

Transportation Committee

Meeting date: February 22, 2016

For the Metropolitan Council meeting of March 9, 2016

Subject: Amendment to the Regional Transitways Guidelines to Add Noise Mitigation Guidelines for Light Rail

District(s), Member(s): All

Policy/Legal Reference: Metropolitan Council's Regional Transitway Guidelines

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Division/Department: MTS/Metro Transit /Green Line Extension Project Office/Blue Line Extension Project Office

Proposed Action

That the Metropolitan Council (Council):

1. Amend the *Regional Transitways Guidelines*, Chapter 5, as follows:

Add a guideline related to noise mitigation in section 5.1 – Light Rail Transit Runningways:

“Severe” and certain “Moderate” noise impacts identified through the NEPA process should be considered for mitigation if they meet the criteria for reasonableness, feasibility and cost effectiveness.

Add the following text in the discussion below the new guideline:

General guidelines for considering mitigation include:

- Reasonableness: noise mitigation provides at least a 5 dB reduction in project noise.
- Feasibility: noise mitigation is practical from engineering, operations and safety standpoints and may also take other factors into account such as community input and visual impacts.
- Cost effectiveness: the standard cost per benefited receptor is approximately what it would cost to build a 10' high noise wall.

2. Direct staff to update the associated *Runningway Guidelines User Guide* to add applicable definitions and criteria.

Background

In 2012, the Council adopted Regional Transitway Guidelines, which serves general as standards in the design of transitway investments, after extensive internal discussion and public input. The purpose of the Regional Transitway Guidelines is to provide technical guidance, based in best practices, that supports the development and operation of transitways in a way that is consistent, equitable, and efficient, and delivers an effective, integrated, and user-friendly transit system throughout the Twin Cities region.

Chapter 5 provides guidelines for making design decisions along the right-of-way required to operate the line. The chapter includes guidelines to specific modes including light rail, commuter rail, highway bus rapid transit and arterial bus rapid transit. This additional guideline applies only to future light rail transit to provide project staff guidelines as they make design decisions in the Project Development and Engineering phases.

Since the design of runningways is directed by specific design practices, standards, and/or regulations, more detail is provided in the *Runningway User Guide*. Staff will work to update this document.

Rationale

Although the FTA provides general noise mitigation approach guidelines, it does not have a national policy on mitigation for transit projects, and encourages individual transit agencies to develop their own approaches to noise mitigation. Amending the Regional Transitway Guidelines to add noise mitigation guidelines will establish thorough technical support guidance for the development of the region's transitway network in a consistent, equitable, and efficient manner.

Funding

This action is not anticipated to result in direct funding impacts as project budgets include funding for mitigation of impacts identified through the environmental review process.

Known Support / Opposition

No known opposition.

Attachments:

Attachment 1: Addition to Transitways Guidelines Chapter 5

5. RUNNINGWAY GUIDELINES

These guidelines should be considered collectively when making runningway decisions.

A runningway is the linear component of the transit system that forms the right-of-way reserved for the horizontal and vertical clearance requirements of transitway vehicles and ancillary structures or equipment required to operate the transit vehicles; it is sometimes called the guideway. While the runningway incorporates the space needed to operate transit, it should be differentiated from right-of-way, which incorporates the potentially larger area needed to implement the project. For example, right-of-way would include additional property that may be needed for sidewalks, driveways, light poles, landscaping, and stations. Station and Support Facilities are discussed in Chapter 4. Station and Support Facility Design Guidelines. Since the design of runningways is directed by specific design practices, standards, and/or regulations, more detail is provided in the Runningway Guidelines User Guide.

5.1. LIGHT RAIL TRANSIT RUNNINGWAYS

Light Rail Transit runningways should serve LRT only. They will generally be at-grade and double track with crossovers and storage tracks provided as needed to support efficient operations.

Ballasted track is lower cost and preferred, with embedded track used where tracks are within urban streets including at vehicle and/or pedestrian crossing locations. Direct fixation track is preferred in tunnels and on bridges.

Lane striping, pavement color, pavement texture, and/or barriers (including intertrack or side fencing, for example) may be appropriate to guide, discourage, or prevent access to runningways in areas not designated as a legal crossing and should be used where needed.

“Severe” and certain “Moderate” noise impacts identified through the NEPA process should be considered for mitigation if they meet guidelines for reasonableness, feasibility and cost effectiveness.

LRT runningways are the linear components of the transit right-of-way containing rail trackage designed for LRT vehicles as well as ancillary facilities such as traction power substations and signal bungalows. Elements of LRT runningway operations and maintenance to be addressed during planning and design include but are not limited to, safety, security, communications and central control, system compatibility, contingency planning, periodic repairs and replacement, and snow removal.

General guidelines for considering noise mitigation include:

- Reasonableness: noise mitigation provides at least a 5 decibel (dB) reduction in project noise.
- Feasibility: noise mitigation is practical from engineering, operations and safety standpoints and may also take other factors into account such as community input and visual impacts.
- Cost effectiveness: standard cost per benefited receptor is approximately what it would cost to build a 10' high noise wall.

Moderate impacts may be mitigated if the impact is located in an area where the existing noise levels are already 65 dBA Day-Night Sound Level (Ldn) or greater or there is an increase of 3 dB or more in Ldn over the existing level due to the project or is adjacent to a “severe” impact where it would be logical and equitable to extend the mitigation.