

# Drafting the Future: **The Dollars and Sense of Toll Roads**



## Electronic Toll Collection and Interoperability



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# Drafting the Future: **The Dollars and Sense of Toll Roads**

## Highlights

- Why ETC?
- Components of ETC
- Implementation Options
- Interoperability

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**Q: Why ETC?**

**A: Service**

VS



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**Q: Why ETC?**

**A: Reduced Construction/  
ROW Cost**

VS



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## **ETC Collection Systems:**

**Customer Service Center (CSC)**



**Transponder (Tag)**

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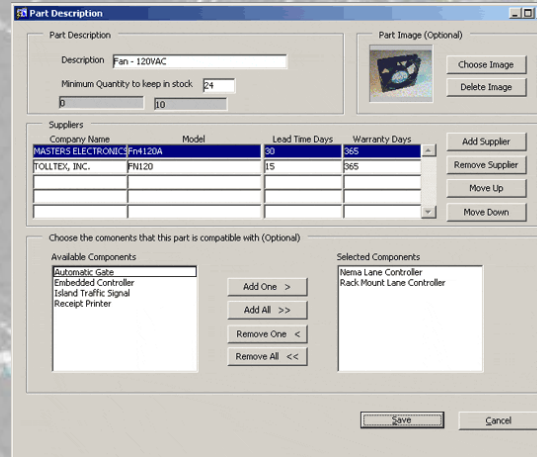
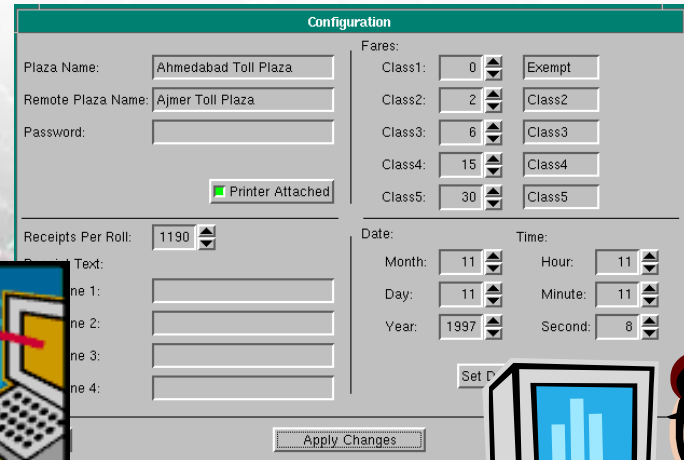
## **ETC Collection Systems:**

### **Antenna**



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## ETC Collection Systems: Back Office



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## **ETC Collection Systems: Demo**



open\_road\_toll

## **ETC Collection Systems: Implementation**

- All electronic
- Ideal for retrofit
- Least cost per toll collected
- Lowest construction cost



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## **ETC Collection Systems: Implementation**

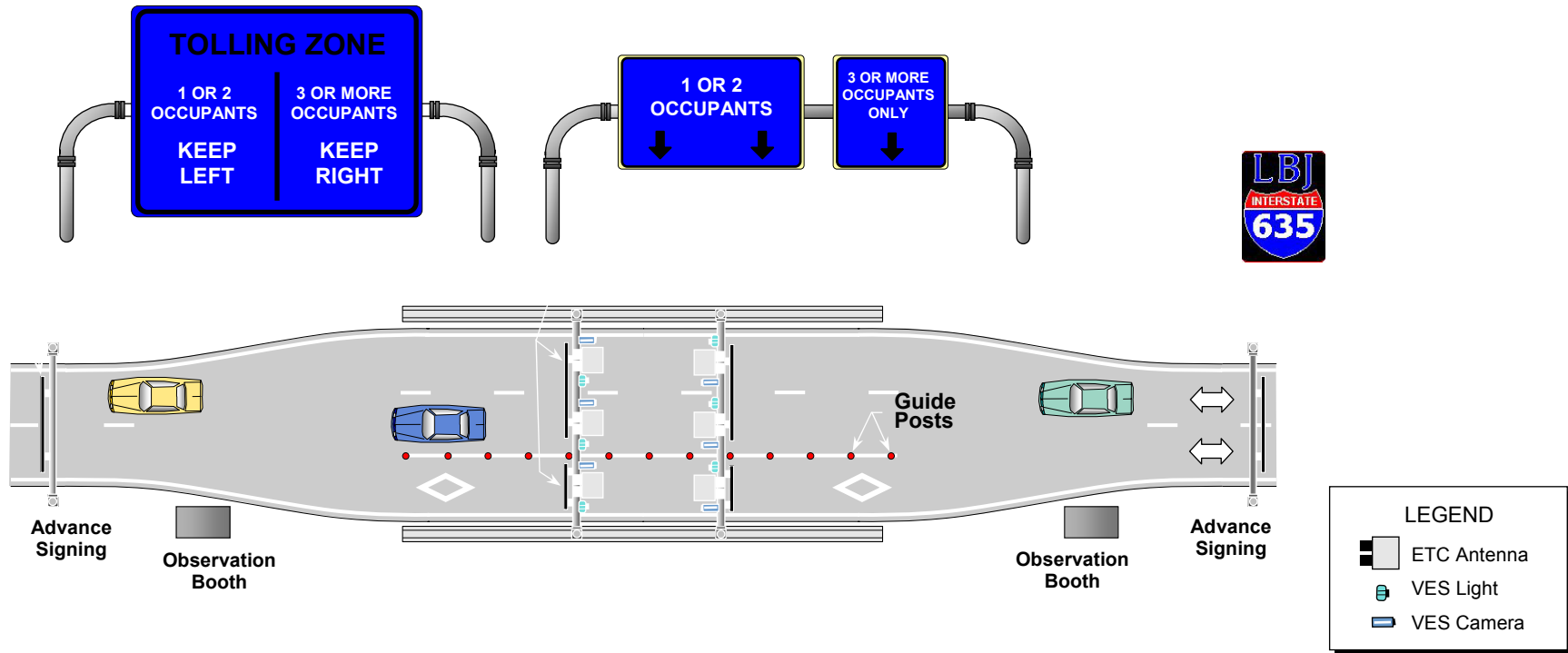
Combination Cash and ETC

Higher cost, but more revenue



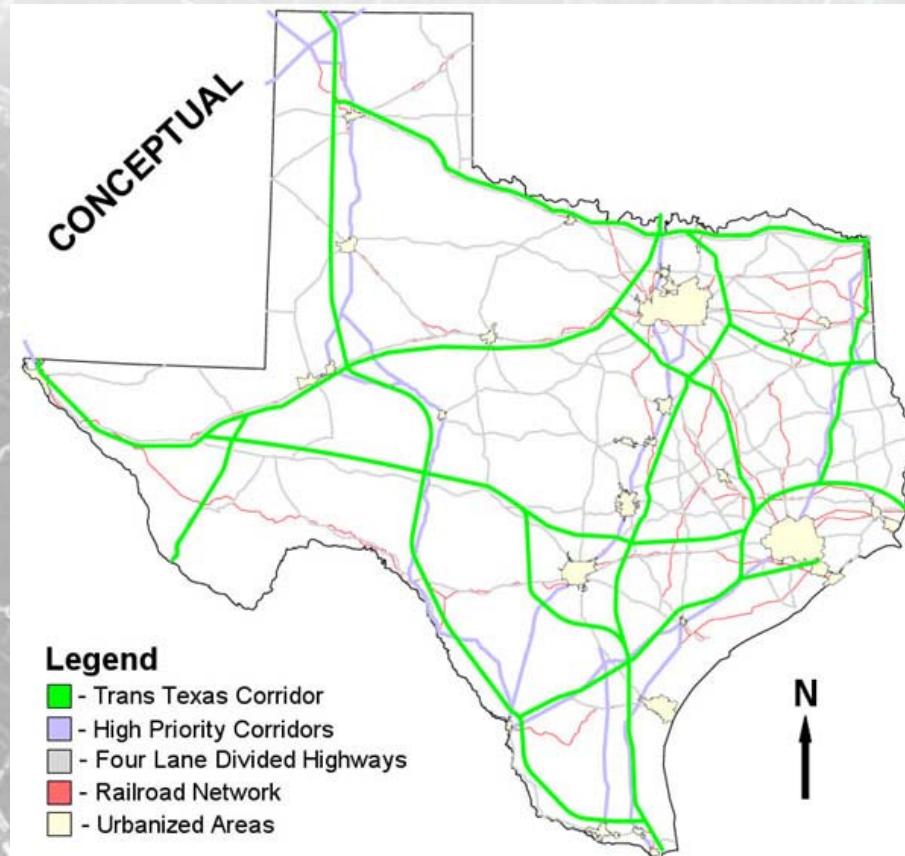
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## ETC Collection Systems: HOT Lanes



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## Why Interoperability?



## Interoperability: Regional Customer Service Centers

- Customer has 1 account, 1 tag
- Customer drives anywhere and receives 1 bill
- Can include:
  - Tolls
  - Parking
  - M-Commerce
  - Transit

