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A new Chicago Public Transit System

Imagine you are the average Chicagoan on your morning commute to work. You enter the cold and crowded Logan Square station, swipe your Ventra card that costs you a whopping 105 dollars a month, hop onto the blueline train toward Forest Park, and get stopped once again by another maintenance delay only three minutes into your ride! This type of commute has become accustom to the 1.51 million Chicagoans who take public transit on a regular basis. (Transit Chicago.com). Due to the expensive costs of ticket fares, many unreliable routes, and many other factors, Chicagoans have been slowly shying away from taking public transit. This paradigm shift in Chicago’s public transit population has caused a negative impact in Chicago’s overall carbon footprint as many flock to alternatives such as driving and choosing services such as Uber, Lyft, and Zipcar for their everyday commute. With more vehicles in urban areas things such as smog, lower air quality, and traffic may begin to increase.

Though these things have a direct and immediate impact on our daily lives, things such as an increase of carbon dioxide can affect our environment in at a macro scale. According to the Environmental Literacy Council “a public transit company is estimated to save over 1.4 billion gallons of gas and decrease carbon dioxide emissions by 1.5 million tons each year” (National Express Transit). In order to combat this, Chicago must look to successful public transit systems from other major cities in order to improve. One of the many cities Chicago can look up to as a role model is Hong Kong, who has arguably one of the best public transit systems in the world.

Before diving into Hong Kong’s public transportation model, we must first understand the good and bad of Chicago’s mass transit system. The Chicago Transit Authority (CTA), the operator of mass transit in Chicago, consists of 1,500 rail cars and approximately 1,900 buses (Transit Chicago Facts). CTA uses fully electric rail cars operating on low-friction steel rails (Transit Chicago Environment). CTA has also looked into implementing a Wayside Energy Storage System that could impact the CTA Red Line. They have also switched their bus fleet to ultra-low sulfur diesel buses along with hybrid buses and two new electric busses. Though CTA has been going the right direction toward a more environmentally friendly transit system, we have seen a large decline in CTA riders.

Some major reasons for the decline in CTA rider’s may be because of the high-ticket price, cleanliness, and unreliability of CTA’s fleet. From CTA’s annual public performance metrics, we can see that the rider population decreased from 43.4 million riders a month in 2010 to 35.1 million riders a month in 2019 (Transit Chicago.com). With expensive one-way ticket prices of $2.50 and an average of 108 delays of greater than 10 minutes per month, we can start to uncover why millions of riders are shying away from CTA.

A screenshot of a cell phone

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(Figure 1.) – MTR Sustainability Report

On the contrary out of the 5.9 million of riders who ride Hong Kong’s Mass Transit Railway (MTR) on a daily basis approximately 99.9% of the riders arrive on time (Figure 1.). With such a reliable transportation system, the MTR still also manages to keep fares very affordable. From Chai Wan to Kennedy Town, one end of Hong Kong to the other, the fare costs $2.3 HKD or roughly $0.30 USD. Even going from Central station in Hong Kong to mainland China costs only $6.4 USD. These prices are also discounted at around 50% for children, students, the elderly, or disabled riders. With 12 lines and 93 different stations, Hong Kong citizens can conveniently go anywhere in the city with very little overhead cost without never having to worry about delays.

The reason for the MTR’s major success can be pointed to the MTR’s business model. In the United States, public transport is seen as a public good and a tool used to get people to and from areas in where they can spend and make money. Public transportation in the United States isn’t expected to be profitable. It is expected to gain a portion of its income from basic transit fares but to also be subsidized by the government. Unlike any other city in the world, Hong Kong’s MTR on the other hand has a public transportation system that is self-sufficient. South China Morning Post states that “In 2015 the MTR’s fare recovery ratio, which measure operating costs against ticket prices, was a remarkable 187% - the highest of any train system in the world.” (SCMP 7) This essentially means that fairs pay for 187% of the MTR’s operating costs.

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(Figure 2. Income - bre.polu.edu.hk)

One way in which MTR is able to be highly profitable is it’s ‘Rail plus Property model (R+P)’. Whenever the MTR builds a new station the surrounding land instantly becomes more valuable. Many businesses flock to build retail space above, around, and near any MTR station to capitalize on the large Hong Kong population who takes public transit. The MTR gains revenue by selling retail space around these stations to businesses and institutions. In 2010 property rental income alone came in at $2,758 million HKD (Figure 2). In Hong Kong it is normal to see many MTR partnered shopping malls, hotels, and shops as soon as you enter your station. The CEO of MTR Corporation Lincoln Leong states that “R+P works in part because of Hong Kong’s specific characteristics. The city’s dense population and scarce land make real estate highly valuable, which helps R+P developments generate reasonable profits”. (McKinsey 9) In 2018 the company made 8.2 billion HKD from fares, and 12.7 billion off of property development, rent, and commercial business. (SCMP). With such high profits, the MTR can continue to invest in itself and improve the technology of their system while also creating more urban development, and jobs.

A picture containing indoor, building

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(Figure 3. R+P Model – bre.polu.edu.hk)

Though Hong Kong’s MTR is a complex system tied with a population that is much more different than population of Chicago, Chicago can take things such as Hong Kong’s R+P model to CTA. One distinct place where we can see this type of environment in Chicago today is at the shopping/dining center, Block 37, on State Street. Block 37 consists of many local and high-end shopping/dining chains right above a pedway that connects the red and blue line. Here businesses take advantage of the travelers who switch between the two lines, or who are just exiting the station. If CTA began to sell and lease public spaces much like Block 37, they would be able to increase revenue which could in turn result in a higher budget for development and improvements. With a higher budget from improvements, CTA can begin to chip off at the 108 monthly 10 mins or more delay average and begin on developing and improving technology to increase reliability. If Chicago begins to promote public transportation, and CTA is able to capitalize on the opportunity, CTA can become much more profitable. This can also benefit the average Chicagoan as CTA will rely less on government subsidies, and the extremely high taxes in Chicago can decrease.

Chicago can also promote public transit by offering discounted ticket prices for children, students, the elderly, or disabled riders. Metra, the commuter rail system that offers train services to and from suburban areas to downtown Chicago, sells monthly passes for just over $100 depending on which suburb you are coming from. This ticket price is much too expensive for students who also need to foot an expensive tuition. This result in many student’s driving to school rather than taking public transit.

Improving the Chicago public transit system will not only result in a better experience for the daily commute of the Chicago population, but will also benefit the environment. Urban areas must strive to decrease their carbon emissions, and a perfect way to do that is through using public transit. We must follow in the footsteps of cities like Hong Kong and develop systems that promote public transit. If public transit becomes the most convenient form of transportation in urban areas, many will begin to rethink their morning commute.

An orange and white cat with its mouth open

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