

Talking Points Collaborative Mapping

Forest Service Public Participation GIS Application

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Why are we doing this?

Talking Points Collaborative Mapping (TPCM) was developed to meet the 2009 President's Open Government Initiative to promote transparency, participation and collaboration. The President's initiative specifically directs agencies to *"take specific actions to implement the principles of transparency, participation, and collaboration."* The President's directive further states:

"Transparency promotes accountability by providing the public with information about what the Government is doing. Participation allows members of the public to contribute ideas and expertise so that their government can make policies with the benefit of information that is widely dispersed in society. Collaboration improves the effectiveness of Government by encouraging partnerships and cooperation within the Federal Government, across levels of government, and between the Government and private institutions." (President's Open Government Directive, December 8, 2009)

Additionally, the 2012 Forest Service Planning Rule (36 CFR 219.4) mandates public involvement in national forest planning and encourages use of contemporary tools such as the Internet to engage the public. Public involvement shall occur in assessment, proposal, and monitoring stages and tools which are interchangeably useful in all stages and all types of stakeholders and individuals are especially useful. TPCM meets this need. In addition, it can provide similar opportunities for scoping and collaboration needs entirely within a national forest for intra-staff communications. It can also be useful to collect compare and study similarities and differences in public comments across all participating national forests through a state, region or the entire nation. And presently, TPCM also fulfills the USDA Forest Service Strategic Plan (2015-2020) to *"develop internet-based tools to improve internal and external user interaction with the Forest Service and Forest Service data."*

Originally built using ArcGIS ESRI Flex, now being updated to JavaScript, the US Forest Service with help from USGS developers, created a Public Participation GIS (PPGIS) application to meet its community participation and public scoping needs. TPCM fulfills an online mapping need for the Forest Service to receive public comments and threads.

TPCM can be used for any public scoping need, not only for the Forest Plan Revision process, but also for the public input needs for Developed Recreation, Forest Restoration, National Scenic Trails, and many varied program areas. This online application can even be tailored for inter-staff communication and collaboration. Forests can track and manage public comments; databases are automatically generated, and can be queried and easily exported; GIS layers of the comments can also be output.

Individually and collectively, data mined from these public scoping efforts can provide rich sources for public reporting, as well Forest-wide, regional, or national meta- analyses. Talking Points Collaborative Mapping is still in its infancy, with updates occurring regularly, and a mobile access in the works.

What are some of our Priorities?

Continuity of Service

While maintaining and upgrading our public participation application, it remains important to ensure continuity of service. This is necessary that those national forests with current public scoping projects underway have no break in their public comment time. It is also that those forests who have planned for, and are developing their paperwork and mapping for their next round of public scoping can rely on our ongoing service. Another reason to maintain continuing operations is to ensure historical data be readily available. Data mined from these efforts can individually and collectively serve as valuable sources of information for future analyses—and fulfill local, state and federal government needs for public involvement and reporting.

Encourage public participation and collaboration

It is essential that TPCM be such a way that it encourages public participation – especially in its collaborative form. End users not only can leave their comments, but if they want, they can respond to the comments of others.

Satisfy multiple FS program areas

Talking Points Collaborative Mapping was designed to satisfy the public scoping needs for multiple program areas and can be tailored to specific needs by applying some of the tools covered later in this document.

Easy and intuitive

End users of the application should be able to use and navigate through the application with relative ease and intuitively know how to use the tools. TPCM resembles other online mapping tools, with similar functions for creating lines, points and polygons.

Watch Costs

During these times of increasingly tighter budgets and increasing demands for higher internet security, upgrades and unexpected costs, it is essential that the application and its support staff operate at maximum capacity yet do it with limited funding. The team emulates agile development principles, allowing flexibility by iterative development and billing only for on-demand costs, rather than supporting a full-time dedicated staff who bill 40/hours a week.

What is PPGIS?

PPGIS (Public Participation Geographic Information Systems) is an emerging field that uses GIS technologies to involve the public. PPGIS melds public involvement with new computer aided technologies using geographic information systems (GIS). Most PPGIS use online mapping components to gather public comments. The traditional scoping method of mailed comments didn't give specific geographic locations nor did it allow for a dialogue among the public. PPGIS on the other hand allows comments to be tied to specific locations and, if desired, allows the public to respond to each other. The TPCM website is the first PPGIS tool specifically for the Forest Service.

Why would Forests staffs want to Use TPCM?

The Federal Office of Management and Budget (OMB) is concerned with burdening the public with too many surveys, and therefore requires OMB approval before agencies are allowed to survey the public. TPCM is not a survey. It is but a public scoping tool, and therefore does not require oversight by OMB.

When end users first come to the landing page for the public scoping effort, boilerplate language lets the public know the proper etiquette and protocols for leaving comments. A specific project description lets stakeholders know the reason for this effort and describes the parameters of the study area. By checking the box to move forward, the web page visitors indicate their understanding and agree to continue on with the mapping part of the site.



Figure 1 – TPCM Online Map Landing Page

Talking Points Collaborative Mapping was specifically designed for the Forest Service by the Ecosystem Management Coordination/Human Dimension program. The Human Dimensions Program provides economic, social and other analytic tools, as well as providing scientific expertise related to the “human” side of the Forest Service-Public relationship.



Figure 2 - TPCM Manager's Project Parameters Screen

TPCM has several points which would encourage managers seeking public input to use it. It is quick and easy, inexpensive to implement, and produces an automated database of comments. The information derived can be used for public reporting and analysis. Having this dynamic, online mapping application also engenders a more robust connection to the land. TPCM is easy for the public to use. And it is inexpensive to use. Because it requires no additional licensing fees, it fills a niche not met by any other PPGIS application.

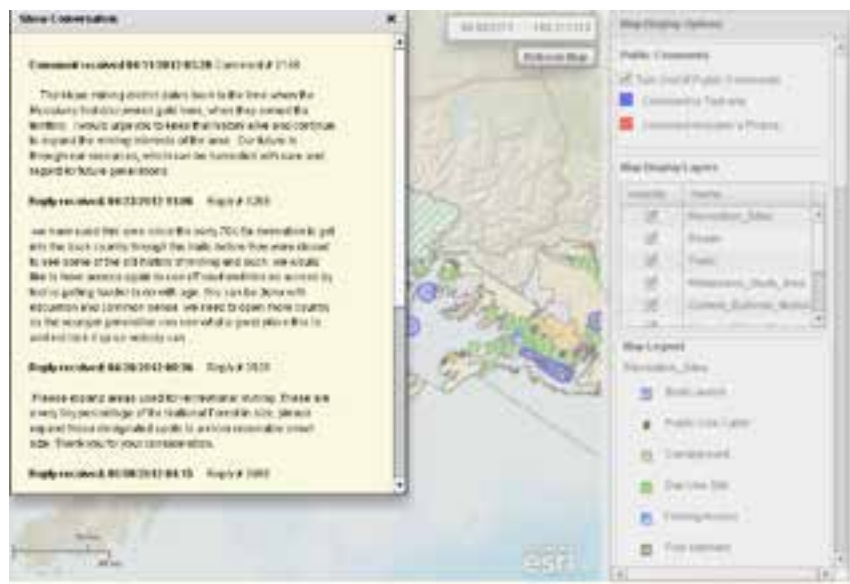


Figure 3 - Public Comment and Conversation Thread

Traditional public scoping efforts has been mostly through regular mail, email, phone calls, or public meetings. However, there remain a large number of people in the public who could not make the meetings or were too busy to call, or write. Providing an interactive website where members of the public can leave comments, have conversations, and other planning related input has benefits at their convenience provides fills a much-needed tool in the public input process. TPCM has numerous advantages over traditional scoping techniques such as:

- Ability for the forest to provide online the forest spatial layers related to the project in question, which also can allow the public to drill down into the data to find more specific information
- Increased spatial referencing of public comments
- True collaborative capabilities allowing public commenters to communicate with each other as well as with Forest Service staff in “real time” discussion as opposed to collection (with contact information optional and confidential)
- Easy integration of photos and URL links to other documents
- Automatic documentation of comments and spatial locations
- Potential for NFS wide comparisons of public comment themes and trends
- ArcGIS platform is compatible with standard Forest Service GIS format
- Easy and very low cost to implement with available help desks

Public Users and Forest Service Manager Benefits

One of the advantages of TPCM's online mapping tool is quickly informs and easily shares information about the land and proposed actions via interactive, dynamic mapping layers and provides other project related data. It allows the public the ability to easily comment on a project with an interactive web mapping interface, as well as provides an opportunity for discussion and possible collaboration through dynamic threads commenting pop-ups. The public can also leave their comments in four ways: polygon; line; point; and general comments related to the whole project. And for ease of access, no lengthy login protocols are required, allowing the public to just get to the business at hand.

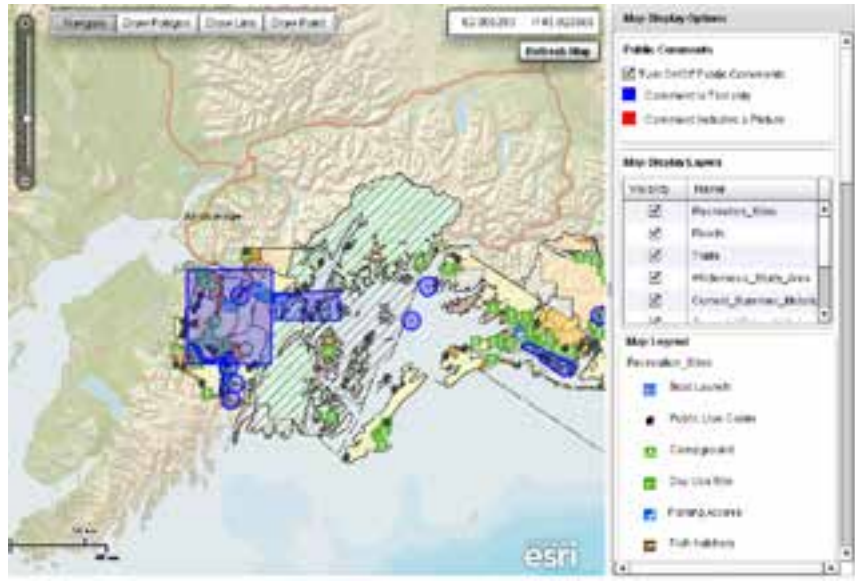


Figure 4 - Spatially Associated Public Comments (with tools and layers on sidebar)

Another benefit of TPCM's design is that it not only takes verbal comments, but it allows users, should they desire, to attach a photo to a comment. And for those who do not want to be contacted back or other privacy concerns, the site also accepts anonymous comments. And for those who'd like to read more about what others have left, visitors can also peruse all the comments by simply clicking "View All."

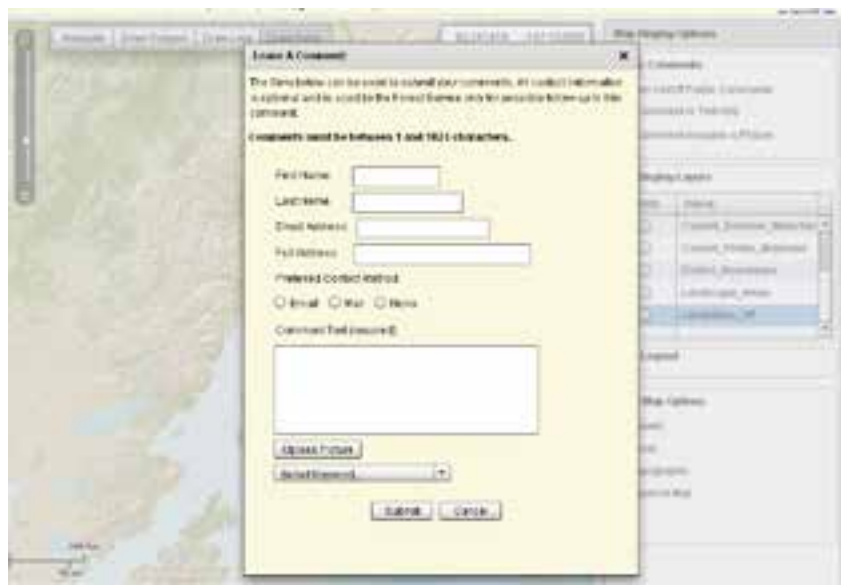


Figure 5 - Public Comment Pop-Up Screen

For Study Area Managers, as well as keeping personnel costs to a minimum, a database is created automatically when a comment is made. Most traditional Forest Service Scoping methods require personnel time to organize and enter the comments manually into a computer system. Exponentially, one can easily see how this could be a cost-savings benefit for the Forest Service and taxpayers.

The screenshot shows a web-based interface for a 'Conversations Report - Chugach National Forest'. The report lists public comments with the following columns: ID, Commenter, Location, Comment and Replies, Status, Date, and User. The comments are numbered from 1016 to 1029. Each entry includes a brief snippet of the comment text and a status indicator (e.g., 'Open', 'Closed').

Figure 6 - Sample Public Comments Report

The comments that are automatically collected in the database can be used in multiple ways:

- Managers can be notified when a comment is made.
- Although remaining part of the public record, managers can hide comments that may prove offensive, contentious, or sensitive to species or heritage sites.
- Also, there automatic filters comments must pass through before being posted--Spam filters, "naughty word" filters detecting offensive language, and a sensitive language filter ensuring protected information remain undisclosed—such as "Bald Eagle Nest" or "Culture Heritage Site."
- Although hidden, comments will appear part of the record, and a manager can unhide them if proven to be a false negative.
- Scoping effort managers can easily make quick online queries based on key words previously assigned to the project.
- They can also do string queries, such as search for the word "fishing" or "picnic"
- Comments can be exported in several formats (Word, Excel, PDF, XML, and GIS) for project record, content analysis and meta-analyses and more.
- Managers, as well as the public, can print maps of comment locations.



Figure 7 - Manager's Reports Query Definition Screen

The Talking Points Collaborative Mapping application uses the ESRI ArcGIS platform for map information and display capabilities combined with database formats, making it easy to integrate into Spreadsheets, Database platforms, presentation and document platforms. Maps are first created on the ArcGIS Desktop providing the Forest-Service specific layers, and base map tiled backgrounds are provided by ESRI map service. Just like any other online mapping service, end users can standard pan, zoom, easily navigate and refresh features. Drilling down to get further information is easy with individual Forest Service layers being able to be checked on or off more in-depth analysis. Holding the mouse over and clicking on a comment left via point, line or polygon quickly reveals the comment with discussion thread (replies), including date and time of comment.

TPCM is designed to use a relatively simple standard approach to both setting up a website and retrieving results. Because the system is mostly automated, the Forest Service Manager need only complete a few steps to get website output. And because help is easily available via online help prompts or on-demand help desk services, the application is relatively easy to use. To begin, managers only need to identify the spatial study area in which they wish to receive public comments, and then create the script they wish to appear on the website that describes your purpose for hosting the website, with any information they'd like to included, as well as any additional web links to National Forest homepage or other website.

Working with their GIS specialists, study managers will also identify the Forest Service layers they would like to use on their public scoping project. They can set and modify starting and ending dates for comment period, choose key words for categorizing comments, set up *sensitive words* which will trigger hiding of a comment. For example, comments containing the words "bald eagle nest" would automatically trigger a comment to be hidden.

Ensuring Participation

It is not as simple as “*build it and they will come.*” The public needs to know about our public participation GIS application, and be able to easily find it in on the internet in order to use it. Forest Service staffs and leadership need to work synergistically with other staff areas, such as Public Affairs, in order to ensure the success of this public scoping effort. When working with managers, we provide the following *Keys to Success* to ensure our online commenting tool will get plenty of public participation as well as inspire collaboration:

Know what TPCM is—and isn’t— before you begin

Be clear with decision makers and the public alike about TPCM’s purpose, process, and limitations. It is not a survey. It is not subject to OMB approval. In most ways it is the equivalent of an enhanced form of collecting public comments during NEPA scoping periods. Therefore, its results are not meant to be a statistical representation of public opinions, rather to discover the range of opinions and issues and to further permit discussion of those opinions and issues. Be mindful about how you interpret the public comments in that light.

Use the TPCM Help Desk Services early and often.

Staff at Integrated Resources (IR) can help you not only get TPCM set up but also have practical experience in the operation of the program. You should not hesitate to ask them questions but please do not call USGS directly. You are encouraged to share your experiences with IR in order that they can serve as a central source of information and problem-solving on all aspects of the use of TPCM.

Have a clear purpose for using TPCM

TPCM has many possible uses. You should know what you want to get out of the collaborative communications process with your users.

Have “Buy-In” from Decision-makers, Planners, Resource Staffs and Public Affairs

Using TPCM can build expectations in its users for their participation. Make sure that decision-makers are in agreement with your use of the program and know how they will respond to the results of its use.

Work with your Public Affairs Officer to coordinate use of TPCM as part of Integrated Public Involvement and Collaboration

It can be confusing to users to have several different but seemingly similar (if not identical) public involvement processes ongoing. Do not make the processes compete or confuse the users as to which is the more important.

Make sure Intended Users Understand the Purpose

Be explicit in your landing page messages, especially the purpose of collecting comments and how those comments will influence the management of the Forest.

Commit to Using TPCM efficiently, especially in monitoring the process and results

TPCM has several features designed to prevent unwanted situations but it does require dedicated staff time to monitor the results as they come in. Further, be aware that a user may ask the Forest a question

as well as leave a comment and your measured response to one user can be a great way to reach a larger number.

Advertise the Existence and Purpose of TPCM to your Intender Users

Do not rely on word of mouth to inform potential users about your TPCM website—tell them through a variety of means, and often, that the TPCM website exists.

Make sure the TPCM site is easy to find on your Website

Make the link to the TPCM website obvious; do not bury it in several layers nor use indirect means to describe it.

Share the results with your Decision-makers, Line Officers, and Staff

The collection of public comments for consideration at a later date may be part of the planned use of TPCM but keeping Forest staff informed of significant comments on a regular basis will improve the value of TPCM.

Appreciate your Users

Finally, the usefulness of TPCM is directly related to the time and thought put into comments and dialogue of the program's users, especially those publics you are reaching out to. Make sure that they understand their participation is appreciated—and above all, used. Do this by posting some messages in associated with the website describing the progress of the use of TPCM and how it is being used.

Support – Online & Help Desk Services

TPCM provides online help on each web page to immediately tend to any questions the public or managers might have. Managers are also able to visit a SharePoint site with step-by-step slides on how to use each function of the application, as well as a complete user's manual. Help Desk staff are readily available to answer any questions or demo the application processes—filling a gap for human interface which is often missing when using online web applications. Additionally, Forest and Regional Staff who develop a familiarity with Talking Points Collaborative Mapping creating projects and be a source of expertise to help others in their forests or region.

Moving toward the Future

After its introduction during the beta testing period a few years ago, interest and demand for Talking Points Collaborative Mapping continues to grow. In fact, because of its streamlined processes making it quick to implement and easy-to-use, and because of its automated comment data collecting, TPCM could save the Forest Service much money into the future on personnel costs alone. Upgrades are continuously being made to improve the user interface, as well as meet the technology and security demands of the future.

Where can I learn more?

The TPCM website is managed by the WO EMC Human Dimensions program with technical and help desk support provided by the Integrated Resources enterprise team. You may contact any of the following for more information on TPCM capabilities or arranging for its use on a National Forest or Grassland:

- El Aran, Integrated Resources: earan@fs.fed.us or 503-808-2371
- Pat Reed, WO EMC Human Dimensions: preed01@fs.fed.us or 907-743-9571
- Ashley Goldhor-Wilcock, WO EMC Human Dimensions: agoldhor@fs.fed.us or 202-360-3486