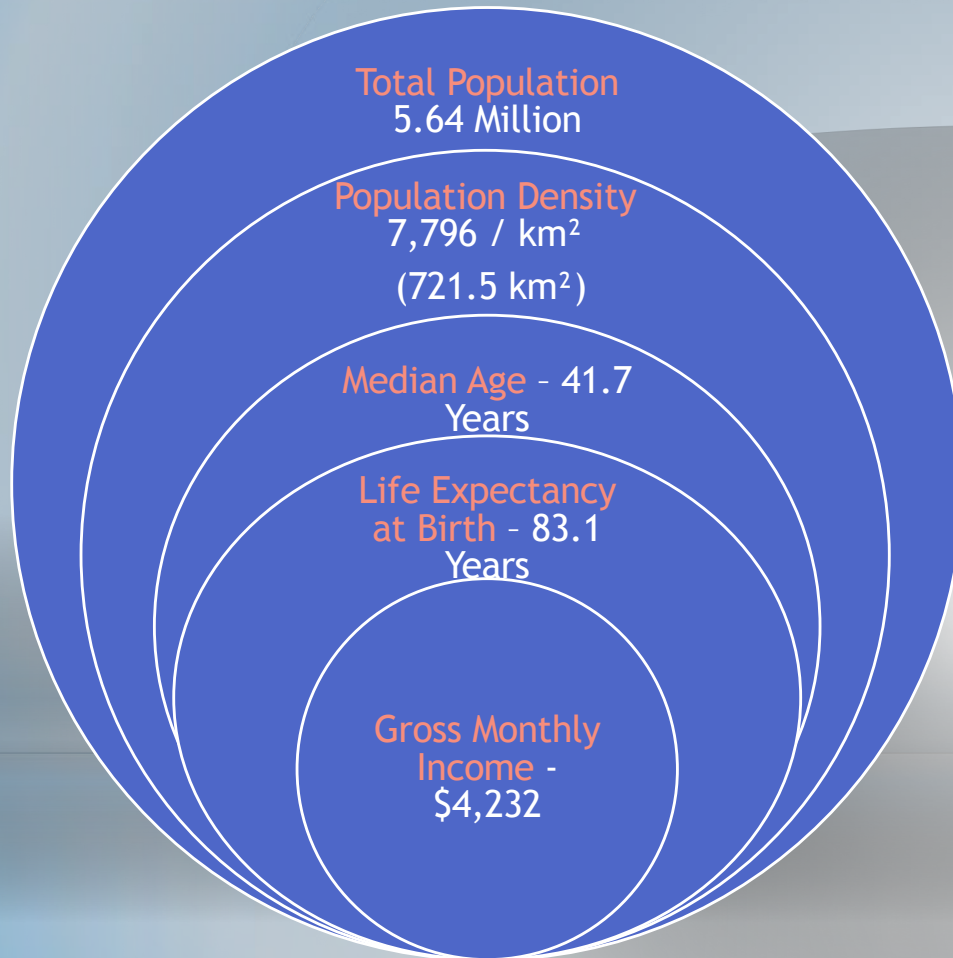


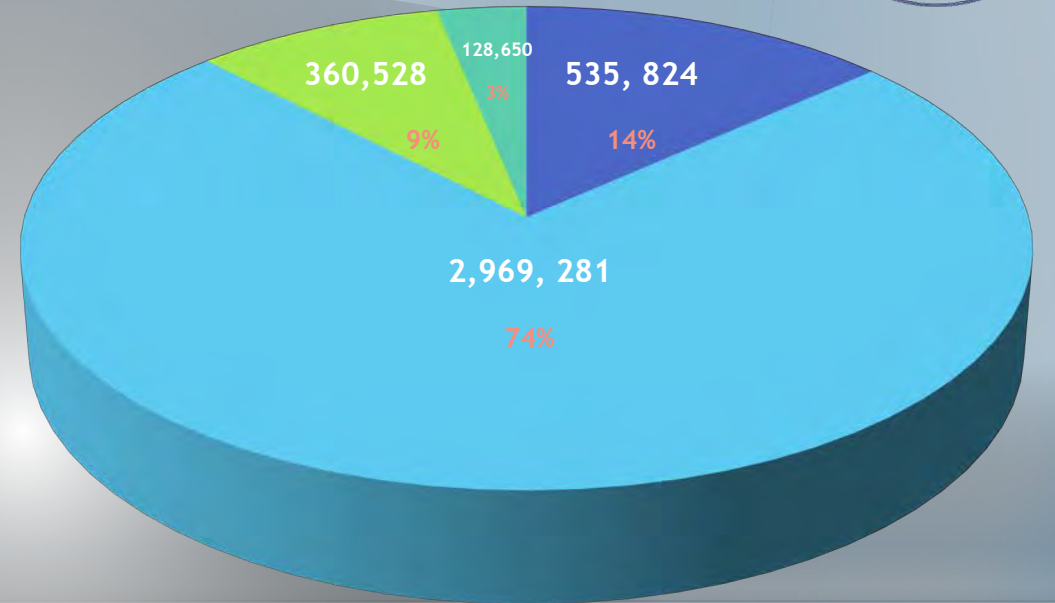


Singapore Plumbing Society

Singapore Demographic Fact Sheet



Multi-Racial Society



■ Malays ■ Chinese ■ Indians ■ Other Ethnic Groups

Greater Melbourne - 9992.5 km² / Population - 4.96 million

Source: <https://www.population.sg/population-trends/demographics>
<https://www.singstat.gov.sg/find-data/search-by-theme/population/population-and-population-structure/visualising-data>



Henley Index: Japan and Singapore
top 2019 list of world's most
powerful passports ... 189 countries



Singapore's PM ranks world's highest-paid leader

Highest-paid world leaders
Source: USA Today

Leader	Salary
Lee Hsien Loong	\$1,818,000
Clare Lam	\$564,405
Li Keqiang	\$482,938
Donald Trump	\$400,000
Scott Morrison	\$379,414
Angela Merkel	\$268,727
Joscha Andrius	\$236,862
Mohammed bin Zayed Al Nahyan	\$236,000
Siddharth Kumar	\$228,984
Khalid bin Salman	\$228,000

Graphic by Nani Kyungdon
nani@nani.com

The highest paid
public servant



Fun Fact about Singapore

Singapore ranked among bottom 10 countries for
efforts to reduce inequality: Oxfam report



Singapore tops global ranking for
order and security (EIU)





“Licensing and learning: The Singapore experience”

Presented By: Wee Teck, TAN
President of Singapore Plumbing Society



Agenda

WHO

is Sharing?

is Singapore Plumbing Society?



- ❖ An Overview of the Plumber's Licensing Framework in Singapore
 - Main Legislations
 - Collaboration Framework
 - Continual Professional Development for LPs
 - Enforcement
- ❖ Why Single Licensing for Plumbing Works?
- ❖ The Plumber's Licensing Journey - Past & Present
- ❖ What Qualifications are Needed to be a LP?
- ❖ What are the Learning Pathways to Becoming a LP?
- ❖ Value Proposition for Sustainable & Consistent High-Quality Plumbing Service

WHO is Sharing?



Wee Teck, TAN *PUB Licensed Plumber*

President of Singapore Plumbing Society

Member of PUB Water Network 7th Panel

Senior Member of Institution of Engineers Singapore (IES)

Adjudicator for Security of Payment Act (Construction Payment Disputes)

WHO

is Singapore Plumbing Society?

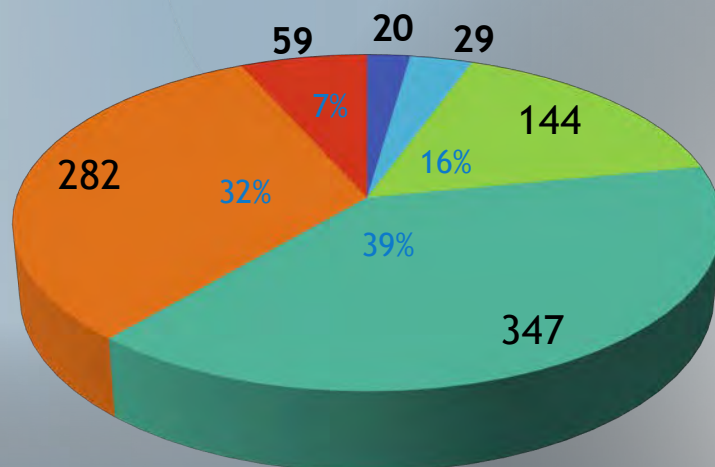


- ❖ A non-profit society founded in 1956
- ❖ To uphold plumbing & sanitary standards for public health and to advance the interests of plumbers in Singapore through partnerships and continual professional development

How many of the same kind?

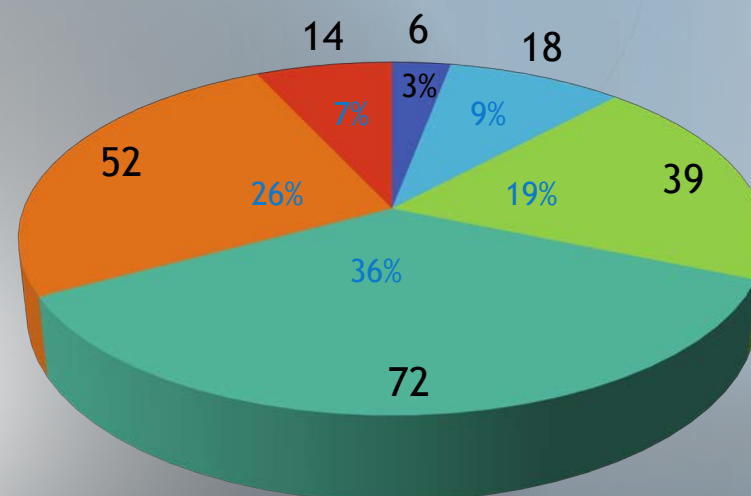


***LPs in Singapore - 881**

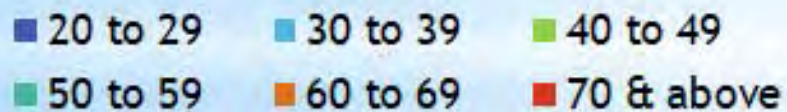


*78% of LPs in SPS are above the age of 50
6% of the LPs in SPS are below the age of 40*

LPs in SPS - 201



*69% of LPs in SPS are above the age of 50
12% of the LPs in SPS are below the age of 40*



**Data from PUB as of 1st Sep 2019*

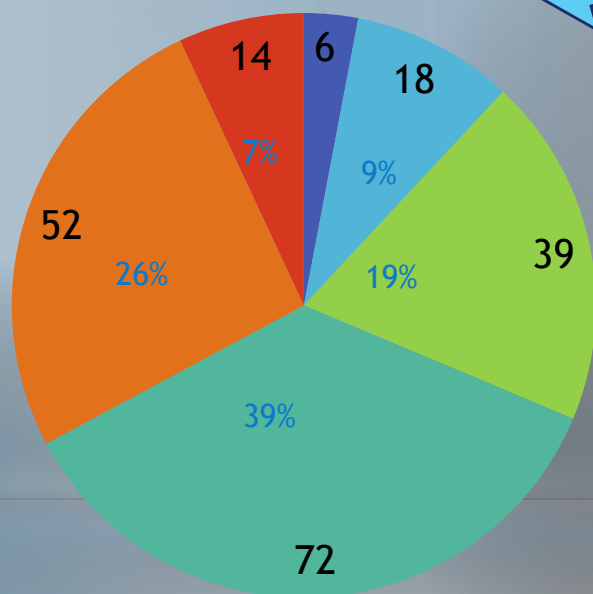




SPS Membership

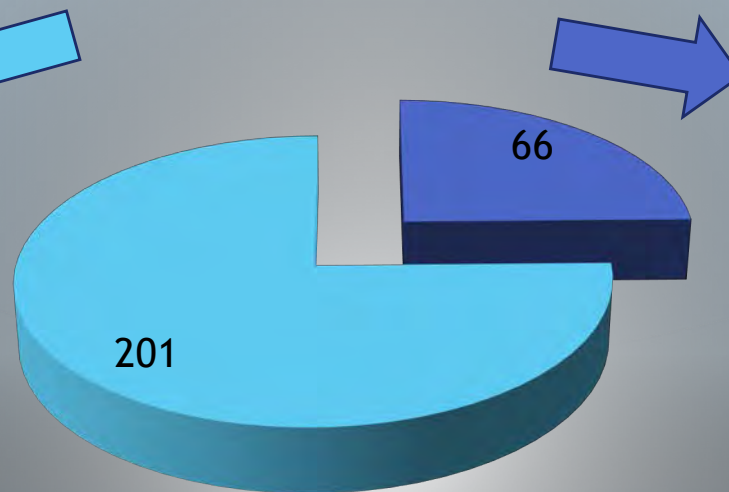
Total no. of Members - 267

LPs Members - 201



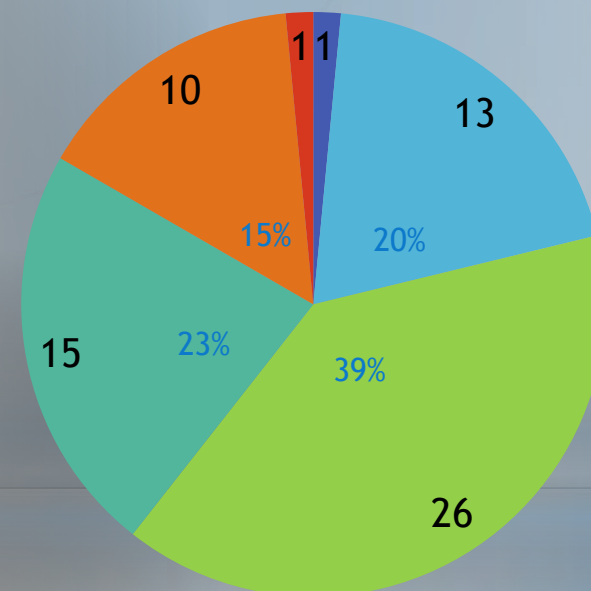
:- 69% of LPs in SPS are above the age of 50
:- 12% of the LPs in SPS are below the age of 40

Associate Members (AM) - 66



■ Associates ■ LPs Member

■ 20 to 29	■ 30 to 39	■ 40 to 49
■ 50 to 59	■ 60 to 69	■ 70 & above



:- 40% AM in SPS are above the age of 50
:- 22% AM in SPS are below the age of 40

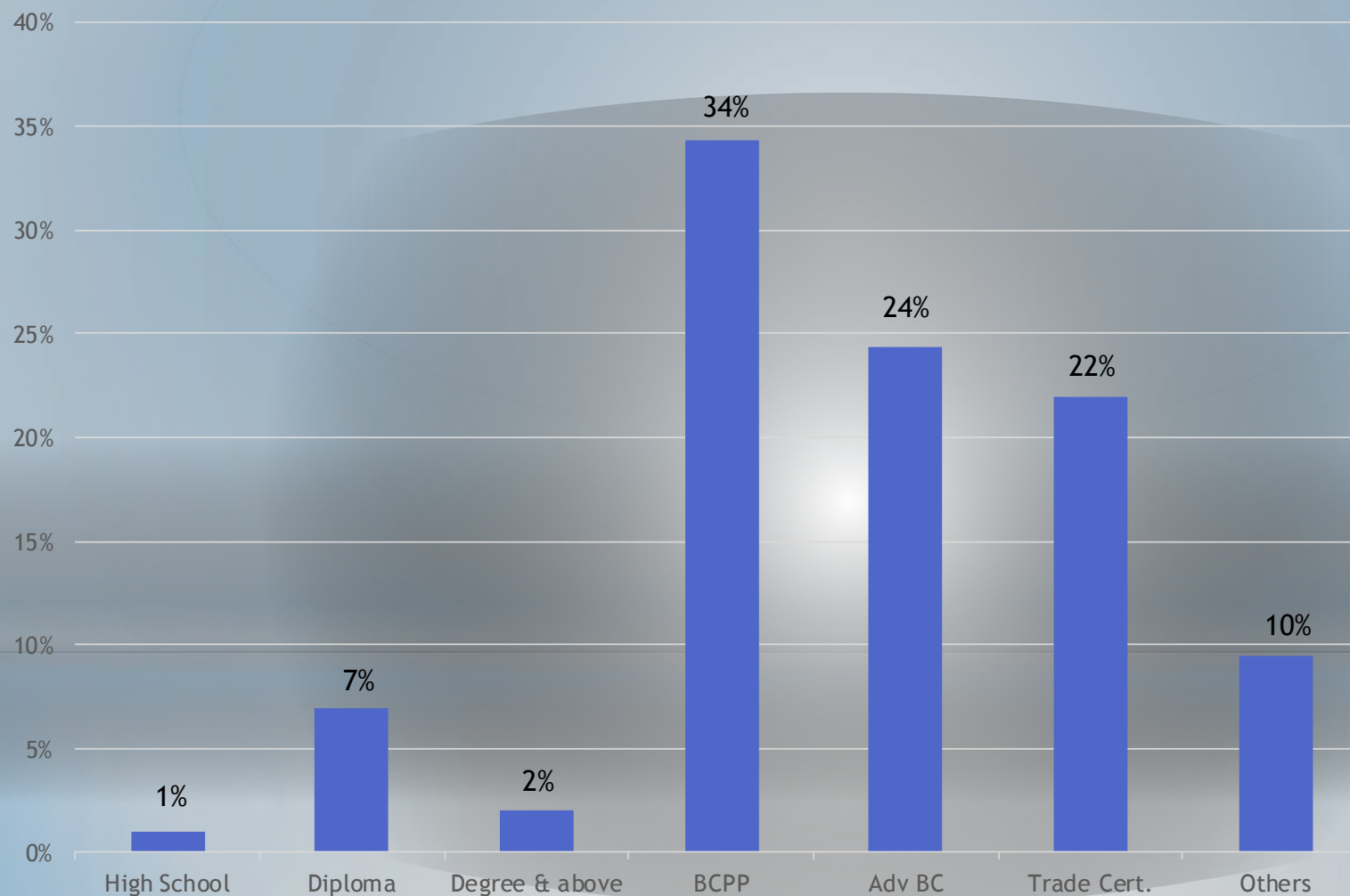
LPs Qualification in SPS



Legend:-

Adv BC - Advanced Builder Certificate

BCPP - Builder Certificate in Plumbing & Pipefitting



An Overview of the Plumber's Licensing Framework in Singapore



1. Main Legislations

- ❖ Public Utilities Act
- ❖ Public Utilities (Water Supply) Regulations
- ❖ SS 636:2018 - Code of Practice for Water Services
- ❖ Code of Practice on Sewerage and Sanitary Work (2nd Ed., 2019)

[Similar to the WPC's Protection Pillar?]

Note: The Public Utilities Board (PUB) is the National Water Agency of Singapore



An Overview of the Plumber's Licensing Framework in Singapore



2. Collaboration Framework

Formulation of standards & COP are done in consultation with local professional bodies through working committees and focus groups:

- ❖ Singapore Plumbing Society (SPS)
- ❖ Institute of Engineers Singapore (IES)
- ❖ Association of Consulting Engineers Singapore (ACES)
- ❖ Singapore Institute of Architects (SIA)
- ❖ Statutory Boards - Housing Development Board (HDB), Jurong Town Corporation (JTC), etc.

[Similar to the WPC's Participation Pillar?]

An Overview of the Plumber's Licensing Framework in Singapore



3. Continual Professional Development for LPs

- ❖ LP license is for LIFE ... BUT mandatory to attend a 4-hour refresher course once every 3 years
- ❖ SPS conducts specialised technical training - high / low pressure test, washing of water tanks, leak detection, pumping system etc.
- ❖ Through Lifelong Learning Framework - Singapore's national movement on SkillsFuture

“Skillsfuture is a national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points.”

[Similar to the WPC's Practices Pillar?]

(Source: <https://www.skillsfuture.sg/AboutSkillsFuture>)



An Overview of the Plumber's Licensing Framework in Singapore



4. Enforcement

- ❖ Public Utilities Board (PUB), the National Water Agency is the Enforcement Agency
- ❖ The Plumbers' Workmanship Improvement Scheme (PWIS)
- ❖ Penalty Point System - Warning, Suspension and De-Registration (Revoke)
- ❖ Prosecution Through Court Proceedings

[Similar to the WPC's Protection Pillar?]

Why Single Licensing for Plumbing Works?



"Plumbing is a fundamental part of maintaining the consumer end of water supply and used water collection. Water and sanitary pipes in buildings and homes must be built properly with competent knowledge in both water service and sanitary plumbing to maintain public health standards. This is why we are expanding the licensing framework to include sanitary plumbers - to better ensure the quality of works carried out by them and to better protect consumer interests."

(TAN Yok Gin, Deputy Chief Executive (Operations), PUB)

Source: <https://www.straitstimes.com/singapore/sanitary-plumbers-to-require-licences-under-new-licensing-scheme-from-april-2018-pub>



The Plumber's Licensing Journey - Past & Present



Timeline	Water Service Plumbing Works	Sanitary Plumbing Works
Before 1 st Apr 2018	Work can only be carried out by PUB Licensed Water Service Plumbers (LWSPs).	A license is not required ¹ . Any contractor or plumber can carry out the work.
From 1 st Apr to 30 th Sep 2018 (transition period to Single Licensed Plumber Scheme)	<ul style="list-style-type: none"> - PUB² Licensed Plumbers³ (LPs) - PUB Licensed Water Service Plumbers (LWSPs) 	Work can only be carried out by: <ul style="list-style-type: none"> - PUB Licensed Plumbers (LPs) - Singapore Plumbing Society (SPS) Registered Sanitary Plumbers
From 1 st Oct 2018	<ul style="list-style-type: none"> - All plumbing works can only be carried out by Licensed Plumbers (LPs) - Plumbers without license can only work under the direction of LPs 	

¹ Prior to 1st Aug 2002, only a Ministry of Environment registered sanitary plumber was allowed to carry out sanitary plumbing works. However, Ministry of Environment deregulated the registration of sanitary plumbers on 1st Aug 2002. SPS took over the role of the registration of the sanitary plumbers.

² PUB stands for Public Utilities Board. The Singapore National Water Agency.

³ Licensed Plumber under the new Single Licensed Plumber Scheme.

What Qualifications Are Needed to be a LP?



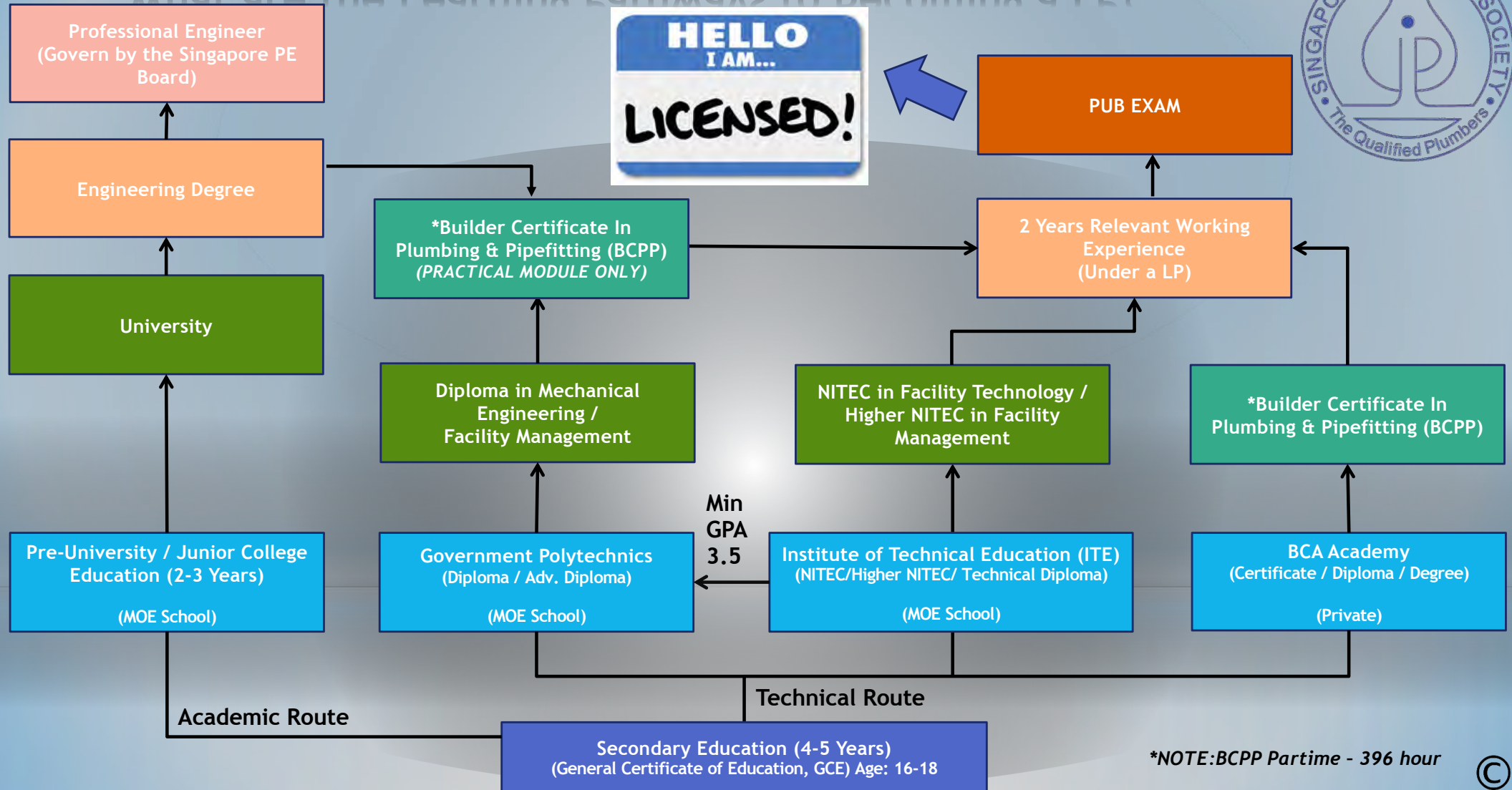
- ❖ **Builder Certificate / Advanced Builder Certificate in Plumbing & Pipefitting or Trade Diploma in Plumbing Technology issued by BCA⁴ Academy or NITEC⁵ in Facility Technology issued by ITE⁶; OR**
- ❖ **Diploma or Degree in Civil, Building, Environmental or Mechanical Engineering disciplines with at least a Builder Certificate in Plumbing & Pipefitting (Practical); AND**
- ❖ **At least 2 years of relevant post qualification experience or concurrent experience working under a LP's supervision**

⁴ BCA stands for Building and Construction Authority. A government agency to develop and regulate Singapore's building and construction industry.

⁵ NITEC stands for National Institute of Technical Education Certificate. A trade skill certificate issued by ITE.

⁶ ITE stands for Institute of Technical Education. A government technical college that provides technical training to support the Singapore economy.

What are the Learning Pathways to Becoming a LP?



Value Proposition for Sustainable & Consistent High-Quality Plumbing Service



- ❖ Continual Professional Development (CPD) through regular mandatory training. Eg. To accumulate minimum CPD points per year for license renewal vs the current 3 yearly refresher course
- ❖ To reinvent the penalty point system (PWIS) to include reward system in order to shape LP's behaviour (human behaviour)
- ❖ Regular dialogue and sharing sessions with other professional bodies, statutory boards and public interest groups to bridge the expectation vs quality gap



... for the opportunity to share and learn

