



Fermilab site access: Now and in the future

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HEPAP meeting

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Outline

- Context
- Bottom Line Up Front: Our Vision for the Future
- Requirements
- Fermilab-specific Implementation Challenges
- Implementation Strategy
- Present state
- Future state
- Closing remarks

Context

- Site access issues are affecting our ability to accomplish our mission
 - What is driving the change?
 - How are we getting there?
 - Lab processes are being fixed and streamlined
 - We have improved some processes with more improvements on the way
 - Need better communication on how to navigate the system and changes in the system
 - Where are we going?
 - What is the end state?
 - How long will it take?
- We are working on all of these. It is a challenging time as we do so

What is our vision for the future?

A safe & secure site that welcomes and excites the national and international scientific community, the public, families, and students about our scientific mission

- New processes; new safety & security systems**
- New Welcome & Access Centers**
- Enhanced & frequent communication**

Fermilab is a member of the DOE family

Office of Science Laboratories

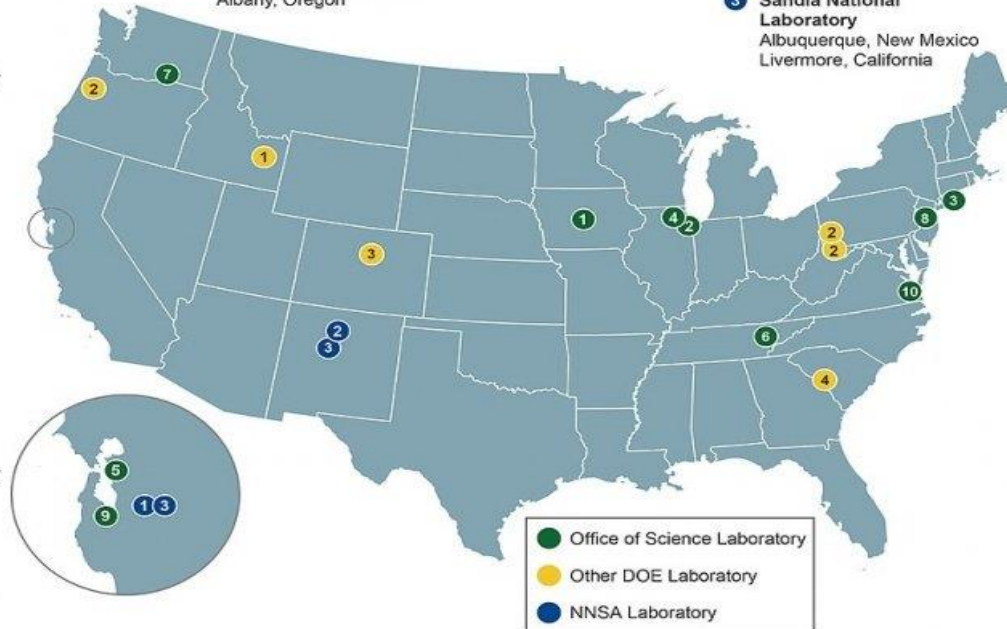
- 1 Ames Laboratory
Ames, Iowa
- 2 Argonne National Laboratory
Argonne, Illinois
- 3 Brookhaven National Laboratory
Upton, New York
- 4 Fermi National Accelerator Laboratory
Batavia, Illinois
- 5 Lawrence Berkeley National Laboratory
Berkeley, California
- 6 Oak Ridge National Laboratory
Oak Ridge, Tennessee
- 7 Pacific Northwest National Laboratory
Richland, Washington
- 8 Princeton Plasma Physics Laboratory
Princeton, New Jersey
- 9 SLAC National Accelerator Laboratory
Menlo Park, California
- 10 Thomas Jefferson National Accelerator Facility
Newport News, Virginia

Other DOE Laboratories

- 1 Idaho National Laboratory
Idaho Falls, Idaho
- 2 National Energy Technology Laboratory
Morgantown, West Virginia
Pittsburgh, Pennsylvania
Albany, Oregon
- 3 National Renewable Energy Laboratory
Golden, Colorado
- 4 Savannah River National Laboratory
Aiken, South Carolina

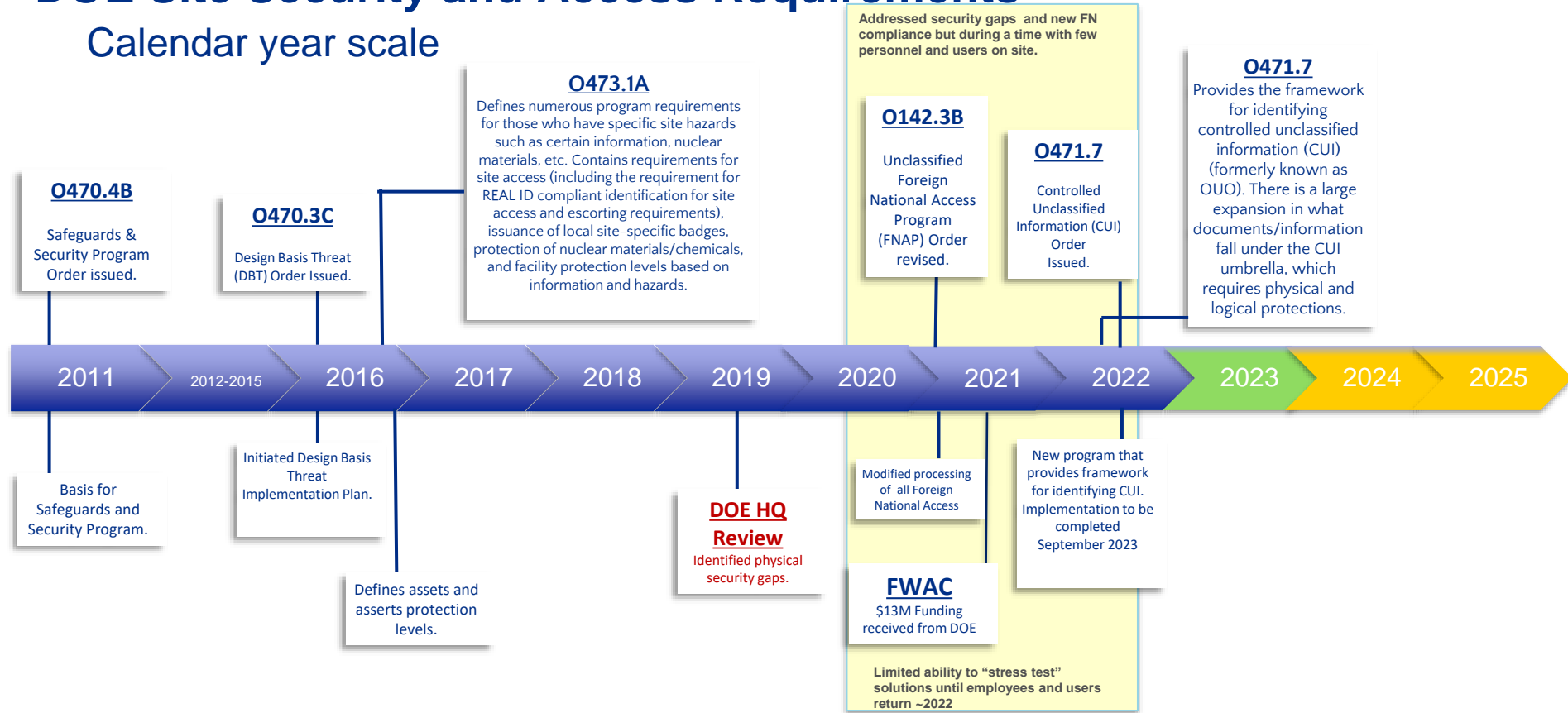
NNSA Laboratories

- 1 Lawrence Livermore National Laboratory
Livermore, California
- 2 Los Alamos National Laboratory
Los Alamos, New Mexico
- 3 Sandia National Laboratory
Albuquerque, New Mexico
Livermore, California



DOE Site Security and Access Requirements

Calendar year scale



***The lab must stay in compliance with federal regulations and DOE requirements
The lab is overdue with respect to site access management given the facilities on site***

Implementation Challenges

- **New requirements have been in place for three years, however**
 - Many changes implemented during COVID were not "stress tested" until people returned, activities ramped up
 - Supply-chain issues delayed implementation of solutions
 - Lab inadequately communicated to stakeholders (users/affiliates, partners, neighboring community, public) the new requirements and implementation plans
 - Fermilab's Batavia site currently has specific challenges →

Fermilab site is unique: Largest accelerator complex in the US

- Fermilab's Batavia site currently has specific challenges
 - Large site, many access points, open areas including around accelerator complex
 - Accelerator operations intermixed with non-operational areas
 - Many buildings/doors
 - Extensive and distributed sensitive equipment that could be damaged by unauthorized people
 - Sensitive technologies
 - Cybersecurity: Fermilab manages a large amount of non-public information



Implementation Challenges

- This led to concerns by many, shared in a number of ways, including a recent petition.
- Some things have been improved but there is more to do
- We're working to do a better job listening and communicating



Implementation Strategy and Action Plan

- **New processes; new safety & security systems**
- **New Welcome & Access Centers**
- **Enhanced & frequent communication**

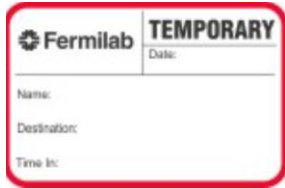
New processes implemented to date

- ✓ **Improved on former access deficiencies** identified internally and by DOE
- ✓ Established Site Access and Badging (**SAB**) **Task Force** in the fall 2022, includes employees & users – recently appointed new lead Matt Kwiatkowski
- ✓ Improved physical access process and **transitioned to Real ID**
- ✓ **Established Site Access Coordinators** (in training)
- ✓ Improved Continuous Badging IT process since 2019
 - Multiple institutions/affiliations tracking (reduces duplicate data entry)
 - DOE upload enhancements (reduces processing time)
 - FNAL and Export control process enhancements (reduces processing time)

Streamlined badging process via single entry form will be implemented in Sept 2023



Temporary badges



Red: General Public

Exception: badges are not required for underage participants on scheduled school tours.

Required Escort (in non-public areas of the lab)

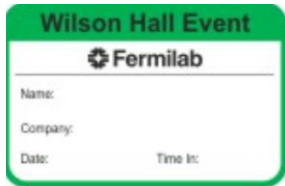


Blue: Business Visitors

Those that have had their identity verified, but do not have a Fermilab badge for an acceptable reason (shorter stays less than a week, for instance)

Individuals who are at Fermilab for more than 1 day will be emailed a QR Code that the Security Officers will be able to scan at the control posts.

Required Escort (in non-public areas of the lab)



Green: Business Visitors attending events (Wilson Hall Only) (In Use!)

Those who have had identity verified and are attending a Wilson Hall event during workdays.

Escort *not* required as long as at Wilson Hall.

Individuals who have completed registering process and been approved by an associate lab director will be emailed a QR Code that the Security Officers will be able to scan at the control posts. (Does not include events that are open to the public or minors.)



More recent improvements to access requirements

- ✓ There is now a process for **personal visitors** to access the Village and emergency utility service workers to access the site during off hours
- ✓ **Construction delivery** drivers without a REAL ID can be escorted onto the site
- ✓ **Commercial pick up/drop off drivers** without a REAL ID can access site with a vehicle placard obtained at the security gate
- ✓ Delivery drivers without a REAL ID can access the warehouse with a company photo ID and a regular drivers' license

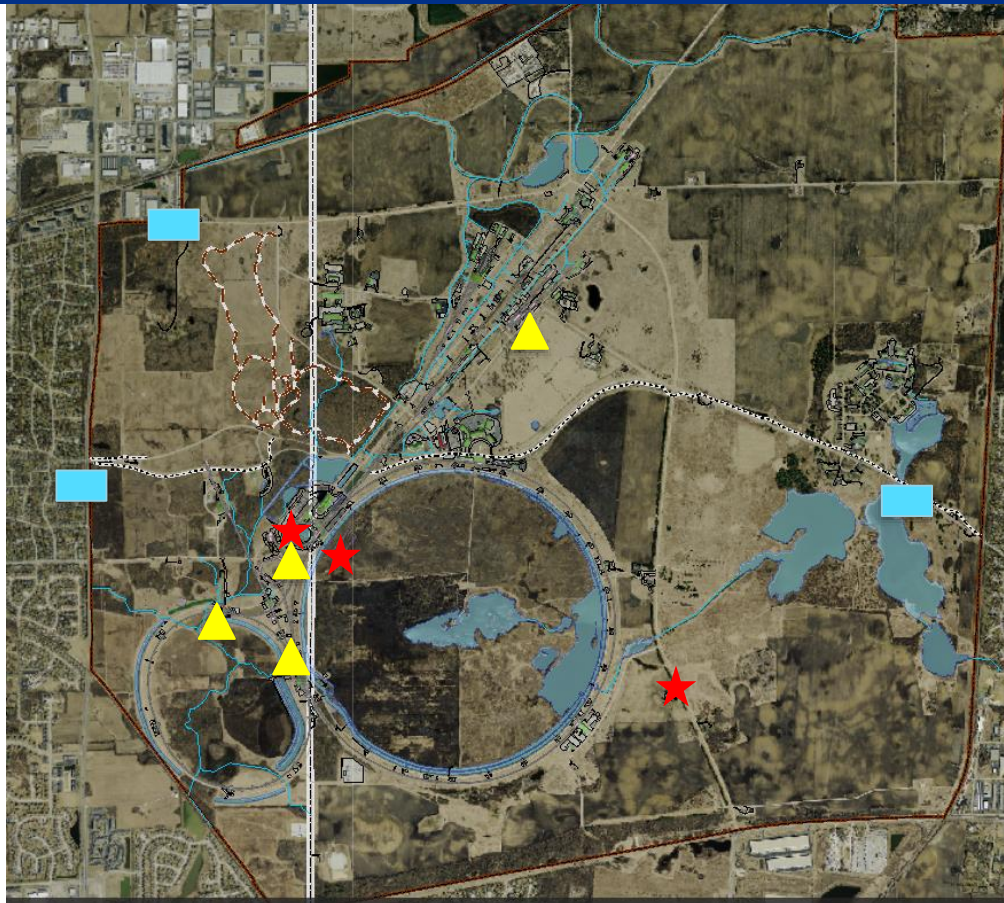


Card readers in Wilson Hall – arriving end of 2023

- Describe the plan for card readers in Wilson Hall (where will they be)? How many?
 - The card readers in Wilson Hall will control access per floor at each door in the stairwells and elevators. Each floor door and elevator will be getting a card reader.
 - Who will have access? People who are authorized to be in Wilson Hall today without escort. However future access needs may change over time.
 - Will we still be able to visit colleagues / have coffee?
 - Yes!
- Why is it taking so long to implement card readers in Wilson Hall?
 - Construction is taking place afterhours to keep noise to a minimum during the day and supply chain delays with the card reader hardware have been challenge.

The plan to manage public access

- ❑ **Gates:** control vehicle access to main accelerator campus
- ❑ **Signage** at entrance gates and local postings
- ❑ **Fences** at West Booster Lawn, AP-0, MI-12, to control worker doses, and NM4/Spin Quest



- ★ = new gate arm
- ▲ = new fencing
- = new signs

Arriving in 2025!

New main entrance access

- The new center will provide business visitors and the public with a welcoming entrance to Fermilab
- A smoother administrative process
- Public visitors can obtain visitor passes to visit the public areas of the campus
- New employees and subcontractors will have a more efficient badging experience
- The center will provide a place for business visitors to complete any required access forms
- We expect construction to start this fall or in 2024

Aspen East is going to be FWAC East



Arriving in 2023!

We need to finalize the gate location and other operational items before Aspen East is functioning as FWAC – East



Communications: Fermilab will communicate frequently about access

Prioritized attention to communications to assure awareness and understanding of needed changes and incorporating feedback through a comprehensive communications plan, successful CAB engagement, involvement of leadership at all levels.

Site Access website getting updates in August.

Upcoming meetings:

- Community Advisory Board meeting in late July
- Briefing with experiment spokespeople in late July
- Briefing at all-scientist meeting August 4
- All-hands/users meeting in August

We are committed to doing a better job communicating about site access regularly

- For employees, users and affiliates:** All-hands meetings, news@work, FAQs, manager and supervisor updates, responses to staffquestions@fnal.gov
- For the public:** Fermilab Frontier newsletters, website updates, Community Advisory Board Updates
- Questions?:** Email staffquestions@fnal.gov
- FAQs:** Will be posted on inside.fnal.gov

Present State

Access requirements for employees, users, business visitors

As of May 3, 2023: REAL-ID compliant identification is required to enter the Fermilab site



- ❑ Employees, users, affiliates and visitors are required to follow standard site access processes to obtain badging for lab entry
- ❑ We are **working to streamline processes for badging and improve systems** for research collaborators, users and business visitors
 - Site access and badging task force; site access coordinator program
- ❑ Access the [FAQ](#) on Fermilab's website for answers to your questions and questions from visitors and community about access

What's open to the public now?

Discover Fermilab

The public is invited to visit the Fermilab site to enjoy the following permitted activities: observing the bison herd, walking, hiking, bicycling, running, rollerblading, skateboarding, roller-skating, cross-country skiing, snow shoeing, bird watching, interpretive trails, photography, and painting. Additional parking to view the bison herd is available at Building 327. For more information on tours and things to do at Fermilab go to www.fnal.gov/pub/visiting

- 1 WILSON HALL, OPEN FOR ESCORTED PUBLIC TOURS ONLY
- 2 LEDERMAN SCIENCE CENTER AND OUTDOOR AREA
- 3 BISON PASTURE AND VIEWING
- 4 A.E. SEA NATURE AREA

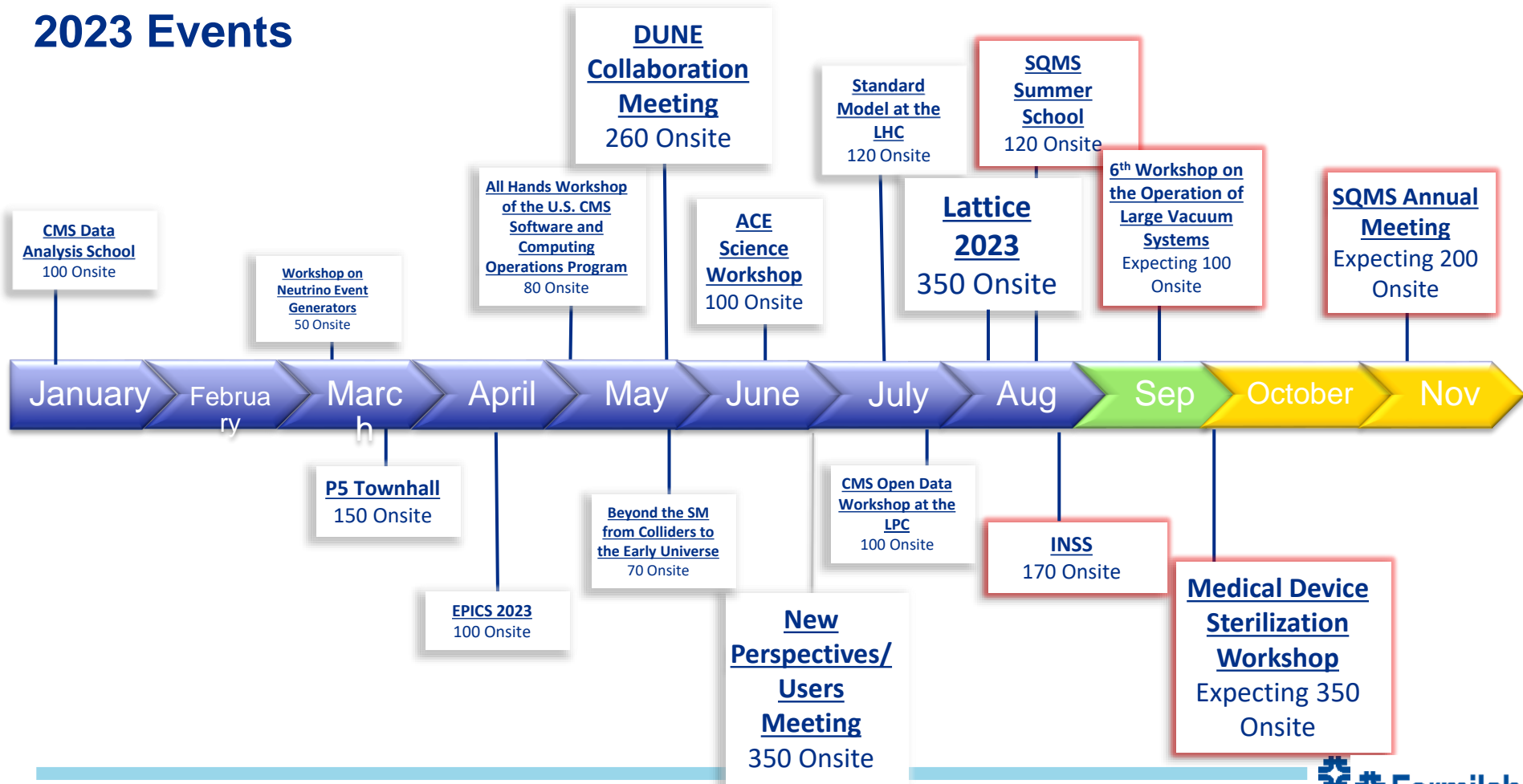
Legend

- Public Access Road
- Scenic View
- Restrooms
- Parking
- Drinking Water
- Public Accessible Shelters
- Emergency Dispatch Operator 630 840 3131
- Sculpture
- Bicycle Trail
- Walking/Jogging
- Hiking
- Nature Trails
- Bird Watching
- Roller Skating
- Handicapped Access

With Real ID-compliant identification, Fermilab visitors can access:

- Bison-viewing area
- Bird watching
- Prairie trails
- Bicycling and walking trails
- On-leash dog walking
- Lederman Science Center
- Saturday Morning Physics and other STEM activities in the Ramsey Auditorium

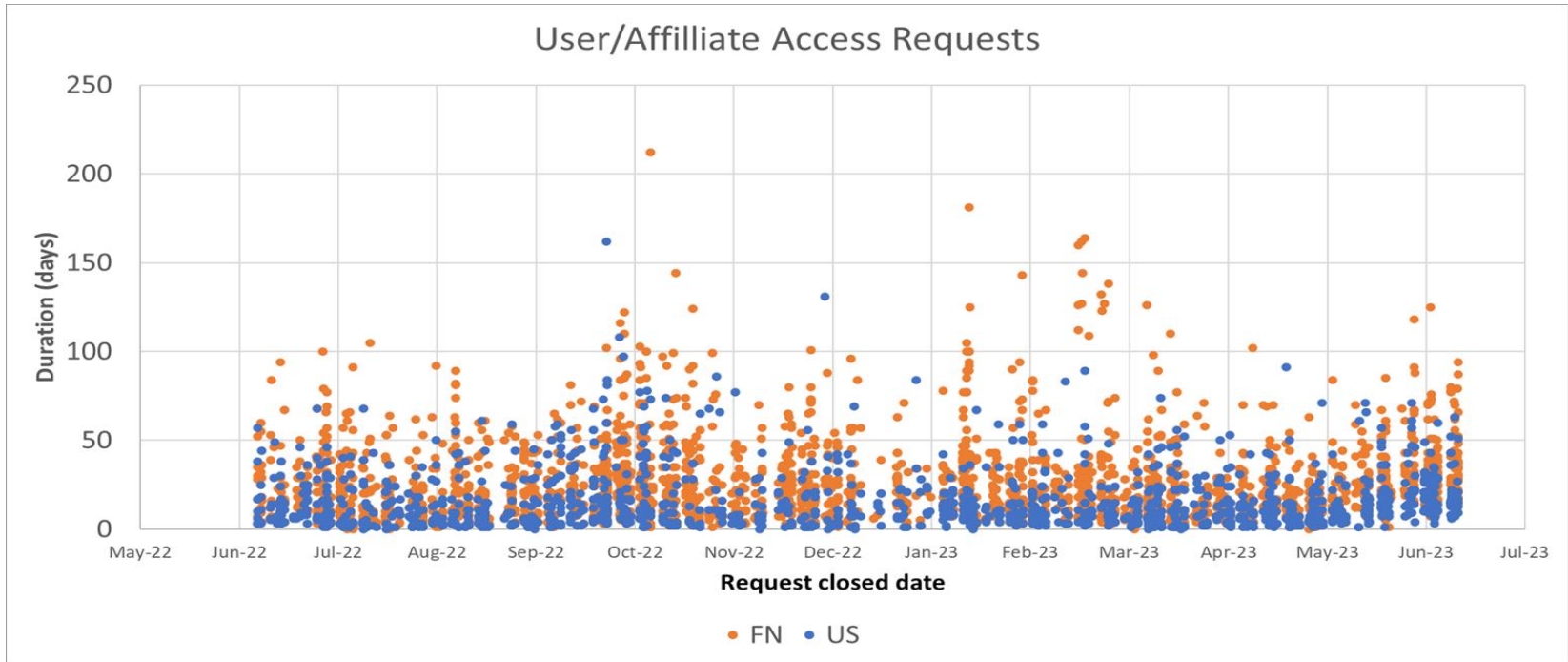
2023 Events



Recent events: LATTICE 2023



Site Access Metrics – User/Affiliate Access

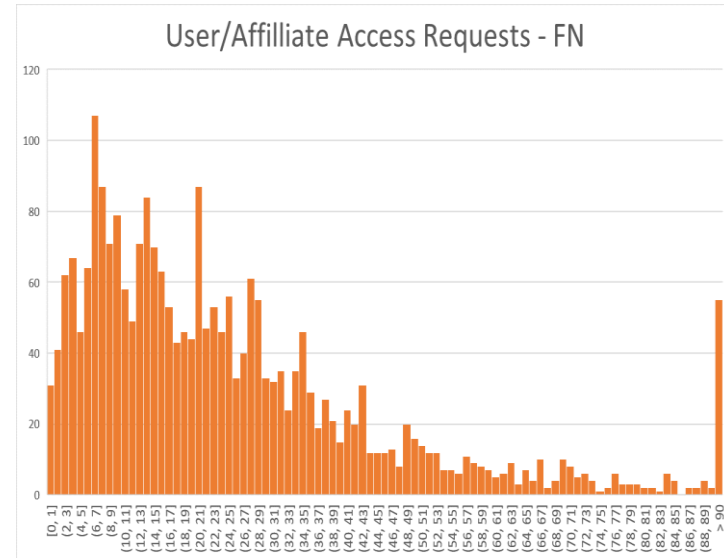
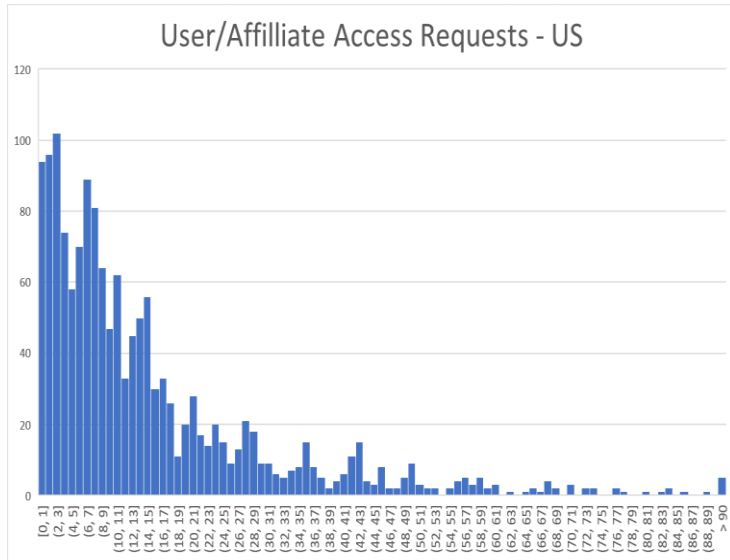


Duration for badging over time: use to see progress/challenges

- Peaks can correspond to large events
- Longer duration recently due to large influx of summer visitors

Site Access Metrics – User/Affiliate Access

Time it takes to be badged separated out by US Citizen and Foreign National



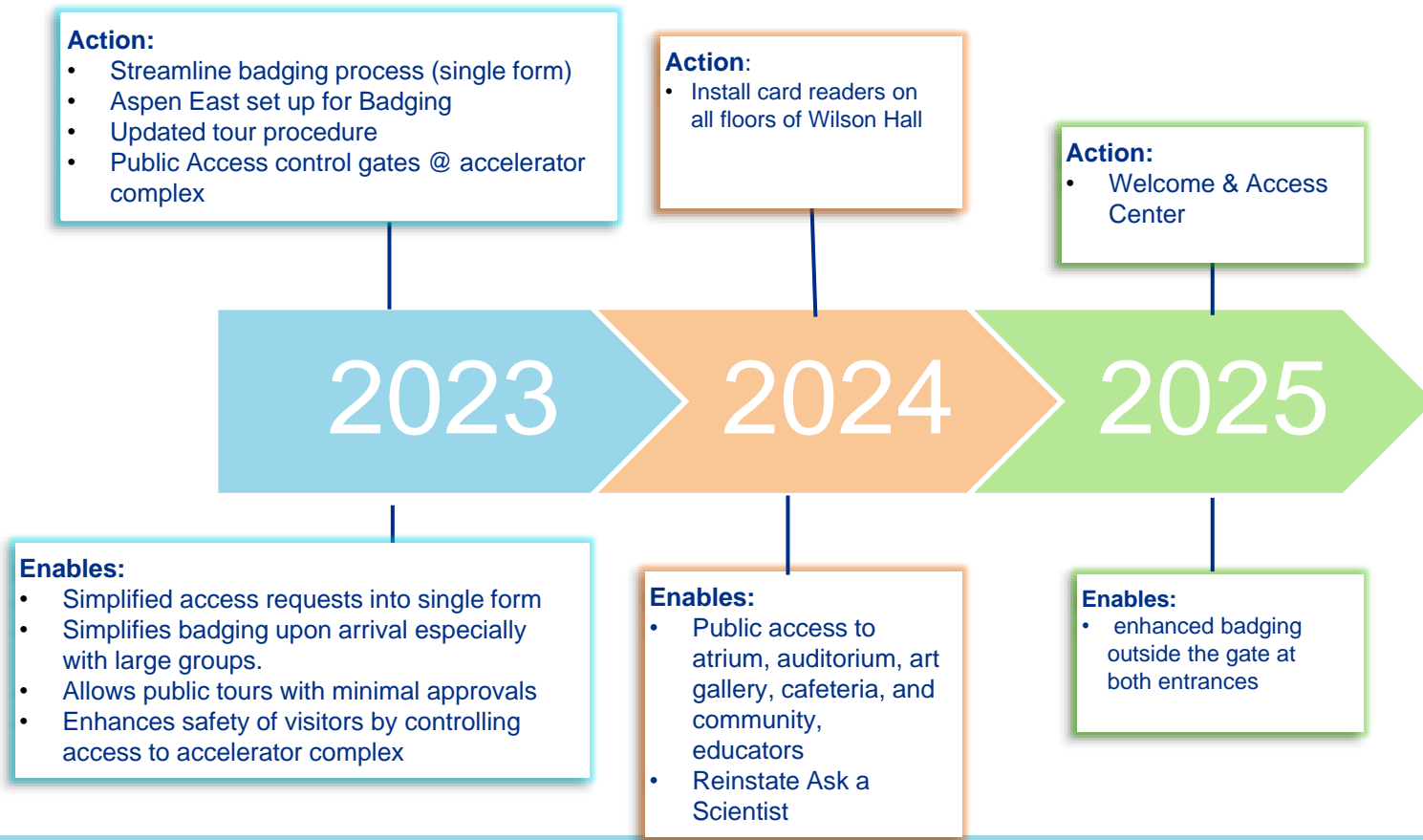
Binned in days

Using detailed data to understand potential features in plots and make improvements

- Move peaks to shorter times
- Understand and reduce tails of distributions

Future State

Timeline to Planned Improvements



Parking Lot of ideas

- We are presently laser-focused on the highest priority actions that impact our employees/users/affiliates and affect our ability to deliver our mission.
- We have a list of topics for next priority consideration. These include:
 - Garden clubs
 - Catch and release fishing
 - Recreation activities in the Village
 - Ideas from Feedback...

Closing Remarks

- We hear you!
- We are systematically working on all fronts. It is a challenging time as we do so.
- Please be patient

Thank you!



Feedback and input systems established/prioritized

How to give input/feedback:

Employees: staffquestions@fnal.gov

Users: staffquestions@fnal.gov

Vendors: fermilab@fnal.gov

Community: fermilab@fnal.gov

SAB Task Force:

site_access_task_force@listserv.fnal.gov

