



The Role of IT in DRT and Virtual Fleet

SPT Experience

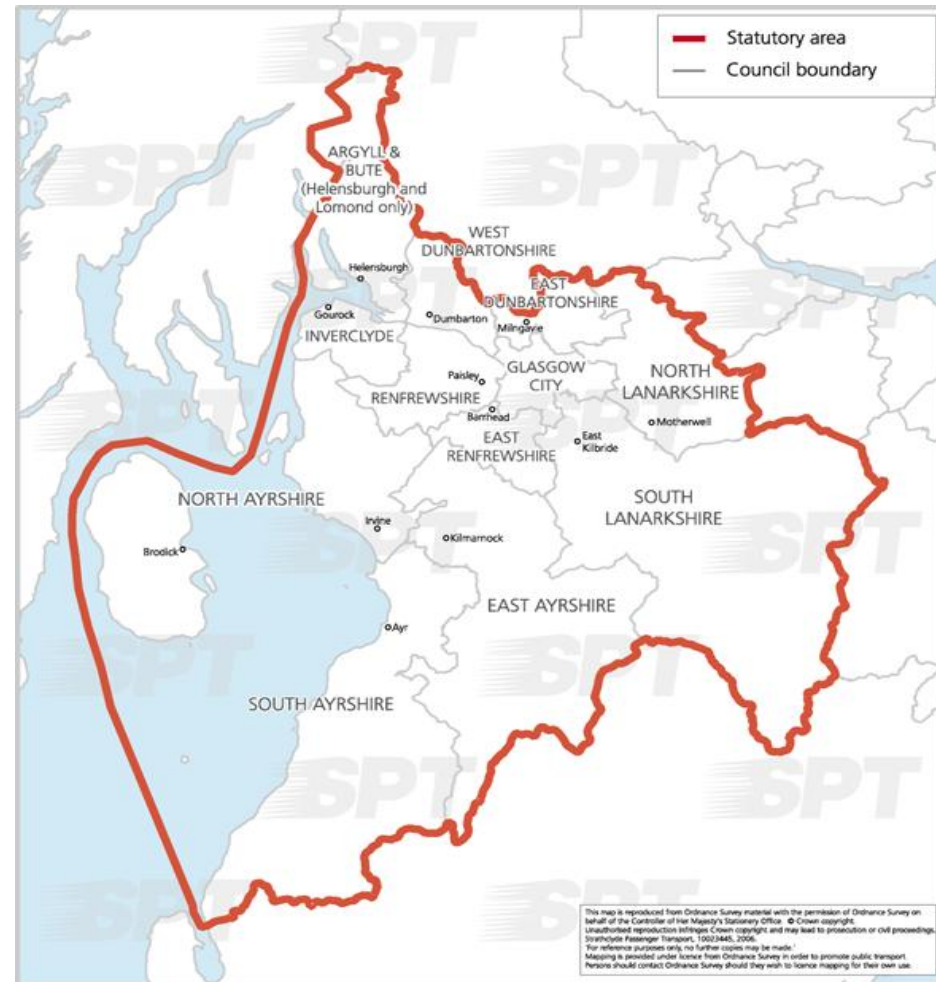
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2011 Annual Polis Conference, Brussels
29-30 November 2011

Strathclyde Partnership for Transport



- One of 7 Regional Transport Partnerships in Scotland
- Transport (Scotland) Act 2005
- Partnership working on behalf of 12 councils and 2.16 million people
- The SPT region covers an area of approximately 9300 km²
- An operator and an authority



About SPT – What We Do



- ❑ Develop and implement the Regional Transport Strategy
- ❑ Operate the Subway (13 million passengers each year)
- ❑ Provide socially necessary DRT Bus Services – MyBus
- ❑ Developing Community Transport throughout Region
- ❑ Deliver school transport
- ❑ Subsidise bus services
- ❑ Develop integrated ticketing, e.g. Zonecard
- ❑ Provide bus infrastructure
- ❑ Provide travel information
- ❑ Leading the development of Integration and the Virtual Fleet Management Agenda in Scotland



SPT Recent Developments in IT Systems



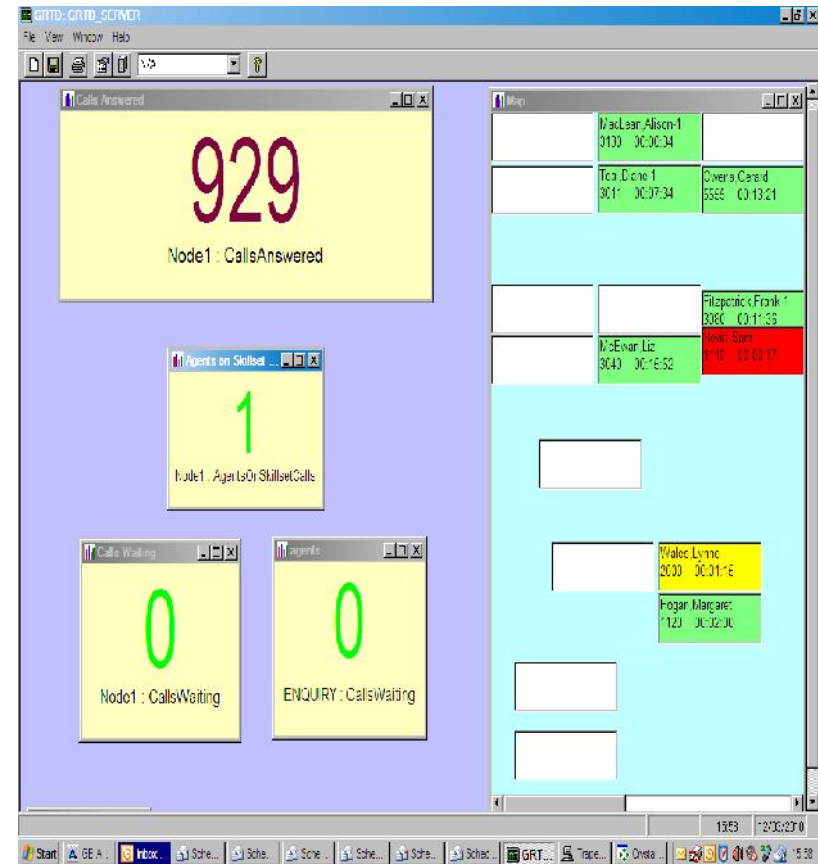
- In 2002 Trapeze Booking and Scheduling System purchased
- To date over £1m investment made in the Travel Dispatch Centre (TDC) and IT infrastructure
- TDC now has 21 staff
- Operates from 0845 to 1630 Monday to Friday
- Operates a number of DRT Services through the TDC



Main Functions of Trapeze Software



- Passenger registration (capturing user characteristics)
- Vehicle specification (capturing vehicle characteristics)
- Network specification (defining characteristics of road network)
- Service specification (defining DRT service designs within the system)
- Booking request management (place & edit bookings/enquiries)
- Scheduling (trip assignment and journey planning)
- DRT system database management (users/vehicles/services)
- Service monitoring and statistics management





- Quick and efficient booking of trip requests**
 - Allows bookings to be taken and routed in one process, providing instant definite answers to customers**

- Scheduling of trip requests to optimal routes**
 - Reducing dead mileage and passenger journey distances**

- Dispatching of routes to the most appropriate vehicle**

- Visualisation of routes and orders with integrated digital mapping**

- Efficient record keeping and reporting**



Devices Supported:

- **Mobile Data Terminals for real time communication with drivers**
- **GPS location finding for vehicles**
- **Internet based services (web booking)**
- **SMS booking services**
- **Finance system**
- **Links to established reporting packages e.g. Crystal Reports**

SPT'S DRT Services



Provided throughout the West of Scotland using the following:

- State of the art vehicles
- Centralised booking and scheduling
- Significant investment In TDC – software and telecoms
- 'Real Time' GPS vehicle tracking and work allocation using Mobile Data Terminals (MDT's)



DRT Services - MyBus



Managed by SPT since 1989

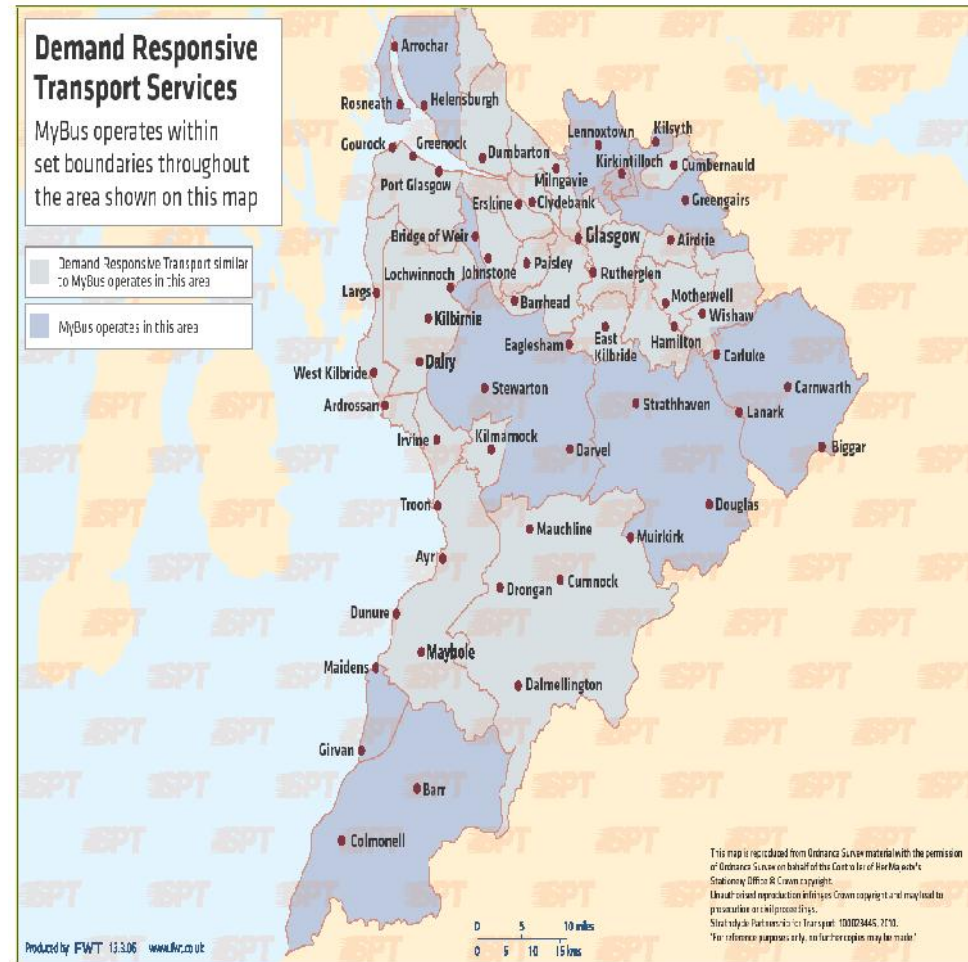
Delivered in urban and rural areas

In urban areas designed for elderly and disabled people

In rural areas designed where there is no access to conventional public transport

A door-to-door service

Pre bookable anywhere to anywhere within operating area



DRT Services - MyBus



- 46 buses providing over 500,000 journeys per year
- Over 46,000 registered users
- All buses fully accessible with low floor, wheelchair spaces, kneeling suspension



- ICMA is EU Interreg 1VB project, 11 partners from 7 Northwest Countries
- Looking at the First and Last Miles of any journey
- Transnational Cost Price Model Developed by AECOM for FTS

DRT Services - GCC Voluntary Club Runs



- SPT approached by Glasgow City Council to schedule and manage their non-statutory transport provision through TDC to:
 - Continue to provide transport more effectively and efficiently
 - Utilise existing transport resources throughout the Glasgow area
 - Integrate DRT Services throughout the area
- Transport required:
 - 67 Voluntary and Community Groups across Glasgow required transport
 - Groups made up of elderly, disabled and individuals with learning difficulties
 - A door-to-door transport service
 - Group Members required access to activities and centres and were unable to use conventional public transport
 - Transport required daily, weekly, fortnightly and monthly

DRT Services - GCC Voluntary Club Runs



- Was costing £500K (in overtime payments alone)
- The ICMA Price and Cost Model used to assist with assessing savings
- Through SPT scheduling the journeys **Total** Cost reduced to under £300K and with more clubs added
- A delivered saving of 42%
- Won the “Excellence in Technology and Innovation” Award at 2011 Scottish Transport Awards



This DRT Service has established the potential:

- For more efficient and effective methods of delivering DRT Services
- To reduce costs to service provision by utilising vehicle resources to full capacity
- Benefits of a single access booking and scheduling system

Current Developments - Virtual Fleet Management



- SPT currently leading on an Integration of Social Transport and Fleet Management Project. This involves:
 - Planning and scheduling 7 Councils Education ASN and Social Work Transport through the Trapeze scheduling and booking system
 - This will:
 - Schedule work and identify savings
 - Reduction in taxi spend through better utilisation of vehicle down time and rationalisation of resources
 - Potential 5 year savings - £4.4m per annum

- **Why the Need for Integrated Approach?**
 - **Economic crisis has reduced the amount of money available to Authorities**
 - **Ever increasing elderly population. Over 60 population will increase by 30% in 10 years**
 - **25% of West of Scotland population registered with some form of disability and this is likely to increase**
 - **Development of new technologies and business models mean that DRT services can be provided through a single agency**

Conclusion



- SPT leading the way in Scotland in the delivery of DRT and Virtual Fleet Management
- Through its investment in IT and TDC has the infrastructure in place to continue to develop and deliver an integrated approach to the delivery of DRT Services
- Use of IT and Virtual Agency approach has already seen financial savings in excess of 40%
- Long Term Future – integrating transport services of SPT, NHS, Community Transport and The Scottish Ambulance Service