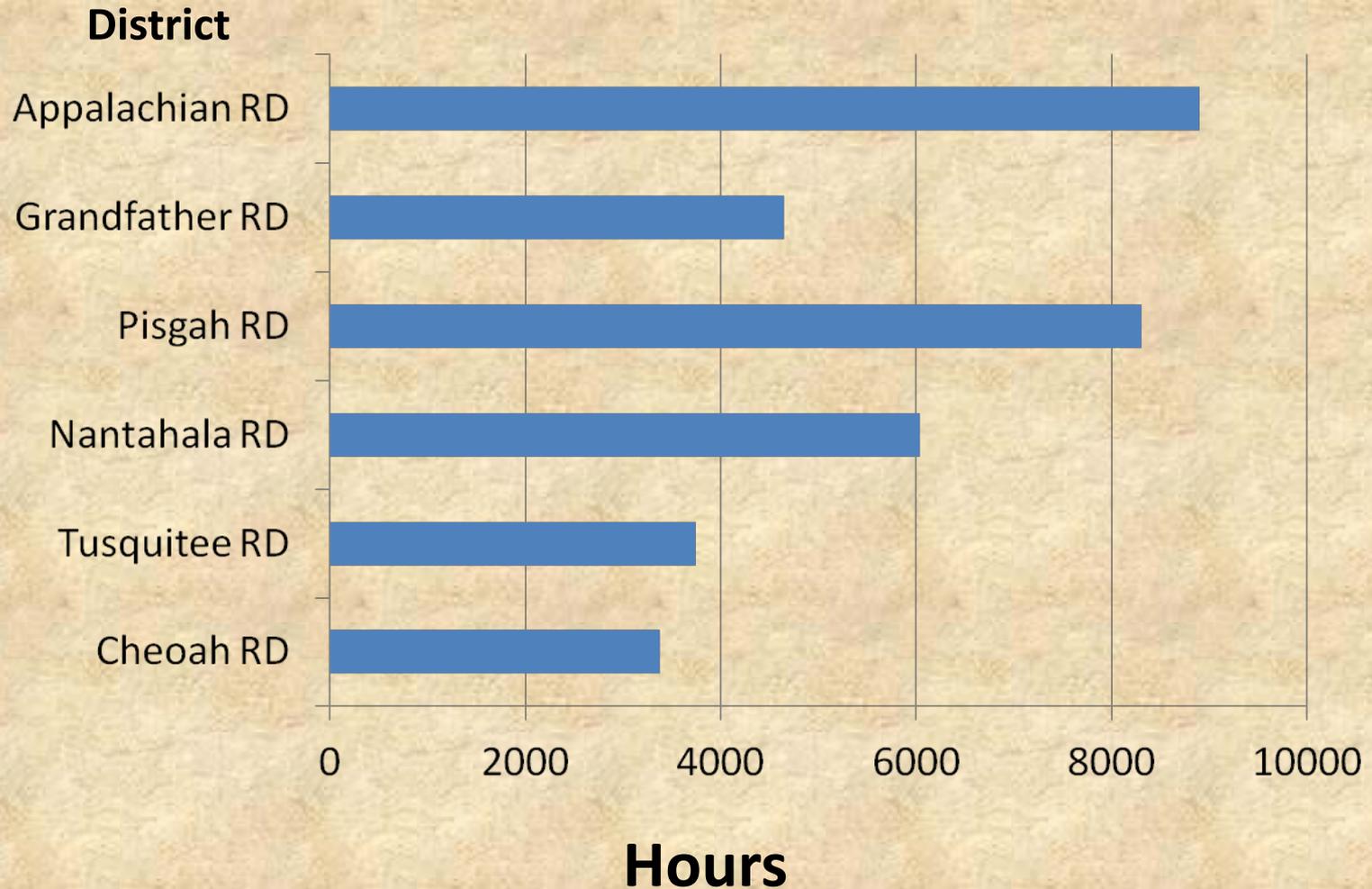


- Typical cost: \$10k to \$15k per mile for contract maintenance.
- Maintenance includes brush & hazard tree removal, structure repair/replacement, tread & drainage work.
- New construction, reconstruction or reroutes can be much more expensive.

- FY2011 Combined Annual Funding: ~\$366,000*
- Combined annual funding equals ~\$235 per trail mile*

*Calculations consider only non-motorized trail funding for Nantahala & Pisgah NFs

TRAIL VOLUNTEER CONTRIBUTIONS*



* Volunteer contributions on non-motorized trails.

EFFECTIVE USE OF VOLUNTEERS

- Need better trail maintenance training
- Need better project coordination and supervision
- Volunteers as volunteer coordinators



NFNC FY11 TRAIL CONDITION SURVEYS

- In FY2011 GPS condition surveys were conducted on ~345 miles of non-motorized trails on the Nantahala & Pisgah National Forests
- Approximately 300 miles surveyed by FS employees & 45 miles by volunteers with Wild South
- Trails which had no GPS/GIS data or had known erosion issues were highest priority

NFNC FY11 TRAIL CONDITION SURVEYS

- Location data was collected for conditions such as: excessive slope, entrenched tread, braided trail, sediments reaching streams, etc.
- GPS data dictionary was structured to capture existing condition of critical elements, and avoid subjective assessment of overall trail condition
- Data is being used to update trails database, GIS, and inform collaborative trail strategy process.

NFNC NON-MOTORIZED TRAIL MILES BY USE-TYPE*

NFNC Unit	Total	Hike Only	Horse/Hike	Bike/Hike	Horse/Bike/Hike
Nantahala NF	649	504	72	21	52
(Cheoah RD)	252	198	15	0	39
(Tusquitee RD)	121	83	18	20	0
(Nantahala RD)	276	223	39	1	13

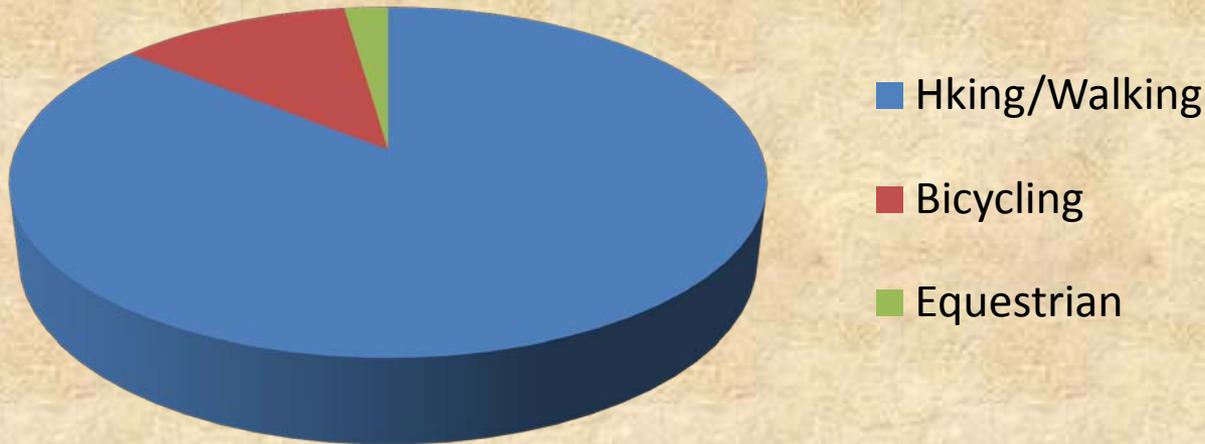
Pisgah NF	911	609	50	157	95
(Pisgah RD)	380	200	8	99	73
(Appalachian RD)	264	203	39	15	7
(Grandfather RD)	267	206	3	43	15

Total Nant-Pisg NF	1560	1113	122	178	147
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* All trail miles are approximate as of 1/3/2012; trail assessments and database updates are ongoing.

NFNC VISITOR USE SURVEY DATA

Trail use as % of main activity (NFNC NVUM)



NFNC User Activities 2008 National Visitor Use Monitoring		
Activity	% Participation	% Main Activity
Hiking/Walking	64.3	38.3
Bicycling	6.4	5.3
Equestrian	0.9	1.0
Other Activity	28.4	55.4

TRAIL MANAGEMENT EMPHASIS

- **National Trail Quality Standards (partial list)**
 - No safety hazards exist
 - No damage to other resources
 - No violation of environmental Laws
 - No human waste, no litter, no graffiti
 - Little to no deferred maintenance
- **Trail Design Parameters**
 - Specific design guidance for each use type by Trail Class
 - Maximum slope, maximum obstacle height, height & width clearing limits, tread width, etc.

TRAIL MANAGEMENT EMPHASIS

- Focus on a quality experience over quantity of miles
- Locate and maintain trails for sustainability
- Provide loop opportunities from well maintained trailheads
- Provide long distance (multi-day) backpack opportunities
- Design trail systems to support existing developed recreation facilities

TRAIL EXPERIENCE / SETTINGS

- **USFS Recreation Opportunity Spectrum (ROS)**
 - **Primitive** (Congressionally Designated Wilderness)
 - **Semi-Primitive Non-Motorized** (Back-Country Areas - Un-Roaded)
 - **Roaded Natural** (General Forest Area - Roaded)
 - **Rural** (Developed Recreation Areas)
- **Trail system design objectives are to provide a range of experiences in all ROS settings**
- **A range of experiences is also provided with trails of varying difficulty levels, i.e. Easy, More Difficult, Most Difficult**
- **Accessible trails are provided where possible, following FS Trail Accessibility Guidelines**