

Freight Railways Ordinance
Frequently Asked Questions, Version 6-2-2023

1) What does the ordinance require?

- A pre-application meeting with CPD and supporting agencies before applying for a zone use permit for a residential, commercial, campus, or sensitive use within 100 feet of freight railroad ROW (Freight Railway).
- Any permit for a major commercial or residential renovation or business license within 100 feet of freight railroad ROW requires approval from CPD, DDPHE, DOTI, DFD, OEM and other agencies or departments deemed necessary.
- CPD may only issue a zone use permit for a residential, commercial, campus, or sensitive use within 100 feet of freight railroad ROW if the applicant produces:
 - Analysis of emergency vehicle access to the freight rail ROW adjacent to the permitted use, conducted by DFD;
 - Evacuation plan, including shelter-in-place plan, for the structure approved by DFD;
 - Documents demonstrating:
 - Structural reinforcement of buildings; or
 - Elevation of finish floor above freight rail ROW grade; or
 - Berms or walls between structure and freight rail ROW; or
 - Other mitigations that provide equivalent safety to reduce effect of derailment, chemical release, or fire.
 - A zone use permit for a temporary shelter within 100 feet of a freight railway requires an evacuation plan including shelter-in-place approved by DFD.
- CPD, in consultation with other agencies, promulgate rules and regulations necessary for implementation.
- Requires annual reporting starting 2024 from CPD to City Council of permits issued and mitigations approved pursuant to this article, and permits denied and grounds for denial.

2) Does the HNTB/CCD freight rail safety study report recommend the requirements that are in the bill?

- Yes, in Chapter 8, Suggested Guidelines and Considerations, guidelines, or requirements for new development, top of page 8-2.

3) Why doesn't the ordinance implement the other recommendations in the HNTB/CCD report besides land use?

- Denver and its departments and agencies do not need new authority to implement other recommendations in the HNTB report. They may need staff, budget and for some mitigations, grants. DOTI, for instance, has indicated they intend to pursue grade crossing improvements and potential grade separation.
- Denver departments and agencies that review zone use permits for development close to railways **do need** new authority to require mitigation of risks from freight rail to development near railways, which the ordinance is intended to provide.

4) What changed in the draft ordinance since the last HNTB draft report in March?

- What was previously Section 432 was completely changed from Application Requirements to Pre-Application Meeting, upon suggestion from development stakeholders.
- Requirements were removed to attest to having reviewed the 2016 Report by the Mayor's Railroad Safety Working Group and list of efforts made to mitigate risks in the previous Section 432.
- Analysis of emergency vehicle access and evacuation plan or procedure from the previous Section 432 was moved to new Section 433, Application Requirements.
- The previous Section 434, Council Requirements, for Council to adopt standards based on the HNTB report, was removed, and replaced with the land use mitigation recommendations made in the HNTB final report, in new Section 433, Application Requirements.
- New Section 433 requires an application for permit for a major commercial or residential renovation or business license within 100 feet of a railway must be approved by DDPHE, DOTI, DFD, OEM and other agencies deemed necessary.
- New Section 433 provides that a zone use permit for the specified uses within 100 feet of railway may only be issued if the applicant complies with the requirements in paragraph (b) (EV access, evacuation plan including shelter-in-place, selected safety mitigation option).
- New Section 433 provides that a zone use permit for a temporary shelter within 100 feet of a railway requires an evacuation plan including shelter-in-place.
- New Section 434 requires rules and regulations as necessary for implementation.
- New Section 435 provides annual reporting requirements.
- Definition of sensitive use was added to Section 431, temporary shelter facility is removed from sensitive use and definitions were added for major commercial and residential renovations.
- Sunset provision in old Section 435 was removed.

5) What is the basis of the 100-foot set back from freight rail, how is it measured, and what about light rail and tracks?

- 100 feet is measured from the freight rail right of way, per proposed ordinance definition of Freight Railway in Sec. 10-431 (a) and Sections 10-432 & 10-433. This is consistent

with 30-meter (98.43 feet) requirements in Calgary and in the Federation of Canadian Municipalities/Railway Association of Canada Guidelines for New Development in Proximity to Railway Operations, which are implemented across Canada.

- 30-meter set back is reported from Canada to be a distance longer than 96% of freight rail cars, to reduce chances of building strikes from derailment. It also increases space to deal with hazmat releases and incidents involving flammable liquids.
- Light rail tracks between freight rail and protected properties count towards the 100-foot set back. The ordinance does not apply to properties adjacent to light rail tracks because light and commuter rail in Denver are typically only 1-4 railcars long, are powered by overhead electrical lines and don't carry hazardous fuel, and don't haul hazardous materials cargo.

6) The HNTB/CCD recommendations indicate the land use mitigations are for medium term, a 1-5 year timeframe. Why is the ordinance being proposed now in the short term?

- To bring land use mitigations online in a 1 to 5 -year timeline requires enacting the ordinance and likely subsequent rulemaking(s) and implementation into the 1 to 5 -year period.
- The HNTB January 2023 draft report had land use mitigations in the short-term time period, indicated as “can be implemented relatively quickly”. The final draft and final report moved them to medium term, better reflecting they “require some project planning and funding”.

7) The HNTB/CCD report recommendations call for development of requirements or guidelines to be informed by peer city research, an analysis of impacts and costs on development, and stakeholder outreach. Shouldn't we wait for that?

- These are all appropriate considerations for rulemaking after passing the ordinance. The six-figure consultant engineering report from HNTB identified commonly known land use mitigations for protected uses from freight rail: Separation from freight railway main lines; structural reinforcement of building; grade separation; wall or barrier. The ordinance provides for alternatives to these mitigations if they provide equivalent protection. Detailed requirements for these mitigations should be clarified in agency rulemaking.
- The mitigation type Denver cannot use readily is limiting building width to reduce risks as Calgary, Alberta does. This is done based on the annual risk of freight rail causing a fatality for any property along all of Calgary's freight rail corridors. Denver does not have the risk values needed for this due to study budget limitations. There is nothing precluding Denver from generating such risk -based evaluation in the future or applicants doing the same for particular parcels next to the railway.
- In the 2016 Mayor's Working Group on Rail Safety, we made inquiry about US cities that had development guidelines or requirements to mitigate the risk of a rail incident for development near freight rail. This included outreach to NLC, Fire Chief's Association,

and UP and BNSF Railroads. We learned the only place this had been done was in Canada, before and especially after the Lac Megantic train disaster in 2013. We are not aware of, and HNTB did not report on any comprehensive approach in other US cities, like what we are attempting to do.

8) Why are at-grade crossings addressed so much in the HNTB/CCD report?

- Identification of risks and mitigations from at-grade crossings is in the scope of work for HNTB. Grade crossing incidents were reported by HNTB as the second leading cause of freight rail accidents, and they can cause train derailments. The HNTB study reviewed safety of all grade crossings in Denver, identified those presenting significant risks and ranked their hazard levels. The findings allow DOTI and Denver to proceed with grade crossing improvements in an informed manner that provides the most risk mitigation.

9) Can't Denver regulate freight rail cars sitting on tracks for hours or other freight rail operations?

- Freight rail operations are governed by federal law and not local or state authorities. If federal law allows staging rail cars or other freight rail operations, railroads can do it.
- Local authorities do have jurisdiction over nearby land use as well as emergency response.

10) Why is there no responsibility of the railroad to provide mitigation?

- Generally, freight railroads have authority and responsibilities under federal law to provide common carrier freight services and conduct operations on railways compliant with federal law. State and local authorities generally cannot preclude freight railroads from doing what federal law authorizes, so we lack authority to compel extra mitigations beyond federal requirements.

11) How do the quantities of hazardous materials transported on trucks compare with the amount transported on trains?

- Large flammable liquid tank trucks range in capacity from 9,000-11,000+ gallons. Flammable liquid rail tank cars such as DOT-117 specification are commonly 28,000-30,000 gallons in capacity. When rail cars are assembled into a single train, they constitute much larger hazmat capacities. Thirty flammable liquids rail tank cars in a train approach 1 million gallons capacity. 90 tank cars approach 3 million gallons capacity and 200 tank cars are over 6 million gallons capacity. Rail traffic for the proposed Uinta Railway through Denver project 100 to up to 200 flammable liquid tank cars per train passing through Denver several times per day.

