

## **Vision & Rationale**

The group's rationale in proposing the following ideas for the Paya Lebar Air Base (PLAB) is to boost connectivity in the region, complementing the URA's vision of "Better Connectivity for all"<sup>1</sup>, and its multiple endeavours aimed at boosting connectivity. The URA has several plans in place for the future that focus on improving:

- a) physical connectivity, as illustrated by its multiple plans for new MRT lines;
- b) residents' connectivity to nature, as shown by the construction of Park Connector Networks; and
- c) connectivity between residents, spearheading initiatives like 'Connecting People in the City'<sup>2</sup>.

Working in tandem with the URA's vision, we propose the following:

- d) construction of a MRT station and provision of bus services to boost physical connectivity,
- e) creation of a nature park to increase residents' connectivity to nature and one another.

In addition to addressing the types of connectivity listed above, our team has also incorporated other facets of connectivity into our proposal such as residents' connection to heritage and industry. Inspired by the PLAB's history of being equipped with the finest aviation technology<sup>3</sup>, we have come up with ideas for PLAB features that are reminiscent of history and technology-savvy.

These features are:

- a) a technology-savvy smart park that boosts residents' connectivity to the PLAB's history of technological advancement as well as nature,
- b) the incorporation of aviation elements into the design of the nature park, as mentioned previously,
- c) repurposing the runway as a park connector between the smart park and nature park, which boosts residents' connectivity to nature and the history of the PLAB.

This is our overall plan for the redevelopment of the Paya Lebar Air Base (Figure 1).

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<sup>1</sup> (2020, February 21). Better Connectivity for All - URA. Retrieved April 13, 2020, from <https://www.ura.gov.sg/Corporate/Planning/Master-Plan/Themes/Convenient-and-Sustainable-Mobility/Better-Connectivity-for-All>

<sup>2</sup> (2019, February 19). Seeking innovations that build connections - URA. Retrieved April 13, 2020, from <https://www.ura.gov.sg/Corporate/Media-Room/Media-Releases/pr19-08>

<sup>3</sup> (n.d.). Paya Lebar Airport | Infopedia - NLB Eresources. Retrieved April 13, 2020, from [https://eresources.nlb.gov.sg/infopedia/articles/SIP\\_130\\_2005-01-22.html](https://eresources.nlb.gov.sg/infopedia/articles/SIP_130_2005-01-22.html)

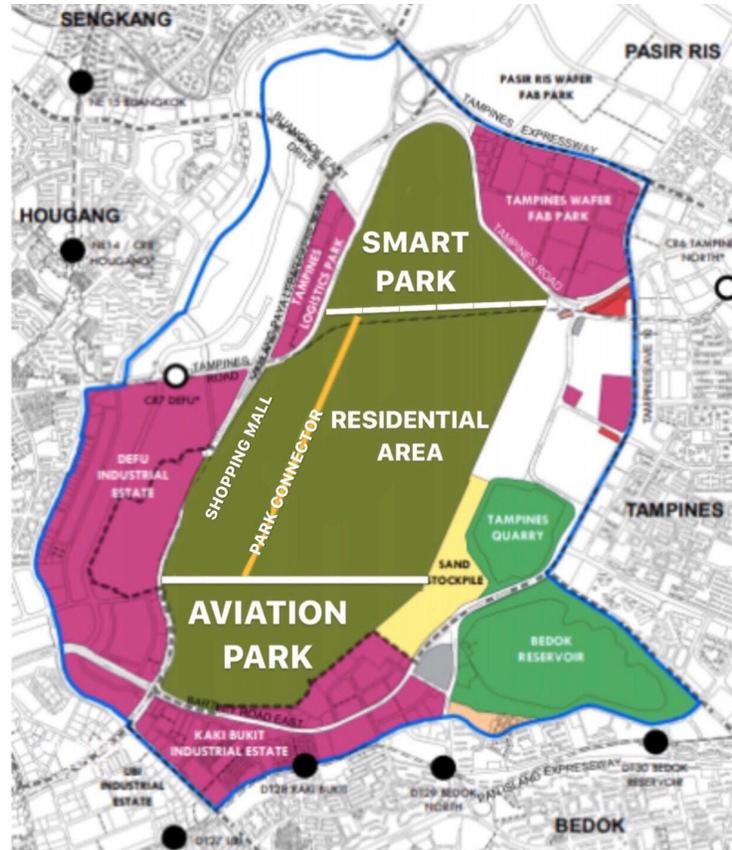


Figure 1. PLAB Redevelopment Plan

## **Description & Explanation of Proposal**

### **Transport**

We propose that a new station be added along the Cross Island line on the PLAB site. At the present, a MRT track stretching from Defu MRT station to Tampines North MRT station, that crosses the PLAB site, is planned to be constructed by 2029<sup>4</sup>. However, there are no plans for an MRT station on the site itself, although the site spans 800 hectares and is likely to host a number of residential neighbourhoods<sup>5</sup>. Hence, by constructing an MRT station on the PLAB, there will be greater ease of access to other interchanges in the east and west of Singapore. This will ensure greater connectivity between the PLAB region and the rest of Singapore.

<sup>4</sup> (2013, January 17). More new MRT lines to be built by 2030, Singapore News .... Retrieved April 13, 2020, from <https://www.straitstimes.com/singapore/more-new-mrt-lines-to-be-built-by-2030>

<sup>5</sup> (2017, July 18). A different Paya Lebar, with air base gone, Singapore News .... Retrieved April 13, 2020, from <https://www.straitstimes.com/singapore/a-different-paya-lebar-with-air-base-gone>

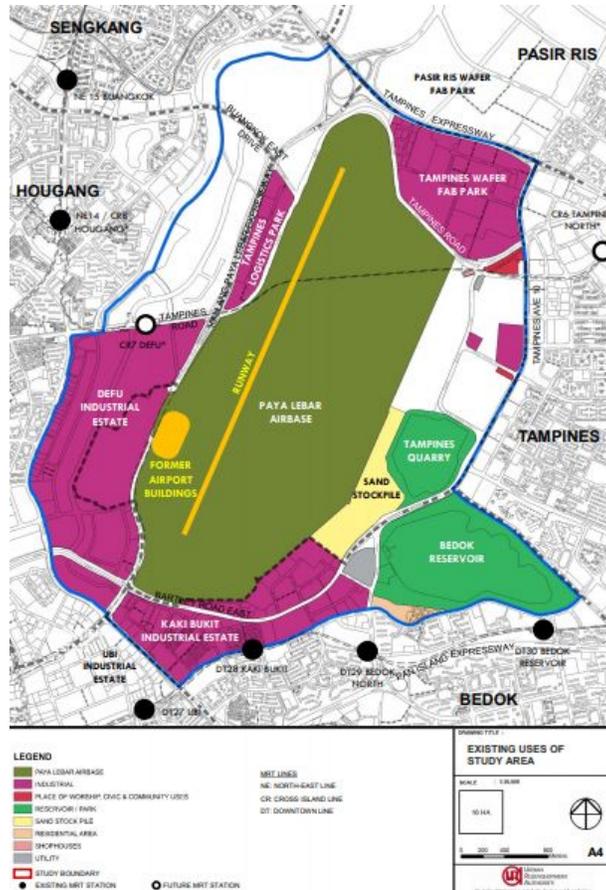


Figure 2. Current URA plan for PLAB, to be implemented by 2030<sup>6</sup>

In addition, bus services that operate within PLAB, and between PLAB and other towns should be introduced to boost intra-connectivity and inter-connectivity in the region. Bus services within the PLAB site can effectively facilitate the commute of residents within the area, while buses that travel to and from PLAB and other areas will enable greater ease of access and faster travel between PLAB and the rest of Singapore. In this regard, road connectivity is also important. To improve road connectivity between the PLAB and surrounding neighbourhoods, there will be multiple arterial roads that will run in a northwest direction across the planning area. This will allow neighbourhoods in Tampines and Pasir Ris to connect to the central & northeastern neighbourhoods like Hougang and Seng Kang without having to make the customary 'loop' around the air base that typically happens today.

## People

We proposed to have one major residential area along the runway, below the Smart Park that we will be implementing. These residential areas will comprise a variety of public and private housing, as well as other relevant amenities like libraries, schools, medical and sporting facilities. One of the key priorities would be to provide housing for different residents - migrant workers, low income families in rental flats, single parent households, as well as single & unmarried individuals, alongside the regular supply of

<sup>6</sup> (n.d.). Paya Lebar Airbase - URA. Retrieved April 13, 2020, from <https://www.ura.gov.sg/Corporate/Planning/Master-Plan/Urban-Transformations/Paya-Lebar-Airbase>

3-5 room BTO flats. This supply of housing will allow Singapore to house its residents well into the 2030s and beyond.

In order to cater the residents and the workers of nearby industrial areas with their daily needs, we are planning to refurbish and repurpose the old Paya Lebar Airport building into a shopping centre, along with a multipurpose space on the upper floors. Other retail and food establishments will also be necessary in other localities.

## Nature

We propose to build two parks, the Smart Park and the Aviation Park, within the existing Paya Lebar Airbase. The Smart Park would be situated between the Tampines Logistic Park and Tampines Wafer Fab Park and the Aviation Park would be situated above the Kaki Bukit Industrial Estate, as seen in diagram below. The runway (line in yellow) will then be transformed into a Park Connector, connecting both parks together, as well as serving as a space for activities such as cycling and exercising.

The Smart Park aims to provide services beyond what an ordinary park offers to the citizens with the advancement of technology. Firstly, we propose the implementation of “smart benches” that use solar panels to power electrical devices such as phones and tablets, as inspired by cities such as Boston and Jersey City. This benefits not only the citizens by bringing convenience to them, but also increases Singapore’s reputation as a Smart City. The citizens can thus relax and enjoy the scenery in the park while always being connected with their phones or smart devices. Secondly, we propose to replace directory boards with interactive kiosks in the smart park. This is because interactive kiosks, controlled by GPS and 4G Wireless communication, can provide a wider range of the most updated information to users of the park. These information include direction to their desired destination, real-time update of the weather forecast and even crowd level at different parts of the park.



*Figure 3. Solar-powered smart benches in Boston<sup>7</sup>*

<sup>7</sup> (2014, July 13). Boston Testing Solar-Powered Benches That ... - Mashable. Retrieved April 13, 2020, from <https://mashable.com/2014/07/13/solar-powered-smart-bench-soofa/>



*Figure 4. Smart interactive kiosks in San Diego<sup>8</sup>*

The Aviation Park focuses on preserving and highlighting the PLAB's history and heritage that could allow future generations and its citizens to be reminded of the land's history. It also serves as a distinct characteristic of the PLAB so as to strengthen the town's identity. With the majority of the park planted with trees and different florals, the park also will have big grassy areas for families to relax. Inspired by HDB's 'thematic playgrounds', the aviation park will feature big planes which 'fly through the skies', a playhouse mimicking a control tower from the old Paya Lebar airport, a mini runway to enhance the aviation theme. This can further create more opportunities to create community bonds and ties within the residents. The aviation park can also serve as an attraction so that Singaporeans from other regions can visit and understand the rich history of the PLAB.



*Figure 5. Illustration of a playground playhouse mimicked as 'Control Tower'<sup>9</sup>*

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<sup>8</sup> (2017, July 27). Smart Technology Is Coming To A City Near You - Forbes. Retrieved April 13, 2020, from <https://www.forbes.com/sites/bisnow/2017/07/27/smart-technology-is-coming-to-a-city-near-you/>

<sup>9</sup> (n.d.). Ashcroft Park 'Aircraft Control Tower', Williams Landing. Retrieved April 13, 2020, from <https://tothotornot.com/ashcroft-park/>



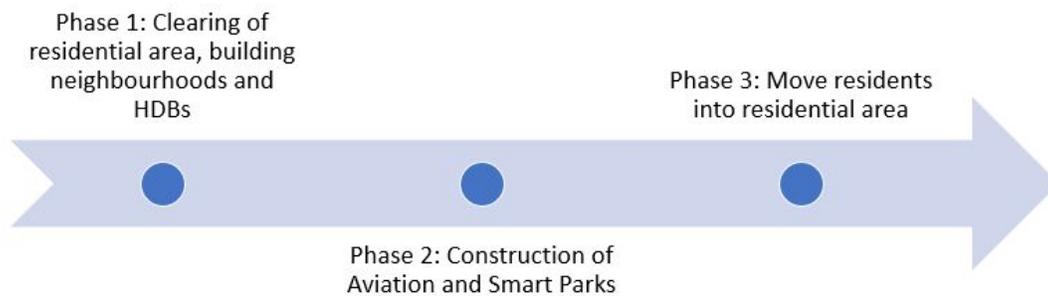
*Figure 6. Currie Barracks Airport Playground in Calgary, Canada.<sup>10</sup>*

Connecting the smart park and the aviation park would be the park connector (previously the runway). With this, people can access both parks easily. In addition, it serves an open space for the public, specifically the residents living at the nearby residential areas, to carry out leisure activities such as cycling. Now, recreation and nature are brought closer to the residents' doorsteps.

### **Phasing and implementation timeline**

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<sup>10</sup> (2015, August 28). Currie Barracks Airport Playground - Calgary, Alberta .... Retrieved April 13, 2020, from <https://calgaryplaygroundreview.com/currie-barracks-airport-playground/>



*Figure 7. Illustration of phasing timeline*

**Phase 1 (2020):** Clearing the land of the residential area, building neighbourhoods and HDBs. Cross island line should be under construction as it steps into its 1st phase in 2020, and aims to open in 2029. We aim to settle the residential areas first as we would like to start on the residential area, which can then slowly diverge our constructions and plans to the Northern portion and Southern portion of the PLAB.

**Phase 2:** Construction of the Aviation park and Smart park concurrently. As we can divert our resources to both plots of lands when the first phase finishes.

**Phase 3:** Move residents in, as we want to ensure minimal disturbance to the residents if we move them in in phase 1. Revamp the old airport building.

### **Conclusion**

While there are many possibilities for the future of the PLAB's land, our group believes that it is important that the land should be used to meet pressing needs for housing in the future while maintaining the region as an active hub for industry. In order to make the area attractive for work and play, it is important that residents have the opportunity to live close to their workplace as well as green public spaces for recreation. Connections to existing nature parks along Sungei Serangoon as well as Bedok reservoir will help to improve the quality of life of residents. Moreover residents of the district must feel that they are well-integrated into the existing public and road transportation networks. The introduction of useful train and bus, walking and cycling routes in the area will thus go a long way in this regard.

Amidst all of this, it is important to give this district a sense of character with some connection to the region's past. Thus, we aim to celebrate the nation's aviation heritage through the preservation of landmarks, as well as other subtle nods to aviation in the design of new public spaces.

Our proposed allocation of land use to residential and industrial activity thus not only makes the PLAB area a highly functional one, but also a highly connected one in that it forges long-lasting connectivity to history, nature, technology and between residents.

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