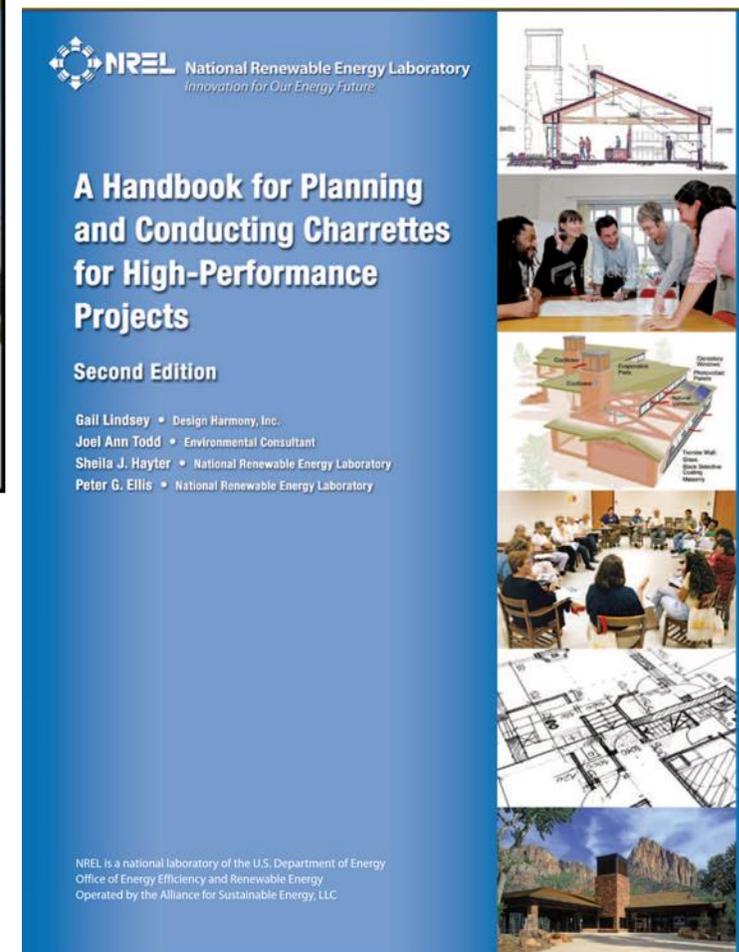
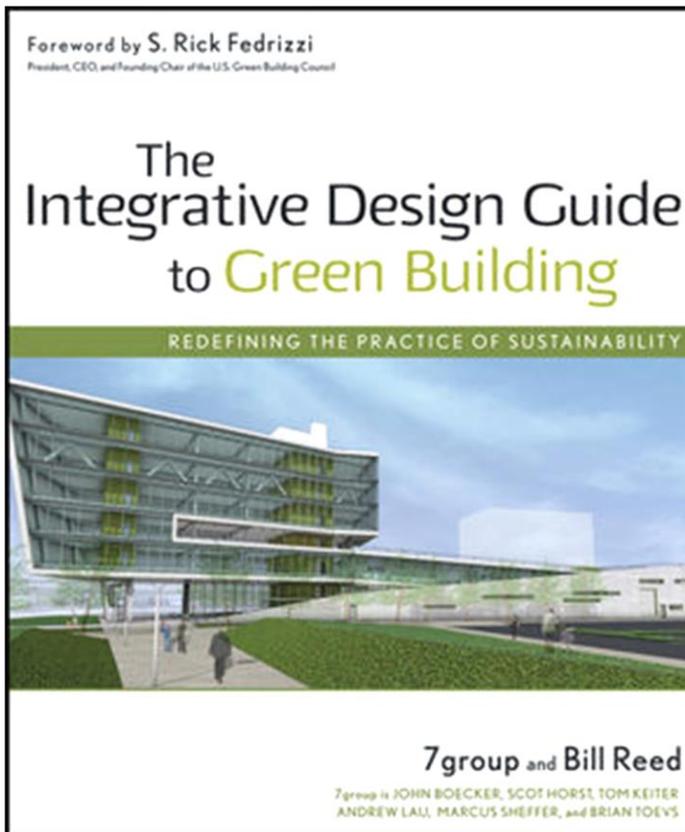


The Goal-Setting Charrette

جلسه ششم- مبانی طراحی محیطی، نظریه و روشها

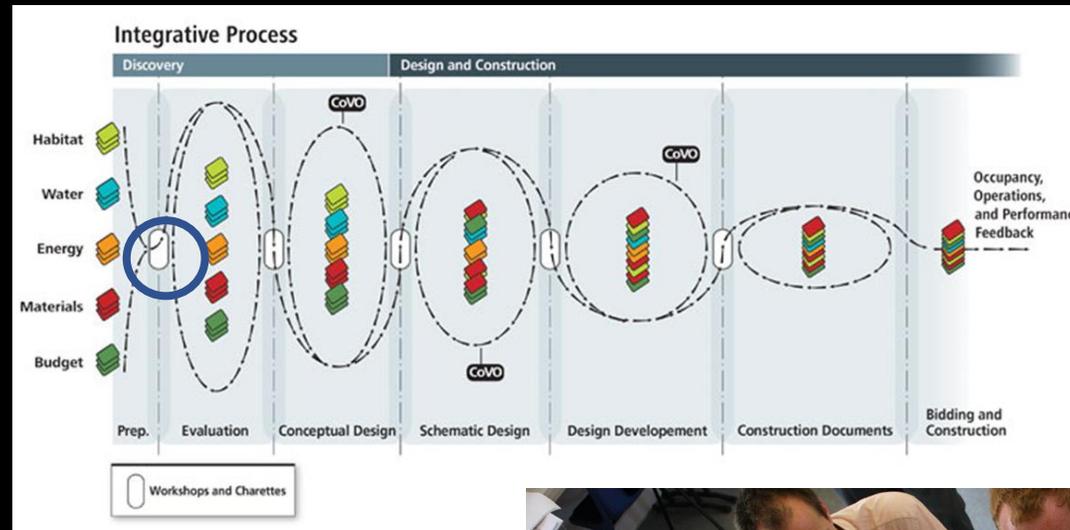
اردیبهشت ماه 1399



NREL is a national laboratory of the U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Operated by the Alliance for Sustainable Energy, LLC

Introduction

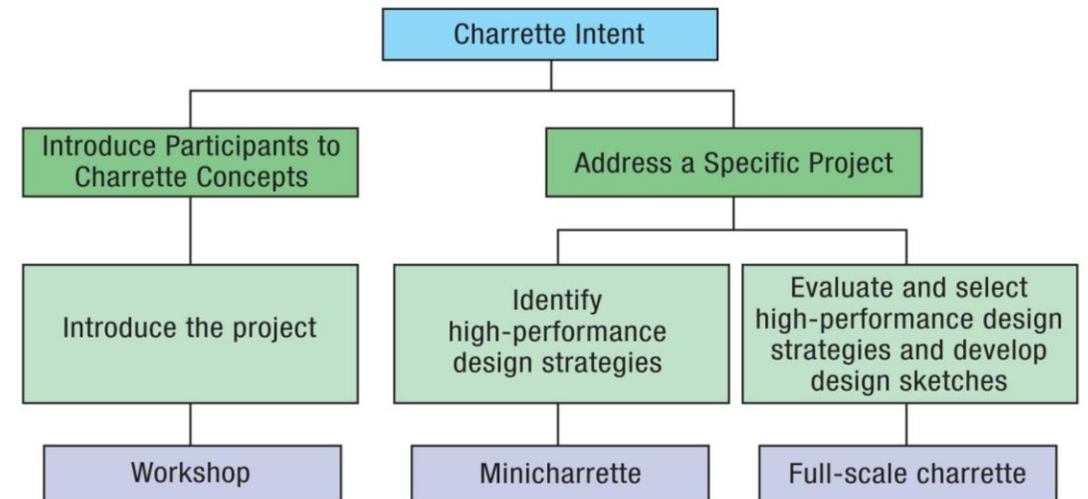
- Design charrette introduction
 - Who to invite
 - Logistics
 - Codes of conducts
 - How to facilitate discussions
- The Goal Setting Workshop
 - Tasks and activities
 - Principles and measurements
 - Cost Analysis
 - Schedule and next steps



Design Charrettes

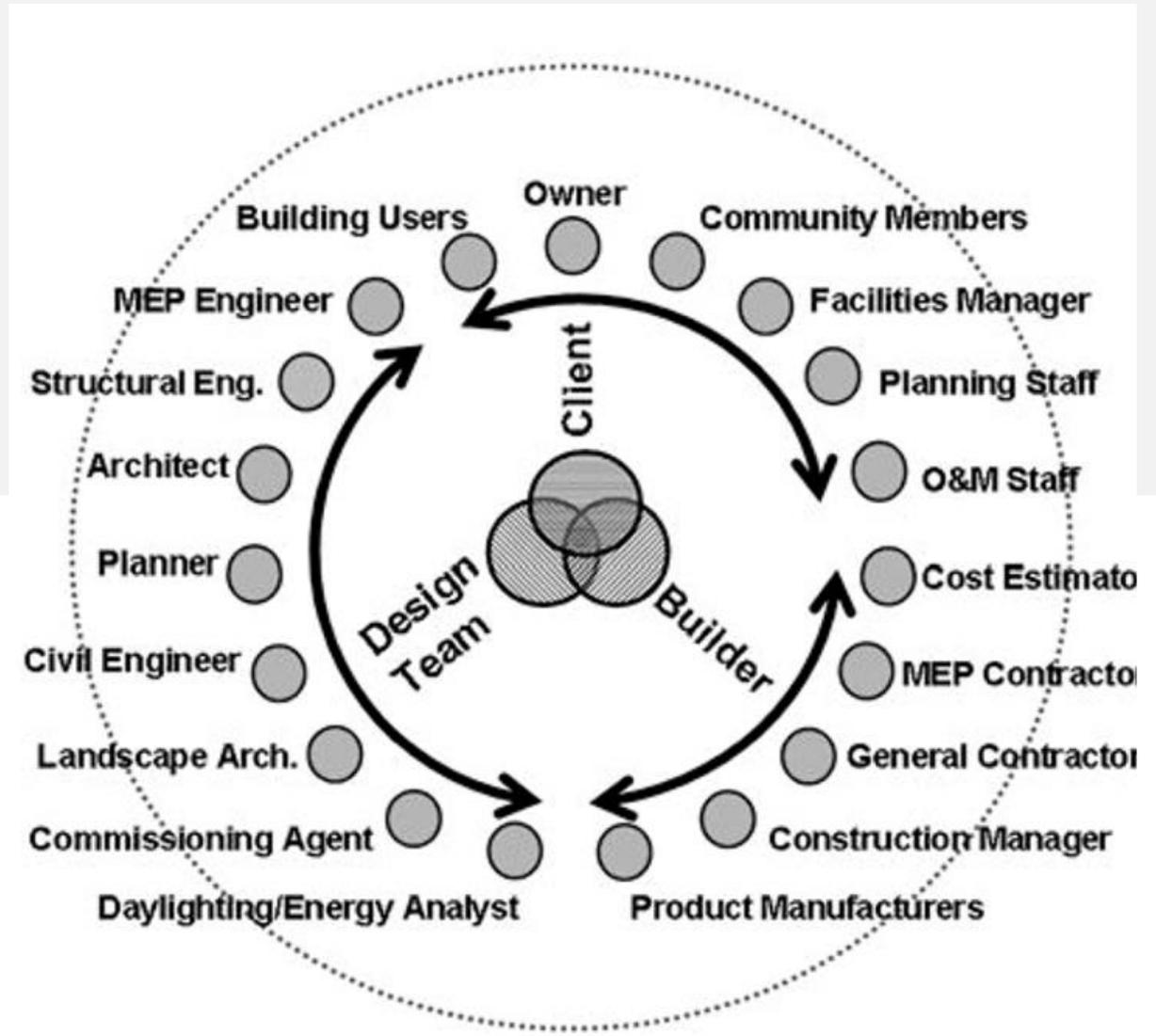


Ecole des Beaux-Arts - Paris, France



Who to Invite?

- Plan ahead
- Invite only relevant stakeholders for each particular Charrettes



Logistics

- Assemble and Distribute Resource Materials
 - Event specific information:
 - Final agenda
 - List of sponsors and contact information
 - List of participants and contact information
 - List of presenters with bios and contact information
 - List of exhibitors
 - Project Information (+site printouts)
 - Predesign energy analysis results
 - Handouts For Technical presentations
 - Case studies of similar high-performance projects
 - Resources (useful Web sites, articles about local green buildings,)
 - Evaluation forms

AGENDA

HUBBUB ^{AT}
CITYHALL

Friday, November 29, 2013

Dialogue

10:00	(30 min)	Registration	Arrival, name tags, bingo	Town Hall
10:30	(15 min)	Welcome	Lena Soots "What's all the hubbub about"	Town Hall
10:45	(45 min)	Project Presentations + City Staff Responses	Feeding the City: Local Food + Food Recovery Safe City: Health + Inclusion Zero Waste City Active City: Transportation + Walkability Happy City: Design + Placemaking	Town Hall
11:30	(60 min)	Dialogue	Five breakout themes	Various Rooms

Lunch

12:30	(60 min)	Food Truck Lunch	Bring lunch money! Eat at the Long Table.	Town Hall
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Design

1:30	(90 min)	Design Workshop	What should we be working on? Create a poster for the next big project	Town Hall
3:00	(30 min)	Post + Share Ideas		Town Hall
3:30	(30 min)	Closing	See you at the Hullabaloo!	Town Hall
6:00	(3 hours)	CityStudio Holiday Party	Hullabaloo Party at Lost+Found	Town Hall

Lead by Example

Employ green practices when preparing participant materials:

- Use recycled paper.
- Make double-sided copies of everything except site information and other charrette working materials.
- Use notebooks or folders made of recycled or environmentally preferable materials (e.g., recycled cardboard).
- Avoid using paper when possible:
 - Give Web site addresses and information about how to order materials instead of providing all the materials.
 - Make examples of supplemental materials such as brochures and flyers available at the resource table.
 - Distribute advance materials (such as project information and predesign energy analysis results) electronically by e-mail or Web site.
- Collect name tags for use at the next event.
- Provide recycling bins for paper, cans, bottles, and composting.

Code of Conducts in IPD charrettes

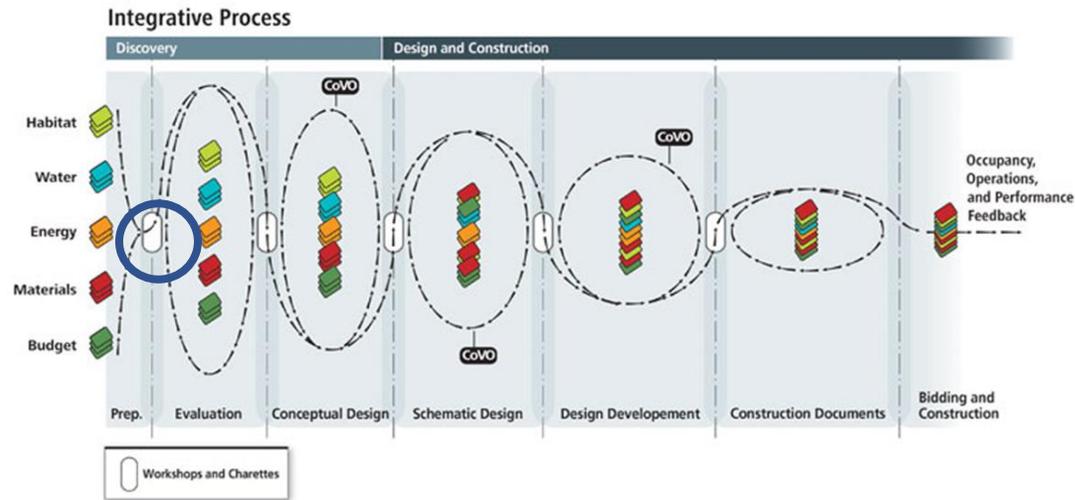
- Active Listening
- Respect of other Ideas
- Start and end on-time
- Open sharing of ideas and perspectives
- Serve the best interest of the group



Tip/Tools for good Facilitation

Tip / Tool	Description	Purpose
Check-ins	Participants introduce themselves, give personal anecdote, or state goal for meeting	Personalize setting, get on same page, break ice, and set context
Check-outs	Participants comment on their experiences	Chance to express concluding remarks and achieve sense of closure
Ice-breakers	Game or activity	Introductions, ease people into group setting, and stimulate discussion
Team values or Code of Conduct	Establish team's ground rules with input from all participants	Create common understanding, promote a respectful environment, and provide a means to prevent or resolve disputes
Brainstorming	Technique for generating ideas in low-risk environment	Generate new ideas, stimulate creative and lateral thinking, get input from everyone
Parking lot	List to track issues that arise but are off-topic	Keeps discussion focused without forgetting important issues
Mirroring	Facilitator repeats what a participant has said verbatim	Ensures that people are heard, builds trust, can speed up brainstorming
Paraphrasing	Facilitator repeats what a participant has said in his/her own words	Ensures that people feel heard and understood, can clarify meaning

Tip / Tool	Description	Purpose
Multi-modal learning	Use of different styles of learning and participation, including visual, auditory, and written	Reflects participants' different learning styles, maximizing learning and input
Positions versus interests	Facilitator may be able to draw out underlying motives beneath a participant's position (iceberg analogy)	Highlights common ground between positions that appear conflicting or polarized
Go-around	Technique of 'going around the room' or table one-by-one to hear from everyone. Can continue until everyone has passed, indicating that they have nothing more to add	Ensures that everyone has a chance to speak, and prevents domination of discussion; participants can listen effectively knowing that they will have a turn to speak
Negative poll	Ask for a show of hands to determine who disagrees with a statement	Can allow for fast decision-making and consensus-building
Open-ended questions	Broad questions typically beginning with "how", "what", or "why"	Encourages participants to share their perspectives
Probing questions	Questions or statements such as "Can you give an example?" or "Could you elaborate on that?"	Encourages participants to provide more information
Thumb-o-meter ¹	Ask for thumbs up, down, or sideways to indicate levels of agreement	Quick way to get feedback from participants
Hot dots	A method of prioritizing using adhesive dots: participants are given a certain number of dots to place beside a certain number of choices	Used to get a sense of the group's collective priorities without making a final selection or decision



Stage A.2

Workshop No. 1: Alignment of Purpose and Goal-Setting

A.2.1 Workshop No. 1: Tasks and Activities

- Introduce participants to the fundamentals of the integrative design process and to systems thinking
- Elicit client's deeper intentions and purpose for the project
- Engage Touchstones exercise to elicit stakeholders' values and aspirations
- Clarify functional and programmatic goals
- Establish initial Principles, Metrics, Benchmarks, and Performance Targets for the four key subsystems:
 - Habitat
 - Water
 - Energy
 - Materials
- Generate potential strategies for achieving identified Performance Targets
- Determine order-of-magnitude cost impacts of proposed strategies
- Provide time for reflection and feedback from client and team members
- Develop an Integrative Process Road Map that identifies responsibilities, deliverables, and dates
- Commissioning: Initiate documentation of the Owner's Project Requirements (OPR)

A.2.2 Principles and Measurement

- Document Touchstones, Principles, Metrics, Benchmarks, and Performance Targets from Workshop No. 1

A.2.3 Cost Analysis

- Document order-of-magnitude cost impacts of proposed strategies to reflect input from Workshop No. 1

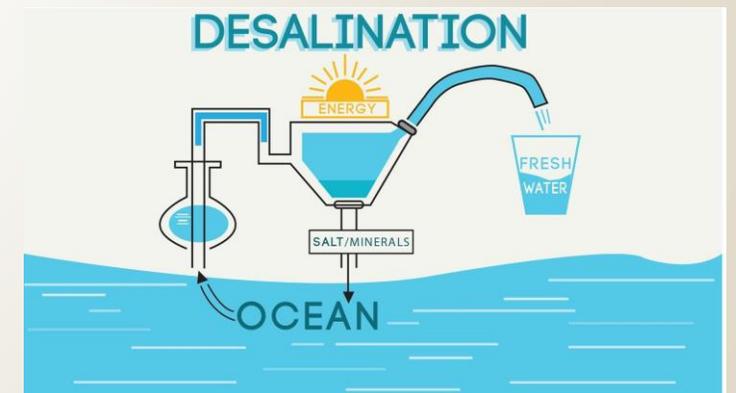
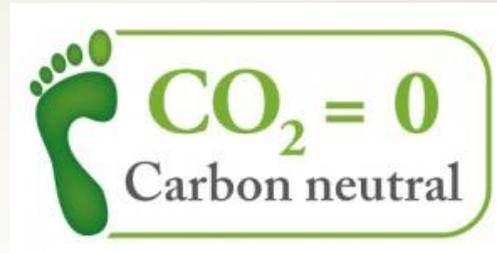
A.2.4 Schedule and Next Steps

- Adjust Integrative Process Road Map to reflect input from Workshop No. 1
- Distribute Workshop No. 1 report

The Goal Setting Workshop

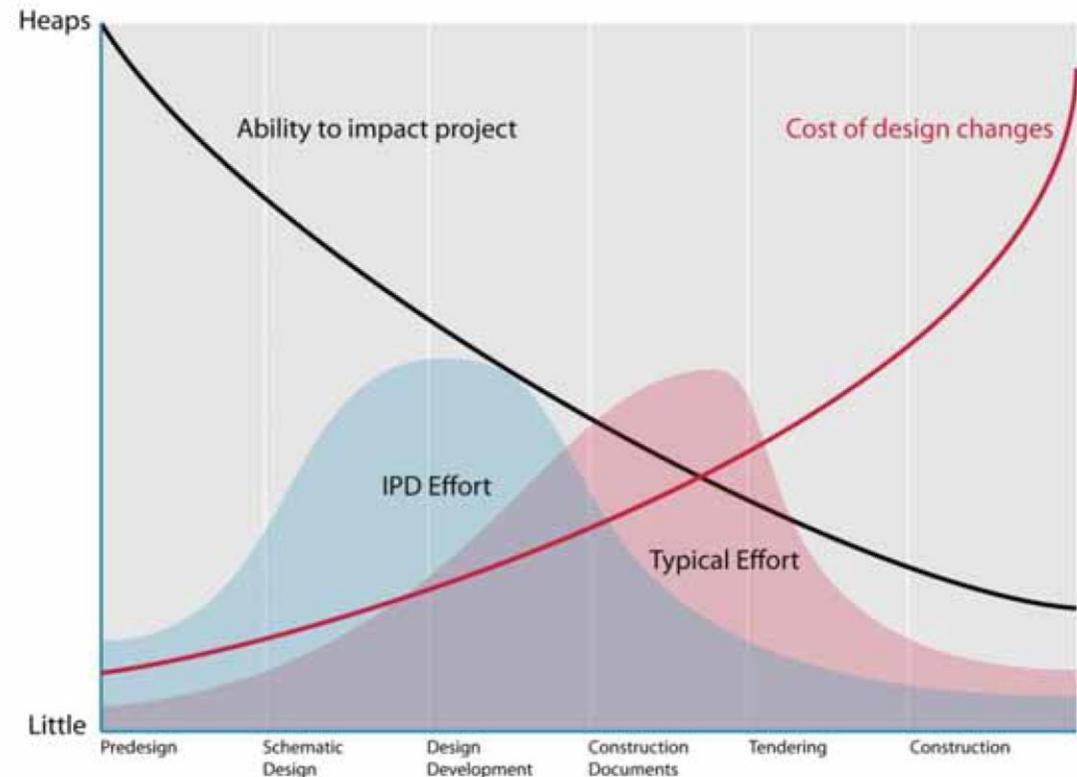
Alignment of Purpose and Goal-Setting

The story of ecoresort project in Caribbean island



Introducing Participants to the fundamentals of IPD and Systems Thinking

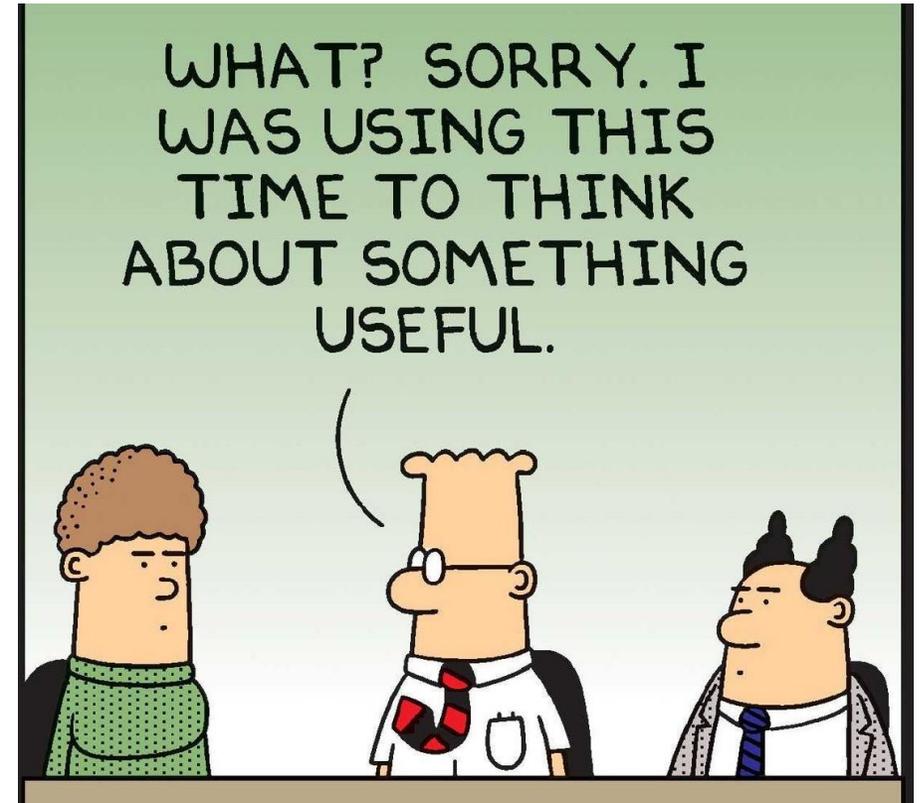
- Structured
- Inclusive
- Non-traditional Expertise
- Collaborative
- Holistic or Systemic thinking
- Whole building budget setting
- Iterative
- Looking for Synergies
- Continuous learning and improvements



The MacLeamy Curve

Elicit participants' deeper intentions for the project

- “A truly integrative process is not just passing information back and forth but actually creating something together and collectively identifying and holding onto principles and core values-purposes.”
- How would a successful project be defined for this place not only at this time, but also for its evolution into the future?
- Spend some time reflecting on how the project can help the client move toward achieving their deepest purpose.
- Each team member becomes more engaged on a personal level. The project is no longer just another building project or a job.



Speakers that you can invite:

- Kickoff speaker(s) to energize and excite participants
- Local dignitaries to demonstrate support
- Case Study speakers to share previous experience gained from actual projects.

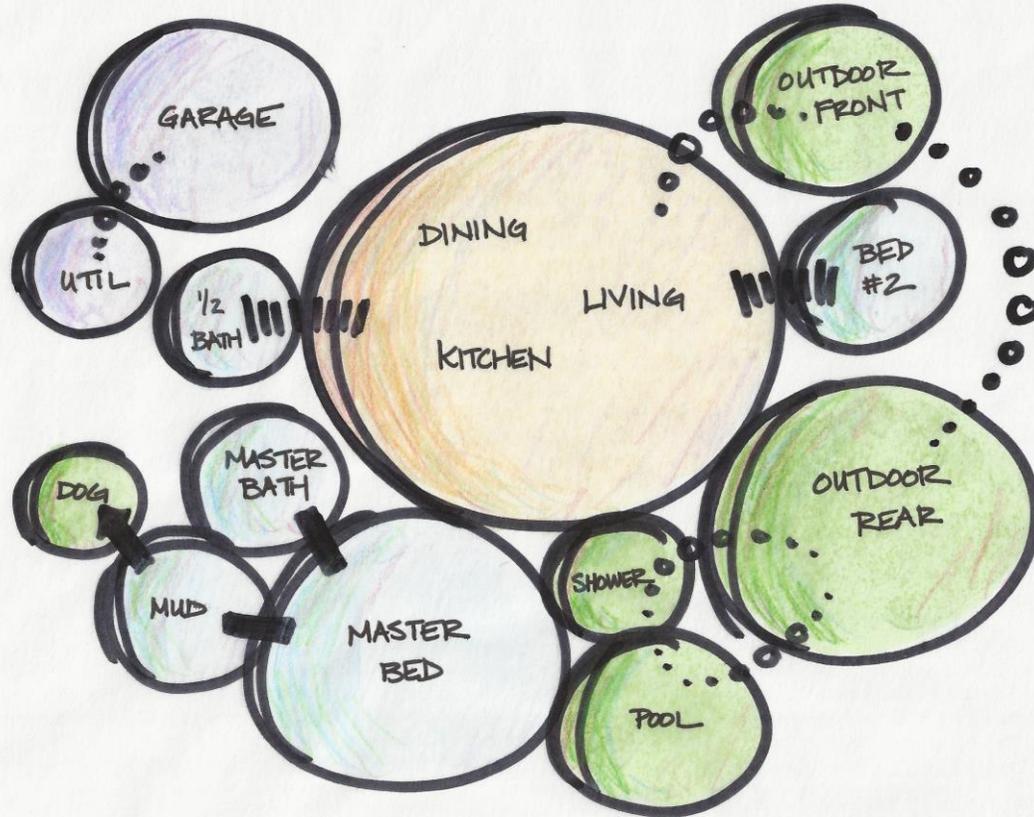


The “Touchstone” Exercise

- Identifying the team’s values through the lens of the following five key environmental imperatives:
 - Climate Change
 - Potable water
 - Resource destruction
 - Habitat destruction
 - Pollution and toxins
- Open a discussion about how teams think a successful project would address each of these issues.
- The results contribute to creating the owner’s Project Requirement.
- The story of Phipps Conservatory
- It is useful to have “**champions**”.



	Design Elements/Issues	# of votes
1.	Financially sustainable	85
2.	Functional efficiency that encourages team collaboration	75
3.	Building as a teaching/research tool	65
4.	Transferability to the market	56
5.	Model for beyond green	50
6.	Quantifiable results over building life cycle	39
7.	Pittsburgh’s new icon of sustainable development	37
8.	Dissolve the boundaries between inside and outside	34
9.	Systems transparent to the public/visitors	31
10.	Provide a roadmap for improving future sustainable projects	31
11.	Demonstrate the connection between buildings and the environment	31
12.	Inform the development of future codes	28
13.	Influence societal behavior	27
14.	Beacon of hope related to climate change	25
15.	Create a destination venue	24
16.	Flexible/adaptable design	24
17.	Optimization of project’s structure with the site	23
18.	Demonstrate achievement of the triple bottom line	22
19.	Expand project boundaries to improve health of the regional ecosystem	21
20.	Memorable spatial experience	14
21.	Encourage the question of sustainable	13
22.	Dynamic building information model	11
23.	Spark to ignite change	11
24.	Create clear linkages with adjacent park/universities/local amenities	11
25.	Engage the larger public in design and planning	11
26.	Catalyst for future innovations	9
27.	Showcase the integrative design process	8
28.	Zero construction waste	8
29.	Tangible example of the effects of human/environment interface	7
30.	Redefining building health	7
31.	Incorporate biomimicry	7



CONCEPT #1 MAIN HOUSE

Clarify Functional And Programmatic Goals

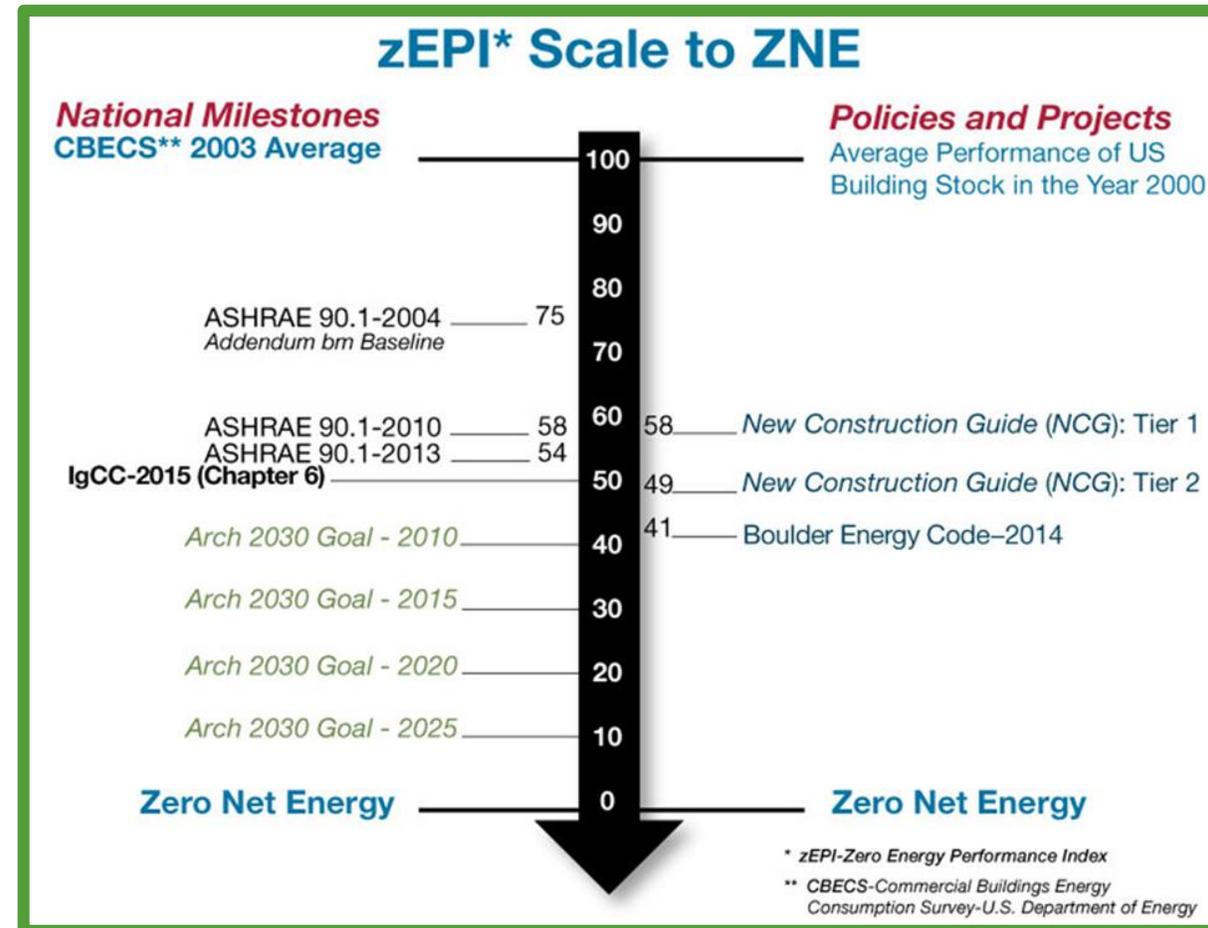
- Verify and clarify the conventional functional program- space and site functions,
- area quantities,
- Adjacencies,
- Parking requirements, etc.

Establish initial Principles, Metrics, Benchmarks, and Performance Targets for the Four Key Subsystems

- **Principle:** A fundamental truth that is a basis for action
- **Metric:** how we measure
- **Benchmark:** The standard against which we measure performance
- **Performance Target:** A measurable, quantifiable, and verifiable performance goal established by the team.

Examples for Energy:

- Zero-Site Energy
- metric vs. imperial kbtu/sf-year-GJ/m²
- ASHRAE 90.1-2013
- net-zero, 50% less energy use



LEED 2009 for New Construction and Major Renovations			Project Checklist			Project Name			
						Date			
0 0 0 Sustainable Sites Possible Points: 26			Materials and Resources, Continued						
Y	Y	Prereq 1	Construction Activity Pollution Prevention	1	Y	Y	Credit 4	Recycled Content	1 to 2
		Credit 1	Site Selection	1			Credit 5	Regional Materials	1 to 2
		Credit 2	Development Density and Community Connectivity	5			Credit 6	Rapidly Renewable Materials	1
		Credit 3	Brownfield Redevelopment	1			Credit 7	Certified Wood	1
		Credit 4.1	Alternative Transportation—Public Transportation Access	6	0 0 0 Indoor Environmental Quality Possible Points: 15				
		Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1	Y	Y	Prereq 1	Minimum Indoor Air Quality Performance	0
		Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3			Prereq 2	Environmental Tobacco Smoke (ETS) Control	0
		Credit 4.4	Alternative Transportation—Parking Capacity	2			Credit 1	Outdoor Air Delivery Monitoring	1
		Credit 5.1	Site Development—Protect or Restore Habitat	1			Credit 2	Increased Ventilation	1
		Credit 5.2	Site Development—Maximize Open Space	1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
		Credit 6.1	Stormwater Design—Quantity Control	1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
		Credit 6.2	Stormwater Design—Quality Control	1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
		Credit 7.1	Heat Island Effect—Non-roof	1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
		Credit 7.2	Heat Island Effect—Roof	1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
		Credit 8	Light Pollution Reduction	1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
0 0 0 Water Efficiency Possible Points: 10							Credit 5	Indoor Chemical and Pollutant Source Control	1
Y	Y	Prereq 1	Water Use Reduction—20% Reduction				Credit 6.1	Controllability of Systems—Lighting	1
		Credit 1	Water Efficient Landscaping	2 to 4			Credit 6.2	Controllability of Systems—Thermal Comfort	1
		Credit 2	Innovative Wastewater Technologies	2			Credit 7.1	Thermal Comfort—Design	1
		Credit 3	Water Use Reduction	2 to 4			Credit 7.2	Thermal Comfort—Verification	1
0 0 0 Energy and Atmosphere Possible Points: 35							Credit 8.1	Daylight and Views—Daylight	1
Y	Y	Prereq 1	Fundamental Commissioning of Building Energy Systems	0	0 0 0 Innovation and Design Process Possible Points: 6				
		Prereq 2	Minimum Energy Performance				Credit 1.1	Innovation in Design: Specific Title	1
		Prereq 3	Fundamental Refrigerant Management				Credit 1.2	Innovation in Design: Specific Title	1
		Credit 1	Optimize Energy Performance	1 to 19			Credit 1.3	Innovation in Design: Specific Title	1
		Credit 2	On-Site Renewable Energy	1 to 7			Credit 1.4	Innovation in Design: Specific Title	1
		Credit 3	Enhanced Commissioning	2			Credit 1.5	Innovation in Design: Specific Title	1
		Credit 4	Enhanced Refrigerant Management	2			Credit 2	LEED Accredited Professional	1
		Credit 5	Measurement and Verification	3	0 0 0 Regional Priority Credits Possible Points: 4				
		Credit 6	Green Power	2			Credit 1.1	Regional Priority: Specific Credit	1
0 0 0 Materials and Resources Possible Points: 14							Credit 1.2	Regional Priority: Specific Credit	1
Y	Y	Prereq 1	Storage and Collection of Recyclables	0			Credit 1.3	Regional Priority: Specific Credit	1
		Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3			Credit 1.4	Regional Priority: Specific Credit	1
		Credit 1.2	Building Reuse—Maintain 90% of Interior Non-Structural Elements	1	0 0 0 Total Possible Points: 110				
		Credit 2	Construction Waste Management	1 to 2	Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110				
		Credit 3	Materials Reuse	1 to 2					

Generate Potential Strategies For Achieving identified Performance Targets

- Brainstorming exercise/ not a commitment
- Look for synergies between LEED credits
- Walking the team through the intentions behind the LEED checklist on a credit-by-credit basis.

Workshop No. 1. Tasks and Activities



- Determine Order-of-Magnitude cost impact of proposed Strategies
- Provide time for Reflection and Feedback from client and team members
 - Focus groups may help
- Develop an Integrative Process Road map that identifies responsibilities, deliverables, and dates
- Commissioning: Initiate documentation of the Owner's Project Requirements (OPR)
 - OPR questionnaire might be helpful to help guide the owner's thinking about what the building needs to be and how it needs to perform.



Principles and Measurements

- Document Touchstones, Principles, Metrics, Benchmarks, and Performance Targets from Workshop No. 1
 - Principle based report
 - Include an expanded and annotated LEED checklist (for LEED projects)



old rail corridor and Hick's Street. This southern gateway could become a major hub of activity and a primary catalyst for downtown development.

Approaching off of Highway 58, visitors entering Town would see a new 3-story mixed use building with retail on the ground floor and offices and housing above. The orientation of this building would be ideal for capturing bicyclists and runners coming off the Heritage Trail as they would be in need of refreshment and supplies. On the opposite side of the street, there would be a large Gazebo for small outdoor concerts, movable chairs, and tree-lined paths. If a critical mass of people can be achieved, this will attract more businesses and ultimately more people to regularly visit the area for lunch, dinner, and to recreate.

The intersections of New Hicks, Hicks, and Meredith Streets are currently awkward for both pedestrians and drivers to navigate. The viable businesses in this part of Town could benefit from infilling new buildings to help complete the streetscape and bring more customers to the area. Additionally, by modifying the intersection of Hicks and Meredith streets into a 3-way stop, it would

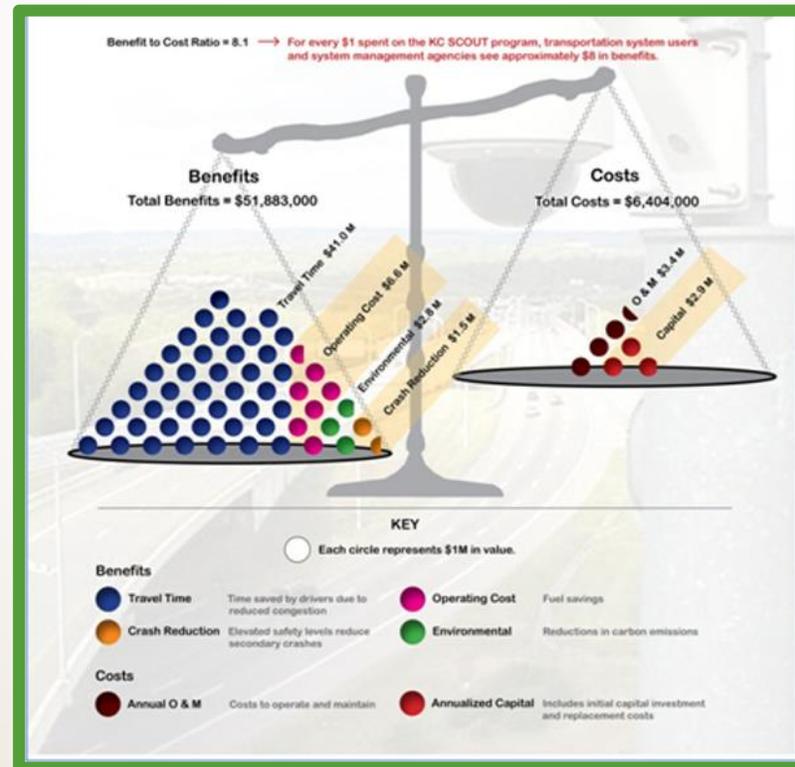
help to calm traffic, improve crosswalks, and open the opportunity for a focal point at this part of Town. Public art could be displayed in and around the intersection as well as way-finding signs and an informational kiosk. A façade extension onto the current Star Value building could eliminate the unnecessary surface parking spaces and allow for alfresco dining to penetrate that end of Town. The activity on the sidewalk at this location would be an ideal opportunity to create "perceptual innuendo" through a new walkway from South Hicks Street. For example, as people walk towards Town they would be able to view the activity at the Star Value building and have a choice whether to use the new walkway towards New Hick's Street or continue on towards Meredith Street. Meredith Street also has opportunities for infill and shared parking. ■



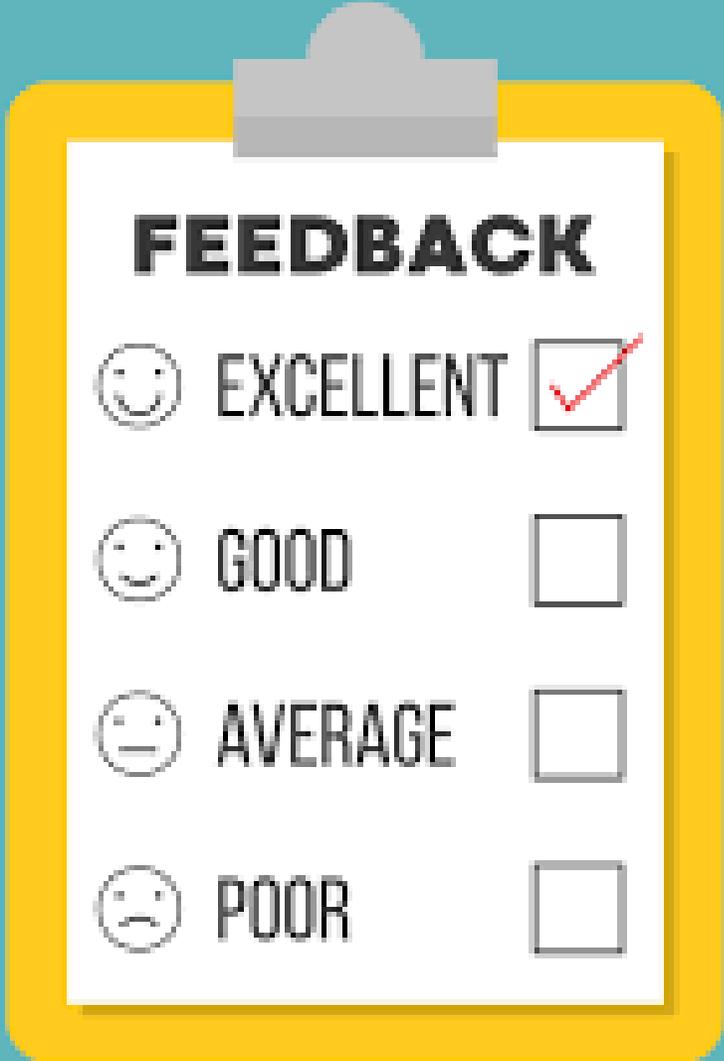
Many opportunities

Cost Analysis

- Document Order of Magnitude cost impacts of the proposed strategies to reflect input from workshop No. 1.



Feedback

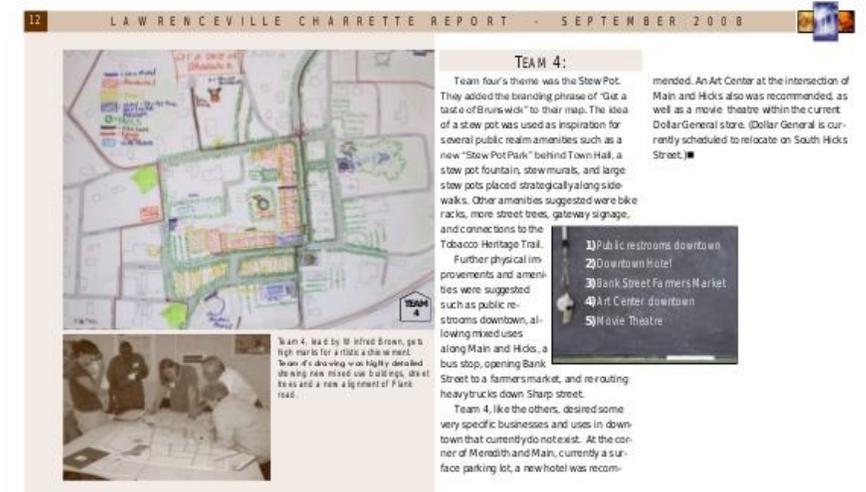
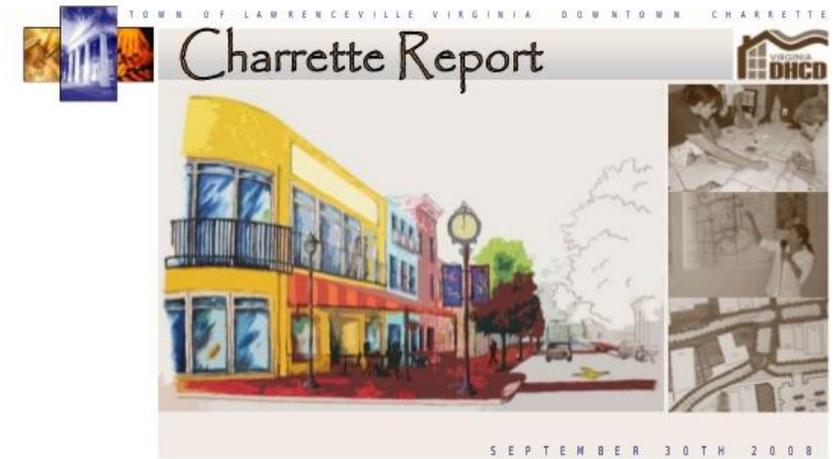


FEEDBACK

	EXCELLENT	<input checked="" type="checkbox"/>
	GOOD	<input type="checkbox"/>
	AVERAGE	<input type="checkbox"/>
	POOR	<input type="checkbox"/>

Workshop No. 1 Report

- Meeting agenda
- Lists of attendees
- Photos of activities
- Results from the Touchstones exercise
- Initial OPR document or date when OPR will be written and by whom
- Initial Principles, Metrics ,Benchmarks, and Performance Targets (including LEED Scorecard as described above)
- Cost analysis, including any initial cost-bundling template input
- Integrative Process Road Map Spreadsheet of Schedule and tasks
- Bulleted list of next steps



Questions to Consider for writing the Reflections:



WHAT IS OPR AND WHAT IS THE BENEFIT OF DEVELOPING AN OPR DOCUMENT?



HOW IS COMMISSIONING CONDUCTED IN OUR COUNTRY? WHAT CHALLENGES DO WE FACE IN CONDUCTING FULL SCALE COMMISSIONING IN OUR COUNTRY?



Establish initial Principles, Metrics, Benchmarks, and Performance targets for any of the four Key Subsystems in your studio project.