

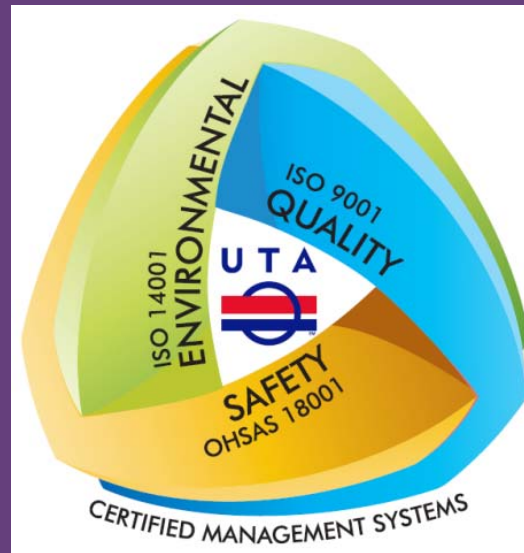
Quantifying Transit's Role in Improving Air Quality

Dan Locke

Environmental Compliance Administrator

Utah Transit Authority


Salt Lake City, UT



2013 Sustainability and Public
Transportation Workshop



Employing APTA's Recommended Practice:



APTA STANDARDS DEVELOPMENT PROGRAM
RECOMMENDED PRACTICE
American Public Transportation Association
1666 K Street NW
Washington, DC 20006

APTA SUDS-CC-RP-001-09
Approved August 14, 2009
Climate Change Standards
Working Group, SUDS Policy and
Planning Committee

Quantifying Greenhouse Gas Emissions from Transit



Typology of Transit Emissions Impacts

Emissions Produced by Transit

- Emissions from Transit
- Tailpipe emissions from transit services
 - Electricity use for traction

Emissions Displaced by Transit

Mode Shift:
Transit Use
Rather Than
Driving

Congestion
Mitigation
Effects

Compact
Land-Use
Effects

Credit

Debit

Air Quality Impacts of Transit

Mode Shift: Transit Performance Monitoring System

Service Area (x1,000)	Phase I & II (2002)	Phase III (2004)
All Systems	0.44	0.45
Small: <500	0.34	0.39
Med: 500 – 1,250	0.42	0.43
Large: >1,250	0.47	0.50
Large Sub. >1,250	0.44	0.52

**Congestion Relief: 2012 Annual Urban Mobility Report
by Texas Transportation Institute**

Land-Use Multiplier:

- **Reduced trip lengths – higher density development**
- **Facilitate bicycle and pedestrian travel**
- **Trip chaining**
- **Impacts through vehicle ownership**

