

Assessment Of Likely Use and Impacts From Proposed Devil's Slide Trail



Dr. Patrick Tierney
San Francisco State University
ptierney@sfsu.edu

Information Needed To Plan New California Coastal Trail Segment

- Proposed Devil's Slide Trail (DST) has the potential to be quite popular
- Information is needed to help plan for facilities, operations and maintenance

DEVILS SLIDE AREA MAP

Future Devils Slide Trail



PACIFIC OCEAN



Key Research Questions

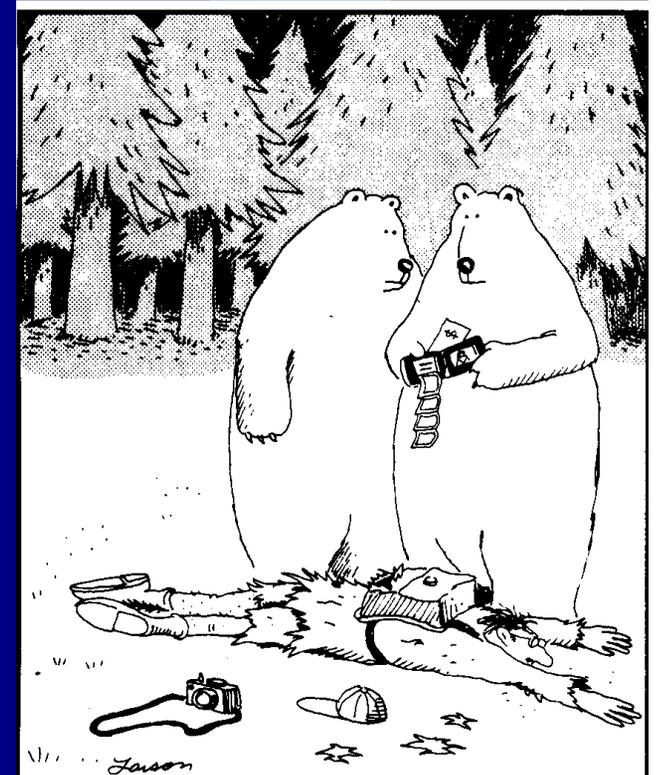
- Will there be a great deal of interest in visiting DS trail?
- If so, what is impact on regional recreation use?
- Will new recreational facilities be needed beyond those proposed by CalTrans? What about staffing?
- If a shuttle from areas with greater parking availability is provided, will it be used?
- How much funding will be needed to meet increased demands for facilities, operations and related trail maintenance, trash collection, law enforcement, traffic management, public safety, conflict management between different types of users and resource protection?

Study Objectives

1. Conduct a telephone survey of land management and recreation agencies that may be affected by the DST.
2. Gather information on use levels, types of users, needed facilities, management, operations and maintenance issues and staffing levels from a comparable trail.
3. Survey potential DST users who are visiting the project area to learn about their interest in visiting the DST, frequency of use, what activities they would undertake and how likely they would take a shuttle from the Linda Mar area to the trailhead.
4. Estimate how the DST may impact individual recreation sites, regional park and recreation area visitation, recreation and traffic patterns, facilities, operations and maintenance needs.

Innovative Methods Employed

- Enslaved students
 - Forced statements from innocent travelers
 - Used W.A.G.'s
 - Talked to wildlife experts
- Just kidding.....



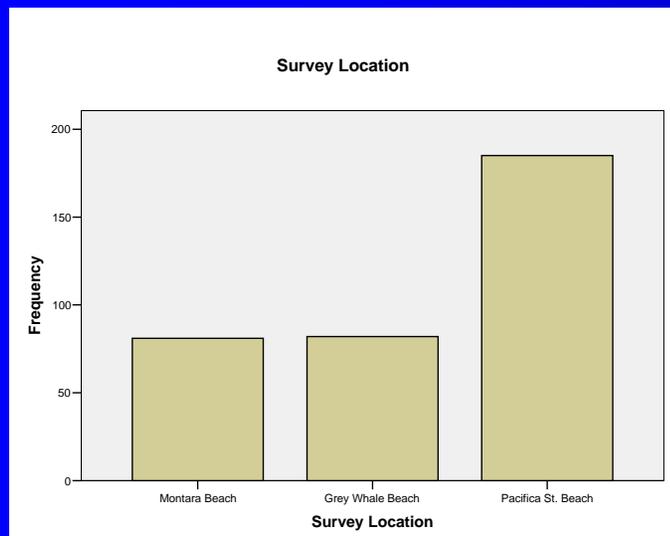
Really, The Methods Used

- Conducted on-site intercept survey of visitors in the DST area. Total of 348 completed
 - Conducted October 8, 9, 15, 2006
 - Pacifica, Grey Whale Cove and Montara St. Beaches
- Received 30 responses from follow-up on-line survey of intercept respondents
 - To get more detailed responses
- Email and phone surveys with managers of adjacent parks. Six completed
 - To ascertain manager perspectives
 - Learn about comparable trail use and issues
 - Sawyer Camp Trail near Crystal Springs Reservoir
- And the results...

Key Finding- Peace, Free Love and Good Vibes Will Prevail



Really, The Key Findings



Respondent Residence

		Count	Col %
Residence Location	Local	94	27.4%
	Bay Area	191	55.7%
	California	35	10.2%
	USA	15	4.4%
	Int'l	8	2.3%
	Total	343	100.0%

Likelihood Of Visiting DS Trail

Likely To Visit DS Trail



		Likely To Visit DS Trail					
		Extremely	Very	Somewhat	Not Likely	Very Unlikely	Don't Know
		Row %	Row %	Row %	Row %	Row %	Row %
Residence Location	Local	51.6%	29.0%	16.1%	1.1%	1.1%	1.1%
	Bay Area	29.3%	29.8%	29.3%	7.3%	2.6%	1.6%
	California	37.1%	14.3%	37.1%	2.9%	8.6%	
	USA	13.3%	13.3%	53.3%	13.3%		6.7%
	Int'l	50.0%	25.0%		25.0%		



Most Popular Activities At Proposed Devils Slide Trail Area

Table 19. Activities Extremely Likely To Participate In During Visit To Devil's Slide Area By Residence*

Activity Participation	Bay Area Resident	Not B.A. Resident
Viewing The Pacific Ocean	58.4	65.5
Beach Activities (e.g. Sun bathing, Surfing)	45.0	48.3
Walking/Hiking/Jogging	44.3	44.8
Accessing Other Trails In Area	30.6	30.4
Observing Scenery/Plants /Nature	25.8	36.2
Bicycle	25.4	17.2
Scenic Drive In Car	21.9	30.9
Picnicking At Tables	16.8	29.3*
Learning About Marine Resources	17.9	24.1
Dog Walking	18.7	17.9
Learning About History Of Area	17.1	22.4

* Significant difference between two groups at p=.05

Desired Facilities & Info By Respondents

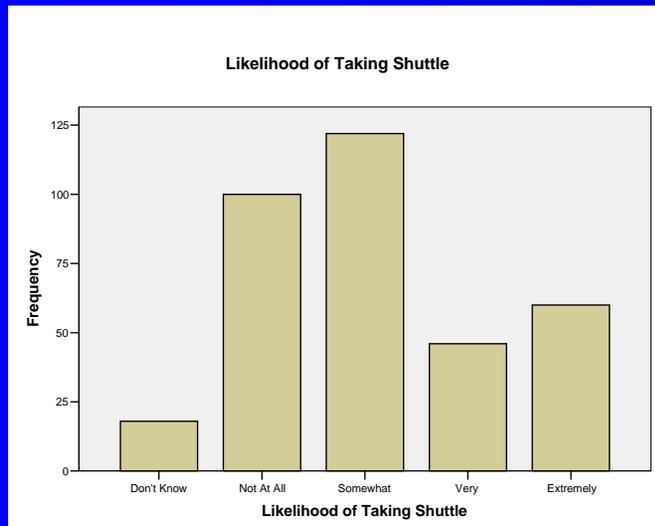
Desired Facility Or Information	Extremely Interested %
Rest Rooms	62.6
Map of Trail On Sign At Trail-Head	58.0
Information on Animals, Plants, Marine Res.	43.1
Map Showing Other Parks In Area	37.4
Information on History of Area	35.5
Information On Activities and Things To Do	34.6
Picnic Tables	29.1
Other	
Food Service	NA
Dog Access	NA
Trash Containers and Recycle Bins	NA
Water Fountain	NA
Bicycle Access	NA

Greatest Benefits From DST: Follow-up Survey Respondents

- A safer car-free trail than now exists along Highway 1
- Improved trails and access to other trails
- A trail with fine views of nature and scenery
- Improved costal access
- More recreation options
- A wonderful place for exercise
- Having a great trail so close to their home

Over 96% of respondents = Local or BA residents

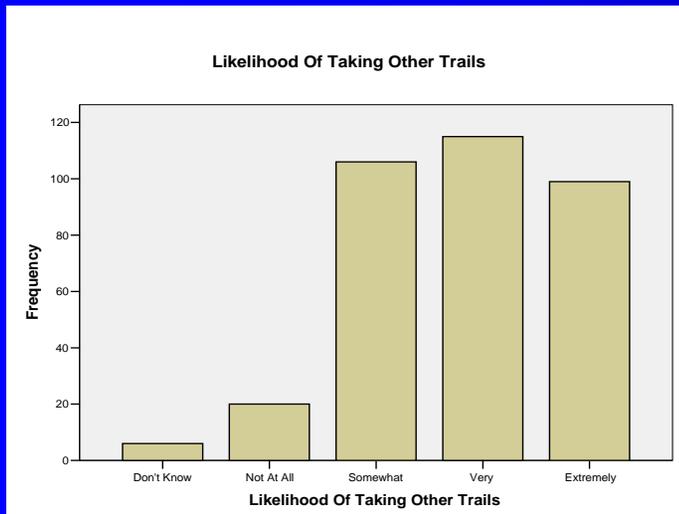
Taking A Parking Shuttle



		Likelihood of Taking Shuttle				
		Don't Know	Not At All	Somewhat	Very	Extremely
		Row %	Row %	Row %	Row %	Row %
Residence Location	Local	4.3%	32.3%	37.6%	8.6%	17.2%
	Bay Area	6.3%	30.0%	33.2%	17.4%	13.2%
	California	2.9%	25.7%	45.7%		25.7%
	USA		6.7%	40.0%	20.0%	33.3%
	Int'l	12.5%	25.0%	12.5%	25.0%	25.0%

Likelihood Of Taking Connecting Trail; Intercept Survey Respondents

- Over two-thirds extremely or very likely



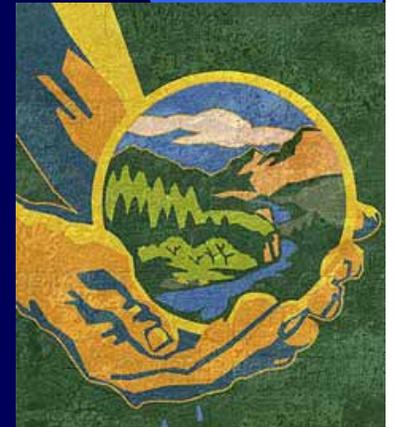
		Likelihood Of Taking Other Trails				
		Don't Know	Not At All	Somewhat	Very	Extremely
		Row %	Row %	Row %	Row %	Row %
Residence Location	Local	2.1%	4.3%	20.2%	38.3%	35.1%
	Bay Area	1.6%	4.7%	32.1%	34.2%	27.4%
	California	2.9%	17.1%	34.3%	17.1%	28.6%
	USA			73.3%	13.3%	13.3%
	Int'l		12.5%	37.5%	25.0%	25.0%

Potential Problems With Opening New DS Trail; Follow-Up Survey

Potential Problems	Percent Mentioned
Litter	13.2
Parking	13.2
Personal safety and vandalism	11.3
Traffic	11.3
Impact on coastal environment	9.4
Sanitation, human waste, rest rooms	9.4
Conflicts with other users (dogs, bikes, etc.)	7.5
Crowding	5.8

Needed Facilities, Services Or Policies To Protect Environment Along Trail; Follow-Up Survey

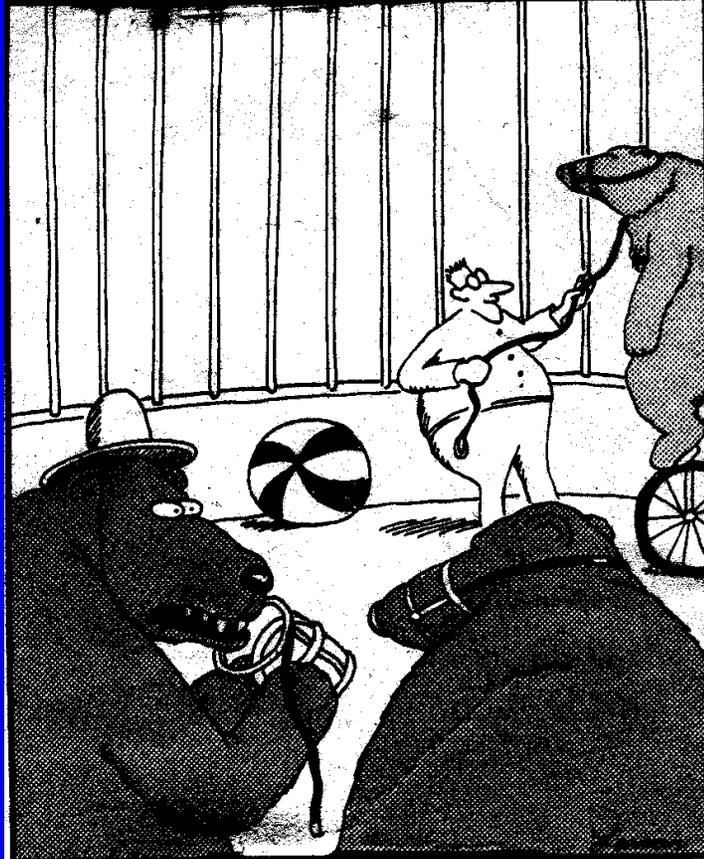
- Get people to stay on trails
- Clearly posted regulations and user obligations
- Animal-proof trash receptacles and dog feces bags with regular trash pick-up
- Build more restrooms
- Enforce laws, have patrols
- Describe why conservation is important and existence of fragile resources
- Habitat restoration programs
- Keep dogs on leash



Summary Of Adjacent Park Manager Survey Responses

- All agreed DST was a tremendous chance to expand public recreation opportunities
- All thought DST would be very popular
- Manager consensus was DST would also greatly increase use in nearby parks
- Largest types of new impacts on their parks would be related to trail and amenity maintenance, law enforcement and public safety
- This coastal area has very significant, unique public safety concerns that must be addressed
- Proposed recreation facilities at tunnel portals were considered inadequate for the future large demand
- Every manager said their agency absolutely could not take on the added operation and maintenance responsibilities without significant increases in their operating budgets

Study Conclusions



Hey, these things come right off!

Researcher Conclusions

- The public and managers are excited about the great opportunity to expand recreation opportunities with the Devil's Slide Trail
- Estimated 50,000 to 100,000 person-visits on the DST in the first year it is open
- The public and managers are concerned about safety, emergency response, environmental protection, interpretation and providing needed facilities and services to allow for compatible high quality recreation experiences
- Significant agency staff time, support, equipment and related funding will be needed to address concerns
- Amount and sources of funding for operations and maintenance need to be identified

Multi-Agency Planning Approach Needed



- Devils Slide Trail will be the missing (trail) link
- No agency has current funding to take on these responsibilities alone
- So a multi-agency management approach may be needed
- CalTrans could maintain surface of the trail via new DS maintenance facility
- GGNRA could provide law enforcement and maintenance staffing at new portal recreation facilities in conjunction with its southern expansion
- State Parks could enlarge support facilities and associated maintenance in their adjacent parks
- San Mateo County could assist in planning and grant writing for DST and adjacent recreation projects

Questions and Comments?

