



EDCOM2
The Second Congressional
Commission on Education



Turning Point: A Decade of Necessary Reform
EDCOM II ■ FINAL REPORT

Workforce Development Plan

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Workforce Development Plan

INTRODUCTION

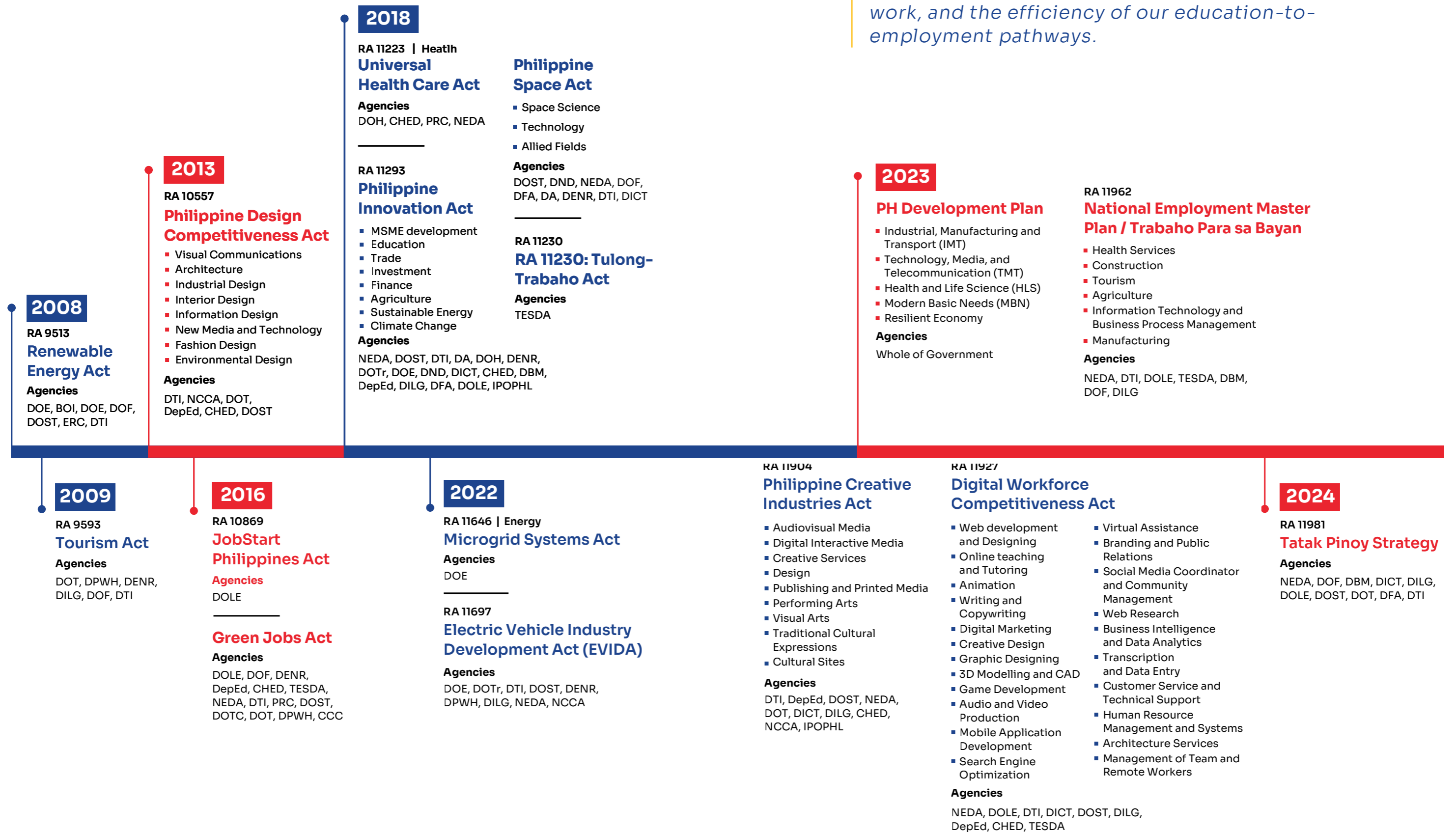
A Workforce Development Plan is complementary and necessary to any reforms made in foundational education, as the Filipino student eventually enters the labor force in search for meaningful, productive work.

Education develops the capacities of Filipinos to live meaningful and productive lives, often realized most clearly through the work they choose. A Workforce Development (WFD) Plan, therefore, is an equally important complement to the National Education Plan. We view education as an investment that must flow into clear, measurable employment outcomes such as employability, matching of skills, and social mobility. A disproportionate focus on the supply side, which has long been the case, has produced graduates whose competencies are misaligned with workforce needs, leading to underemployment and wasted potential. To prevent this, our education system must ensure that curricula, certification and credentialing, and coordination with employers are efficient and relevant. This is why a WFD plan is neither peripheral nor optional, but rather a core requirement to ensure our investments in education redound to both the Filipino citizen and to the country's economic progress.

The national Trabaho Para sa Bayan agenda provides a critical first step in that direction. Republic Act No. 11962 established a National Employment Master Plan to coordinate skills, jobs, and MSME support across agencies and to drive medium- and long-term targets for labor-force participation and decent work. The law (and the government's May 2025 launch of the 10-year plan) creates the institutional space — an interagency council, shared metrics, and budgetary authorizations — that any complementary workforce development strategy must plug into rather than duplicate. This report is therefore explicitly designed to supplement the Trabaho Para sa Bayan Plan by (a) proposing national workforce development goals informed by industry-specific diagnoses, (b) documenting local labor-market frictions, and (c) proposing measurable interventions that both government and industry can scale.

Further, 26 laws that supplement the needs of the workforce have also been enacted. These include, but are not limited to, the PH Development Plan of 2023, the Digital Workforce Competitiveness Act of 2023, and the Tatak Pinoy Strategy of 2024 (Figure 1).

FIGURE 1.
Overview of Current Government Priorities



Our labor force faces critical gaps, alongside opportunities for decisive reform, especially when looking at underemployment, quality of work, and the efficiency of our education-to-employment pathways.

a DTI survey has shown that for manufacturing companies, only 11% of their entry level hires were considered “fully ready” by their employers.

Our labor force faces critical gaps, alongside opportunities for decisive reform, especially when looking at underemployment, quality of work, and the efficiency of our education-to-employment pathways.

Even as headline unemployment has fallen, there is a persistent question on underemployment (14.6% in April 2025, per PSA) and quality of employment. In some key industries such as healthcare and advanced manufacturing, “overeducation” (i.e., having credentials above what is required in your occupation) could reach as high as 36% of the labor force. Further, our analysis has shown that 24% of “specialized” graduates (i.e., graduates with a degree in a specific field) are working in an unrelated industry. These findings point towards opportunities to make our education-to-workforce pipelines more intentional and efficient, and are reinforced by realities on the ground.

Across industry consultations, we have heard industry leaders sharing unnecessarily burdensome ways to train new hires beyond what is expected. For instance, a DTI survey has shown that for manufacturing companies, only 11% of their entry level hires were considered “fully ready” by their employers. Especially with the advent of Artificial Intelligence (AI), proactive action is necessary to safeguard the agility of our education system.

Being strategic means any reform investments must be informed by grounded insights that are industry-specific, validated by both public and private sectors, and generate material, measurable returns.

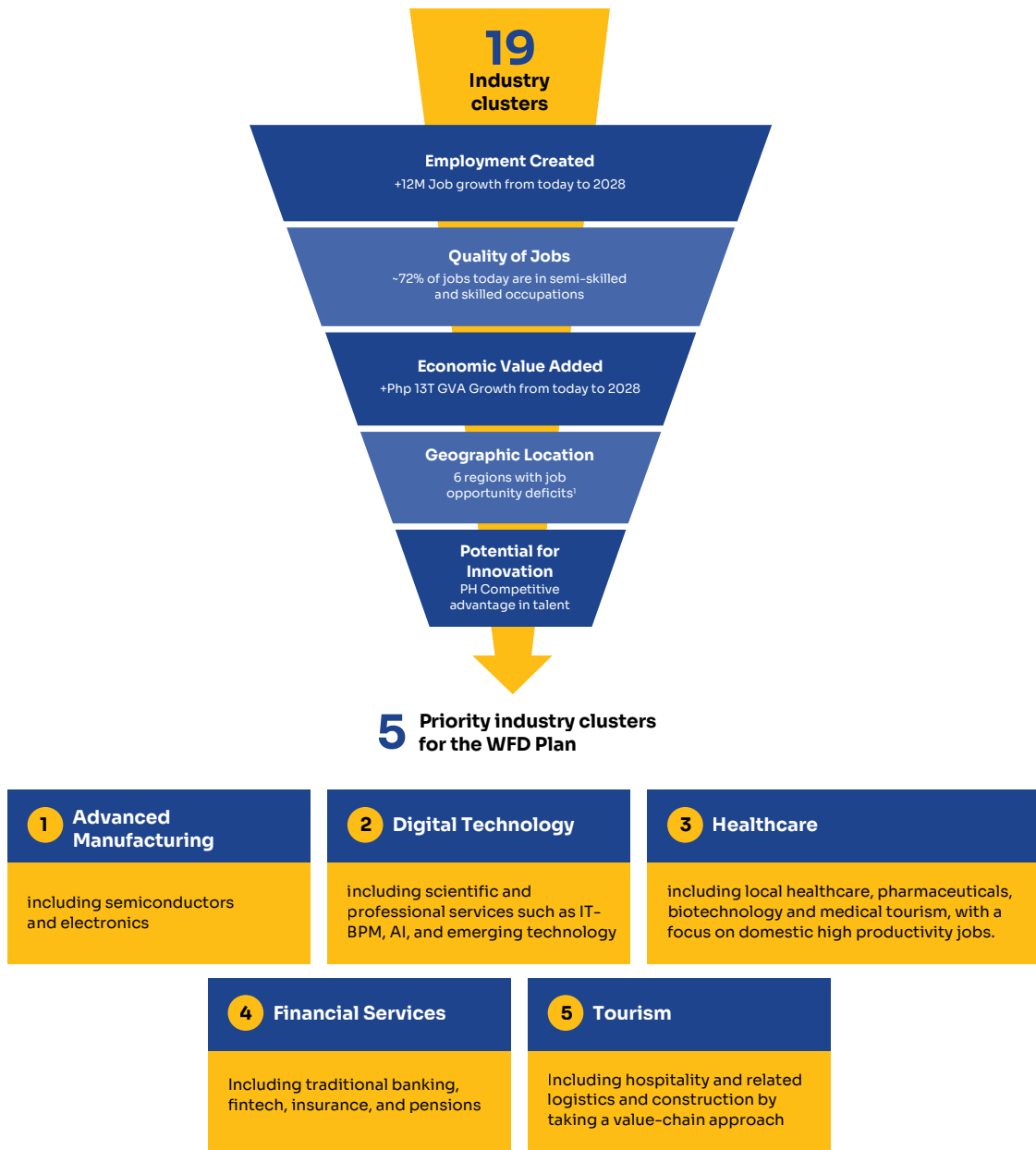
Therefore, this WFD Plan was crafted following three distinct phases. First, EDCOM II, in consultation with principals of key government agencies, identified the priority clusters that are most in need of education and training interventions, and that would also capitalize on the country’s competitive advantage. Second, within each industry cluster, workforce gaps were assessed - both quantitative and qualitative - to sharpen emerging challenges that could be addressed by reform. From these diagnoses, the third phase followed: identifying a suite of reform options through workshops with industry partners and national government agencies. As a result, the WFD Plan’s core contribution to education reform is a list of more than 20 reforms to be tracked and implemented over the next 10 years. These reforms, while specific and inspired by the diagnoses across the five priority clusters, are often relevant for the broader education system. In the spirit of forging a more adaptable education system, this WFD Plan must also be revisited, updated, and even expanded over the years.

FIVE PRIORITY CLUSTERS: TARGETING SKILLS FOR THE SECTORS OF THE FUTURE

To formulate actionable and insightful reforms, we prioritized 5 industry clusters to analyze. These clusters are where education and workforce development reforms would deliver the broadest national impact.

Five clusters were selected from an exhaustive list of 19 sectors using a process that balanced economic relevance, geographic inclusion, and the potential for high-quality and productive work.

FIGURE 2.
Priority Industry Selection Criteria



1. Population % share is larger than jobs % share nationwide (e.g., Region 3 has 11% of the population but only 8% of jobs)

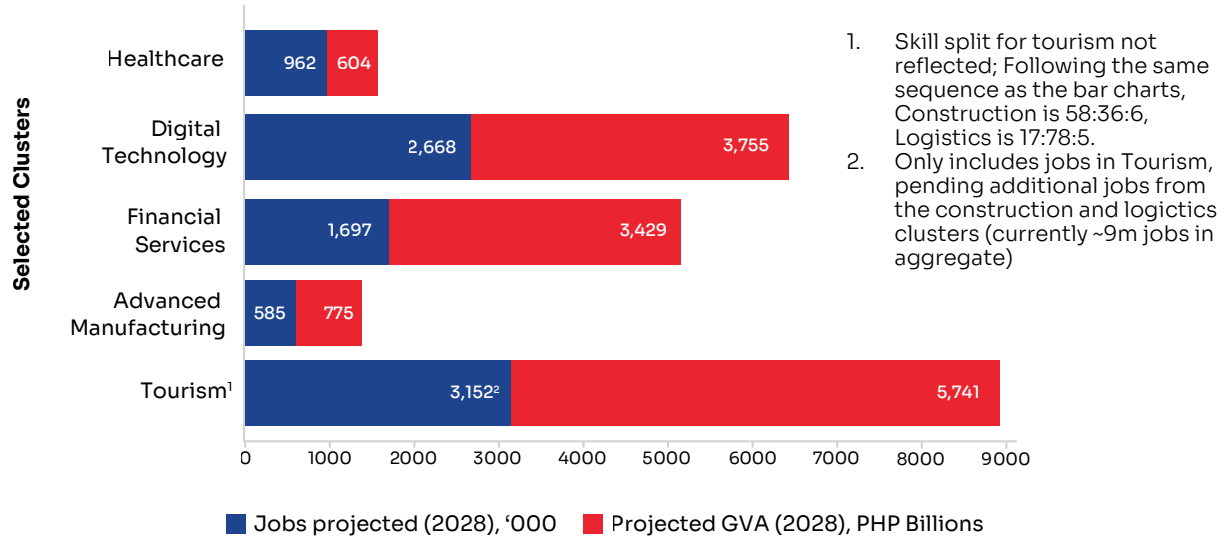
The final prioritization was guided by the following criteria:

- Quality of jobs** – preference for sectors where a large share of employment is in semi-skilled and skilled occupations,
- Geographic distribution** – capacity to expand employment across all regions throughout the country
- Employment growth potential** – sectors projected to generate a significant amount of jobs between today and 2028, providing both volume and diversity of opportunities.
- Economic value-added growth** – industries with the potential to contribute significant Gross Value Added (GVA) by 2028.

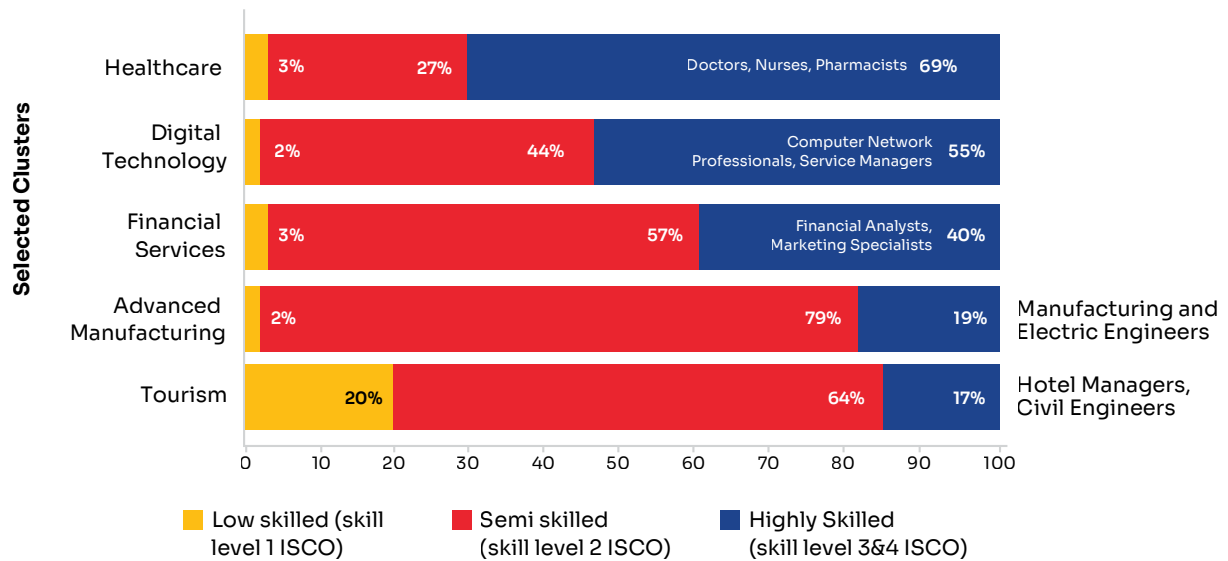
The overall relevance of the five criteria were used in selecting the five priority industries. Weighting, however, varied per industry. For instance, sectors like advanced manufacturing and digital technology might rank lower in terms of the quantity of jobs created and geographical spread, but would generate high quality jobs that are productive and value-creating. These industries can also capitalize on a potential competitive advantage for the country, such as riding the AI wave, for example. On the other hand, sectors such as tourism and healthcare generate demand across all regions of the country—creating large volumes of employment, though with a wide range in job quality. Lastly, while these weights varied across industries, the final consideration was whether the proposed education and workforce development reforms would deliver real impact—or merely add activity without measurable outcomes.

FIGURE 3.
Baseline Job and GVA Estimates in Priority Clusters by 2028

Jobs and Value Added



Skill Split Today (2022)



18.3M
Projected jobs in 2028
(32% of total jobs)

Php 14.1T
Projected GVA in 2028
(43% of total)

Source: PSA, DepDev, Oxford Economics

Prior to the WFD plan, baseline projections show that by 2028, these five clusters could collectively account for 32% of all jobs in the country and generate 43% of gross value added (GVA) (Exhibit 3). Their combined footprint ensures that targeted reforms in these areas will have system-wide economic and employment effects, and substantially elevate productivity, innovation, and inclusive growth.

The priority clusters are: **(1) Healthcare**—encompassing the talent for our domestic local healthcare system, pharmaceuticals, biotechnology, and medical tourism; and emphasizing the importance of creating high-productivity domestic jobs; **(2) Digital Technology**—including scientific and professional services such as IT-BPM, artificial intelligence, gaming, animation, and digitally-enabled creative industries, as well as other emerging technologies; **(3) Financial Services**—covering traditional banking, fintech, insurance, and pensions; **(4) Advanced Manufacturing**—including manufacturing for semiconductors and electronics, renewables, and electric vehicles (EVs); and **(5) Tourism**—approached through a full value chain lens, primarily considering workforce needs for the hospitality industry (including relevant creative industries), but also acknowledging needs for the enabling industries of logistics and construction.

Specific analyses were undertaken for the five clusters to help identify the necessary investments, curriculum redesigns, training systems, and credentialing frameworks, among others, that could strengthen workforce readiness.

What follows is a summary of the key insights discovered for each cluster. Each section examines each priority cluster in detail, outlining the workforce challenges, skills gaps, and opportunities that will subsequently inspire our proposed WFD reform agenda.

INDUSTRY-SPECIFIC ANALYSIS: HEALTHCARE

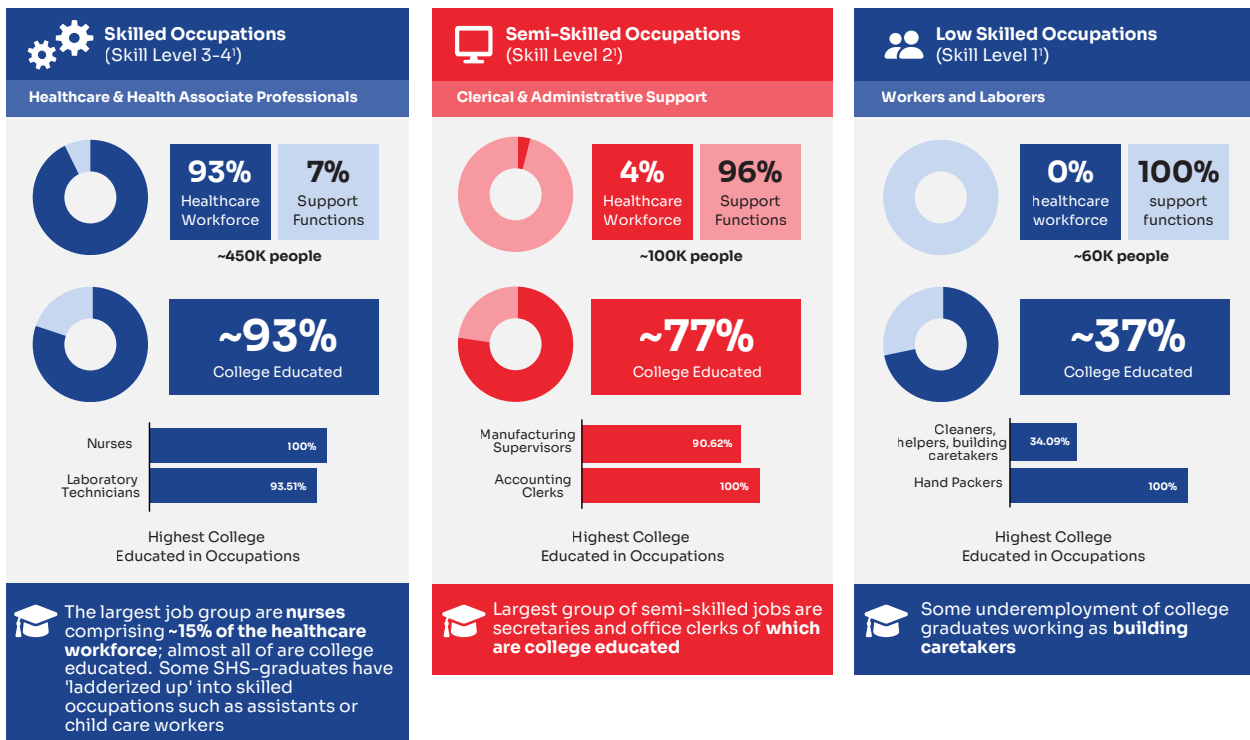


The healthcare cluster considers the workforce across three major sets of industries: healthcare services (including health service providers and public health practitioners), pharmaceuticals, and biotechnology. Among these, healthcare services represent the most urgent domestic need, addressing core social-sector challenges in access and equity. At the same time, the global demand for Filipino healthcare professionals continues to rise, placing further pressure on local systems to retain talent while meeting international market opportunities. While the majority of the following analysis covers the first sub-industry, such as the pressing need for more doctors, nurses, and dentists, the workforce needs across the entire cluster, such as researchers and biotechnologies, are well within the scope of any reforms considered for the healthcare workforce.

Based on the PSA's labor force survey (Figure 4), today's full healthcare workforce of roughly 610,000 is concentrated in key roles such as nurses (95,000), secretaries and clerks (65,000), laboratory technicians (50,000), and midwives (45,000). Each year, we estimate that around 32,000 graduates enter the job market, led by graduates of nursing (9,000), medical technology (6,000), medicine (5,000), and midwifery (4,000).¹ The quantum of the workforce specifically in biotechnology, for instance, remains small.

FIGURE 4.

Estimated Healthcare Workforce² by Occupation Type, Number of People (2022)



1. Aligned to International Standards for the Classification of Occupations (ISCO) defined skill taxonomy
2. Nurses, Dentists, Medical Technologist, Midwives, Nutritionist/Dietician, Occupational Therapist, Pharmacist, Physical Therapist, Physician, Radiologic Technologist, X-Ray Technologist numbers are based on DOH HRH statistics; others estimated based on PSA labor force survey

Source: PSA Labor Force Survey, October 2022 (n = 183,602), DOH HRH Statistics 2022

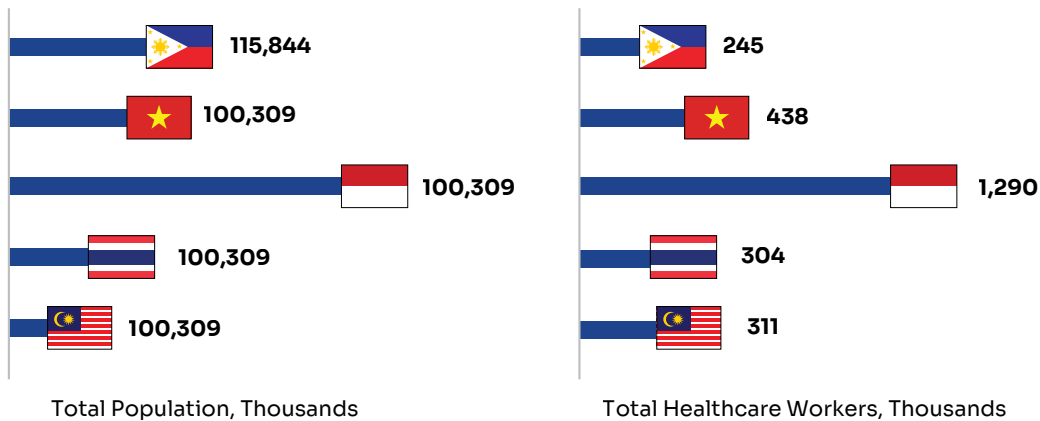
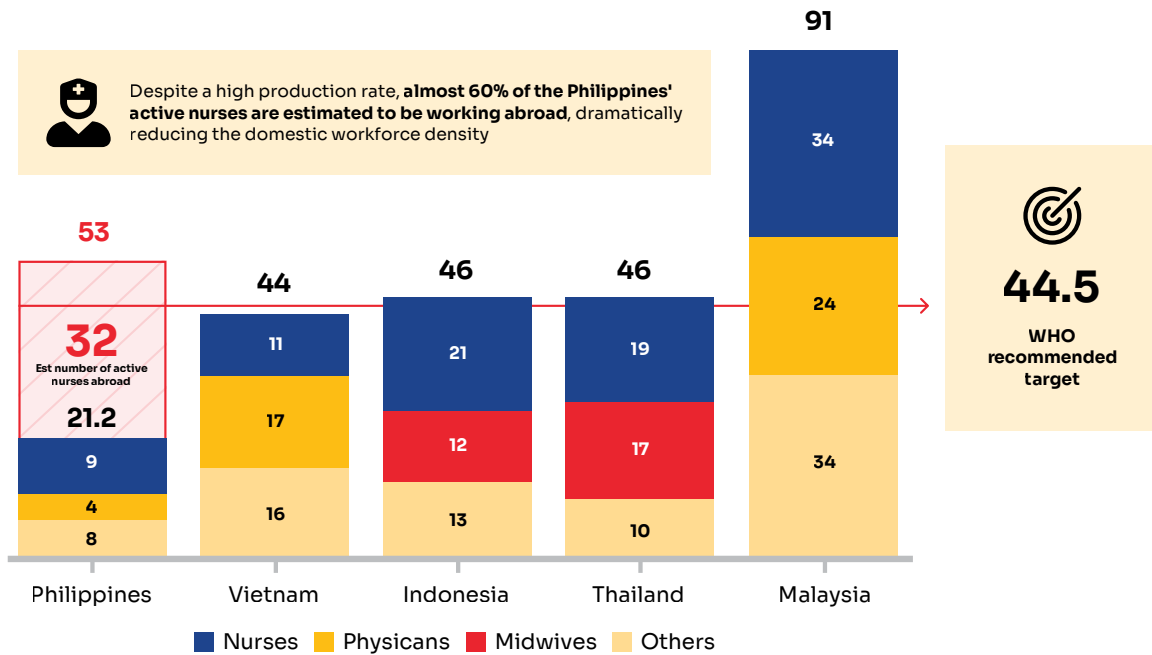
The Philippines has an estimated 21.2 healthcare workers per 10,000 people - below the 44.5 recommended ratio of the World Health Organization (WHO). While many challenges drive this shortfall, migration of workers is a prominent driver of talent leakage.

Of this 610,000, around 245,000 are classified and tracked by the Department of Health as core healthcare workers. These include nurses, midwives, physicians, pharmacists, and dentists, among others. This roughly translates to only 21.2 healthcare workers per 10,000 people—less than half of the WHO-recommended 44.5, implying a clear shortfall that constrains both healthcare access and outcomes.

However, the country has theoretically produced enough healthcare workers. Just considering the estimated number of nurses that have migrated out of the country would bring the ratio to 53 healthcare workers per 10,000 people, sufficiently meeting the WHO recommendation (Figure 5). The issue of migration is most prominent in the healthcare industry, with many healthcare workers treating migration as the ultimate goal in choosing this career path.

1 PSA Labor Force Survey, October 2022 (n = 183,602), DOH HRH Statistics 2022

FIGURE 5.1.
Philippine Healthcare Workers Per 10,000 Population vs. Select Asean Countries



1. Includes all other healthcare professions (i.e. physical therapists, occupational therapists, medical assistants, dental technologists, optometrists, etc.)
2. Based on DOH 2021 estimates

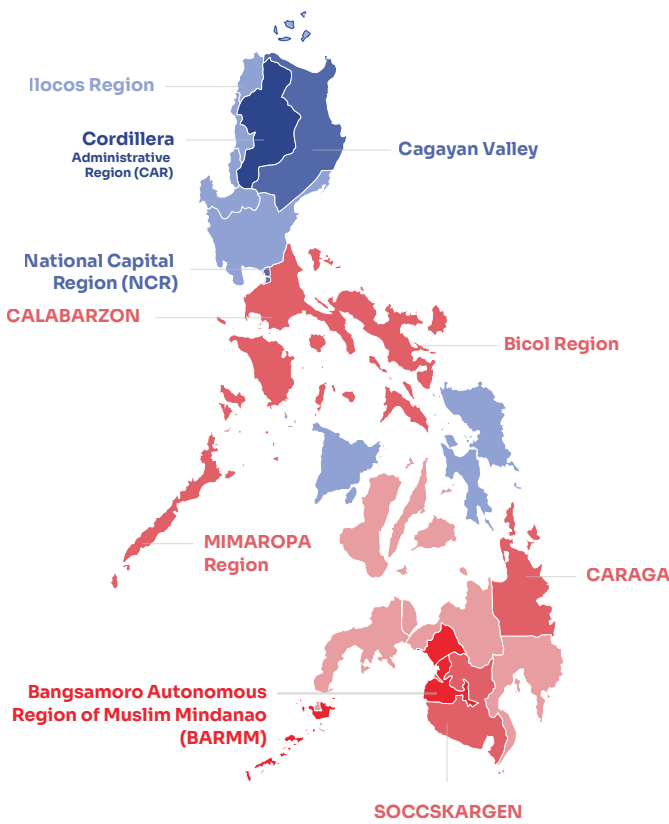
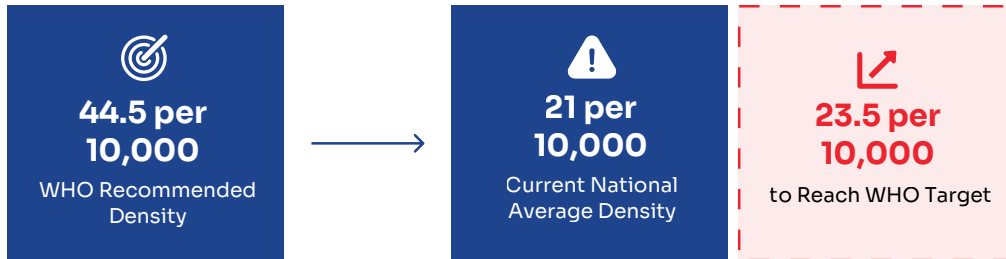
Source: WHO Global Health Observatory Data Repository, Country-specific department of health statistics (DOH, SPD, MOH, SPS)

The Human Resources for Health (HRH) reform plan further reports: Only about one in ten health workers serve in rural areas, and roughly a quarter of barangays have no dedicated health personnel. Just 25 percent of active health professionals work in primary care, leaving many localities underserved. The country needs an estimated 15,000 additional doctors to meet annual population needs, yet the ratio stands at one government physician for every 33,000 Filipinos—far from the WHO’s 1:1,000 benchmark, and below our own DOH’s 1:20,000 recommendation. While the ratio is not the ultimate measure of healthcare access, we have seen that across countries and within Philippine regions, higher numbers of doctors, nurses, midwives, and allied health professionals are highly correlated with longer life expectancy—a reflection of how direct access to skilled care shapes outcomes.²

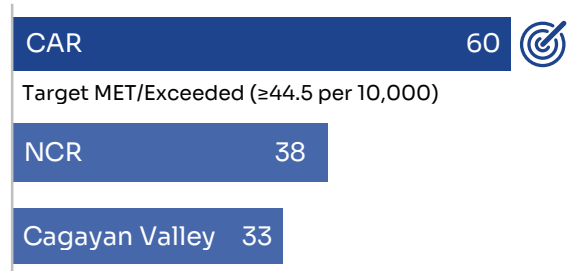
² PSA 2020 Census, DOH HRH Statistics 2022, Global Data Lab, WHO Global Health Observatory Data Repository, Country-specific department of health statistics (DOH, SPD, MOH, BPS)

The Universal Health Care (UHC) Law, which aims to guarantee equitable access to quality and affordable health services for every Filipino, also furthers the importance of developing our domestic healthcare workforce.

FIGURE 5.2.
Deficit Of Healthcare Workers by Region



Regions with Highest Density



Regions with Lowest Density



- Regions with Highest Density
- Severe HRH Shortage

Source: PSA 2020 Census, DOH HRH Statistics 2024

The healthcare workforce is also distributed unevenly across regions. Most regions fall well short of the WHO-recommended 44.5 ratio, leaving many communities without adequate medical coverage. The most underserved regions include BARMM, MIMAROPA Regions IV-A, V, XII, and XIII – all with less than 15 healthcare professionals per 10,000 people.



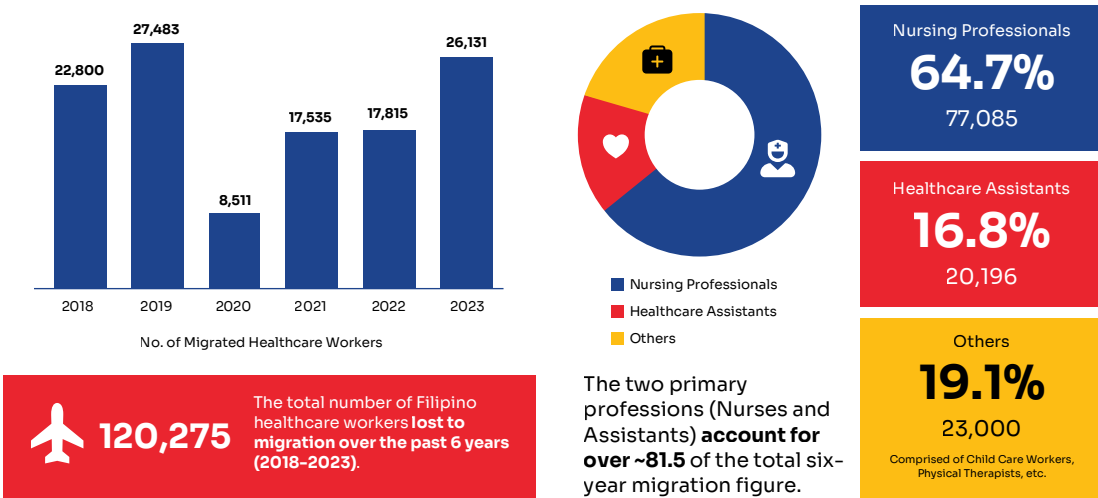
Migration of our healthcare workforce is thus a critical aspect that must be analyzed. With the skills of Filipino health professionals recognized and sought after worldwide, this international demand places sustained pressure on the domestic system already struggling to meet basic needs. According to the Department of Health’s Philippine Health Statistics, six in every ten Filipinos die without ever seeing a doctor—a figure unchanged since a similar finding by the DOH and the Philippine Institute for Development Studies in 1991. In more than two decades, we have made little progress on one of the most fundamental indicators of healthcare access. Today, an average of 1,667 Filipinos share a single doctor, and each hospital bed must serve roughly 1,000 patients—far from the global standards of one doctor per 1,000 individuals and one bed per 200. These numbers point to a health sector operating well beyond its capacity, constrained by chronic shortages in both human resources and infrastructure. The national priority, therefore, is not only to build and retain a healthcare workforce capable of delivering accessible, high-quality care, but also to expand the system’s capacity to create sufficient healthcare jobs at home—strengthening both public health outcomes and the broader economy.

Around 25,000 to 27,000 healthcare workers migrate annually, a number that is projected to increase in the next few years. Over the past six years, estimates show nearly 120,000 healthcare workers have migrated, with half going to Saudi Arabia and the United Kingdom. (Figure 6). This steady outflow reflects a broader pattern in Philippine education and labor policy, where higher education—particularly in health sciences—has long been aligned with overseas employability (Ortiga, 2018).³ Universities continue to produce graduates for global markets, reinforcing a system in which education functions as an export industry and migration as the primary route to upward mobility (Ortiga, 2020).⁴ The result is a persistent domestic gap, as trained professionals build careers abroad while local health systems struggle to retain talent. Beyond migration, natural attrition through retirement or movement into other industries further reduces the available health workforce by an estimated 27,000 each year.

³ Ortiga, Yasmin Y., “Emigration, employability, and higher education in the Philippines” (2018). Research Collection School of Social Sciences. Paper 2678. https://ink.library.smu.edu.sg/soss_research/2678

⁴ Ortiga, Yasmin Y., (2020). Shifting employabilities: Skilling migrants in the nation of emigration. *Journal of Ethnic and Migration Studies*, , 1-19

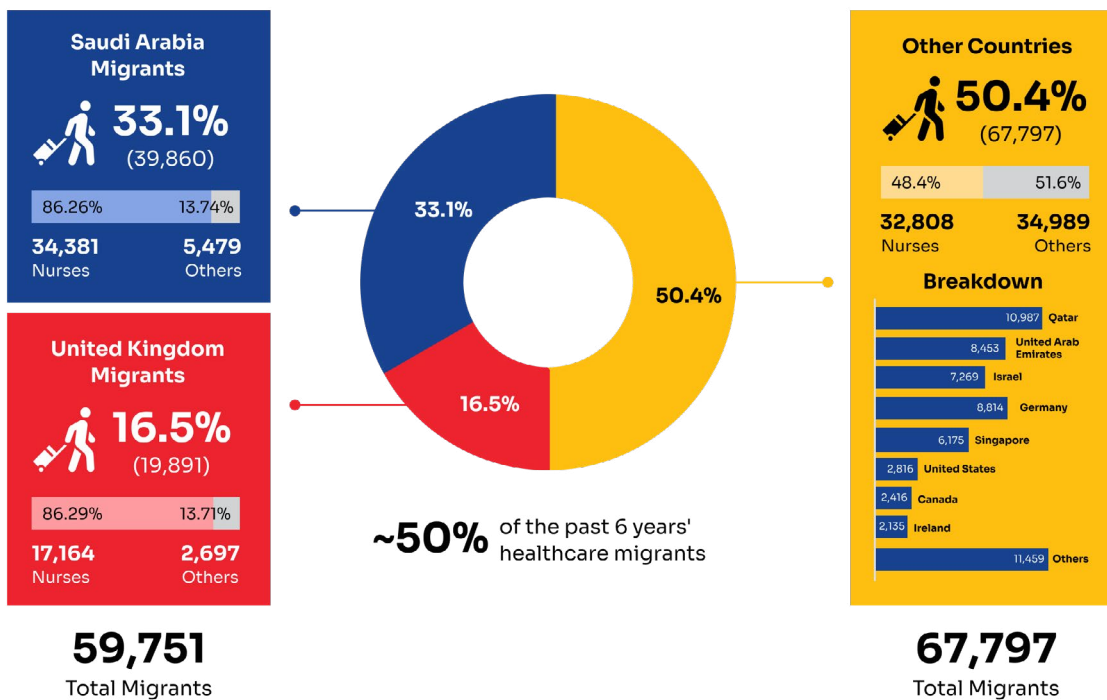
FIGURE 6.1.
Overseas Filipino healthcare hires by profession, number of migrants (2018-23)



Source: DOH HRH Statistics 2024, CHED, PRC

FIGURE 6.2.
Cumulative Overseas Filipino Healthcare Hires by Country Destination and Number of Migrants (2018-2023)

Cumulative overseas Filipino healthcare hires by country destination, # of migrants

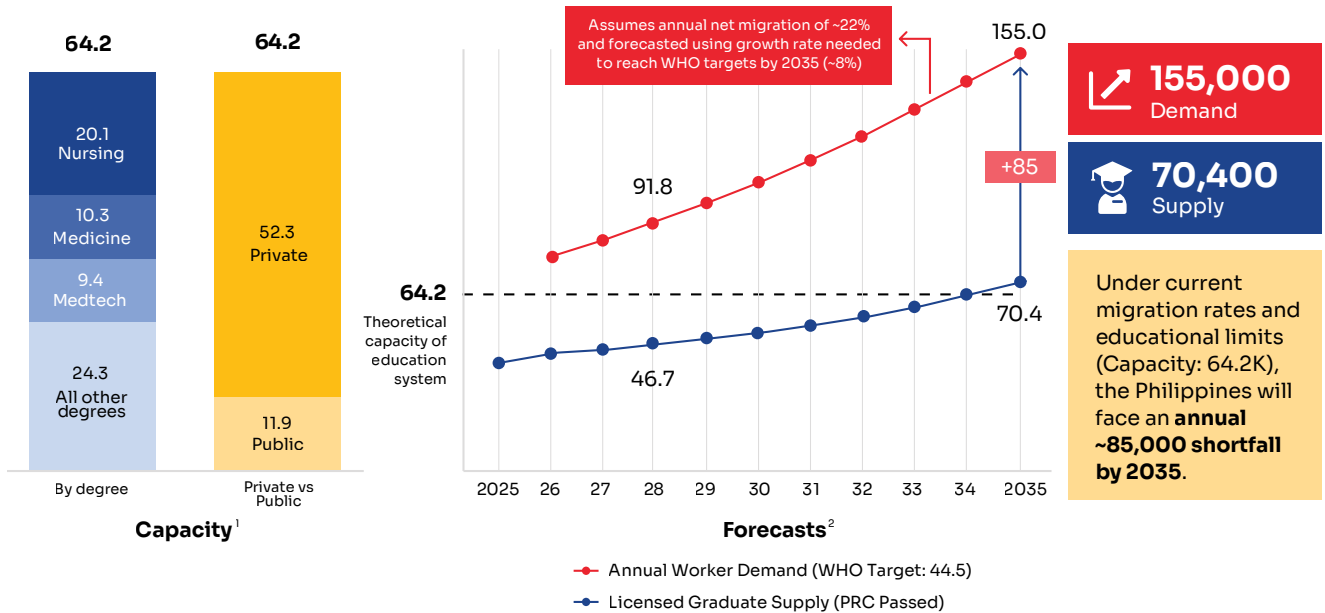


Source: Department of Migrant Workers - Management Information and Technology Service (2018-2023)

Even if the migration and attrition of health professionals is mitigated, our domestic supply of workers could still be insufficient to meet our workforce needs. The problem is magnified by attrition within the education-to-employment pipeline: across healthcare degree programs, roughly 33,000 students—about 56 percent of an entering class—never reach the workforce, either due to dropping out from school, or failing the licensure examinations required for practice. Only about 32,000 graduates or licensure passers each year enter the system, which is insufficient to close the workforce gap even through the next 10 years.

FIGURE 6.3.
Projected Number of Healthcare Graduates and New Workers Required to Achieve WHO Targets (2025-35)

Number of healthcare graduates and new workers required to achieve WHO target, thousands of people



1. Sum of highest historical number of graduates produced at a regional and degree level, from 2013–2022
2. Expected number of graduates assumed to grow at historical rate of ~1% p.a. (2016–2024)

Source: DOH HRH Statistics 2024, CHED, PRC

Against the World Health Organization’s benchmark, the country should have approximately 520,000 healthcare workers by 2025. This leaves a gap of about 290,000—a shortfall that cannot be closed without decisive reforms in training, retention, and workforce deployment. Based on target density levels, the country will require roughly 94,000 doctors and 196,000 nurses, and significant numbers of midwives and other essential health professionals, to meet population health needs⁵. Without urgent intervention, this gap risks becoming entrenched, constraining service delivery, overburdening existing staff, and limiting progress toward health coverage targets.

There are a limited number of healthcare education programs in the country, mostly private-led and concentrated in Metro Manila.

The demand for healthcare workers will persist both domestic and internationally. An examination of current supply pipelines reveals a system that is both inadequate and unevenly distributed across regions.

For instance, only 80 schools offer medical programs in the country, 28 (26 are SUCs and 2 are LUCs) of which are in public universities, with 2 (Region 10 and CAR) regions not having a public medical university. The problem is more pronounced with dental programs: only 34 dental schools exist in the country, with 10 (29%) being in Metro Manila. Z regions do not have any dental school whether public or private.

⁵ The WHO benchmark does not explicitly indicate the breakdown of the 44.5 ratio by profession, given the contextual differences across countries, including how work is typically split between regions. To crystallize the benchmark for the Philippines, local experts and institutions must be further consulted to identify the ideal mix of healthcare professions that sufficiently serve their communities.

Moving earlier in the education pathways, there are also limited technical/vocational pathways. For one, healthcare programs are not yet offered for Senior High School students who decide to take a TVL/TechPro track. When it comes to TESDA courses, only 14.23% of TVIs in high priority regions (i.e., regions with the lowest healthcare worker ratios) offer programs in healthcare.

In order to help bridge the healthcare workforce gap, we would have to expand not only access to healthcare programs nationwide, but also ensure that the funnel of students—from enrollment, to graduation, to passing licensure exams— is efficient and effective.

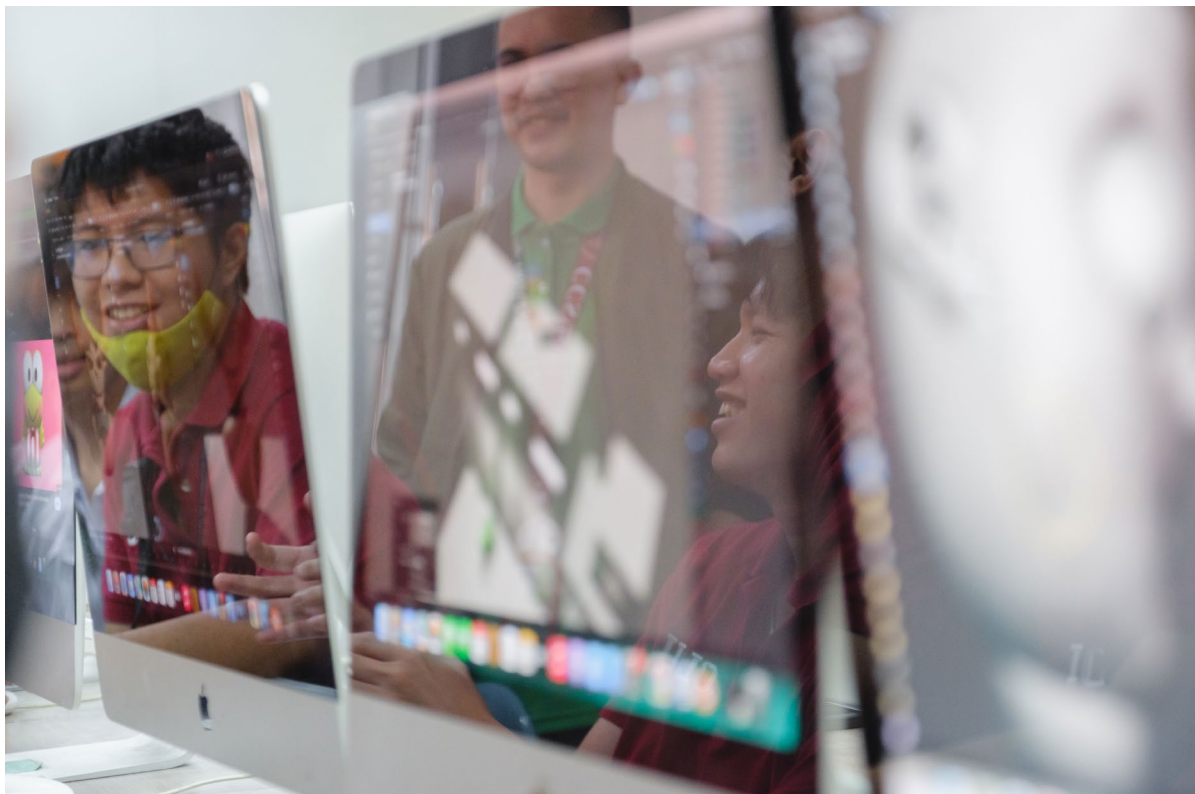
Implications for the education system

- **PATHWAYS:** Expand possible ways for students to get healthcare training and certification.
- **CAPACITY:** Support more institutions to be able to offer healthcare programs across the country to help bridge the quantity gap
- **RETENTION:** Expand retention and re-entry programs, including novel ladderized programs proven to have high retention and success rates

INDUSTRY-SPECIFIC ANALYSIS: DIGITAL TECHNOLOGY

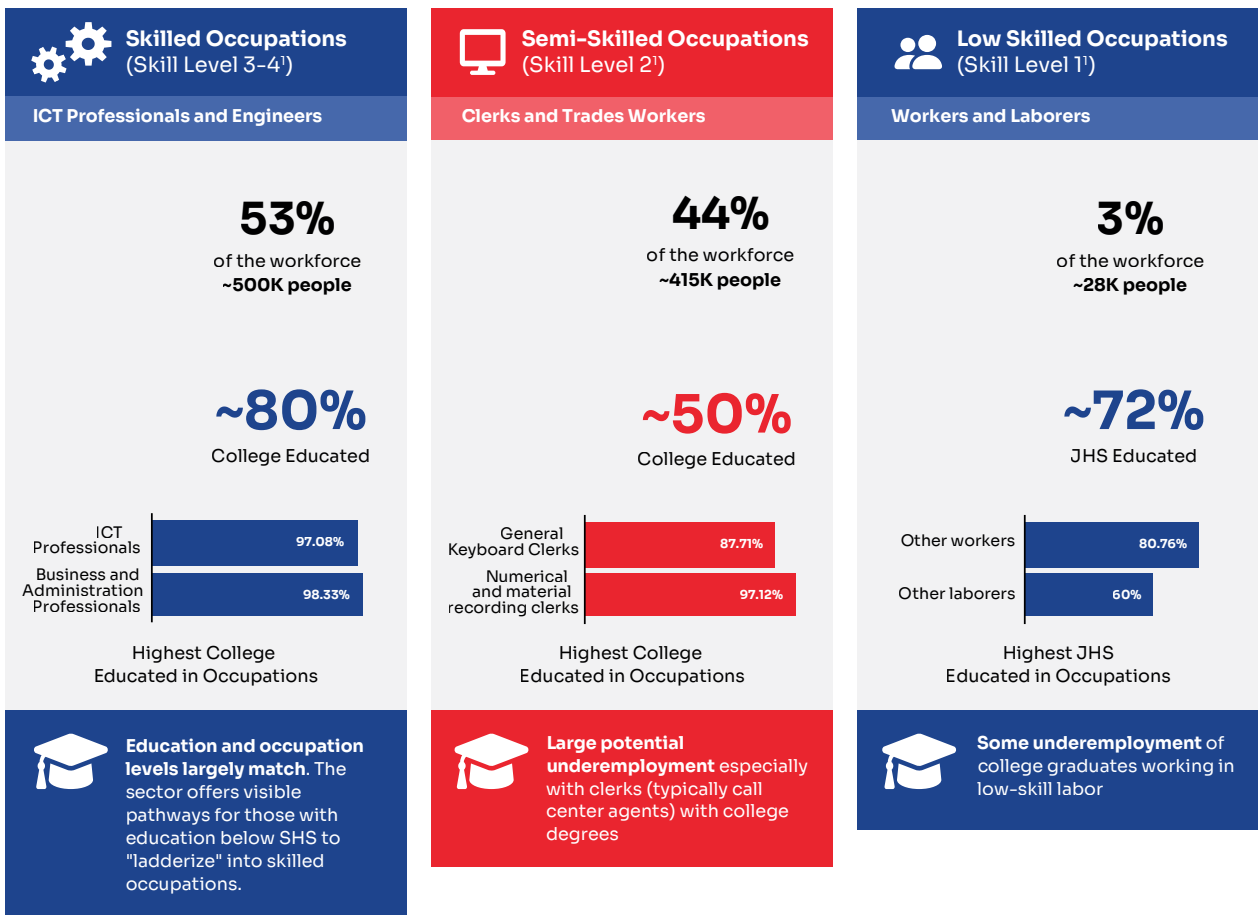
The digital technology cluster is a major pillar of the Philippine economy, driving up to 6.9% of GDP and employing ~1.4 million people.

As a major pillar of the Philippine economy, the digital technology cluster is positioning itself for rapid and sustained expansion. The business process management industry – the biggest component of this cluster – contributed around 6.9% of GDP in 2024. As of 2022, the workforce stands at approximately 1.4 million, spanning top occupational groups such as ICT professionals (around 90,000), keyboard clerks (about 118,000), and



business administration professionals (roughly 79,000). The talent base is supported by 333,000 graduates from digital technology-related fields, led by Business Administration (195,000), Engineering and Technology (79,000), and IT-related disciplines (52,000). An additional 275,000 potential workers come from post-secondary finishers in digital-related courses, offering a significant pool for recruitment if pathways into the industry are strengthened.⁶

FIGURE 7.1.
Estimated Digital Workforce by Occupation Type, Number of People

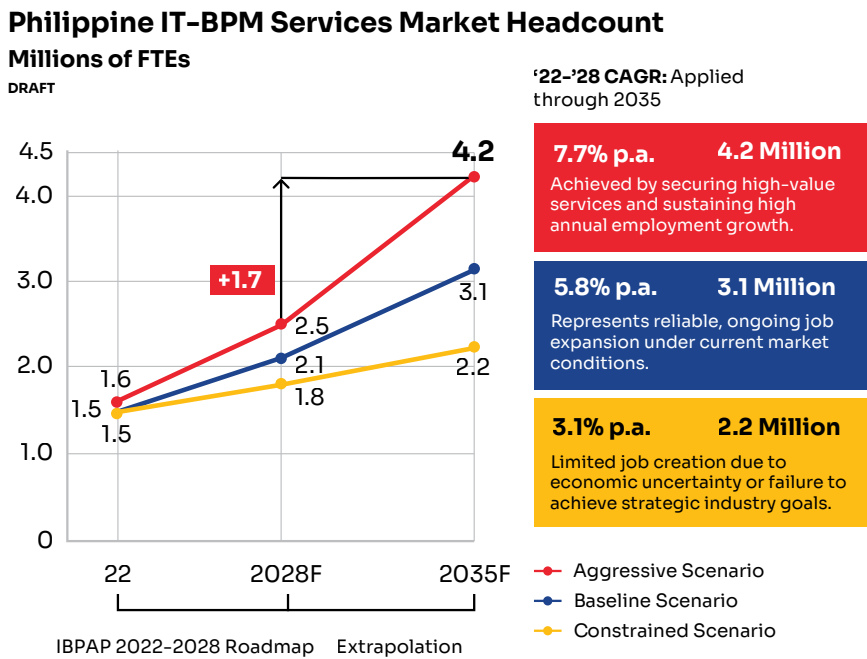
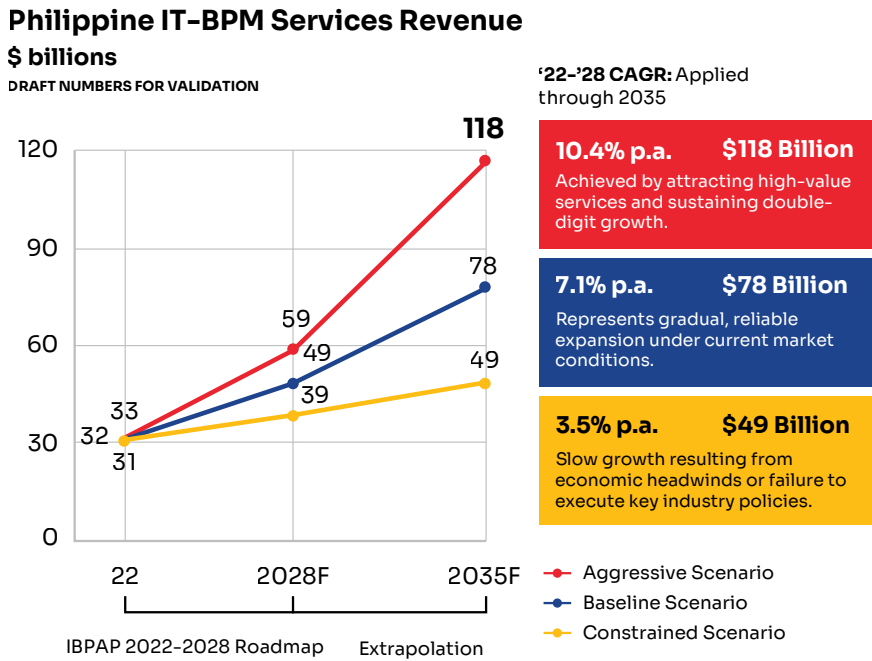


1. Aligned to International Standards for the Classification of Occupations (ISCO) defined skill taxonomy
 Source: PSA Labor Force Survey, October 2022 (n=183,602)

The IT-BPM industry, the largest industry of this cluster, envisions positioning the Philippines as the world’s leading hub for digitally enabled, customer-centric services, driving inclusive and sustainable economic and social growth. By 2028, the IT and Business Process Association of the Philippines (IBPAP) targets expanding the workforce to roughly 2.5 million—adding about 1.1 million jobs to the 2022 base of 1.4 million—and increasing annual revenues from USD 33 billion to USD 59 billion. This growth will be anchored in transformation: becoming the top global destination for experience transformation across customer, employee, and user experience; shifting toward higher-complexity, higher-skill roles to raise revenues per full-time equivalent by 13 percent; and consolidating its lead in the delivery of digitally enabled services.

6 PSA Labor Force Survey, October 2022 (n = 183,602)

FIGURE 7.2.
Projected Philippines IT-BPM Services Revenue and Market Headcount by 2035 (IBPAP Roadmap, 2022-35)



Note: The IBPAP Roadmap is currently being updated with refreshed numbers, to be released within 2025.

Source: IBPAP Roadmap, 2022-2028

If realized, this vision could enable the IT-BPM industry to reach up to USD 118 billion in value and employ as many as 4.2 million Filipinos by 2035.—a scale of aspiration that must be thoughtfully supported.

Estimates show that around 86 percent of agents—many in customer service and other semi-skilled roles—are college graduates, reflecting some misalignment between qualifications and job requirements.

FIGURE 7.3.
IT-BPM service segments by growth and fit to PH prospects (baseline scenario)

Protect dominant market position

Service Segment	Higher Ed	TechVoc
Contact Center	✓	- Contact Center Services NC II (being updated)

Go deeper and move up value-chain

Finance and Accounting	✓	Typically BS Accountancy	Bookkeeping NC III
Application services	?	Typically BS Computer Science/Engineering.	Several Computer Programming NCs
Infrastructure services ¹	✗	None specific (base degree BS Computer Science/Engineering)	
Human Resources	✗	None specific (base degree BS Management/Biz Ad/Psychology)	
Industry-specific BPM ²	✗	None specific (base degree BS Management/Biz Ad, BS Nursing)	

Invest to build capabilities

Marketing	✓	BS Marketing	-
Game Development	?	BS Game Development (~3 schools in NCR)	Game Programming NC II
Animation	?	BS Illustration/Animation (~3 schools in NCR)	Animation NC II
Trust & Safety	?	BS Cybersecurity (4 schools); Typically BS CS/IT	Several Computer Programming NCs
Digital and Data Services ³	?	Typically BS MIS, BS IT, BS CS	-
Other BPM Services ⁴	✗	None specific (base degree BS Management/Biz Ad)	
Procurement & SCM	✗		

Industry-Pointed Themes

Digital competencies and foundational skills in graduates
 (e.g., critical thinking, communication and collaboration) is critical as having pathways.

Specializing the workforce fast
 is necessary for them to move up to high-value domains (e.g., health informatics specialization for nursing graduates) – but **use industry to know what to train the workforce on** given how fast digital skills change.

New programs are needed for growing domains (e.g., Game Development, Animation, Cybersecurity), but at skill levels **protected from AI disruption.**

- ✓ Has existing dedicated pathways
- ? Potentially has existing pathways
- ✗ No existing dedicated pathways

1. Includes traditional services (e.g., network, workplace, cloud infrastructure services, cybersecurity, and managed services).
2. Includes operations across verticals such as banking, healthcare, retail, manufacturing, etc.
3. Includes next-generation technology services such as cloud and mobile apps development, IoT, AI/ML, AR/VR, blockchain, quantum computing, big data, D&A, etc.
4. Includes services such as legal, market research, etc.

Source: IBPAP Roadmap, 2022-2028, Industry Interviews

Structural challenges threaten to slow the sector’s trajectory. Underemployment persists: Estimates show that around 86 percent of agents—many in customer service and other semi-skilled roles—are college graduates, reflecting some misalignment between qualifications and job requirements. This mismatch is partly driven by the sheer growth of the industry, which demands over 230,000 new hires each year.

Education and training pipelines for high-growth, specialized roles in areas such as infrastructure services and industry-specific BPM are also welcomed by the industry. Yet firms—especially those at the forefront of innovation—consistently cite skill shortages as a major constraint, with innovative firms twice as likely as traditional ones to be dissatisfied with workforce preparation. The Philippines also lags behind most regional peers in advanced education levels, limiting its capacity to adopt modern technologies (World Bank, 2025)⁷. The industry’s voice is consistent in acknowledging that graduates with digital competencies and strong foundational skills—critical thinking, communication, collaboration—is as important as creating the pathways themselves. Without foundational skills, workers cannot adapt quickly enough to evolving technologies or industry demands.

The agility with which the digital technology cluster shifts must also be reflected in our educational pathways, particularly in the advent of AI.

For the workforce to capture higher-value opportunities, skills must be targeted to emerging domains—health informatics for nursing graduates, for example—guided by industry input to ensure training aligns with market needs in real time. For instance, the IBPAP roadmap identifies segments with high market growth rate forecasts, and assesses how they fit with the current capabilities and market maturity of the Philippines. These segments include Game Development and Animation, Trust and Safety, and Data Services (e.g., IoT, AR/VR, quantum computing). Investments are required to build capabilities where we could compete, and to accelerate the momentum where we are showing signs of a competitive advantage.

Geographic concentration further limits the sector’s potential for inclusive growth: 64 percent of the digital workforce is clustered in just four regions, with about 40 percent in the National Capital Region and another 24 percent spread across Regions III, IV-A, and VII.⁸ Without deliberate strategies to expand digital talent and industry into emerging hubs, and without distributing higher-value digital jobs more evenly, many Filipinos will be left out of the sector’s growth.

Whether AI substitutes or complements human work will likewise depend on the sector’s ability to upskill its workforce—particularly in foundational areas such as literacy and language. Without these basics, AI adoption risks replacing rather than enhancing existing roles. A national AI upskilling program would be valuable, but it must be paired with stronger interventions in core skills, especially English proficiency.

Implications for the education system

- **PATHWAYS:** Revise and update current pathways to make them more industry-attuned; allow better industry-led programs to be recognized, including microcredentials
- **CAPACITY:** Enable industry’s training programs to supplement existing formal education pathways; explore region-specific “domain specializations” and build capacity accordingly
- **RETENTION:** Expand retention and re-entry programs, including novel ladderized programs proven to have high retention and success rates

7 World Bank. 2025. Running Uphill: Growth, Jobs, and the Quest for Productivity. Philippines Growth and Jobs Report. © World Bank.

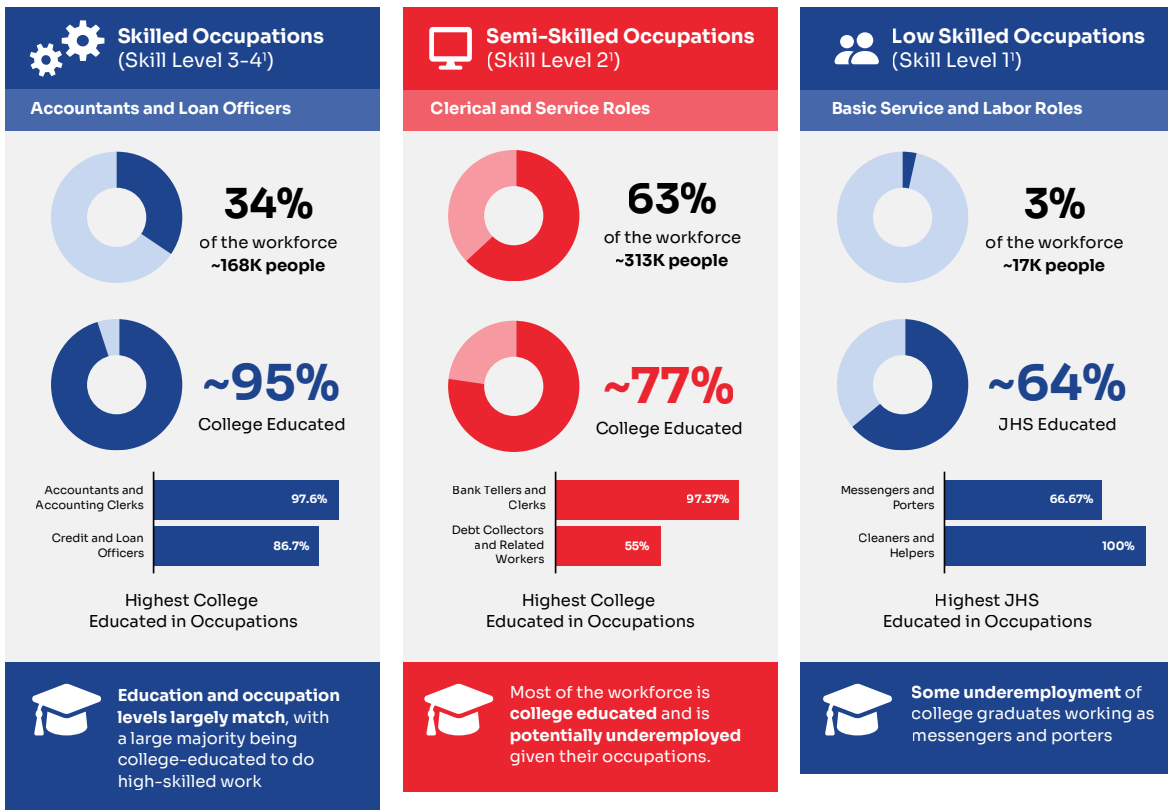
8 PSA Labor Force Survey, October 2022 (n = 183,602)

INDUSTRY-SPECIFIC ANALYSIS: FINANCIAL SERVICES

The almost 650k employees of the financial services sector are vastly college educated, with almost two-thirds of jobs concentrated in five regions.

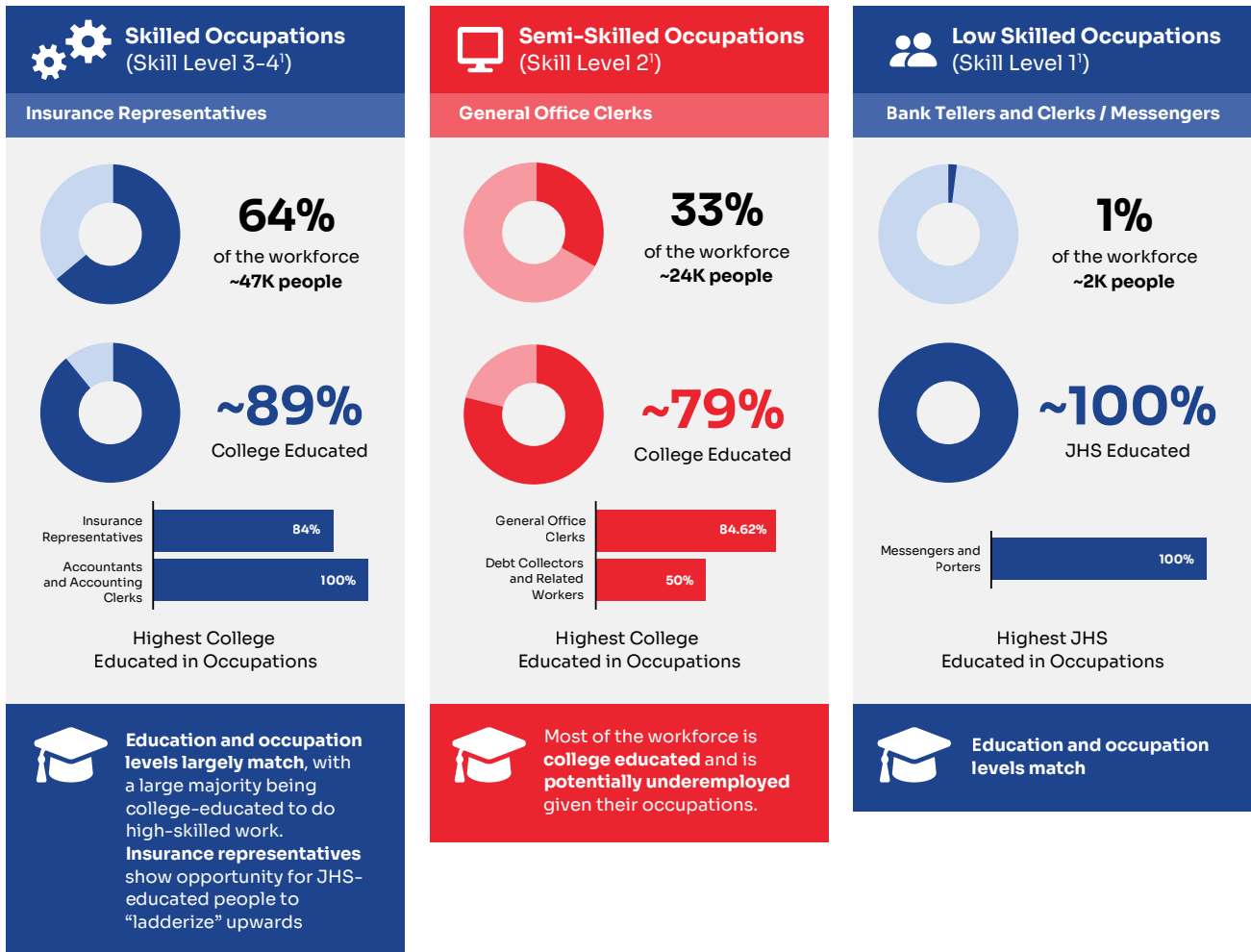
The financial services cluster spans industries that form the backbone of capital circulation, risk management, and innovation in the economy. It covers traditional banking, insurance and pensions, and a rapidly expanding fintech sector. The cluster employs roughly 645,000 workers. Employment is concentrated in five key regions—NCR, Region VII, III, VIII, and VII—which together house nearly two-thirds (64%) of the sector’s labor force, reflecting the geographic centralization of financial infrastructure. Within this workforce, nearly 500,000 are concentrated in banking and core financial activities, with skilled occupations such as accountants, loan officers, and managers well-aligned with education levels, with 95% of these roles filled by college graduates. Majority of banking jobs— around 313,000 people— fall into semi-skilled categories, where over three-quarters of workers are also college educated, signaling potential underemployment (by qualification) in this area. This is most notable for bank tellers – an occupation that is semi-skilled by international standards, but typically requires college degrees in the Philippines’ labor market.

FIGURE 8.
Estimated Banking Workforce by Occupation Type, Number of People
(Based on PSA Labor Force Survey, October 2022)



1. Aligned to International Standards for the Classification of Occupations (ISCO) defined skill taxonomy
 Source: PSA Labor Force Survey, October 2022 (n=183,602)

FIGURE 9.
Estimated Insurance Workforce by Occupation Type, Number of People
(Based on PSA Labor Force Survey, October 2022)



1. Aligned to International Standards for the Classification of Occupations (ISCO) defined skill taxonomy
 Source: PSA Labor Force Survey, October 2022 (n=183,602)

A similar trend can be seen in insurance, which employs around 73,000 of the financial service workforce: 89% of skilled workers are college-educated, and 79% of semi-skilled workers are also college-educated.⁹

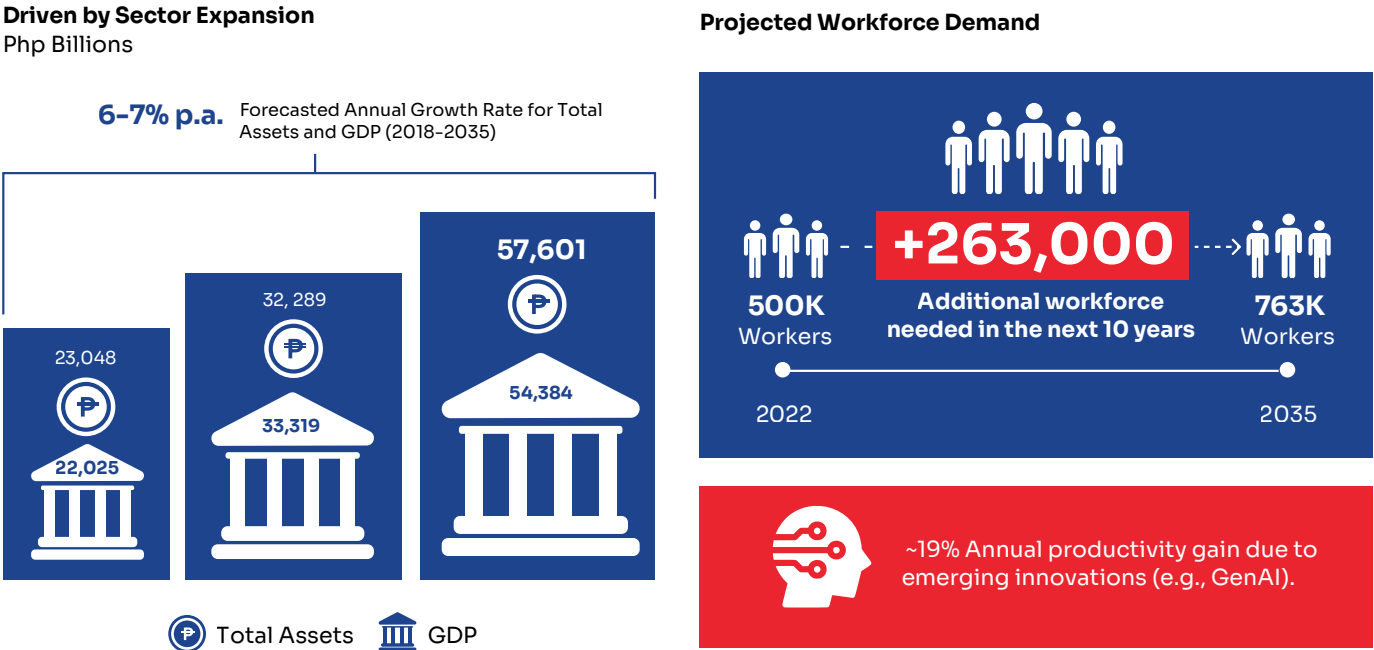
Education-to-employment gaps remain. In banking, IT support specialists benefit from clear higher education tracks and tech-voc programming curricula, but frontline roles such as tellers, relationship managers, and sales tend to come from general pools of educated talent (e.g., BS Business Management, BS Marketing, BS Accountancy). Similarly, in the insurance industry, top hiring needs—including financial advisors and digital sales specialists—are served only by broad-based degrees. In fintech, software developers, data scientists, and cybersecurity specialists have structured pathways, but roles like UX/UI designers and compliance specialists do not. While dedicated pathways are not necessarily the solution, it is critical that tactical skills required are either embedded within the broad pathways, or foundational skills are integrated and sufficient in broad degrees to ensure readiness for work.

9 PSA Labor Force Survey, October 2022 (n = 183,602)

Almost 400k more jobs may be created through 2035 for core banking and insurance talent needs, even considering the impact of AI.

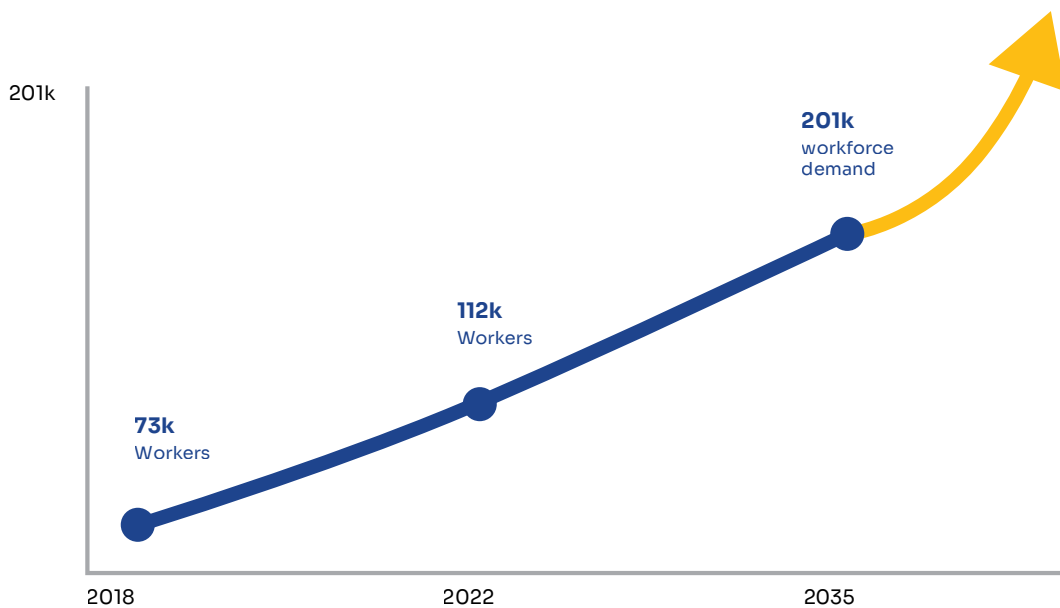
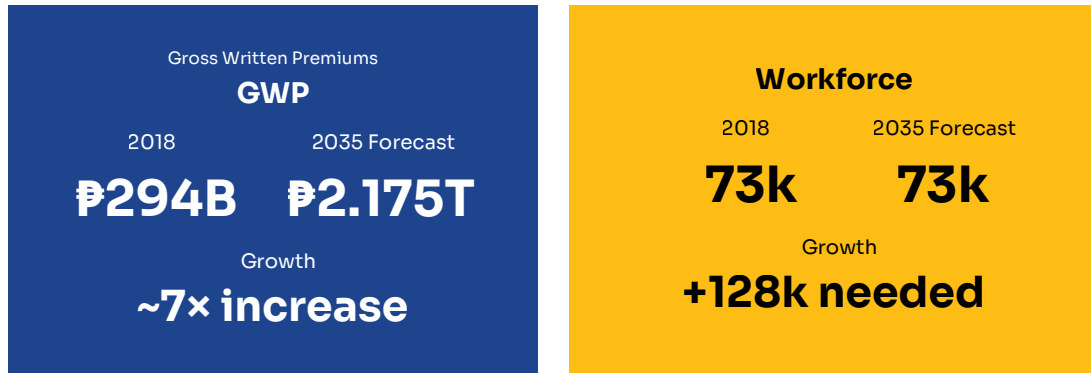
By 2035, the banking sector may need 263,000 additional workers from today’s base of around 500,000 workers, in line with the workforce required to manage the country’s growing asset base tied to rising GDP. Assuming GDP growth of 6–7% per annum, total bank assets could more than double from ₱23 trillion in 2022 to nearly ₱58 trillion. This growth in the workforce is required even with an assumed productivity gain of around 19% annually from innovations such as AI. Insurance shows parallel trends: growth in premiums and penetration could generate demand for 128,000 additional workers by 2035, even as automation reshapes claims, underwriting, and customer service (Figure 11).

FIGURE 10.
Potential Growth in GDP, Total Bank Assets, and Banking Workforce Demand by 2035



Source: Philippine Development Plan (2023-2028), PSA

FIGURE 11.
Potential Gross Written Premiums (GWP),
GDP, and Insurance Workforce Demand by 2035



1. Historical growth in GWP/Workforce from 2018-2022

Source: Philippine Development Plan (2023-2028), Insurance Service Malaysia Statistical Yearbook

What’s driving the demand?

 <p>Insurance penetration expected to reach 4% of GDP</p>	 <p>Strong national economic growth & digital transformation</p>	 <p>~17% productivity increase from innovation (e.g., GenAI)</p>
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Why this matters for education & workforce planning

- The Philippines must rapidly expand actuarial, insurance, finance & data analytics programs
- Alignment needed between CHED, TESDA & Industry
- Opportunities for high-skill local jobs without migrating abroad



Generative AI is already redefining skills and job requirements. In banking, AI-driven tools are strengthening “Know Your Customer” (KYC) tracking, fraud monitoring, and compliance, while marketing and sales functions are shifting toward hyper-personalization and virtual portfolio assistants. Credit decisioning, mid-office documentation, and data quality checks are increasingly supported by AI systems. Insurance is undergoing similar changes: AI now enables research assistants for product development, agent co-pilots for sales, underwriting assistants that generate indicative decisions, and claims chatbots that automate eligibility and processing. IT and support functions are also evolving, with AI-enabled coding assistants and HR virtual assistants accelerating both technical and training workflows. It is imperative that our digital talent is equipped to ride this wave of technological disruption and move up in the skill value chain.

As it stands, the industry sees the roles they require to evolve together with the demands of the customer for experience. For instance, bank tellers may need to be upskilled to have skillsets closer to relationship managers - including active listening, empathy, product knowledge - which will also have to be reflected in how the education system has pathways or credentials that build these skills.

The higher education system is producing a pipeline of graduates that by our estimates is sufficient to meet the quantity of workers needed in banking and insurance by 2035. However, direct placement cannot be assumed: other industries will compete for the same talent, and graduates will need both specialized preparation and transferable skills. Deliberate workforce planning is therefore essential—not only to prevent underutilization of highly educated workers, but also to ensure that the financial services cluster remains a driver of the Philippine economy.

Implications for the education system

- **PATHWAYS:** Build more fit-for-purpose pathways for most in-demand occupations, including higher-level skills to combat potential AI disruptions



INDUSTRY-SPECIFIC ANALYSIS: ADVANCED MANUFACTURING

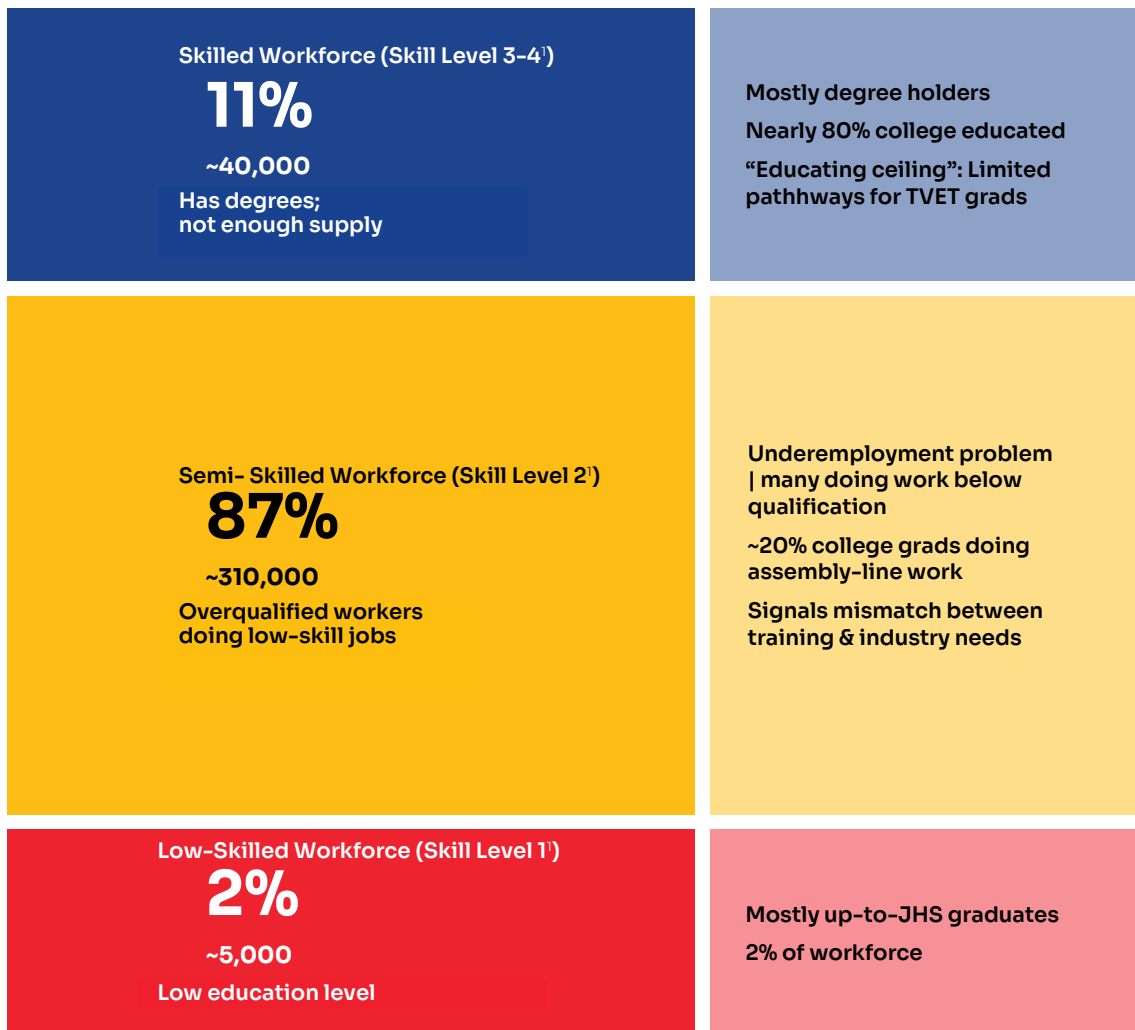
The advanced manufacturing cluster covers the production of semiconductor devices and other electronic components, computers and peripherals, communication equipment, consumer electronics, electromedical and electrotherapeutic devices, optical and photographic instruments, and magnetic and optical media. It also includes emerging sectors such as renewable energy-linked components and equipment, including electric vehicles, as well as aerospace and aviation parts and accessories. This wide breadth underscores the scale and diversity of workforce capabilities required to sustain its growth.

The ~350,000 workforce for the semiconductors industry is mostly doing semi-skilled work, like technicians, assemblers, and machine operators, but there are instances of “overeducated” college graduates doing semi-skilled work.

Within this cluster, the semiconductor and electronics industry stands as the core employer, with roughly 350,000 workers today. However, workforce gaps persist: many in semi-skilled roles hold college degrees, suggesting some underemployment. Further, skilled occupations are largely held by college graduates, implying a “profession ceiling” and limited pathways for technical-vocational graduates to advance through ladderized programs. This mismatch leaves thousands of degree-holders—about 19,000 in assembly work alone—underemployed in roles that do not fully utilize their training.¹⁰ (Figure 12)


¹⁰ PSA Labor Force Survey, October 2022 (n = 183,602)

FIGURE 12.
Estimated Advanced Manufacturing Workforce by Occupation Type,
Number of People (PSA Labor Force Survey, October 2022)




1. Aligned to International Standards for the Classification of Occupations (ISCO) defined skill taxonomy
 Source: PSA Labor Force Survey, October 2022 (n=183,602)


What needs to be fixed



**Build
laddered
training
pathways**



**Increase
TVET-to-skilled
progression**

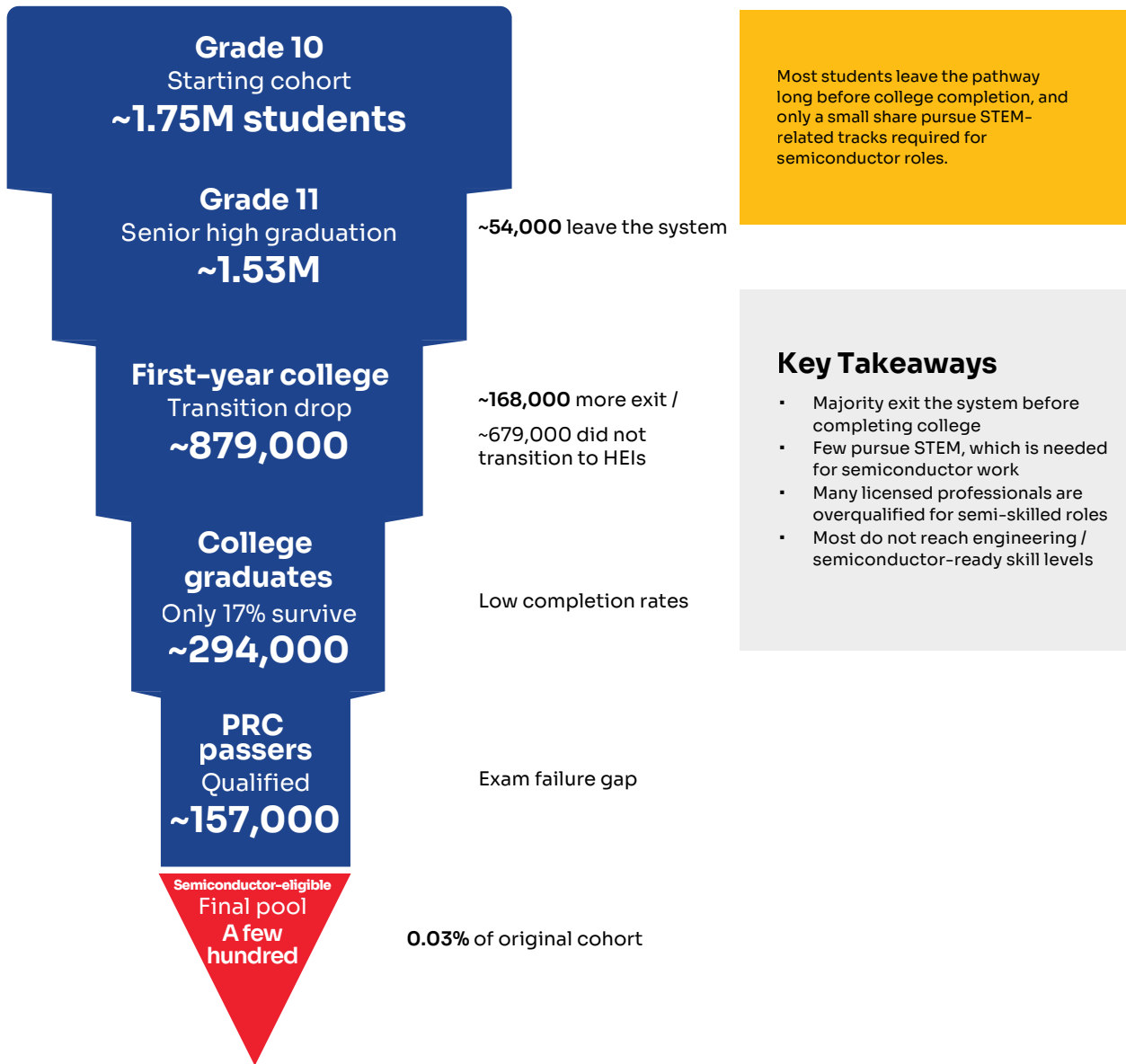


**Align
curriculum
with actual
semiconductor
roles**

The education-to-industry pipeline remains narrow. Only 15 percent of STEM enrollees pursue courses that typically feed into semiconductor careers¹¹, leaving a shallow pool of new entrants with the right technical foundation. Industry feedback indicates that certain regulatory requirements, such as professional licensure, are not always necessary to fulfill the demands of their jobs. Some employers train engineers directly after graduation, while others note that well-designed in-house training can enable even high school graduates to perform effectively—yet perceptions about needing a bachelor’s degree persist, limiting the talent pool and stifling the efficiency of education-to-employment pathways. (Figure 13)

11 DepEd, CHED, TESDA

FIGURE 13.
Illustrative Enrollment Trends of the Grade 10 class of 2019



The workforce is geographically concentrated. Nearly 95 percent of the semiconductor workforce is concentrated in Regions IVA, III, VII, and NCR, while only about a third of senior high school TVL tracks with semiconductor-relevant programs are located in those regions¹². This spatial mismatch not only raises recruitment costs but also delays workforce deployment, weakening the sector’s responsiveness to demand surges. (Figure 14)

A ~188,000 workforce gap could persist through 2035 without any interventions. In particular, a vast majority of the gap (~163,000) will come from semi-skilled roles, necessitating both utilization and expansion of today’s system capacity.

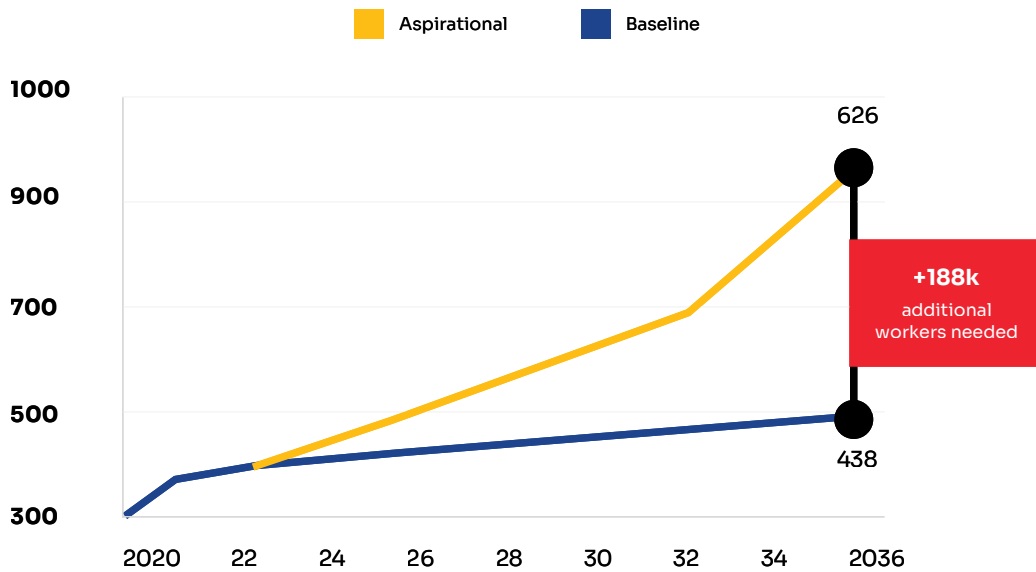
12 DepEd, PSA Labor Force Survey (October 2022)

If the pipeline for TVET-trained workers cannot be expanded and aligned to industry needs, the sector’s ability to meet production targets, adopt new technologies, and sustain competitive advantage will be severely constrained. Technical readiness likewise remains uneven; as production shifts toward automation.

By 2035, the cluster will require approximately 626,000 workers to achieve its growth aspirations, but baseline trends suggest only 438,000 will be available, leaving a gap of 188,000.¹³ (Figure 14) Of this gap, the largest share—around 163,000 positions—will be in semi-skilled technical jobs typically filled by TVET graduates, such as equipment assemblers, production clerks, electronics mechanics, and machine operators; the projected shortfall, therefore, shall be driven primarily by semi-skilled technical roles—the very backbone of production capacity. Skilled technical occupations, which often require higher education or advanced technical certifications, account for a further 20,000 unfilled roles, while skilled non-technical jobs add another 1,000, and semi-skilled non-technical jobs add around 4,000.¹⁴

FIGURE 14.
Projected advanced manufacturing cluster workforce demand by 2035

Projected workforce growth: Baseline vs. Aspirational scenario (in thousands)



Source: DTI Semiconductor and Electronics Industry Roadmap, PSA Labor Force Survey (October 2022), ILO, Department of Statistics of Malaysia

<p>Industry growth requires a significantly larger talent pipeline:</p> <p>Baseline reaches ~433k Aspirational needs ~626k Additional ~190k workers required Requires major TVET + STEM + engineering enrollment expansion</p>	<p>GVA growth</p> <p>+75% productivity to reach PHP 1.17M</p>	<p>Productivity per worker</p> <p>+65% vs Malaysia benchmark</p>

13 DTI Semiconductor and Electronics Industry Roadmap, PSA Labor Force Survey (October 2022), ILO, Department of Statistics of Malaysia
14 DTI Semiconductor and Electronics Industry Roadmap, PSA Labor Force Survey (October 2022), ILO

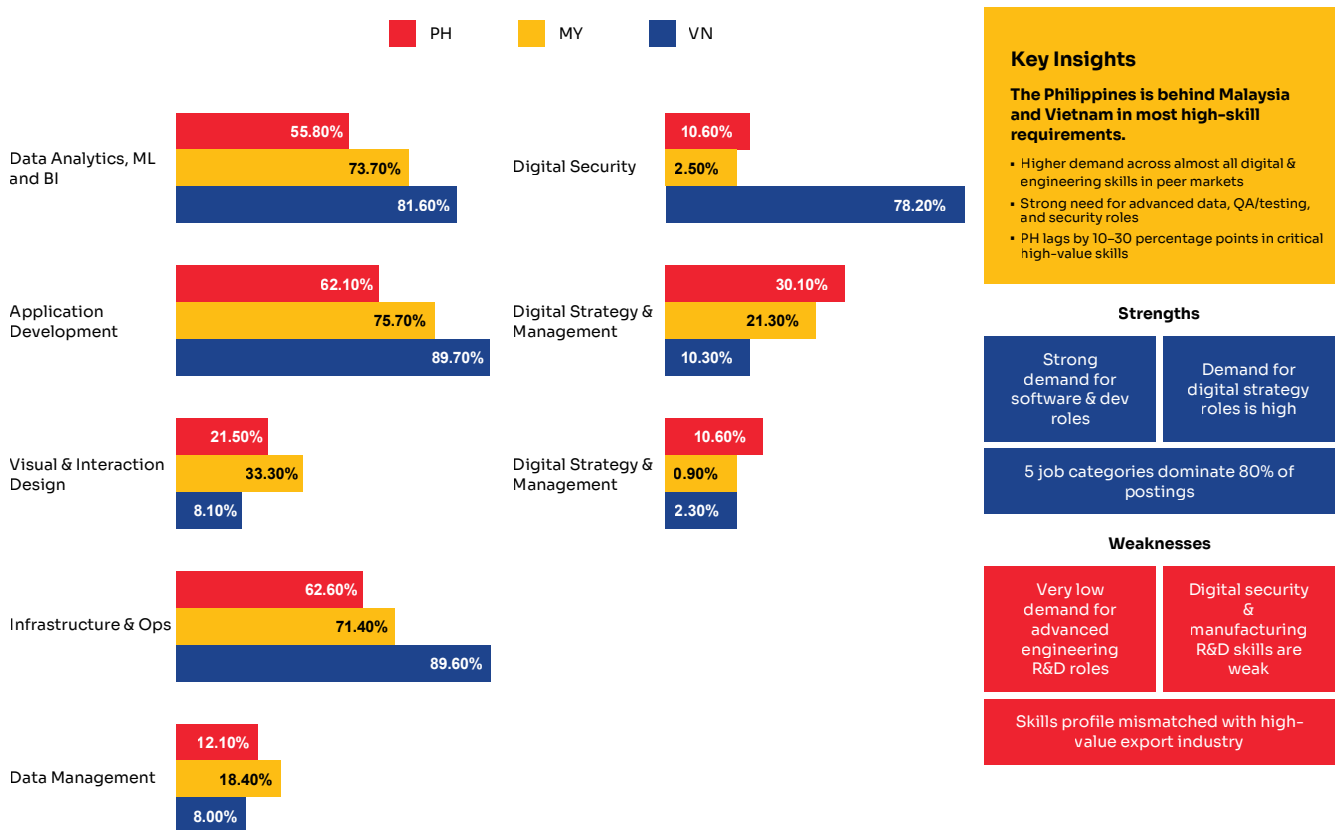
This imbalance highlights a fundamental risk: if the pipeline for TVET-trained workers cannot be expanded and aligned to industry needs, the sector’s ability to meet production targets, adopt new technologies, and sustain competitive advantage will be severely constrained.

Technical readiness likewise remains uneven; as production shifts toward automation, AI-enabled systems, and Industry 4.0 environments, even traditionally manual functions—such as packaging and testing—now demand competencies in data interpretation, machine interface, and process optimization.

LinkedIn job postings in Malaysia and Vietnam, when compared to those in the Philippines, indicate some gaps, especially in higher levels of advanced technical skills such as data analytics, application development, and infrastructure management—competencies increasingly central to semiconductor manufacturing. Philippine postings show lower prevalence of these requirements, yet even at this lower bar, the supply of candidates with the requisite skills remains insufficient (Figure 15).

FIGURE 15.
Percentage of Advanced Manufacturing Job Postings Requiring Specific Skills, Philippines vs. Malaysia and Vietnam (2025)

Comparison of % of job postings requiring specific skills — PH vs Malaysia vs Vietnam

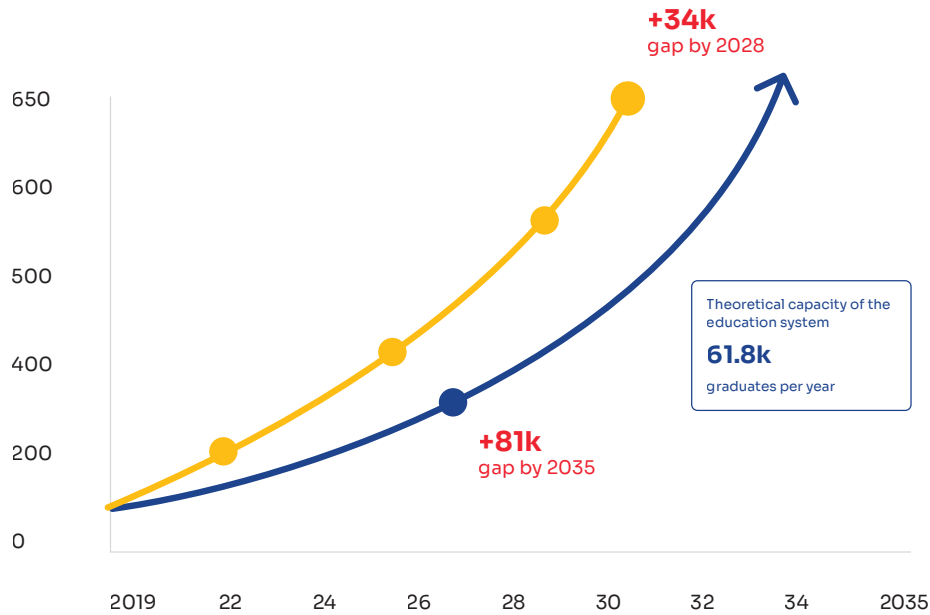


Source: LinkedIn Analytics (as of March 3, 2025)

Looking ahead, the supply of TVET-trained workers for semiconductor-related roles is set to fall well short of demand. Even at the theoretical maximum capacity of the current education system—around 61,800 graduates annually—the output of relevant NC programs has stagnated near 36,000 per year. By 2028, the sector will need about 69,000 new semi-skilled workers, leaving a gap of roughly 33,000; by 2035, this shortfall could swell to 81,000 as demand rises to nearly 118,000.

FIGURE 16.
Projected Demand for Semi-Skilled Workers vs. Projected Supply of Semiconductor-Related NC Graduates by 2035

Graduates of semiconductor-related NCs vs. demand for new semi-skilled workers (2019-2035)



Capacity of Current Education Pipeline (thousands of graduates per year)	
Private SHS-TVLS	7.8k
Private TVIs	22.0k
Public SHS-TVLS	21.3k
Public TVIs	10.7k
Total	61.8k

Key Insights & Action Points

- ⚠ Demand curve is rising sharply while supply remains flat
- 📍 System has room to train more, but enrollment is uneven across regions

Supply-Demand Gaps

- ~34k worker shortage by 2028
- ~81k shortage by 2035

Why This Matters

- Semiconductor industry is scaling rapidly and requires more skilled workers
- TVET graduate output has stayed almost flat (~44-36k/year)
- Increasing supply is critical to meet economic and industry goals

- Sum of highest historical number of graduates produced at a regional and public vs private level, from 2019-2024
- Expected number of graduates assumed to grow at historical rate of 0.6% p.a. (2020-2024)

Source: DepEd (SHS-TVL Enrollees and Graduates Data for SY 2019 - 2024); TESDA (TVI Enrollees and Graduates Data 2018 - 2024 as of March 2025)

By 2035, meeting advanced manufacturing’s projected workforce demand will be challenging enough—yet the sector must also contend with a steady outflow of talent. In the last two years, around 8 percent of all new land-based migrant workers—roughly 69,000 people—had semiconductor-related skills, from manufacturing laborers and equipment assemblers to engineers and supervisors. While some overseas placements give Filipino engineers valuable exposure to advanced practices, many do not return, and the most capable often find permanent roles abroad. Employers acknowledge that the sector struggles to compete with foreign opportunities in both pay and career prospects, leading to a thinning domestic pool of experienced professionals. The decline in engineering’s local appeal compounds the challenge, eroding the talent base that once anchored industrial growth. Unless the Philippines can both scale the pipeline and retain its best-trained workers, advanced manufacturing risks ceding ground not just in technology and productivity, but in its ability to sustain the human capital that underpins long-term competitiveness.

Implications for the education system

- **PATHWAYS:** Offer more semi-skilled pathways aligned with industry needs and strengthen on-the-job training opportunities; provide ways for existing workers like engineers to upskill via microcredentials
- **CAPACITY:** Build more capacity for semi-skilled pathways, including offering scholarships and vouchers to maximize existing capacity

INDUSTRY-SPECIFIC ANALYSIS: TOURISM

The tourism cluster brings together hospitality, logistics, retail trade, and construction to form the ecosystem that shapes the visitor experience. Accommodations, food services, and recreation define the core of this journey; logistics ensures seamless mobility; retail adds cultural and commercial vibrancy; and construction underpins long-term viability through roads, airports, utilities, and tourism estates.

A large employing industry at around ~5.8 million, the Tourism workforce could almost double by 2035 if aspirations are met.

The workforce stands at 5.8 million—1.9 million in tourism, 2.4 million in logistics, and 1.5 million in retail trade. The adjacent industry of construction stands at around 4.6 million workers as well.¹⁵ Collectively, these roles span the visitor journey, from pre-trip planning to in-trip services and post-trip engagement.

The National Tourism Development Plan (NTDP) sets ambitious targets for 2028, building from 2022 baselines. Domestic trips are projected to rise from 103 million in 2022 to between 137.5 and 195.7 million by 2028. Inbound arrivals are expected to grow from 2.6 million to 11.5–13.5 million, while tourism employment is targeted to expand from 5.4 million to 6.3–7.2 million—up to 14.7% of national jobs. Tourism’s GDP contribution, meanwhile, is projected to climb from 6.2% in 2022 to as high as 18.7% by 2028.

By 2035, the scale intensifies. Tourist volumes could reach 350–380 million, largely driven by domestic travel, generating PHP 24–25 trillion in revenues and supporting 11–12 million jobs. Meeting this demand may require up to 5.7 million additional workers—a challenge given that the pipeline of tourism-related graduates may not suffice.

These ambitions face constraints. Infrastructure, connectivity, and service capacity remain uneven, while recovery from the pandemic has been slower than peers. As of 2024, the Philippines still trailed ASEAN neighbors, with international arrivals 34.1% below 2019 levels compared to stronger rebounds elsewhere.

¹⁵ PSA Labor Force Survey, October 2022 (n = 183,602)

FIGURE 17.
Tourism Cluster Workforce across 3 Industries (Based on PSA Labor Force Survey 2022)

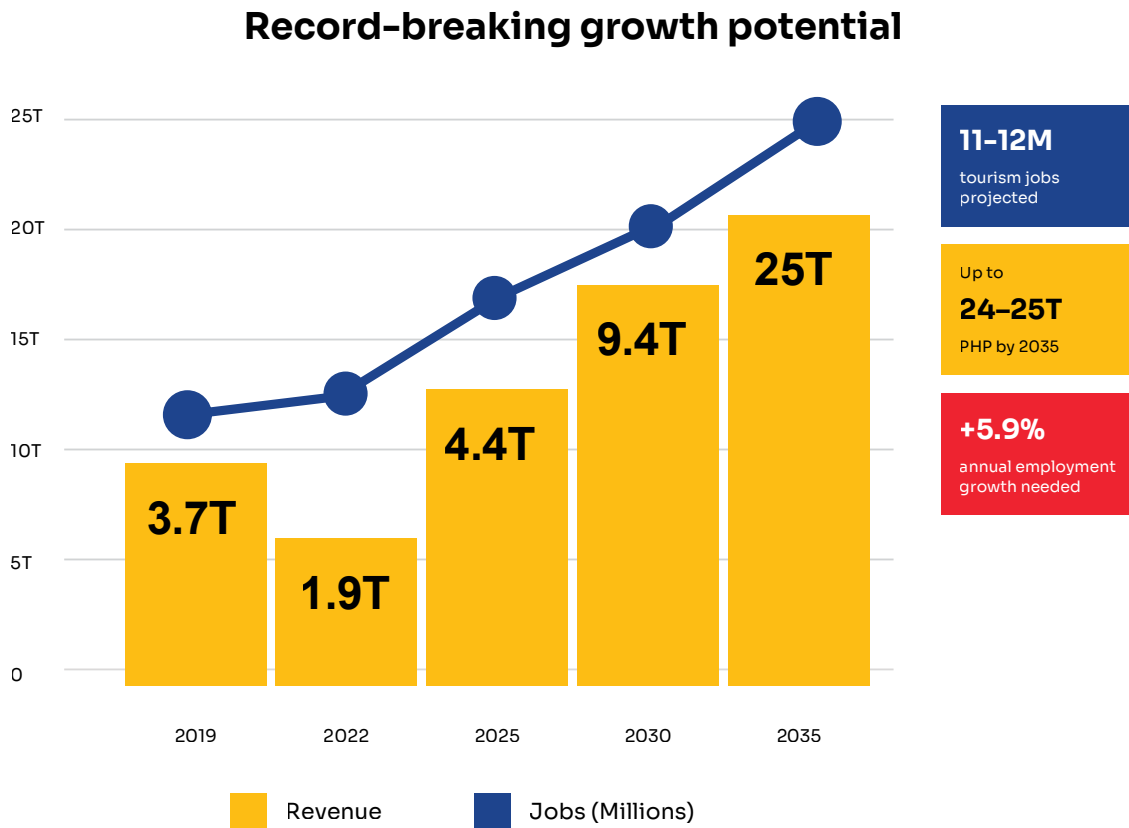
Four interconnected sectors power the end-to-end visitor experience.






Source: PSA Labor Force Survey, October 2022 (n=183,602)

FIGURE 18.
Tourism Vision 2035: PHP 24–25 Trillion Revenue \$ 11–12 Million Jobs

Tourism can be a major economic engine — if growth and talent align.



Supporting Blocks

 <p>Workforce Pipeline Skills, certification, attracting returning workers</p>	 <p>Infrastructure & Destinations Transport access, airports, digital booking, quality service</p>	 <p>Economic Multiplier Tourists support jobs 1:10, drives MSME growth</p>
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1. 2029-2035 numbers are extrapolated from ideal tourists per employee ratio on a regional level
 Source: NTDP Roadmap, 2023-2028



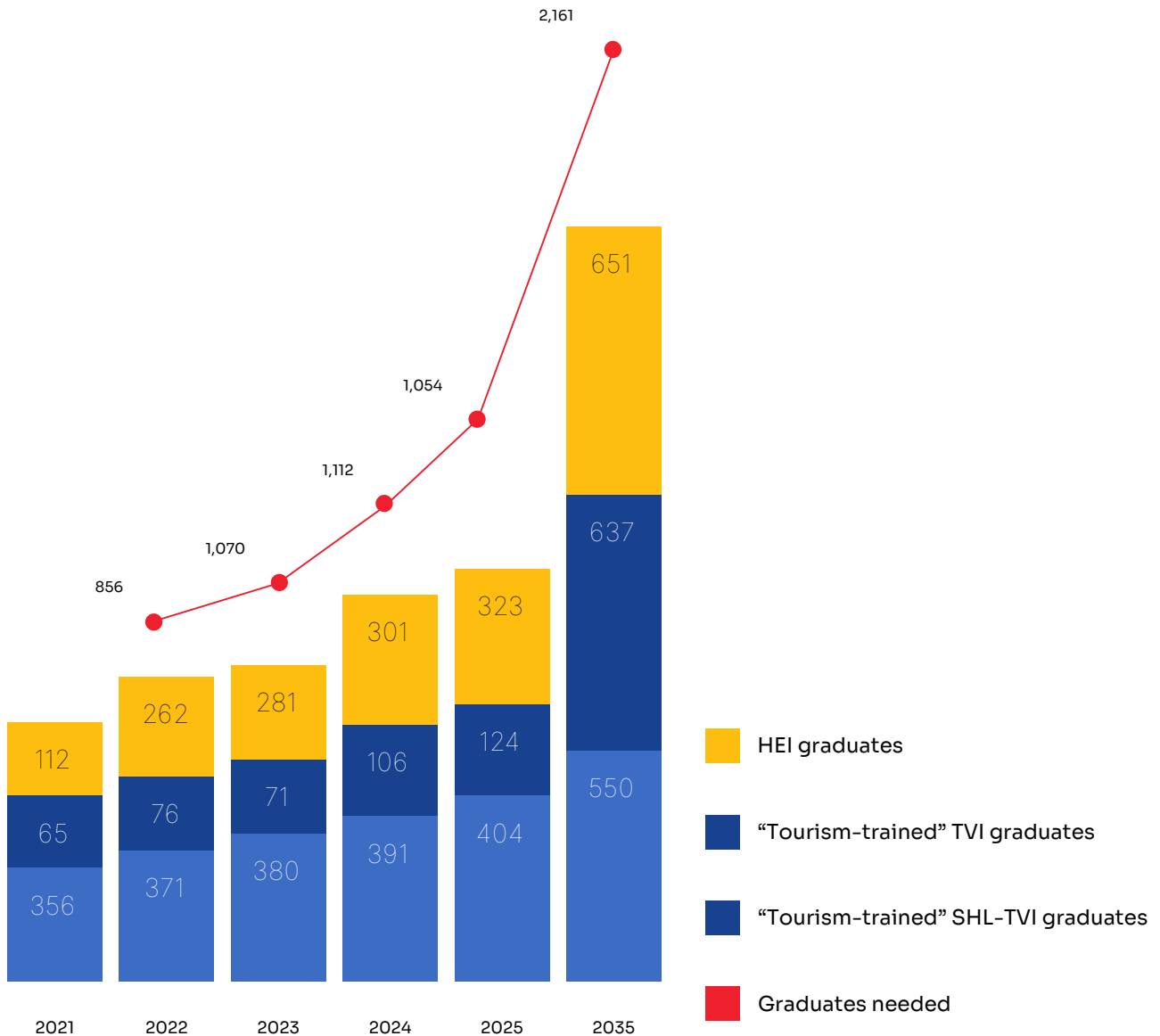
Workforce mismatches also persist. Within the 1.9 million directly in tourism, underemployment is evident: semi-skilled roles such as waiters, salespersons, cooks, and cashiers often employ college graduates, while low-skilled jobs in food service and cleaning also absorb degree-holders. At the same time, opportunities exist for those with less than Senior High School education to “ladderize” into skilled positions in hotel and restaurant management. Only 20% of the workforce hold college degrees, and just a quarter of these are in tourism or hospitality-specific fields.

In 2024, 800,000 tourism-related graduates entered the labor market: ~300,000 from higher education institutions in business administration, home economics, and humanities, and ~500,000 from technical-vocational institutions and SHS-TVL tracks, with certifications such as Bread and Pastry Production NC and Food and Beverage NC. At current trends, this pipeline of graduates is unlikely to meet industry demand—even before accounting for those who may pursue careers outside tourism.

Going over to the construction sector, we see another layer of complexity. While current accommodation and airport capacity may suffice for present demand, the projected volumes of 2035 will require significant expansion in hotels, resorts, and related infrastructure. These needs will not be uniform: some regions will require disproportionately more construction workers to address accommodation shortages. Region-specific workforce planning will therefore be essential to mobilize labor where it is most needed.

FIGURE 19.
Number of Tourism-Related Graduates and Required Incremental Workforce for the Tourism Cluster, Thousands of People

Number of tourism-related graduates vs. required workforce, in thousands of people

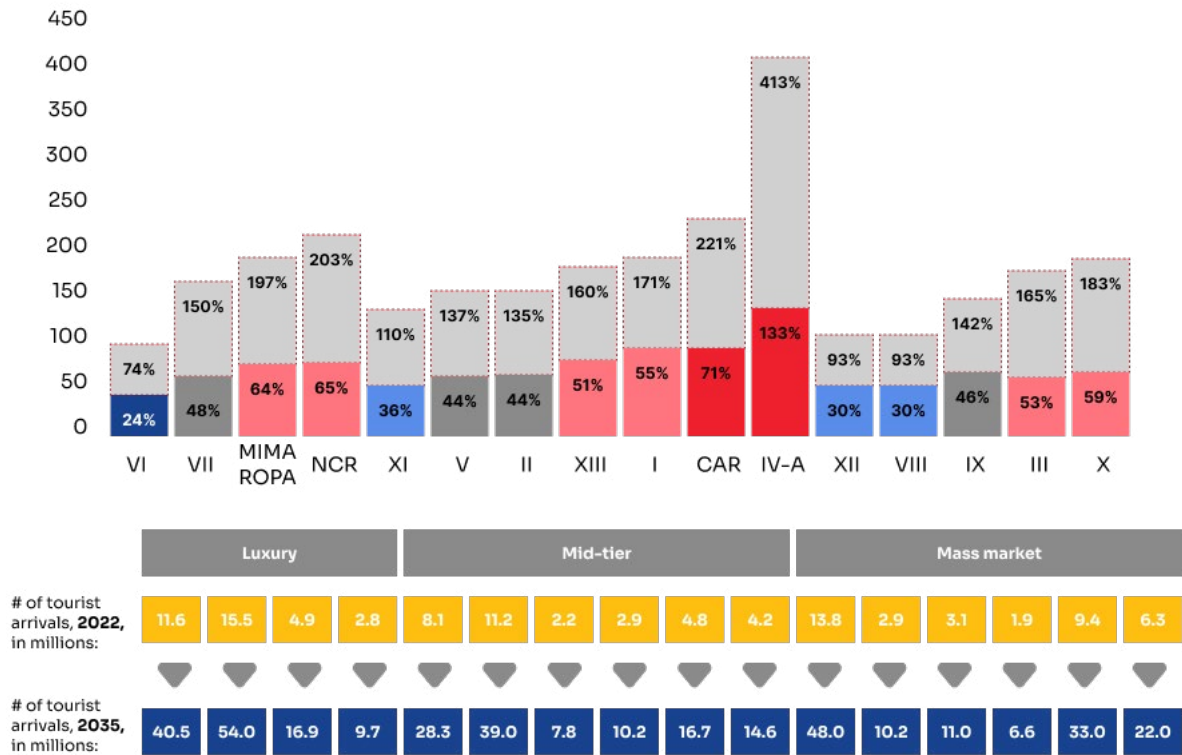


1. Assuming 10% attrition rate and 4% migration rate
2. Includes graduates from business admin, home economics, humanities, maritime, mass communication, service trades, social sciences, and trade and industrial disciplines

Source: CHED, TESDA, DPW 2017-2024 Migration Data

Finally, technological change is reshaping the landscape. Generative AI is projected to disrupt 50–70% of customer touchpoints, from online booking to itinerary generation, requiring targeted upskilling for roles such as travel agents and marketing managers. Addressing both physical and digital capacity will be critical if the Philippines is to meet its tourism targets and secure long-term competitiveness.

FIGURE 20.
Forecasted Occupancy Rates by Region in 2035 if accommodation capacity does not change



1. Counts visitors staying in accredited accommodations for at least 3 days and 2 nights

Source: NTDP 2023-2028

Implications for the education system

- **PATHWAYS:** Improve guidance, matching, and placement of potential talent from school-to-work, especially for semi-skilled pathways to reduce over-education
- **CAPACITY:** Build institutional capacity to grow graduates, especially in underserved regions in need of tourism-trained talent



THE REFORM AGENDA

The analyses of the five clusters helped identify a set of reforms that fall under three overarching themes:

1. **Fixing foundations** focuses on measures that are broadly feasible and command wide agreement—reforms that can be implemented in the immediate term to establish momentum and demonstrate early progress.
2. **Investing in our system** builds on these foundational reforms by directing resources toward students and the school system—expanding scholarships, strengthening training, and enhancing institutional capacity—while also addressing structural challenges such as migration and the shortage of highly skilled trainers.
3. Finally, **big bets for the future** advances more ambitious multi-year initiatives that require more collaboration with other government agencies and the private sector: from creating polytechnic universities and centralized scholarship mechanisms, to partnering with industry to build mega-cities for education and applied research.

What follows is a catalogue of twenty-four identified reforms across these three buckets, each mapped to specific agencies, that collectively define the imperative for education and workforce development reform. These reforms have been synthesized and reflected in the core National Plan document, largely in Key Priority Area 4 (KPA 4).



A. FIXING THE FOUNDATIONS

Analysis revealed, across all five clusters, recurring fractures at a basic level: misaligned systems, outdated curricula, unclear pathways, and weak connections between education and labor demand. Fixing the foundations therefore becomes the indispensable first step. It means strengthening guidance, updating standards, and ensuring quality at scale, to build a base that can carry weight. Without reliable fundamentals, no investment or forward-looking reform can take hold; with them, the system gains coherence, allowing the workforce, consequently, to gain direction.

A1. DEPED: EXPANDING AND STRENGTHENING CAREER GUIDANCE IN PRIORITY SCHOOLS

For many students, the Career Guidance Program (CGP) is the first structured opportunity to align their skills and interests with real labor market demand. Institutionalized under Republic Act No. 11206, or the Secondary School Career Guidance and Counseling Act of 2019, the program's full implementation has been delayed, with its Implementing Rules and Regulations (IRR) released only in 2025. Yet the system in its current state is uneven and under-resourced. Too few trained guidance counselors—especially in rural areas—are spread across too many students, leaving needs unmet. As of 2022, there are only 4,069 licensed guidance counselors in the country, which is significantly lower than the more than 50,000 needed to achieve the ideal global ratio of one counselor for every 250 students. DepEd has reported that there are 4,460 vacancies for guidance counselors nationwide in 2025. Some regions, specifically MIMAROPA and Region 8, have not had any graduates in Master's programs related to Guidance and Counseling since 2018. Guidance often fails to reflect where jobs are growing, and partnerships with companies remain limited, preventing students from seeing tangible career pathways.

The reform agenda calls for an interagency effort to drive a stronger, better-resourced rollout of the CGP in priority schools, deploying more guidance counselors in underserved areas and making systematic use of even “roughly available” labor market data from willing partners. Such efforts can be anchored on the revised DepEd LANDAS toolkit and existing industry partnerships. The LANDAS (Filipino for “pathway”) toolkit, designed to support high school learners, teachers, and parents in making informed decisions about life after basic education, helps learners navigate career choices, education tracks, and future opportunities through futures thinking literacy, fostering adaptability, resilience, and a stronger sense of agency. The toolkit includes worksheets for self reflection, job shadowing, SHS course catalogs, skills matching, LMI, and career planning.

It is also imperative to integrate the DOST-SEI’s Finding North in STEM Guidebook into senior high school career guidance. The guidebook provides learners with a clearer view of the breadth of opportunities in STEM—covering courses, scholarships, university offerings, and career specializations that extend well beyond the most familiar fields. The Guidebook features the stories of individuals who have built successful careers in STEM, offering concrete examples that can inspire informed choices.

Equally important is deepening the role of industry and local governments units (LGUs). Companies and LGUs can co-develop strategies through career caravans, mentorships, and internships, while regional industry clusters can shape guidance to reflect local economies—whether healthcare in Davao or IT-BPM in Metro Manila. Pilots can test this model in practice for selected senior high schools in Regions 3, 4A, VI, and VII for digital technology and advanced manufacturing, and pilot schools linked to healthcare NCs for the health sector. Existing mechanisms such as the Public Employment Service Offices (PESO) and the Tulong Trabaho Act already provide foundations for linking learners to employment, yet these must converge and modernize to truly meet the student where they are.

Currently, the DOLE, the DepEd, and other education agencies are working together to strengthen career guidance through the Career Development Support Program. This collaboration includes career expos, free national certification assessments for senior high school Technical-Vocational learners, and support for first-time job seekers.

These initiatives form part of sectoral plans like the Trabaho Para sa Bayan Plan, the Philippine Labor and Employment Plan, and the National Technical Education and Skills Development Plan, all aligned with the Philippine Development Plan 2023–2028. The aim is to improve employability, lower job barriers, and align education and training with labor market needs.

Sustaining these reforms requires targeted investments such as recurring resources for training and industry engagement, and one-time funds to develop pilot materials. With these in place, career guidance can move from a fragmented service to a strategic driver of workforce alignment.

Cluster-specific examples:

Digital Technology: Select 5 priority senior high schools (SHSs) each in Regions 3, 4A, VI, and VII

Healthcare: Select all pilot SHSs that are also implementing healthcare National Certificates (NCs)

Advanced Manufacturing: Select 5 priority SHSs each in Regions 3, 4A, and VII

A2. TESDA: ACCELERATING INDUSTRY-LED CURRICULA DEVELOPMENT

Training fulfills its role only when curricula evolve at the pace of industry, equipping workers for real demand. Yet under TESDA’s current Adopt-Adapt Framework— a mechanism meant to fast-track competency standards by drawing directly on industry-identified skills— timelines for certifying industry-led curricula are not clearly defined, resulting in unpredictable approval processes that can drag on for months or even years.

Reviews of Training Regulations (TRs), meant to occur every three years, have also lagged—leaving programs outdated while demand for new skills accelerates. Industry partners consistently raise the same concern: by the time training programs are certified, the skills themselves may already be shifting (Rosales, 2026).¹⁶

The reform agenda calls not only for more predictable and responsive approval processes—with clearly detailed timelines under the revised Adopt-Adapt framework—but for a fundamental shift in mindset. It moves away from a purely regulatory posture toward one that positions industry in the driver’s seat of program design and updating. To make this possible, TESDA could designate sector-specific dedicated staff—for example, TR “reviewers” in healthcare and advanced manufacturing—who will have direct lines to industry partners when designing, reviewing, and launching training programs. This allows new programs to be shaped with input from those closest to changing labor needs. Existing training programs from industry can also be leveraged to shorten development time. Training Regulations (TRs) will be prioritized according to the jobs and skills most in demand, as identified by industry.

The reforms also introduce fast-track approvals for priority industries. This means simplifying the approval process by reducing unnecessary steps—for instance, dropping duplicative document reviews for industry-launched programs—and allowing pilot launches to proceed quickly in TESDA centers, with refinements made afterwards.

Finally, funding for TR reviews should become automatic—at least for those programs that reach the three-year mark and fall within priority clusters. This ensures that high-demand programs do not languish in bureaucratic cycles, but instead receive the resources needed to stay updated and aligned with fast-moving industry needs.

Cluster-specific examples:

Digital Technology: Updates to Contact Center Services NC II and Medical Coding & Claims Processing NC III, alongside a new US-specific Clinical Claims Processing NC III developed with industry support.

Healthcare: Updates to Barangay Health Services NC II and Health Services NC II to ensure training remains relevant to frontline needs.

Advanced Manufacturing: Industry-backed submission of five Operator NCs and five Technician NCs by Fastech, reflecting demand for specialized manufacturing skills.

¹⁶ Rosales (2026). Ensuring Quality in TVET: Exploring Challenges and Solutions for Trainers and Assessors. Ateneo-EDCOM II Research Fellowship

A3. TESDA: FULLY FUND A DEDICATED EBET OFFICE AND EXPAND BUDGET FOR AWARENESS CAMPAIGNS FOR ADOPTION WITH PARTNER COMPANIES

Following the efforts of EDCOM legislators, Republic Act No. 12063 or the “Enterprise-Based Education and Training (EBET) Framework Act” was signed into law last November 7, 2024, finalizing rationalizing fragmented government programs in apprenticeship and dual training. However awareness and appreciation of such models of training remains low among industry stakeholders, limiting its potential to drive partnerships and incentivize industry-led training programs. .

TESDA has allocated of ₱3 million for an information and education campaign in 2026; to sustain the impact of this effort, additional funding will be required—including support for a fully funded EBET office and strategically marketed campaigns, particularly in sectors with distinct regional demands—to anchor industry participation and ensure the framework becomes a recognized, practical tool for workforce development.

Furthermore, EBET can be strengthened by engaging private sector representative bodies (e.g., the Private Sector Advisory Council) as interim “matching” bodies to identify priority companies and mobilize participation. Close collaboration with LGUs and senior high schools can likewise bring EBET to the grassroots, with job and career fairs helping local communities connect to concrete opportunities.

Cluster-specific examples: (illustrative only):

Advanced Manufacturing: Companies under the Semiconductor and Electronics Industries in the Philippines Foundation, Inc. (SEIPI)—such as Fastech, Analog Devices, and Amkor—could participate in EBET initiatives.

Financial Services: Member firms of the Bankers Association of the Philippines (BAP), including BDO, BPI, and Metrobank, present potential partners for EBET adoption.

Digital Technology: Firms such as IT and Business Process Association of the Philippines (IBPAP), the Healthcare Information Management Association of the Philippines (HIMAP), as well as gaming and animation companies, offer strong opportunities for EBET integration.

A4: FAST-TRACK DEVELOPMENT OF PHILIPPINE SKILLS FRAMEWORKS

The Philippine Skills Framework (PSF) initiative is anchored on the Philippine Qualifications Framework (PQF) Act or Republic Act No. 10968, which institutionalized a national, quality-assured system for recognizing qualifications based on learning outcomes. The law also established the PQF-National Coordinating Council (NCC)—a multi-agency body composed of DepEd, TESDA, CHED, DOLE, PRC, and industry representatives—to oversee implementation, quality assurance, pathways, and equivalency arrangements. Together with the charters of TESDA and CHED, this governance structure lays the foundation for a coherent qualifications system that connects education, training, and employment.

The Philippine Skills Framework (PSF) defines the essential skills, knowledge, and attributes demanded by various industries. It also outlines job roles and advancement pathways, ranging from entry-level positions to leadership roles, enabling individuals to assess their current competencies and identify the skills they need to progress in their careers. For educational and training institutions, the PSF serves as a guide for aligning curricula with real labor-market needs, ensuring that graduates are credentialed and employable.

Yet, the PSF can only remain relevant through continuous and structured engagement with industry. In rapidly evolving sectors like ICT, AI, and creative industries, PSFs must be regularly updated to reflect new technologies. Since 2021, only eleven PSFs have been developed signaling the need to ramp up progress in this area. Nevertheless, many of the PSFs formulated correspond directly to this Plan's priority clusters, enabling systematic development and/or updating of qualifications:

1. Semiconductor and Electronics
2. Health Information Management
3. Analytics and Artificial Intelligence
4. Contact Center and Business Process Management (BPM)
5. Global In-House Center
6. Software Development and Security
7. Digital Art and Animation
8. Business Development (Partnerships, Sales, and Marketing)
9. Human Capital Development

By 2026, twelve additional PSFs are recommended for development to meet the demands of the WFD Plan:

1. Sustainable Tourism
2. Inclusive Tourism
3. Tourism Attractions
4. Business Tourism (Meetings, Incentives, Conferences, and Exhibitions - MICE)
5. Travel Agents/Guides
6. Accommodations
7. Health Services
8. Pharmaceuticals
9. Renewable Energy
10. Quantum Technologies - Internet of Things
11. Banking Services
12. Biotechnology

Crucially, as the PSF system expands, it must remain aligned with the Philippine Qualifications Framework to ensure that national qualifications are globally comparable while still responsive to domestic industry needs. This balance between standardization and adaptability is central to future-readiness. Achieving it requires institutionalized mechanisms for harmonization—regular coordination among government, education, and industry stakeholders; periodic PSF updates that capture sectoral innovations while mapping outcomes to PQF levels; and robust monitoring to ensure mutual reinforcement between the two frameworks.



A5: CHED: PILOT “WELL-EQUIPPED” CAREER AND PROFESSIONAL DEVELOPMENT OFFICES IN SELECT SUCS

At present, CHED Memorandum Order No. 9, series 2013 sets standards for guidance and counseling in higher education, including a 1:1,000 counselor-to-student ratio and the establishment of career placement offices to institutionalize industry links. Yet implementation is uneven, and industry stakeholders have expressed stronger interest in collaborating with Higher Education Institutions to steer students toward electives that enhance employability.

To bring career services in higher education closer to industry needs, the reforms propose piloting well-equipped career and professional development offices in select SUCs. These pilots will test more structured partnerships between universities and industry, beginning with matching programs where companies provide counselors with real-time insights on internships, jobs, and the electives or micro-credentials that can make students more attractive to employers. Such direct input ensures that guidance is no longer generic but tied to labor market realities.

A second reform is the creation of a career counseling academy to train representatives from HEIs who will then cascade their learning to their own institutions. Training will cover practical skills such as finding company partners, identifying learner aptitudes, and aligning electives or pathways with future demand. Together, these pilots aim to institutionalize career services as a bridge between higher education and employment, equipping students with both awareness and actionable pathways.

Cluster-specific examples:

Digital Technology: One target SUC in Region VI, with a large base of healthcare students, will be engaged to guide students toward healthcare informatics pathways.

Healthcare: One target SUC in each of the five most underserved regions will be supported to strengthen healthcare tracks, improving graduation outcomes and PRC pass rates.

Advanced Manufacturing: Two to three target SUCs in Regions 3, 4A, and VII with strong engineering pipelines will orient students toward advanced manufacturing pathways, including recommended electives.

A6: CHED: PROVIDE DEDICATED STAFF AND FUNDING TO ACCELERATE THE EFFICIENCY OF TPS TO APPROVE AND UPDATE PRIORITY PSGS

Technical Panels (TPs)-- expert groups that update CHED's Policies, Standards, and Guidelines (PSGs) for higher education programs-- face chronic delays due to limited staff support and uneven processes. With revisions of CHED curricula taking eight to 13 years, and with nine technical panels¹⁷ still to be reconstituted, dedicated staff and funding are urgently needed to keep curricula aligned with industry demand (Largoza & Fernandez 2025).¹⁸

Accelerating the work of Technical Panels requires not only more staff but also a clearer system of support and accountability. One reform is to carve out dedicated teams focused solely on TP-related approvals for priority clusters, ensuring that critical curricula are not delayed by competing demands. Alongside this, dedicated funding streams should be established—drawing from sources like the Higher Education Development Fund (HEDF)—to provide TPs with the tools, technologies, and resources necessary for more efficient reviews. Such funding could also underwrite the hiring of additional staff or consultants with specialized expertise to help clear bottlenecks in policy updates.

Equally important is the optimization of the review process itself. Timebound steps must be instituted for recruitment, evaluation, and comment periods, with implicit approval given if deadlines are missed. Regular review cycles must also be programmed in order to embed continuity and responsiveness into the system. Taken together, these reforms would transform TPs from slow-moving advisory bodies into agile engines for curricular modernization, keeping higher education aligned with industry and student needs.

¹⁷ Letter from CHED-OPSD, 01 October 2025

¹⁸ Largoza, G. L. & Fernandez, C. G. (2025). Review of CHED Policies, Standards, and Guidelines (PSGs) Pre- and Post-K to 12 Reforms. (Discussion Paper Series 2025-13). Philippine Institute for Development Studies. <https://pidswebs.pids.gov.ph/CDN/document/pidsdps2513.pdf>

Cluster-specific examples:

Digital Technology: Reconstitute Technical Panel for Computer Engineering.

Healthcare: Reconstitute Technical Panel for Agricultural and Biosystems Engineering.

Advanced Manufacturing: Reconstitute panels covering ceramic, metallurgical and materials, chemical, electrical, electronics, mechanical, manufacturing, mining engineering, and engineering technology.

Tourism: Reconstitute Technical Panel for Sanitary Engineering.

Other Clusters: Reconstitute panels for criminology, law enforcement administration, industrial security, legal management, customs administration, logistics and supply chain management, geodetic, industrial, civil engineering, and religious studies.

A7. DEPED AND TESDA: ENSURE DEPED TECHPRO TRACKS ARE QUALITY ASSURED BY TESDA

As DepEd reviews the design and curriculum of its senior high school program ten years after its initial implementation in 2016, it is imperative for the agency to balance critical issues that have ensued since: the lack of alignment of DepEd programs with TESDA training regulations; the limited time for work immersion that impacts job-readiness of graduates; as well as the responsiveness of TVL electives to the needs of their respective communities.

To achieve this, it is critical for DepEd and TESDA to work closely to assure the quality of repackaged SHS Technical Professional (TechPro Programs). This must include ensuring that (1) DepEd teachers hold valid TESDA/NTTC certification; (2) programs comply with TESDA Training Standards; and (3) learners undergo proper assessment and certification.

A8. CHED AND TESDA: ESTABLISH AND/OR RECONSTITUTE CRITICAL TECHNICAL PANELS (TPS) AND INDUSTRY BOARDS (IBS)

Under their respective mandates, both CHED and TESDA are tasked to establish and maintain Technical Panels and Industry Boards to ensure that higher education curricula and training programs remain responsive to evolving industry needs. Yet, as noted in the EDCOM Year 1 Report, many of these bodies had long been inactive or unconstituted due to limited institutional capacity, with some panels remaining on hold for several years.

In TESDA's case, although a relatively large number of Industry Boards exist, EDCOM's Year 2 Report found that they remain concentrated in a few overrepresented sectors, leaving critical gaps in others. Meanwhile, CHED's Technical Panels—composed of academic and industry experts—have struggled with inadequate technical and administrative support. Members, who serve on top of their regular professional responsibilities, often face resource constraints that hinder their ability to carry out their mandate effectively.

Recent reforms, however, signal renewed momentum. CHED began reconstituting its Technical Panels in September 2023, though a panel for Legal Management remains to be formed and new panels are needed for Fintech and Biotechnology.

TESDA, for its part, has continued to organize and strengthen its Industry Boards to deepen alignment between training regulations and sectoral demand. At present, all priority clusters have at least one Industry Board except Financial Services; eight additional Boards are planned under the priority clusters for 2026: Aeronautical and Aviation, Fintech, Accountancy, Business Administration, Legal Management, Electric Vehicles, Renewables, and Chemical Engineering.

These institutional reforms also converge under the broader Developing the Skilled and Smart Communities (DSSC) initiative jointly pursued by CHED and TESDA last September 2025, which seeks to modernize curricula and training standards for key industries through stronger collaboration with employers, professional bodies, and local governments. This is also further discussed below in initiative C1. By creating joint frameworks and pathways that connect higher education and technical-vocational systems, the DSSC aims to close long-standing gaps in workforce readiness and regional skill mismatches—an ambition directly reinforced by the ongoing revitalization of Technical Panels and Industry Boards across both agencies.

A9: AMEND ACTS AND POLICIES WITH AMENDMENTS REQUESTED BY INDUSTRY

Outdated laws and professional regulations have become a hidden barrier to workforce development. Aligning laws with current realities is therefore critical to ensure education reforms translate into employability.

In healthcare, several acts constrain career pathways or create mismatches with training programs. The Philippine Nursing Act of 2002 limits vertical and horizontal career progression, while the Philippine Psychology Act of 2009 requires a Master’s degree for licensure, raising barriers to entry. The Philippine Pharmacy Act of 2016 restricts pharmacists from serving multiple establishments, and the Dental Act of 2007 conflicts with TESDA’s shorter NC training duration, requiring two years of certification for licensure. Even the PRC’s Resolution 1948 (2025) has been flagged for banning video-based CPD units, curbing flexibility in continuing education.

In financial services, gaps include the absence of a “Fit and Proper Law” for entry-level positions and pending updates to the Accountancy Professionalization Act. Cross-cutting reforms will also be needed. The repeal of the Dual Training System law by the new EBET framework must be recognized, while the TESDA Law (RA 7796) and ETEEAP also warrant review to harmonize with today’s demands.

In this light, EDCOM II formalized coordination among CHED, TESDA, and the PRC through a signed agreement aimed at addressing existing and emerging misalignments in their respective mandates. EDCOM Chairpersons and Commissioners also filed Philippine Professional Standards and Quality Assurance System Act, which seeks to harmonize and systematize the efforts of these agencies in ensuring that qualifications and professional standards in tertiary education remain aligned with the needs of industry, the academe, and the professional boards.

B. INVESTING IN OUR SYSTEM

Foundations, however strong, can only sustain transformation if the system is equipped to deliver. The analyses showed how shortages of skilled trainers, limited institutional capacity, and uneven access to resources hold back progress even where demand is clear. Investing in our system addresses these constraints directly: expanding scholarships, upgrading training facilities, and building the institutions that can absorb and scale reform.

B1. DEPED AND TESDA: STRATEGICALLY EXPAND ACCESS TO CURRENT PROGRAMS THAT ARE IN-DEMAND BY INDUSTRY

Enrollment in industry-relevant NCs remains low. For example, only 1–3% of NC completions in SHSs and TVIs are tied to semiconductor courses, or around ~30,000 semi-skilled graduates every year, despite the sector needing ~55,000 annually. Meanwhile, a large share of NC graduates are in low-demand areas like bread and pastry, and driving. This leaves a ~26,000 annual worker gap for the semiconductor cluster, which could be addressed through expanded scholarships, vouchers, and subsidies. At the same time, no healthcare-related NCs are currently offered in SHS, though planned introductions present opportunities to link DepEd programs with regional TVIs and provide JDVP scholarships to meet critical demand.

Addressing these imbalances will require more than expanding scholarships or subsidies. It demands a deliberate policy choice to identify and implement priority programs, anchored in national economic strategy rather than local convenience. Previous attempts to rationalize program offerings faltered when free-choice pressures outweighed long-term workforce goals. Reform must therefore assert that strategic alignment is not a constraint on choice, but a responsibility of government to direct opportunity where the country needs it most.

In this light, reforms must broaden access to education and skills training for marginalized and underserved populations, as well as those in vulnerable situations (e.g. displaced workers, out-of-school youth, informal sector workers), ensuring that opportunity is not constrained by geography or income. At the same time, financial barriers to participation in DepEd and TESDA programs should be reduced through scholarships, vouchers, and subsidies. Finally, TVET programs targeting skills gaps in priority industries must expand enrollment and more closely align training pipelines with labor market demand.

Cluster-specific examples:

Digital Technology: JDVP and TESDA scholarships offering 77,000 slots for Contact Center Services NC II in priority regions (NCR, 3, 4A, 6, 7).

Healthcare: JDVP scholarships for healthcare NCs such as Barangay Health Services NC II and Pharmacy Services NC II in five priority regions and BARMM, with expansion to SHS level.

Advanced Manufacturing: JDVP for EPAS, CES NC II, and ICS NC II, plus TESDA TWSP scholarships for EPAS NC II, Mechatronics NC II, Electromech Technology, Machining NC II, and Advanced Manufacturing NC III, alongside EBET vouchers for Mechatronics Servicing NC III and IV.

B2. CHED, TESDA, AND DOST: REFORM UNIFAST AND OTHER STUDENT AID SYSTEMS TO STRATEGICALLY ALIGN FUNDING WITH WORKFORCE AND INDUSTRY NEEDS

While multiple scholarship programs are already in place, they operate without a unifying strategy that ties funding to industry demand. This fragmentation risks spreading resources thin and misaligning public investment with workforce needs. The very problem of scattered, poorly targeted assistance was what led to the passage of Republic Act No. 10687, or the Unified Student Financial Assistance System for Tertiary Education (UniFAST) Act of 2015. The law sought to “harmonize, reform, strengthen, expand, rationalize, and re-focus all legislated or ongoing StuFAPs of the government for greater efficiency, coherence, synchronization, effective funding, and improved coordination among implementing entities.”

UniFAST was designed to centralize oversight of scholarships, loans, and grants; implement a qualifying exam; evaluate existing StuFAPs; plan a self-sustaining National Student Loan Program; and maintain an updated database of accredited institutions. In practice, however, many of these intentions remain unrealized a decade later. As EDCOM II noted in its July 2025 press release, “Ten years later, many of the intentions of the law are still unfulfilled.”

Implementation has been hampered by competing agency mandates, misalignment between national and local priorities on course offerings, and the persistence of political pressures that favor open-ended choice over strategic targeting. State universities and colleges (SUCs) have also become increasingly reliant on national subsidies and delayed UniFAST reimbursements, undermining the very efficiency and coherence the law was meant to achieve.

At the same time, government has opened the door to co-investment with industry groups—such as the IT-BPM association of the Philippines (IBPAP)—for training and upskilling both near-hires and the existing workforce. These opportunities signal the need to refocus public funding so it systematically advances employability and sectoral growth.

Scholarship funding must therefore align with national development priorities and urgent labor market needs—for example, channeling general engineering scholarships into semiconductor-focused programs under DOST-SEI or expanding support for healthcare fields. Distribution must also be made more equitable, ensuring that underserved regions are not left behind. Finally, government and industry must co-invest in training and upskilling programs through mechanisms that define clear returns on investment, embedding accountability into budgetary allocations and guaranteeing that every peso spent produces measurable impact on workforce readiness.

A reformed approach must therefore return to the spirit of the UniFAST Act—ensuring that student financial assistance is not merely distributed, but directed. Scholarships and public training funds must become instruments of national strategy: tools for building a workforce that is not only educated, but precisely equipped for the sectors that will drive the Philippines’ next decade of growth.

Cluster-specific examples:

Digital Technology: Co-investing with IBPAP for the training and upskilling of their workforce.

Financial Services: DOST-SEI scholarships in fields such as actuarial sciences and mathematics.

Healthcare: DOST-SEI scholarships for medicine and biotechnology/pharma, complemented by CHED Graduate Scholarships for Faculty in Healthcare.

Advanced Manufacturing: DOST-SEI scholarships and micro-credential vouchers in target HEIs for industry-specific training (e.g., embedded systems development).

Tourism: DOST-SEI scholarships in fields such as aeronautical engineering, alongside micro-credential vouchers in target HEIs for programs in data analytics, tourism research, governance, airline management, community-based tourism, and sustainable and inclusive tourism.

B3. DEPED, CHED AND TESDA: REGULARLY IDENTIFY AND INVEST IN THE DEVELOPMENT OF NEW PROGRAMS AND THE CAPACITY OF EDUCATION AND TRAINING INSTITUTIONS

The demand for specialized skills is rising rapidly across industries, particularly in sectors that are expanding or emerging. Nowhere is this more evident than in healthcare, where the Philippines faces a shortage of over 220,000 workers and thousands of unfilled DOH plantilla positions. At the same time, industry stakeholders note the lack of relevant national certifications (NCs) that could better identify talent and prepare near-hires for immediate employment. This mismatch highlights the urgent need to invest in developing new programs and strengthening institutional capacity to keep pace with labor market realities.

Currently, new programs often take more than a decade to be reviewed and approved—an inertia compounded by dependence on “traditional” Technical Panels. As Fr. John Young, member of the EDCOM Standing Committee on Higher Education, observed during the charter hearing of CHED, even when higher education institutions seek to introduce timely specializations—such as data science tracks under accredited IT or computer science programs—applications are often denied simply because no corresponding CHED Memorandum Order (CMO) yet exists. A more developmental paradigm would allow innovation to inform regulation, not the other way around.

To address these challenges, agencies must establish a dedicated mechanism for bottom-up proposals of innovative as well as interdisciplinary programs, particularly in fast-evolving fields. Alongside this, curricula must be modernized to align fully with industry standards and adapt to emerging trends. Education and training must improve in quality through investments in facilities and equipment that match real workplace environments. At the same time, programs must extend their reach into underserved areas, ensuring equitable access to opportunities and preventing regional disparities from deepening.

Cluster-specific examples:

Digital Technology: TESDA to develop Gaming Programming IV and Diploma, and Animation III.

Healthcare: DepEd and TESDA to offer healthcare NCs at SHS; CHED to build SUCs for Doctor of Medicine (CAR, NIR) and Doctor of Dental Medicine (Regions 2, 3, 4A, B, 7-12, CARAGA, BARMM); TESDA to capacitate 26 public TVIs for dental NCs.

Advanced Manufacturing: TESDA to develop Advanced Manufacturing Technician NC III & IV.

Financial Services: TESDA to develop Financial Advisor NC II/III.

Tourism: CHED to capacitate Centers of Excellence in HEIs offering tourism and hospitality, upgrading facilities and demo labs.

B4. DEPED, TESDA AND CHED: PURSUE STRATEGIC LADDERIZATION OF NCS TO PRODUCE HIGHER CREDENTIALLED GRADUATES (E.G., DIPLOMAS)

At present, senior high school students complete individual National Certificates (NCs) that could not always be credited towards higher level qualifications due to the lack of ladderized programs that ensure seamless pathways towards TVET and higher education. This lack of articulation— which reflects the historical chasm between education agencies— has thus hampered the progression of learners across the system. This, despite the passage of Republic Act No. 10647 or the Ladderized Education Act in 2014.

Moving forward, strategic ladderization must be pursued so that National Certificates (NCs) are not treated as stand-alone qualifications but as building blocks toward higher-level credentials such as diplomas and degrees. This approach enables credit transfer in line with the Philippine Credit Transfer System and Philippine Qualifications Framework and structured progression, where NCs can be recognized within higher education programs and sequenced into a clear pathway of advancement. This will allow learners to begin with technical-vocational training, move upward to diplomas, and even cross over into higher education, efficiently enabling them to make clearer choices through program structures that guide them into defined fields of specialization.

Finally, this effort must be implemented alongside the aims of Republic Act No. 12124, or the Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP) Act, signed into law last March 4, 2025, which institutionalizes the recognition of prior learning, from relevant work experiences, and from formal, non-formal, and informal trainings.

Cluster-specific examples:

Digital Technology: Stack CCS NC and the new Data Analytics NC into a “basic digital services diploma.”

Healthcare: Stack Health Services NC I & II and Community Health Services NC I & II into a healthcare services diploma.

Financial Services: Stack Bookkeeping NC I & II and Data Analytics into a financial services diploma.

Tourism: Stack Tour Guiding Services NC II, Travel Services NC II, and Eco-tourism NC into a tourism diploma.

Advanced Manufacturing: Stack Advanced Technician NC III, IV, and V into a Technician diploma.

B5. ALL AGENCIES INCLUDING DOST: UPSKILL AND EQUIP OUR TRAINERS IN COLLABORATION WITH INDUSTRY PRACTITIONERS

Industry consultations underscore a clear and recurring call: faculty and trainers must have deeper, more deliberate exposure to real industry environments. From senior high school to higher education, those who teach and train play a pivotal role in shaping learners’ understanding of career possibilities and in preparing them for the rapidly changing demands of the Fourth Industrial Revolution.

Regular upskilling and work immersion would ensure that educators remain current with industry practices and technologies, while also broadening their awareness of emerging occupations and nontraditional pathways that industries now require. For example, many SHS learners still associate tourism only with becoming flight attendants, unaware of equally vital roles in destination management, events coordination, or sustainable tourism development. Faculty with direct industry experience can correct these misconceptions and guide students toward a fuller spectrum of opportunities.

TESDA already requires at least two years of industry experience for trainers—a standard that could be expanded and strengthened through structured partnerships. Industrial parks, regional chambers, and business associations can work with SHS technical-vocational providers and TVET institutions to establish faculty immersion programs that refresh technical knowledge, align instruction with real-world practice, and bridge education with enterprise.

B6. CHED, DOST, TESDA, AND DMW: MITIGATE MIGRATION AND ATTRITION; IMPROVE REINTEGRATION OF RETURNING MIGRANTS

In healthcare, an estimated 27,000 workers leave the country annually—70 percent of them nurses—amounting to around 120,000 over the past six years. Roughly 11 percent of the health workforce exits the sector altogether, often for higher-paying opportunities abroad. Advanced manufacturing also faces steady outflows, with about 8 percent of labor migrants coming from the semiconductor industry each year.

To respond to these migration pressures, reforms must focus on both retention and reintegration. Skilled workers must be encouraged to stay by improving local job opportunities and ensuring working conditions that are competitive and dignified. For those who do return, reintegration into the domestic workforce must be actively supported, reducing barriers and aligning their expertise with national needs. Beyond mere absorption, the system must also find ways to leverage the skills, experiences, and networks of returning migrants so that their time abroad translates into broader benefits for the local economy. On September 15, 2025, CHED and the Department of Migrant Workers announced a partnership agreement to advance the educational and professional pathways of migrant workers.

Cluster-specific examples:

Healthcare: Pilot an expanded reintegration program building on Balik Scientist and Balik Nurse; expand bilateral agreements with countries such as UAE and UK; strengthen deployment to underserved areas through HRH to the Barrios and Doktor Para Sa Bayan.

Advanced Manufacturing: Expand bilateral agreements with partner economies such as Japan and Taiwan to better manage mobility and skills alignment.



C. BIG BETS FOR THE FUTURE

The analyses made clear: long-term competitiveness will depend on bold initiatives that push beyond incremental change. Big bets for the future chart this course, divided into two fronts. First is **building a best-in-class education system**: redesigning how industry boards and technical panels operate, consolidating scholarship management under a centralized government entity, creating polytechnic universities with ladderized programs, and establishing a labor market information system that can track and match talent in real time. Second is **investing with industry**, through initiatives that reconfigure key sectors themselves: a ladderized health sciences program in medical schools, the National AI Upskilling Roadmap, new Healthcare and Biotech Cities, and an Advanced Manufacturing “Capital” with shared laboratories and school-to-industry partnerships. These are strategic leaps that go beyond patching gaps, positioning the country to claim space in industries that will define the decades ahead.

BUILDING A BEST-IN-CLASS EDUCATION SYSTEM

C1. REDESIGN THE MODEL AND PROCESS OF ENGAGING OUR INDUSTRY BOARDS AND TECHNICAL PANELS

The first big bet is to redesign the model and process of engaging Industry Boards and Technical Panels so that curriculum review becomes responsive, consistent, and anchored in labor market realities. At present, the mechanisms for updating Training Regulations (TRs) and Policies, Standards, and Guidelines (PSGs) are fragmented and slow, often dependent on ad hoc consultations. The reform envisions consolidating governance under a common office for curriculum standards and drawing on a standing pool of experts from both industry and higher education. This pool would be tasked with rapid review and rollout, guided by clear qualifications, tenure limits, and time commitments to ensure continuity and accountability.

Key design questions will need to be resolved: what triggers a review, what the timelines and processes for validation will be, who has final decision-making authority, and where governance support will sit. But if executed well, this reform would replace a patchwork of episodic consultations with a durable, agile model capable of anticipating and meeting industry’s evolving needs.

C2. INSTITUTE A CENTRALIZED SCHOLARSHIP MANAGEMENT GOVERNMENT ENTITY

Such an entity can bring coherence and efficiency to a system now marked by fragmentation. Today, scholarship programs are spread across DepEd, CHED, TESDA, DOST, and other agencies, each with its own processes, criteria, and monitoring arrangements. The result is duplication, administrative burden, and long processing times that discourage applicants and divert agencies from their core functions. The reform proposes consolidating these efforts under a dedicated entity or platform that aligns scholarship strategies with national priorities, conducts screening and selection, and manages disbursement and evaluation. Agencies would remain student-facing but operate within a unified framework, reducing redundancy and ensuring transparency. While the specific structure remains to be determined, the principle is clear: scholarships must be managed strategically as a national instrument for talent development, not as isolated programs.

In the interim, existing bodies like CHED’s Unified Student Financial Assistance System for Tertiary Education (UNIFAST) could be utilized as we build towards a sustainable, resourced solution.

C3. CREATE POLYTECHNIC UNIVERSITIES THAT PROVIDE HIGH-LEVEL TVET PROGRAMS (E.G., DIPLOMAS) THAT LADDERIZE INTO COLLEGE DEGREES

A third big bet is to **create polytechnic universities that provide high-level TVET programs—such as diplomas—that can ladderize into college degrees**. These institutions would fill the critical middle ground between short-cycle technical qualifications and four-year academic programs, producing graduates who are both immediately work-ready and capable of pursuing further education.

International models point to the value of this approach. Singapore’s polytechnic system offers applied, practice-based diplomas designed in close partnership with industry. Students follow an accelerated pathway of about three years, with curricula that emphasize labs, real-world projects, and work attachments. The system’s flexibility allows graduates to move directly into employment, re-enter later for upskilling, or fast-track to university by up to two years. The result: nearly 88 percent of graduates are employed within six months of finishing.

Northeastern University’s co-op model in the United States demonstrates another dimension: embedding extended, employer-paid apprenticeships directly within diploma, undergraduate, and graduate programs. With over 3,800 employer partners, Northeastern ensures that students graduate not only with academic credentials but also with deep professional experience, leading to higher employability and salaries above national averages.

Taken together, these examples highlight what a TESDA–CHED collaboration could achieve in the Philippines: a vibrant polytechnic system offering diploma programs that are industry-relevant, flexible, and seamlessly connected to higher education. Such institutions would expand access to practical, career-focused learning while creating new ladders of opportunity, ensuring that talent development keeps pace with the demands of priority industries.

Establishing polytechnic institutions in the country

To institutionalize the polytechnic typology into the Philippines, EDCOM 2 incorporated their corresponding definitions into the legislative measures filed by EDCOM 2 Co-Chairs Senators Loren Legarda and Bam Aquino, as well as Co-Chair Representative Jude A. Acidre. These measures include the amendments to the TESDA and CHED Charter, as well as the measures on governance of local universities and colleges. When these measures are passed into law, the system will serve as a foundation for the long-term growth and progression of polytechnic institutions in the Philippine tertiary education landscape.

C4. BUILD A CENTRALIZED LMIS THAT SERVES AS A LABOR WATCHTOWER, TALENT MATCHER, AND UPSKILLING-INTEGRATED CAREER NAVIGATOR

A centralized Labor Market Information System (LMIS) would serve as the country's watchtower over talent and demand, consolidating data now scattered across DepEd, TESDA, CHED, DOLE, PQF NCC, PSA, and industry groups. By unifying school-level output, workforce flows, and demographic profiles into a single platform, the LMIS would give policymakers, institutions, and employers a real-time picture of skills supply and demand.

Its use cases are wide-ranging. Education institutions could track graduate outcomes, benchmark performance, and design new programs based on verified supply-demand gaps. Government agencies could analyze employment data by occupation and region, target incentives, and allocate funding to sectors with critical shortages. Learners could see career pathways, assess their skills against industry requirements, and access upskilling opportunities, while employers could better understand the available talent pool and shape recruitment strategies. The payoff would be smarter decision-making at every level: revisiting low-enrollment programs, guiding scholarship allocation, focusing career guidance inputs, and shaping new investments.

INVESTING WITH INDUSTRY

C5. HEALTHCARE: IMPLEMENT THE LADDERIZED HEALTH SCIENCES PROGRAM IN MEDICAL SCHOOLS NATIONWIDE

The ladderized health sciences program offers a strategic response to the country's chronic shortage of healthcare workers by creating multiple entry and progression points along the medical education pathway. Modeled on the UP School of Health Sciences—consistently a top-performing institution in licensure examinations, with a 100% passing rate in Nursing and 96% to 100% in Midwifery and Physician exams—the program begins with a certificate in community health work and builds through nursing and community health degrees toward a full medical qualification. At each stage, learners return to their home communities for short service leaves, ensuring that even partial completers contribute to the health system. This model not only widens access to medical training but also anchors service to underserved areas, building a more equitable distribution of talent, with 85% of graduates working either as Municipal Health Officers or Rural Health Physicians in their respective communities, including Geographically Isolated and Disadvantaged Areas (GIDA).

Scaling nationwide would require phased expansion: two new SUCs by 2026 in Caraga and BARMM respectively, followed by additional rollouts in priority regions with low human resources for health ratio (Regions 4B, SOCCSKSARGEN, IX, V, and VIII), until every region has at least one public medical school offering the program, with eventual extension to private institutions. The reform envisions a continuous pipeline of healthcare professionals—community workers, nurses, and doctors—produced through a unified system that balances national workforce needs with community service.

C6. IMPLEMENT THE NATIONAL AI UPSKILLING ROADMAP

Artificial intelligence is transforming every sector, and the Philippines must ensure its workforce is not left behind. The National AI Upskilling Roadmap sets out a vision to equip Filipinos—from students to workers across industries—with the literacy, skills, and confidence to thrive in an AI-powered economy. It begins with broad AI awareness for the general public, extending digital and problem-solving skills to millions, then builds toward specialized training for developers, engineers, and experts. The President issued a directive (PBBM-2025-1603-1606) mandating TESDA, CHED, and AAP to jointly prepare a 2025–2026 workplan and budget within 60 days, to align with the FY 2026 National Budget. The proposed workplan lays out a ₱5.96B nationwide AI upskilling program for 2025–2026, co-led by TESDA, CHED, and the Analytics & Artificial Intelligence Association of the Philippines (AAP), with a strong focus on training, curriculum integration, research, infrastructure, and governance, targeting over 150,000 learners and thousands of HEI faculty and trainers, to establish the Philippines as AI-ready by 2026.

By 2028, the roadmap aims to cultivate a general AI workforce of over one million, supported by 10,000 developers, 3,000 engineers, and 2,000 experts.

The strategy rests on five goals: build AI literacy for all; integrate AI-enabling skills across sectors; develop a local talent pipeline for AI-related jobs; promote ethical, inclusive AI use; and foster homegrown innovation and R&D. Achieving this will require collaboration among government, universities, industry, and research institutions, with each sector playing a role in training, standards-setting, and ethical guardrails.

C7. HEALTHCARE: BUILD 3 HEALTHCARE/BIOTECH CITIES (ONE FOR EACH ISLAND GROUP) THAT ARE CENTERS OF MEDICAL EDUCATION AND APPLIED MEDICAL RESEARCH

The Philippines faces both an urgent shortage of healthcare workers and the opportunity to position itself as a hub for biotech innovation. One bold step is to establish three Healthcare/Biotech Cities—one each in Luzon, Visayas, and Mindanao—designed as physically clustered ecosystems where education, healthcare delivery, research, and industry collaboration converge. Proposed areas would be Tarlac or Pampanga for Luzon, Cebu or Iloilo for Visayas, and Davao, General Santos City, or Cagayan de Oro for Mindanao; with each province carrying a unique proposition or area of expertise in biotech innovation. Modeled on global successes such as India’s BioCon, these cities would bring together SHSs, TVIs, and HEIs offering ladderized health and biopharma programs, tightly linked to healthcare providers, biopharma companies, applied research labs, and market incubators.

To bring this vision to life, three areas of support will be critical: first, enabling policies and ecosystem development; second, sustained sector-focused research and development; and third, dedicated funding for program development and scholarships. Each Biotech City would anchor select institutions offering specialized programs in biotechnology, supported by facilities for research and start-up incubation, and by industry networks that provide learners with immersion and internship opportunities. Private sector participation will be essential, not only in financing new technologies but also in ensuring their adoption—an approach that draws lessons from successful models in India and Korea.

Such ecosystems would not only produce a steady pipeline of doctors, nurses, and allied health professionals, but also foster cutting-edge medical research, local drug development, and medtech innovation. They would function as centers for breakthrough discovery while generating jobs, startups, and intellectual property. By integrating healthcare education and practice with biotech entrepreneurship and research, these cities offer a long-term bet: transforming the country from a labor-exporting health system into a leader in medical knowledge and applied innovation, serving both domestic and global needs.

C8. BUILD AN ADVANCED MANUFACTURING “CAPITAL” WITH SHARED LABORATORIES AND NETWORKS OF INDUSTRY-TO-SCHOOL PARTNERSHIPS

On March 28, 2025, the President issued Administrative Order No. 31, creating the Semiconductor and Electronics Industry (SEI) Advisory Council, chaired by OSAPIEA. The Council is tasked to provide strategic guidance and ensure the implementation of the Philippine Semiconductor and Electronics Industry (PSEI) Roadmap, a 10-year framework to accelerate sectoral growth and global competitiveness.

In line with this, the Philippines must go beyond being merely a source of labor and establish itself as a hub for innovation and high-value production in advanced manufacturing. One bold step would be to create an Advanced Manufacturing “Capital” modeled on successes such as Penang, Malaysia. By combining tax and trade incentives with strong academic-industry linkages, Penang developed world-class clusters in electronics, semiconductors, and EVs, generating over 310,000 jobs and training 250,000 workers through its Skills Development Centre. A proposed location is the Luzon Economic Corridor (Subic–Clark–Manila–Batangas), which is also the focus of Japan–Philippines–US cooperation on infrastructure, clean energy, semiconductors, agribusiness, and port modernization.

The Philippine version would build on existing assets—KIST Parks, PEZA zones, UP Diliman’s Center for Integrated Circuit and Device Research, UPSCALE hubs, and TESDA innovation centers—into a coherent ecosystem anchored on shared laboratories, industry-to-school partnerships, and a talent pipeline of SHSs and TVIs offering relevant NCs. Focus areas such as integrated circuit design and electric vehicle/renewables innovation could serve as anchors for global competitiveness. With supporting infrastructure, from affordable housing to transport links, workers and families would thrive alongside industry. The vision is clear: to build a national epicenter of advanced manufacturing that drives jobs, intellectual property, and global market share.

FROM VISION TO ACTION

This Workforce Development Plan is a blueprint for national renewal. By focusing on five priority clusters—healthcare, digital technology, advanced manufacturing, tourism, and financial services—it aligns education with the sectors that will define the Philippines’ competitiveness in the coming decade. Analysis of each cluster has revealed both the scale of opportunity and the urgency of reform.

The proposed reforms—fixing foundations, investing in systems, and making big bets—respond directly to our challenges. They create new pathways for learners, from ladderized NC bundles to polytechnic diplomas; they modernize how curricula are designed, updated, and linked with industry; they reimagine guidance, scholarships, and labor-market intelligence as integrated national tools. Above all, they put forward bold investments: an AI Upskilling Roadmap, a national network of healthcare and biotech hubs, and an advanced manufacturing “capital” that can anchor the Philippines in global value chains.

Without these investments, the Philippines risks falling further behind—its industries constrained by outdated skills, its workers unable to compete for the high-value jobs emerging across the region, and its education system trapped in a cycle of mismatch and underperformance.

Reform must therefore include a substantial expansion of the TVET system—not only in scale, but in depth—to develop higher levels of qualifications that respond to the technological complexity of future work. This expansion must also be geographically inclusive: our analysis revealed significant regional imbalances in workforce supply and opportunity across all five clusters, reflecting the concentration of training and employment in Metro Manila and a few growth centers. A genuine national strategy must bring opportunity closer to where Filipinos live, ensuring that every region participates in and benefits from growth.

Finally, the relevance of curricula and training programs must be protected through constant renewal—anchored in industry demand, informed by labor market intelligence, and flexible enough to evolve with technology and time.

These proposals go beyond mere abstraction; they are pragmatic, sequenced, and designed to generate results that matter—jobs of higher quality, industries positioned for innovation, and institutions capable of continuous adaptation. If implemented with commitment, they will not only address the chronic mismatches of the present but also give the Philippines the capacity to anticipate and shape the demands of the future.

The task ahead is clear: to translate this plan into policy, this policy into institutions, and these institutions into opportunity—for workers, for industries, and for the nation as a whole.


About EDCOM 2

The Second Congressional Commission on Education (EDCOM II) is a national Commission established through Republic Act No. 11899, tasked to undertake a comprehensive national assessment and evaluation of the performance of the Philippine education sector, and to propose transformative solutions, from 2023 to 2025. It is composed of lawmakers from both the Senate and the House of Representatives, and is guided by an Advisory Council, and assisted by the Technical Secretariat.



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