

# DPP Improvements

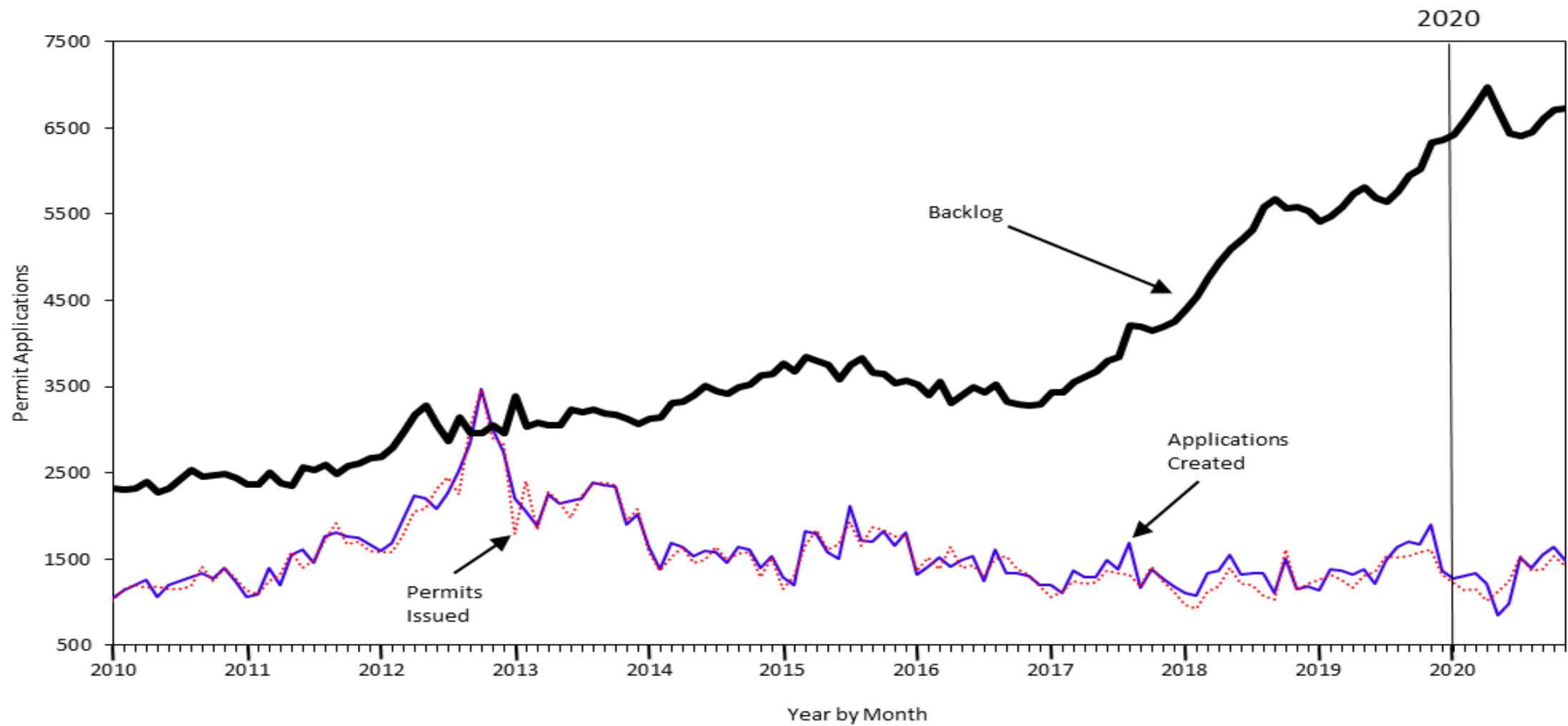
*Presentation to:*  
**American Institute of  
Architects Honolulu**

September 11, 2024



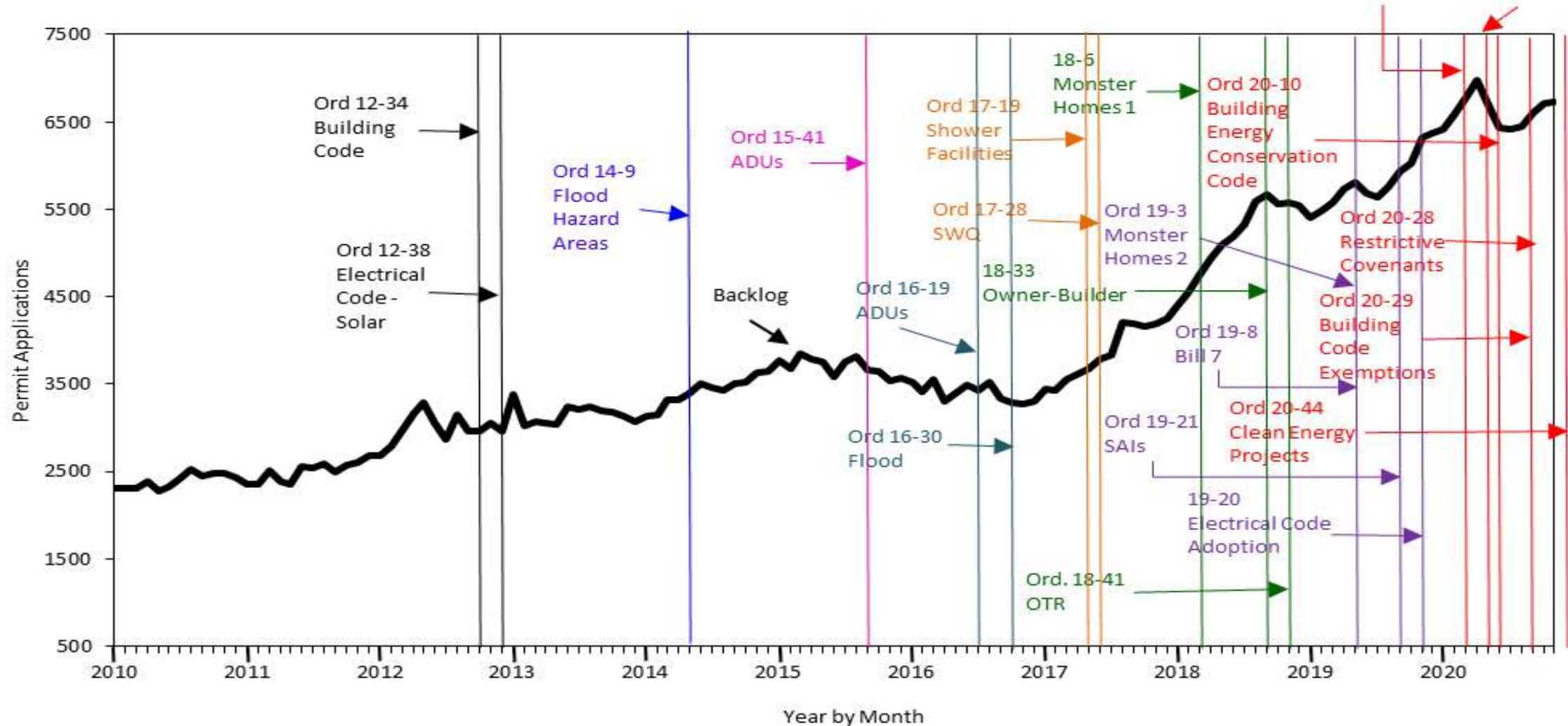
# Building Permit Backlog by Month

1/1/2010-11/30/2020



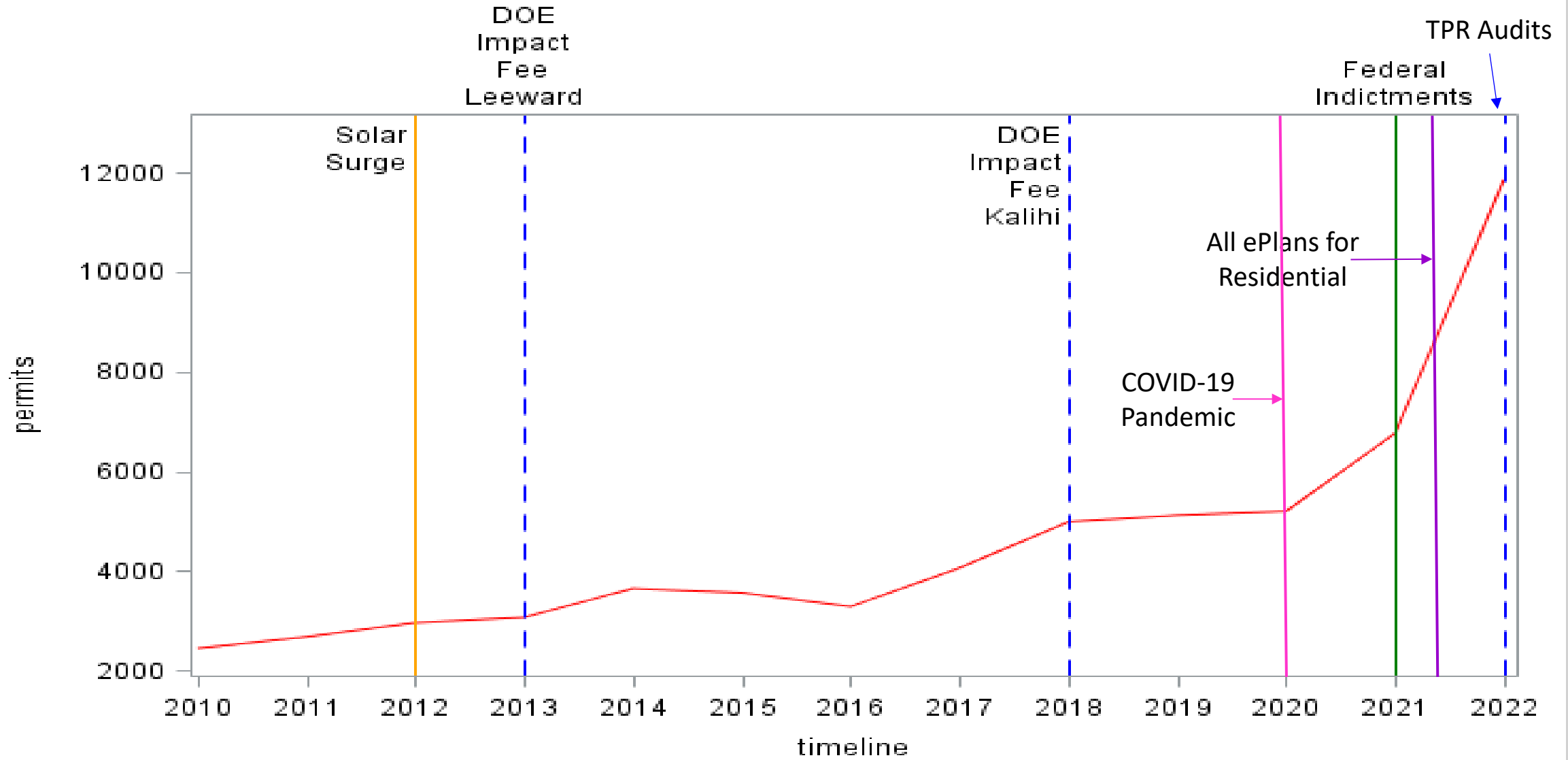
# Building Permit Backlog by Month with Ordinances

1/1/2010-11/30/2020



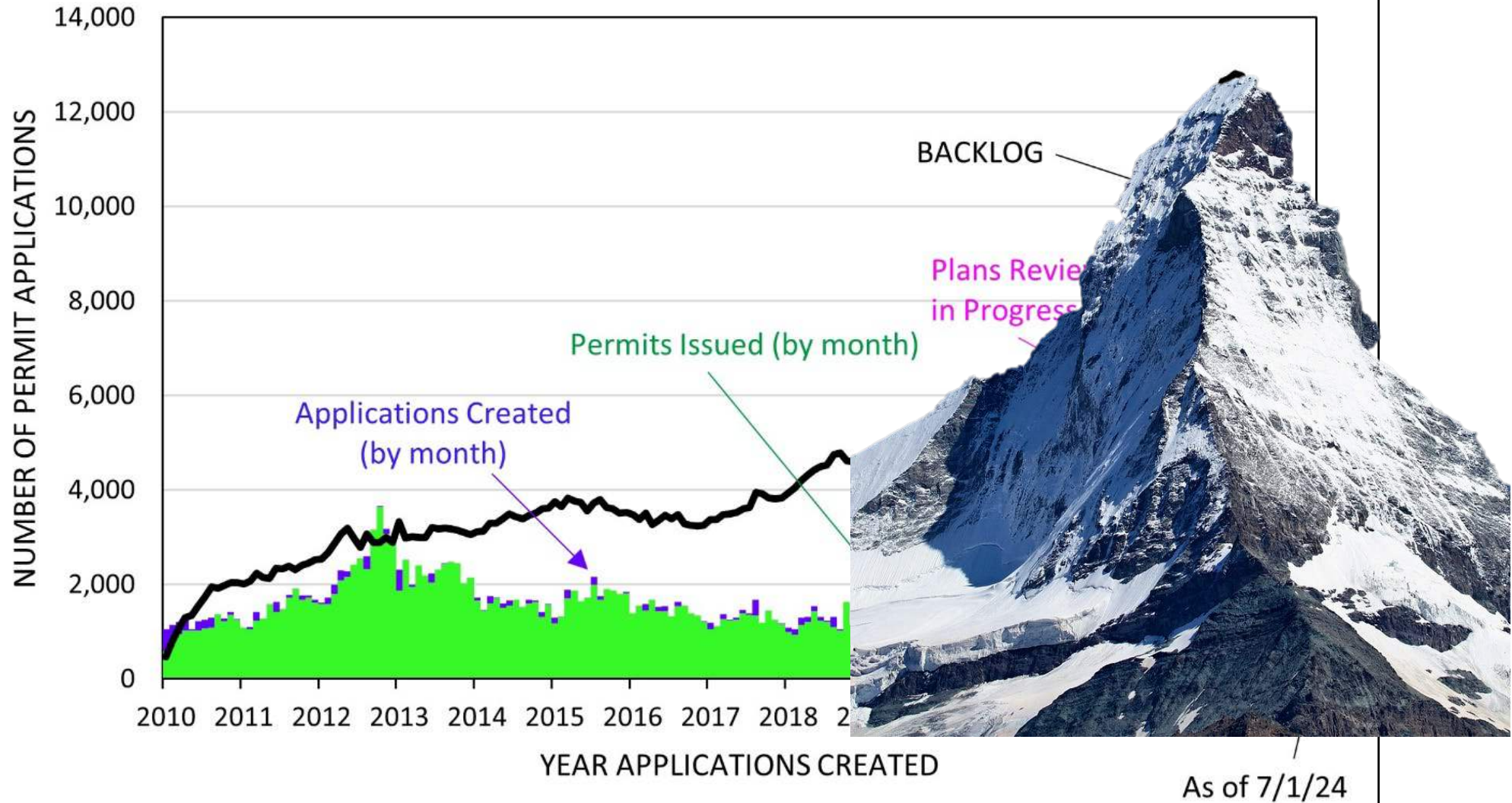


# Building Permit Backlog by Year 1/1/2010-12/31/2022

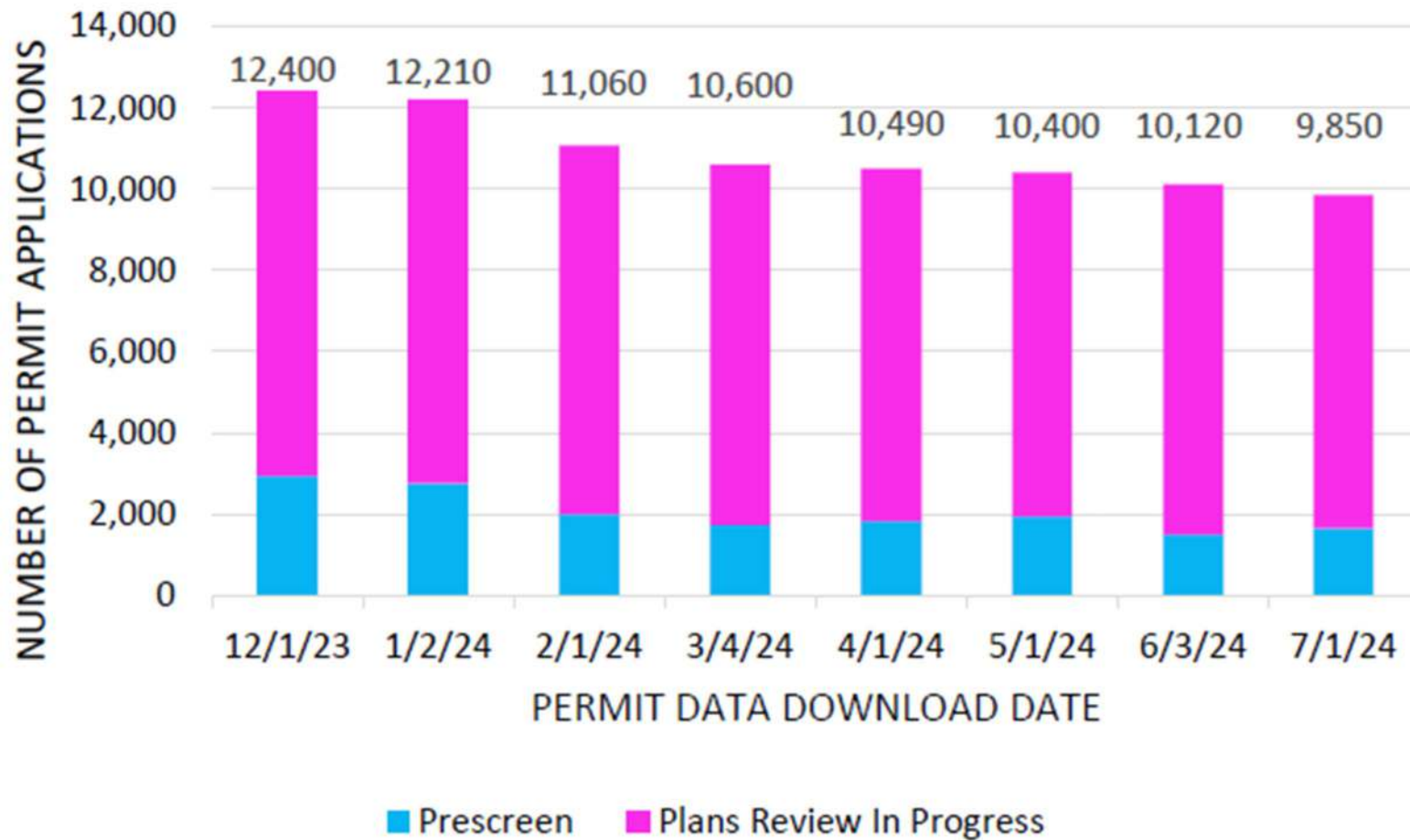


# Permit Backlog

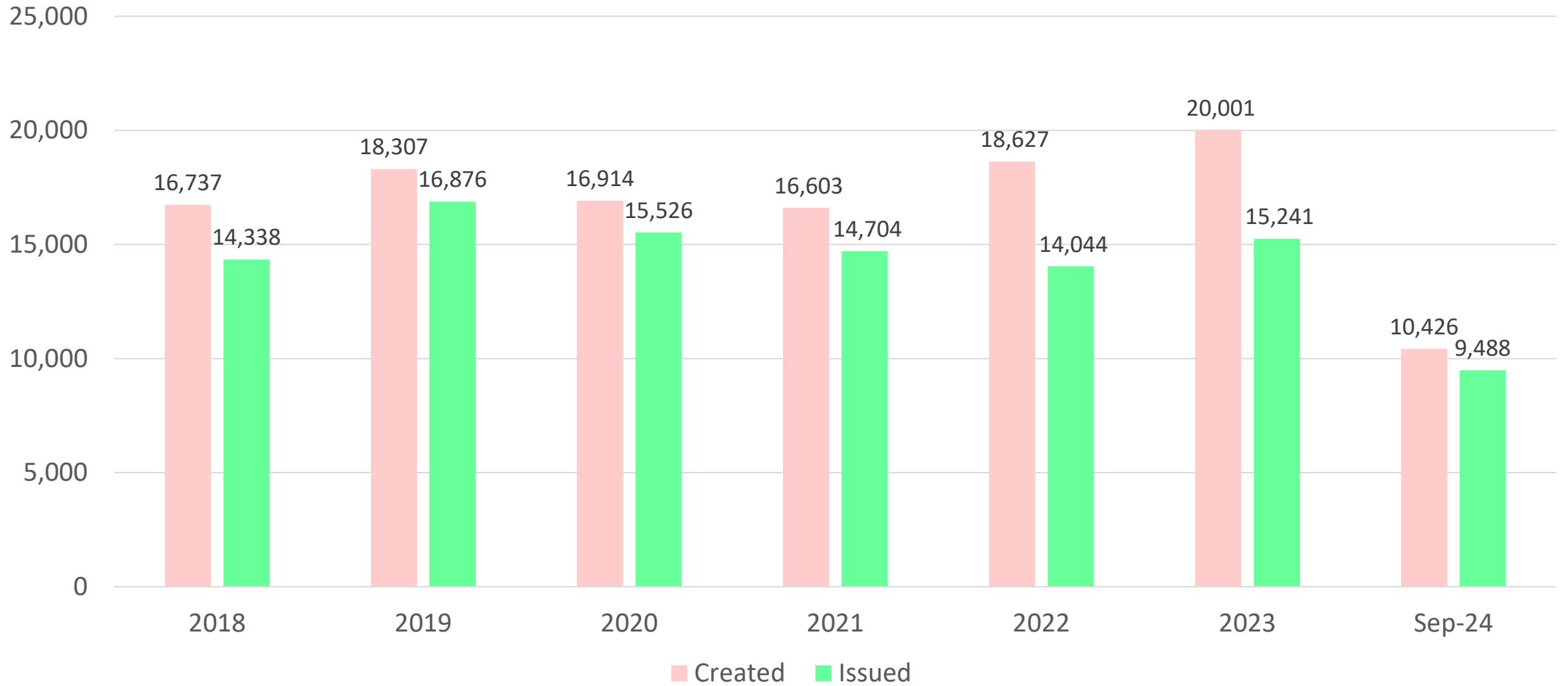
January 1, 2010 through July 1, 2024



## Permit Backlog by Review Status Since December 1, 2023



# Residential & Commercial Building Permits



# Permits Under Review vs. Permits Pending DPP Review

<b>APPLICANT</b>	6,434	58.2%
<b>SWQ REVIEW BRANCH</b>	1,832	16.6%
<b>RESIDENTIAL PLAN EXAMINER</b>	596	5.4%
Board Of Water Supply	559	5.1%
<b>PERMIT CLERKS</b>	222	2.0%
<b>ELECTRICAL</b>	169	1.5%
Review Coordinator	165	1.5%
Zoning Plans Review Branch	142	1.3%
<b>BUILDING</b>	142	1.3%
<b>MECHANICAL</b>	124	1.1%
Wastewater Branch	119	1.1%
Civil Engineering	86	0.8%
Honolulu Fire Department	54	0.5%
Third Party Review - Mechanical	55	0.5%
Third Party Review - Electrical	45	0.4%
Third Party Review - Building	41	0.4%
Third Party Review - Residential	35	0.3%
Other Agencies	236	2.1%
<b>Total:</b>	<b>11,056</b>	





- 12-month Contract completed in June 2024
- To Improve People, Processes & Technology
  1. 25 Process Improvement Projects
  2. 89 DPP staff Participated
  3. 150+ Process Documents created
  4. 350+ Major improvements identified
- *Next steps:* DPP Implementation Plan and Action



- 7<sup>th</sup> month of 18 month project (June 2025 Go Live)
- 47% project completion
- Features developed:
  - Community Portal
  - Online Instant Permits
  - Internal Permit creation
  - DCCA registration
  - Violations
  - Short Term Rentals
  - Payment integration
- Ongoing development of data migration and GIS



- ePlans Upgraded from 9.1 to 9.2 – Aug. 1 to 5<sup>th</sup>
- Application moved to a cloud-hosted environment for improved access for future upgrades and integration with other DPP systems.
- Key Features of 9.2:
  - Easy-to-follow step-by-step instructions for uploads and submissions
  - Invite Project Team Members to projects to view status and comments
  - Centralized reviewer comments/corrections
  - Project status tab including task status, time tracking, outstanding reviews, etc.
  - Self-service “Forgot Password” feature using emailed verification codes instead of security questions.
- Upgrade to 9.3 and 9.4 slated for October



- CivCheck's Guided AI Plan Review Platform (GPR)
- 5-month Pilot Project – Honolulu Case Study
- 2020 DPP Audit Identified Challenges to Set Goals:
  1. Improve plan quality.
  2. Assess plan quality and complexity prior to full plan review.
  3. Educate and empower city reviewers.

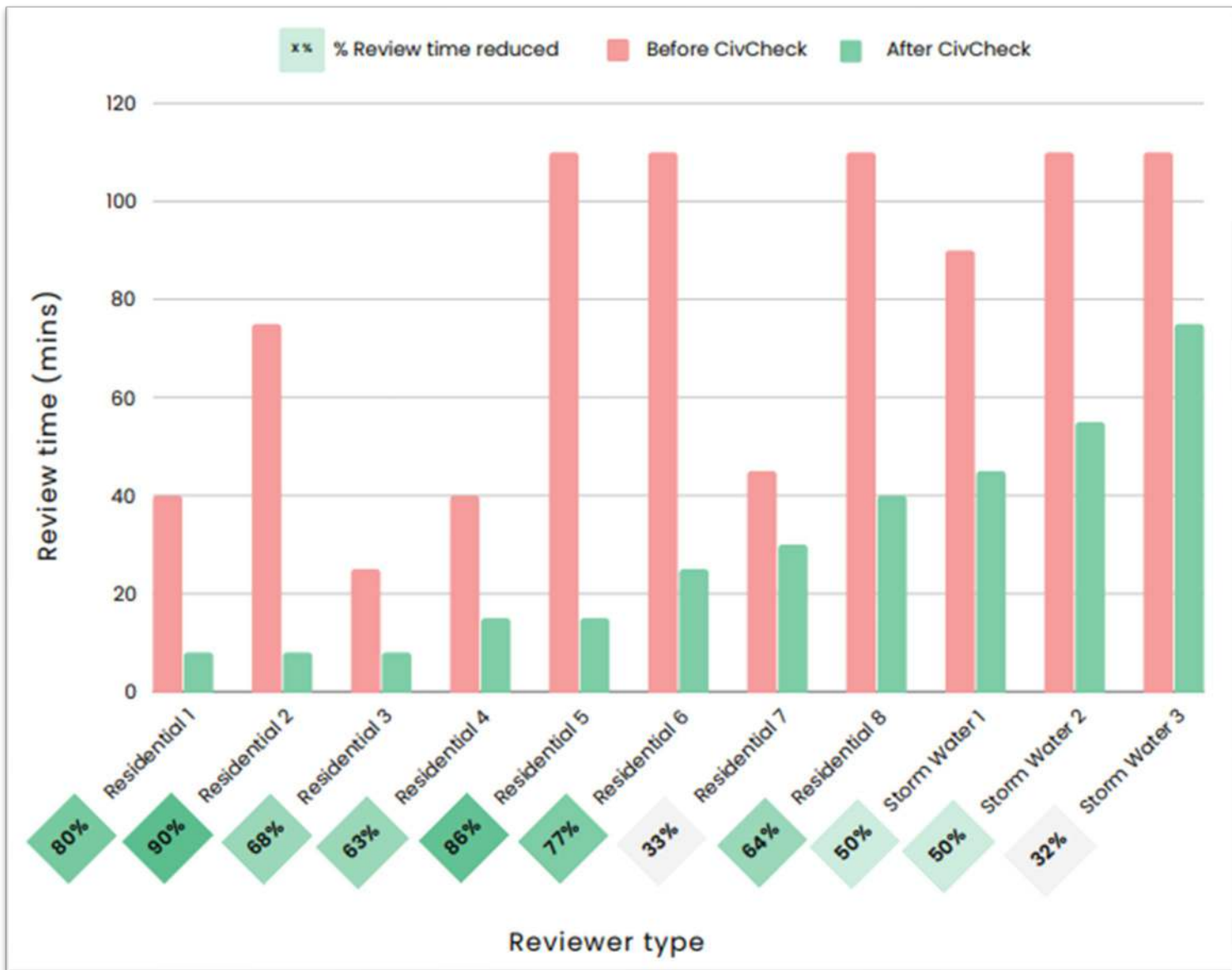
PILOT OVERVIEW – Focused on residential single-family/two-family/duplex projects, and Storm Water Quality (SWQ).

Phase One: Configuration

Phase Two: Internal Beta test

Phase Three: External Beta Test





## RESULTS AT A GLANCE

**32-90%**

*Overall Average: 64%*

**Range in overall reduction of total review time**

**60-90**  
mins

Typical Review Time for residential reviewers without CivCheck

**70%**

Average reduction in residential review time

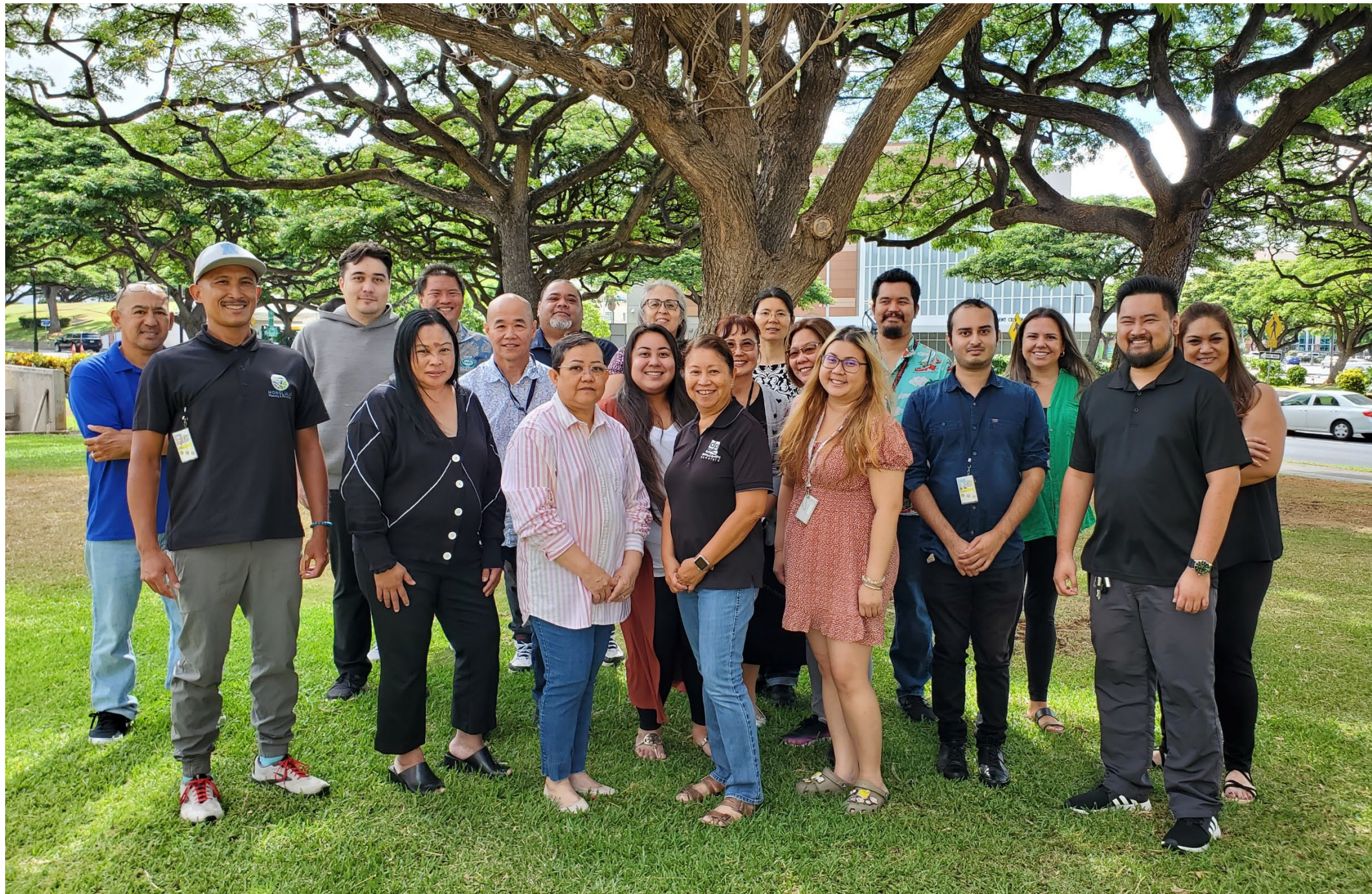
**90-120**  
mins

Typical Review Time for storm water reviewers without CivCheck

**46%**

Average reduction in storm water review time\*







SALARIES

CAREER PATHWAYS

TRAINING

# Common Errors/Issues with Plan Submittals

## Prescreen

### A. ePlans required:

1. Page size: 36" x 24"
2. Landscape orientation
3. All sheets are the same size
4. Each sheet is its own file

### B. Pending/TBD:

1. Must meet file naming standard
2. Must meet sheet numbering standard

### C. Manual DPP Review:

1. DPP Approval Stamp Space
2. Color (requirement was removed and changed to allow color)
3. Scale
4. Index
5. Title Block
6. Complete Plot Plan
7. Drawing Revisions

Prescreen guidance: <https://www.honolulu.gov/dpp/permitting/building-permits.html>



# Common Errors/Issues with Plan Submittals

## **Erosion and Sediment Control Plans (ESPC).**

- A. ESCP: Checklist Option (Appendix B) (37% error rate):
  - Missing Appendix B form
  - Lack of explanation for Best Management Practices (BMPs) marked as "will not use"
- B. ESCP: BMP Site Diagram (42% error rate in stormwater-only reviews):
  - Omission of "will-use" BMPs on the ESCP Site Diagram, despite being listed in Appendix B

## **Storm Water Quality (SWQ).**

- A. Residential Storm Water Management Plan / Impervious Surface Area (ISA) (63% error rate):
  - Discrepancies in ISA calculations across different documents (Site Plan, Attachment A, Google Map view)
  - Missing or incomplete Appendix G1 form
  - Inconsistencies between ISA values on Appendix G1 and RSWMP notes
  - Failure to include all impervious surfaces in ISA measurements

# Common Errors/Issues with Plan Submittals

## Residential Projects

1. Elevations
2. Window/door details
3. Dimensions
4. Area calculations
5. Building envelope
6. Room labels Carbon Monoxide Alarms (58% error rate):
  - Frequent omission in dwellings with attached garages, a critical safety oversight
7. Floor Area Ratio (FAR) Calculation Energy Code Compliance Block (43% error rate):
  - Incorrect references to outdated code editions
  - Complete absence of energy blocks on permit plans
8. Natural Light & Ventilation Notes (35% error rate):
  - Absence of required light and ventilation notations
  - Failure to specify rooms with mechanical ventilation
9. Bathrooms: Shower Clearance (28% error rate):
  - Missing dimensions on floor plans for shower clearance
  - Incorrect dimensions: common mistake of swapping the required 24" perpendicular and 30" parallel clearances
10. Outlet Locations (27% error rate):

Failure to show outlet locations for countertops and near bathroom sinks on interior elevation

# Common Errors/Issues with Plan Submittals

## Commercial Projects

### Building Code:

1. Duplicate sheets on resubmittals.
2. Changemarks not addressed.
3. Incorrect IBC edition listed.
4. Missing building code analysis.
5. Separating LUO data from building code data.
6. Missing special inspection listing.
7. ADAAG Compliance Statements.
8. Make sure to research, know the existing type of construction and allowable use.

# Common Errors/Issues with Plan Submittals

## Commercial Projects

### Mechanical Code:

1. Approval request letter for Alternative Engineered Design required for single stack and site plumbing utilities.
2. Certificate based digital signatures.
3. Comments not addressed completely and/or missing response describing correction.
4. Duplicate sheets (e.g. same sheet numbers with different description)- sheet file names required to be exactly the same as previous version to be replaced.
5. Vector (not raster) type files required.
6. Scope of work is not clear or consistent (existing conditions are not clearly shown, plans are not coordinated,...).
7. Non-compliant fire sprinkler coverage, e.g. spacing distances and/or obstructions.
8. Suds zone clearance requirements not met.
9. Inadequate plumbing aggregate vent pipe sizing.
10. Missing gutters/roof drains.
11. Non-compliant cleanout locations/clearances.



# Common Errors/Issues with Plan Submittals

## Commercial Projects

### Electrical Code:

1. Pay all plan review fees [ROH 18-6.1]
2. No duplicate sheets, especially on resubmittals [ROH 18-4.3(a)]
3. Sign and stamp drawings when required [HRS 464-13] or provide full plan maker name when not provided (not just initials) [ROH 18-4.3]
4. Digital signature shall comply with DPP website for certified-based digital signature [HAR 16-115(9)]
5. Clear all change marks when resubmitting in eplans [policy but also ROH 18-4.3(a)]
6. The drawing index should match the actual sheets which are submitted [ROH 18-4.3(a)]
7. Re-routed applications should have a response from the design professional which clearly identify the corrective action. Not a response like “complied”.
8. A complete plot plan, which indicates all structures on the property. Maybe add easements. [policy but also ROH 18-4.1(2)]
9. Identify the correct plot plan and all additional parcels, i.e. joint development, etc. [ROH 18-4.1(2)/(3)]
10. Identify the phases of work at time of application as required by ROH 18 [ROH 18-4.1(7)(D)]
11. WOW idea, a separate sheet should be submitted for electrical work, plumbing work, fire alarm work, etc.
12. Electrical load calculation for new electrical services and when additional loads are added to the existing service (NEC 220)
13. Identify all symbols and abbreviations.



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