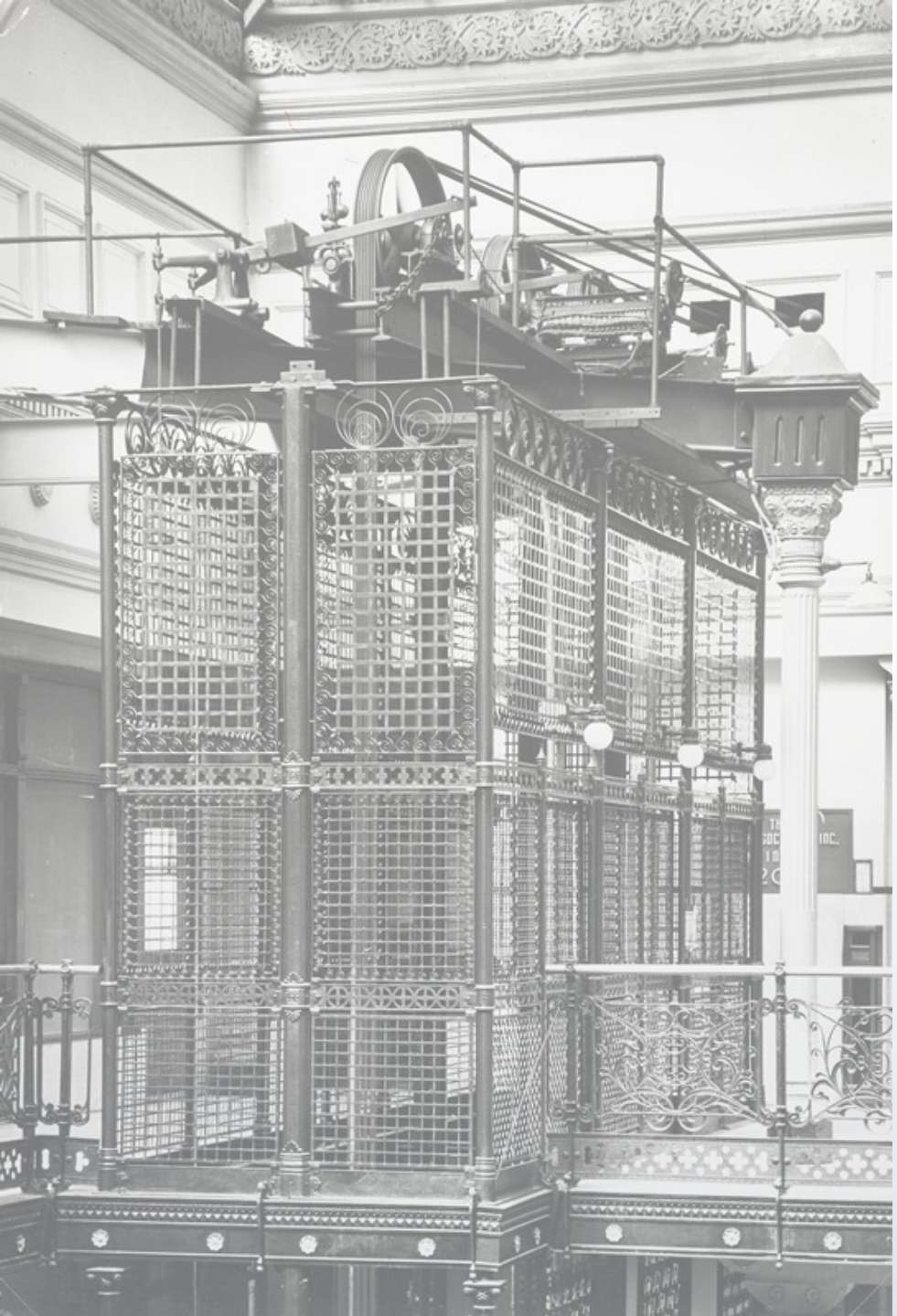
Elevator Industry Round Table Meeting



AGENDA

- Introductions
- Director’s Comments
- Process
- Policy
- Maintenance Control Program (MCP)
- Q+A

INTRODUCTIONS

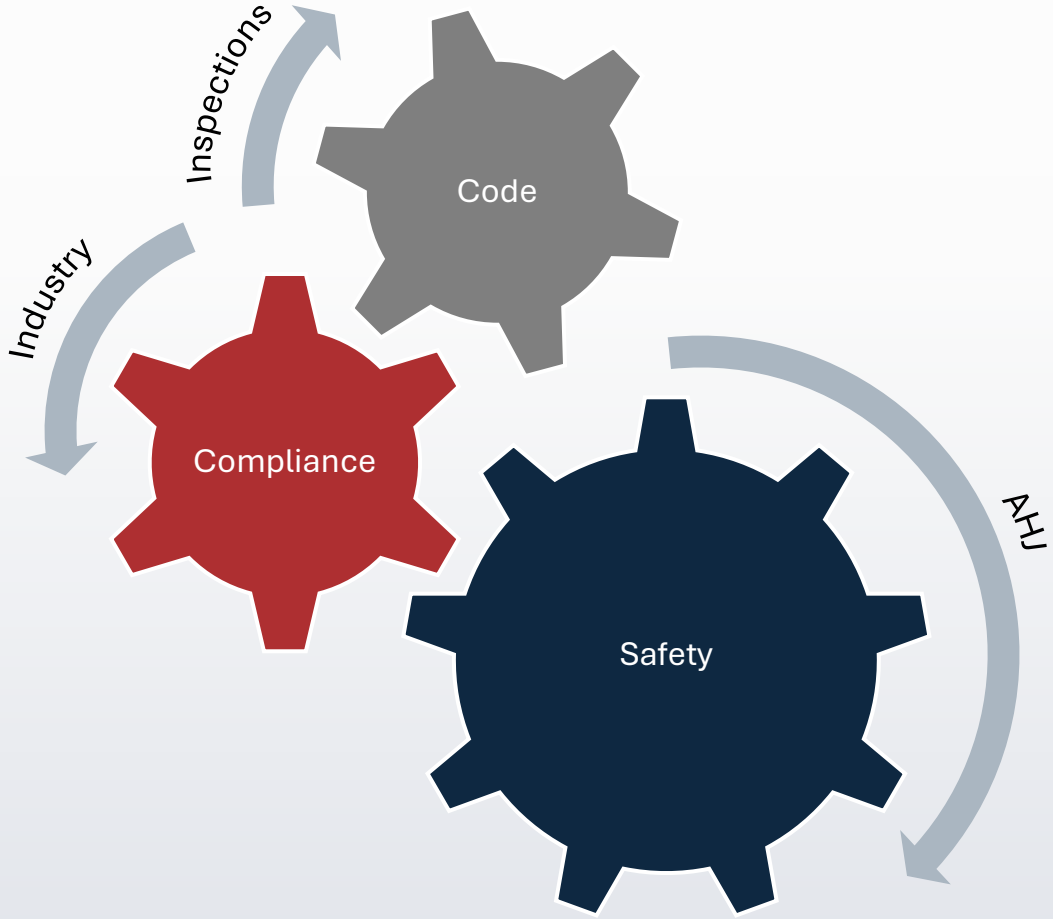
NICK KAVANAGH, BUILDING ELEVATOR PROGRAM MANAGER

DIRECTOR'S COMMENTS

BILL HICKS, LAND DEVELOPMENT SERVICES DIRECTOR

PURPOSE OF THE ELEVATOR PROGRAM

DRIVING SAFETY THROUGH COMPLIANCE

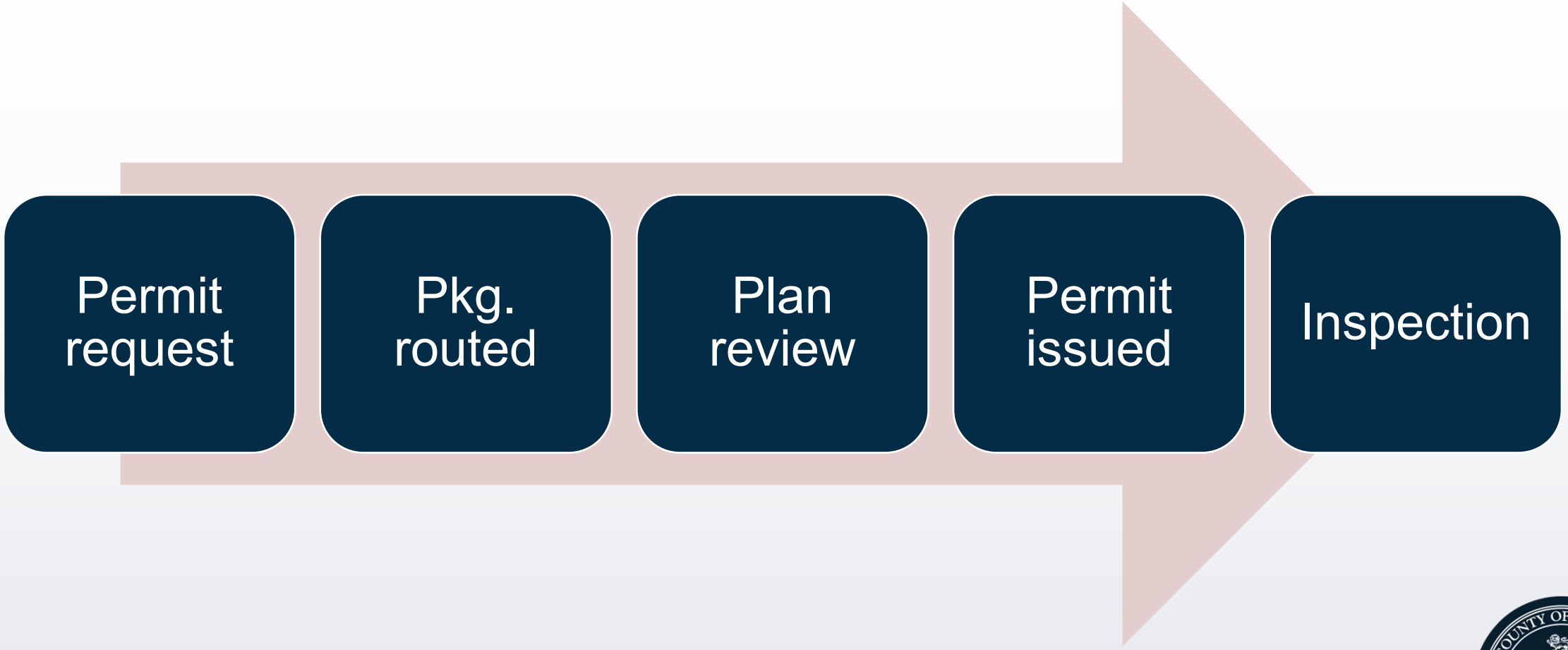


AHJ: Authority Having Jurisdiction

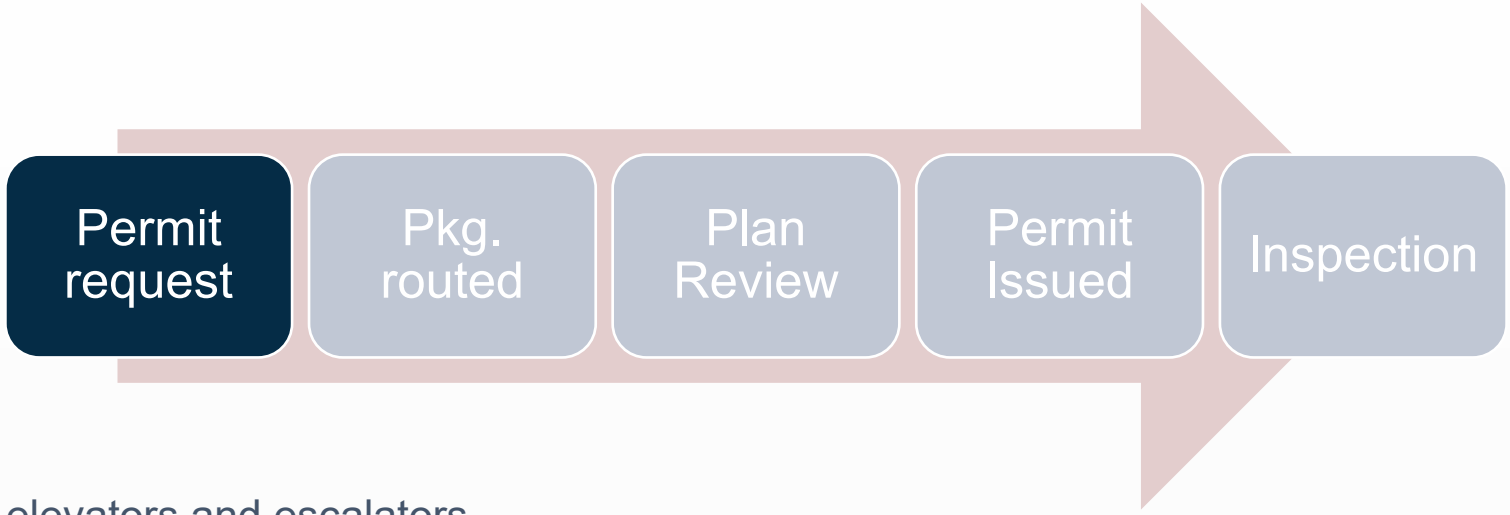
PROCESS

NICK KAVANAGH, BUILDING ELEVATORS PROGRAM MANAGER

PERMIT PROCESS



PERMIT PROCESS



- Installation Permits (ELEVI)
  - Required for residential and commercial elevators and escalators

- Maintenance Permits (ELEVM)
  - Temporary use permits or any alteration/modernization to existing passenger elevators or escalators

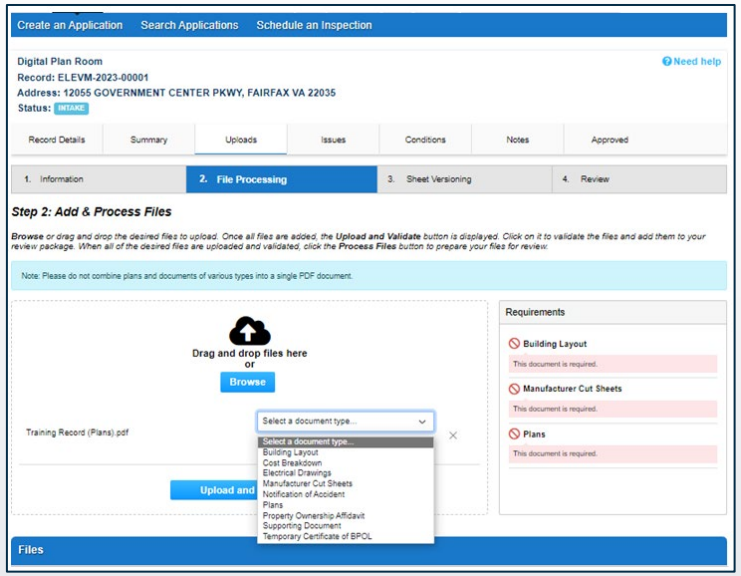
- Submit request via PLUS Application under “Buildings”
  - Plans meeting plan minimum submission requirements
  - Manufacturer cut sheets
  - Building layouts
  - Additional documentation (if applicable)

PERMIT PROCESS

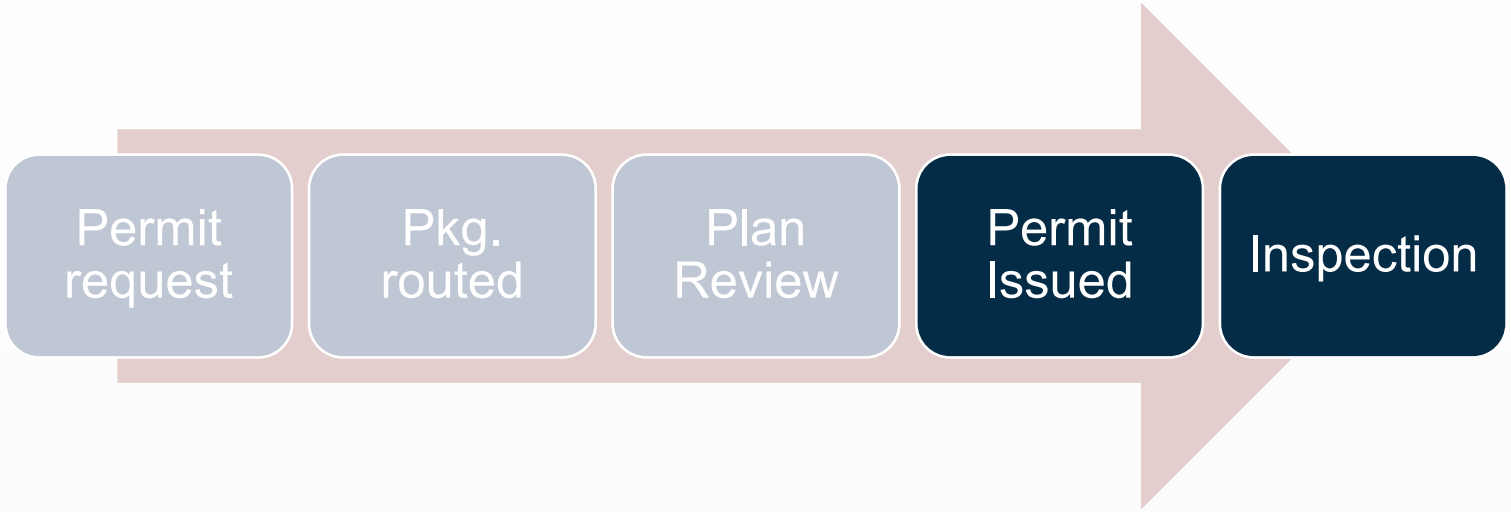
Permit request → Pkg. routed → Plan Review → Permit Issued → Inspection

- Review of minimum submission requirements
- Package will then be routed:
  - Fast-Tracked: 48-72 hours
  - Non-Fast-Tracked: ~14 days

  *Review time starts once fees are paid
- Notifications will be made of any deficiencies
- May be required to:
  - Make plan corrections
  - Resubmission fees
  - Additional supporting documents



PERMIT PROCESS



- Permit Issuance via email notification
  - Once reviews get approved
  - Permit card and approved plans available in PLUS

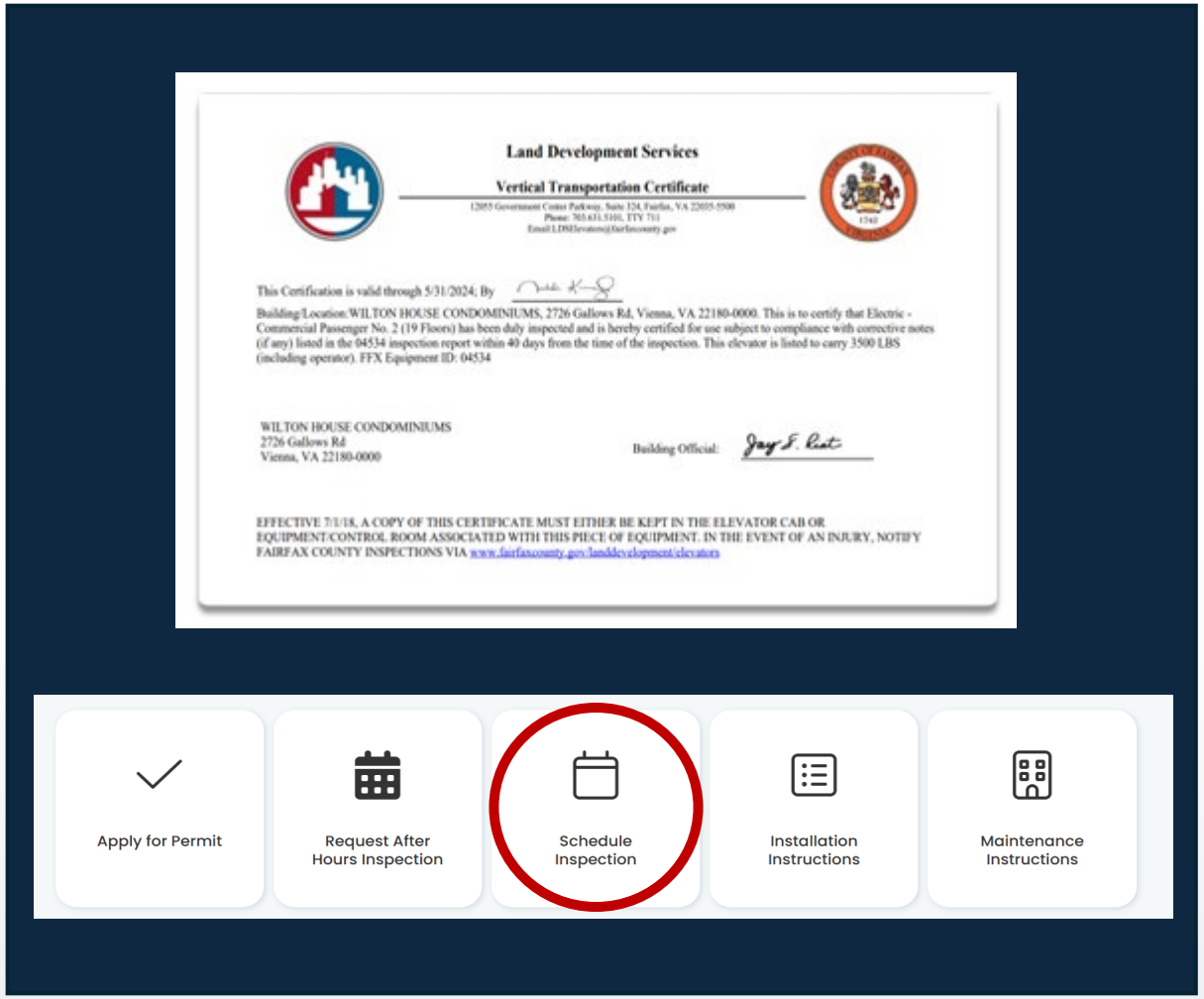
- Inspection
  - Permit/plans are issued electronically and should be in printed and on-site prior to commencement of work
  - Coordinate when scope of work completed
  - FFX/ATIS will provide an inspection date/time within 48-hour window
  - Based on availability of ALL parties, scheduled date/time could be outside 48-hour window

INSPECTION PROCESS

- Vertical Transportation Devices
  - Certificates are valid for 12 months
  - Certificate dates are anchored off diary month
  - 30/60-day courtesy notices sent out
  - Inspection requests come through ATIS Portal

- Inspection Requests
  - www.fairfaxcounty.gov/landdevelopment/elevators.com
  - Select “Schedule Inspection”
  - Submit FFXIDs and type of inspection
  - ATIS will coordinate date/time with required parties

- Accident/Entrapments
  - Ensure FFX is notified via online portal on LDS website
  - Effected equipment is required to be removed from service after an incident
  - Returned to service after compliant and inspected
  - Currently under review for efficiencies and enhancements on RTS process



RE-INSPECTION PROCESS

Virginia Property Maintenance Code,

Chapter 1 Administration, Section 105 Violations:

- Notice of Correction (NOC)
  - Issued to the Owner, Agent and Responsible Party for the maintenance of the structure and/or equipment
  - Your Inspection Report is the NOC
  - 1st step in legal process
  - 30-40 days for re-inspection

- Notice of Violation (NOV)
  - County has right to issue NOV
  - NOV can be issued to any and all responsible parties
  - The Building Official reserves the right to pursue criminal charges for uncorrected violations.

POLICY

NICK KAVANAGH, BUILDING ELEVATORS PROGRAM MANAGER

EXPECTATIONS OF INSPECTIONS/COMPLIANCE

- Comply with ASME 17.1, Appendix N
  - Periodic Inspections: 6 months
  - CAT1 (Annual): 12 months
    - 90% Compliance Rate
  - CAT5 (Full Load): 60 months
    - Fee Awareness, LDS Approved Fee Schedule

- Work without a permit WILL NOT be tolerated

- Removal from Service
  - Accident/Entrapment
  - Life/Safety violations
  - Failure to comply with scheduling of annual inspections
  - Failed inspection results not re-inspected

OPPORTUNITIES ARISE…

- Pre-Acceptance Inspections
  - Schedule within 30 days of substantial completion
  - No testing, up to 4 hours per equipment
  - 80% Acceptance Inspection pass rate

- Afterhours Inspections
  - Limits disruptions in building tenants in certain circumstances
  - Fairfax County is open Monday-Friday, 7am-4pm
  - Need alternatives outside these hours?
  - Accommodations can be made for inspections before 7am or after 4pm
  - Weekends and holidays are also options

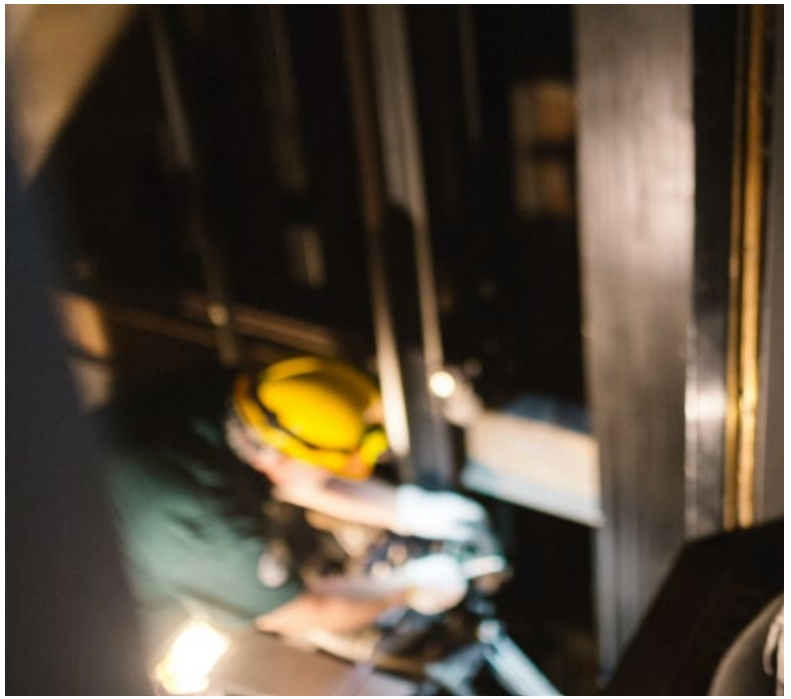
- Generator Testing
  - Option to perform generator testing off-hours to avoid building disruption
  - Schedule up to 30 days in advance of annual inspection (see website)
  - Requests made through ATIS portal

MAINTENANCE OF EQUIPMENT

NICK KAVANAGH, BUILDING ELEVATORS PROGRAM MANAGER

MAINTENANCE OF EQUIPMENT

- Expectations
  - Maintain equipment to Code
  - Inspection is not meant to catch lack of maintenance
  - Inspections should have minimal issues
  - Owner contracts EMC to have it maintained to Code
  - Maintenance companies are under agreement to abide by this obligation
- Frequency
  - Manufacturer Specifications
  - There are still minimum Code requirements
  - Consider use of the unit: church on Sunday versus parking garage
- Preventative Maintenance
  - How do you keep a 1972 Mustang running?
  - Have you ever bought a $350 trash bag?



MAINTENANCE CONTROL PROGRAM (MCP)

CHARLIE SLATER, ATIS EXECUTIVE VICE PRESIDENT

MAINTENANCE CONTROL PROGRAM (MCP)

A17.1-8.6.1.2 GENERAL MAINTENANCE REQUIREMENTS

8.6.1.2.1 A written Maintenance Control Program shall be in place to maintain the equipment incompliance with the requirements of 8.6. The MCP shall specify examinations, tests, cleaning, lubrication, and adjustments to applicable components at regular intervals (see definition for maintenance) and shall comply with the following:

(a) A Maintenance Control Program for each unit (see 8.6.1.1.1) shall be provided by the person(s) and/or firm maintaining the equipment and shall be viewable on-site by elevator personnel at all times from the time of acceptance inspection and test or from the time of equipment installation or alteration (see 8.10.1.5).

(d) Where the MCP is maintained remotely from the machine room, machinery space, control room, or control space (see 8.11.1.8), instructions for on-site locating or viewing the MCP either in hard copy or in electronic format shall be posted on the controller or at the means necessary for test (see 2.7.6.4). The instructions shall be permanently legible with characters a minimum of 3 mm (0.125 in.) in height.

MAINTENANCE CONTROL PROGRAM (MCP)

A17.1-8.6.1.2.2 ON-SITE DOCUMENTATION

The following documents specified in 8.6.1.2.2(a), (b), and (c) shall be written and permanently kept on-site in the machine room, machinery space, control room, control space, or in the means necessary for test (2.7.6.4) in hard copy for each unit for elevator personnel.

The documentation specified in 8.6.1.2.2(d) shall be on-site and available to the specified personnel.

> *(a)* Up-to-date wiring diagrams detailing circuits of all electrical protective devices (see 2.26.2) and critical operating circuits (see 2.26.3).
>
> *(b)* Procedures for inspections and tests not described in ASME A17.2 and procedures or methods required for elevator personnel to perform maintenance, repairs, replacements, and adjustments…
>
> *(c)* Written checkout procedures…

1.3 Definitions

> **hard copy:** a written record or log of all items specified in the maintenance records**.**

MAINTENANCE CONTROL PROGRAM (MCP)

A17.1-8.6.1.2.2 ON-SITE DOCUMENTATION

A17.1 - 8.6.1.2.2 On-Site Documentation…

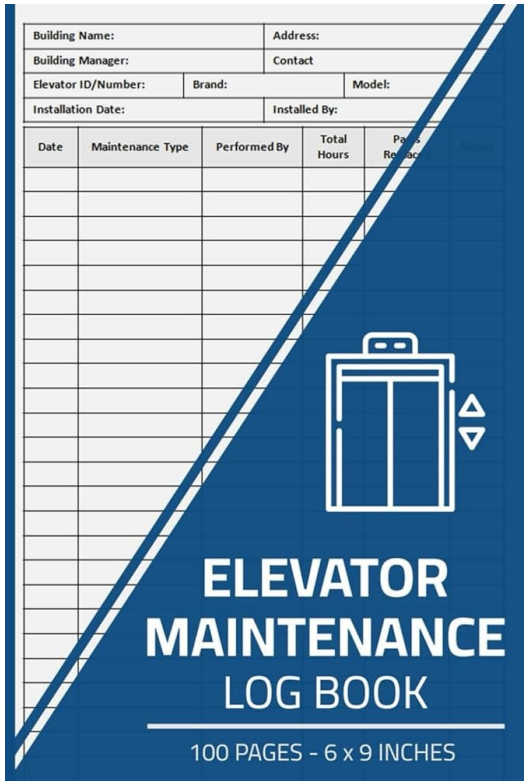
(b) Procedures for inspections and tests not described in ASME A17.2 and procedures or methods required for elevator personnel to perform maintenance, repairs, replacements, and adjustments, as follows:

> (3) unique maintenance procedures or methods required for inspection, tests, and replacement of equipment applied under alternative arrangements (see 1.2.2.1) shall be provided by the manufacturer or installer.

MAINTENANCE CONTROL PROGRAM (MCP)

A17.1-8.6.1.4 MAINTENANCE RECORDS

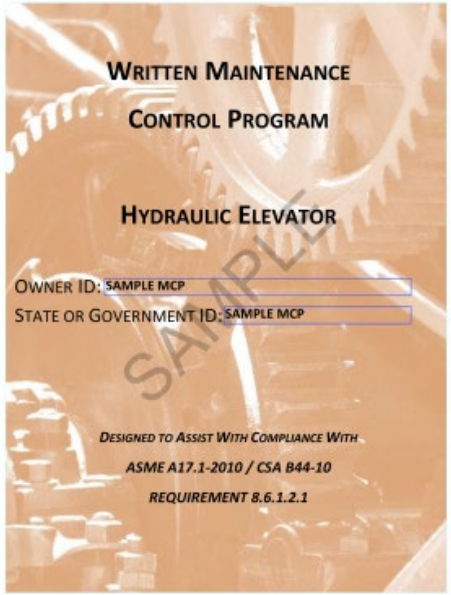
- Maintenance records shall document compliance with 8.6.
- Instructions for locating the maintenance records of each unit, for viewing on-site, shall be posted on the controller or at the means necessary for test (see 2.7.6.4).
- The provided instructions shall be permanently legible with characters a minimum of 3 mm (0.125 in.) in height.
- These records shall be retained for the most recent 5 yr or from the date of installation or adoption of this Code edition, whichever is less or as specified by the authority having jurisdiction.
- Existing maintenance records up to 5 yr shall be retained.



MAINTENANCE CONTROL PROGRAM (MCP)

A17.1-8.6.1.4 MAINTENANCE CONTROL PROGRAM

- The Maintenance Control Program complying with 8.6.1.2.1 shall be available.
- On-site equipment documentation complying with 8.6.1.2.2 and maintenance records complying with 8.6.1.4 shall be available.



MAINTENANCE CONTROL PROGRAM (MCP)

A17.2 GUIDE FOR INSPECTION OF ELEVATORS, ESCALATORS, MOVING WALKS

ITEM 2.40
MAINTENANCE RECORDS
2.40.1 Periodic Inspections
Review the maintenance records and verify that they are available to elevator personnel and that they are legible and up to date. They should include the following:
(a) description of maintenance tasks performed and dates
(b) description and dates of examinations, tests, adjustments, repairs, and replacements
(c) description and dates of callbacks (trouble calls) or reports that are made to elevator personnel by any means, including corrective action taken
(d) written record of the findings on the firefighters' service operation monthly test

2.40.1.2 Hydraulic Elevators. Check the record of oil usage where required. Investigate any unaccountable fluid loss.
2.40.2 Periodic Test
2.40.3 Acceptance

2.40.4 References
2.40.4.1 Electric Elevators. A17.1-2000/B44-00 through A17.1-2004/B44-04 — Requirements 8.6.1.4 and 8.6.10.1. A17.1a-2005 and later editions — Requirements 8.6.1.4 and 8.6.11.1.
2.40.4.2 Hydraulic Elevators. A17.1-2000/B44-00 through A17.1-2004/B44-04 — Requirements 8.6.1.4, 8.6.10.1, and 8.6.5.7. A17.1a-2005/B44a-05 and later editions — Requirement 8.6.11.1.
2.40.4.3 Electric LU/LA Elevators. A17.1-2000/B44-00 and later editions — Requirements 8.6.1.4, c8.6.12.2.5, and 8.6.10.1.
2.40.4.4 Hydraulic LU/LA Elevators. A17.1-2000/B44-00 and later editions — Requirements 8.6.1.4, c8.6.12.2.5, 8.6.5.7, and 8.6.10.1.

MAINTENANCE CONTROL PROGRAM (MCP)

TRACTION ELEVATOR AND MAINTENANCE TASKS

8.6.4.1 Suspension and Compensating Means

8.6.4.2 Governor Wire Ropes

8.6.4.3 Lubrication of Guide Rails

8.6.4.4.1 Oil Buffers

8.6.4.4.2 Elastomeric Buffers

8.6.4.5 Safety Mechanisms

8.6.4.6 Brakes

8.6.4.7 Cleaning of Hoistways and Pits

8.6.4.8 Machinery Spaces, Machine Rooms, Control Spaces, and Control Rooms

8.6.4.10.2 Procedure

MAINTENANCE CONTROL PROGRAM (MCP)

TRACTION ELEVATOR AND MAINTENANCE TASKS

8.6.4.10.3 Tags

8.6.4.11 Runby

8.6.4.12 Governors

8.6.4.13.1 Door Systems General

8.6.4.13.2 Kinetic Energy and Force Limitation for Automatic Closing, Horizontal Sliding Car and Hoistway

8.6.4.14 Hoistway Access Switches

8.6.4.15 Car Emergency System

8.6.4.16 Stopping Accuracy

8.6.4.17 Ascending Car Overspeed and Unintended Car Movement Protection

8.6.4.18 Compensation Sheaves and Switches

THANK YOU