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What is C-FERST

C-FERST is an online tool empower communities with **information** and **structured process** to clarify issues and develop options for potential solutions.

Making a Difference:

- Includes step-by-step guidance for community-based assessments
- Addresses challenges and needs identified by NRC and others
- Provides a means to communicate and translate relevant science to communities

Why Did We Develop C-FERST?

Communities and decision-makers face complex environmental issues...

- numerous concerns, impacts and solutions
- not enough experts to evaluate every situation
- some communities have limited resources and access to information
- disproportionate impacts

Intended Users and Uses

- State and local environmental and public health agencies
- Community involvement and EJ coordinators
- Community groups
- Federal agency community project leads
- Academia

- Follow step-by-step guides (e.g., CARE, PACE-EH) for community assessments
- Helps to build partnerships, identify issues, collect information and develop options for solutions

Example uses: State and Local Agencies

- Oregon Health Authority Public Health Tracking Unit identified potential uses to identify:
  - populations impacted by expanded transit/light rail
  - climate change/pollution exposure for populations near Superfund sites
  - mapping possible EJ Concerns and assessing populations/needs
- Oregon DEQ Partnership
  - with Portland Business Bureau, Portland Ops Office to assess property owners concerns for cleaning up/redeveloping brownfields
- Multnomah County, OR
  - Community outreach, engagement and education
  - Brownfields program assessments and outreach

C-FERST Highlights

C-FERST

- Can be used to help to build partnerships, identify issues, collect information and develop options for solutions
- Users can view maps and compare environmental conditions, gather information, and use community assessment guides.
- Contains data on sources of pollution, environmental concentrations, estimated exposures and potential risks, demographics, and community characteristics.
- Provides information on potential solutions, community projects, guidance, citizen science, and methods for measuring environmental conditions.

Application & Translation

Community partners have used C-FERST for gathering information for screening-level community assessments:

- Springfield, MA grantees used C-FERST air quality data in their risk-screening ranking process.
- Baseline conditions for a Health Impact Assessment (HIA) at an elementary school were collected using C-FERST in Springfield, MA.
- Evergreen State College (Portland OR) is using C-FERST as a classroom learning tool for community engagement (Region 10 RESES)
- Tacoma Pierce County Health Department, Multnomah County, Oregon Health Authority, Oregon Department of Environmental Quality
  - Reviewing grants and outreach, incentivizing brownfields cleanup and redevelopment, exposure to diesel PM, transit routing

For Additional Information:

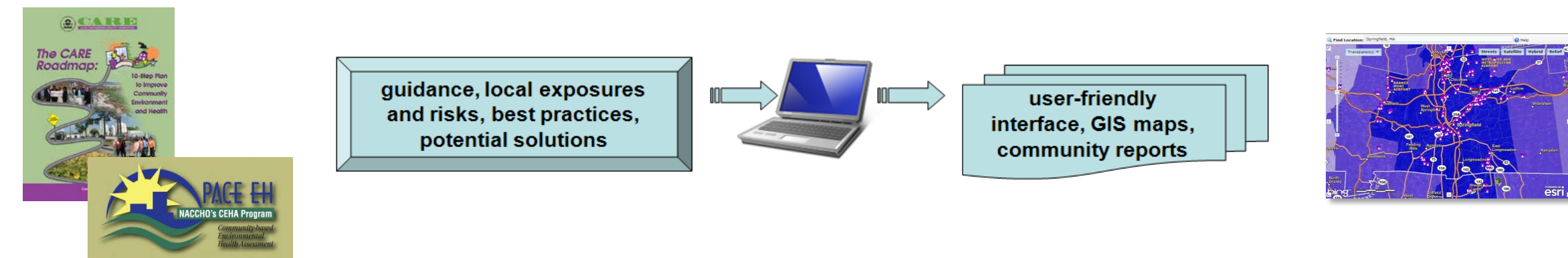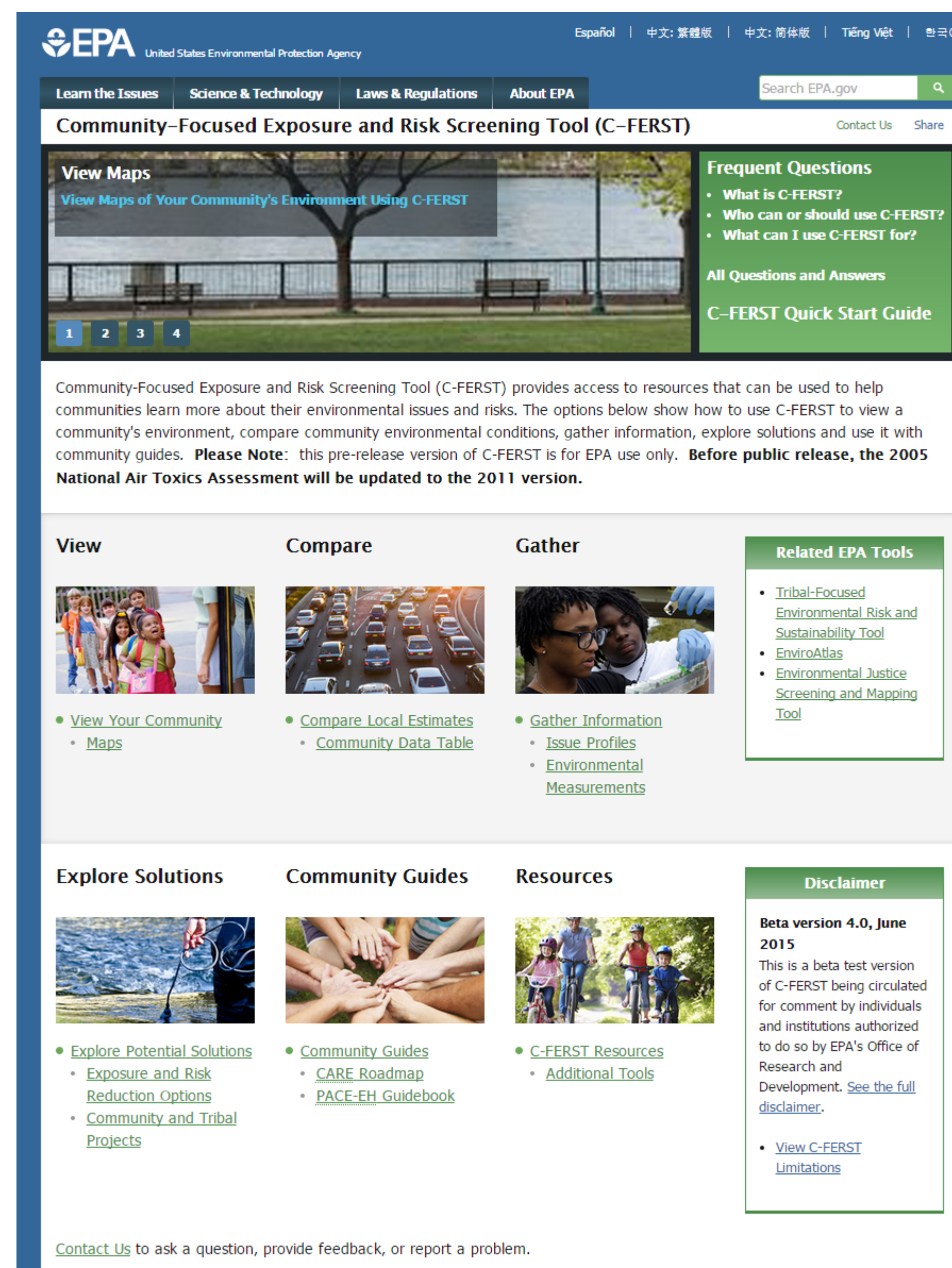http://www2.epa.gov/healthresearch/community-focused-exposure-and-risk-screening-tool-c-ferst

What data are in C-FERST? What could be added?

Current Data Sources		Potential Future Data Sources
EPA Regulated Facilities, e.g.,		EPA Sustainable and Healthy Communities Research, e.g.,
• ACRES	• TRI	• Estimated concentrations of pollutants from vehicle emissions (census block level)
• Superfund	• PCS	• Estimated childhood blood-lead level (census tract level)
• RCRA	• & many more...	• Sustainability & well-being indicators
National Air Toxics Assessment (NATA) 2011*		
• Concentration, exposure, and cumulative cancer & non-cancer risks for select outdoor air pollutants		EnviroAtlas Ecosystems Services layers
Water Quality, e.g.,		STORET Water Quality Exchange;
• Impaired Waters	• STORET monitoring stations	Leaking Underground Storage Tanks
• Discharge points		
PM & Ozone		
• Attainment	• 3 year averages	PM & Ozone attributable health outcomes (BenMap)
• AIRNow AQI		
Neighborhood, Federal and Tribal Boundaries		E-Enterprise
School Locations Database		Children's Health
Demographics		Environmental Justice
FHWA Traffic Counts		Health data, e.g.,
		• CDC or States' Environmental Public Health Tracking
		• Health and Well-being Index
Smart Location Database		Other publicly available datasets in the EPA Geoplatform?

EnviroAtlas, EJSCREEN, and C-FERST

EnviroAtlas is a web-based resource giving users ability to view, analyze, and download information related to natural capital (i.e., ecosystem services) for the US. Includes drivers of change and demand/beneficiaries. Can inform many different types of decisions at multiple scales. http://enviroatlas.epa.gov/enviroatlas/atlas.html

EJSCREEN highlights places for further review; a starting point for further dialogue, engagement, and examination. EPA uses include outreach and engagement, many aspects of environmental programs, geographically-based initiatives. http://www2.epa.gov/ejscreen

C-FERST is an online tool which provides access to resources that can help communities learn more about their environmental issues, compare communities, gather information, and develop options for possible solutions.

Using EJSCREEN with C-FERST and EnviroAtlas

States, local agencies and communities might use these tools together or in sequence, to

- Identify "Candidate" Communities with EJSCREEN
- Work with communities in order "to take a closer look"
- Use C-FERST Guides for community assessments, Gather information on issues, and Explore potential solutions

C-FERST Next Steps

Outreach and training

- Opportunity to use pre-release version (serious concerns/issues?)
- Provide additional training
- Identify points of contact for questions to minimize burden on states
- Provide comments, concerns and recommendations

Public release after updating NATA and other datasets

- Between the December 2015 and March 2016

For Access to the pre-release version of C-FERST

Please send an e-mail to CFERSTMAIL@epa.gov