



2011-2017

Minnesota Department of Labor and Industry Construction Codes and Licensing DIVISION REPORT



Construction Codes and Licensing Division

The Construction Codes and Licensing Division (CCLD) was created at the Department of Labor and Industry (DLI) in 2005 with the consolidation of seven construction-related state programs. In 2011, the benefits of centralized, streamlined building regulation began to be realized.

To increase efficiency and effectiveness while remaining a trusted resource for the construction industry, CCLD has focused on meeting performance measures, increasing online services and reducing fees. Since 2012, DLI has enhanced its technology and created process improvements that have reduced the time required to process license applications. For example, 80 percent of all personal licenses issued each year are obtained online. Other CCLD accomplishments throughout the past seven years include:

- The creation of shared databases and electronic permitting now allows inspectors, architects, contractors and homeowners to view inspection and plan-review reports in real time.
- Today, 86-percent of more than 100,000 construction-related permits issued each year are obtained online.
- An online directory allows homeowners and contractors to identify local code officials for inspections.
- There is now free, online access to more than 20 different construction codes, including a Spanish translation of the Minnesota Residential Building Code.
- License exams and education programs are offered throughout the state to serve all of Minnesota.
- Fees have been reduced by 40 percent for all licensed construction professionals.
- Regulatory processes have been streamlined to enable the expansion of wind energy generation and PV solar installations.
- Movement to a continuous bond simplifies and expedites the renewal process for business licenses.
- Strategic partnerships have been developed with state and federal regulators, code bodies, construction industry professionals, associations and other stakeholders.
- Electronic plan review was implemented in 2016 to reduce costs and save and time by allowing architects and engineers to instantaneously send plans and receive review comments without having to ship and reship rolls of paper plans.

The Minnesota Department of Labor and Industry, Construction Codes and Licensing Division, serves as a trusted resource and strives to provide outreach, education and regulatory services as quickly and efficiently as possible. This report summarizes many of the accomplishments of the past seven years and provides a guide for continued success.

Ken Peterson
Commissioner

Scott D. McLellan
CCLD Director

Leadership and staff all share the same mission: protecting the health, safety and welfare of the public through the administration and enforcement of reasonable and uniform standards for Minnesota's buildings and construction professionals.

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Administrative Services

PURPOSE

The Administrative Services Unit provides timely and accurate administrative support for safety services performed by the boiler, elevator, electrical, high-pressure piping, manufactured structures, building plan review and plumbing units, along with civil penalties, boards and councils.

This includes processing Requests for Electrical Inspection, billing and refunds, invoicing, collection of past-due fees, annual operating permits, creating meeting minutes for boards and councils and responding to stakeholder inquiries.



RESPONSIBILITY

Administrative Services staff assist applicants when applying for online and paper permits. When a user applies for a permit online, the applicant receives a permit immediately and can begin work. If an applicant has questions about the permit, Administrative Services staff are available to assist with the application process and provide inspector contact information.

CCLD has developed a database using TRAKiT land management software that allows users to obtain and pay for permits instantly through eTRAKiT – the agency’s online permitting system.

CCLD inspectors are able to review and track projects, manage inspections and update location information in real time. Administrative Services staff verify the accuracy of the data and processes payments for permits and plan reviews.

Administrative Services

Administrative staff process requests for electrical inspections, billings, refunds and invoices. They also research and update databases and respond to stakeholder inquiries.



Administrative Services

Staff members review applications to determine jurisdiction, process plans and financials, and issue permits.

ACCOMPLISHMENTS

- Facilitated the timely issuance of more than 115,000 permits and plan reviews.
- Provided accurate accounting and reconciliation of millions of dollars in permit and plan review fees.

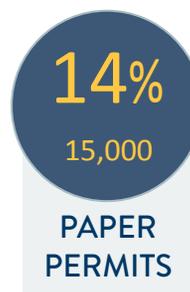
GOALS

- Continue to implement processing improvements to better provide prompt and efficient services.
- Provide customer-service training to staff so those who interact with stakeholders and the public will have the tools and ability to provide excellent customer service.
- Continue to move toward electronic storage of data.

ADMINISTRATIVE SERVICES FY 2017

- 109,153 permits issued
- 6,441 building, elevator and plumbing plans processed
- 6,386 refunds issued
- \$430,042 collected in past-due fees

PERMITS PROCESSED IN FY 2017



For more information visit www.dli.mn.gov/CCLD/PDF/Topic.pdf or (651) 284-5859.

Boiler and Pressure Vessel Inspection

PURPOSE

The Boiler and Pressure Vessel Unit protects public safety by ensuring that boilers and pressure vessels are safe to operate within buildings. They accomplish this by verifying that these devices meet the requirements of the American Society of Mechanical Engineer's boiler and pressure vessel codes and the National Board Inspection Code.

RESPONSIBILITY

The Boiler and Pressure Vessel Unit inspects new and existing boiler and pressure vessel installations, boiler appurtenances, investigates accidents and complaints, and issues registration certificates for more than 78,000 boilers and pressure vessels. The unit inspects and issues

permits for historical boilers, boats-for-hire that carry passengers, and audits ASME and National Board Stampholders. The unit is responsible for ensuring that all boilers are operated by properly licensed engineers.

Unit staff provide inspection and investigation services throughout all parts of Minnesota including the Twin Cities area.

The unit works closely with the insurance industry. The insurance industry inspects approximately 75 percent of the boilers and pressure vessels in the state and reports their inspection results to the department electronically.



Historical boilers

Sixty three historical boilers were inspected in FY 2017. These machines are boilers used only for display or demonstration purposes and are a working reminder of Minnesota's agricultural, transportation and lumber industries.



Boiler and pressure vessel inspectors

Each year CCLD's Boiler and Pressure Vessel staff inspects thousands of boilers, pressure vessels, boats-for-hire and historical boilers throughout Minnesota. All inspectors maintain a Chief A Boiler Operators License and international certification issued by the National Board of Boiler and Pressure Vessel Inspectors.

ACCOMPLISHMENTS

- Increased efficiency through additional inspector training and enhancements to computer systems.
- New online permit-application process for the installation of new boilers provides automatic electronic notifications to inspectors.
- The electronic transfer of inspection reports with 12 insurance companies eliminates the need for support staff to manually enter data.
- A recent software enhancement to the unit's inspection database program helps identify past-due inspections.

GOALS

- Provide inspectors with electronic tools to assist in mapping, planning and scheduling inspections in order to increase efficiency.
- Reduce the time inspectors spend performing data entry.
- Create a system to help reduce accidents by tracking violations and producing data for operators and manufacturers.

BOILER AND PRESSURE VESSELS FY 2017

- 788 initial installation inspections
- 3,543 annual boiler inspections
- 5,605 pressure vessel inspections
- 64 boat inspections
- 63 historical boiler inspections
- 25 triennial audits
- 4 investigations

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/Boiler.asp or (651) 284-5544.

For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

Building Plan Review

PURPOSE

The Building Plan Review Unit ensures that the construction of public buildings and state-licensed facilities complies with the Minnesota State Building Code so they are safe, accessible and energy efficient.

RESPONSIBILITY

The unit employs eight full-time review staff, one administrative specialist and a supervisor. Their primary duty is to review building plans for compliance with requirements related to fire and life-safety, structural integrity, accessibility, fire sprinklers, mechanical HVAC systems and energy conservation.

Duties include:

- Providing interpretations and opinions about the State Building Code to code officials, design professionals, owners, contractors and the public.
- Conducting preliminary meetings with design

professionals about proposed building projects to ensure compliance with the State Building Code.

- Providing training to code officials and architects about the State Building Code.
- Providing contractual plan-review services for municipalities on projects not under state jurisdiction.
- Coordinating with other government agencies to ensure consistent application of the code.

State-licensed facilities include:

- hospitals, nursing homes and residential hospices
- correctional facilities
- supervised living facilities
- free-standing out-patient surgical centers
- boarding care

Places of public accommodation include:

- Facilities designed for occupancy by 200 or more people and include sports or



Building plan review

Plan review staff are responsible for verifying that designs submitted for construction comply with the State Building Code.



Electronic plan review

ePlans Electronic Plan Review is a comprehensive system that streamlines the plan review process for architects, engineers and division review staff.

entertainment arenas, stadiums, theaters, community or convention halls, special event centers, indoor amusement facilities, water parks and swimming pools.

Public school district and charter school building projects include:

- Projects with a valuation of \$100,000 or more including schools, administration buildings, bus garages, stadiums, swimming pools, bleachers, field houses, domes, etc.

Public buildings include:

- All MNSCU projects (state colleges and vocational schools).
- All buildings, facilities and grounds paid for by the state or a state agency such as MnDOT and DNR.

ACCOMPLISHMENTS

- Assisted with adoption of the Minnesota State Building Code.
- Replaced two long-term employees who retired with industry-recognized experts.
- Worked closely with the State Fire Marshals Office to resolve conflicts and duplication of work for projects under CCLD jurisdiction.
- Implemented an electronic plan review program.

GOALS

- Reduce plan-review time and improve efficiency.
- Implement web-based plan review application and payment process.
- Provide training to users about code requirements for projects over which CCLD has jurisdiction.

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/PlanConstruction.asp or (651) 284-5857. For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

BUILDING PLAN REVIEW FY 2017

- 385 plans reviewed for public buildings and state-licensed facilities
- 63 preliminary plan review meetings with architects
- \$870 million in project valuation

Education, Rules and Code Development

PURPOSE

The purpose of the Education, Rules and Code Development Unit is to provide relevant training to ensure consistent, competent code enforcement and adopt codes that provide cost-effective, reasonable and uniform safety standards for the construction of buildings.

RESPONSIBILITY

The unit's five full-time staff each provide a unique function for CCLD. Their duties include education, code development and rule adoption.

Some of the unit's education duties include:

- Reviewing applications for building official, building official limited and accessibility specialist certifications. These certifications allow holders to administer the Minnesota State Building Code.
- Presenting a five-day training program for

applicants who have qualified for building official limited or accessibility specialist certification. This training is offered several times each year.

- Presenting building code seminars throughout Minnesota. These seminars help code officials, designers and contractors understand changes and those complicated or confusing parts of the code.

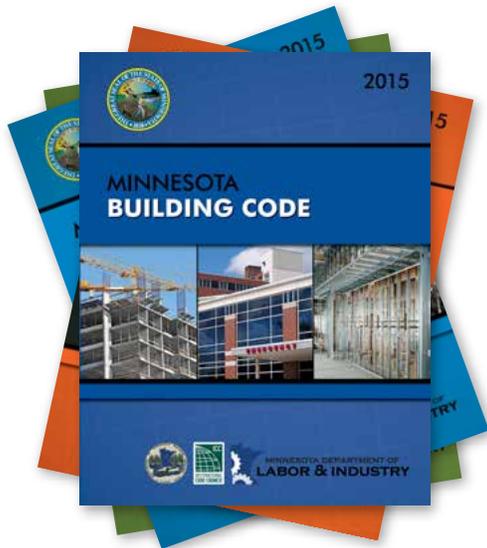
Some of the unit's responsibilities for code development and adoption include:

- Leading stakeholder workgroups to evaluate changes to model codes under consideration for adoption.
- Meeting with stakeholders to discuss code changes and determine if they are needed and reasonable.



Education

CCLD's Education Unit presents code seminars twice a year throughout Minnesota. These seminars, along with the unit's other education, outreach and codemaking duties, help keep builders, building officials, inspectors and others up-to-date with the most recent changes to the Minnesota State Building Code.



Code adoption

Staff are in the early stages of gathering information about codes that will be produced by the International Code Council for 2018.

- Drafting rules, statements of need and reasonableness and following the process prescribed in the Administrative Procedures Act for adopting codes.
- Assisting code committees that develop building codes at the national level.
- Attending committee meetings and testifying.

ACCOMPLISHMENTS

- Adopted 10 chapters of the State Building Code.
- Expanded Building Official Limited Course to five days.
- Developed three-year education plan.
- Presented at all Regional Building Official Chapter meetings.

GOALS

- Continue to provide building code seminars with subject matter relevant to the industry.
- Expand the Building Official Limited and Accessibility Specialist Training programs from three times each year to four, increasing attendance by 10 percent over the 2017-18 fiscal year.
- Develop a streamlined internal process for reviewing the 2018 ICC codes.

EDUCATION, RULES AND CODE DEVELOPMENT FY 2017

- Presented to 2,196 stakeholders during 74 educational presentations.
- Responded to more than 8,450 phone calls and emails from stakeholders
- Reviewed 428 continuing education courses.

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/Education.asp or (651) 284-5884.
For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

Electrical Inspection

PURPOSE

The Electrical Inspection Unit protects public safety by providing inspection services on residential, commercial and industrial electrical installations to ensure they meet safety standards of the National Electrical Code.

RESPONSIBILITY

The goal of the Electrical Inspection Unit is to ensure electrical installations meet code standards for safe operation and provide outreach and education to homeowners, municipalities and other stakeholders including more than 21,000 licensed electricians and 11,000 registered unlicensed individuals.

The unit is also responsible for reviewing and approving applications for unlisted electrical equipment and developing examination content

for all classes of personal electrical licenses.

CCLD's Electrical Inspection Unit has 15 full-time staff. DLI contracts with 73 electrical inspectors who complete more than 100,000 electrical inspections each year.

ACCOMPLISHMENTS

- eTRAKiT version three – an online application that allows contractors and homeowners to apply for and pay for electrical permits instantly – was successfully deployed in 2015.
- Alternative energy systems, including solar photovoltaic, have increased dramatically in recent years. Staff completed inspections on a community solar garden near the Twin Cities that encompasses 800 acres of land with 440,000 ground-mounted solar panels.



Inspections

CCLD's electrical inspectors performed more than 150 inspections during the construction of U.S. Bank Stadium. The home to the Minnesota Vikings includes thousands of miles of electrical wiring.



Solar photovoltaic arrays

For the past decade, the popularity of solar energy has been growing rapidly worldwide. In FY 2017, the Electrical Inspection Unit conducted nearly 2,070 inspections of more than 650 solar installations, boosting the state's current solar capacity to more than 450 megawatts.

GOALS

- Continue to successfully manage the electrical licensing, inspection and code challenges associated with the expanding deployment of solar photovoltaic installations.
- Continue to reduce the number of expired permits by proactively notifying permit holders.
- CCLD's near-term goal is to have 90-percent of permits obtained electronically with a future goal of 100-percent of permits obtained online.

ELECTRICAL INSPECTION FY 2017

- 104,849 electrical permits issued
- 158,086 electrical inspections performed
- 73 Minnesota contract inspectors managed by the Electrical Inspection Unit

ELECTRICAL PERMITS



Homeowners and contractors can use eTRAKIT to apply for, track and pay for permits online instantly:
www.dli.mn.gov/cclcd/etrakit.asp.

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/Electrical.asp or (651) 284-5026.
For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

Elevator Inspection

PURPOSE

The Elevator Inspection Unit ensures that elevators, escalators, lifts and related devices are installed and maintained to function as intended to keep the public safe.

RESPONSIBILITY

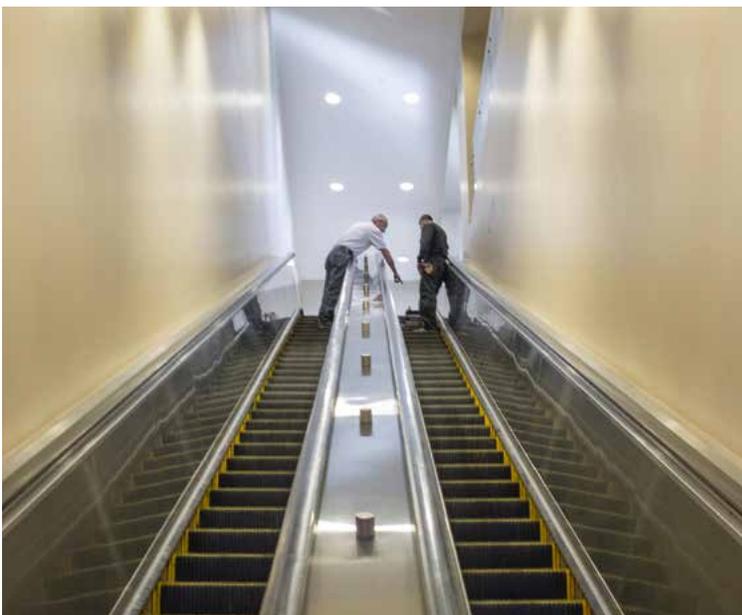
To ensure that elevators and related devices are safe, the unit inspects new and altered elevators for compliance with adopted safety codes. Elevator inspectors also conduct periodic safety inspections of elevator and related devices throughout Minnesota that are issued annual operating permits.

The unit employs 17 experienced and nationally certified inspectors to provide inspection and

investigation services for all elevators in the state, with the exception of Minneapolis and St. Paul which employ their own inspectors. In addition to inspecting elevators and related devices, the unit investigates elevator accidents, complaints and takes action when unsafe equipment is found.

ACCOMPLISHMENTS

- Electronic permitting system launched in February 2015.
- A new software enhancement to the unit's database program helps identify required inspections.
- Efficiencies have steadily increased through staffing and the use of new technology that helps to prioritize inspections.



Inspections

In addition to passenger elevators, the unit inspects freight elevators, hand-powered elevators, dumb waiters, escalators, moving walks, vertical reciprocating conveyors, stage and orchestra lifts, endless belt lifts, wheelchair lifts, stairway chair lifts and other related devices.



Elevators

Inspections are required for anyone desiring to install, relocate, alter or remove an elevator or related device. Tests are conducted to prove the safe operation of the installation. In addition to the national certification, inspectors must carry appropriate elevator licensure to conduct the inspections.

GOALS

- Reduce a backlog of periodic inspections through the use of technology enhancements that have been made over the last year with a plan to target specific areas.
- Achieve a paperless permit rate closer to 100 percent. Permits filed electronically are processed quickly and communication about the status of a permit is instantaneous.

ELEVATOR PERMITS



ELEVATOR INSPECTION FY 2017

Inspections

- 1,904 new installations
- 1,425 alterations
- 4,083 periodic inspections

Investigations

- 162 accidents
- 35 complaints
- 104 damaged equipment

Permits

- 1,781 new installations
- 1,002 altered units
- 348 repaired units
- 247 removed units

Operating permits

- 16,638 issued

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/Elevator.asp or (651) 284-5071.
For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

Enforcement

PURPOSE

The Enforcement Unit protects the public by holding contractors accountable when they perform poor work or engage in deceptive or dishonest business practices. Enforcement investigators also work to educate licensees and consumers in order to increase compliance with the laws intended to provide consumer protection.

RESPONSIBILITY

The Enforcement Unit investigates complaints and other allegations against individuals and companies licensed by, or that are required to be licensed by, the department. The unit also investigates worker misclassification in the construction industry.

The unit employs 14 investigators, a supervisor and an administrative assistant. Most investigators work on cases in a specific trade, though all are

trained and capable of handling cases involving any of the trades CCLD regulates. Staff also provide consumer education and outreach to licensees and other groups.

ACCOMPLISHMENTS

- Enhanced the department's ability to regulate the misclassification of workers in the construction industry.
- Investigators successfully reduced operations of two large home-improvement contractors, enabling homeowners to get projects completed or obtain financial compensation from the Contractor Recovery Fund.
- The fostering of relationships with the Minnesota Department of Commerce's Insurance Fraud Bureau and local law enforcement agencies have increased the agency's impact on contractor misconduct.



Enforcement

While the primary function of the Enforcement Unit is investigating complaints and initiating disciplinary action when warranted, the unit's goal is to achieve compliance through education about the governing laws.



License enforcement

The Enforcement Unit opens more than 2,000 investigations each year related to violations of state laws and rules in the construction industry.

GOALS

- Continue to explore and implement process improvements to increase the unit's efficiency.
- Increase outreach to stakeholders to provide greater consumer education and assist licensees in compliance efforts.

ENFORCEMENT FY 2017

Percentage of cases that resulted in enforcement action

- Residential building contractors: 29%
- Worker misclassification: 59%
- Electrical: 36%
- Plumbing: 51%

Orders issued

- Residential building contractors: 211
- Worker misclassification: 240
- Electrical: 101
- Plumbing: 86

ENFORCEMENT TRENDS

Investigations conducted each year



Penalties collected*



*Penalties are deposited into the Assigned Risk Safety Account.

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/Enforcement.asp or (651) 284-5069. For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

High-Pressure-Piping Inspection

PURPOSE

The High-Pressure-Piping (HPP) Inspection Unit ensures that HPP systems are installed according to adopted safety standards and are safe for building occupants.

RESPONSIBILITY

The duties of the unit's four inspectors include:

- Inspecting high-pressure steam, ammonia refrigeration, bioprocess and high-pressure/high-temperature heating media piping systems.
- Conducting inspections of existing HPP systems upon request to ensure safe operating condition.
- Providing technical support to contractors and owners of HPP systems for code-compliant design and installation.
- Investigating HPP system failures and anhydrous ammonia releases from refrigeration systems.
- Providing technical assistance.
- Determine through permitting and inspections that properly licensed HPP contractors and pipefitters are constructing and installing HPP systems.



High-pressure piping

The High-Pressure-Piping Inspection Unit inspects all steam systems that operate over 15psi, ammonia refrigeration, high-pressure/high-temperature heating media and bioprocess piping systems in Minnesota, except federal facilities and in Minneapolis and St. Paul which have municipal inspection agreements. These systems are installed in power-generating plants, college campuses, petrochemical refineries, ice arenas and many other industrial and commercial facilities.



Important safety checks

All high-pressure-piping inspectors possess American Welding Society Certified Welding Inspector certification. The licensed pipefitters and apprentices who weld on these critical piping systems must have welding certifications along with employer welding procedures on each jobsite for review by inspection staff.

HIGH-PRESSURE PIPING FY 2017

- 1,076 inspections
- 438 permits
 - 215 standard permits
 - 111 blanket/maintenance permits
 - 112 time/materials permits

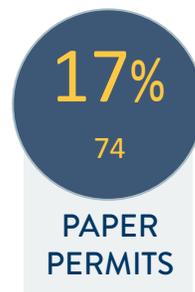
ACCOMPLISHMENTS

- Eighty-three percent of HPP permits were issued through the eTRAKiT online permit system.
- An upgraded version of eTRAKiT was successfully deployed in February 2015.
- As a result of efficiencies gained through online permit issuance, inspectors receive notification of projects several days earlier than those applied for via U.S. mail.

GOALS

- Implementation of new safety standards adopted by the Board of High-Pressure Piping.
- Increase the use of eTRAKiT online permits.

HIGH-PRESSURE-PIPING PERMITS



FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/HPP.asp or (651) 284-5238.
For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

Licensing and Certification

PURPOSE

The Licensing and Certification Unit protects public safety by ensuring that construction professionals have the necessary skills and experience to make buildings functional and safe. Maintaining a strong system of examinations and licensing is essential in this effort.

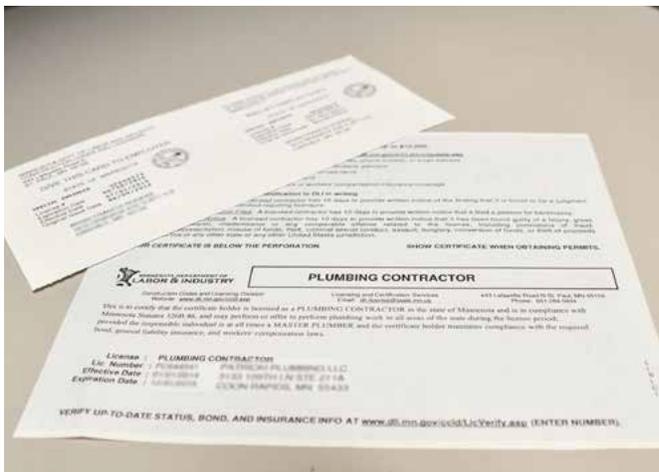
RESPONSIBILITY

The Licensing and Certification Unit assists applicants and licensees with obtaining and renewing licenses as quickly and easily as possible. All licenses may now be obtained and renewed online, greatly increasing the ease of applying.

The Licensing and Certification Unit employs 15 staff who process license applications and renewals for business and personal licenses for the building construction and safety fields. Staff also administer pre-licensing exams at seven sites throughout Minnesota.

ACCOMPLISHMENTS

- Efficiencies gained in electronic license applications and renewals have resulted in faster turnaround time for license processing as well as a reduction in license fees.
- Moving to a continuous bond eliminates the need for business licensees to submit a paper bond to DLI every two years. This results in less work for licensees, insurance agents and staff.
- Improvements to DLI's online business license renewal process greatly reduces the need for the submission of paper forms, making the license renewal process simpler and faster.
- DLI's legislative initiatives enabled:
 - Reduced license fees.
 - Uniform bond language across license types.
 - Continuous bonds eliminated the need for businesses to submit a new bond with each license renewal.



Licenses

CCLD staff strive to improve the services it provides to make obtaining licenses, registrations and certifications as easy as possible. Recent improvements include continuous bonds for business licensees and paperless online renewals, in addition to across-the-board fee reductions.



Exams

CCLD develops and administers 36 different exams across nine skilled trades. All exams are offered weekly at DLI's offices in St. Paul, and every two months at six locations around the state. Exams are critical to establishing a minimum level of competency for individuals seeking licensure in the construction industry.

GOALS

- Implementation of a completely paperless license renewal system for business licenses.
- Printing of licenses on durable plastic cards.
- Allowing licensees to view data relating to continuing education courses they have completed.

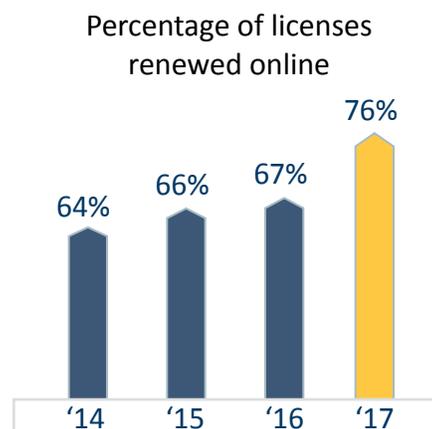
LICENSING FY 2017

- 7,086 exams administered
- 17,070 new licenses issued
- 58,501 licenses renewed

EXAM LOCATIONS



ONLINE LICENSE RENEWALS



HOW CAN WE HELP? Visit www.dli.mn.gov/CCLD/Forms.asp or for business licenses call (651) 284-5034. For personal licenses call (651) 284-5031.

Manufactured Structures

PURPOSE

The Manufactured Structures Unit ensures that manufactured housing and prefabricated structures are designed and constructed to comply with state and federal safety standards.

RESPONSIBILITY

The Manufactured Structures Unit employs four full-time code representatives, a supervisor and an administrative assistant. Code representatives review and inspect work for structural, mechanical, plumbing, electrical and accessibility for the codes of Minnesota and other states as well as federal housing construction codes and regulations.

Minnesota's Manufactured Housing Program began in 1972 and the Housing and Urban Development's (HUD) Manufactured Housing Program began in 1976. Responsibilities include enforcing Minnesota Rules Chapter 1350 and HUD's Code of Federal Regulations.

The Manufactured Structures Unit enforces the HUD Manufactured Housing Program and is the State Administrative Agency (SAA) for the program.

Minnesota's Prefabricated Buildings Program started in 1972. Responsibilities include enforcing Minnesota Rules Chapter 1360. These are single-family dwellings and utility buildings that are usually constructed by lumberyards, trade schools or shop classes.

The Industrialized Modular Building Program began in 1993. Responsibilities include enforcing Minnesota Rules Chapter 1361.

Duties include:

- Reviewing plans, system designs and quality-assurance programs for compliance with state(s) and federal code programs for 14 modular and four HUD manufacturers in Minnesota and those shipping into Minnesota.



Manufactured homes

Manufactured homes are built to Federal HUD Standards. Four manufacturers in Minnesota build HUD units and ship them to 14 states. (Photo: Dynamic Homes www.dynamichomes.com)

Prefabricated, industrialized modular buildings

Buildings can be of any type of construction and occupancy that is permitted by the State Building Code. Minnesota has 14 production plants and receives buildings from 22 other states.



- Auditing manufacturers for the Interstate Industrialized Building Commission (IIBC) and HUD programs.
- Providing plan review and inspection services for schools that construct houses.
- Inspecting Minnesota plants and lumber yards that produce modular buildings for Colorado, Indiana, Minnesota, Montana, North Dakota, South Dakota, Wyoming and Wisconsin.
- Reviewing manufactured home consumer complaints for the HUD program.
- Providing training for building officials, trade organizations and manufacturers' production staff.

ACCOMPLISHMENTS

- All staff certified as (IIBC) inspectors and plan reviewers.
- Certified all manufacturing plants in Minnesota for (IIBC) requirements.
- Completed HUD-SAA audits at all HUD manufacturing plants in Minnesota.
- Provided training programs for IIBC production line staff, Minnesota Manufactured Housing Association, building official groups and IIBC third party agencies.
- Resumed random auditing of licensed and limited-licensed manufactured home dealers.

GOALS AND INITIATIVES

- Ensure all IIBC manufacturers maintain quality assurance programs and systems designs with 100-percent approved documentation.

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/Manufactured.asp or (651) 284-5092. For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactus.asp.

MANUFACTURED STRUCTURES FY 2017

IIBC

- 234 in-plant inspections
- 14 plant certifications maintained
- 2 records audits
- 397 plan reviews
- 106 system reviews
- 2 on-site complaint inspection
- 716 labels issued

Prefabricated

- 34 plan reviews
- 79 site inspections
- 25 labels issued

HUD

- 4 in-plant audits
- 12 dealer lot audits
- 7 home complaint inspections
- 1 installer audit
- 521 installation seals issued

Plumbing Inspection

PURPOSE

The Plumbing Inspection Unit ensures plumbing installations protect public health and safety. This occurs through the inspection of new and altered plumbing systems for compliance with the Minnesota Plumbing Code

RESPONSIBILITY

The Plumbing Inspection Unit employs six full-time staff and one intermittent employee to inspect plumbing installations in schools, hospitals, public buildings and licensed health care facilities. Staff also inspect plumbing installations in many small communities and rural areas that do not have inspection staff. These include many businesses, resorts and campgrounds.

Staff provide outreach and education to designers, municipalities and other stakeholders. They provide technical assistance to cities about plumbing code and licensing enforcement and technical assistance and expertise to the

Education Unit for training of building officials. In addition, they provide continuing education opportunities for licensed plumbers, apprentices and registered unlicensed individuals.

Field inspections verify compliance with plans and ensure the materials and methods comply with the Minnesota Plumbing Code. This occurs by performing a series of rough-in and final inspections on each new or remodeled building. Inspectors ensure:

- Backflow preventers are installed to protect the water supply from contamination.
- Correct water and drain pipe and fittings are installed for proper function.
- Drain and vent pipes are installed to prevent sewage back-ups and sewer gas.
- Roof drains are installed as designed to prevent building damage or collapse.
- Water and drainage systems are tested to ensure systems don't leak.
- Building water supplies are disinfected and flushed to prevent contamination.



Plumbing inspection

Plumbing inspections help ensure that plumbing systems are constructed properly and meet all health and safety standards.



Plumbing inspection

State plumbing inspectors visit construction sites to verify compliance with the Minnesota Plumbing Code. Visual inspections verify that correct materials and methods have been used to construct the plumbing system.

ACCOMPLISHMENTS

- Efficiencies gained through electronic permit and inspection have helped provide timely inspections for schools, hospitals and other projects inspected by the department.
- Provided local inspector training about the Minnesota Plumbing Code.
- While the number of plumbing inspections has continued to increase since 2012, inspectors have provided uninterrupted customer service.

GOALS

- Assist plumbing contractors with the transition from the previous plumbing code to the new code.
- Increase the use of technology in the field to provide inspectors immediate access to plans and other information related to the inspection, as well as quickly create a record of the inspection results. This will allow a more efficient process for conducting and recording inspections.
- Implement an online permitting system.

PLUMBING INSPECTION FY 2017

- 4,987 inspections performed
- 895 permits issued

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/PlumbingInspect.asp or (651) 284-5063. For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactus.asp.

Plumbing Plan Review

PURPOSE

The Plumbing Plan Review Unit ensures plumbing systems protect public health and safety by reviewing plumbing plans and verifying they comply with the safety and health standards of the Minnesota Plumbing Code.

RESPONSIBILITY

The unit's eight full-time staff review plans submitted by licensed master plumbers and engineers.

Plumbing plans must be submitted for all plumbing systems that serve the public. These include, but are not limited to:

- restaurants,
- grocery stores,
- department stores,
- offices,
- warehouses,
- churches,
- hospitals,
- nursing homes, and
- residential housing with five units or more.

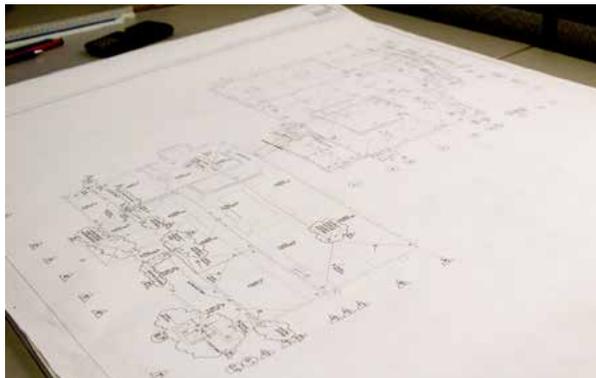
Plan review includes evaluating all interior plumbing, sewer and water service connections within the property lines and storm-water-drainage systems. Some items reviewed include:

- adequate pipe size,
- proper pipe connections,
- approved pipe material,
- fixture specifications, and
- backflow prevention devices.

Staff coordinate with architects, engineers, plumbers, inspectors and project owners to ensure that plumbing systems are designed properly. Doing so ensures that plumbing systems are safe, sanitary and protect public health.

ACCOMPLISHMENTS

- Implemented ePlans Electronic Plan Review.
- Assisted in developing the new Minnesota Plumbing Code.
- Streamlined an internal plan review process allowing work on projects to begin sooner.
- Participated in a Water Reuse Interagency Workgroup to ensure regulation of water



Plumbing plan review

Engineers review plumbing plans for compliance with the Minnesota Plumbing Code. Plans submitted to DLI must be signed by an engineer registered in Minnesota or by a licensed master plumber.



ePLANS

Electronic plan review allows on-screen markup and comments which are immediately available for viewing by the designer. Corrections are made and resubmitted electronically until approved. This saves the time and expense of printing and mailing paper plans.

- reuse is coordinated, safe and sustainable.
- Coordinated with the Minnesota Pollution Control Agency to update statutes relating to work on building sewers.

GOALS

- Increase the use of electronic plan review technology for review of plumbing plans. This technology will gradually replace paper plans and will significantly reduce the time required to approve plans. The Plumbing Plan Review Unit's 2016 launch of ePlans – an electronic plan review platform – is helping speed the submittal and review process of plumbing plans.
- Reduce turnaround time for review of plumbing plans.

PLUMBING PLANS SUBMITTED

The number of plumbing plans submitted annually for review averages more than 2,500.



FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/PlanPlumbing.asp or (651) 284-5063. For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactus.asp.

State Building Inspection, Regional Services

PURPOSE

The Building Inspection and Regional Services Unit ensures that public buildings and state-licensed facilities are safe, accessible for the disabled and energy efficient. These include public and charter schools, nursing homes, hospitals, prisons, free-standing outpatient surgical centers, supervised living facilities and buildings built for the Minnesota Department of Natural Resources and Minnesota Department of Transportation.

Inspectors verify that buildings are constructed in accordance with plans previously reviewed and approved by CCLD specialists for compliance with the Minnesota State Building Code. This includes structural integrity, fire and life safety, accessibility, mechanical systems, energy conservation and fire sprinklers.

RESPONSIBILITY

The unit employs six full-time regional building

officials, four full-time code administrators and a supervisor.

Duties include:

- Inspection of public buildings and state-licensed facilities.
 - Assisting jurisdictions with administration of the State Building Code.
 - Evaluating applications submitted by municipalities for delegation of public buildings and state-licensed facilities.
 - Providing tailored education/training to building departments.
 - Assisting contractors, homeowners, design professionals and building officials with code-related questions.
 - Investigating complaints about municipal administration of the State Building Code.
 - Providing disaster response and assisting municipalities with disaster assessment.
- Work with building officials and Homeland



Assurance

Building inspections ensure safe, accessible and energy-efficient buildings.



Inspections

Regional building officials provide inspections beginning at the footings and continuing through all stages of construction to final building occupancy.

Security and Emergency Management (HSEM) regarding disaster preparedness.

- Assisting non-code enforcing municipalities with information about the State Building Code. This includes presentations to city councils, county and township boards, and other associations about the benefits of the State Building Code.

ACCOMPLISHMENTS

- Worked closely with the building inspection industry and League of Minnesota Cities to implement a new process for the application and delegation of state projects.
- Assisted with adoption of the State Building Code.
- Worked with industry, Homeland Security and Emergency Management to update a Disaster Assistance Manual.
- Continued involvement with the code-enforcement industry to achieve uniformity in the administration of the State Building Code.

GOALS

- Implement an online permitting system.
- Find and implement field-compatible technology for viewing plans and recording inspection results.

BUILDING INSPECTION, REGIONAL SERVICES FY 2017

- 378 permits issued
- \$639 million in project valuation
- 5,027 inspections performed
- 84 code investigations
- 77 municipal reviews for delegation of state projects

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/Regional.asp or (651) 284-5857.
For a list of staff visit www.dli.mn.gov/CCLD/CCLDContactUs.asp.

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Contractor Recovery Fund

PURPOSE

The Contractor Recovery Fund is administered by DLI to compensate owners or lessees of owner-occupied residential property in Minnesota who have suffered an actual and direct out-of-pocket loss due to a licensed contractor's fraudulent, deceptive or dishonest practices, conversion of funds or failure of performance.

ACCOMPLISHMENTS

- Contractor Recovery Fund application materials were streamlined from a 21-page document to 12 pages.
- The payout amount allowed for each licensed contractor was increased from \$150,000 to \$300,000.

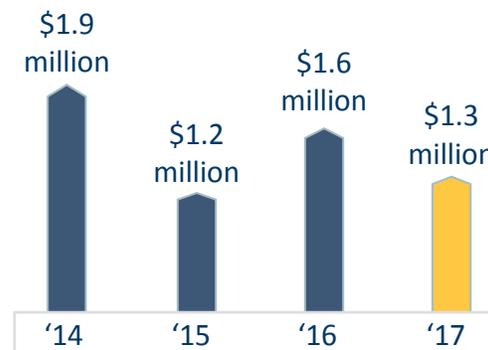
- The fee paid by licensees to cover the cost of the fund was reduced, lowering the cost of licensing for residential building contractors and remodelers.

GOALS

- Increase education and outreach efforts about the fund through presentations to building officials, inspectors and other groups with connections to the residential construction industry.
- Increase the viability of the fund through legislative initiatives.

FUND PAYOUTS

Amount paid to homeowners from the Contractor Recovery Fund



Recovery Fund

The Contractor Recovery Fund is supported by fees paid by licensed Minnesota residential building contractors. Those who qualify may be compensated up to \$75,000 for direct, out-of-pocket losses. The maximum payout for any one licensed contractor was recently increased from \$150,000 to \$300,000.

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/RBCRecovery.asp or (651) 284-5057.

Contractor Registration

PURPOSE

The Contractor Registration Program was created by the legislature in 2012 as a tool to help DLI and other state agencies investigate worker misclassification in the construction industry. Misclassification occurs when an employer treats its workers as independent contractors when they should be treated as employees. Misclassified employees are not protected by workers' compensation or unemployment insurance, nor are they protected by wage and hour laws that govern the employer-employee relationship.

PROGRAM

All companies and individuals that perform commercial and residential building construction or improvement services are required to register in the Contractor Registration Program if they are not required to be licensed by DLI. The penalty for working without being registered is forgiven if the contractor becomes registered within 30 days. The penalty for hiring an unregistered subcontractor is forgiven for the first violation.

CCLD's Enforcement Unit has four full-time staff who investigate worker misclassification cases. Two of these investigators were added in 2014 to enhance DLI's ability to regulate the classification of workers in the construction industry. These investigators use subpoenas to gather information about business relationships among general contractors and the various tiers of their subcontractors. Contractors who fail to comply with DLI subpoenas are subject to the suspension of their license or registration and a fine.

ACCOMPLISHMENTS

- Enhanced the department's ability to prevent the misclassification of workers in the construction industry.

GOALS

- Continue to identify workers of registered businesses who are being misclassified as independent contractors.
- Continue sharing investigative findings with DEED and the Minnesota Department of Revenue.

CONTRACTOR REGISTRATION FY 2017

- 16,991 registered contractors
- 406 investigations opened
- 240 enforcement orders issued
- 195 active cases

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/register.asp or (651) 284-5074.

Home Warranty Dispute Resolution Process

PURPOSE

The Home Warranty Dispute Resolution Process (HWDRP) was created by the legislature in 2010 in response to concerns that the costs of litigating home warranty disputes between homeowners and builders was becoming too costly and time consuming. In 2011, DLI convened a work group including homeowners, builders, insurance companies and attorneys to explore alternatives to litigation. The framework of the HWDRP was the result of the work group’s discussions.

PROGRAM

Under the HWDRP section of the state’s home warranty law, a homeowner cannot sue their builder unless they have applied to use the HWDRP. The builder is not required to participate, and the homeowner is free to sue if the builder declines to participate. The HWDRP consists of a panel of 28 “neutrals” who are available to evaluate homeowner claims. The individuals have significant experience in residential construction defect analysis and litigation.

When a homeowner submits an application to the HWDRP, DLI selects three neutrals from the panel and provides their information to the homeowner and builder. The parties select a neutral and then each provides all of their information to the neutral for evaluation. Within 30 days, the neutral schedules a conference, usually at the home in question, and allows both parties to present their case.

Following the conference, the neutral issues a written determination providing an analysis of how the neutral believes the case would turn out if it went to litigation. The determination is not binding and cannot be used in any subsequent litigation. Its purpose is to allow the parties to reevaluate their positions and open the door to settlement negotiations. The neutral charges an hourly rate for their work and the parties split the cost.

ACCOMPLISHMENTS

- Although the number of cases handled by the HWDRP is low, it has been helpful in enabling some homeowners and builders avoid the costs and headaches involved in litigation.

GOALS

- Explore ways to increase the visibility of the HWDRP among legal professionals.

HOME WARRANTY DISPUTE RESOLUTION PROCESS FY 2017

- 3 cases opened
- 0 determinations issued
- 0 cases settled by a “neutral”
- 3 builders declined to participate
- 0 other conclusions

FOR MORE INFORMATION: Visit www.dli.mn.gov/CCLD/ene.asp.

Boards and Councils

BOARD OF HIGH-PRESSURE PIPING

The Board of High-Pressure Piping Systems was created by the 2007 legislature under the statutory authority of Minnesota Statutes 326B.925.

The Board of High-Pressure Piping:

- adopts the high-pressure piping code and amendments,
- reviews requests for final interpretations,
- adopts rules – with the exception of rules regulating continuing education – regulating the licensure and registration of high-pressure piping contractors, journeymen and other persons engaged in the design, installation and alteration of high-pressure-piping systems, and
- advises the commissioner of the Department of Labor and Industry regarding educational requirements for high-pressure piping inspectors.

The board has 13 members, including the commissioner of the Department of Labor and Industry and 12 members appointed by the governor.

BOARD OF ELECTRICITY

The Board of Electricity is under the statutory authority of Minnesota Statutes 326B.32.

The Board of Electricity:

- adopts the electrical code, including any amendments,
- adopts rules that regulate the licensure or registration of electrical contractors, master electricians, journeyman electricians, class A and B installers, power-limited technicians and other persons who perform electrical work,
- issues final interpretations of the electrical code, and
- adopts rules that regulate the continuing education for individuals licensed or registered as electrical businesses, electrical contractors, master electricians, journeyman electricians, class A and B installers and power-limited technicians.

The board has 11 members that are appointed by the governor.

PLUMBING BOARD

The Plumbing Board is under the authority of Minnesota Statute 326B.435

The Plumbing Board:

- adopts the plumbing code, including any amendments,
- adopts rules that regulate the licensure or registration of plumbing contractors, journeymen, unlicensed individuals, master plumbers, restricted master plumbers, restricted journeymen, restricted plumbing contractors, backflow prevention rebuilders and testers, water conditioning contractors, water



Boards and Councils

The State Appeals Board conducts appeals for jurisdictions without a board or those that could not meet the time period requirement in the rule. The Plumbing Board, Board of High-Pressure Piping Systems, Board of Electricity and the Construction Codes Advisory Council meet quarterly.

conditioning installers and other persons engaged in the design, installation, and alteration of plumbing systems or engaged in or working at the business of water conditioning installation or service or engaged in or working at the business of medical gas system installation, maintenance or repair,

- adopts rules that regulate continuing education for individuals licensed as master plumbers, journeyman plumbers, restricted master plumbers, restricted journeyman plumbers, water conditioning contractors and water conditioning installers, and
- issues final interpretations of the Plumbing Code.

The Plumbing Board has 14 members. Twelve members are appointed by the governor, one member is designated by the commissioner of DLI and one member is designated by the commissioner of the Minnesota Department of Health (MDH). All members are voting members except the MDH designee.

CONSTRUCTION CODES ADVISORY COUNCIL

The 2008 legislative session reestablished the Construction Codes Advisory Council (CCAC) to review laws, codes, rules, standards and licensing requirements relating to building construction.

The council may recommend ways to eliminate inconsistencies, streamline construction regulation and construction procedures and improve procedures within and among jurisdictions. The council may also review and comment about current and proposed laws and rules to promote coordination and consistency and advise agencies on possible changes in rules to make them easier to understand and apply, and also promote the coordination, within each jurisdiction, of the administration and enforcement of construction codes.

STATE APPEALS BOARD

The State Appeals Board, under Minnesota Rule Chapter 1300.0230, was established to hear appeals of orders, decisions or determinations made by a municipal building official when the municipality does not have a board of appeals or when a local appeals board cannot hear the appeal within 10 working days of receiving an application.

The board consists of CCLD staff members qualified by experience and training to interpret the State Building Code in matters relating to building construction.

FOR MORE INFORMATION: Visit www.dli.mn.gov/Boards.asp.

Minnesota Department of Labor and Industry
Construction Codes and Licensing Division
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www.dli.mn.gov/CCLD.asp