EVALUATING SYSTEM CHANGE

EXPLORING HOW PROJECT INNOVATIONS TRANSFORM BUSINESS AS USUAL

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Australian Evaluation Society Conference 2019

TODAY'S PRESENTATION

Signature Programme: Innovation and system change case studies

Socio-technical systems (STS) theory

Learning from applying STS to evaluation case studies

PROJECT INNOVATIONS FOR SYSTEM CHANGE

EVALUATION CONTEXT AND APPROACH

CONTEXT: SIGNATURE PROGRAMME

Safer Journeys
Signature Programme

Established to enable and facilitate the implementation of projects that are

- Ambitious
- Innovative
- Apply the Safe System principles and approach

With the aim of reducing deaths, serious injuries, or the risks of these occurring

Evaluation funded and supported by ACC and NZTA

INNOVATION PROJECTS

PROJECT PROCESSES

Commitment to shared vision, sense of direction, co-investment, problem solving

Identify willing leaders, understand capacities and capabilities of different partners

Relationships, trust, frank conversations

Applying safe system pillars and principles

Learning identified and disseminated

Building knowledge, understanding, acceptance of safe system

Ambitious vision/goals

Implementing safe system approach and principles.

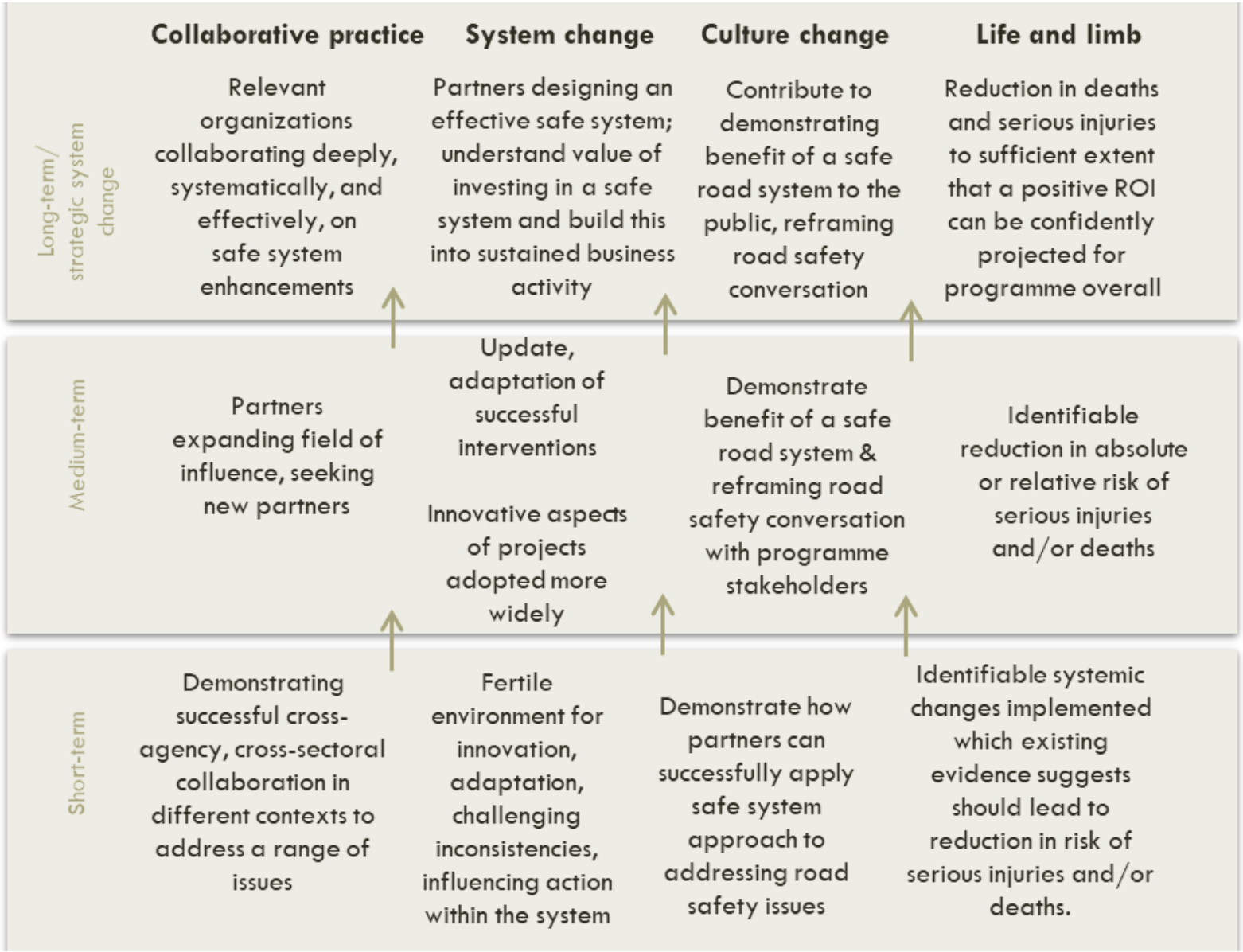
Culture of continuous improvement.

Programme support.

Projects aimed at challenging attitudes, norms, default settings inherent in practices and beliefs

…and reflecting on Eastern Bay of Plenty

PROGRAMME OUTCOMES



SOCIO-TECHNICAL SYSTEMS THEORY

FROM NICHE INNOVATIONS TO SYSTEM CHANGE

CORE ELEMENTS

Systems that include supply side (innovation) and demand-side (user environment)

Actors that are involved in maintaining and changing the system; they carry, reproduce and challenge the rules in their activities

Rules and institutions that guide actor's perceptions and activities; they provide constraining and enabling contexts for actors

Socio-technical systems are the outcome of the activity of human actors

RULES AND REGIMES

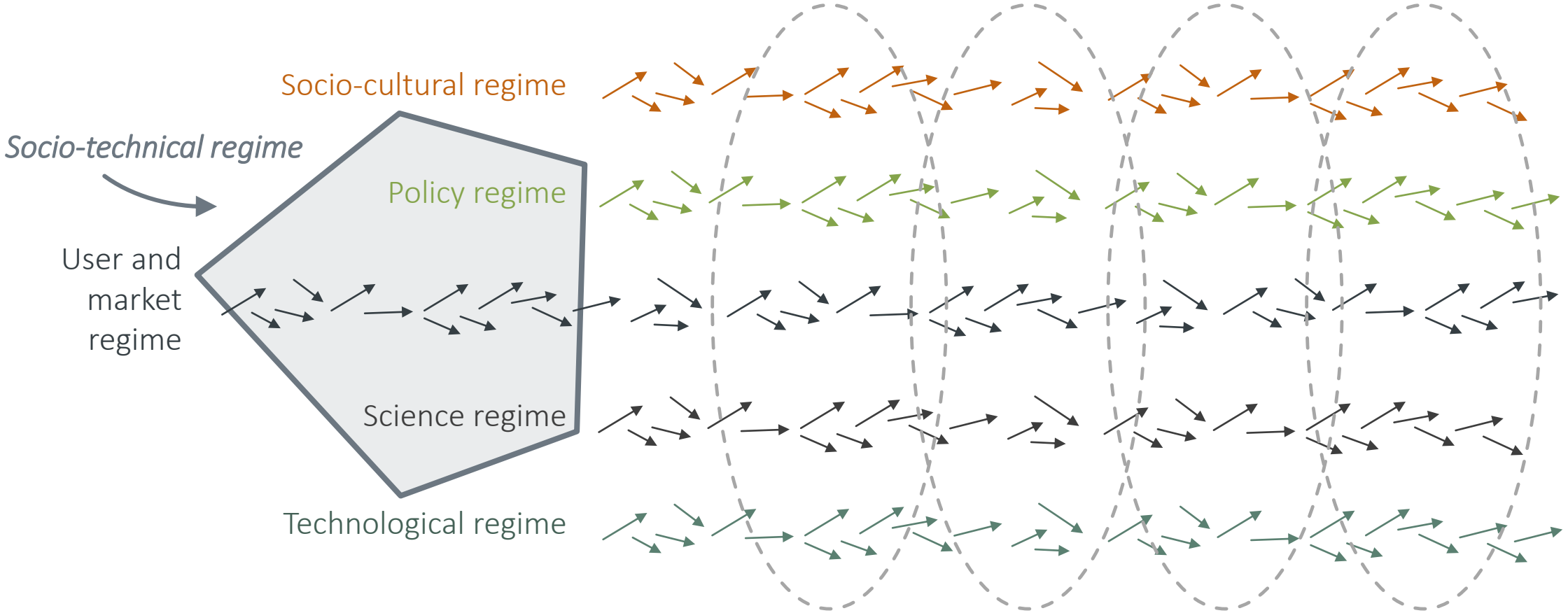
Rules

- **Regulative** – explicit, formal rules that constrain behaviour and regulate interactions
- **Normative** – values, norms, role expectations, duties, rights and responsibilities
- **Cognitive** – nature of reality and the frames through which meaning or sense is made

Regimes

- **Socio-technical regimes** as semi-coherent sets of rules linked together
  - **Technological and product** – standards, specifications
  - **Science** – Programmes, boundaries, procedures, paradigms
  - **Policy** – Administrative regulations and procedures, goals, interactions, ideas
  - **Socio-cultural** – Information rules, cultural values, symbols
  - **Users and markets** – laws, relationships, practices

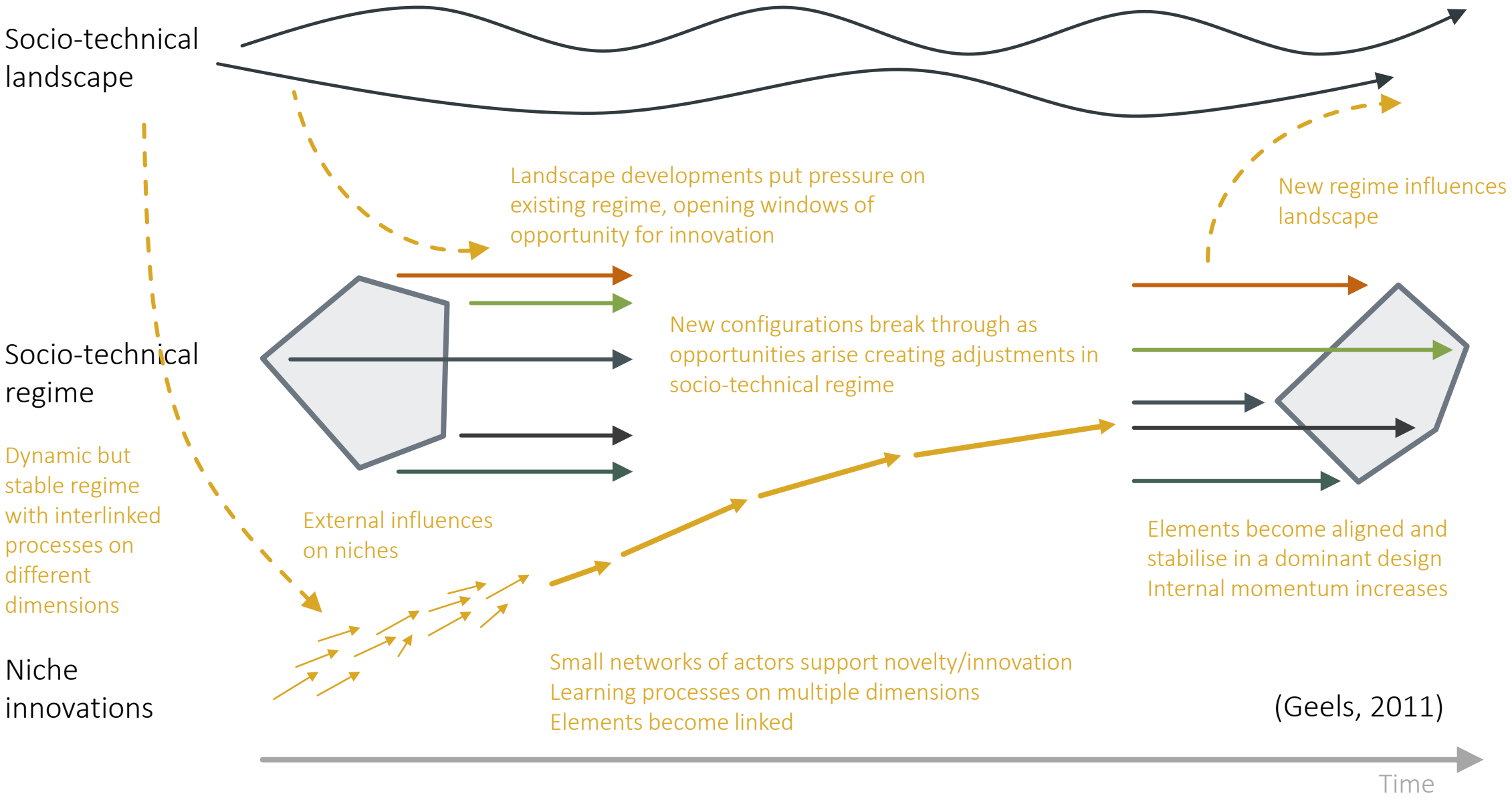
Ongoing processes in a socio-technical regime



(Geels, 2011)

SOCIO-TECHNICAL TRANSITIONS

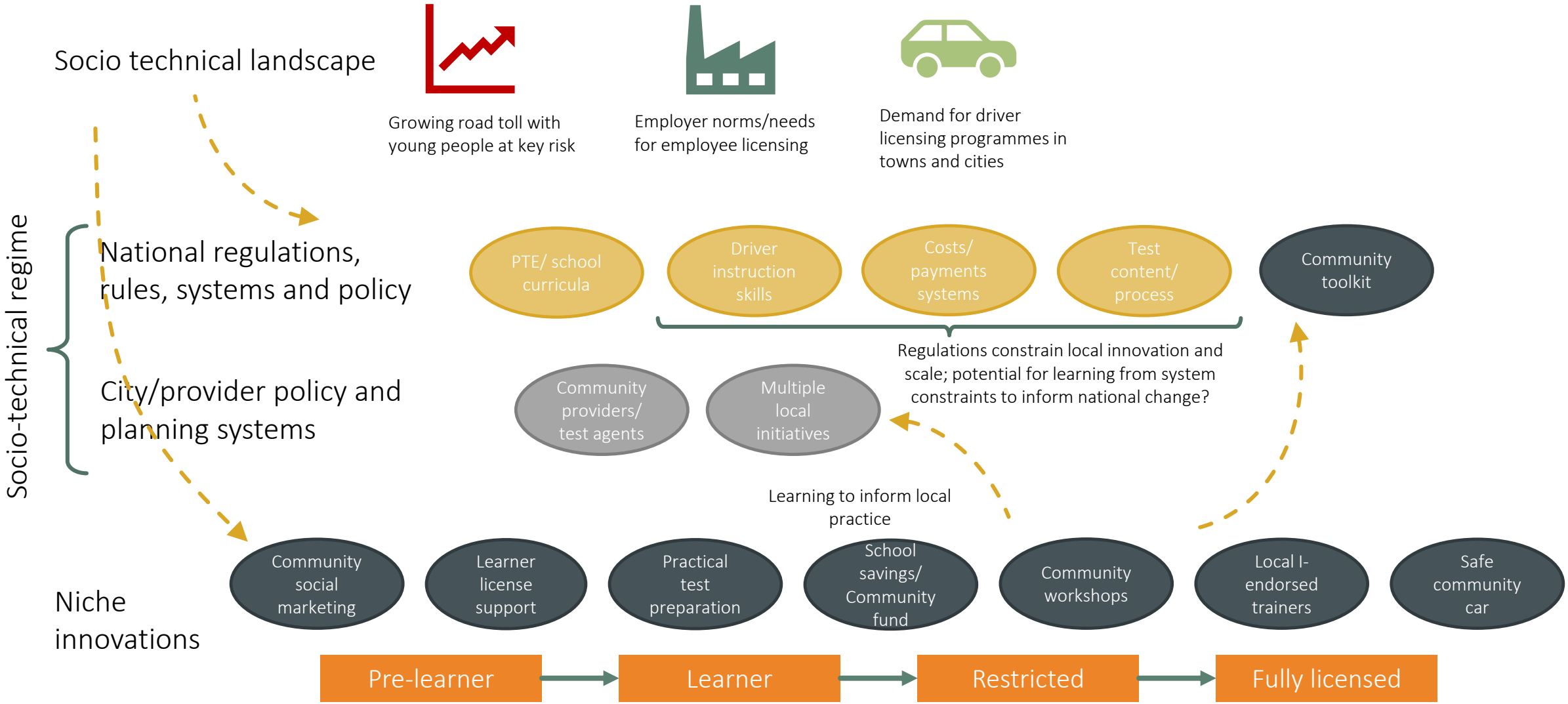
- Non-linear processes involving alterations in the configuration of whole systems
- Three levels
  - **Niches** – the locus for radical innovation
  - **Socio-technical regimes** – 'deep structure' of established rules and systems that stabilise current practice
  - **Socio-technical landscape** – Wider context that influences niche and regime dynamics
- Function interdependently at macro (national/international); meso (city); micro (community) levels


Socio-technical landscape
Landscape developments put pressure on existing regime, opening windows of opportunity for innovation
New regime influences landscape
Socio-technical regime
New configurations break through as opportunities arise creating adjustments in socio-technical regime
Dynamic but stable regime with interlinked processes on different dimensions
External influences on niches
Elements become aligned and stabilise in a dominant design
Internal momentum increases
Niche innovations
Small networks of actors support novelty/innovation
Learning processes on multiple dimensions
Elements become linked
(Geels, 2011)
Time

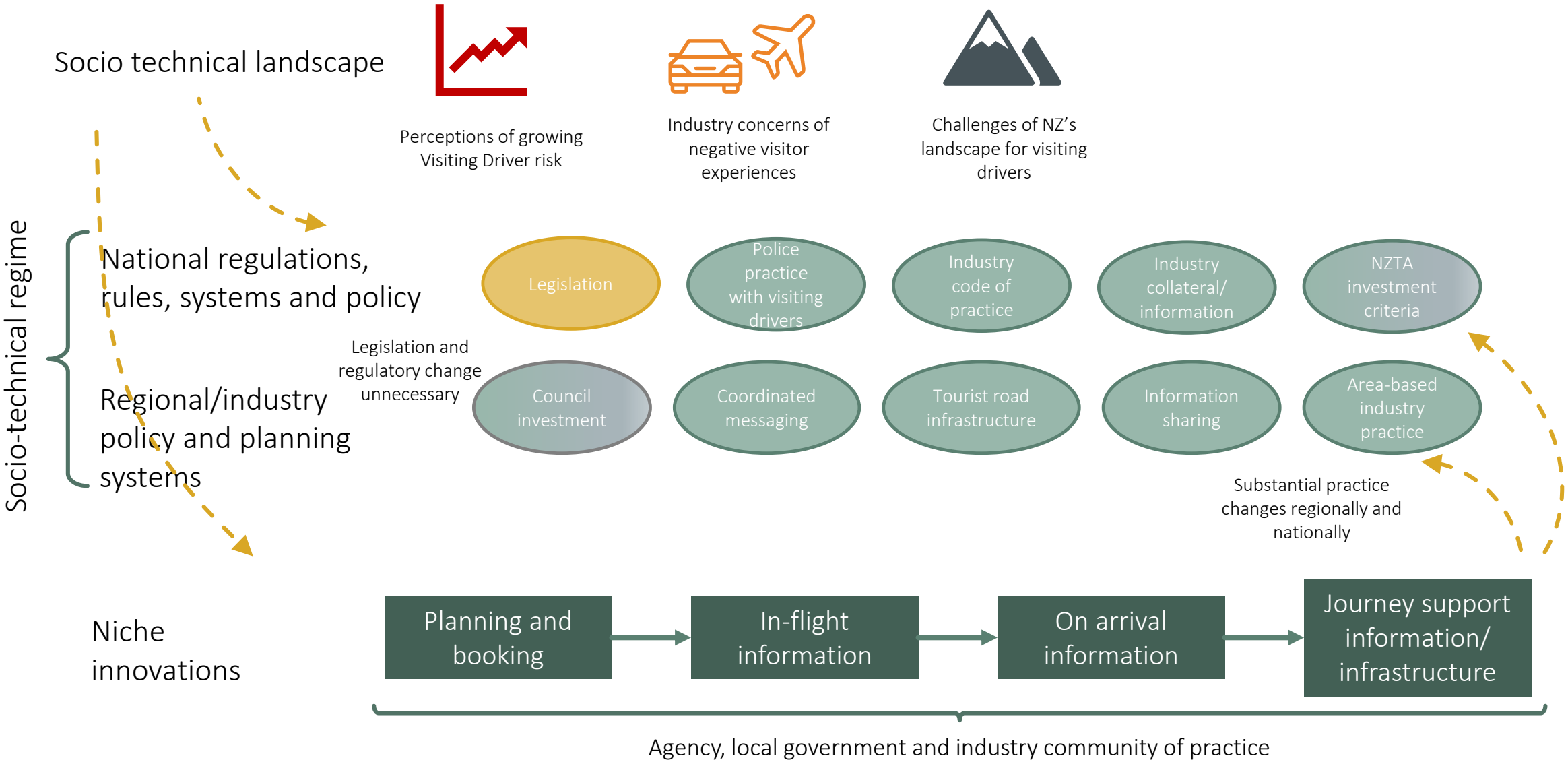
APPLYING SOCIO-TECHNICAL SYSTEMS THEORY

LEARNING FROM CASE STUDIES

Community driver licensing



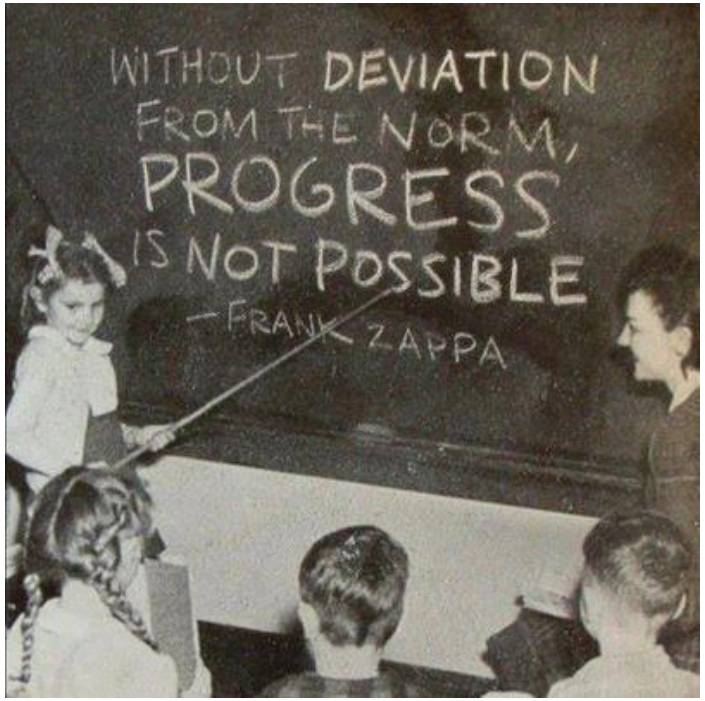
Safety of visiting drivers



LEARNING FROM CASE STUDIES

- Local niche innovations are as important for the systemic barriers that they reveal, as they are for their local impacts
- Systemic barriers include:
  - Rules and systems
  - Regulations that constrain developing new ways of working
  - Policy or investment priorities that shift resources
- Yet some system change still occurred from sites of niche innovations

LEARNING FOR EVALUATION



01

THINK BEYOND THE PILOT TO SYSTEM CONSTRAINTS AND OPPORTUNITIES

02

NICHES AS LOCATIONS FOR LEARNING

03

DEVIATING FROM EXISTING PRACTICE IS HARD WORK

04

SCALING REQUIRES A WIDER MANDATE

05

MISMATCH BETWEEN LOCAL INNOVATION AND SYSTEM CAPACITY

WANT TO READ MORE?

- www.dovetailnz.com/news
- Geels FW. 2011. The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1: 24-40
- Marletto G. 2014. Car and the city: Socio-technical transition pathways to 2030. *Technological Forecasting & Social Change*, 87: 164–178