

2009 Trafinz Conference
act now for tomorrow

Creating Better Public Transport

- General Overview
- Principles of Planning
- New Technologies
- Recommendations

General Overview

- **Main Public Transport problems are**
 - No integrated fare and ticketing systems (Wellington and Auckland)
 - No coordinated planning for all modes and for all services
 - No coordinated operation for all modes and for all services
 - Only few bus priority measures
 - Slow operations at bus stops due to ticketing systems
- **These main problems cause low level of services**
- **Modal-split is low, public transport is used only for specific trips, e.g. to work, but not seen as an integrated system**

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General Overview

- **Network design**
 - No recognisable structured networks with backbone-feeder systems
 - Many inefficient direct routes from outskirts into CBDs
 - Many diameter routes, inefficient and causing high traffic volumes in CBDs
 - No overall express bus networks
 - Often parallel bus and train services
 - No defined areas for demand responsive services
 - Network structures not easy to understand

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Principles of Planning

- **Build an integrated network**
- **Make services fast and frequent**
- **Make services reliable**
- **Make services easy to use and understand**
- **Ensure services are well provisioned**
- **Minimize cost per passenger of buses**

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Principles of Planning – Integrated Network

- **Strategic network**
 - Spine of the network (rail, light-rail, trolley and major bus routes)
 - Connects outer suburbs to key activity centres in the CBD
 - Key links between major stations across the city
 - Service usually direct and frequent with priority and high quality
- **Feeder and local network**
 - Connects residential areas to suburban centres and the strategic network
- **Demand responsive network**
 - Connects residential areas with low demand to suburban centres and the strategic network

→ see workshop tomorrow

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Example: Wellington East



- **Existing situation**
 - All routes go to the CBD
 - Even the express buses stop very often
 - Not easy to understand
 - Inefficient

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Example: Wellington East



- **Optimized situation**
- Only strategic routes go to the CBD
- Express routes at strategic network with only few stops
- Direct route from Airport to CBD
- Transfer stops in Kilbernie, Miramar and Seatoun
- Need of transfers, but faster to get from Suburbs to city
- Easier to understand
- More reliable
- More efficient adjustment of frequencies to demand

New Technologies

- **Passenger information via Bluetooth**
 - High data transmission rates, so excellent for information about network and events, mp3 files, advertising, ...
 - High availability of mobile phones
 - No costs for passengers
 - Low investment and very low operational costs
- **Mobile phone ticketing**
 - High availability rate of mobile phones
 - Easy access to public transport
 - Proven in Europe



Recommendations

- **Use the opportunities given by the new PT Management Act**
- **Define a structured network, including all (!) services**
 - Strategic Network and express network with bus priority, fast and direct services and only few stops to CBD
 - Feeder and local network
 - Demand responsive network
- **Improve fare and ticketing systems**
 - Integrate all modes and services
 - Simplify tariff structure, stimulate monthly tickets, job tickets, etc.
 - Trust the customers, open all doors, only random ticket controls

Discussion

- **Thanks for any questions**
- **More to discuss in the workshop after morning tea**
 - Monthly tickets, job tickets and access to bus through all doors
 - Network planning
 - Bluetooth
 - Mobile phone ticketing
 - ...



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