KEY TECHNOLOGICAL AND DEMOGRAPHIC TRENDS AFFECTING THE LAND TRANSPORT WORKFORCE



Industry 4.0

Digitalisation of industrial production creates new employment opportunities



Ageing population

Ageing workforce will require an inclusive and age-friendly work environment



Shift to electric vehicles (EVs)

Emerging opportunities throughout the EV value chain



Foreign worker dependency

Reskilling of locals for higher-level work to reduce reliance on foreign labour



Autonomous vehicles (AVs)

Projected to gain momentum after 2040







TECHNOLOGY WILL TRANSFORM JOBS IN THE LAND TRANSPORT INDUSTRY

Creation of 6 new roles

These include: Data Analyst, Electric Vehicle (EV) Charging Infrastructure Technician and Autonomous Vehicle (AV) Fleet Operator

Enhancement of 15 existing job roles

Examples: Use of data and analytics by Rail Technicians; assistive technology for repair and maintenance of EVs for Bus Technicians

Automation of 6 existing job roles

Manual, labour-intensive tasks in operation and maintenance (e.g. Track inspection, monitoring) will be eliminated

Transformation in job roles and scope will be gradual

Changes experienced in jobs such as EV Technician (maintenance and repair) will be gradual because it would take time for the vehicle population to electrify. Furthermore, AV technology will mature over a longer time frame, of 10 to 20 years or beyond

WHAT CAN BUSINESSES DO?





Plan ahead

Work with NTUC to form Company Training Committees (CTCs). Companies can also work with Trade Association Chambers (TACs) to implement their business and workforce transformation plans according to insights from the Jobs Transformation Map (JTM)



Upskill and reskill existing workers in highly-impacted roles

- Equip workers with emerging skills such as Sensor Monitoring Management, Robotics and Automation Application and Data and Statistical Analytics through SkillsFuture courses
- Tap on WSG's Career Conversion Programmes (CCPs) which include Job Redesign Reskilling (JRR) modality to reskill impacted workers.
 An example of a CCP is the CCP for Sustainability Professionals (EV Specialists)

WHAT CAN BUSINESSES DO?





Explore partnerships

Develop employees' skillsets through partnerships with:

- Institutes of Higher Learning (IHLs)
- Land Transport Training Academies: Singapore Bus Academy (SGBA),
 Singapore Rail Academy (SGRA)
- Land Transport Associations: National Transport Workers' Union (NTWU), Singapore Motor Workshop Association (SMWA), National Taxi Association (NTA)



Adopt a Learn, Practice and Review approach

Create skills development strategies that blend formal structured learning, on the job training and informal learning, to equip employees with the necessary knowledge, skills and abilities to stay relevant and support the land transport industry

WHAT CAN WORKERS DO?





Explore programmes launched by LTA in partnership with WSG and SSG

- The Land Transport sector is open to all workers, from fresh graduates, to mid-career workers and senior workers
- Aspiring EV Technicians may explore the National Electric Vehicle Specialist Safety (NESS) certification launched in partnership with SkillsFuture SG
- Mid-career and senior workers interested to join the Land Transport sector can tap on Career Conversion Programmes (CCPs) such as the CCP for Sustainability Professionals (EV Specialists) launched in partnership with WSG



Take charge of their own careers and reskill

Existing Land Transport workers to determine skills top-up needed to continue carrying out your job role effectively



Upskill in advance

Existing Land Transport workers to tap on SkillsFuture to pick up emerging skills and seize new and good job roles