

MEETING NOTES WORKSHOP #3

TERC SUSTAINABILITY SUBCOMMITTEE – SUSTAINABILITY FRAMEWORK



MEETING MINUTES TERC Workshop #3

Date of Meeting: January 6, 2011

The third workshop in the TERC Sustainability Framework project was held on Thursday, January 6, 2011 at 8:00 am at the Colorado Department of Transportation Office in Golden, Colorado. 20 people representing 12 agencies attended (see attached sign-in sheet). The following summarizes Workshop #3. Any corrections or additions to the meeting notes should be directed to Jessica Myklebust at Jessica.Myklebust@fhueng.com or 303-721-1440.

Welcome and Introductions

The project team members in attendance introduced themselves and included: Jessica Myklebust –FHU; Joshua Proudfoot – Good Company, and Sam Seskin – CH2MHill. Jessica reviewed the progress that has been made through Workshops #1 and #2. She also went through the two tools that had been sent to the TERC members electronically. These two tools include the *Handbook to Develop Sustainability Measures* and the *Tool to Determine Topics – Categories – Aspects*. It was also noted that these tools are items that could be placed on the centralized resource.

Joshua began the workshop by defining projects and/or program initiatives. The question was posed “why should we evaluate a project or program for sustainability?” Group answers included: to determine if the project/program should be continued, to see if we should adjust the project/program from how it is currently being run, to identify future funding, to determine what’s being done right, and to determine the footprint of sustainability.

Joshua then went into the life-cycle analysis definition and stages (before, during, and after). The question was posed to the group “with regard to a building project where are the biggest environmental impacts?” The answers ranged from resource extraction, manufacturing, construction, occupancy/maintenance, demolition, and recycling/reuse/disposal. Joshua indicated that the occupancy/maintenance of the building is where the majority of impact occurs due to the longevity of the life of the building. Additional information was presented on life-cycle.

RTD mentioned that they would like to get a better understanding of how metric tons (MT) of CO₂e relates to greenhouse gas emissions (GHG) and what the GHG impact an individual project has and how that relates to the world of GHG emissions. The graphic in the presentation included an axis labeled GHG Emissions (MT CO₂e) from 0 to 3,500. Joshua explained that an average US household emits about 20 MT of greenhouse gasses per year. If we include the GHG as a result of the products purchased by households that number increases to about 80 – 100 MT/year. However, annually 7.3 gigatons of GHGs are emitted from anthropogenic (humans) in the US. Worldwide, humans generate 40 gigatons of CO₂ annually.

After the life-cycle presentation the group was given some time to communicate any ah-ha moments they had. The point was made that one has to evaluate numerous elements within the life-cycle to determine the individual contribution to the GHG emissions. The example of this was given with regard to a restaurant that wanted to calculate their GHG emissions. They had to evaluate the transport of their food product, whether their beef product was grass or grain fed, how far their customers traveled etc.. The point was also made that during life-cycle analysis the argument of profitability can’t be lost.

Sam then began a discussion around understanding the context of a project. Pictures of an urban and rural area were shown and the group was asked what types of context they saw. Sam

encouraged the group to always explore the context of the project area and find those sustainable elements that make the most sense with regard to the specific context. In order to obtain context information he encouraged early conversations with project stakeholders to address issues. Bringing up issues early in the project process allows problems to be solved and context understood while decisions can still be made.

The presentation then began to cover various sustainability frameworks that are available to evaluate sustainability in projects. The programs discussed in high-level included:

- LEED and Green Globes for vertical projects
- Greenroads and FHWA's Sustainable Highways Initiative for transportation projects
- Civil Engineering Environmental Quality (CEEQUAL) System and ASCE-ACEC-APWA rating system for infrastructure projects

The basic components of each framework was discussed. The question was asked "how do we know which would be the best system for a project?" It was suggested that the TERC agencies should start with the TERC tools and framework to get a basic idea of what outside frameworks would be useful. It is also recommended that agencies use the framework that has the most reasonable cost for the project and is easiest to use. Additionally, agencies should evaluate if the framework has any blind spots or incomplete areas. Finally, agencies can pick elements out of a framework and don't have to use the entire framework.

A break was given for 15 minutes.

A sustainability evaluation excel spreadsheet tool was presented to the group that was developed specifically for the TERC taking into account all of their topics, categories, and aspect options. Jessica mentioned that this tool would be emailed to the TERC after the workshop. Joshua suggested that participants open the tool and try to use some pieces and parts of it. He also mentioned that it would be one of the best tools provided to the TERC.

A group activity commenced practicing evaluating sustainability within a project. The 136th Avenue interchange at I-25 was the project. The group was divided into 3 groups; community well-being, environmental stewardship, and economic vitality and quality. Large aerial plots of the project were handed out to each group. The groups were instructed to inventory sustainability benefits and concerns using the established TERC topics and aspects. They also were instructed to present their 3 top sustainability opportunities. The following were the results of the top priorities within various aspects:

- Community well-being
 - connectivity
 - energy (development standards)
 - preservation of resources such as historic and open space
- Environmental stewardship –
 - mobility and access - regard to transit and trip length
 - land consumption – houses, retail
 - habitat
- Economic vitality
 - Loss or shift or agricultural
 - Housing availability
 - Long-term infrastructure
 - Maintenance of floodplain
 - Operation and maintenance costs

The agencies were then asked how they have taken information provided on sustainability in projects/initiatives and incorporated it into their daily work and projects. CDOT replied that in the

recent TIGER grant application they were asked how sustainability was being evaluated. FHWA mentioned that they could leverage money. Another response was that multiple agencies could collaborate on a grant application for sustainability. RTD mentioned that the big picture has to be retained of the triple bottom line when incorporating sustainability.

Joshua then presented an example of how sustainability could be incorporated into a program/initiative. The example used was planning a program to address childhood obesity. Aspect areas where sustainability could be addressed include: land use planning, walking to school, access to services and recreation.

Jessica discussed the schedule for the next workshop. It was indicated that the next Workshop would be February 24, 2011 from 8 – 12. Jessica will send out an invite to the group.

<u>Name</u>	<u>Agency</u>	<u>email (if new)</u>
F. Yates Oppermann	CDOT-EPB	francis.oppermann@dot.state.
KIRK MILLS	CDPITE	Kirk.Mills@state.co.us
Leah Sirmm	FHWA	leah.sirmm@dot.gov
Bill Haas	FHWA	william.Haas@dot.gov
STEVE EGGLESTON	HUD	STEVEN.EGGLESTON@HUD.GOV
ANDY HILL	DOLA	andy.hillestate.co.us
TAREQ WAFAR	DOLA	tareq.wafar@state.co.us
<u>ROMARE TRUELY</u>	FHWA	Romare.truely@dot.gov
MEHDI BAZIAR	CDOT	mehdi.baziar@dot.state.co.
SUSAN WOOD	RTD	susan.wood@rtd-fstracks.com
Vanessa Henderson	CDOT	vanessa.henderson@dot.state.co.us
Alison Deans Michael	USFWS	alison-michael@fws.gov
Stan Szabelak	RTD	Stan.Szabelak@RTD-fstracks.com
JANE HANN	CDOT-EPB	jane.hann@dot.state.co.us
Stephanie Lind	RAQC	slind@raqc.org
Lesli Ellis	NFRMPO	lellis@nfrmpo.org
JIM SCHRACK	GED	jim.schrack@state.co.us
Tracey Macdonald	CDOT	tracey.macdonald@dot.state.co.
LARRY SQUIRES	FTA	Larry.squires@dot.gov
Aaron Bustaw	FHWA	aaron.bustaw@dot.gov
Jessica Myklebust	FHU	
Joshua Proudfoot	Good Company	
Sam Seskin	CH2M Hill	