

REQUEST FOR INFORMATION # **0000508794**
Design and Manufacture Open Gangway System for A-Division Cars
Reply Date: June 6, 2025

MTA New York City Transit (NYC Transit) is seeking information from firms experienced in designing and manufacturing Open Gangway Systems for the safe and effective method of allowing riders to walk freely between rail cars.

This Request for Information (“RFI”) is not a solicitation for bids.

Background Information

NYCT intends to purchase 1,140 R262 A-Division Subway Cars and a portion of those subway cars may be open gangway. The intent of this request is to identify industry interest in designing and manufacturing an open gangway system for the R262 A-Division Subway Cars.

NYCT is in the process of evaluating the potential application of open gangways as part of R262 car procurement as an option. The future R262 fleet will serve as the replacement for the current R62/ R62A fleet. The car length for the R262 is 51.2 ft. long.

The A-Division of the New York City Subway lines are operated with services designated by numbers (1, 2, 3, 4, 5, 6, 7) and the 42nd Street Shuttle.

Overview

NYCT’s evaluation of open gangways recognizes the advantages these systems may offer, such as a customer’s ability to move freely between individual cars and improved sightlines, while being mindful of challenges associated with our unique operating environment and needs. These challenges include, but are not limited to:

- Tight radius curvatures within NYCT’s A-Division, with radii as small as 100 feet (simple curve), and 120 feet on back-to-back “S”-curves, with no intervening tangent, and No. 3.5 crossovers.
- The need to isolate individual cars while remaining in service, for example in the case of broken glass, door failures, or due to a customer related incident. The current requirement to gain access to track level from between cars from inside the cars in “No-Clearance” zones to investigate incidents related to Brakes in Emergency, passenger under train, etc.
- The ability to introduce an overall gangway system that meets NYCT’s standards of durability, customer safety and vandal resistance.

In order for NYCT to complete our research and evaluation on open gangway systems, we are requesting assistance from suppliers to provide their input regarding open gangways within NYCT’s A-Division cars. The information submitted should address the different types of gangway constructions suitable for the NYCT’s A-Division application, NYCT’s physical

constraints, the challenges identified above, the feasibility of prototyping an open gangway system on an existing NYCT vehicle to mitigate technical risks to NYCT. We are also seeking other design developments and data collection efforts that may be needed and possibly beneficial.

NYC Transit is particularly interested in qualifying manufacturers to supply open gangway systems on our A-Division subway cars.

Manufacturers must have the following attributes at a minimum:

1. Service proven history with designing and integrating open gangway systems on similar vehicle types to NYCT's A-Division Subway Cars.
2. Design experience that allows for ease of maintainability including routine maintenance and overhaul.
3. Design and integration experience of hard shell (walled passageway) or soft shell (bellowed fabric passageway) open gangway systems.

Questions

- How many years of experience do you have in designing and manufacturing open gangway systems?
- What is your experience in manufacturing and reconditioning open gangway systems? Please provide the location(s) where the manufacturing will be conducted.
- What is your experience in providing technical documentation i.e. drawings, fatigue analysis, reliability calculations etc.?
- Describe any challenges foreseen in designing and manufacturing an open gangway system for NYCT's A-Division Subway Cars with the geometry and characteristics summarized in Attachment A of this document.
- Please list all of your rail vehicle projects with an open gangway system. For each project, please describe the type and classes of rail vehicles (e.g. subway cars, LRV), the type of gangway design and provide customer reference details.
- Please describe the standard set of technical deliverables, including static and dynamic design validation, that are provided for an open gangway system design review. Also describe any test equipment required for validation of the open gangway system.
- Please identify the compliance of an open gangway system to all applicable rail vehicle standards, including fire / smoke / toxicity standards for all gangway elements.

Please review the above requirements and submit your reply to include the following: 1) answers to the questions posed above, 2) the type of open gangway systems offered by your company, 3) company brochures, 4) company size, 5) a list of transit properties or municipalities with contact information that are presently using the Open Gangway Systems being offered and 6) any other information you deem relevant in assisting NYC Transit to understand what your organization is able to offer. Your reply can be submitted to the address below no later than **June 6, 2025**.

**New York City Transit
2 Broadway, 19th Floor, Room A19.81
New York, NY 10004
Attn: Alfred Adebare**

If you would like to submit your response electronically, please send it to:
alfred.adebare@nyct.com and altamaria.perkins@mtahq.org

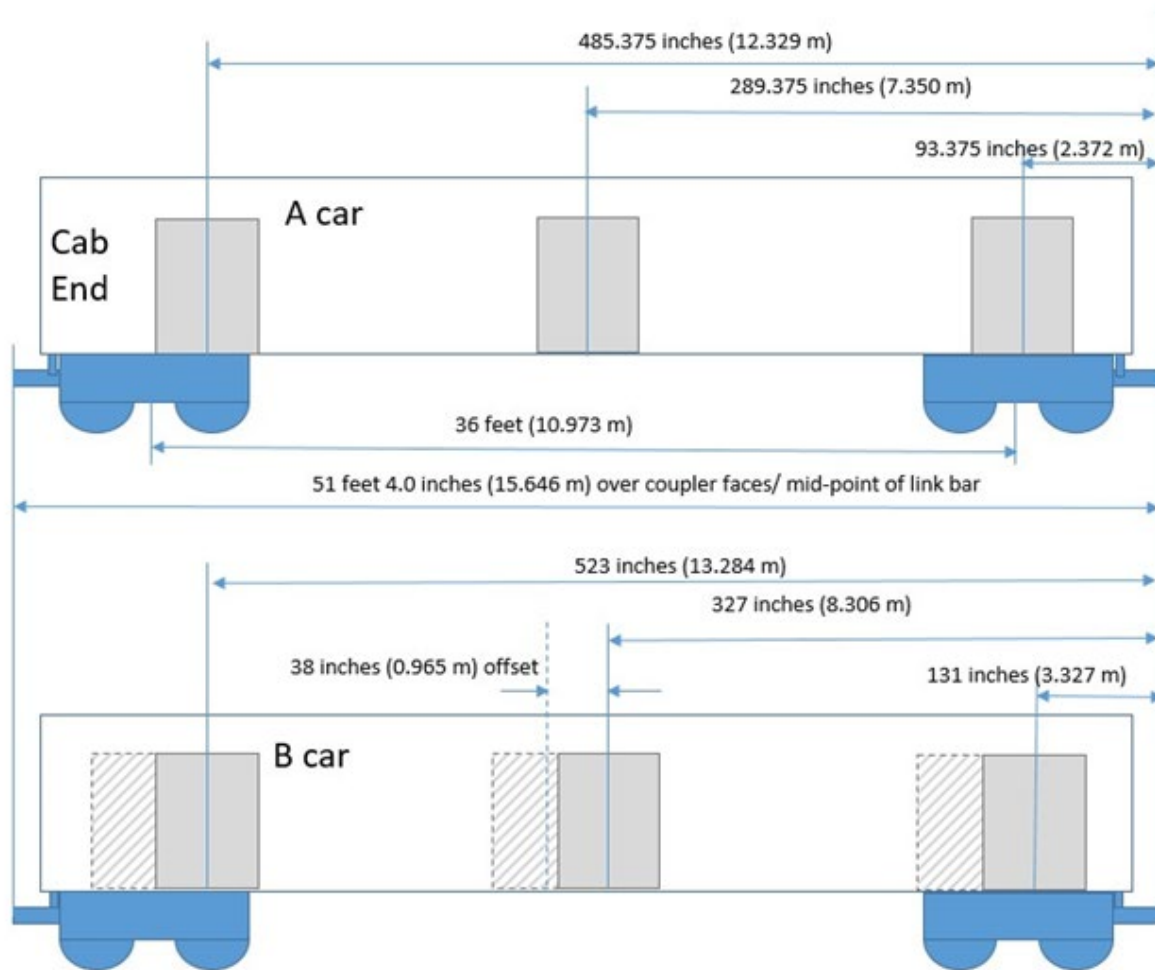
Upon receipt and review of your information we may invite you to a meeting (virtual or in-person) to discuss your open gangway systems with our engineering team.

Attachment A – NYCT’s A-Division Subway Cars Geometry and Fixed Facilities

A1) NYCT’s A-Division Subway Cars Geometry

The overall dimensions shall be as listed below and in Figure A1 for a new car, AW0 loaded, ready for revenue service. The dimensions given are nominal unless otherwise indicated.

- a. Lengths and door centerline positions: Per Figure A1
- b. Body width over side skins, maximum: 8 feet 7.25 inches (2.62 m)
- c. Width over door thresholds, maximum: 8 feet 9.5 inches (2.68 m)
- d. Width over roof gutters, maximum: 8 feet 8.63 inches (2.657 m)
- e. Height, at bolster, top of rail to top of roof, new wheels: 11 feet 10.625 inches (3.623 m)
- f. Height, top of rail to top of finished floor, new wheels: 3 feet 8.75 inches (1.137 m)
- g. Height, top of rail to top of anti-climber, new wheels: 3 feet 7.5 inches (1.105 m)
- h. Height, top of rail to coupler centerline when coupler: 2 feet 4.875 inches (0.733 m)
centerline parallel to floor with zero camber
- i. Side and end door clear opening minimum height: 6 feet 3.0 inches (1.9 m)
- j. Side door clear opening minimum width: 4 feet 8.0 inches (1.422 m)
- k. Clear opening minimum width for all End Doors, Cab Partition Doors, or Cab Doors: 2 feet 6.0 inches (0.8 m)
- l. Interior height, floor to normal ceiling, minimum: 7 feet 0.5 inches (2.146 m)
- m. Interior height, floor to low ceiling if used, minimum: 6 feet 7.5 inches (2.019 m)
- n. Truck axle spacing: 6 feet 10 inches (2,083 mm)



Important note –All A car door centerlines shall be measured from the No. 2 end (doors are in alignment side to side); B car door centerlines shall be measured from the right hand end of the car when viewed from the side (doors are offset by 38 inches (0.965 m) side to side)

Figure A1: Car Dimensions – Side View

A2) FIXED FACILITIES DESCRIPTION – Division A (IRT) Track

A.2.1- Track:

- i. Rail type - 100 A R A, type B rail, and 115 RE rail, some 39-foot (11.887 m) bolted, some CWR, 1:40 cant.
- ii. Curve Radius Limits:
 - Tangent to 7500 ft.: 4 ft. 8 1/4 in. gauge (1.429 m) gauge
 - 7500 ft. to 500 ft.: 4 ft. 8 1/2 in. gauge (1.435 m) gauge

- 500 ft. to 200 ft.: 4 ft. 8 3/4 in. gauge (1.441 m) gauge
- 200 ft. to 100 ft.: 4 ft. 9 in. gauge (1.448 m) gauge

iii. Horizontal Curves and Superelevation:

Minimum lateral radius at centerline of tracks: 100 feet $\pm$ 10 feet (30.48 m $\pm$ 3.05 m)

Maximum superelevation: 6 1/2 inches $\pm$ 1 inch (165 mm $\pm$ 25 mm)

Minimum tangent length between reverse curves: 0 feet (0 m)

Minimum indices of reverse curves: 120 feet (36.58 m)

Radius of smallest turnout (No. 3.5 switch): 112.17 feet (34.2 m)

iv. Vertical Curves and Grades:

Vertical curves, rate of change of grade: 3 percent $\pm$ 1 percent

(For a radius of approximately 2000 ft. with the curves corresponding to a length of vertical curve of not less than 200 feet).

Vertical Curves:

Mainline: 5 1/2 percent per 100 feet (30.48 m)

Yard: 5 1/2 percent per 100 feet (30.48 m)

Other: 5 1/2 percent per 100 feet (30.48 m)

Grades: Maximum Sustained Grade: 5 1/2 percent