# Training the Next Generation of Energy Efficiency Evaluators: A Report from the Field

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## **Topics**

- o Introduction
- o IEPEC Survey
- Evaluation Training Opportunities
- IEPEC 2012 Planning Committee Survey
- o Conclusions





#### Introduction

- Energy efficiency program evaluation is increasing in prominence
  - Increased regulatory requirements and review
  - Use of energy demand forecasts and bids by ISOs
  - Crediting of energy efficiency in air quality programs and carbon-trading markets
- Increased need for trained evaluators
- Need to assess the training needs of new and "experienced" evaluators





#### **IEPEC Survey - Methodology**

- IEPEC Educational Subcommittee designed survey
- 2011: Emailed survey to 5,300 email
  addresses
  - 785 opened their email; 211 answered; 28% response rate
- Self-selected sample but not just evaluators
  - include regulators and program administrators, etc.





#### **Affiliation of Respondents** (n = 139)Utility commissions 6% Other 9% Non-profit organization Consulting firm 10% 29% University 12% Utility Gov't - all levels, 16% including nat'l labs 18%

Diverse respondents: Almost 50% from government and consulting firms



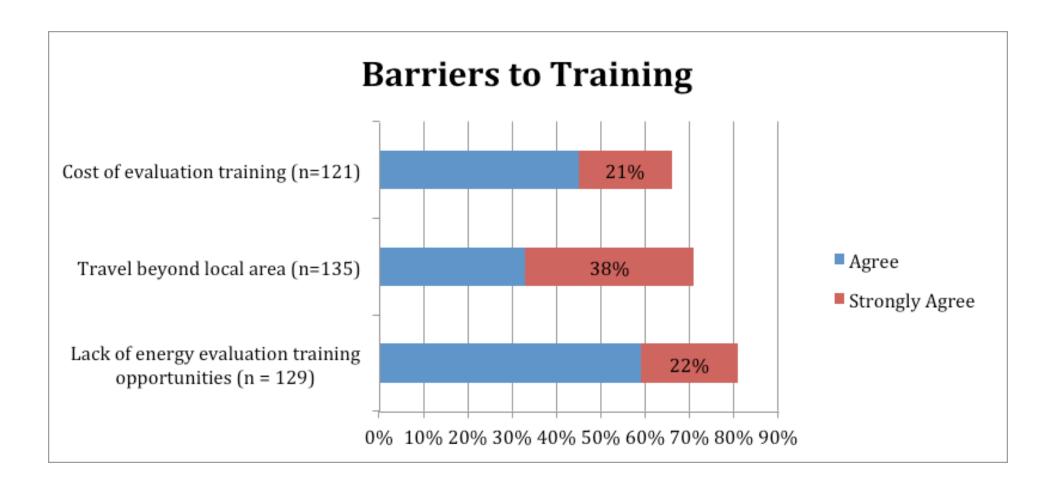


# IEPEC Survey – Evaluation Experience and Interest in Training

- Majority had attended two IEPEC conferences or less
- Evaluation experience: most were in the 0-3
  year range or the 10 years plus range
- 62% (130 responses) interested in energy efficiency program evaluation training now for themselves or for their staff



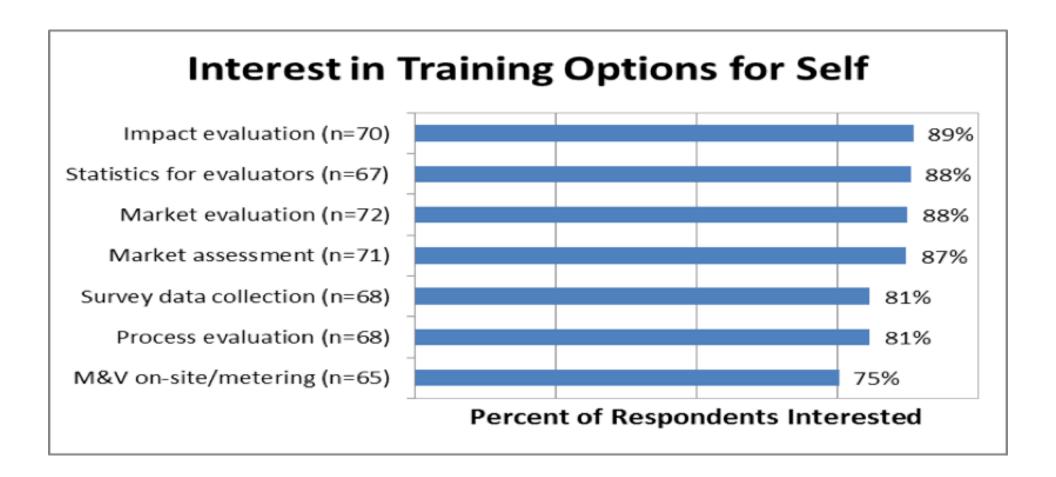




Lack of training opportunities is key barrier, followed by travel restrictions



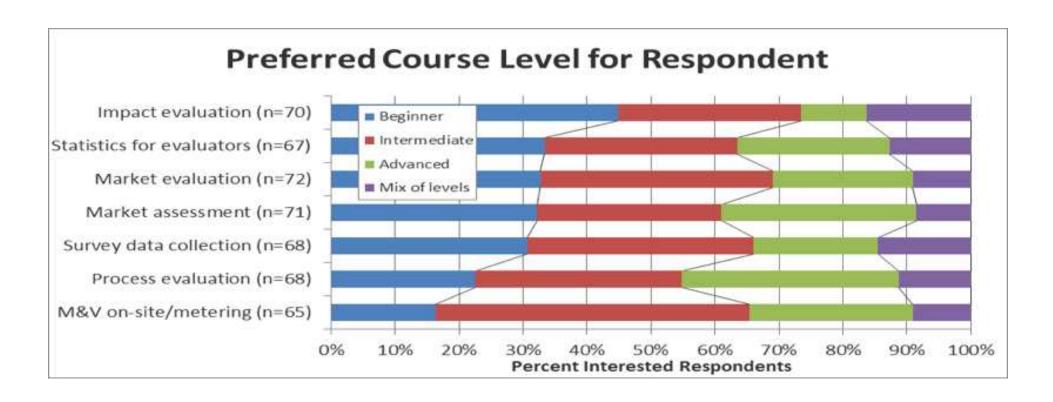




**Strong interest in ALL training topics!** 





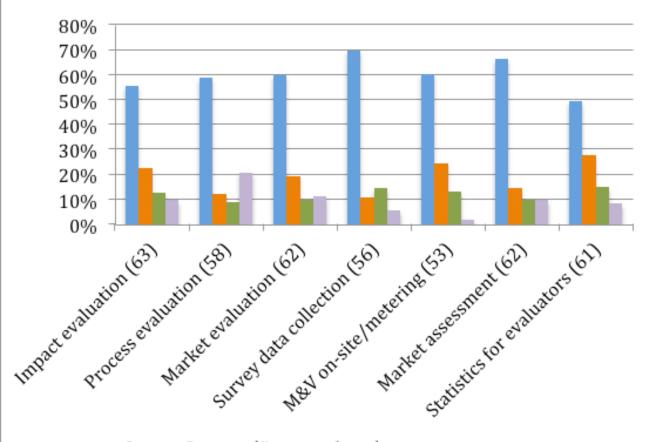


Generally: preference for beginning/intermediate levels; little interest in advanced levels.









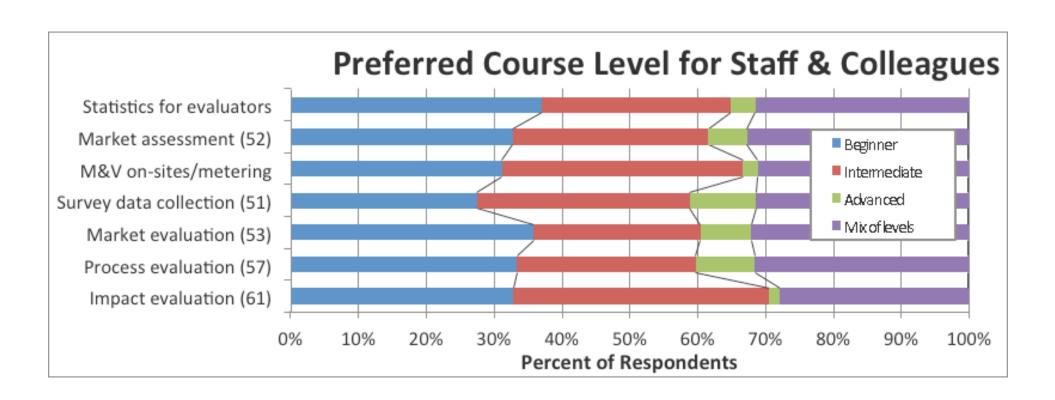
- Webinar/Online presentation
- In-person training at various locations
- Video Course
- Part of the IEPEC Conference

Course Content (# respondents)

**Clear preference for Webinar/Online presentation** 



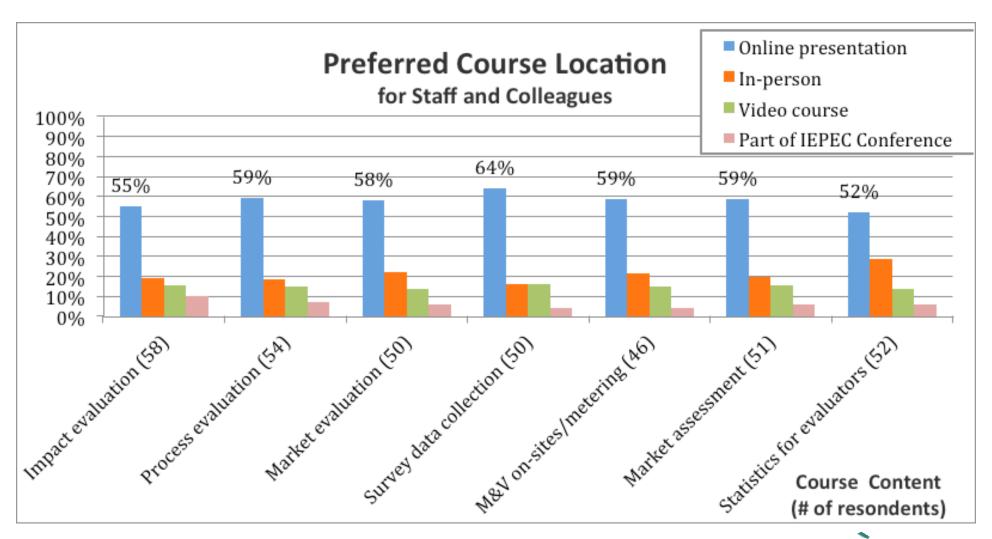




**Greater preference for beginner/intermediate levels (compared to respondent)** 











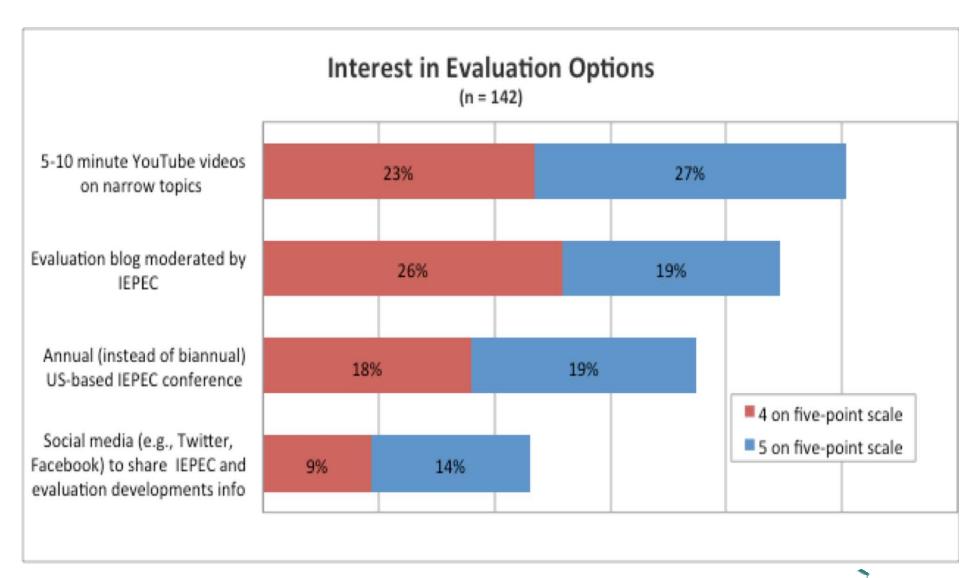


#### **IEPEC Survey – Interest in Specific Course Topics**

Торіс	Count	Percent (N=211)
Evaluation and Regulatory Practices		
1. Best practices in evaluation	60	28
2. Developing an evaluation plan for one program	56	26
3. Communicating evaluation results to stakeholders	55	26
4. Developing a strategic plan for evaluating multiple programs	52	25
5. Evaluation and regulatory policy	50	24
6. Pros and cons of deemed EM&V databases	48	23
7. Analyzing evaluation data on regional or national basis	47	22
8. Selecting and managing an evaluation contractor	45	21
9. Developing a RFP for a program evaluation	44	21
Evaluation Methods		
1. Use of logic models	49	23
2. Billing analysis	49	23
3. Use of non-parametric tests	42	20
4. Developing a deemed EM&V database	41	19
5. Applications of geographic information systems	41	19
6. Use of logit models	41	19
7. Developing a technical reference manual	40	19
8. Verifying and certifying greenhouse gas emissions from energy- efficiency projects	39	18
9. Developing fixed effects models	38	18

Interest in all topics – slight preference for Evaluation and Regulatory Practices





Least interest in Social Media; more interest in YouTube and blogs





#### **Evaluation Training Opportunities**

- O Efficiency Valuation Organization (EVO)
  - Certification course on M&V and IPMVP
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)
  - Training course on M&V
- Association of Energy Services Professionals (AESP)
  - Training course on evaluation
- The Evaluators Institute
  - Courses & certificates on evaluation
- American Evaluation Association (AEA)
- IEPEC evaluation workshops
- Conferences: IEPEC, American Council for an Energy-Efficient Economy, Consortium for Energy Efficiency
- Universities and colleges
  - Directory of energy and energy-related programs (2006) at IEPEC website



#### 2012 IEPEC Planning Committee Survey

#### Key Findings from Small Sample

#### Need for training

- More jurisdictions developing and implementing energy efficiency programs and evaluation plans
- Audits of national energy agencies pointing out problems with existing monitoring and evaluation activities and the need to correct for these deficiencies
  - Agencies have responded with improved evaluation services but still lack trained manpower to conduct these services
- National programs for energy have led to increased capacity building in multiple organizations for improving energy savings calculations and evaluation





#### 2012 IEPEC Planning Committee Survey

#### Key Findings from Small Sample

#### No need for training

- Lack of an evaluation culture on programs, plans and strategies
  - s No need for a defined role for energy efficiency evaluation
- No regulatory pressure for evaluation
  - Professional evaluators work in a range of fields with out a specific energy focus





#### **Conclusions**

- Training of evaluators (new and experienced) is a high priority
- Most respondents are interested in webinars and YouTube videos on specific evaluation topics
- Need for coordination and collaboration on evaluation training among leaders in this field
- Evaluation training is especially needed at the intermediate level
- Colleges and universities have an important role in training the next generation of evaluators





## **Time for Questions**





