the Singapore WAY

STUDENT GUIDE

Urban Mobility and Sustainable Transport

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1. Welcome & Purpose of This Case

Welcome to a Case About More Than Roads and Trains

Transport isn't just about moving people. It's about **shaping opportunity, access, dignity, and sustainability**. In this case, you'll explore how Singapore redefined mobility not as a byproduct of growth—but as a **national strategy** for building a smarter, greener, and more inclusive society.

This is a story of:

- Cities that move **efficiently and equitably**
- Policies that **nudge behaviour instead of punishing it**
- Public systems designed not just for speed—but for **shared dignity**

Why This Case Matters to You

Whether you live in a walkable village or a traffic-jammed city, you've felt the impact of mobility. This case invites you to reflect on:

- What kind of mobility serves **everyone**, not just the privileged
- How governments and designers influence your **daily movement and freedom**
- What it takes to balance **climate goals** with people's need to move and thrive

You don't need to be an urban planner to care about this—just someone who has ever taken a bus, crossed a street, or waited in traffic.

What You'll Explore

- How Singapore uses **ERP**, **COE**, and MRT expansion to shape public behaviour
- Why the government made car ownership expensive—and public transport excellent
- The role of **long-term planning, data, and policy discipline** in avoiding urban gridlock
- How different users (elderly, low-income, disabled) experience the same system differently
- Whether cities should focus on building roads—or **changing minds**

A Thought to Begin With

"Your commute isn't just a trip—it's a policy decision made years ago by someone you've never met."

This case gives you the chance to **be that someone**—to reimagine how cities move, and whom they move for.

2. Case Background

Singapore's Starting Line: Limited Space, Unlimited Ambition

When Singapore gained independence in 1965, it faced daunting transport challenges:

- Narrow roads, overcrowded buses, and few options for the working class
- A fast-growing population and rising vehicle imports
- Virtually no space for endless road expansion

Rather than follow the car-centric model of many Western cities, Singapore made a bold choice: **design transport to control—not chase—demand.**

The Shift: From Congestion to Control

By the 1970s, Singapore introduced its first road pricing model. Then came:

- **COE (Certificate of Entitlement):** A quota system that limits car ownership and makes buying one a deliberate, expensive choice
- **ERP (Electronic Road Pricing):** Dynamic tolls that rise during peak hours, nudging commuters toward transit or off-peak travel
- Massive **investment in the MRT and bus systems**
- Walkable, green corridors and **first/last-mile planning**

Today's System: Integrated, Intelligent, and Intentional

Singapore's transport system is now a **globally admired model**, thanks to its:

- Seamless integration between MRT, buses, bike-share, and ride-hailing
- Transit apps and real-time tracking
- Car-lite zoning policies and "Walk-Cycle-Ride" urban design
- Green mobility targets: electric buses, zero-growth car policies, and transit-oriented development

Why the World Watches Singapore

Other cities struggle with:

- Endless traffic despite new roads
- Underfunded or poorly used public transit
- Climate commitments that contradict urban sprawl
- Political resistance to pricing roads or restricting cars

Singapore stands out by treating transport not just as infrastructure—but as **behavioral policy, climate strategy, and social design**.

This case helps you understand what happens when **movement is designed intentionally—not left to chance.**

3. Learning Objectives

This case will equip you with the tools to think about **mobility not just as transportation—but as a system of access, climate action, and city design.**

By the end of this case, you will be able to:

Understand:

- How Singapore integrates pricing, planning, and public transit to shape behavior
- The purpose and function of tools like **ERP** (Electronic Road Pricing) and **COE** (Certificate of Entitlement)
- Why Singapore invested heavily in **multi-modal transport** instead of expanding roads
- How mobility systems affect **emissions, congestion, equity, and land use**

Analyse:

- The trade-offs between **private convenience and public benefit**
- How different groups (commuters, car owners, low-income residents) experience the same system differently
- How Singapore's model compares to your own city or country
- The **policy courage** it takes to push unpopular—but necessary—reforms

Apply:

- Propose new transport strategies for your city, school, or country
- Design inclusive, climate-friendly transport zones
- Build an argument for or against congestion pricing, car quotas, or walkable cities
- Connect this case to broader themes: climate justice, behavioral economics, smart infrastructure

You will also discuss:

- Is car ownership a right—or a luxury?
- Should governments "nudge" commuters with pricing tools?
- How do we measure mobility success—speed, fairness, or sustainability?
- Who gets to move freely in your city—and who doesn't?

You'll walk away from this case not just thinking about how **you move**, but how **your city moves—and whom it moves for.**

4. Pre-Class Preparation

Before entering class, you should be ready to explore **how cities shape mobility—and how mobility shapes lives**. This section helps you arrive prepared to contribute meaningfully through reflection, observation, and case familiarity.

What to Read

Required:

- **Chapter 7 of *The Singapore Way*** by Maher Kaddoura
  Pay close attention to:
  - How Singapore uses **COE and ERP** as behavioural tools
  - Why MRT expansion was paired with car restraint policies
  - The goals of the **Land Transport Master Plan** and the "Walk-Cycle-Ride" initiative
  - Case examples of **public-private integration** and user-first transport planning

Optional:

- *How Singapore Stopped Traffic Without Building More Roads* – Vox / CNA Insider
- *Transport Equity in Practice* – World Bank or ITDP report
- *Life Without a Car in Singapore* – Commuter vlog or mobility ethnography

Reflection Questions to Prepare

Please jot down or think through your answers to these before class:

1. **What is your primary mode of transportation—and why?**
2. **Have you ever felt left out of or underserved by a transport system?**
3. **How do transport systems in your city support—or hinder—climate and equity goals?**
4. **Would you support congestion pricing or limits on car ownership? Why or why not?**
5. **What does "freedom of movement" mean to you—and who might be missing it?**

Optional Activity: “Map My Commute”

Sketch or describe your daily commute or most common travel route.

Element	Prompt
Bottlenecks	Where do you lose time, money, or energy?
Access Gaps	Is the route safe, accessible, and inclusive for all users?
Green Potential	Could this trip be done more sustainably if options were available?

Bring this to class for comparison, discussion, or brainstorming.

Checklist: What to Bring to Class

	Item
	Notes or highlights from Chapter 7
	Your commute map and/or answers to reflection questions
	1–2 real examples from your own city, region, or country
	A willingness to explore your city’s mobility system with a critical eye

5. In-Class Participation

This session is designed for **immersive, creative, and debate-driven learning**. You'll step into the shoes of commuters, designers, and policymakers—and explore what it takes to move a city forward without leaving anyone behind.

What You'll Do in Class

Activity	What It's About
Case Discussion	Analyze Singapore's unique approach to transport, pricing, and long-term planning
Mobility Simulation or Stakeholder Debate	Role-play a real decision about road pricing, MRT expansion, or walkability
Design Sprint	Work in teams to redesign a neighborhood, transit route, or pricing policy
Equity Mapping	Identify who is left behind by typical transport models—and how to reach them
Mini-Pitch or Town Hall	Share your idea with classmates and defend your design or proposal under feedback

How to Prepare for Meaningful Contribution

- **Use real-life examples** from your city, country, or personal experience
- Refer to key case ideas like **ERP, COE, "Walk-Cycle-Ride", transport justice**, and **Land Transport Master Plan**
- Listen respectfully—especially when discussing class, accessibility, or urban inequality
- Ask questions like: "Who is this designed for?" and "What trade-off does this system require?"
- Don't be afraid to propose **bold solutions**

Sample Questions You Might Explore

- Should car ownership be restricted in congested cities?
- What makes public transit attractive—not just affordable?
- How do policies like ERP encourage smarter, greener behaviour?
- Would Singapore's model work in your country? What would need to change?
- How do mobility systems reflect privilege or exclusion?

Your Participation May Be Assessed On:

	Criteria
	Relevance and clarity of your contributions
	Integration of Singapore case insights
	Creativity and collaboration in group activities
	Willingness to engage with difficult trade-offs and diverse perspectives

This is your chance to think not just as a commuter—but as a **city-shaper**.

6. Assignments

These assignments invite you to apply what you've learned about Singapore's transport strategy to **real-world problems, creative redesigns, or personal stories of movement**. Choose the format that best fits your skills and voice.

Option 1: Policy Essay – "The Price of Movement"

Length: 1,000–1,200 words
Prompt:
Would Singapore's transport policies—like ERP or COE—work in your city or region? Why or why not?

Your essay should:

- Briefly describe your local transport landscape
- Analyse which Singaporean strategies are most (or least) adaptable
- Explore **equity and climate implications**
- Make a clear, justified recommendation

Option 2: Transport Redesign Brief

Format: Slide deck, visual map, or poster
Task:
Redesign a city block, neighbourhood, or commute route using principles from Singapore's mobility model.

Must include:

- A design that prioritizes **Walk–Cycle–Ride**
- At least one **policy tool** (pricing, zoning, subsidy, incentive)
- A feature addressing **inclusion** (for elderly, disabled, low-income, etc.)
- An optional green or climate solution (e.g. electric, shaded, car-lite zones)

Option 3: Personal Reflection – "A Journey That Changed Me"

Length: 700–900 words
Prompt:
Write about a time when transport—good or bad—impacted your access, dignity, safety, or opportunity.

Then reflect on:

- What this story says about equity, design, or systems
- How Singapore's approach might have changed your experience
- What you'd redesign if you were in charge

Tips for All Assignments

- Use at least 2–3 concepts from the Singapore case (e.g., COE, ERP, master plans, MRT expansion, inclusion)
- Ground your writing or design in **real-world context or user experience**
- Think about long-term impacts, not just short-term fixes
- Be bold, clear, and empathetic—**good mobility starts with listening**

7. Reflective Practice

Mobility isn't just technical—it's personal. It affects how we feel, what we access, and who we become. This section invites you to pause, look inward, and reflect on your **own mobility journey** and what you now see differently.

Reflection Prompts

Take 15–20 minutes to journal, sketch, record a voice note, or just think through these questions:

1. **What does freedom of movement mean to you?**
   Is it speed, affordability, comfort—or something else?
2. **Have you ever felt empowered—or excluded—by a transport system?**
   What made that experience memorable or frustrating?
3. **How do your values show up in the way you move?**
   Do you walk, drive, bike, or ride because of climate, cost, safety, or habit?
4. **What's one part of Singapore's strategy that challenged your assumptions?**
   Why did it surprise, inspire, or make you uncomfortable?
5. **If you were tasked with redesigning your city's transport system—what would you protect, change, or remove first?**
   Who would benefit from that change?

Self-Check: My Mobility Beliefs

Rate yourself from 1 (not true) to 5 (very true):

Statement	Score (1–5)
I believe everyone should have access to affordable, safe transport	
I see transport as a tool for justice, not just convenience	
I would be willing to change how I commute if it helped others or the planet	
I understand the trade-offs between road space, emissions, and access	
I think cities should prioritize walkability and public transport over cars	

Final Thought

"The way we move through a city reveals who we think belongs in it."

This case gives you the tools to imagine cities that don't just function—but **welcome, connect, and include.**

8. Glossary of Key Terms

These are the core terms and concepts that define Singapore's approach to mobility—and will help you speak confidently about transport systems, policies, and strategy.

Term	Definition
ERP (Electronic Road Pricing)	A dynamic tolling system in Singapore that charges vehicles for using busy roads during peak hours to reduce congestion and nudge public transit use.
COE (Certificate of Entitlement)	A permit required to own a car in Singapore, issued via auction. It limits the total number of vehicles on the road and makes car ownership a strategic choice.
MRT (Mass Rapid Transit)	Singapore's high-capacity metro system, the backbone of its public transport network. Known for speed, coverage, and reliability.
Walk-Cycle-Ride Strategy	A planning philosophy that prioritizes walking, cycling, and public transit—placing them above private car use in urban design.
Land Transport Master Plan	Singapore's long-term strategy document guiding investment, expansion, and innovation in transport over 10–15 year cycles.
Mobility-as-a-Service (MaaS)	A digital and policy approach that integrates multiple modes of transport—like buses, trains, ride-hailing—into one seamless user experience.
Transport Equity	The principle that mobility systems should serve all people—regardless of income, ability, age, or location—with fairness and dignity.
Car-lite City	An urban design model that limits car dependency by promoting alternatives like transit, cycling, and mixed-use walkable neighbourhoods.
Congestion Pricing	A system that charges drivers for entering high-traffic zones during peak hours, aiming to reduce gridlock and encourage mode shift.
First/Last-Mile Connectivity	Infrastructure and services that help users get from their home to transit (first mile) and from transit to their final destination (last mile).

Tip for Class and Assignments

Try to **use at least 3–5 of these terms** when contributing to discussions, simulations, or your final project or essay. This shows you understand the system—and can apply it in context.

9. Additional Resources

These videos, articles, maps, and tools will help you **go deeper into Singapore's transport strategy**, explore global comparisons, or find inspiration for your assignment or project.

Recommended Readings

Title	Why It's Useful
Land Transport Master Plan 2040 – LTA Singapore	Offers a detailed roadmap of Singapore's long-term goals, including equity, tech, and climate
How Singapore Solved Traffic Without More Roads – Vox or CNA	A concise, clear explainer on ERP and car restraint strategies
Inclusive Transit Design Toolkit – ITDP or World Bank	Provides case studies and tips for designing transit for all users
Mobility Justice – Mimi Sheller (book)	A global look at how transportation intersects with race, class, gender, and environment

Videos & Documentaries

Title	Platform	What You'll Learn
Smart Transport in Singapore	CNA Insider / Gov.sg	Shows how tech and policy align to shape behaviour
The Cost of Cars	The Guardian Cities	Investigates the real cost of car-centred urban planning
A Commute Through Inequality	Short doc / TEDx	Offers real stories of how mobility limits or empowers people
Walkability and Urban Design	NACTO / Strong Towns	Explores how walkable, car-lite cities change how we live and connect

Data Platforms & Tools

- https://www.lta.gov.sg – Land Transport Authority of Singapore
- https://ourworldindata.org/transport – Mobility-related emissions, urban travel modes, and global trends
- https://nacto.org – Global best practices in cycling, walkability, and street design
- https://citytransport.info – Overview of mass transit systems worldwide
- https://mobilityobservatory.com – Dashboard of policy innovations and urban mobility experiments

Cities to Research & Compare

City	Why Compare
Bogotá, Colombia	Pioneered BRT (Bus Rapid Transit) with limited budget
Tokyo, Japan	Ultra-reliable public transit in high-density areas
Amsterdam, Netherlands	Cycling-first infrastructure that transformed behaviour
Seoul, South Korea	Subway expansion + road-to-park conversion (Cheonggyecheon)
Lagos, Nigeria	Transport challenges in a megacity with rapid population growth

10. FAQs & Support

This section answers common questions and gives you guidance on how to approach the case, your assignment, and any challenges you might face.

Frequently Asked Questions

Q1: I'm not a transport or urban design student—can I still do well in this case?

A: Absolutely. This case is about **systems thinking and social design**—not engineering. Anyone who's taken a bus, sat in traffic, or dreamed of a better commute can contribute meaningfully.

Q2: Do I have to agree with Singapore's model to succeed?

A: No. You are encouraged to **critically analyse** what works, what doesn't, and what would (or wouldn't) work in your context. Thoughtful disagreement is welcomed.

Q3: What if I live in a rural area or car-heavy city with poor transit?

A: That's a strength, not a limitation. Use the contrast to **evaluate and adapt** ideas from Singapore—highlighting what needs to change for any strategy to be effective in your context.

Q4: Can I use visuals or maps in my assignments?

A: Yes! Whether you're writing or designing, **visual tools** like route maps, zone redesigns, or infographics can help express your ideas clearly and creatively.

Q5: I've never done a reflection-based essay before. Any tips?

A: Focus on a **moment, feeling, or commute** that reveals something bigger about mobility and systems. Keep it personal, but always connect it back to the **public or policy** dimension.

Where to Go for Help

Need Help With…	Go To…
Clarifying the case ideas	Ask your instructor or case facilitator
Finding data or maps	Check the *Additional Resources* section or ask a librarian
Essay structure or writing	Try Grammarly, the writing centre, or a peer reviewer
Designing visuals or slides	Use Canva, PowerPoint, Google Slides, or even pen + scan
Citing your sources	Use Zotero, Google Scholar, or your course citation style guide

Final Encouragement

"Cities aren't just built—they're designed by values."

This case gave you a window into how Singapore designed mobility not just for efficiency, but for **dignity, climate, and equity**. Now it's your turn to think like a movement-maker.