C-FERST Train-the-Trainer

**Live Demo Cheat Sheet**

* **Live Demonstration**
  + This document will walk through a community example to show you how to use the tool.
  + Set up:
    - If you will be demonstrating a participant’s community in the demo portion enter it here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
    - To follow along with our demo: SE 122nd Avenue and SE Division Street in Portland Oregon.

* **Home Page** 
  + This is the home page (<https://www.epa.gov/c-ferst>).
* *Note:*
  + - *Please open a browser (like Chrome, Firefox, Internet Explorer, or Edge) and navigate to C-FERST to follow along.*
    - *Turn off the pop-up blocker on your browser settings*
* The green boxes on the right provide additional guides and links to other EPA tools.
* The top three photos are the basic parts of C-FERST.
  + **The View** Maps section allows you to see what your community issues might be.
  + **The Compare** section allows you to compare your community to county and state levels on key air pollutants.
  + **The Explore** section allows you to compare environmental issues to find out more information and resources, including stories of what other communities have done.
* **Plan Your Project**
* For our community demo, let’s start by navigating to **Plan Your Project- Community Guides.**
* *Note: Site navigation is always available on the left from all C-FERST pages*
* For this demo, we will be telling the story of a Portland, Oregon community concerned about a planned urban development project that would displace some of their residents. They wanted to prepare and submit a report to the city that would communicate the community’s key concerns for this urban development.
* Our example utilizes the **EPA CARE Roadmap**.
  + - Step 1 here is to Build a Partnership
  + Community members asked the *What’s in Our Soil* (WOS) non-profit for help. This nonprofit that works with low-income communities of color on environmental advocacy. They wanted to know “What are the livability concerns at the site the city wants to develop and the site the displaced residents would be moved to?”
* WOS convened a community working group of local government, nonprofit and academic members to conduct their assessment using C-FERST. Each partner brought a separate concern to the table:
  + - The local government partner was interested in identifying Brownfields sites that can be revitalized for the community’s benefit.
    - The nonprofit partner was interested in assessing a potential location to establish a campsite for the homeless who would be displaced during the redevelopment.
    - AND The academic partner wanted to ensure students had a place to play outside in a ‘clean air zone.’

**Maps of Community Environmental Conditions**

* After building their partnerships, the working group moved to Step 2 on the **EPA CARE Roadmap** ‘Identify Community Concerns’. Under “C-FERST resources for this step”, the community selected the **Maps** link and was taken to the **Maps of Community Environmental Conditions** page.
* Now that we are on the map page, we should take a second to get familiar with how the map works. First, we may want it to be in Full Screen Mode. Next, we want to be able to see the different things we can display on the map, called “layers.”
  + Click on **Content**, 2nd button under Details, to see the different types of “layers” available and how to get these to show up on the map
  + Click on the little triangle(s) to open up what’s under them
  + Click inside the checkboxes to turn layers on.
* If using your own community example, enter that address in the search bar and press enter. Select some interesting layers and be sure to check each box of the layer tree that you are interested in viewing.
  + Potential layers to highlight:
    - EPA Registered facilities
    - Demographic Data
    - National Air Toxics Assessment (NATA) 2011
* For our demo, the working group used C-FERST to produce a map of the neighborhood where the city wants to develop, SE 122nd Avenue and SE Division Street in Portland Oregon, that generated information on:
  + EPA Registered facilities – Hazardous Waste (RCRA)
  + Schools
  + Demographic Data – Percent Minority and Percent Below Poverty
  + National Air Toxics Assessment (NATA) 2011 data – Pollutant – Diesel PM – Ambient Concentration
* By using C-FERST maps, the working group discovered: (*Show Legend)*
  + Several active Resource Conservation and Recovery Act (RCRA) sites that could be redeveloped *– Green Triangles*
  + A number of schools serving children of various ages - *Colored Book Icons*
  + A 41% minority population - *Cross checked*
  + A 53% low income population (Less than 2x the poverty level) - *Cross checked*
  + Diesel PM concentrations - *Shades of Green*
* *Zoom in:*
  + The potential location proposed for a homeless campsite was located on an abandoned dry cleaner and an active RCRA (Brownfield) site. *[To the right, Nifty Cleaners]*
  + The Facility Registry Service (FRS) report, showed them the facility type and regulatory contact information.
* Since the maps show a lot of good information, let’s pause for a summary. The community has some air quality concerns, and the demographics indicate that this area may qualify as an environmental justice community.

**Community Data Table**

* Now, let’s go back to the CARE Roadmap (You can navigate on the left side of the webpage). The other resource highlighted under Step 2 is the **Community Data Table.**
* This page provides some more information about the CDT, including the CDT Quick Start Guide.
* From this page, we click at the bottom on the words Community Data Table, to take us to the next page.
  + Here, we are able to select the area we are concerned about:
  + The working group assessed four census tracts in the immediate area around SE 122nd Avenue in Portland and identified local scale concerns.
* Once you get to the map, you can click Pick Another Location and then Pan to move around the map to find your location
  + Then click to Select Location and Load Community Data Table.
* *Note: If the Community Data Table doesn’t load, you may need to turn off your Pop-up blocker. Check your browser window for more details.*
* The CDT shows some of the same data from the maps, conveniently located in a table that allows communities to compare the selected census tract to the county and state.
  + The hyperlinks provide more information about the data sources or the contaminant of concern.
  + Note that demographics are available at the bottom of the CDT, as well.
* Together with the visual aspect of the maps, the high minority and low income percentages in the area stood out even more as EJ concerns.
* The group used the data as part of its report. However, the group had questions about Acetaldehyde and other pollutants that were higher than state levels.
  + [*Use the cursor to highlight sources and estimated concentration of acetaldehyde.*]

**Issue Profiles**

* C-FERST provides more information about many different pollutants, health effects, and other community issues.
* All of them are listed under the **Issue Profiles.**
  + You can use the “Tabs” on the right to only show those for
    - Pollutants
    - Environmental Media
    - Health Effects
    - Other Community Issues
    - Or Alphabetical List to show them all
* The working group identified acetaldehyde as an issue of concern.
  + They used C-FERST’s **Environmental Issue Profiles** to learn more about acetaldehyde in their community.
    - [*Use the cursor to highlight that you can learn more about sources of acetaldehyde in the Sources box.*]
* The community decided it needed to supplement the C-FERST data with local data.
  + So, WOS convened a group to conduct a ground-truthing exercise along SE 122nd Avenue and SE Division Street.
  + A youth employment group went into the community and identified and assessed concerns that were not reflected in C-FERST, including:
    - high traffic counts,
    - a concentration of fast food outlets,
    - a vacant lot where the RCRA site was identified and
    - a lack of accessible recreational areas.
* At the conclusion of this stage, the working group had documented a list of community environmental and livability needs identified through C-FERST and the ground-truthing exercise, which were:
  + **Homeless Campsite**: A further assessment of the location for a homeless campsite that considers human environmental health implications of Brownfields, potential exposure to hazardous waste and exposure risk.
  + **‘Clean Air Zone’ Play Area**: A recreational area away from the roadside and accessible by foot that considers community exposure to air contaminants.
  + **Brownfields Revitalization**: A culturally responsive/ healthy food outlet servicing minority and low-income community needs.
* Back in C-FERST, the team read about how other communities redeveloped a brownfield into a community garden.

**Strategies Implemented by Other Communities**

* After hearing the community concerns, the working group looked under the **Strategies Implemented by Other Communities** section in the Acetaldehyde issue profile to develop recommendations based on other community projects listed in C-FERST.
* One of these projects highlighted how a community redeveloped a Brownfield into a community garden. This information was listed in the WOS report.

**User Forum, Citizen Science**, and **Environmental Measurement Methods**

* Highlight the **User Forum** 
  + The User Forum allows you to post questions or submit answers about C-FERST. This is a great resource to use to interact with or learn from other C-FERST users. It is moderated, so anything you post will not appear instantaneously. Also, the C-FERST team may connect you with other EPA staff and environmental experts to better assist you.
* Highlight **Citizen Science** and **Environmental Measurement Methods** sections.

**Live Demo Summary**

* WOS and their partners were able to develop and submit a report to the City and other community-based advocacy groups.
  + They were confident that the agency generated data, environmental language and supportive community data reinforced the credibility of their report. For example, they cited the FRS report as a reason for further assessment of the homeless campsite location.
  + Another nonprofit asked WOS to share their report in support of advocacy for a bicycle lane connected to the ‘clean air zone’ play area.
  + Access to scientific information using C-FERST supported the working group’s advocacy efforts and created broader opportunities for collaboration.
* This example shows how C-FERST can be used to help communities identify potential environmental issues within their community. There are many other possibilities and applications of C-FERST.
  + What are yours?
  + We hope you enjoyed our C-FERST Tour!