



SEMINAR GUIDELINES FOR
AGENCY PRESENTATIONS

GIS Retrospective Applied Research Seminar
Esri Federal GIS Conference
February 24-25, 2016, Washington, DC

**Mining U.S. Federal Agency Materials
for GIS Nuggets**

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September 15, 2015



1. Background

The GIS Retrospective Program began in 2013 with [AutoCarto Six Retrospective](#), and is further defined by several papers in the International Journal of Applied Geospatial Research (Wellar, 2014, 2015, 2016; see [Reading List: Using a Retrospective Approach to Mine the Literature for GIS and GIScience Nuggets](#) for details), as well as by slide presentations, papers, and discussions from the colloquium, “Using the Retrospective Approach to Mine for GIS Nuggets”, which was held February 13-14, 2015, at the Esri campus in Redlands, CA.

A summary report, thirteen slide presentations, and six papers from the colloquium can be viewed at <http://www.wellar.ca/wellarconsulting/>.

Upon review of the colloquium activity, Esri decided to support further investigations into the idea of using the retrospective approach to mine “the literature” for GIS nuggets. Discussions among principals led to the decision that the next step in the GIS Retrospective Program would be to hold an Applied Research Seminar, **Mining U.S. Federal Agency Materials for GIS Nuggets**, during the 2016 Esri Federal GIS Conference.

The opening publication for the Applied Research Seminar is the [Seminar Overview](#), which is an indicative discussion of seminar objectives, rationale for retrospectively mining agency materials, and seminar design specifications. And, the second background publication is the [Reading List](#), which was available at the end of August.

The intent of the Guidelines is to assist in placing us on the same page in terms of key thoughts and materials that could and should be “put on the table” during the seminar. Then, with the body of recommendations providing an overall frame of reference, or seminar parameters, agencies can design their presentations about retrospectively mining for GIS nuggets accordingly.

2. Exploring the Universe of GIS Nuggets

The concept of GIS nuggets was introduced for the colloquium, and has three primary components as shown in Figure 1.

Figure 1. “GIS Nuggets”

“GIS nuggets” are findings from the literature which serve:

- The design and development of geographic information systems technology;
- The definition and elaboration of geographic information systems science; and
- The uses of geographic information systems technology and geographic information systems science.

The GIS nuggets concept was discussed at length during the colloquium, and found to be sufficiently substantive by Esri that the corporation decided to support the Applied Research Seminar as the next step in the GIS retrospective program.

A key point to be emphasized from the outset is that we are at an early stage in the exploratory process, and have just begun to identify both general and particular findings from the literature which serve current (and potential future) initiatives involving GIS technology, GIScience methodology, and the uses of GIS technology and GIScience methodology.

At the risk of over-stating the case, it appears fair to say that this seminar is a pioneering enterprise, and that there is considerable interest in both the design and the content of agency presentations.

In the next two sections I first acknowledge sources of advice about how to design the seminar (section 3), and then I outline the recommendations to agencies regarding their presentations (section 4). And, I hasten to add, the term outline is used advisedly since discussions with agencies will define the details of presentations.

3. Sources of Recommendations to Guide Agency Presentations

Recommendations on designing the Applied Research Seminar to be held in conjunction with the 2016 Esri Federal GIS Conference come primarily from three sources:

- Colloquium discussions, papers, and slide presentations identified a number of initiatives to include in a GIS retrospective research agenda, including priority topics for seminars and/or workshops prepared for government agencies, academic organizations, business organizations, and professional associations.
- Consultations with Prof. W.L. Garrison, UC-Berkeley, who made numerous comments and suggestions prior to his death in February, 2015, about the design and implementation of the GIS Retrospective Project, including suggestions about the components of a modular seminar curriculum with an emphasis on past-present-future linkages.
- Consultations with colloquium and seminar advisors, many of whom were involved in the AutoCarto Six activities in 1983 and 2013, and all of whom have contributed to the literature on GIS technology, GIScience methodology, and the uses of GIS technology and GIScience methodology.

The three sources of ideas, suggestions, etc., behind the recommendations bring a great deal of substance and credibility to the Applied Research Seminar. I am pleased to acknowledge their contributions to the Guidelines statement.

4. Recommendations to Guide Agency Presentations

The format of the Esri Federal GIS Conference is based on sessions of 60 minutes in duration, and the Applied Research Seminar is designed accordingly. The net result is that I envisage two sessions (one each conference day), four agencies per session, with each agency being allotted 12-14 minutes for its presentation. For various reasons, agencies will be invited to give repeat performances.

In terms of designing presentation time, the Esri Federal GIS Conference is a fast-paced affair. Further, it is attended by a very savvy audience which expects speakers to cut to the chase during presentations, with the understanding that the materials mentioned in the presentations can be viewed online and, should questions arise, the presenting agency can be contacted for clarifications, further information, specific instructions, names of contact people, etc.

That mindset guided the design of the guidelines for presentations. That is, briefly inform attendees about GIS retrospective mining opportunities, and provide some of the means to direct and support their mining endeavours.

For the initial version of the Guidelines statement, the following recommendations have been selected as being most pertinent. Other recommendations that may be added in response to suggestions from agencies, as well as from seminar advisors and partners will be incorporated in a revised guidelines statement.

Each recommendation is accompanied by a brief, descriptive text. It is my perception that this outline approach is appropriate and that we can dispense with detailed commentary since much of what follows is familiar to agency participants. More details can be added as required, of course, upon requests or suggestions by agencies, advisors, or partners.

1. Include presentations from four core agencies which have distinguished records in using GIS technology and GIScience methodology in a mix of policy, program, plan, and operations activities.

It is suggested that this is the appropriate number of agencies to “start the ball rolling” in terms of illustrating the array of subject matter, scope of topics, variety of productions, and potential utility of mining U.S. federal agency materials for GIS nuggets.

2. Describe in general terms why your agency’s materials should be examined for GIS nuggets.

Some attendees and readers may already know a considerable amount about an agency’s productions, but in all likelihood many others do not have more than a passing familiarity. The seminar is a marketing and promotion opportunity to attract visitors to an agency’s website and its literature holdings, and to give them reasons to invest time and effort in mining agency materials for GIS nuggets.

3. Provide examples of GIS nuggets that your agency has discovered over the years by mining what your agency had previously published.

This recommendation boils down to demonstrating that the agency does its homework and extracts from its own previous work GIS ideas, concepts, approaches, capabilities, applications, etc., that proved useful subsequent to their initial appearance in agency productions. Further, this approach is a very powerful way to avoid the misfortune of “re-inventing the wheel”, which is a phrase that most everyone understands to mean wasting time, money, effort, energy, etc., on re-creating or duplicating things that are already known and done.

4. Provide examples of GIS nuggets that have been brought to the attention of the agency by others who have mined agency materials.

The seminar is an excellent opportunity for agencies to establish their worth to current and future clients, partners, users, etc., by making known some of the good things that users have stated about the contributions that agencies have made to GIS technology, GIScience methodology, and the uses of GIS technology and GIScience methodology.

5. Provide examples of nuggets that your agency has discovered over the years by mining what other agencies had previously published.

At a very pragmatic level, the seminar is an opportunity for agencies to confront the “silo” issue by identifying a selection of GIS nuggets that have been extracted from the works of other agencies, and/or build on the works of other agencies. The intent is to provide an indicative sense of agencies working together to identify and share GIS nuggets in a mutually supportive manner.

6. Ensure that links to digital references are included in the agency reports so that published works are accessible online.

Due to the limited time available to make presentations during the seminar, this is an excellent way to “get out the word” about agency productions to those attending and also to those not attending the seminar.

7. Scan paper documents of importance so that they are more readily available.

As pointed out on frequent occasions, but perhaps not fully appreciated by those of “the digital generation”, many early, fundamental contributions to the literature on GIS technology, GIScience methodology, and their uses, were paper productions. These contributions to the literature may have been relatively difficult to obtain at the time of publication, with perhaps only 500 or even just 200 copies of a conference proceedings being published, and are likely to be even more difficult to obtain today if they are only available in their original paper form.

Several significant cases in point were encountered when assembling the reading list ([Reading List: Using a Retrospective Approach to Mine the Literature for GIS and GIScience Nuggets](#)), leading to their being scanned by Esri Canada and Wellar

Consulting for the convenience of readers. It is expected that agencies would reap an excellent return from such a service.

8. Provide a reading list of publications reporting on the use of the retrospective research approach by your agency.

An important part of the Applied Research Seminar is to advance the methodological aspect of using the retrospective approach to mine for GIS nuggets.

How-to-do-it publications from introductory to advanced are invaluable contributions to an emerging body of literature which is in a very early stage of definition and development. Using links to directly connect readers to materials would be much appreciated by all, as would detailed references to materials which are not electronically available.

5. Feedback on Implementing the Guidelines

Feedback from agencies on implementing the Guidelines will be compiled for publication as an Applied Research Seminar report. It is expected that agency feedback will be instructive in terms of evaluating the design and value of the current seminar, and in terms of designing future GIS retrospective program activities.

For further information about this seminar or the GIS retrospective program, contact Barry Wellar by email at wellarb@uottawa.ca.