Link Transit’s Battery Electric Bus and Fast Charger Projects

June 2017
Federal Grants to Link Transit

• $2.95 mil. “ARRA” TIGGER I Grant (2009)

• $2.5 mil TIGGER III Grant (2011)

• $3.77 mil. Lo/No Grant (2016)
Ebus 22’ Trolleys
EBus with China Aviation
Lithium Batteries

- LiFePO$_4$ batteries
- 188 – 3.2 V batteries
- Air cooled
- 601 volt
- 90 KW
- 90 mile range
Ebus 50kW Slow Charger
Ebus
Robotic Fast Charger
Trolley Fast Charge
Ebus Current Situation

- Fast Chargers de-energized pending circuit board decision
- Buses in use using slow-chargers
- 60 mile practical range
- In use about ½ of day
BYD Bus with BYD Lithium-ion Iron Phosphate Batteries

- LiPO$_4$ Battery
- 160 - 3.2 v cells
- Air cooled
- 512 volt
- 270 Kwh
- 165 mile range

www.linktransit.com
BYD 85KW Wired Charger
Momentum Dynamics 200KW Magnetic Inductive Charger
Monthly Energy Cost Comparisons

Electric:  
$285 per month  
2530 KW @ $0.11/kwh

Diesel:  
$1,381 per month  
429 gallons @ $3.22 per gal