Monorails vs. Trams and Trains

High-capacity monorail trains have a passenger capacity between a train and a large tram. However monorails and trains can run at a much faster speed. Monorails are the cheapest grade-separated option where no surface easement is available.

Melbourne Metro X’Trapolis Conventional Train

- 3.05 meters wide, 71.68 meters long for 3-car train.
- Usually 6 cars.
- 90 km/h top speed.

Hitachi “Large” Monorail

- 2.98 meters wide, 59.5 meters long for 4-car train. (80% of 3-car X’trapolis)
- Can be between 2 and 8 cars.
- 80 km/h design speed.

Bombardier E-Class Tram

- 2.65 meters wide, 33.45 meters long. (40% of 3-car X’trapolis)
- 80 km/h top speed but average is 16 km/h.
- Largest tram in Melbourne.

Transrapid Maglev

- 3.7 meters wide x 75.8 meters long. (128% of X’trapolis)
- Can be up to 10 cars.
- 500 km/h top speed.

Former Sydney Monorail

- 32 meters long, 36 km/h. Manual operation.
- No walk-through interior. Single track.