

**Draft Summary of the NEPSI Infrastructure Subgroup Conference Call
December 18, 2001
3:00-4:30 PM EST**

Members in Attendance:

Reggie Caudill, NJIT
Catherine Wilt, UT CCPTC
Lisa Collins, DMC Recycling
Lorraine Graves, EPA Reg. 2
Gordon Hui, EPA OSW
Tony Hainault, MN OEA
Butch Teglas, Philips
Jeff Hunt, CIWMB
Terri Cronin, CIWMB
Lucy Stanfield, EPA Reg. 5

David Stizhal, WEPSI
Julie Rhodes, ReDO
Lynn Rubinstein, NERC
Patty Dillon, Tufts University
Chris Beling, EPA Reg. 1
Guy Watson, NJ DEP
Frank Coolick, NJ DEP
Merry Rankin, IA DNR
Wayne Rifer, WEPSI (facilitator)
Ben Carlisle, ERG (note-taker)

The participants of the NEPSI Infrastructure Subgroup met via conference call on December 18, 2001, from 3:00 to 4:30 PM EST. This document briefly summarizes the major topics covered during the subgroup's discussions, and highlights agreements that were reached.

Introductions and Administrative Matters

The subgroup members began the meeting by approving the meeting notes from the December 4 conference call and discussing several administrative matters. Wayne Rifer announced that the subgroup's list serv is now operational. The address for the list serv is nepsinfra@listserv.utk.edu.

Discussion of Matrix

The subgroup asked Reggie Caudill to provide more details about his offer of supplying free labor for the development of a matrix. Reggie said that one of his graduate students had agreed to develop a matrix for evaluating different models for collection, reuse, and recycling of electronic equipment. The student would create the matrix by building on a "generic" matrix which was developed for an earlier project and which is already set up with the necessary algorithms. Reggie said that one axis of the matrix would list key features of the models in question; the other axis would list the desired attributes defined earlier in the NEPSI process. The matrix would assess which key features are most successful at achieving the desired attributes. It would do this through a numerical scoring system that would indicate how well a model characteristic achieves specific attributes. Reggie said that his student could develop the matrix relatively quickly, once subgroup members provide information on the key features of each model.

One subgroup member pointed out that the development of such a scoring system would require the subgroup to make decisions about why some attributes should be given greater weight than others. The member said it was important that all stakeholders be fairly represented

in that kind of decision-making, and he questioned whether the subgroup had the authority to move forward with the process, or whether it should involve the larger stakeholder group. Another subgroup member said that the process of weighting attributes would be subjective, and many in the group agreed with this point. A third member suggested that a scoring system could actually hinder the process of developing a visionary model, since that process would involve choosing characteristics from different existing models rather than selecting the one highest-scoring existing model as an ideal system (the subgroup has agreed that none of the existing systems are ideal).

Wayne addressed these concerns by saying that the output from the matrix would be a draft, which the subgroup could discuss and consider bringing before the larger group. The participants then talked about whether the matrix would be used to assess existing models or visionary models, and it was agreed that it could be used for both purposes.

After further discussion, the subgroup agreed that Reggie and his graduate student should test the matrix on a few existing models to demonstrate how it would work. The subgroup identified the Massachusetts model as possible candidate for the test, since a write-up on it will be ready relatively soon, and it is a good model to consider. Other possible candidates include: the Dutch model (currently being evaluated by Scott Cassel), SWICO (Julie Rosenbach), and Best Buy (Ed Nevins). Chris Beling said that she would check to see how the write-ups on these models are progressing. Reggie asked that the write-ups be sent to him as soon as possible, and preferably before January 1st.

One subgroup member asked whether the group needed to discuss the values/weightings to be used in the matrix, or whether the test could proceed without these matters being hashed out ahead of time. Reggie said that he and his graduate student will first set up the model using temporary values; then the subgroup members can examine the results of the test run and decide whether they want to move forward with the process of refining the values/weightings. Catherine Wilt said that there would be time to look at the results of the test run during the January NEPSI meeting in Tampa, where the subgroup will meet face to face.

Discussion of “Key Features” Document

The subgroup quickly went over the “Key Features” document that Wayne had distributed before the conference call. The document presents a list of eleven key features that will be analyzed for each model under evaluation. The document is a revised version of the list of eleven key features that Patty Dillon had suggested during the December 4 conference call.

Following are comments that were made on specific items in the Key Features document:

- **Administration of infrastructure**—The subgroup discussed the fact that there seems to be some overlap between item #2 (administration of infrastructure) and item #3 (responsibilities of stakeholders). Patty Dillon clarified that the “responsibilities” feature is a place to delineate the roles of stakeholders throughout the product recovery and recycling system, whereas “administration” is a place to focus on the organization that manages the system and to analyze its functions.

- **Collection system(s)**—One subgroup member stated that the collection systems for urban and rural populations will have to be different, and that the choice of collection systems will affect participation rates. A question was raised about who will have the authority to choose the collection system in different areas, and what decision process will be used. Will this be a local decision?
- **Flow of product**—One subgroup member said that there will inevitably be regional differences in the way products flow through collection/reuse/recycling system, and that the nationwide system should make use of existing regional infrastructure and organizations.

After reviewing the list of key features, the subgroup members discussed whether they should present the list to the larger stakeholder group during the NEPSI meetings in Tampa. It was agreed that the list should be presented in the context of describing the overall process that the subgroup is engaged in, but that there was no need to discuss the key features in detail. The subgroup members also agreed that they should touch base with the Finance Subgroup to find out what discussions they've had regarding the administration of a nationwide system and the flow of funds.

Brainstorming the Ideal Model for Each Key Feature

The subgroup members used the remaining time to start the process of brainstorming the ideal model for each key feature. They began with administration of the infrastructure. One subgroup member said that he likes the idea of having retailers administer the nationwide system. He said that a retailer-administered system would achieve many of the desired attributes (e.g., convenience for consumers), though such a system might not be the best model for dealing with orphaned equipment. Another member said that a retailer-administered system might not achieve satisfactory reuse rates, though this point was debated by others who said that the Best Buy model has achieved better-than-average reuse rates.

Another subgroup member pointed out that the level of reuse under a nationwide system will depend on who the recycler or demanufacturer is, not on who collects the equipment. This member also said that reuse rates will improve if equipment from small businesses is accepted into the nationwide system.

This comment led to a discussion concerning whether reuse should be considered as an integral part of a nationwide system, or whether reuse should be considered as a side issue. The subgroup talked about the federal government's system for encouraging reuse of its electronics equipment (wherein individual agencies are responsible for seeking out and making decisions about reuse opportunities within communities), but it was agreed that federal agencies are often constrained by the fact that their end-of-life equipment is badly outdated and of limited value to charitable organizations.

Guy Watson suggested that the subgroup might want to search for other models where organizations have successfully incorporated reuse into their end-of-life options. He offered to

contact the New Jersey-based Public Service Enterprise Group (PSEG), whose computer reuse program has been doing very well. The subgroup members also agreed that they should analyze a mail-back model, such as the program operated by Hewlett-Packard for taking back hardware and other equipment through the mail. IBM operates a similar program, and both companies look for opportunities to refurbish and reuse the equipment they take back. Lorraine Graves said that such mail-back programs fill a need because many consumers buy equipment online from individual companies, rather than going through retailers. Someone else pointed out that many computers today are bought through television networks such as the Home Shopping Network.

The subgroup agreed that they would approach the HP representative (David Isaacs or Renee St. Denis) during the Tampa NEPSI meeting and ask if HP would be willing to put together a summary characterizing how the company's mail-back model works. The members also agreed that the issue of reuse was worthy of highlighting for the larger stakeholder group during the subgroup's presentation in Tampa.

Returning to the topic of what role retailers might play in a nationwide system, one subgroup member said that retailer collection should not be the only collection mechanism. Other members said that Best Buy had trouble getting retail stores to participate in its program, and that part of the problem was that stores weren't included in the decision-making process. Another concern among store owners/managers involves the use of their limited retail space for equipment returns instead of sales.

The subgroup agreed to request help from retailer representatives during the Tampa NEPSI meetings. This could involve asking retailer representatives to participate in future subgroup meetings and conference calls.

Next Steps

Patty Dillon suggested that a sub-subgroup should meet to begin developing a visionary system. She said that if any individuals have ideas for what might work they should put them on the table, and that this would give the subgroup something to discuss and build upon.

Another member suggested that each person should go through the "key features" list and write down his or her ideal model for each feature or for any feature that is of particular interest to him or her. The resulting write-ups could then be circulated through the subgroup's list serv. Chris Beling said that someone should initiate an email exchange via the list serv, then others can react and offer their own ideas. She offered to write-up a summary of the resulting exchange, if such a summary would prove useful.

Wayne asked everyone to look over the "Sources of Data" document that was distributed prior to the call, and to send him any comments or additions.

For the subgroup presentation to the NEPSI meeting in Tampa, the subgroup decided to include a discussion of the attributes and of reuse. Our presentation will be more fully defined at future meetings.

The next conference call for the subgroup will occur on Tuesday, January 8th at 3:00 EST. The call-in number will be sent out prior to the call.

Assignments

- **Reggie Caudill** and his graduate student will test the matrix on a few existing models to demonstrate how it would work.
- **Patty Dillon** will write up the Massachusetts model as a candidate for the test.
- **Scott Cassel** and Alan Phipps will write up the Dutch model
- **Chris Beling** will write up SWICO
- **Ed Nevins** will write up Best Buy.
- **Chris Beling** will check to see how the write-ups on these models are progressing, to be sent to Reggie preferably before January 1st.
- **Wayne Rifer** will check with the Finance subgroup about how they are addressing administration and the flow of funds.
- **Guy Watson** will contact the New Jersey-based Public Service Enterprise Group (PSEG) regarding their computer reuse program.
- **Wayne Rifer** will ask the HP representative at the next NEPSI meeting if they would summarize their mail-back program as a model.
- **Wayne Rifer** will ask retailer representatives at the next NEPSI meeting if they would be willing to join the subgroup to help analyze back-to-retail models.
- **Everyone** will do their own brainstorming about their ideal model according to the attributes list, and discuss their ideas in small groups if they chose. They will write ideas keyed to the attributes and circulate them via the listserv. **Chris Beling** will assemble the results of the listserv communications.