# **Tuesday 10 November Webinar**





Delivering DRT using ITS in a Virtual Agency.

Brian Masson FCILT Founder Multi Modal Transport Solutions Ltd (2003)

SMARTA 2 Project



### Background

- 46 years experience in Public Transport Sector
- ▶ 25 Years in UK Bus Industry
- External expert adviser in EU SMARTA2 project
- Non Executive Director of Community Transport Glasgow
- Adviser to Scottish Accessible Transport Alliance
- Chair UK Skills Gap In Transport Planning Working Group
- Partner in over 20 EU Transport Projects

### What is the real cost of poor mobility?

- The cost of providing public transport outside peak times and in low density areas and for vulnerable groups is often quoted as being expensive.
- In simple monetary terms this may appear to be the case,
- However, What is the real cost of not providing PT services?
- We need greater understanding of impacts caused by poor access to public transport in terms of social impacts.
- What are the real costs of mental health, alcohol, drugs abuse, isolation, crime, poverty, lack of access to training, education, jobs, leisure etc?

# Problems With Current Public Transport Offer

Does not recognise the ever changing needs of the individual or communities.

Does not encourage Social Inclusion or Sustainability

Does not maximise the use of resources

Too many stakeholders in decision making/supply chain

Inflexible regulatory policies

# DRT – What is it?

Ask 100 people what DRT is and you will get 100 answers.

In simple terms all modes of transport are responsive to varying levels of demand. Therefore DRT covers everything. Simple

### DRT – Who decides on best solution?

#### • Objectives

- 1) Meet known demands in the most cost effective manner both economically and environmentally
- 2) Maximise the use of existing resources
- 3) Improve the mental and physical health of citizens
- 4) Provide flexible solutions to respond to varying demands including: events, Seasonal demands and in times of crisis

### Multi Modal Networks – The future?

- Having identified demands we need to work with multi modal operators to design local, regional, national and international solutions. (MaaS?)
- Customer needs journey planning, simple fare/payment structure to cover all modes,
- Who is responsible when issues arise?
- Operator issues sharing data and revenues.
- Transport Authorities Who will be responsible for "agency"? Legal requirements, can standards be adopted across all modes?
- Infrastructure Multi Modal Hubs

# How can we quantify demand?

The ability to assess demand requires data. Simple or is it?

Challenges

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1) Can we get stakeholders to share data?

2) Need to invest in ITS and integrate systems

3) ITS is vital to success

4) Sustainable business models required. Who owns data?

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5) Smart technologies essential but what about people with no access?

6) Identify user preferences. Likes and dislikes on modal choice



## FAMS Virtual Agency Business Model

# ITS Structure for DRT Agency



DRT Concept well established for over 30 years. Issues

- We have the technology to deliver DRT
- We have the vehicles
- We have the data
- However,
- Do we have the ability to work together?
- Can we share data and resources?
- Will stakeholders agree to share costs and rewards?

## Sustainability – Who pays for the Agency?

#### • Facts -

- Uber, MaaS Global etc. Have yet to break even. Why?
- Agency Costs who pays? ITS, Staffing, Marketing, Complaints, Refunds, Revenue distribution, Legal costs..... Massive costs
- Operators don't want to share revenues and customers don't want to pay more.
- Sustainable business model has yet to emerge.
- FAMS was highlighted at G20 Summit in Tokyo in 2019.
- DRT and MaaS in theory are the golden bullets to aid modal switch but to date there has been no largescale take up

Potential Business Models for ITS EU Newbits Project http://newbitsproject.eu/theproject/

- Newbits project was commissioned by DG Move to look into the reasons for the lack of progress into maximising return in investment in ITS.
- We have the technologies available to identify customer needs, operational issues (vehicle location, ticketing, real time information, fleet management etc.) Why have we not seen a major explosion in new integrated public transport services using ITS?
- Covid has seen huge expansion of online shopping using parcel delivery systems. Tens of thousands of new jobs created in 6 months.
- In the past 10 years Uber, Lyft, ViaVan etc have moved into transport sector and impacted on traditional public transport market
- MaaS has received massive hype about potential but no large scale take up globally
- Newbits worked with partners in ITS, Traffic Control, Ride Sharing, Rail and Shipping sectors to explore the development of multi stakeholder business models.
- Results are really positive with return on investment between 2.5 and 13 times

### Multi Stakeholder involvement

- Co Creation/ Lean Methods essential
- All stakeholders involved in design of products and services
- Each stakeholder can fully understand the challenges each face
- Helps to breakdown barriers
- Facilitates bottom up decision making
- Provides sustainable solutions







#### **Policy recommendation #2**

• Strengthen the support from **local authorities** considering the need for:

#### **Sharing Mobility**

measures to overcome the critical mass barrier

#### MaaS

stakeholder cooperation

user's willingness to move from a car ownership culture

#### CAVs

user acceptance

ad-hoc regulatory actions

### Conclusion

Partnership working using new technologies and business models can deliver an integrated, coordinated public transport solution, meeting the ever changing needs of the individual, statutory bodies, businesses, communities and transport providers

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- Where there is a will to involve all stakeholders in the design of services to improve access to opportunity for everyone
- ITS is vital to success. Data Sharing and integrated systems are critical to success
- We are all part of the future of public transport and must share a common vision on how this will be developed to the benefit of all.

### Contact details

- Brian Masson FCILT, Founder, Director
- Multi Modal Transport Solutions Ltd
- brian.masson@btinternet.com
- +44 7957 645202

<u>https://ruralsharedmobility.eu/smarta-2/</u>