



Using Metrics to Make Permitting Work Better: Providing A Useful Framework

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Why a Framework for Metrics Now?

- EELC Consensus: efforts to evaluate and improve permitting processes would benefit from more effective use of metrics and measures (September 2017)
- Working group convened: state, tribal and EPA personnel to develop a “living” document
- Expedited timeline: produce guidance for EPA use in anticipated Lean events in first quarter 2018



Major Aspects of the Framework

- Sample framework of metrics relating to permitting systems' timeliness, quality, quantity, process complexity, cost, outputs, and system impacts
- Sample effectiveness criteria for the selection of metrics appropriate to each circumstance (including "SMART" principles: simple, measurable, actionable, relevant, and timely)
- Sample use cases demonstrating how the Framework's metrics and methodology can help improve permitting systems on a case-by-case basis
- Builds upon "Lean Government Metrics Guide" (USEPA, July 2009)



How to Use the Framework

- **First:** “What is the problem with this permitting system that we want to help solve by the use of a metric?”
- **Determine the purpose of the metrics** - Measures can drive behavior and focus attention in powerful ways.
- **Select a limited number of metrics that are targeted at the identified problem and its causes** - Having too many metrics dilutes the focus of the improvement efforts.
- **Use only the most appropriate metrics** - Gather and analyze data over time, and select new metrics as deeper insights are gained
- **Focus on customer and agency leadership needs** - Only a few metrics may matter, including time to receive a service or product or the quality of the service or product.
- **Engage data users in the design of the metrics** - Without consulting front-line employees, agencies risk choosing metrics that are poorly understood, irrelevant or inconsistently used by the people who do the work.



Potential Uses for the Framework

- As a valuable tactical tool for improving individual permitting systems through customized metrics applied on an internal, operational basis
- To answer questions at a strategic level that ultimately support progress toward achieving an agency's mission (protecting human health and the environment)
- To improve alignment of goals and objectives for permitting systems and drive progress toward an agency mission and desired outcomes
- Note: A different process and a standard set of measures would be needed to answer questions at a strategic level for public reporting or related purposes about how a group of permitting systems in the aggregate are operating or what they are achieving.



Where Could We Go From Here?

- Ask and answer:
 - “What story do we want to be able to tell about how permitting systems, taken as a whole, are operating?”
 - “What kinds of data could be gathered on a consistent basis across disparate permit systems covering different types of permits that would help to tell this story?”
- Development of strategic measures for public reporting for permitting systems would require a combined team of communications as well as permitting system experts



Effectiveness Criteria - SMART

- Is the metric readily understandable by all parties? (Simple)
- Can these data be collected easily by EPA/States/Tribes? (Measurable)
- Do the data provide information that enables you to improve or better manage the process? (Actionable)
- Is the metric broadly applicable and relevant across permit types? (Relevant)
- Does the metric provide right info to right people at right time for making decisions? (Timely)



Sample Use Cases Provided

- 1) Statutory deadline for making decisions on permit applications is 60 days. There are 300 permits in a backlog of applications not processed within the statutory deadline.
- 2) The process for approving each permit includes nineteen steps, four levels of review and signoff and may take up to 10 months before a final decision is made on an application.
- 3) A substantial number of permits issued each year end up being litigated by permittees or intervenors.
- 4) Applicants are frequently contacting the agency regarding status, stage of review and likely date of action.



A Sample Use Case for Delaware

- DNREC Problem Statement: There are 56 separate permits/licenses with numerous subcategories within those permits. For those permits that need to be approved (e.g. well, waste, air etc.) an average of 60% are submitted with incomplete information.
- Most common issues include:
 - ~ missing signatures
 - ~ missing email addresses
 - ~ incomplete site addresses
 - ~ missing forms



Governor Carney's Executive Orders

Executive Order #4 – Establishing the Government Efficiency and Accountability Review Board

Executive Order #18 - Continued Open Data Council to Promote a More Open, Accountable and Effective Government

Delaware's Open Data Portal <https://data.delaware.gov/>

DNREC's <https://dnrec.alpha.delaware.gov/dnrec-open-data/>



DNREC Permitting Metrics @Open Data

Quality

- Percentage of Applications Submitted That Are Incomplete (%)

Workload/Backlog

- Current Number of Applications/ Licenses in Process
- Current Number of Expired Operating Permits/ Administratively Extended

Timeliness

- Current Number of Days to Process a Complete Application
- Target Number of Days to Process a Complete Application



Division	DNREC Permit/License Type	Applications Submitted	Applications Incomplete	Applications in Process	Expired and Admin. Extended	Current Days to Process	Target Days to Process
E/C & C	Coastal Zone Act Status Decision		TBD	TBD	TBD	TBD	TBD
E/C & C	Coastal Zone Act Permit		100%	2	0	< 90	90
F & W	Aquaculture – Shellfish Grounds		14%	14	0	132	TBD
DWS	Shoreline/Waterway Coastal Construction Baseline		47%	9	0	32	40
DWS	Shoreline/Waterway for Mechanical Restoration of the Dune Baseline		0%	13	0	55	40
DWS	Sediment/Stormwater Plan Review		100%	NA	0	30	30
DWS	Sediment/Stormwater NPDES for Construction Activities		100%	NA	0	14	30
DWHS	Transporters		70%	19	16	23	26
DWHS	Scrap Tire Facilities		100%	0	0	64	26
DWHS	Recycling		100%	3	1	51	60
DWHS	Composting		100%	0	0	36	60
DWHS	UST Construction Approval (from Jan 2016)		100%	2	2	12	30
DWHS	AST Construction Approval (from Jan 2016)		100%	3	0	42	60
DWHS	Vapor Recovery-Construction (from Jan 2016)		90%	0	2	14	60
DWHS	Vapor Recovery-Operating (from Jan 2016)		90%	0	0	17	60
DAQ	Reg 1102 Minor Source		5	51	0	109	90
DAQ	Reg 1102 & 1125 Synthetic Minor		0	9	0	101	120
DAQ	Reg 1125 Major Source Pre-Construction		0	0	0	0	365
DAQ	Reg 1130 Title V		0	39	9	369	365



Similar State Enterprise Metrics Use

Wisconsin Enterprise Performance Dashboard:

<https://performance.wi.gov/index.html>

Wisconsin Department of Natural Resources Dashboard:

<https://performance.wi.gov/DNR.html>

OpenMichigan:

<https://www.michigan.gov/openmichigan/0,4648,7-266-60201---,00.html>

Michigan Department of Environmental Quality Scorecard

https://www.michigan.gov/openmichigan/0,4648,7-266-60201_60935---,00.html



E-Enterprise for the Environment ?

E-Enterprise supports the environment, public health and the economy by modernizing the business of environmental protection.

- **Modernize Business Processes** – Improve regulations by streamlining and updating the implementation of environmental programs
- **Enhance Services to Users** – Reduce transaction costs and burdens for the regulated community by promoting electronic reporting and permitting, online portals, business best practices, training, assistance and other tools.
- **Advance Shared Governance Among U.S. EPA, States and Tribes** – Transform the way environmental programs are implemented via a new paradigm of collaboration

For Current Initiatives: <http://e-enterprisefortheenvironment.net/>



E-Enterprise/Exchange Network States' Retreat

Strategic Recommendations for E-Enterprise and the Exchange Network



Background

- In December 2017, state reps from AR, AZ, CO, DE, MA, NH, NM, OK, and WY gathered to reflect on state priorities for E-Enterprise and the Exchange Network
- Discussion topics
 - Priority themes in environmental management and technology
 - Overarching barriers to progress on E-Enterprise and Exchange Network
 - Strategic recommendations aimed at accelerating and improving the management and adoption of E-Enterprise and the Exchange Network



Priority Themes

- Drive **Permitting** process efficiency to improve environmental outcomes and customer experience
- Enable efficient **Compliance Assurance and Inspections** through program innovations and advanced technology
- Maximize the use of **Microservices and Web APIs in Architectural Design**
- Harness **Citizen Science** to enhance agencies' monitoring capabilities and decision making
- Build an interoperable **Network of Portals** that support seamless customer interactions with environmental agencies
- Increase opportunities for **Collaborative Design and Development** of software, procurement processes, and shared services.



Identify Potential Barriers to Progress

States engaged in a LEAN management technique called “Five Whys” to uncover some overarching impediments to progress

- Need greater clarity on our Vision for EE Technology Architecture
- Challenges in rightsizing collaboration and playing to our strengths
- Limited options for developing and operating shared systems and services
- Resource imbalances between states and EPA
- Need to improve project management capacity and clarify staff roles
- Difficulty operationalizing truly shared decision-making in IT
- Need greater emphasis on user experience
- Challenges in spreading EE to agency cultures and priorities



Broad Recommendations

- Evaluate staffing needs and empower key staff and governance bodies to make decisions and take actions.
- Explore the feasibility of using alternative models for developing and operating shared infrastructure, software, and services. This could include use of a 3rd-party collaborative.
- Consider IT funding and procurement structures that ensure accountability, enable joint decision-making, and advance the shared vision of cooperative federalism.
- Create visible metrics for tracking progress and measuring engagement



Broad Recommendations

- Align grant resources with activities that advance the E-Enterprise Technology Vision
- Build on the EE Partner Inventory to encourage state collaboration, knowledge transfer, and standardization.
- Building on principles of Cooperative Federalism, explore ways to propose revolutionary alternatives to data management.
- Develop a more robust Change Management Strategy/Communications Plan. We need more effective outreach to directors, middle managers, program staff, and state central IT offices.



Projects for Immediate Investment

- **Develop EE Technology Vision, Architecture and Implementation Roadmap**

Establish a common target for E-Enterprise partners, create a foundation for interoperability, and provide much needed guidance for our technology choices and system design decisions.

- **Micro Services for Permitting**

Examine the cost and opportunity of separating common permitting functions into reusable components organized around repeatable processes and business capabilities.

- **Identity Management Documentation**

Develop documentation and guidance for agencies implementing the E-Enterprise Federated Identity System—an important service for enabling seamless customer experiences across agencies and systems.



For More Information

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