

BENCHMARKING INFRASTRUCTURE OPERATIONS COURSE

AUGUST 8 - 11, 2016
GAINESVILLE, FLORIDA
USA

How can utilities be benchmarked for efficiency? Which types of comparisons are valid and which are invalid, possibly leading to significant errors? This course answers these questions and more, as participants analyze the benefits, best practices, and pitfalls of benchmarking utilities. Join us!

After completing this course, you will be able to:

- Understand why benchmarking is essential for improving the performance of infrastructure organizations
- Analyze the implications of partial, limited, or incorrect information
- Assess how information on trends in key performance indicators helps decision-makers
- Understand how model specification and data outliers affect performance comparisons
- Identify the strengths and limitations of alternative quantitative methodologies and how to communicate results

This benchmarking course features 16 different teaching modules across four-and-one-half days, beginning Monday, August 8 at 9:00 a.m. local time. Topics are presented in a manner that emphasizes their interrelationships. You will learn how benchmarking can improve operational performance, help in the design of incentives (internal to the firm and those established by external authorities), promote transparency, and lead to more effective regulation. Topics include identifying data requirements, collecting information, auditing information for accuracy and relevance, establishing effective communication with the public on regulatory issues, and helping in the resolution of disputes among stakeholders.

Benchmarking Infrastructure Operations Course Fee is US \$3,900

The fee includes:

- Program tuition
- Hotel accommodations for five (5) nights (arrival Sunday, August 7 departure, Friday, August 12)
- Meals (Monday-Thursday) breakfast, refreshment breaks, lunches, and 3 dinners
- Reading and classroom material
- Welcome Reception, Sunday, August 7

Find more information about this course through the Advanced Program listing under Training and Development on the PURC homepage, www.purc.ufl.edu or contact us at purcadmin@warrington.ufl.edu or +1 (352) 392 - 6148.

The application process opens March 2016 on the PURC website - www.purc.ufl.edu.

This course is part of the PURC Advanced International Practices Program. Other courses available in 2016 include Energy Pricing (July 31-August 5, 2016) and Telecom Policy and Regulation for Next Generation Networks (Aug. 8-11, 2016).

**PURC Advanced International Practices Program – Benchmarking Infrastructure Operations
August 8 - 11, 2016 - Gainesville, Florida**

Monday, August 8	Tuesday, August 9	Wednesday, August 10	Thursday, August 11
<p><u>Session 2</u> 9:00 - 10:30</p> <p>Overview of Program Sanford Berg Understanding the political economy of benchmarking; who supports benchmarking; who is threatened by comparisons; how can studies be misused; sources of conflict and sector performance: the role of evidence</p>	<p><u>Session 6</u> 9:00 - 10:45</p> <p>Alternative Methodologies for Measuring Performance Sanford Berg Beyond key performance indicators; Metrics and productivity trends; statistical analysis (OLS and COLS); data envelopment analysis (DEA), and Stochastic Frontier Analysis (SFA). Strengths and Limitations of alternative methodologies.</p>	<p><u>Session 10</u> 9:00 – 10:45</p> <p>Case 5: Utilizing Available Software--DEA Michelle Phillips Using data from cases 1 and 3, participants will develop performance indicators; results will be shared and evaluated; what are the strengths and limitations of statistical methods?; how sensitive are results to selection of inputs and outputs?</p>	<p><u>Session 14</u> 9:00 – 10:45</p> <p>Performance Assessment and Performance Improvement Sanford Berg and Ted Kury Data acquisition and validation; best practice examples; pre-analysis (clustering, sensitivity analysis, KPIs); tables, scatter diagrams, figures; studies with data from participants. Implications for different stakeholders. Service quality and cost. Awards: top performers most improved.</p>
<p><u>Session 3</u> 11:00 – 12:30</p> <p>Case 1: Selecting Data Ted Kury Productivity, efficiency and effectiveness; identifying inputs and outputs, stocks and flows; prioritizing data needs; implications of partial, limited or incorrect information; conditioning and environmental variables. Legal authority for data collection.</p>	<p><u>Session 7</u> 11:00 - 12:30</p> <p>Case 4: Utilizing Available Software: Statistical Analysis Ted Kury With data from cases 1 and 3 participants will utilize the Analysis ToolPak in Microsoft Excel to estimate productions and cost functions; evaluating analyses; what are the strengths and limitations of statistical methods?; how sensitive are results to model specifications?</p>	<p><u>Session 11</u> 11:00 – 12:30</p> <p>Case 5: Continued – Group Work Michelle Phillips Participants will utilize DEA software to compute performance scores for the sample utilities; specifications of cost and production relationships will be evaluated</p>	<p><u>Session 15</u> 11:00 – 12:30</p> <p>Case 6: Communicating Results Sanford Berg and Michelle Phillips Should the analyst present scores or rankings?; who are the different audiences for performance studies?; each team will prepare a Press Release or Executive Summary for a different audience (sector ministry, regulator, top management, the press, consumer’s association)</p>
<p><u>Session 4</u> 1:30 – 3:00</p> <p>Case 2: Confidence in Performance Comparisons Sanford Berg Additional inputs and outputs; additional years (trends); context and governance variables; introduction to robust comparisons. Moving from KPIs to Overall Performance Indicators.</p>	<p><u>Session 8</u> 1:30 – 3:00</p> <p>Case 4: Continued – Group Work Ted Kury Each participant will practice using Analysis ToolPak in Microsoft Excel to analyze the efficiency of utilities in the sample; results of different specifications will be used to strengthen abilities to interpret empirical results</p>	<p><u>Session 12</u> 1:30 – 3:00</p> <p>Evaluating Benchmarking Studies: Engaging Stakeholders Sanford Berg and Michelle Phillips Participants will develop stakeholder maps, identifying groups with high/low influences and high/low interest in improving sector performance. Opponents of change will be identified.</p>	<p><u>Session 16</u> 1:30 – 3:00</p> <p>Action Plans Araceli Castaneda Presentation of individual Action Plans; think strategically about your relationships; develop a system of accountability; give and receive critical feedback</p>
<p><u>Session 5</u> 3:15 – 5:30</p> <p>Case 3: Back to the Basics Sanford Berg Data definitions; Total Factor Productivity (TFP); evaluating company information systems (sensors, data capture, data consistency, storage, analysis, decisions); checklist for conducting benchmarking studies</p> <p>Review of Software Resources Michelle Phillips Review of Excel, ensure participant laptops are configured with necessary plug-ins used throughout the course</p>	<p><u>Session 9</u> 3:15 – 5:00</p> <p>Review of Statistical Analyses Ted Kury Determining scale economies; economic vs. statistical significance; evaluating the robustness of results</p>	<p><u>Session 13</u> 3:15 – 5:00</p> <p>Using Benchmarking Results Sanford Berg and Ted Kury Public awareness (transparency and public acceptance/legitimacy); internal incentives (efficiency); regulatory incentives (effectiveness); price reviews (x-factors); baselines, trends and targets</p>	<p><u>Session 17</u> 3:15 – 5:00</p> <p>Next Steps and Key Lessons Sanford Berg Current capabilities; adequacy of data system; developing strategic plans for engaging allies, opposition and other important players; next steps for your organization; prerequisites to successful benchmarking; planning the next study</p>