Facing the Challenge of Measuring

Motorcycle Safety Outcomes

Sherry Williams
Director, Quality Assurance & Research

&

Cathy Rimm
Quality Assurance Specialist

Motorcycle Safety Foundation

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The concept of “Program Evaluation” is defined with examples of types of program evaluation and previous research on the topic. Results from a small survey of state administrators is presented. The survey questions asked administrators what type of program evaluation they engaged in. Types of program evaluation research conducted by MSF is reviewed along with an overview of the types of data MSF could provide to state administrators who are seeking to complete a program evaluation.

Facing the Challenge of Measuring Motorcycle Safety program Outcomes

Sherry Williams & Cathy Rimm
Quality Assurance & Research Department

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Bismarck, ND - 2005

At some point in every program,
someone asks:

How's It Going?
Does Training Work?

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Overview

- What is Program Evaluation?
- Why engage in Program Evaluation?
- Types of Program Evaluation
- The status of Program Evaluation in Motorcycle Safety Programs
- Examples of Motorcycle Safety Program Evaluation Techniques

What is Program Evaluation?

- "Program evaluation is carefully collecting information about a program or some aspect of a program in order to make necessary decisions about the program"
- "Evaluation is the process of determining whether programs – or certain aspects of programs – are appropriate, adequate, effective, and efficient and, if not, how to make them so"
- "Without evaluation, we cannot tell if the program benefits or harms the people we are trying to help"

Why engage in Program Evaluation?

1. Tell the GOOD NEWS! To inform your stakeholders.
2. To make a case for continued or expanded funding
3. To have an early warning system for problems
4. To monitor whether programs are producing desired results
5. To understand why or why not (related to context or to implementation factors)
6. To learn whether programs have any unexpected benefits or problems.
7. To demonstrate program effectiveness
8. To establish future benchmarks

What Program Evaluation is NOT

- A useless activity that generates lots of boring data with useless conclusions…
- Only able to show the program's failures
- A proof of success or failure of a program
- Complex and for experts only
- A process that only produces what we expect

Types of Program Evaluation

- 35 different types according to some
  - Formative
  - Process
  - Impact Evaluation
  - Outcome Evaluation

Types of Program Evaluation

- Formative
  - Research conducted (usually while the program is being developed) on a program's proposed materials, procedures, and methods
  - Understand how the program was implemented or feasibility
- Process
  - Shows how well a program is operating – can give the hows and whys
  - Often overlooked

Types of Evaluation

- Impact Evaluation
  - Research that shows the degree to which a program is meeting its intermediate goals
  - Shows changes in knowledge, beliefs & attitudes in stakeholders and community
- Outcome Evaluation
  - Research that shows the degree to which a program has met its ultimate goals
  - Generally conducted at specified intervals
  - Includes changes in mortality, morbidity

Thoughts on Program Evaluation

- The type of evaluation you undertake to improve your programs depends on what you want to learn about the program
- Essential to a successful grant application
  - NHTSA – from 20 to 30% of evaluation criteria
  - 15% of total budget
- Everyone in rider education must shoulder a share of the responsibility for ensuring quality in rider education programs
- Evaluation is an ongoing process

Results of Previously Published Survey

- Survey of motorcycle safety programs re: program evaluations

- Study Conclusions
  - Most states did not plan to perform impact evaluations
  - Effectiveness of training programs could not be defended
  - Funding could be lost
- Recommendations
  - Administrators should consider the benefits of program evaluation
  - Motorcycle program specific evaluation criteria should be established & tested

Current Status of Program Evaluation Efforts

MSF initiated recent review

- *Interviews with program managers*
- *Reviewed MSF State Reports / State program-based web pages*
- *Reviewed motorcycle program evaluation presentations*

Interviews with program managers

- Over a dozen interviews
- Various regions of the country
- Various program delivery models
- Various program sizes

Various Delivery models

- *State-administered*
- *Privately-administered, State regulated*
- *State-administered with private programs allowed*
- *State-administered with independent contractors*
- *MSF-administered*
- *Privately-administered – no State Coordinator*

Data collected by states/programs

- Collected by ALL we contacted
  - Pass/fail totals
  - Dropped/counseled out
  - Student evaluations

Data collected by states/programs

- *Additional data collected by some states/programs*
  - *# of active RiderCoaches*
  - *# of active sites*
  - *# of training incidents*

Quality Assurance efforts

- Formal – usually larger programs
  - Set # of site visits
  - Standardized forms/reports
  - Training incident tracking
  - PDW's held several times annually

Quality Assurance efforts

- *Informal – usually smaller programs*
  - *Little or no documentation of visits*
  - *Site visits "as needed"*
  - *Corrections by "nudging"*
  - *Annual PDW's*
    - *Some smaller programs hold more frequent PDW's as needed*

Quality Assurance efforts

- Student/Consumer Complaints
  - All programs actively follow up on negative complaints
  - Severe complaints usually arrive at the State Coordinators desk
  - Often generate topics for PDW's

Current Examples of Program Evaluation

- Maryland Program Web Page
- Ohio
  - Peer Observers Web Page
- Indiana
  - Course graduate comments
- Massachusetts
  - Training Numbers
- Texas

Reviewed other program web pages

California, Connecticut, Georgia, Illinois, Iowa, Louisiana, Minnesota, Montana, Nevada, New York, North Carolina, Pennsylvania, Oregon, South Carolina, Tennessee, Washington, West Virginia, Wisconsin

RETS System Evaluation

Formative	Development Process
Process	Infrastructure/Context
Impact	Availability of Training Activity of RiderCoaches Satisfaction/Effectiveness of RiderCoaches
Outcome	# of Students Trained Effectiveness Effective Resource Utilization

MSF-Sponsored Formative Research

- Development of RETS Mission
- Review of Curriculum Specifications
- Review of Motorcycle Training and Development Processes
- Review of Research: Task Analysis; Photographic Analysis; Hurt Study; Colorado Feasibility Study
- Review of BRC (original); MRC; MRC:RSS; BBP; ERC
- Review of worldwide programs

  - 1996 - Curriculum Development Team
  - 1998 - Joint SMSA / MSF MRC:RSS Enrollment Questionnaire
  - 1998 - SMSA Curriculum Advisory Committee
  - 1998 - MSF / ASU Study
  - 1998 - MSF Stakeholder Focus Group Research

MSF-Sponsored Process Evaluation

- MSF Process
  - 1999 - MSF Student Focus Group Research
  - 2002 - Rider Education and Training System Online Resource Guide (RETSORG)
  - 2003, 2004, 2005 - MSF Learning Centers
  - Ongoing - RETS Courses and Training Opportunity Additions
- CMSP Process
  - Policies and Procedures Manual
  - Professional Development Update Meetings
  - Quality Assurance Team Meetings
  - Student Feedback Tracking Process

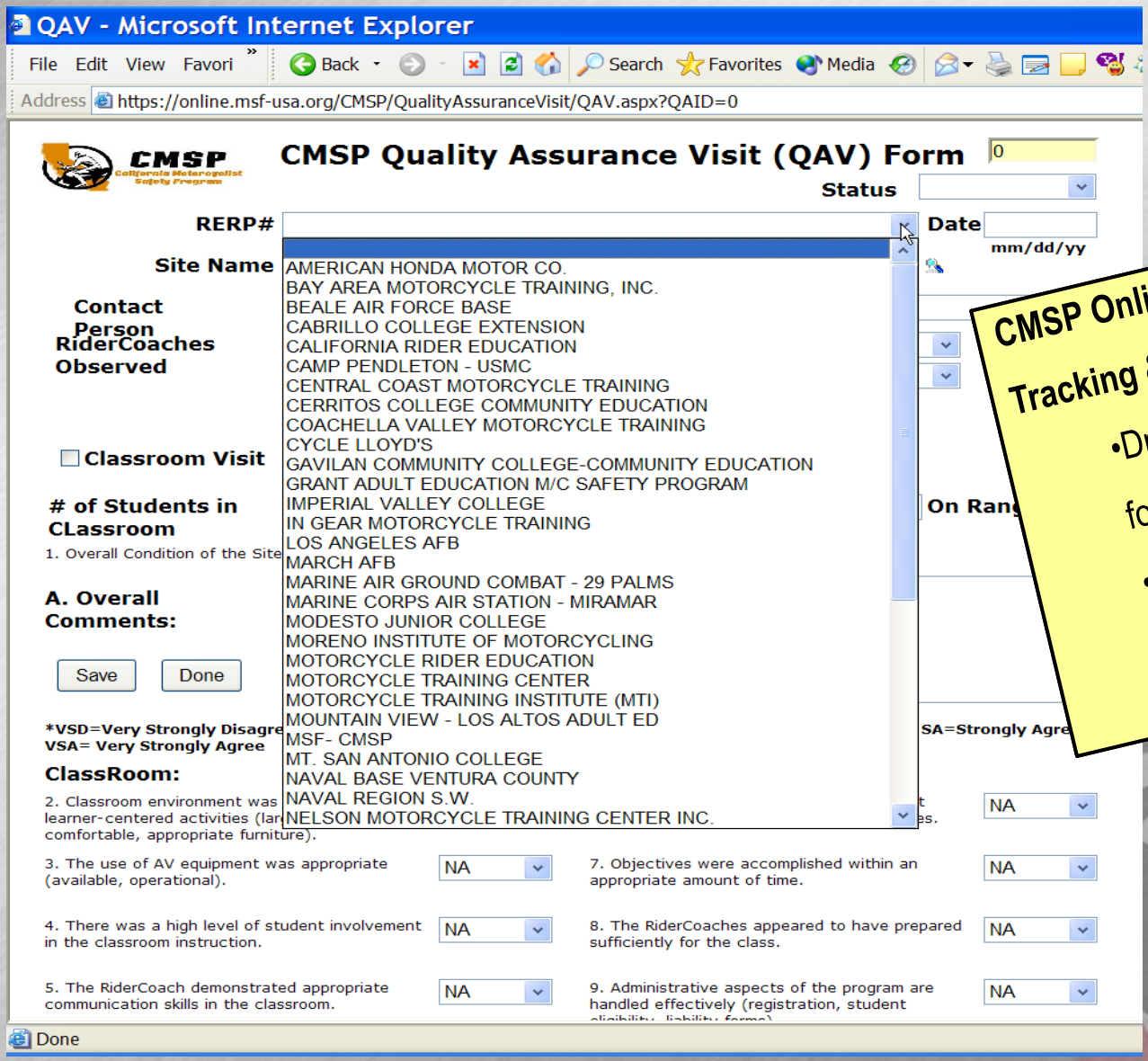
MSF-Sponsored Impact Research

- MSF Impact
  - 2002 - BRC RiderCoach Survey
  - 2003 - Curriculum Expert Evaluation
  - 2003 – BRC Student Evaluation Analysis
  - 2004 – BRC Student Evaluation Analysis
  - 2005 – BRC RiderCoach On-line Survey
- CMSP Impact
  - Training Stats
  - RiderCoach Stats & RiderCoach Survey Results
  - Quality Assurance Visit Analysis (Quarterly)
  - Student Feedback Forms (Qualitative & Quantitative)
  - Ongoing Random Checks of Completed Students

RETS Impacts

- Generally Identified by MSF
  - Participant / Customer Satisfaction
  - RiderCoach Satisfaction
  - Gains in Knowledge
  - Gains in Skill
  - Training Itself is Safe
  - Graduate Input After Experience
- Working toward a Collaborative Process with MSF Stakeholders to Identify Shared Benchmarks

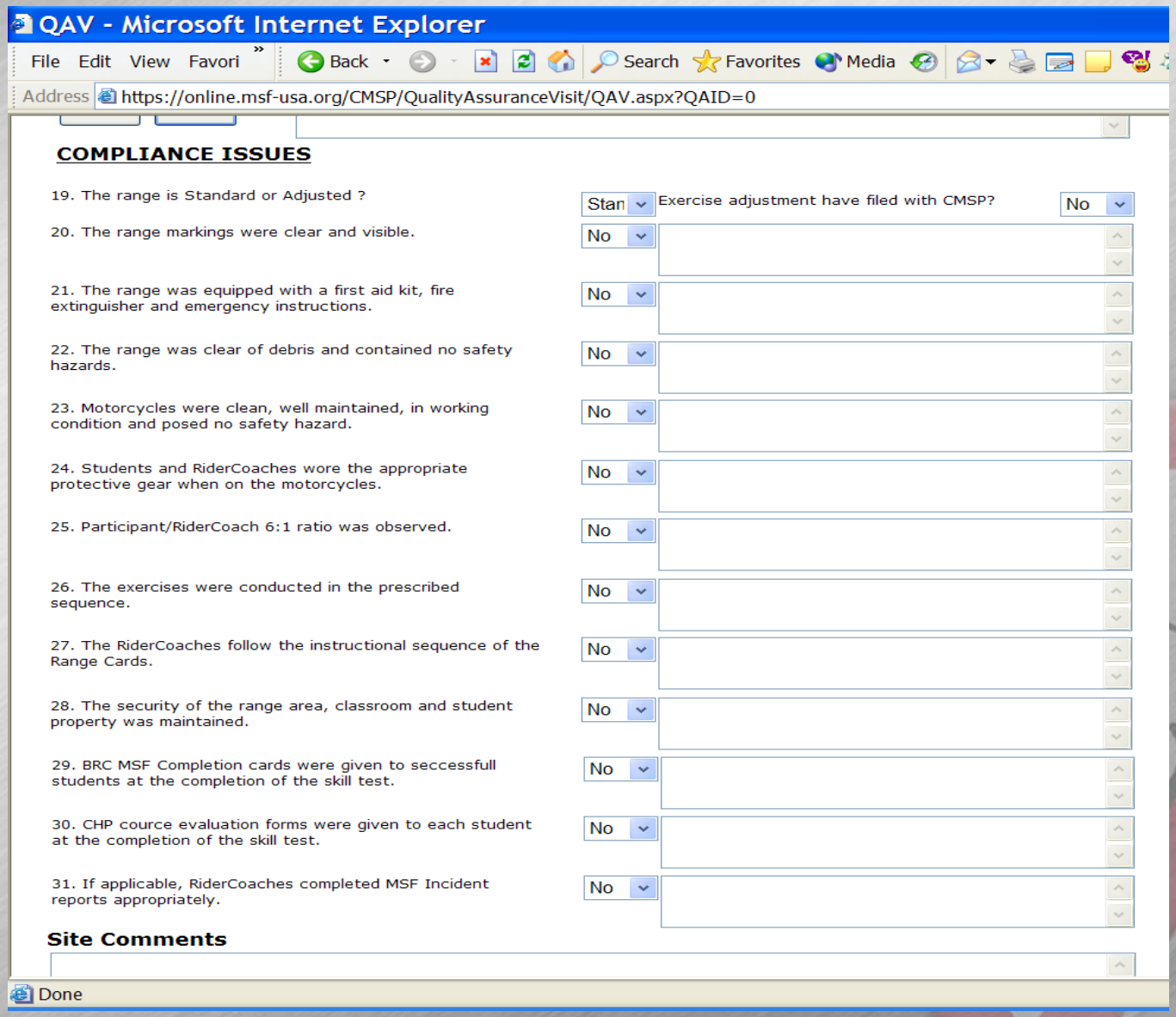
Available Tools to Collect Data



CMSP Online QA Site Visit Tracking & Feedback Module

- Drop-down menus for ease of completion
- Adaptable for state-by-state adoption

Available Tools to Collect Data



MSF Can Provide

- Data from MIC National RDD Survey
  - Provided to State Coordinators with permission of MIC Board of Trustees
- Availability of Training Survey (2004)
  - By zip code
- Our curriculum assessments
  - Posted in RETSORG
    - BRC History Document
    - Expert Review Results
    - BRC Student Survey Analysis Results 2003
    - RiderCoach Survey 2003
    - RiderCoach Trainer Survey 2005
  - To be Posted in RETSORG upon completion
    - BRC Student Survey Analysis Results 2004
    - RiderCoach Survey 2005

Data MSF can provide

RiderCoach Survey Results (Posted in RETSORG)

Chart will Facilitate Comparisons Between Peer State Programs

		General Perceptions of BRC			Perceptions: BRC Effectiveness			
		Safisfac tion	Confi dence In	Enjoy ment of	Range Exercises	Classroom	Street Readiness	State Update
NAT IONAL	3049	82%	83%	89%	83%	83%	75%	77%
STATE	TOTAL N per STATE							
AK	12	86%	92%	93%	90%	90%	83%	80%
AL	21	77%	67%	85%	77%	79%	75%	74%
AR	21	82%	85%	93%	83%	86%	73%	85%
AZ	65	84%	84%	88%	82%	84%	73%	76%
CA	234	77%	78%	85%	79%	79%	71%	69%
CO	71	82%	85%	89%	83%	84%	73%	79%
CT	47	79%	79%	88%	81%	81%	71%	87%
DE	13	89%	89%	97%	89%	90%	80%	90%
FL	155	87%	89%	93%	86%	87%	77%	79%
GA	44	83%	82%	87%	80%	79%	73%	85%
IA	32	78%	81%	88%	79%	75%	70%	69%
IL	110	79%	79%	87%	80%	80%	70%	85%
IN	82	79%	81%	89%	83%	84%	74%	85%
KS	40	86%	88%	91%	83%	87%	76%	75%
KY	37	90%	92%	94%	89%	88%	80%	82%
LA	14	89%	89%	91%	85%	88%	79%	81%
MA	57	79%	77%	86%	80%	78%	70%	64%
MD	94	82%	84%	89%	81%	84%	69%	74%
ME	15	87%	91%	95%	88%	90%	83%	90%
MI	89	81%	81%	89%	79%	82%	70%	74%
MIL*	68	86%	87%	92%	88%	88%	84%	80%
MN	83	81%	84%	90%	84%	79%	74%	71%
MO	58	87%	90%	94%	87%	87%	84%	80%
MS	15	85%	90%	93%	88%	87%	82%	73%
MT	21	79%	81%	93%	80%	83%	74%	76%

VARIABLE KEY

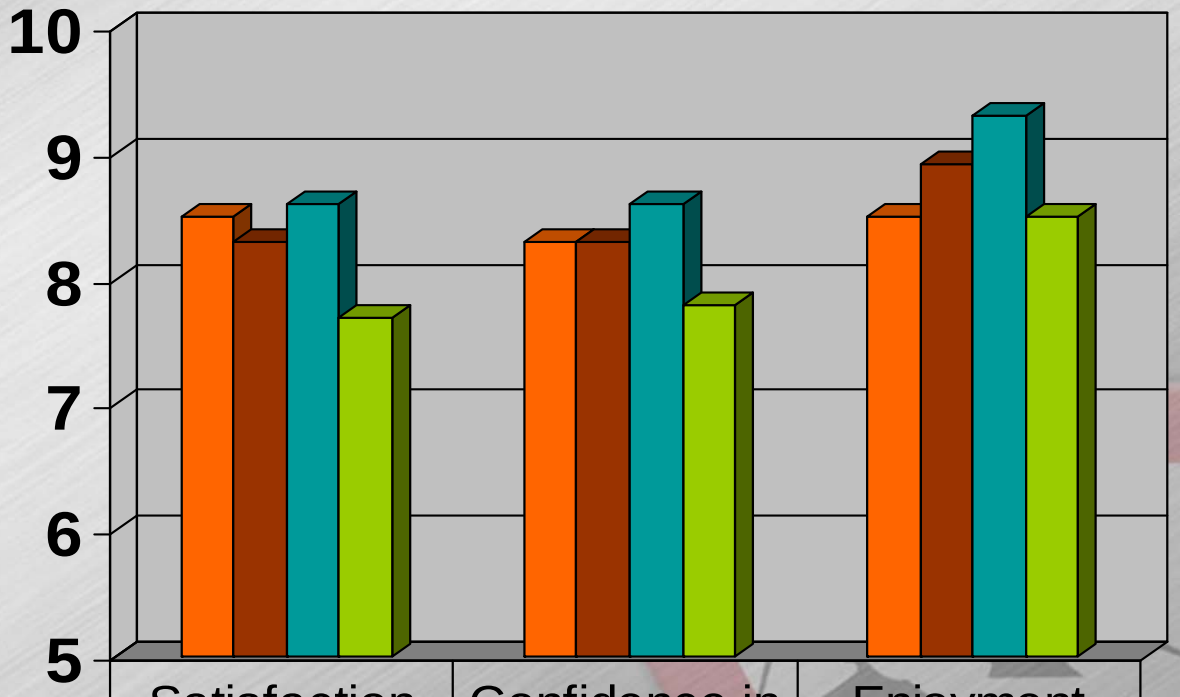
Satisfaction: Rating of Overall Satisfaction when Teaching the Basic RiderCourse
Confidence In: Rating of Current Confidence in the BRC Training Program
Enjoyment of: Level of Enjoyment when Teaching the BRC
Range Exercises: Rating of How Well BRC Range ExercisesTeach Five Basic Skills
Classroom: Rating of How Well BRC Classroom Teaches Basic Concepts

Data MSF can provide

Comparative Bar Graphs

Can be created

From Excel Worksheet



	Satisfaction	Confidence in	Enjoyment
2003	8.5	8.3	8.5
2005	8.3	8.3	8.92
2005 NV	8.6	8.6	9.3
2005 CA	7.7	7.8	8.5

Other Variables for Comparison

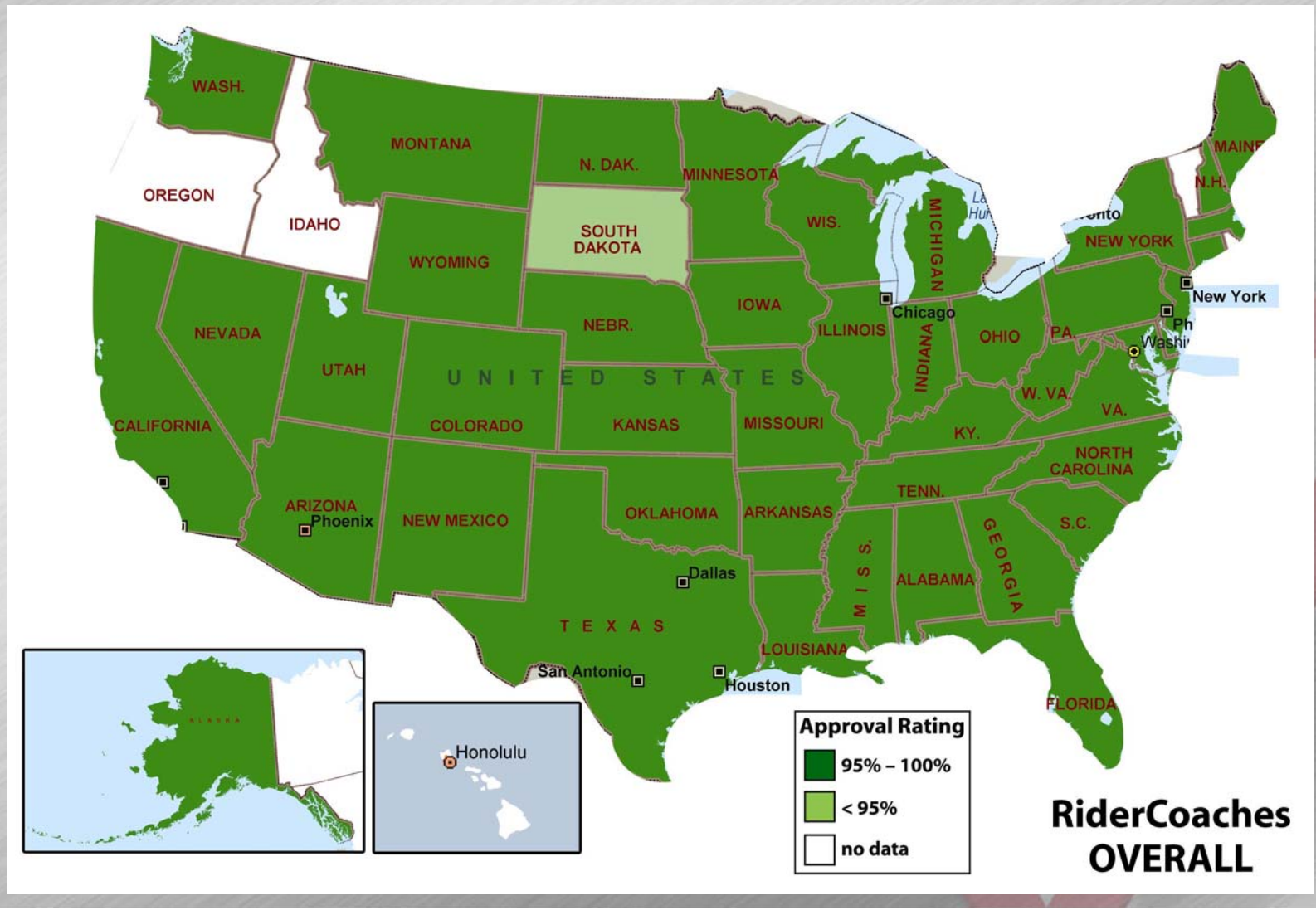
Groups can be pulled out and compared:

- State
- RiderCoach Demographics
  - Age, Education, Gender, Type of other work
- Rider Ed roles (RC, RCT, Site Manager, State Personnel)
- Number of BRC/ERC classes taught
- Riders Edge Involved RiderCoaches
- Years certified as RiderCoach
- Those who were MRC:RSS certified and those who weren't
- Those who attended MSF Learning Center
- List serve participants
- Open-ended comments by groups/states

Request additional Stats Runs or Group Comparisons By contacting: swilliams or atyra @msf-usa.org

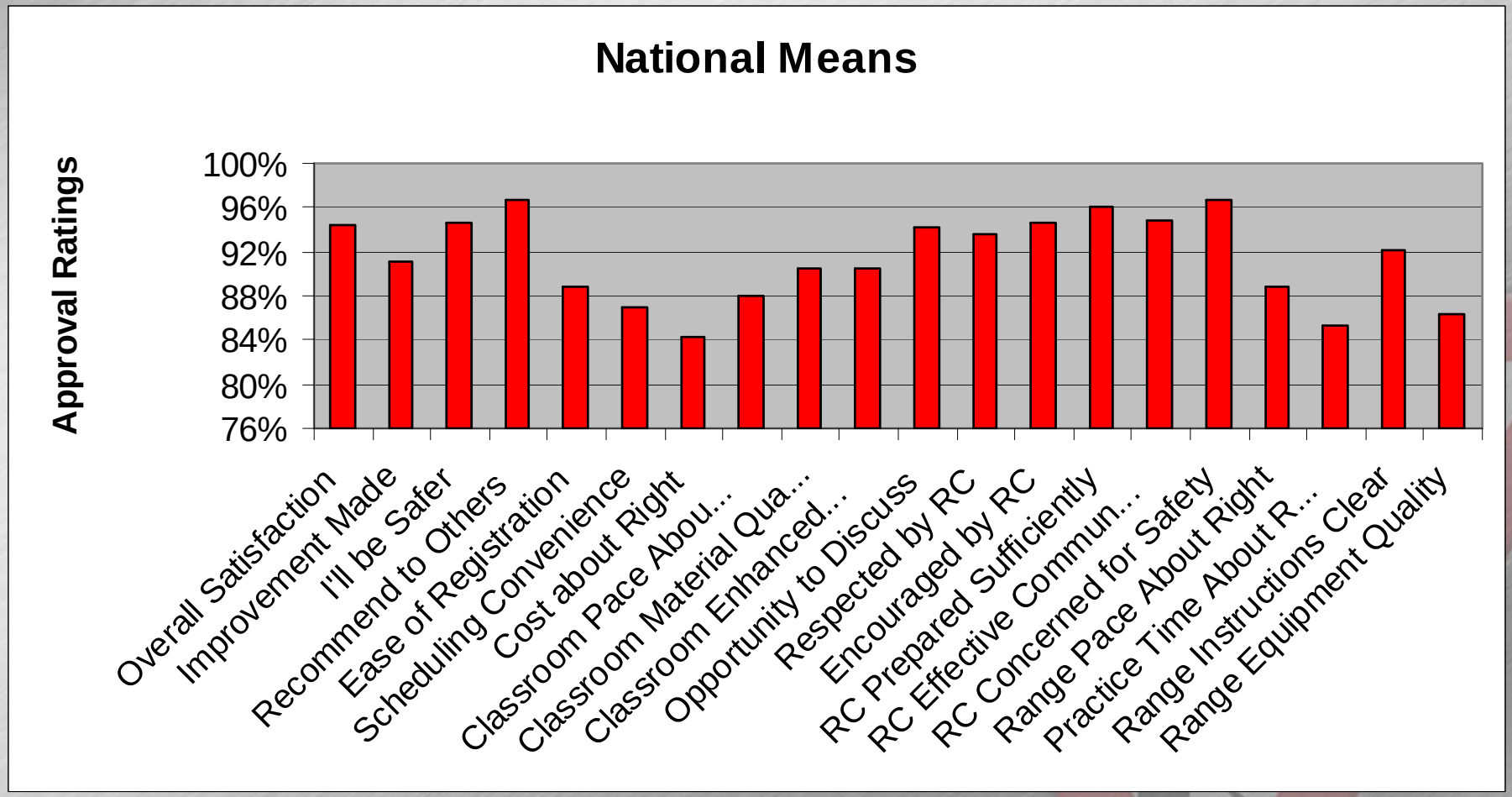
Data MSF can provide

- BRC Student Participant Ratings and Observations



Data MSF can provide

- 2004 BRC Student Feedback



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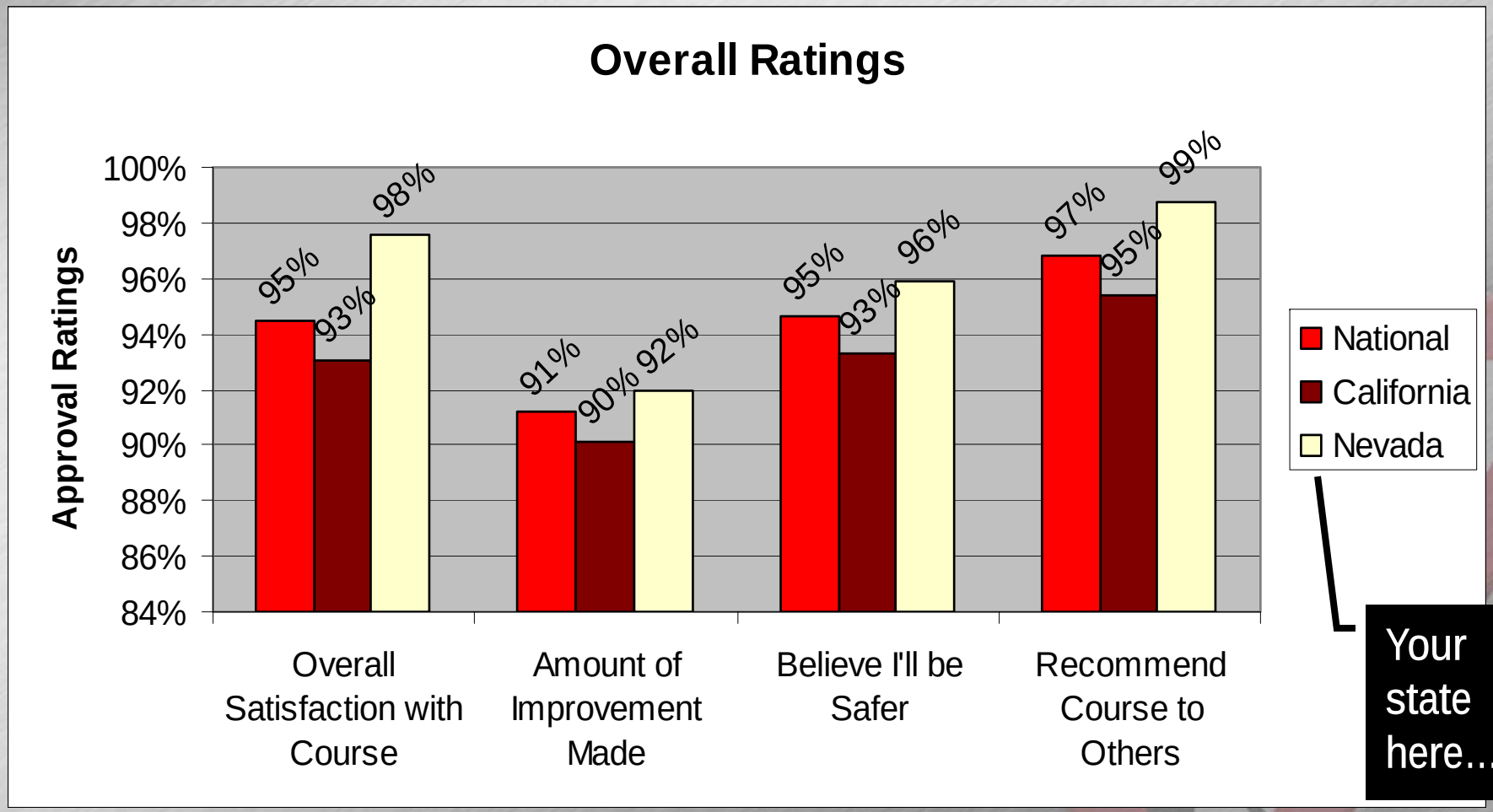
- 2004 BRC Student Feedback – Peer State Comparisons



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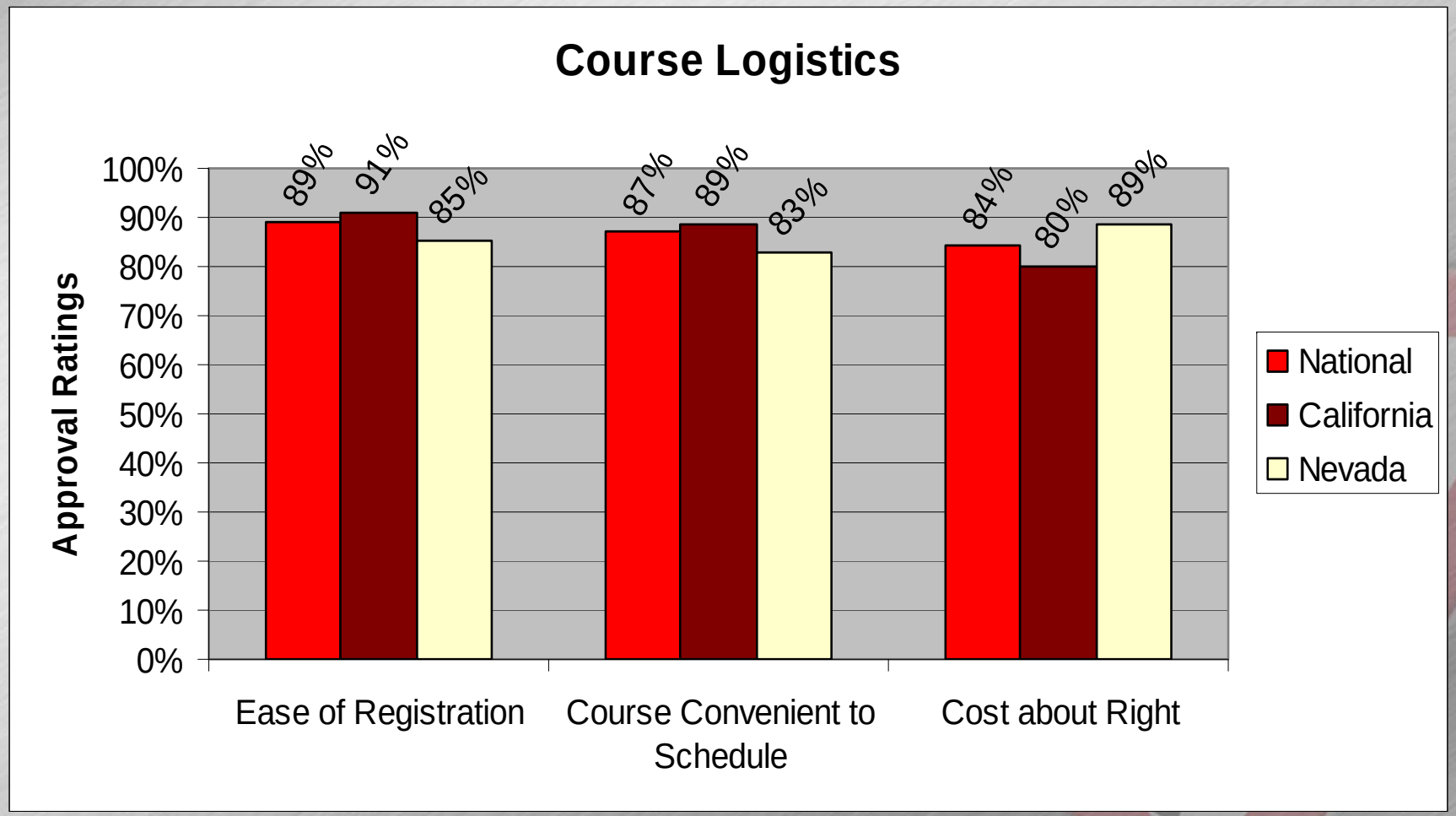

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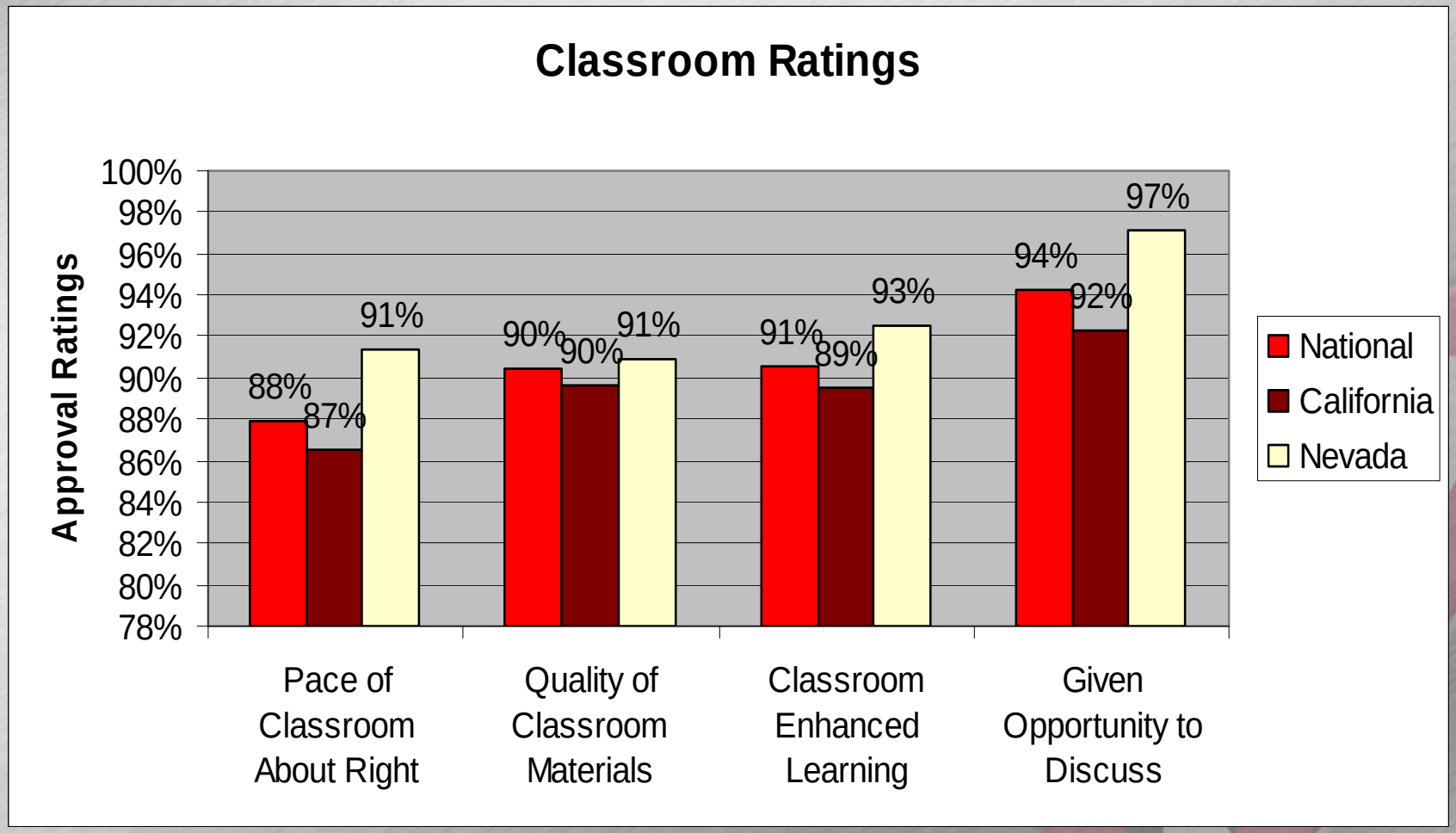

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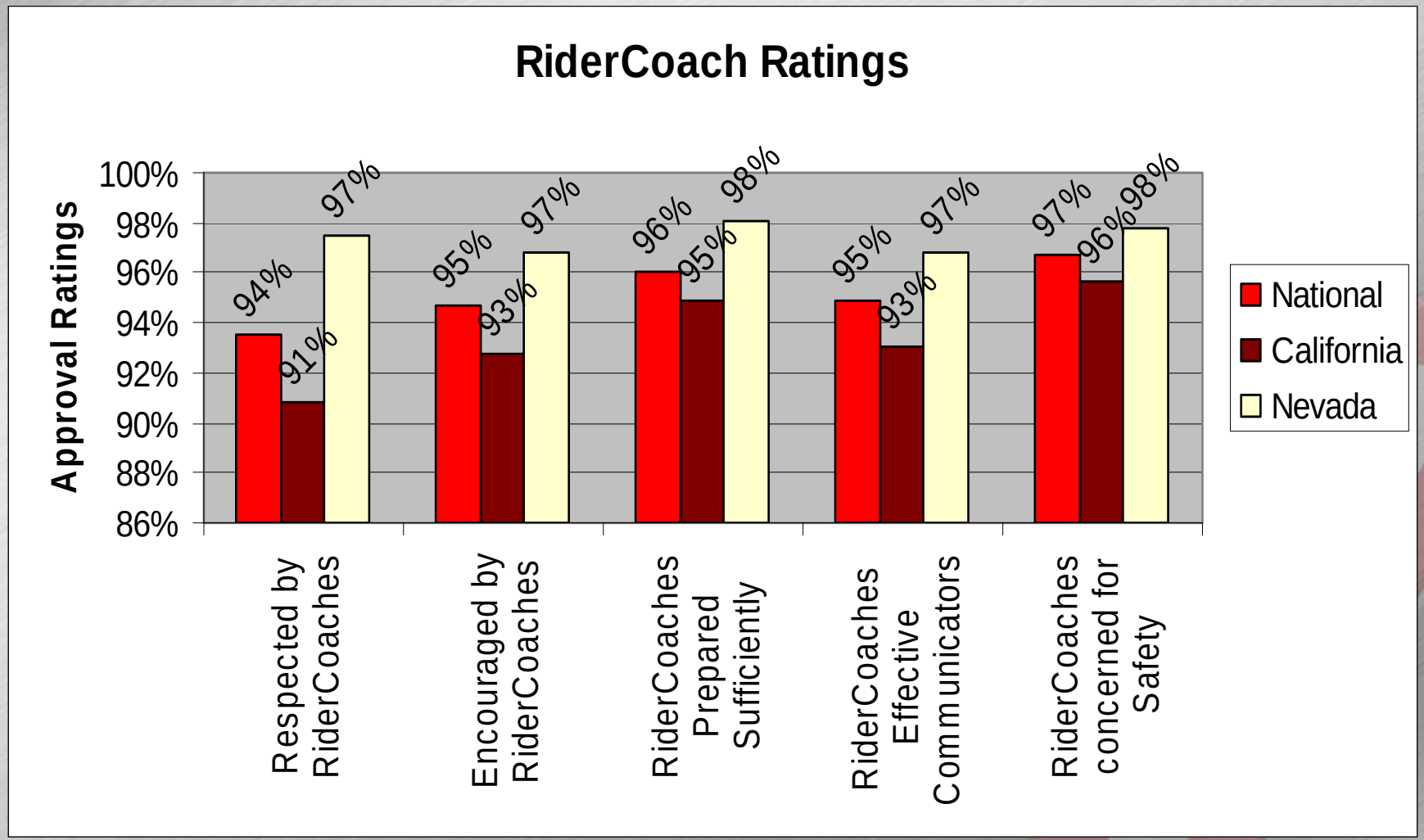

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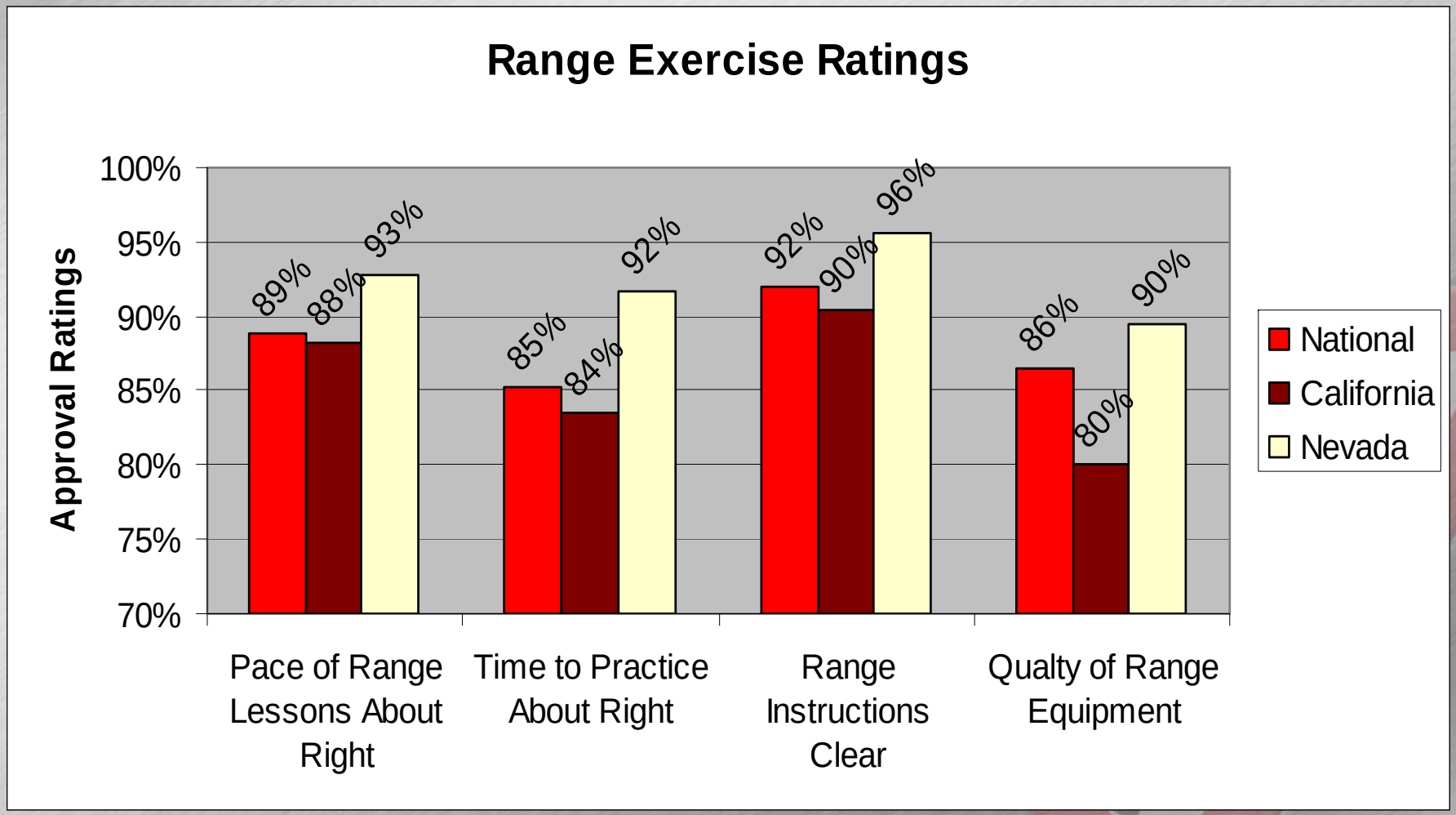

Outcome Evaluation

- CMSP Student Follow-Up Study
  - Random sample of course participants
  - Follow-up Questions about Riding Experiences
  - Telephone Sample

- The Discovery Project
  - Goal: To increase the number of and type of outcome measures
    - Self reported skill improvement
    - Self reported use of crash avoidance skills
    - Violations, Crashes, Fatalities
    - Use of protective gear that meets standards
    - Use of safety strategies

Resources

- Demonstrating Your Program's Worth
  - http://www.cdc.gov/ncipc/pub-res/demonstr.htm
- W.K. Kellogg Foundation Evaluation Handbook
- American Evaluation Association
  - Find an Evaluator
  - http://www.eval.org/consultants.htm
- Motorcycle Safety Foundation

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Program Evaluation

Thank You!

www.msf-usa.org
swilliams@msf-usa.org
crimm@msf-usa.org