

PUSAT PENGAJIAN KEJURUTERAAN AWAM UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG



Rethinking Urban Mobility: Moving People, Not Just Cars

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A technical talk on *Sustainable Transport* was conducted on 7 May 2024 for students enrolled in CEG552 – Highway and Traffic Engineering. The session was delivered by *Ir. Ong Sheng How*, Director of Perunding Trafik Progresif Sdn Bhd.

Have you ever been stuck in traffic and wondered if there's a better way to get around? That's exactly what the technical talk on sustainable transport explored. The speaker challenged a common assumption in city planning: that streets are meant to move cars. Instead, he argued that the real question should be, "How many people can we move down the street?" It turns out, cars, even electric ones, aren't very efficient when it comes to space. A single car takes up a lot of room but usually carries just one person. Multiply that across thousands of vehicles, and you get traffic jams, pollution, and wasted space. In contrast, buses, bikes, and walking paths can move far more people in the same amount of space. For example, a bus lane can carry up to 10,000 people per hour, while a regular traffic lane moves about 1,600 cars, or a maximum of 6,400 people.

In addition, sustainable transport isn't just about numbers. It's about fairness, health, and resilience. Not everyone can afford a car, so public transit and bike lanes make cities more inclusive. Walking and cycling also help reduce air pollution and keep people active. And when cities rely less on cars, they're better prepared for fuel shortages or climate-related disruptions.

So, what does this mean to us? It means we're part of the solution. Whether it's choosing to bike to class, supporting better public transit, or simply rethinking how we move through our cities, we can help shape a future that's smarter, healthier, and more sustainable. Next time you're walking down a busy street, ask yourself: not how many cars are here, but how many people could be.

There are cities that are already making this shift, such as Copenhagen's bike-friendly streets and New York's pedestrian zones, all show how prioritizing people over cars leads to cleaner, more vibrant urban spaces.

This shift in thinking is more than just a technical adjustment. It's a reimagining of what streets are for, who they serve, and how we build cities that are healthier, fairer, and more efficient. When we design streets for people, we create urban environments that are safer, more inclusive, and more adaptable to change. To truly embrace sustainable transport, we need to change how we measure success. Traditional metrics like "Level of Service" focus on how quickly cars move through intersections. But that doesn't tell us how accessible, safe, or sustainable a street is. Instead, we should measure:

- i. Person-throughput: How many people can move through space.
- ii. Level of Access: How easily people can reach jobs, schools, and services.
- iii. Environmental impact: How transport choices affect air quality and emissions.
- iv. Public health outcomes: How infrastructure supports active lifestyles and reduces stress.

This shift requires courage. It means reallocating road space, investing in transit, and sometimes slowing down cars to speed up cities. The future of transport isn't about faster cars; it's about smarter streets. Streets that prioritize people, connect communities, and support a healthier planet. By asking how we can move more people, not just more cars, we unlock the full potential of urban space and pave the way for cities that are vibrant, inclusive, and sustainable.

The above provides a brief overview of the technical talk. Further details and insights from the session will be shared in the upcoming edition of *Buletin FKA*.