

FREQUENTLY ASKED QUESTIONS

COMMENTS/QUESTIONS 1-8 ARE FROM LUTI MEETING APRIL 25, 2023:

- 1) **Not sure the draft ordinance requirements are consistent with the compromise River Mile has reached with CPD to proceed with development plans.**
 - CW Ortega met three times with River Mile in the development of the HNTB report and draft ordinance and they shared what appeared to be suitable mitigations to address the risk from an incident on the adjacent freight tracks.
 - Protection from risks from freight rail in Denver has been discussed since the city began focusing on development near rail in 2015 and issued the Report of the Mayor's Railroad Safety Working Group in 2016.

- 2) **Can't Denver regulate freight rail cars sitting on tracks for hours?**
 - Freight rail operations are governed by federal law and not local or state authorities. If federal law allows staging rail cars, railroads can do it.
 - Local authorities do have jurisdiction over nearby land use as well as emergency response.

- 3) **Isn't emergency vehicle access required for all developments?**
 - DFD indicates that access to railways, as opposed to buildings, is very challenging in some locations and it is not possible to access in some areas including the Millennium Bridge area west of Union Station.
 - DFD says access to street side of buildings may not be good for reaching a rail incident in the railway behind the building.

- 4) **Aren't these DFD vehicle access problems at existing developments but the draft ordinance is addressing new developments?**
 - The vehicle access problems at existing developments are due to not planning for emergency access when they were approved. This access is critical to contain an incident, by railroad and Denver emergency responders.
 - The draft ordinance intends to correct this going forward with new development, particularly in light of the increase of petroleum and other hazardous material transports.
 - DFD could review access problems with existing developments on a case-by-case basis.

- 5) **HNTB guidelines 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?**

- For land use mitigations to come online in a 1 to 5 -year timeline requires enacting the ordinance now, likely subsequent rulemaking(s), and implementation into the 1 to 5 -year period.
- The January 2023 HNTB draft report had land use mitigations in the short-term time period, indicated as “can be implemented relatively quickly”. Land use mitigations were moved in the final draft and final report to medium term, reflecting “requires some project planning and funding”.
- Since 2014, when CW Ortega asked the railroads to stage hazmat trails away from the center of the city and began urging Denver to mitigate risks from freight rail, development adjacent to freight lines has been occurring **without** addressing life/safety impact of an incident on these tracks.

6) The HNTB 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.

7) 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.

8) Why doesn't the ordinance implement the other recommendations in the HNTB 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.

QUESTIONS 9-33 WERE SUBMITTED BY COUNCILMEMBERS BY EMAIL TO CW ORTEGA:

9) How would these requirements have lessened the impact from an accident like East Palestine?

- In the East Palestine situation, the train derailed just after passing east through downtown. **IF** the derailment had happened downtown and the provisions of the proposed ordinance had been in effect, the ordinance would have offered protection for new development in the form of a 100-foot setback (longer than most rail cars to reduce chances of derailment or other impact into a new structure) or other mitigation. Other recommendations in the report, not in the ordinance, could have improved emergency response capacities.

10) How would they lessen the impacts from other derailments?

- Similar to above, the ordinance requirements would set newly built protected uses back 100-feet (longer than most rail cars) from the railway **or** offer other safety mitigations from the HNTB final report page 8-2. Other recommendations in the report, not in the ordinance, could improve emergency response capacities including hazard assessment, training, equipment, grade crossing improvements, etc.

11) Why do derailments happen? What will this do to prevent derailments?

- Derailments happen when locomotives and/or train cars lose proper contact with rail tracks (i.e., outside the zone of tolerance). The ordinance would not prevent derailments but can mitigate impacts.
- Other recommendations in the report could help prevent derailments, such as identifying and improving problematic grade crossings and reducing trespass on the railway. Congress has also been asked by the Railroad Workers Union to address trains staffed by one person, train length from one – three miles long, and braking system upgrades.

12) Are there other types of rail accidents? What is their cause?

- Derailments are the leading type of freight rail accidents, followed by grade crossing accidents. Collision, track obstruction and miscellaneous accidents are the other main types of accidents but are at levels well below derailments and grade crossings. (See HNTB Report, Appendix B, Figures B-1, and B-2).

13) Does the study 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.

14) Would this impact current development? How? If not, what should be done to protect current development?

- The ordinance applies to new development. Other recommendations in the report could help protect existing development such as emergency response capacity and grade crossing improvements. Owners of existing development could voluntarily implement ordinance protective measures such as wall or barrier.

15) How will it impact future development? Time? Cost?

- This process will get folded into a new development project – holistically - while concurrently including mitigation for projects within 100 feet of a freight railway. It is important to clarify that a project built 100 feet away from freight tracks can build without compliance of the ordinance.

16) What are future developers doing now to mitigate risk?

- Generally nothing since the city has no requirements or even evaluations of risks new development has next to freight railways. The HNTB report found new multifamily buildings in Denver constructed 18 feet from a railway spur and 26 feet from the consolidated main line railway. River Mile has indicated intent to locate a service road along the freight railway, providing set back, and raise the grade of the development significantly above the grade of the railway.

17) Are current structures built above the freight ROW?

- The Millennium Pedestrian Bridge in the Central Platte Valley, the pedestrian bridge connecting Six Flags Elitch Gardens to the Ball Arena, Colfax, Speer, 15th and 20th Street corridors run above the freight railway. River Mile has described intention to raise the grade of their site significantly above the adjacent freight railway.

18) Are the suggested structural recommendations (ductile column, enhanced column protection, reinforced pillars) something that already happens?

- These are the methods that Calgary, Alberta reported to CPD and Ortega At Large office for purposes of meeting their option to use structural reinforcement of buildings as a mitigation. These methods may be commonly used in construction but can be applied to more rigorous structural support and protection standards, set by rulemaking, to withstand the projected force and impact in event of derailment.

19) Is this coordinated with the S Platte river project?

- Ordinance requirements are not connected to the South Platte River project. However, mitigation options in the ordinance, such as walls or barriers, and other recommendations in the report could help protect the South Platte River from derailments and hazardous or other material releases. (See HNTB Report, 4.3 on pp. 4-3 and 4-4).

20) What is the status of the National Rail Safety Bill? Are the requirements in your bill similar?

- The Railway Safety Act of 2023 was recently introduced in the US Senate. It would affect freight rail operations and safety requirements, which are subject to federal regulation. The ordinance and other report recommendations would affect land use along freight railways and emergency response capacity, which are subject to local regulation.

21) What stakeholders have been involved? City? Private? Rail? Others? Stakeholder outreach involved city agencies, state of Colorado, developer stakeholders, railroads, and community stakeholders who have raised concerns about freight railroads and development near rail:

- **Jan. 2020:** Met with River Mile.
- **Jul. 2022:** Workshop #1 with city agencies, city project team, and HNTB.
- **Aug. – Nov. 2022:** HNTB with Class 1 Railroads.
- **Oct. 2022:** Met with River Mile.
- **Nov. 2022:** Workshop #2 with city agencies, city project team, and HNTB.

- **Dec. 2022:** Briefing with ULI Urban Mobility and Development Committee.
- **Feb. 2023:** Multiple one-on-one meetings with city project team and various city agencies.
- **Feb. 2023:** Met with Ball Arena Redevelopment Team.
- **Mar. 2023:** Met with developers.
- **Mar. 2023:** Met with the Department of Transportation & Infrastructure (DOTI) Advisory Board

22) What staffing will be required from city staff to implement? Which agencies/departments? How many staff? Do they have the staff now? If not, how will they implement?

- DFD, DOTI, CPD, DDPHE, and OEM have been asked what staffing needs and opportunities are estimated to be to implement the ordinance requirements. Staffing needs to implement other recommendations in the report is a separate, but interrelated subject to freight rail safety city-wide. Following was reported from the agencies to Ortega At Large:

Projected agencies' staffing needs for RR ordinance and some other study recommendations follow up:

AGENCY/DEPARTMENT	SUMMARY OF PROJECTED STAFF NEEDS
DOTI (1)	2 staff and \$300,000 including salaries and benefits.
DDPHE	Will handle it with existing staff.
OEM	One fully loaded rate (salary and benefits) Sr EM Specialist plus equipment probably \$145,000 .
DFD	1 FTE Firefighter Inspector \$140,000 1 FTE Senior Engineer Associate staff \$115,000 SUBTOTAL: \$255,000
CDP (2)	1 2-year LTE senior city planner (SCP) \$74,417-\$122,788 Professional services in the amount of \$150,000 1 new associate development project administrator (ADPA) \$63,801-\$105,272 1 new senior development project administrator (SDPA) \$74,417-\$122,788 1 new senior city planner (SCP) \$74,417-\$122,788 SUBTOTAL: \$437,052-\$623,636 (Pay scales from Denver Job Code Report)
(3)	COMBINED TOTAL: \$1,137,052-\$1,323,636

- (1) DOTI reported these staff would be directed at grade crossings safety and seeking grant funding for reducing railway grades in key redevelopment areas. These are consistent with recommendations in the HNTB report but not necessarily related to the ordinance.
- (2) CPD reports the two staff needs in green text font are temporary positions to help stand up regulatory capacity to implement the ordinance.
- (3) It likely some of the staff projected to implement the ordinance will not work solely on applications covered by the ordinance.

23) Who supports the bill? Agencies? Groups? Individuals? Why isn't CPD in support?

- DOTI led the HNTB project and meetings with CPD and Jack Paterson from CW Ortega's office supporting as the HNTB consultants compiled data that shaped their recommendations in the final draft of their risk analysis report.
- Many city agencies (DFD, DOTI, CPD, DDPHE, P&R, DPD, and OEM) offered helpful information about freight rail risks and safety for the study in stakeholder workshops.
- City agencies saw the proposed requirements when we did the first draft of the ordinance, for new development within 100 feet from railways. Agencies commonly hold off support until agency leadership and the Mayor's Office are on board. However, we received helpful suggestions to improve the ordinance from DDPHE. We prefer to leave it to CPD to express their position. Community stakeholders have expressed support for the study effort and ordinance from Union Station, La Alma/Lincoln Park, Sun Valley, and South Santa Fe neighborhoods.
- Meeting notes from agencies' Workshops in July and November 2022 are ATTACHED.

24) Can you please explain the stakeholder process - who was at the table, when you all met, and how they were involved in determining the requirements that are in your bill?

- Stakeholder outreach involved city agencies, state of Colorado, developer stakeholders, railroads, and community stakeholders who have raised concerns about freight railroads and development near rail:
- **Jan. 2020:** Met with River Mile.
- **Jul. 2022:** Workshop #1 with city agencies, city project team, and HNTB.
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25) How did you decide which "Suggested Guidelines and Considerations" (p 8-1) to include and which ones to exclude? There are 10 "Short Term" recommendations which seem like important steps. Why didn't you include those and why did you include some from the "Medium Term" suggested guidelines? Was this recommended by your stakeholders?

- Denver and its departments and agencies do not need new authority to implement most recommendations in the HNTB report. They may need staff, budget and for some mitigations, grants.
- 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.
- 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”.

26) I was surprised to hear Rys Duggan say that the bill was not what you all discussed.

- We reviewed and discussed the draft freight rail study findings and recommendations with Mr. Duggan. He informed us River Mile anticipated having a service road provide setback from the railway and raising grade level for occupied development 25-26 feet above grade of the railway. That seemed like appropriate mitigation planning.

27) I also don't understand the role of DFD, OEM, CPD and other agencies. Of course, as a council member, I'm not qualified to determine what is needed so I rely on subject-matter experts like these agencies. Can you explain to me how they were involved, what recommendations they made, and if they are in support of the bill?

- DOTI was lead agency and project manager for the freight rail study, supported by CPD and Ortega At-Large. Other agencies involved include DDPHE, OEM, Mayor's Office, DFD, DPD, CAO, DPR.
- Workshops with city agencies were held in July and November. Final round of meetings with agencies were one-on-one in the first 10 days of February, following inability to schedule Agencies workshop #3 in December or January due to agencies responding to migrant crises in Denver.
- Meeting notes from agencies' Workshops in July and November 2022 are ATTACHED.

28) Density bonuses were mentioned at committee. Was that something that CPD recommended? Would that require an ordinance?

- Density bonuses were recommended by developer stakeholders. CPD was consulted and reported they have processes that can develop density bonuses that would involve consultants, stakeholder outreach, and review of peer cities. The need for an ordinance depends on how the density bonus is established and the views of the CAO. Nothing precludes Denver from establishing density bonuses for mitigating risks.

29) I'm also curious about at-grade crossings. Half of the report is dedicated to at-grade crossings. Did you all discuss improving safety at crossings?

- 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.

30) Do you know if Denver has signed on to the NLC's letter?

<https://www.nlc.org/post/2023/03/21/400-local-leaders-urge-congress-to-take-action-on-rail-safety/> This seems important.

- CW Ortega worked very closely with NLC in commenting on DOT Enhanced Standards for High-Hazard Flammable Trains and her comments were highlighted and quoted by DOT in their final rulemaking into 49 CFR. The present letter from NLC concerns actions needed by Congress in the federally preempted areas of freight rail regulation. Denver's freight rail safety study focused on the risks and mitigations that Denver can work on as a local government, generally in emergency response awareness, planning and preparation and land uses near freight rail.

31) Does OEM have plans for rail incidents and hazardous materials spills? What are they? Does OEM communicate with CPD and DFD on land use?

- OEM identifies and assess both transportation incidents (including rail) and hazardous materials release as hazards in the City's Hazard Mitigation Plan. OEM uses an all-hazards approach to responding to emergencies, that would include rail hazmat incidents. This is detailed in the City's Emergency Operations Plan.
- OEM has engaged with CPD over the years on their Small Area Plans and offered feedback on potential hazards in specific areas. However, OEM does not currently have the staffing to review individual land or building projects. OEM does not typically work with DFD on land use projects. Rather, OEM works with DFD to address large scale evacuation, building fire codes, and other facility related matters.

32) 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.

33) What are the laws and mitigation measures for trucks transporting hazardous materials?

- Hazmat transport by road and rail is regulated by DOT, Pipeline and Hazardous Materials Administration, under regulations starting at 49 CFR 172.101 and following.

Federal Railroad Administration additionally regulates freight rail operations and requirements.