Scaling Electric Transit to 100%

by

ROADMAP 12

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Who We Are
Planning
Design
Permitting
Procurement
Construction
Commissioning
SCALING TRANSIT TO 100%
Some questions to consider
BUSES & ROUTES

► Is your ridership growing or declining?
► Are your routes flexible?
► Do you have reliable electric bus data?
► What locations are available for charging?
  ▪ Garages / Depots
  ▪ End of line stops
  ▪ Transfer centers
CHARGERS

► Have you considered charging technology types?
  ▪ Depot chargers
  ▪ Overhead / On-route chargers
  ▪ Wireless chargers

► Interoperability: Do you want to use the same chargers with multiple bus OEMs?
Do you have available power?
- Available utility capacity
- Load growth timing
- Distribution circuit upgrade cost

Do you need resilience?
- Emergency Response & Operations Needs
- Onsite generators
- Battery storage

Do you need / want green power?
- Onsite renewable options (i.e. solar)
- Off-site renewable options (i.e. power purchase agreements)
IMPLEMENTATION

- Designated parking within the depot?
- Impacts of charging socket location on bus and yard layout?
- Operator plug in vs. automatic?
- Overhead chargers vs. pedestal?
- UG vs OH electrical conduit?
- Parking strategies during construction?
- Have you started a business case?
- Have you identified funding sources?
OPERATIONS

► Upgrade existing facilities or build new?
► Are you ready to maintain electric buses?
► Do you need a charger for each bus or can you move buses overnight?
► Do you need charge management software?
  ▪ ensure buses are ready to go when needed
  ▪ manage charging to minimize electric bill (demand charge avoidance)