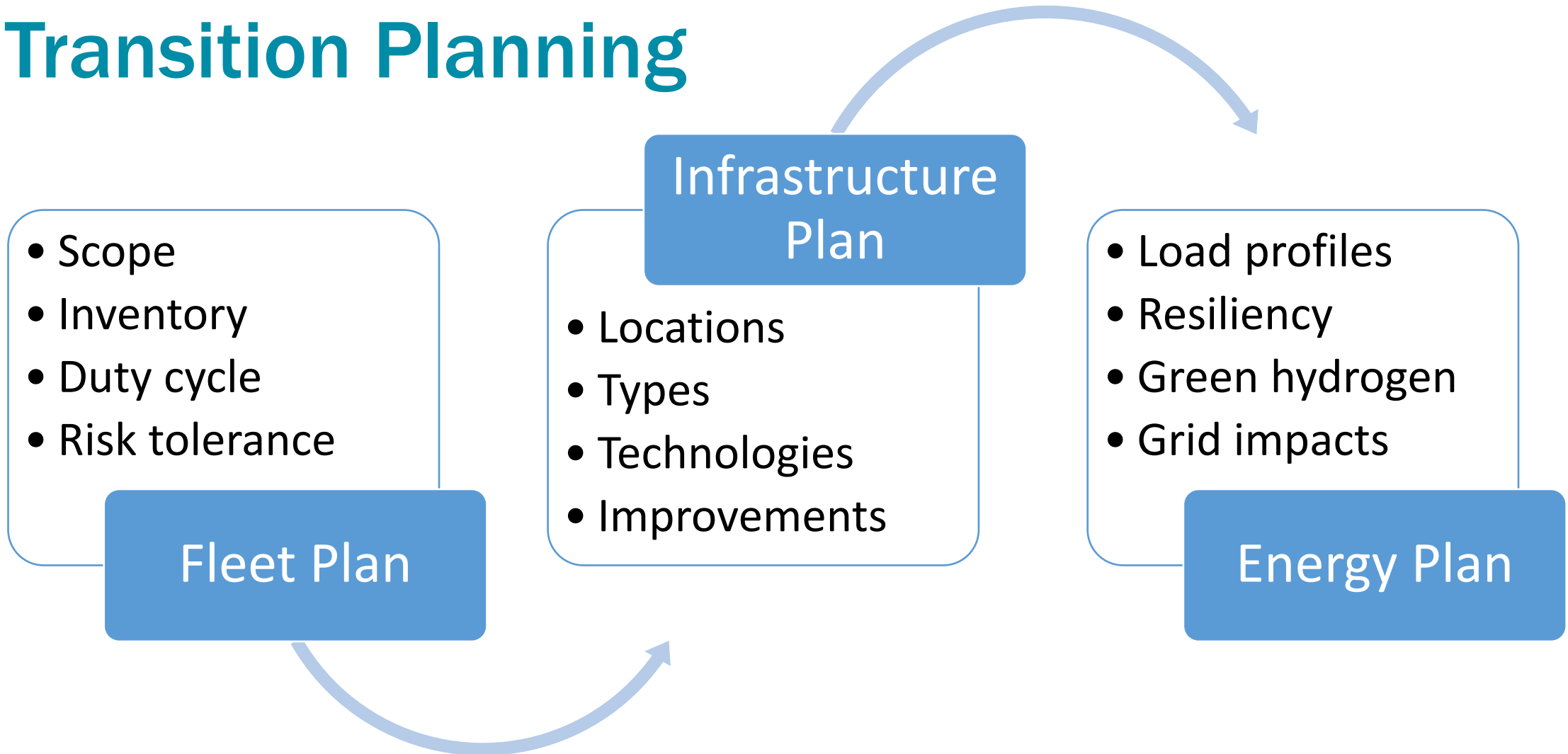


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energy



Planning for the
Transition

Transition Planning



Scope

1. What are the influencers?
2. Which vehicles are included?
3. What is the timeline?
4. What are your procurement policies? Do you follow them?
5. Which contracts help or hinder the ZEV transition?
6. What's in your inventory?
7. What is your budget?

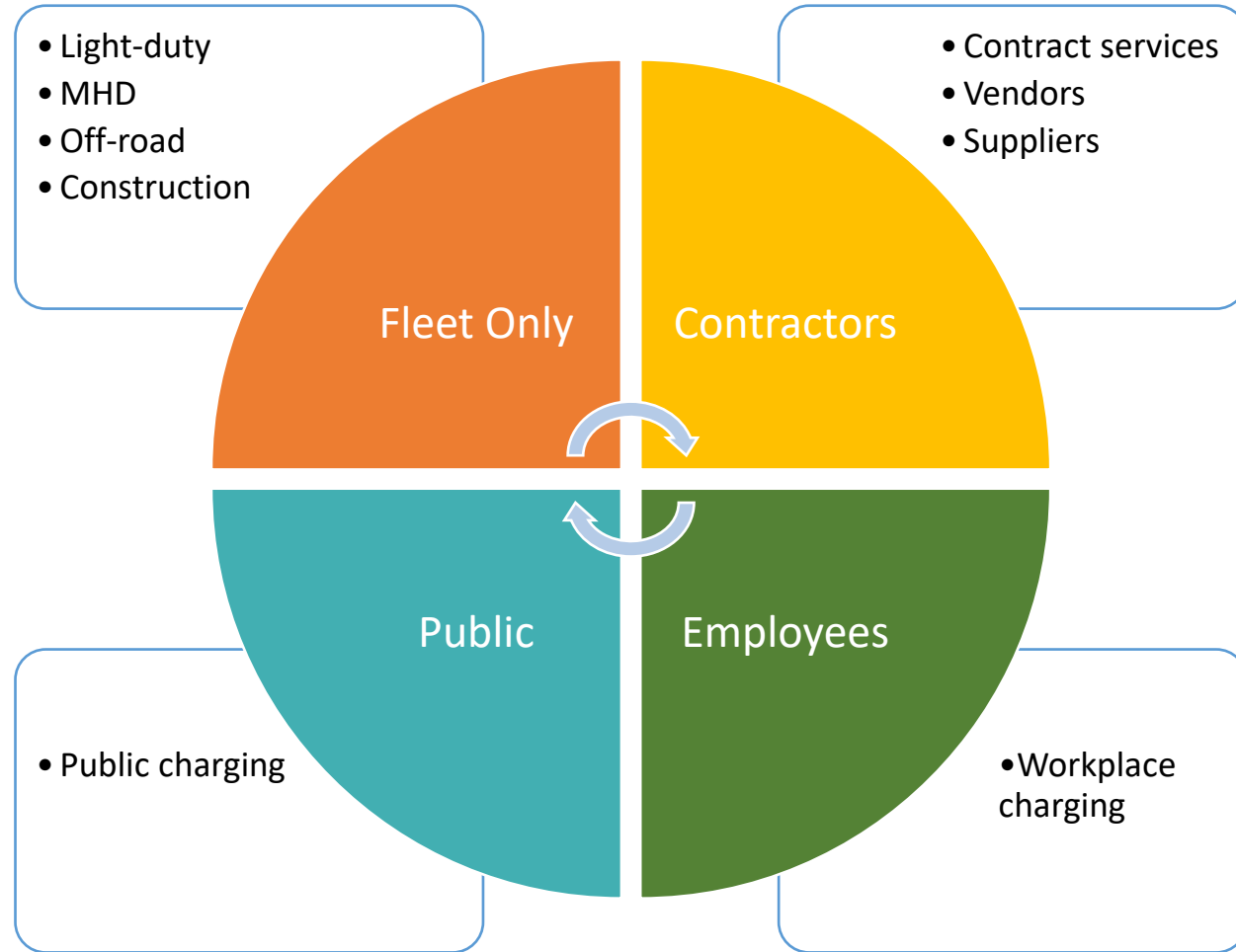
1. Common influencers

- Regulation compliance
- Funding opportunities
- Climate Action Plans and Sustainability Plans
- Building electrification and resiliency
- Rightsizing fleets
- Facility changes
- Contracts ending or renewing

Identify all your motivators.
Do the timelines agree or
conflict with each other?

2. Vehicles and 3. Timelines

Phased approach or all at once?



4. Procurement policies

- “We keep all the old vehicles in case we need them.”
- “Whomever is loudest gets the new vehicle.”
- “We only replace vehicles when we have the budget.”
- “We have a set budget every year. We stretch as thin as possible.”

Practices evolve over time. Do your policies need to change? How can procurement reflect the long EV cycle?

5. Existing contracts

- Conventional fuels
- Vehicle maintenance
- Service and warranties
- Cooperative purchasing
- Labor
- Contracted services
- Facility leases
- Solar power agreements

If any are coming up for rebid or negotiation, what do you need to consider in your plan?

6. The inventory

Desired Information	Alternative #1	Alternative #2
Vehicle VIN, make, model, model year, vehicle type, fuel type	Vehicle ID/unit number (if different from VIN)	
Vehicle description (detailed)	Vehicle description (brief)	N/A
In-service and replacement year	In-service <u>or</u> replacement year	N/A
Original cost, expected surplus proceeds, and budgeted replacement cost	Original cost <u>and</u> budgeted replacement cost	Original cost <u>or</u> budgeted replacement cost
Address of domicile (or “take home”)	N/A	
Assigned division and department	Assigned department	Specific vehicle use case
Hours parked at assigned domicile	Hours parked and domicile address	Domicile address
Typical and max duty cycle (or telematics data)	Weekly mileage data or fuel use	Current odometer
Annual O&M cost: fuel, maintenance, insurance, licensing, fuel infrastructure	Annual O&M cost: subset	Assumption data from team
Special equipment or configuration (e.g., liftgate, license plate reader, 4WD, snowplow)	N/A	

What is a duty cycle and why do we care?

Public works has a van that drives 12 miles a day. Easy BEV replacement.....



It's a CCTV van and the engine idles to provide power to the camera and other equipment needed for pipeline inspection. Plus, it's in a hot environment and the air-conditioned cab provides shelter for the technician.

What is a duty cycle and why do we care?

Tesla cars and the Mustang Mach-E are fast cars with long range that would work for police patrol.....



PD uses “hot seat” car swapping. Patrol cars dwell for less than 10 minutes, which isn’t ideal for a charge. You may need additional charging stations or additional patrol cars.

Does the vehicle...

1. Carry or tow something heavy?
2. Idle to operate electronics, liftgates, or equipment?
3. Stop for 2+ hours during the shift?
4. Go home with the operator?
5. Drive more than 150 miles a day at any time? If so, how often?
6. Get used for emergency response?
7. Have a special use?
8. Regularly drive at highway speed?

7. Budget

- EVs are more expensive to buy
- Fuel and routine maintenance are less
- You may need to procure up to a year before delivery
- Consider grants, incentives, and credits as income
- Consider creating funding solutions

A few other parameters

- Willingness to try emerging technology
- Disaster preparedness and resilience
- Fuels you want or do not want
- Loyalty to brand or badge
- Resources to go after funding
- Workforce and training needs
- Change management

Important points

- This isn't happening tomorrow
- We need to plan for 2024/25 today!
- Renewable fuels will be part of the plan
- Do you have opportunities for group buys?





Thank you!

[Chris White](#)
cwhite@frontierenergy.com
916-371-2899
Sr. Manager
Frontier Energy