

# **Low Emission Buses in Strathclyde**

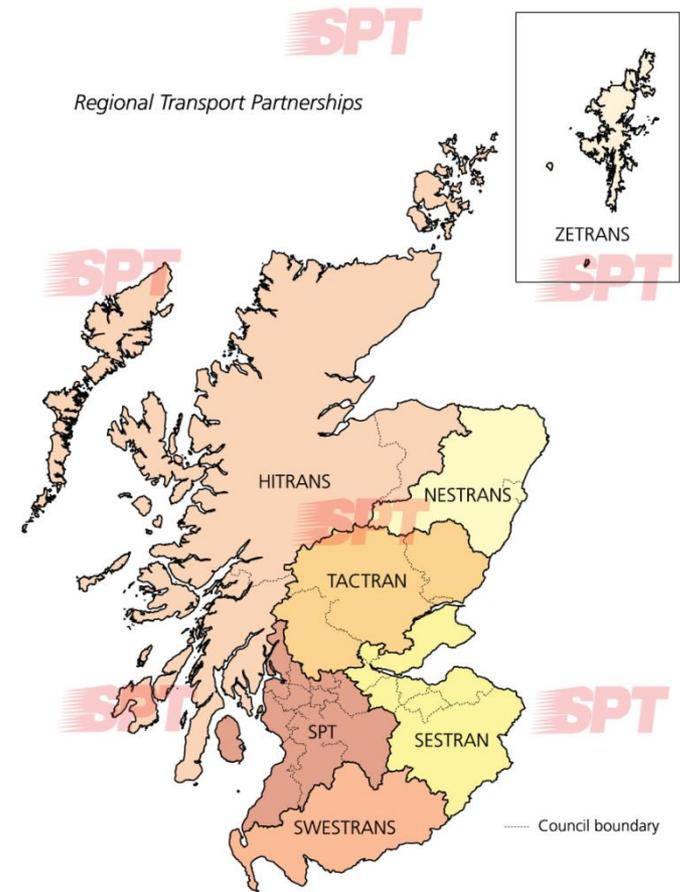
**– supporting delivery of the  
Regional Transport Strategy**

**LCVP Low Emission Bus Workshop**

**8 March 2018**



- One of 7 Regional Transport Partnerships (RTPs)
- Transport (Scotland) Act 2005
- Partnership working on behalf of 12 councils and 2.15 million people
- Public Transport Trips = 285 Million
- The SPT region covers approximately 43% of Scottish population, but 60% of Public Transport trips
- An operator and an authority
- However.....Car trips = 700 million!!



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- **Plan the regional transport network**
- **Promote and deliver projects**
- **Operate the Subway**
- **Support bus & ferry services**
- **Provide bus infrastructure**
- **Provide Demand Responsive Transport**
- **Deliver school transport**
- **Promote sustainable travel**
- **Provide travel information for the public**
- **Connect freight**
- **Develop integrated ticketing**
- **Address transport affordability**
- **Make journeys safer**
- **Promote equality**

## 4 key transport outcomes;

- **Improved Connectivity**
- **Access for all**
- **Reduced emissions**
- **Attractive, seamless, reliable travel**



- **Current Fleet of 102 buses**
- **Mix of Minibuses & Midibuses**
- **Solo (50), Orion (28), Tucana (8), Streetlite (8), Sprinter (6)**
- **Deployed on Local Service & DRT contracts**
- **Deployed in Urban & Rural Services**
- **Fleet Mix by Euro Standard;**

<b>Euro level</b>	<b>Fleet</b>	<b>LCV?</b>
<b>Euro 4</b>	<b>8</b>	<b>0</b>
<b>Euro 5</b>	<b>86</b>	<b>7</b>
<b>Euro 6</b>	<b>6</b>	<b>0</b>
<b>EV</b>	<b>2</b>	<b>2</b>

# ADL Enviro 200 Hybrid



# Optare Solo EV



# Wrightbus Streetlite MicroHybrid



# ADL E300 – Euro 6



# Mercedes City Sprinter – Euro 6



# Why invest in LEB's?



- **Reduced operating costs / improved MPG**
- **Support improved local air quality**
- **Reduce carbon emissions**
- **Reduce risk of investment in new technology**
- **Lead the way in LEB development**

# Scale of the challenge?



	No of Vehicles	% of total	Vehicle Replacement Cost c £200k per bus	Upgrade Cost Exhaust retro-fit E-fans, telematics & R & M, c £25k per bus
Pre Euro (pre 1993)	76	2.3	£15,200,000	
Euro I (1993-1995)	34	1.0	£6,800,000	
Euro II (1996-1999)	156	4.8	£31,200,000	
Euro III (2000-2004)	896	27.6	£179,200,000	
Euro IV (2005-2007)	479	14.8		£11,975,000
Euro V (2008-2013)	1064	32.8		£26,600,000
Euro VI (2014- to date)	415	12.8		
Hybrid	58	1.8		£1,450,000
Electric	2	0.1		
No response	62	1.9		
<b>Total No. of Vehicles</b>	<b>3242</b>	<b>100.0</b>		
<b>Total Cost Veh Retrofit</b>				<b>£40,025,000</b>
<b>Total Cost Veh Replacement</b>			<b>£232,400,000</b>	

**Grand Total**  
**£272,425,000**

- **Bus is key part of the solution (cleaner buses + modal shift)**
- **Significant Investment in retrofit & fleet replacement required**
- **Bus running speeds & reliability must improve**
- **Additional bus priority measures essential**
- **+ Improved passenger facilities**
- **LEZ Phasing; Alignment with Investment? / Scale of Challenge?**

**Questions?**