

**2009 Trafinz Conference**  
act now for tomorrow

## Public Transport in low demand areas - Input for workshop on 10 September

- **The Challenge:** Public transport in New Zealand
- **The Opportunity:** Increased flexibility of public transport
- **The Solution:** Planning and integration
- **The Experience:** Good examples
- **The Future:** Next steps

### The Challenge: Public transport in New Zealand

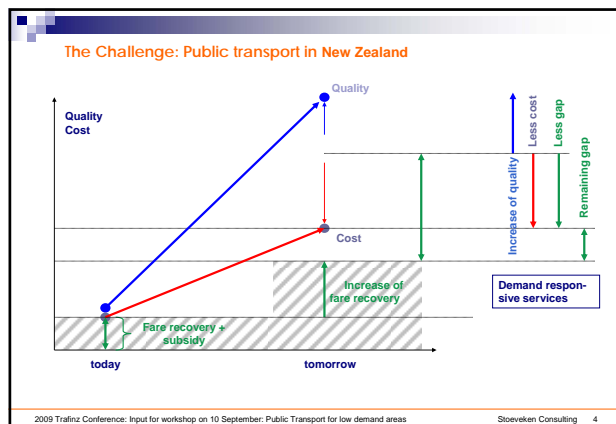
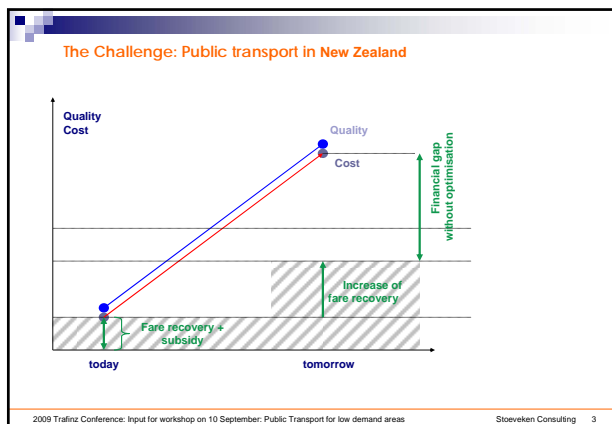
- ✓ Sustainable planning  
Carbon neutrality  
Aging population  
Economic development
- ✓ Public Transport Management Act
- But: Low demand in smaller cities and rural areas

} Need for improved Public Transport systems

} Great opportunity for integrated planning

} Proven systems in Europe

2009 Trafinz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      2



### The Opportunity: Increased flexibility

- So how?
  - See the whole picture (Travel Demand Management, network, fare system, marketing, ...)
  - Plan/optimize a fixed network for areas with sufficient demand
  - Plan demand responsive services for areas with low demand
  - Integrate the demand responsive services into the fixed network

2009 Trafinz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      5

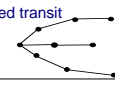
### The Opportunity: Increased flexibility

- Flexibility regarding routing
  - Fixed bus stop
  - Bus stop at demand
- Flexibility regarding schedule
  - Fixed trips
  - - - Trips at demand

2009 Trafinz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      6


### The Opportunity: Increased flexibility

**Fixed transit**




- Fixed routing
- Fixed number of trips
- Fixed departure times

**Demand responsive directed transit**



- Flexible routing
- Fixed number of trips
- Variable departure times (within a range)

**Demand responsive area transit**



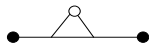
- Flexible routing
- Variable number of trips
- Variable departure times

2009 Trafirz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      7

### The Opportunity: Increased flexibility

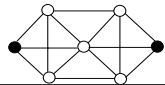
**Demand responsive directed transit**

- Route variation



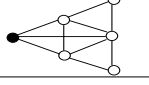
**Demand responsive directed transit**

- Corridor transit



**Demand responsive directed transit**

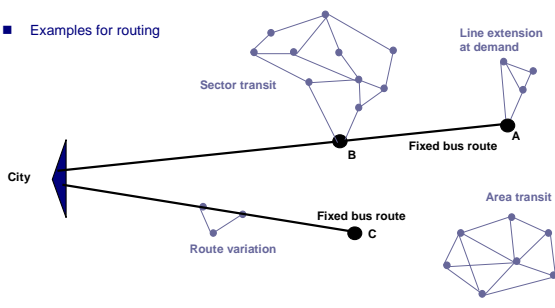
- Sector transit



2009 Trafirz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      8

### The Opportunity: Increased flexibility

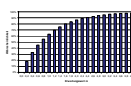
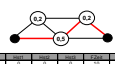
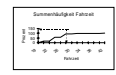
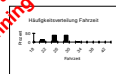
■ Examples for routing



2009 Trafirz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      9

### The Solution: Planning and integration

- Calculate likeliness of a stop approach
- Determine locations for demand responsive stops
- Evaluate all potential stop combinations
- Determine maximum travel times

There are proven planning tools!

2009 Trafirz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      10

### The Experience: Good example Call-A-Taxi Hofheim

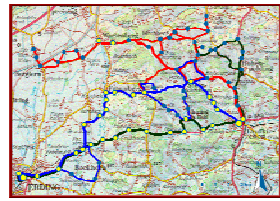
- 20,000 population
- Introduction in 1998
- Collaboration with taxi company
- Use a taxi from city centre/station  
→ Transport directly to the homes  
→ Higher quality and safety
- Call a taxi to city centre/station
- 30 min frequency



2009 Trafirz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      11

### The Experience: Good example Corridor Transport Erding

- Service between cities with 5,000 to 35,000 pop
- Introduction in 1996
- 3 routes with route variation and line extension
- Access to all townships with more than 100 pop.
- 25% cost reduction and 20% more passengers (comparing to previous fixed network)



2009 Trafirz Conference: Input for workshop on 10 September: Public Transport for low demand areas      Stoeveken Consulting      12

### Questions for the workshop

- What are the needs?
- What can be the roles of
  - **Community**
  - **Service provider: citizens, private sector, public sector, ...**
  - **Other cooperation partners**
- How should services be designed: area, booking system, management, staff, ...
- What are suitable vehicles: e.g. taxis, mini-buses, community cars, ...
- How does the funding work?
- What are the critical success factors?
- ...

### Facilitator:

Dr. Peter Stoeveken  
Managing Director

Stoeveken Consulting Ltd.  
18 John Witten Drive, Wellington 6035  
www.stoeveken.co.nz  
peter@stoeveken.co.nz  
T +64 21 681716

