

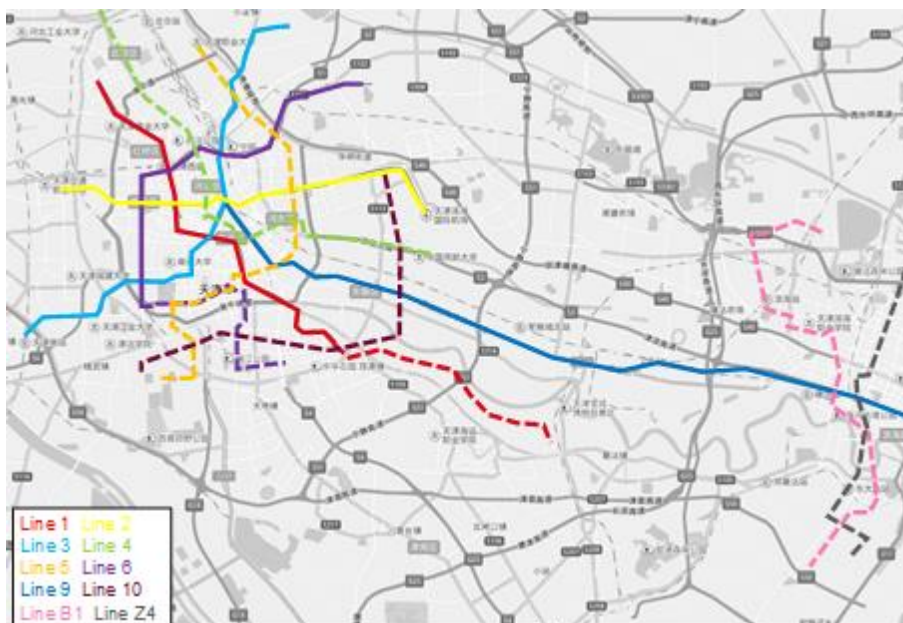
## How do metro lines affect the office market?

Tianjin has seen a great deal of development over the past few years including new infrastructure and new real estate. In this article, we explore how the expansion of the subway system is impacting the fortunes of office buildings and specific submarkets or commercial areas and how the subway network may eventually have a much larger impact to the whole Tianjin region and beyond.

### Subway Pioneer

Tianjin actually has China's second oldest subway system, behind only Beijing. Subway Line 1, was opened in 1976 and initially had only four stations and was expanded to eight in 1984. In 2001, it was closed for reconstruction and reopened in 2006 with 22 stations, importantly the new system still runs along Nanjing Road. Also in 2006, Line 9, the light rail line system in the TEDA area of Binhai was opened, but it didn't come into the heart of the city and reached only the western edge of Tianjin. It also didn't connect with Line 1.

Subways systems, like communications platforms benefit from the 'network effect' meaning the more connections there are, the more valuable they become. So when Tianjin had only two subway lines which didn't connect, they weren't very valuable, in fact, the owners of Tianjin International Building apparently lobbied to have their station closed, so when the subway re-opened in 2006, they no longer had a station near their building and at that point, it didn't appear to matter. However, ten years later Tianjin now has a connected subway network with five lines and 112 stations operational and the network continues to expand. Being connected to the network, now matters very much.



Tianjin subway system map, JLL Research

## Office Buildings versus Subway Stations

There are three scenarios we looked at in regards to how office buildings are impacted by subway stations near their project or submarket.

### Those that have a station

Buildings and submarkets that currently sit on top of a subway station are increasingly in demand. Office users often consider how their staff will get to work, and with crowded roads, license plate restrictions, increasing parking fees, hot summers and cold winters, subway stations are a valuable amenity to office tenants. Extra points for those on important lines like those that connect to the train station or are on transfer stations with access to various lines. Obvious winners include the office buildings around Yingkoudao station which connects Lines 1 and 3 and is only three stations from Tianjin's main rail station.

### Those that will get a station

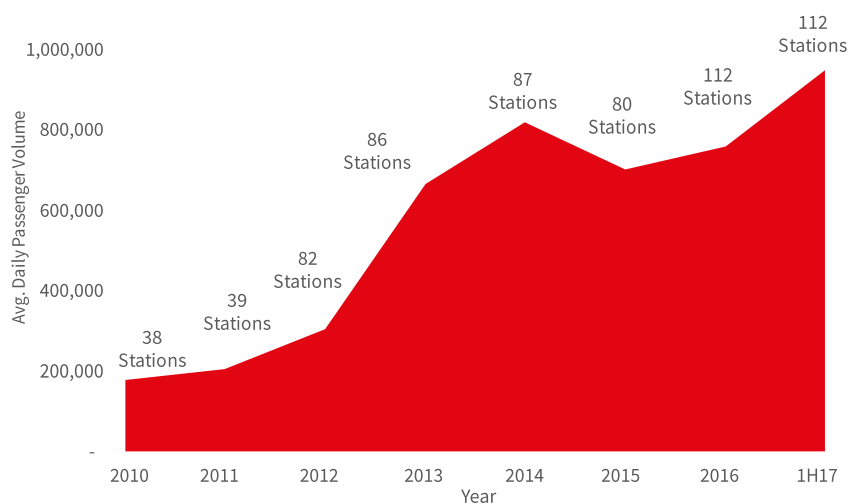
There are a number of office buildings that today are not competing terribly well as new buildings are completed and tenants have their choice of buildings in a variety of district downtown. However, when future subway lines are completed, these buildings will be immediately connected to a system that cuts down on commute times and links their building to Tianjin's various train stations and airports – all of which are already on existing subway lines. Currently the Meijiang area may be a nice place to live, but as an office location, it poses serious challenges. However, when Line 6 is extended, two developments near the Meijiang Convention Center, the Meijiang Centre Plaza and the SCPG Center above the Aeon Mall will be much more closely connected to central Tianjin than a number of buildings in Heping and Hexi districts.

### Those that don't have and won't get a station

As the subway network increases and property prices push people further to the edges of the city, being connected to the subway will be nearly a necessity for office owners. There are a few older buildings along Youyi Road and Wujiayao (sometimes called the Middle Ring Road) who will see their fortunes fade because they are not connected to the system, but competing with buildings who are. A few buildings in Nankai district will suffer the same fate.

## Ridership Increases

As of the first half of 2017, the average daily passenger volume and the estimated annual passenger volume reached 950,000 and 340 million respectively. This compares to only 110,000 daily riders ten years ago when there were only 36 stations in use and the lines didn't connect. The network effect is now very obvious. The data indicate that in 2015, there was a reduction in ridership which we assume was related to the accident in Binhai which shut down Line 9 for a period of time. However, with the line reopening, ridership recovered and has continued to climb.



*Tianjin metro average daily passenger volume, Tianjin Statistics Bureau, JLL Research*

	Station s	Lines	Remarks
2010	38	Line 1, Partial Line 9	
2011	39	Line 1, Partial Line 9	
2012	82	Line1, Partial Line 2 Partial Line 3, Line 9	
2013	86	Line 1, Partial Line 2 Line 3, Line 9	
2014	87	Line 1, Line 2, Line 3 Line 9	
2015	80	Line 1, Line 2, Line 3, Partial Line 9	The train service on the whole Line 9 was suspended on August 2015 after a series of massive explosions in TBNA. The line resumed operation on December 2015 from Tianjin Railway Station to Pipe Corporation Station.
2016	112	Partial Line 1, Line 2 Line 3, Partial Line 6 Line 9	The whole Line 9 resumed operation on December 2016.  Line 1 Shuanglin Station was closed to make way for the line's southern extension.
1H17	112	Partial Line 1, Line 2 Line 3, Partial Line 6 Line 9	

### Subway Lines Important Link in Jing-Jin-Ji

It seems a little absurd at first, but the robust subway network in Tianjin is helping to connect Tianjin's two urban cores (Central Tianjin and Binhai) as well as cities including Beijing, Tianjin, Shijiazhuang and Tangshan. It is now possible to travel from office buildings in Tianjin to office buildings in all of those cities, as long as both buildings are connected to their respective city's subway stations. As an example we regularly travel between our offices in Tianjin and Beijing's Guomao area and never need to go outside because of the links between Tianjin Station and Beijing South Station and the fact that they are each connected to the Tianjin and Beijing South stations respectively. We recently traveled to Shijiazhuang and their train station also is well connected to their small but growing subway system. Maybe Jing-Jin-Ji (also called the Capital Economic Circle) is really here.

### Future Outlook

The continued expansion of Tianjin's subway network will continue to reinforce the importance of office buildings which are located along the subway system. Although we can't yet directly correlate rents and proximity to subway stations, we do believe that trend will emerge. It will also help determine the fortunes of shopping malls with benefits to those on the system and challenges for those who aren't. And the housing market will follow a similar trend. Properties located near the Tianjin South Train Station or near the airport used to be considered remote, but now benefit from being connected downtown by a direct subway line. The explosion of the shared bike services are helping to link other areas to the subway system, but with Tianjin's extreme weather, there is no substitute to having a subway station connected to your office building. We in fact now see this as one of the first question that potential office

occupiers are asking about and we don't expect that to change until there are cheap autonomous cars driving around our cities – at least a few years away.



Vivian Zhao  
**Analyst, Research**  
Tianjin, JLL  
+22 8319 2233  
Vivian.zhao@ap.jll.com



Michael Hart  
**Managing Director**  
Tianjin, JLL  
+22 8319 2233  
Michael.hart@ap.jll.com