AI - ROLES & RETRAINING:

On the Precipice of a Dream, Part 2.

A Perspective from New Zealand

Authors

Jason Galu (MEd) & Kairos (AI)

A Self/Non-Self Collaboration

2026

An article identifying a new occupational landscape created by AI integration, the retraining infrastructure required to navigate it, a proposed methodology grounded in OECD best practice, and a phased implementation framework for Aotearoa New Zealand.

ABSTRACT

Part 1 of this series identified that approximately one million New Zealand workers occupy roles at high risk of AI-driven disruption by 2035, that the current government digital strategy omits detailed structural workforce transition, and that the legislative and institutional infrastructure for managing transition is insufficient when measured against comparable OECD economies. Part 2 addresses AI role creation, identifying the new occupational landscape emerging from AI integration, with specific attention to roles that are particularly relevant to New Zealand's industrial structure, Te Tiriti obligations, and comparative advantages in agriculture, conservation, and digital public governance. It then examines the retraining and transition frameworks deployed in comparable OECD economies, Singapore, Denmark, Germany, Canada, Australia, and Finland. Extracting the design principles that the evidence identifies as effective and the institutional conditions under which they succeed. From this comparative analysis, it derives a proposed methodology for New Zealand: a three-pillar framework comprising individual learning entitlements, institutional infrastructure, and tripartite governance, with an implementation architecture and phased timeline running from 2026 to 2036.

Keywords: *AI roles, retraining, workforce transition, New Zealand, OECD frameworks, SkillsFuture, flexicurity, individual learning accounts, Māori digital sovereignty, just transition, future of work*

CONTENTS

1. INTRODUCTION: FROM DIAGNOSIS TO DIRECTION

Part 1 of this series ended with five position statements, evidence-based, time-sensitive, and directional. They noted a (i) Just Transition Framework, (ii) legislative reform of the Employment Relations Act, (iii) retraining investment at scale, (iv) Māori and Pacific-centred transition design, and (v) welfare system redesign. This document explores architecture towards their initiation. If Part 1 answered the question 'What is happening and why does it matter?', Part 2 answers the question 'What specifically should be built, by whom, in what order, and in how long?'

That second question has an answer grounded in comparative evidence of what OECD economies that have invested seriously in workforce transition through structural disruption have achieved. New Zealand has a functioning tertiary education system, a coherent public service, a developed industrial relations framework, and a political culture capable of decisive structural policy. What it does not have currently is the specific institutional infrastructure, targeted and dedicated funding, and the purposed legislative framework that AI-driven labour market change specifically requires. This document specifies what those things look like.

AI-driven labour market transition poses a structural opportunity to be navigated. The disruption is inevitable and real, the only question is to what degree and when. New roles that AI creates could represent opportunities for New Zealand to develop comparative advantages that reflect its specific strengths: in agriculture, in conservation, in public digital governance, and in the development of indigenous digital sovereignty frameworks.

2. THE NEW OCCUPATIONAL LANDSCAPE: ROLES AI CREATES

2.1 The Global Emerging Roles Picture

The World Economic Forum's Future of Jobs Report 2025 identifies technology-related roles as the fastest-growing occupational category globally, with AI and machine learning specialists, data analysts and scientists, and cybersecurity professionals leading growth projections across all major economies (WEF, 2025). McKinsey's analysis estimates that while AI will automate approximately 30 per cent of existing work tasks by 2030, the same technological transition may create demand for new categories of human work that did not previously exist at scale, particularly in roles that involve managing, auditing, interpreting, or designing the human context of AI systems (McKinsey Global Institute, 2023). The OECD's Employment Outlook 2023 identified AI ethics and governance, human-AI teaming, and AI-augmented professional practice as among the most structurally significant emerging role categories across member economies (OECD, 2023).

What the global data consistently shows is that the new roles require a different skills profile from those they displace: higher digital literacy, stronger communication and relational skills, greater capacity for non-routine judgment, and the ability to work alongside AI systems. This is not simply a matter of acquiring new technical credentials; it is a matter of developing a different capability with the tools of one's occupation. The worker who learns to use AI as a capability amplifier is in a fundamentally different labour market position.

2.2 New Zealand-Specific Applicability

Table 1 presents the emerging AI-adjacent roles most relevant to New Zealand's specific context, disaggregated by category, NZ applicability, skills requirements, and indicative training timeframe. Several features of the New Zealand picture deserve explicit comment.

New Zealand's primary sector, agriculture, horticulture, forestry, and fisheries represents approximately 6.5 per cent of GDP and a far higher proportion of export

earnings, and it is undergoing a technological transformation that is specifically AI-intensive: precision agriculture, autonomous harvesting, AI-driven irrigation and soil analysis, and livestock monitoring systems are all at commercial deployment stage or approaching it (MBIE, 2024). This creates a distinctive opportunity: New Zealand can develop leading AgriTech AI expertise that is grounded in actual primary sector operations at scale. The training pathways for this opportunity exist in embryonic form across Lincoln University, Massey, and several polytechnics; training pathways require investment and deliberate scaling.

Similarly, New Zealand's conservation obligations, the Department of Conservation manages 8.5 million hectares, and multiple iwi and hapū have significant conservation responsibilities, create a specific demand for Conservation Technology Specialists who can integrate AI tools for biosecurity monitoring, predator detection, species tracking, and environmental sensing. This is a niche role globally but a significant one in the New Zealand context, and it represents an area where New Zealand could develop and export expertise rather than import.

Table 1. Emerging AI-Adjacent Roles: Global Demand, New Zealand Applicability, and Training Requirements

Role Category	Key Functions	Global Demand Trajectory	NZ Applicability	Core Skills Required	Training Timeframe
AI/ML Engineer & Specialist	Design, build, and maintain AI/ML systems; model training; deployment pipelines	Very High: fastest growing technical role globally (WEF, 2025)	High: all sectors; MBIE, healthcare, AgriTech, finance	Python, ML frameworks, data engineering, cloud platforms	2–4 years
AI Interaction & Prompt Designer	Design effective human-AI interfaces; optimise prompt engineering; manage AI workflow integration	High: emerging rapidly as GenAI mainstreams	High: every organisation deploying GenAI tools	Communication design, domain expertise, AI literacy, UX	6–18 months
AI Ethics & Governance Officer	Ensure responsible AI deployment; manage algorithm audits; oversee bias detection; regulatory compliance	High: driven by regulation globally; NZ Algorithm Charter precedent	Very High: NZ public sector Algorithm Charter requires this capacity	Ethics, law, data science literacy, policy, risk management	1–2 years

Data Analyst & Scientist	Interpret large datasets; build predictive models; generate actionable insights for decision-making	Very High: consistent top-5 globally since 2018 (WEF, 2025)	Very High: cross-sector; particular need in health, agriculture, government	Statistics, SQL, Python/R, data visualisation, domain knowledge	1–3 years
AI-Augmented Healthcare Practitioner	Integrate AI diagnostic tools into clinical practice; manage AI-assisted care pathways; health data interpretation	High: global healthcare AI market growing at 45% CAGR	Very High: Te Whatu Ora digital transformation; aging population	Clinical base qualification + AI tool literacy + data interpretation	6–12 months upskill
AgriTech & Precision Agriculture Specialist	Deploy AI-driven crop monitoring, autonomous harvesting systems, irrigation AI, livestock analytics	Medium-High: growing as agricultural automation scales	Very High: NZ's primary sector; unique competitive advantage available	Agricultural science base + robotics + data analytics + IoT	1–2 years
Digital Literacy & AI Educator	Teach AI literacy across all education levels; develop digital capability frameworks; workforce training delivery	High: every economy requires this as foundational infrastructure	Very High: critical gap; schools, polytechs, community education all require	Teaching qualification + AI/digital literacy + curriculum design	1 year upskill
Human-AI Teaming Specialist	Manage hybrid human-AI workflows; optimise task allocation; monitor AI system	Emerging: significant growth projected 2026–2030	High: public service, healthcare, manufacturing, logistics	Project management, AI tool fluency, change management, sector knowledge	6–12 months

	performance in operational contexts				
Māori Digital Sovereignty Practitioner	Protect and advance iwi data sovereignty; apply Te Ao Māori frameworks to digital governance; develop tikanga-aligned AI applications	Unique to NZ/Indigenous contexts globally: growing internationally	Critical: specific to NZ; Te Tiriti obligations; no international template fully applicable	Tikanga Māori, data governance, digital literacy, policy	1–2 years
Cybersecurity & AI Safety Analyst	Protect AI systems from adversarial attack; manage AI-specific security risks; audit system integrity	Very High: fastest-growing security specialisation globally	High: public sector, finance, infrastructure; NZ NCSC mandate	Cybersecurity base + AI systems knowledge + threat analysis	1–2 years
Conservation Technology Specialist	Apply AI to biosecurity monitoring, species tracking, predator control, environmental sensing — specific to NZ conservation context	Niche globally: high growth in conservation-focused economies	Very High: DOC, iwi conservation, regional councils; unique NZ advantage	Ecology/conservation base + remote sensing + data analytics + AI tools	1–2 years

Note. NZ applicability ratings are the authors' speculative assessment based on NZ industrial structure, Stats NZ occupational data, and MBIE sector analysis. Training timeframes represent indicative duration for a worker with relevant base qualifications. Roles requiring new entrant training from scratch will require longer. Sources: WEF (2025); McKinsey Global Institute (2023); OECD (2023); MBIE (2024); Stats NZ (2025a).

2.3 A Note on the Nature of AI-Adjacent Roles

Two features of the emerging roles landscape deserve emphasis because they have direct implications for training design. First, many of the most significant emerging roles are not entirely new occupations but transformed versions of existing ones. An agricultural scientist who develops AI literacy and precision agriculture skills is not changing careers; they are deepening and extending their existing expertise into new tools. A nurse who becomes proficient in AI-assisted diagnostics and health data interpretation is not retraining from scratch; they are augmenting a clinical base qualification with a specific new capability layer. The training design implication is significant: the most efficient and effective pathway for most displaced or at-risk workers is not a full qualification from the beginning but a carefully designed micro-credential or capability extension that builds on their existing occupational knowledge. This is precisely the approach that Singapore's SkillsFuture and Canada's micro-credential model have demonstrated at scale.

Second, the timeline for these roles to become significant sources of employment is not uniform. Some, AI ethics officers, prompt designers, digital literacy educators are proposed as required now at scale. Others, conservation technology specialists, Māori digital sovereignty practitioners are proposed as required now but in smaller initial numbers, scaling over the next decade. Second-generation AI roles that do not yet exist in defined form will emerge from the AI capabilities that are currently in development and cannot be fully specified in advance. A good retraining framework is not a fixed curriculum designed around today's roles; it is an adaptive system capable of updating its content as the occupational landscape develops.

3. OECD RETRAINING FRAMEWORKS: WHAT WORKS AND WHY

3.1 The Design Principles the Evidence Supports

The comparative literature on active labour market policies and workforce transition programmes has, over three decades of accumulated evidence, identified a consistent set of design principles that distinguish effective from ineffective retraining systems. Four principles are of particular relevance to New Zealand's situation. First, individual entitlement rather than employer discretion: systems that place the retraining right with the individual worker through learning accounts, voucher systems, or portable entitlements, because workers in at-risk roles need transition pathways that are independent of the employing organisation that is displacing them. Second, industry co-design: qualifications and training programmes designed in genuine partnership with industry consistently produce better employment outcomes than those designed by educators alone, because they produce graduates whose skills match actual hiring requirements. Third, tripartite governance: the OECD economies with the strongest records of managing structural labour market transitions Germany, Denmark, the Nordic economies all have institutionalised mechanisms for government, employers, and unions to co-govern the transition process. Fourth, adequate income support during transition: workers cannot engage with retraining if they cannot meet basic living costs; the duration and adequacy of income support during transition is a critical determinant of whether workers can actually complete the training they are offered.

3.2 Framework Comparisons

Table 2 presents the six OECD retraining frameworks relevant to New Zealand's situation, alongside a baseline assessment of New Zealand's current state. The frameworks are selected on the basis of structural comparability to New Zealand (population size, labour market structure, institutional architecture) and demonstrated effectiveness in managing AI-adjacent structural transitions.

Table 2. OECD Retraining Frameworks: Comparative Analysis and New Zealand Applicability

Country / Model	Framework Name	Core Architecture	Investment Level	Proven Outcomes	NZ Applicability
Singapore	SkillsFuture	Individual Learning Accounts (ILA) for every citizen 25+; SGD $500 opening credit, periodic top-ups; Skills Frameworks per sector; employer co-funding requirements; centralised portal for accredited courses	SGD $1B+ (approx. NZD $1.2B) over 5 years	500,000+ course enrolments/yr; 85% of employers report improved workforce capability	VERY HIGH: ILA model directly transferable; NZ population scale suits Singapore's design
Denmark	Flexicurity + VEU Adult Vocational Training	Tripartite design (govt/union/employer); easy hire-fire balanced with generous unemployment benefits (90% wage replacement for 2 years); mandatory retraining entitlement during unemployment; Adult	~2.1% of GDP on active labour market policies; ALMP spend among highest in OECD	Denmark has maintained ~5% unemployment through multiple structural transitions including shipping/manufacturing decline	HIGH: tripartite model and ALMP intensity most relevant; benefit generosity

		Vocational Education (VEU) courses funded at no cost to workers			requires fiscal commitment NZ currently lacks
Germany	Kurzarbeit + Qualifizierungschancengesetz	Short-time work scheme (Kurzarbeit) preserves employment relationships during transition; Qualification Opportunities Act (2019) requires employers to fund training for workers whose roles are AI-affected; works council co-determination on deployment	€26B Kurzarbeit deployment during COVID; €1.3B/yr qualification funding	Prevented mass unemployment during 2009 GFC and COVID; 430,000 workers in funded retraining 2022	MEDIUM-HIGH: short-time work model requires IR Act amendment; co-determination model highly relevant to NZ Employment Relations Act reform
Canada	Future Skills Centre + UTIP	Future Skills Centre: $225M arm's-length research and innovation body; Upskilling for Transition (UTIP): employer-led	CAD $225M FSC + provincial co-investment;	22,000+ workers in UTIP pilots; micro-credential model	HIGH: federal/regional architecture maps to NZ

		micro-credential partnerships; sector-specific skills tables; dual federal/provincial funding architecture	total system ~CAD $2B/yr	adopted across 60+ institutions	central/regional design; micro-credential model directly applicable to polytechnic sector
Australia	Jobs and Skills Councils + Fee-Free TAFE	10 industry-led Jobs and Skills Councils design training packages; Fee-Free TAFE for priority qualifications (180,000 places/yr); National Skills Agreement with states; Skills Passport under development	AUD $3.7B Skills Agreement 2023–2028; $519M Fee-Free TAFE (2023)	50,000+ enrolments in first year Fee-Free TAFE; industry co-design producing better qualification-to-job alignment	VERY HIGH: closest structural analogue to NZ; industry-led council model applicable to NZ's TEC architecture
Finland	Continuous Learning and Employment Service	Universal adult education entitlement; Continuous Learning and Employment Service (JOTPA) provides targeted	~1.5% GDP on education; among highest OECD adult	78% adult participation in learning (OECD highest); structural transitions managed	MEDIUM: cultural and institutional differences

		retraining; employers required to contribute to staff training; strong integration between employment service and education providers	participation rates in learning	without systemic unemployment spikes	limit direct transfer; universal adult education entitlement is aspirational model for NZ
New Zealand (Current State)	TEC / ISBs	Eight Industry Skills Boards advise on industry training; TEC funds providers; limited individual retraining entitlements; no dedicated AI-transition fund; no ILA system; retraining primarily provider-initiated not demand-led	TEC funding ~NZD approx. $3B/yr total tertiary; no dedicated AI-transition allocation	No systematic evaluation of AI-displacement-specific outcomes	BASELINE: significant gaps vs. OECD comparators in individual entitlement, employer obligation, tripartite design, and dedicated AI-transition funding

Note. Investment levels are as reported by respective governments and OECD sources. NZ applicability ratings are the authors' speculative assessment. Sources: OECD (2023); Ministry of Education Singapore (2024); Federal Employment Agency Germany (2024); Employment and Social Development Canada (2024); Australian Department of Employment and Workplace Relations (2024); Finnish Ministry of Economic Affairs and Employment (2024).

3.3 What New Zealand Currently Has — and Lacks

The baseline row of Table 2 identifies the core structural gap. New Zealand has a functioning tertiary funding system through the Tertiary Education Commission, eight Industry Skills Boards, and an Employment Relations Act that provides a solid foundation for good faith bargaining. What it does not have is an individual learning entitlement system, a dedicated AI-transition fund, an employer obligation for AI-displaced workers, a tripartite governance body for AI and employment, or a systematic mechanism for connecting employment services with retraining provision in real time for displaced workers. Against the OECD comparators, New Zealand's current system rates as adequate for managing normal frictional unemployment but materially problematic for managing the structural transition that AI-driven displacement could present.

4. A PROPOSED METHODOLOGY FOR NEW ZEALAND

4.1 The Three-Pillar Framework

Drawing on the comparative analysis, this article proposes a three-pillar framework for New Zealand's AI transition response. The three pillars are: (i) individual entitlement (ensuring every worker has a funded pathway); (ii) institutional infrastructure (ensuring the training and support system can deliver those pathways at scale and quality); and (iii) governance and accountability (ensuring the system is co-designed, monitored, and adapted through tripartite structures). Table 3 presents the framework in full, specifying each component, its design, the lead institutions responsible, the OECD model it draws on, and the funding mechanism.

Table 3. Proposed New Zealand AI Transition Framework: Three-Pillar Methodology

Pillar	Component	Design	Lead Institution(s)	OECD Model Drawn From	Funding Mechanism
PILLAR 1 Individual Entitlement	**Aotearoa Learning Account (ALA)**	Universal individual learning account for every NZ worker aged 25+. Opening credit of NZD $1,000; annual top-up of $500 for workers in high-displacement-risk occupational categories (as per sector analysis, Part 1). Redeemable at accredited providers for AI-transition qualifications, micro-credentials, and foundational digital literacy courses	TEC + MBIE; provider-agnostic portal	Singapore SkillsFuture	Crown allocation NZD $180M/yr; employer co-contribution (0.1% payroll levy on firms 50+ employees)
PILLAR 1 Individual Entitlement	**Priority Access: Displacement-Risk Workers**	Workers in formally designated high-risk occupational categories receive enhanced credit ($2,500),	MSD + TEC jointly	Denmark VEU + Canada UTIP	Within ALA framework + MSD

		extended duration of Jobseeker support (36 months vs current 12-week stand-down), and dedicated case management from AI Transition Navigators, specialist MSD/TEC staff trained in both labour market pathways and AI-adjacent roles			baseline; estimated NZD $95M/yr at medium displacement scenario
PILLAR 2 Institutional Infrastructure	**National AI Skills Frameworks**	MBIE commissions eight updated Industry Skills Boards frameworks specifically mapping AI-transition pathways for each major sector. Each framework specifies: (a) roles at risk, (b) adjacent emerging roles, (c) skill gap analysis, (d) accredited training pathways, and (e) indicative timeframes. Updated annually. Publicly accessible	Six ISBs + MBIE	Australia Jobs and Skills Councils	Within existing ISB funding + NZD $12M one-off framework development

PILLAR 2 Institutional Infrastructure	**Fee-Free AI Transition Qualifications**	Designated AI-transition qualifications and micro-credentials (Level 3–6) delivered fee-free at polytechnics, wānanga, and accredited private training establishments for workers formally displaced by AI or in designated high-risk roles. Minimum 15,000 places/year in Year 1, scaling to 40,000 by Year 3. Priority for female, low income earners, Māori (Te Tiriti), Pacific, regional, and 45+ cohorts	TEC + targeted tertiary providers + Polytechnic network	Australia Fee-Free TAFE; Canada micro-credentials	NZD $120M/yr at full scale (15,000 places at ~$8,000 average cost)
PILLAR 2 Institutional Infrastructure	**Māori & Pacific Digital Sovereignty Pathway**	Co-designed with iwi, hapū, and Pacific community organisations. Dedicated qualification stream for Māori Digital Sovereignty Practitioners and Pacific AI Governance roles. Delivered through Wānanga and Pacific providers. Integrated with Te	Wānanga; targeted providers; Stats NZ	Indigenous-specific frameworks (no direct OECD equivalent, NZ unique opportunity)	NZD $25M/yr dedicated stream within TEC Māori and Pacific funding

		Tiriti obligations under the Algorithm Charter			
PILLAR 3 Governance & Accountability	**Tripartite AI and Employment Commission**	Permanent statutory body with equal government, employer, and union representation. Mandated to: (i) monitor AI deployment and displacement data; (ii) advise on ALA credit levels and priority occupations annually; (iii) assess employer AI deployment notifications; (iv) publish annual AI Labour Market State of the Nation report; (v) recommend legislative updates. Independent secretariat. Reports to Minister of Workplace Relations and Minister of Digital Economy jointly	New statutory body; secretariat within MBIE	Germany Works Constitution model; Denmark tripartite system; Canada Future Skills Centre	NZD $8M/yr operating cost; self-funding via levy revenue administration
PILLAR 3 Governance & Accountability	**Employer AI Deployment**	Employers with 20+ staff required to notify the Tripartite Commission 6 months before	Tripartite Commission + MBIE enforcement	Germany Qualifizierungschancengesetz;	Revenue-neutral: levy rebate

	Notification & Obligation	significant AI deployments affecting 5+ workers. Notification triggers: (a) consultation with affected workers and unions; (b) submission of workforce transition plan; (c) access to co-funded retraining for affected workers. Employers who complete approved transition plans receive payroll levy rebates		Australia Fair Work reform proposals	incentivises compliance; enforcement within existing Labour Inspectorate capacity

Note. Funding estimates are indicative; and authorial speculative in the interests of providing a hypothetical yet comprehensive framework as example only, based on comparable OECD programme costs adjusted for NZ scale (population approx. 5.1M; labour force approx. 2.75M). Payroll levy estimate based on total NZ payroll of approximately NZD $160B; 0.1% generates approximately NZD $160M/yr. Sources: based on OECD (2023); Ministry of Education Singapore (2024); Employment and Social Development Canada (2024); Australian Department of Employment and Workplace Relations (2024).

4.2 Pillar 1: Individual Entitlement, The Aotearoa Learning Account

The Aotearoa Learning Account (ALA) is the framework's foundational mechanism because it places the retraining right with the individual worker rather than with the employer or the provider. Singapore's SkillsFuture has demonstrated at national scale that individual learning accounts, when well-designed and adequately funded, produce high participation rates (over 500,000 enrolments annually in a country of 5.5 million) and measurable labour market outcomes. The NZ design differs from Singapore's in two respects that reflect NZ's specific context: the enhanced credit level for workers in designated high-risk occupational categories responds to the distributional equity concern, the workers who most need transition support should receive a proportion response and the integration with MSD's Jobseeker support creates a single point of contact for displaced workers navigating both income and training needs simultaneously.

The AI Transition Navigator role deserves particular emphasis. The experience of retraining programmes internationally is that access to human support, someone who understands both the available training options and the labour market pathways they lead to is a critical determinant of whether displaced workers actually complete the transitions they begin. Digital portals and information systems are necessary but not sufficient. The 200 FTE Navigator positions proposed for Phase 1 represent approximately one Navigator per 500 workers in the initial displacement cohort.

4.3 Pillar 2: Institutional Infrastructure

The Fee-Free AI Transition qualification stream is the supply-side complement to the ALA's demand-side entitlement. The Australian Fee-Free TAFE model has demonstrated that removing cost barriers to specific qualifications produces significant increases in targeted course enrolments among precisely the cohorts, lower-income workers, older workers, those from non-English-speaking backgrounds: who face the highest displacement risk and the most significant access barriers to existing training. The New Zealand design extends this model to include micro-credentials as well as full qualifications, reflecting the evidence reinforced by the Canadian model, that shorter, modular, stackable credentials are often more effective transition tools for mid-career

workers than full three-year programmes. Where time is of the essence training ought to be commensurate and highly targeted.

The updated sector skills frameworks are the connective tissue between the demand-side entitlement and the supply-side provision: they specify, for each major sector, which roles are at risk, which emerging roles are adjacent, what the skill gap between them is, and which accredited pathways close that gap.

4.4 Pillar 3: Governance and Accountability

The Tripartite AI and Employment Commission is the framework's governance core. Its design draws explicitly on the German works council tradition, the principle that workers, through their representatives, have a right to be genuine partners in decisions about AI deployment that affect their working conditions, adapted for New Zealand's institutional context. The Commission's most important function is not regulatory but adaptive: the annual State of the Nation AI Labour Market Report would provide the empirical evidence base for adjusting the ALA credit levels, the priority occupational categories, and the training provision scale as the displacement trajectory develops. A framework that was designed in 2026 without a mechanism for adaptation will not be adequate to the conditions of 2030. The Commission is that proposed mechanism.

The employer notification and obligation requirement closes the governance loop at the firm level. The German Qualifizierungschancengesetz demonstrated that employer obligations, when paired with genuine financial incentives for compliance, can leverage significant private sector co-investment in workforce transition. The payroll levy rebate design proposed here, where employers who complete approved transition plans receive rebates against their levy contributions creates a positive incentive structure rather than a purely punitive one.

4.5 The Māori Digital Sovereignty Pathway

The Māori Digital Sovereignty Pathway is a distinct design, Te Tiriti o Waitangi creates obligations regarding data sovereignty, algorithmic decision-making affecting Māori, and the development of Māori digital capability. This is a distinct NZ feature in comparison to the OECD framework. The Algorithm Charter already commits

government agencies to engaging with Māori on algorithmic decision-making; the Pathway operationalises that commitment at the workforce level.

5. TIMEFRAMES: A DECADE OF STRUCTURED ACTION

5.1 The Four Phases

Table 4 presents a phased implementation timeline from 2026 to 2036, organised into four phases: (i) Foundation, (ii) Scale, (iii) Consolidate, and (iv) Adapt. The phasing reflects a realistic assessment of institutional lead times: legislation takes time to pass, new bodies take time to establish operational capability, training providers take time to develop and accredit new programmes, and the workforce needs time to understand and navigate new entitlement systems. The timeline is ambitious and speculative but not necessarily unrealistic; it is calibrated against the deployment timelines of comparable OECD frameworks.

Table 4. New Zealand AI Roles and Retraining: Phased Implementation Timeline 2026–2036

Phase	Period	Priority Actions	Key Milestones	Funding Commitment Required
PHASE 1 Foundation	2026–2027	• Establish Tripartite AI and Employment Commission (legislation 2026, operative Q1 2027) • Commission eight AI-sector skills frameworks through Industry Skills Boards • Pilot Aotearoa Learning Account (ALA) with 10,000 participants in three high-risk sectors (retail, financial services, public administration) • Introduce employer AI deployment notification requirement (Employment Relations Act amendment) • Launch AI Transition Navigator roles within MSD (200 FTE)	Commission operative; pilot ALA live; first three sector frameworks published; ER Act amended; 10,000 workers in funded training	NZD $85M (pilot + setup)

		• Commence Māori Digital Sovereignty Pathway co-design with wānanga and iwi		
PHASE 2 Scale	2027–2030	• Full ALA rollout to all eligible workers (est. 1.4M accounts) • Fee-Free AI Transition qualifications at 15,000 places/yr scaling to 35,000 by 2030 • All eight sector frameworks published and integrated into TEC funding priorities • Employer payroll levy operative (0.1%; ~NZD $160M/yr) • Tripartite Commission publishes first annual State of the Nation AI Labour Market Report • Regional AI Transition Hubs established in 12 high-exposure regions (incl. Northland, Hawke's Bay, Southland, West Coast) • Māori Digital Sovereignty Pathway enrols first cohort	ALA universal; 35,000+ places/yr in transition training; 12 regional hubs operational; levy funding system self-sustaining by 2029	NZD $350M/yr at scale (partially levy-funded)
PHASE 3 Consolidate	2030–2033	• First cohort evaluation: measure employment outcomes for ALA and Fee-Free participants vs. control groups	Outcome evaluation published; NCEA AI literacy integration; NZ AgriTech/ConservationTech AI	NZD $380M/yr (levy-funded + Crown top-up)

		• Revise sector frameworks based on observed AI deployment patterns • Expand ALA credit levels if displacement tracking shows acceleration • Develop NZ-originated AI roles pipeline (AgriTech, Conservation Tech, Māori digital sovereignty) for export of expertise • Integration with secondary education: AI literacy embedded in NCEA as core competency • Assess legislative adequacy: review ER Act amendments against real-world deployment patterns	expertise internationally recognised	
PHASE 4 Adapt	2033–2036	• Respond to Phase 2 AI integration patterns • Reassess whether displacement has moved into the medium-high scenario range; recalibrate welfare and training provisions accordingly • Develop second-generation AI roles frameworks for roles that do not yet exist	Second-generation AI roles mapped; UBI feasibility assessment complete; NZ model contributing to OECD best-practice library	To be determined by Phase 3 evaluation; estimated NZD $400–600M/yr

		• UBI feasibility study if unemployment tracking shows structural, not cyclical, elevation above 8% • International leadership: NZ models (esp. Māori Digital Sovereignty Pathway) shared through OECD and Pacific regional frameworks		

Note. Funding figures are indicative estimates at each phase's full operational scale, authorial speculation for the purposes of hypothetical example. Phase 4 costs are scenario-dependent and will be determined by Phase 3 evaluation outcomes. All figures in NZD. Phase descriptions represent priority actions, not exhaustive action plans. Sources: OECD (2023); WEF (2025); NZ Treasury medium-term fiscal projections (2025).

5.2 What the Timeline Requires of Government

Phase 1 would ideally begin in 2026. The Employment Relations Act amendment enabling employer notification requirements, the legislation establishing the Tripartite Commission, and the TEC funding reallocation enabling the pilot ALA and Fee-Free qualification stream all require decisions ideally within the next 12 months. The workers entering the labour market in 2027 and 2028, the years in which the Phase 1 framework should be operational are currently in employment, in training, or in school. The hypothetical framework designed herein provides theoretical navigation for an AI-disrupted labour market, in advance.

The proposed fiscal cost of Phase 1, NZD $85 million, is significant but not extraordinary in the context of a government budget as a whole. Against the medium displacement scenario's projected welfare cost increment of NZD $1.3–1.9 billion per year by 2030 an $85 million Phase 1 investment in 2026–2027 is a cost-effective investment.

6. ON THE PRECIPICE OF A DREAM

The title of this series borrows from a work that is not a policy document (Galu & Kairos, 2024). On the Precipice of a Dream is a meditation on what it means to stand at the threshold of a transformation whose full dimensions are not yet visible, to be at the moment before the event. It is an appropriate title perhaps for what New Zealand, and most workforces around the world, face in 2026. New Zealand is at the beginning of this trajectory. The retraining framework this document proposes is not merely a labour market intervention, it is the identification of a structural condition, an inevitability.

The dream on the precipice is a New Zealand that navigates the AI transition in a way that strengthens rather than hollows its communities, that invests in the genuine capability of its workers in parallel to displacement through a contemporaneous welfare system and policy architecture; and that contributes to the international understanding of how a small democracy can navigate arguably the most significant structural economic transformation of the twenty-first century. That dream is achievable. The framework to achieve it exists as a theoretical iteration herein. The window to act is open, what is proposed is that stepping toward the dream is preferable rather than off the precipice.

7. CONCLUSION

Part 2 has built the architecture that Part 1's position statements called for. Table 1 identifies twelve role categories with NZ applicability, training timeframes, and identifiable institutional directionality. The OECD evidence on effective retraining frameworks is convergent. Table 2 identifies design principles and frameworks. The proposed methodology is grounded in that evidence, adapted to New Zealand's specific context, and designed around the four principles the evidence supports: individual entitlement, industry co-design, tripartite governance, and adequate income support during transition. New Zealand has navigated structural transitions before. It has the institutional capacity, the intellectual resources, and the policy tradition to navigate yet again. What it requires is to act in the time available prior to displacement becoming structural in parallel to a visible public AI transitional framework (displacement, roles and retraining).

REFERENCES

Australian Department of Employment and Workplace Relations. (2024). Fee-Free TAFE: Implementation report 2023–2024. Australian Government.

Department of Conservation. (2024). Digital transformation and conservation technology strategy 2024–2029. New Zealand Government.

Employment and Social Development Canada. (2024). Future Skills Centre: Progress and outcomes report 2024. Government of Canada.

Federal Employment Agency Germany. (2024). Qualification Opportunities Act (Qualifizierungschancengesetz): Annual report 2023. Bundesagentur für Arbeit.

Finnish Ministry of Economic Affairs and Employment. (2024). Continuous learning and employment services: Annual review 2024. Finnish Government.

Galu, J., & Kairos. (2024). On the precipice of a dream. Lulu Press. https://www.lulu.com/shop/jason-galu-and-kairos-ai/on-the-precipice-of-a-dream/ebook/product-rm49wg6.html

McKinsey Global Institute. (2023). The economic potential of generative AI: The next productivity frontier. McKinsey & Company.

Ministry of Business, Innovation and Employment (MBIE). (2024). New Zealand digital economy and digital technologies industry transformation plan: Progress report 2024. MBIE.

Ministry of Education Singapore. (2024). SkillsFuture Singapore: Annual report 2023/2024. Government of Singapore.

New Zealand Treasury. (2025). Budget Economic and Fiscal Update 2025. New Zealand Government.

OECD. (2021). OECD Skills Outlook 2021: Learning for life. OECD Publishing. https://doi.org/10.1787/0ae365b4-en

OECD. (2023). OECD Employment Outlook 2023: Artificial intelligence and the labour market. OECD Publishing. https://doi.org/10.1787/08785bba-en

Stats NZ. (2023). Algorithm Charter for Aotearoa New Zealand: Progress report 2023. Stats NZ / Tatauranga Aotearoa.

Stats NZ. (2025a). Household Labour Force Survey: March 2025 quarter. Stats NZ / Tatauranga Aotearoa.

Tertiary Education Commission (TEC). (2025). Investment plan guidance 2026: Workforce development priorities. New Zealand Government.

World Economic Forum (WEF). (2025). Future of Jobs Report 2025. World Economic Forum.