



**Public Infrastructure Technical Work Group (PI TWG)
Teleconference Meeting
Wednesday, January 7, 2009
10:00 am – noon
CALL-IN NUMBER: 1-800-315-6338 Code:7494#**

Agenda

10:00-11:00 am

1.0 Tasks PI TWG is requested to accomplish (see table on page 2)
Are there any questions?

2.0 Comments made during AAG December 17, 2008, Review of PI TWG Catalog (see summary on pages 2-3)
Barbara will review. Are there any questions?

3.0 PI TWG Catalog (see pages 4-6)

- a) As we prepare our Recommended Option Papers we can refine the catalog, as needed.
- b) I suggest our goal be to ensure we have a majority of “thumbs up” (rather than “thumbs sideways”) on the Catalog when this process is near completion in April.
- c) I have a few questions and ideas to discuss regarding the Catalog.

11:00am -12:00 noon

4.0 Recommended Option Papers (see pages 6-10)

- a) For each option the PI TWG forwards to the AAG/Subcabinet, we are asked to prepare a 4-6 page paper explaining it in more detail.
- b) Page 8 is a template for preparing the Option Papers. All the TWG do NOT have to use identical templates, but the information and presentation should be approximately the same.
- c) Review and discuss template for Option Papers (reportedly a revised template will be issued Jan 5 or 6 by ICF/DEC).
- d) Idea for how to proceed: Break into teams based on interests and expertise, and work in small teams to prepare draft option papers for PI TWG to review. Does this idea seem acceptable? Do you have other ideas on how to proceed? Is the work load and timing realistic? Are we missing any expertise we need?

5.0 Plan for PI TWG February 4, Meeting (Anchorage, Atwood Building, 8:30 am -12:30 pm (see page 10)

6.0 Other?

1.0 Tasks/Schedule that PI TWG is requested to accomplish to assist with preparing and implementing Governor Palin's Alaska Climate Change Strategy

STATUS	DUE DATES	TASK
Done	Nov/Dec '08	Complete Catalog of Options (expect final version to be refined)
Done	Nov/Dec '08	Identify 3-8 priority options
Beginning work now	Dec-April/May	Prepare 4-6 page papers for each priority option explaining it in more detail. Present work in progress to AAG during Feb 6 and Mar AAG meetings.
	April/May/June '09	AAG prepares recommendations for Sub-Cabinet
	June/July '09	Sub-Cabinet prepares draft Strategy
	Fall '09	Draft strategy reviewed by public, AAG and TWG. Revise as needed and present to Governor.

2.0 Comments made during AAG December 17, 2008, Review of PI TWG Catalog -As recorded by Barbara Sheinberg

Like the idea of overarching vision statement(s).

As you flesh your materials out in more detail, be specific, be practical. As written a massive amount of work and spending could be implied, which is not realistic. Identify who is responsible for accomplishing the program. Identify how the results of the work would get integrated into existing systems/work.

PICCC - Give some careful thought about what it would do and produce. Give some careful thought on who sits on it. Don't leave off expertise of local communities, there needs to be parity in representation. [Sheinberg comment to TWG: As we define charge of this group better, who should sit on it will become clearer.]

Does local government include tribal government? Like using the word 'community.'

Use existing databases and models.

Databases on infrastructure already exist and include ISER and ANTHC. Use these databases, they are sitting there.

The IAWG just had two relevant presentations:

- DCED presented on a database with 30 years of investment of community infrastructure.

- DHS&EM presented a database showing where all state's declared disasters have been.
- The IAWG is proposing to use these databases to identify vulnerable infrastructure.

Use the developed ISER/UAA model to estimate vulnerabilities. Output can be maps, can be \$ per community, can ask for output for 200 different communities. These tools are waiting to be used.

When infrastructure or communities must be relocated, who helps them through the NEPA process? The Health & Culture TWG is talking about the need for ombudsman.

There are Uniform Engineering and Building codes that local governments adopt. Portions of the codes may need to change, and local governments must be encouraged to adopt the codes.

“Requiring” collaboration is an oxymoron.

Policy and regulations that guide investment tend to preclude ability to spend money to build infrastructure in a new community location. This needs changed at the code of federal regulations level so that FEMA spending regulations are changed. It is worth looking at instances where regulations did work to see why, including relocation of Valdez, and relocation of riverside communities along the Mississippi.

Be mindful of cultural impacts when communities are being relocated, this is very important (for example relocating a community away from sea whose culture is intertwined with sea).

Policy 2 stressing COORDINATION is most important directive.

3.0 PI TWG Catalog

As we prepare our Recommended Option Papers we can refine the catalog, as needed.

PI TWG members and the AAG continue to have four types of suggestions and comments on the Catalog.

1. Be more specific, there is technical expertise on the TWG to accomplish this. For example, not all engineering standards and codes will need revising; be specific, most of the need will likely focus on changes due to melting permafrost.
2. Make the policies higher-level, for example establishing a state fund (currently policy 3) is an action or task not a policy.
3. Suggestions that some programs are not under the policy where they belong.
4. Eliminate the part of the catalog with “details” (pages 4-8 of December 11 version) that list specific infrastructure vulnerabilities to assess; specific engineering and structural codes, standards, designs or practices to potentially modify (both by type of infrastructure) and the section that gives examples of the types of planning that could be integrated. Eliminate because:
 - “Most of the details of the 12/11/2008 draft will only spur debate and division. An example is fuel delivery and storage. There are far more variables than coast inundation or erosion bearing on this topic. Another is coastal and river shorelines. Fly over any river and look at the oxbows and how the rivers have wandered. This is not a recent phenomenon but should be addressed whether caused by climate change or not.”
 - “Do not prioritize by type of infrastructure, e.g. airport vs. water treatment. These communities are integrated systems. The airport is degraded with electricity which needs generators which need fuel, which need barge landing or airport. Decisions will occur after documentation and analysis. The decisions are not yes/no but shaded and complex. Proposals from the TWG and the AAG need to be scalable to the resources and schedules of the Governor and legislature.”
 - “Section C should extend to every activity of the state – not just emergency, community and transportation. The integrated, coordinated, multi-agency approach should cover schools, clinics, airports, post offices, barge landings, power plants, and anything else. The key policy is the coordination so that there is a unified decision across the entire spectrum of government investment. This needs to expand to recommend that federal programs also join in the multi-agency forum.”

The good news is that even with the various suggestions, no one is really suggesting programs or content to eliminate...the suggestions are around reorganizing it.

The input and suggestions lead to two, possibly three, discussion items.

A. Consider Higher Level Policy Statements

Current PI TWG Catalog of Policy Options (as presented to AAG Dec 17)

POLICY 1: Collect, assess, and monitor data needed to develop sustainable solutions to adapt public infrastructure to the effects of a changing climate.

POLICY 2: Adopt a statewide planning initiative requiring that state agencies and local governments collaborate to address the effect of climate change on public infrastructure.

POLICY 3: Enact sustainable solutions to adapt public infrastructure that is currently at significant risk, and future public infrastructure, to the effects of climate change. Accomplish by establishing a statewide capital program.

Proposed Higher-level Policy Options.

POLICY 1: Preserve the State of Alaska investment in public infrastructure to the greatest extent possible in an environment of uncertainty.

Policy 2: Coordinate plans for future investments in public infrastructure with updated standards for design, siting, construction, life cycle costs, and mitigation in an uncertain environment.

POLICY 3: Provide unified decision-making and make sound investments in public infrastructure through coordination across the spectrum of government funders. Federal, State and local programs should join in a multi-agency forum.

B. A revised catalog based on the policies above was emailed along with this agenda (PI#6_Catalog of Policy Options_010709draft.doc) , if there is interest and time to review it.

C. Outcomes/Actions of a Successful Climate Change Strategy to Adapt Public Infrastructure

As just noted there have been differences of opinion about what a policy is and what a program is, and how high-level policy options should be.

However, one thing that PI TWG members have seemed quite clear about, from the beginning of our meetings, is what actions must occur to have a successful strategy to adapt Alaska's public infrastructure to the effects of climate change.

Five key actions that must occur to successfully adapt public infrastructure to the effects of climate change (as summarized on a slide for the Dec 17 AAG presentation).

1. Conduct modeling with climate change inputs to identify hazard zones. Conduct a public infrastructure vulnerability analysis.
2. Share hazard and vulnerability analysis results and subsequent monitoring data, in an actionable format, among local, state and federal agencies.
3. Identify the *specific* areas where new engineering standards or design is needed, conduct the research and generate standards or designs.
4. Retrofit existing vulnerable infrastructure. Locate new infrastructure outside hazard zones or design it to withstand expected hazards/forces. Develop a system to prioritize investments.
5. Integrate adaptation to climate change into coordinated community and State planning efforts (emergency, community, transportation, etc).

Please confirm that this is captured about right (thumbs up).

4.0 Recommended Option Papers

- a) For each policy option the PI TWG forwards to the AAG/Subcabinet, we are asked to prepare a 4-6 page paper explaining it in more detail.
- b) Below is a template for preparing the Option Papers. All the TWG do NOT have to use identical templates, but the information and presentation should be approximately the same.
- c) Review and discuss template (below) for Option Papers (note: I've heard that a revised template will be issued Jan 5 or 6 by ICF/DEC...).
- d) Discuss ideas for how to proceed.
 - o A. Break into teams based on interests and expertise. B. Each team selects a chair to lead the team's work. C. Small team prepares draft option papers for PI TWG review.
 - o Does this idea (above) seem acceptable? Do you have other ideas on how to proceed?
 - o Is the work load and timing realistic?
 - o Are we missing any expertise we need for any of the Options?

PI TWG

Chris Mello
David Atkinson
Greg Magee
Herb Schroeder
John Kreilkamp
John Madden
John Warren
Larry Dietrick
Lawson Brigham
Mike Black
Mike Coffey
Patricia Opheen
Peter Larsen
Tara Jollie
Vladimir Romanovsky

AAG representing PI

Amy Holman
Billy Connor
Bob Pawlowski
Bruce Botelho
Denise Michels
Mead Treadwell
Meera Kohler
Steve Ivanoff
Steve Weaver
Taunie Boothby

TEMPLATE OUTLINE

Introduction

- Overview of issues addressed by TWG (this is not the only place in the report that impacts will be discussed)
- Overview of recommended options (what is the strategy, or the “story-line,” represented by the options and how do they address the issues)

For each Recommended Option (4 to 6 page write-up that covers):

- Issue being addressed and Option Description
- Option design
 - targets
 - timing
 - parties involved
- Implementation mechanisms
- Related policies/programs in place
- Benefits and costs (qualitative)
- Feasibility issues (if any)
- Status of group approval
- Barriers to consensus

TEMPLATE DETAILED OUTLINE

A. Issue being Addressed and Option Description

This is a very short introduction and overview of the option, including:

- Issue to be addressed by this specific option.
- Overview of the option—what is it?
- How significant or important is this option to the functioning of public infrastructure? How critical is it to the overall viability of the Alaska's public infrastructure that this option be implemented?
- How does the option address the issue of concern, including identifying the goal of the option?
- Why is this option necessary--why do current trends or projections indicate that these goals are unlikely to be realized without the intervention of this option?

B. Option Design

This is the heart of the option discussion. It is suggested that it be divided into the following sections.

Structure/design: What is the option? How is it structured and designed?

Targets/goals: May include specific quantitative targets or goals, if any.

Timing: When would the policy/program/action take place, how long would it take, over what time frame can results be expected? Would the benefits provided be only in the short-term or over the longer term as well? Will the proposed action be adjusted in response to changing conditions or will it be effective under different plausible climate scenarios? (e.g., no regrets if the option is implemented and changes don't occur or occur differently than anticipated.) Is the policy, program or action needed in response to likely immediate impacts (e.g., thawing ice and permafrost) or longer term impacts?

Participants/Parties involved: Individuals, federal/state/local government agencies, non-governmental organizations, private foundations, corporations, and others involved in this issue. Describe how they are involved.

Evaluation: What type of monitoring and evaluation of the adopted policy, once implemented, would be needed to gauge effectiveness and any corrections that would be needed overtime.

Research and Data Needs: What R/D will be needed before this option can be implemented (note that this will float over to the RN WG as well as remain here).

C. Implementation Mechanisms

This is an indication of how the option could be implemented, for example:

- Steps that would be taken to get it in place (does a feasibility study need to be done first?).
- Is new legislative authority needed?

- Does a new agency or group need to be formed? A new activity added to an existing government agency, or expansion of an activity already undertaken by a non-governmental entity?
- Is there anything else that needs critically to happen before this option can be implemented?

D. Related Policies/Programs and Resources

Related Policies and Programs: Do current governmental, non-governmental, or private programs exist that are relevant to this policy option? Please list them and describe in some detail. Err on the side of including too much information and too many potentially relevant programs (these can be trimmed down later). Are there potential synergies with other efforts being undertaken in other sectors, states, or otherwise?

Available Resources: What resources already exist to address this issue? Are there funding mechanisms in place to institute this policy? Is the necessary expertise available? Does an existing governmental body have the necessary authority and/or practical ability to implement this policy option? Are there unconventional resources available, such as indigenous knowledge or social networks?

E. Benefits and Costs

Still working on details, but likely will include:

- Qualitative or quantitative estimate of effectiveness of option.
- Qualitative discussion or quantitative estimate of the cost of the option (both governmental and private sector, if the option involves private sector investment or other costs). Cost includes the initial costs of implementing the policy/program/action, and also costs over time - such as operation and maintenance, administration and staffing, expected frequency of reconstruction, non-economic and non-quantifiable costs such as the “cost” of resource value lost if action is not taken. For example, costs such as an increased impact on human health should be considered along with more traditional costs.
- Co-benefits—non-impact related, or ancillary, benefits.
- What governs effectiveness of adaptation options?
- Key assumptions about effectiveness and key uncertainties.
- Documentation of data sources used for estimates.

F. Feasibility Issues

Feasibility: Can the state realistically implement the proposed action. Is the proposed action within state authority or is it more appropriately the role of the federal government, localities, individuals, etc? Do the necessary legal, administrative, financial, technical, and other resources exist, and are they available for use on this proposed state action? (Question for Jackie/Larry: can the TWGs leave the issue of political feasibility entirely to the Governor’s Sub-Cabinet?)

Include in this discussion other aspects of the context for the option, such as substantive or procedural issues involved with this policy option, including potential

conflicts of interest, different levels of governmental or non-governmental involvement in this issue.

Constraints: Are there potentially limiting factors for this policy option? Does the policy require public buy-in? Will there be a long delay between actions taken and benefits realized? Are there other potential logistical, geographical, financial, technical, or procedural constraints?

Note that the discussion does not need to be broken into two separate sections as indicated above. The sections are more of an indication of the types of issues that can be raised in the feasibility section.

G. TWG Approval and Deliberations

This is particularly of interest for the AAG. This section indicates the level of approval within the TWG, and is a place to indicate any minority views on the option, as well as caveats or ideas to keep in mind as implement the policies. This will likely appear only briefly in the final appendix of options, but is important for the AAG.

5.0 Plan for PI TWG Meeting

Wednesday, February 4, 8:30 am -12:30 pm, Anchorage, Atwood Building

To help use our time together, in-person, on February 4 as efficiently and effectively as possible, please consider whether:

- Will we be ready to review drafts of portions of any small group's Option Paper? If so, which Option Paper?
- Should we spend time working through, as a group, our thoughts on the information required for one or more of the Option Papers?
- Can the small groups provide some of their ideas ahead of time to help focus the discussion?

Note that there is a Climate Change Track during the Alaska Forum on the Environment (February 2-6) at the Egan Convention Center and Dena'ina Center. For more details, go to: www.akforum.com/agenda.htm

Sessions especially relevant to Public Infrastructure include:

Tuesday, Feb. 3

- 2:00 pm-4:45 pm Climate Change in Alaska: Building Resiliency into our Future (coastal communities adapting to change)

Wednesday, Feb. 4

- 8:30 am -12:30 pm PI TWG Meeting
- 2:00 pm -3:15 pm Climate Change in Alaska: Our Built Environment

Friday, Feb. 6

- AAG Meets all day