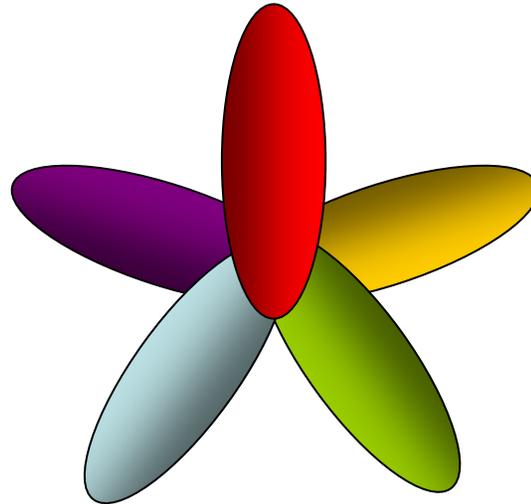


# Fox Integration

## Puget Sound Regional Integrator

Puget Sound Regional Council

May 11, 2005

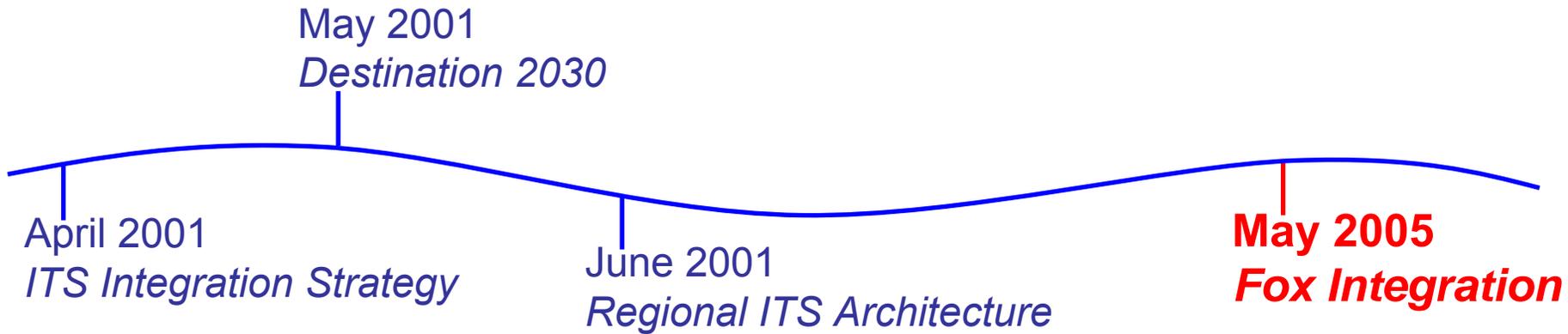


# Purpose

- Responding to PSRC RFP
- *Making the case for a regional integrating agency for ITS*



# How can Fox Integration help?



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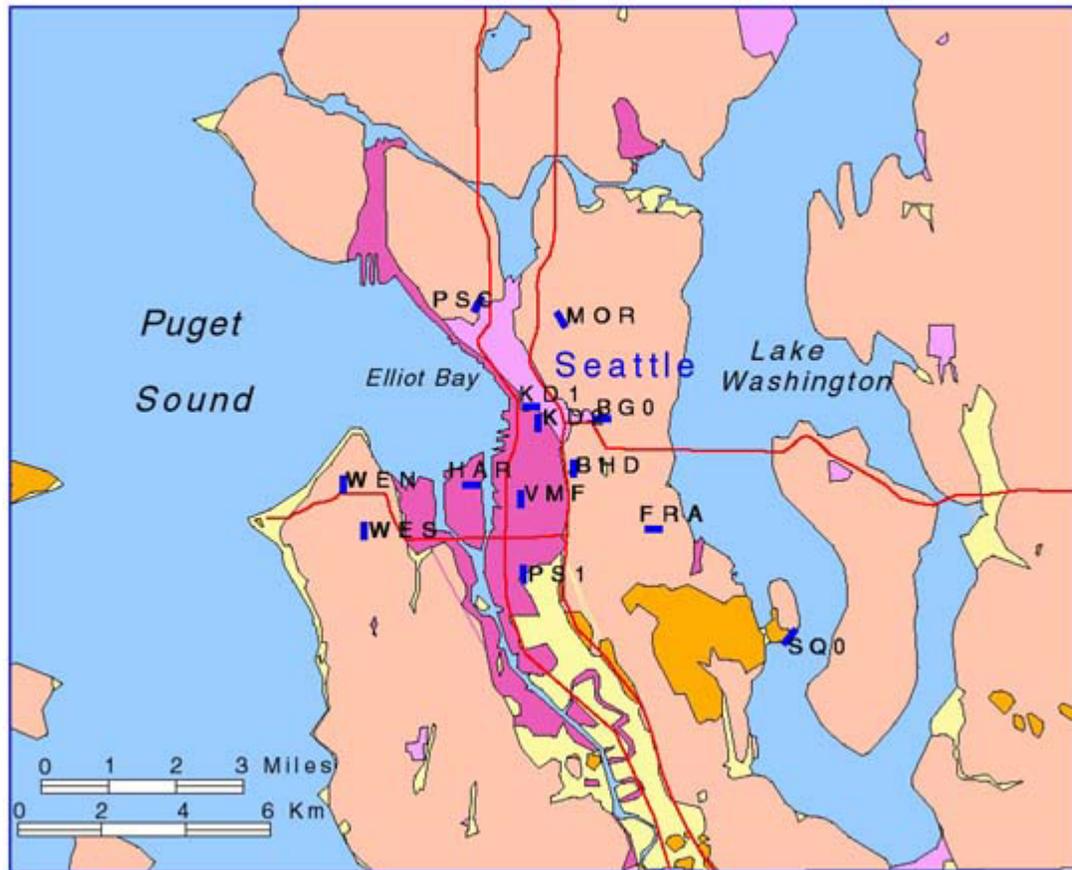
# About Fox Integration

- Transport professionals from one of Cambridge, MA's top universities
- Cutting-edge decision-making support tools
- Experience managing high-technology, multi-stakeholder environments
- You cannot *build your way out of* congestion, but you *manage your way through* it!

*We are your regional integration specialist*



# Puget Sound Background



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# Puget Sound Background

2000 population	<i>3.3 million</i>
1990-2000 growth	<i>10%</i>
Metropolitan area ranking	<i>13<sup>th</sup></i>
2003 hours in congestion	<i>46 per driver</i>
Area (sq. miles)	<i>6300</i>
Seattle (largest city)	<i>600,000</i>
% of pop unincorporated	<i>35</i>



# Puget Sound Background

- 4 counties
- 2 WSDOT Districts
- 7 transit agencies
- 70+ municipalities
- 2 Class I railroads (UP & BNSF)
- 2 major ports (Seattle & Tacoma)



# Puget Sound Transportation Goals, I

- Maintain existing infrastructure and services
- Encourage growth within Urban Growth Boundary
- Improve all modes of transportation through innovative strategies to build financial capacity to invest in transport



# Puget Sound Transportation Goals, II

- Tailor recommendations at the sub-regional and corridor levels, in recognition of the region's social, physical and cultural diversity

*We can achieve these goals through regionally-integrated ITS*



# The Fox FOCUS

- **F**lexibility
- **O**verarching consistency
- **C**ongestion pricing
- **U**nderstanding our customers
- **S**eamless transportation system



# Focus 1: Flexibility

- Options add value
- Why ITS?
  - Technology can increase capacity without committing land and durable resources
  - Infrastructure is not flexible; ITS is
  - Need a regional integrator for consistent flexibility choices



# Focus 2: Overarching consistency

- FHWA National ITS Architecture rules provide interoperability and coordination guidelines
- Why ITS?
  - To meet FHWA requirements → funding
  - Common structure that is locally adaptive
  - ITS considers all stakeholders

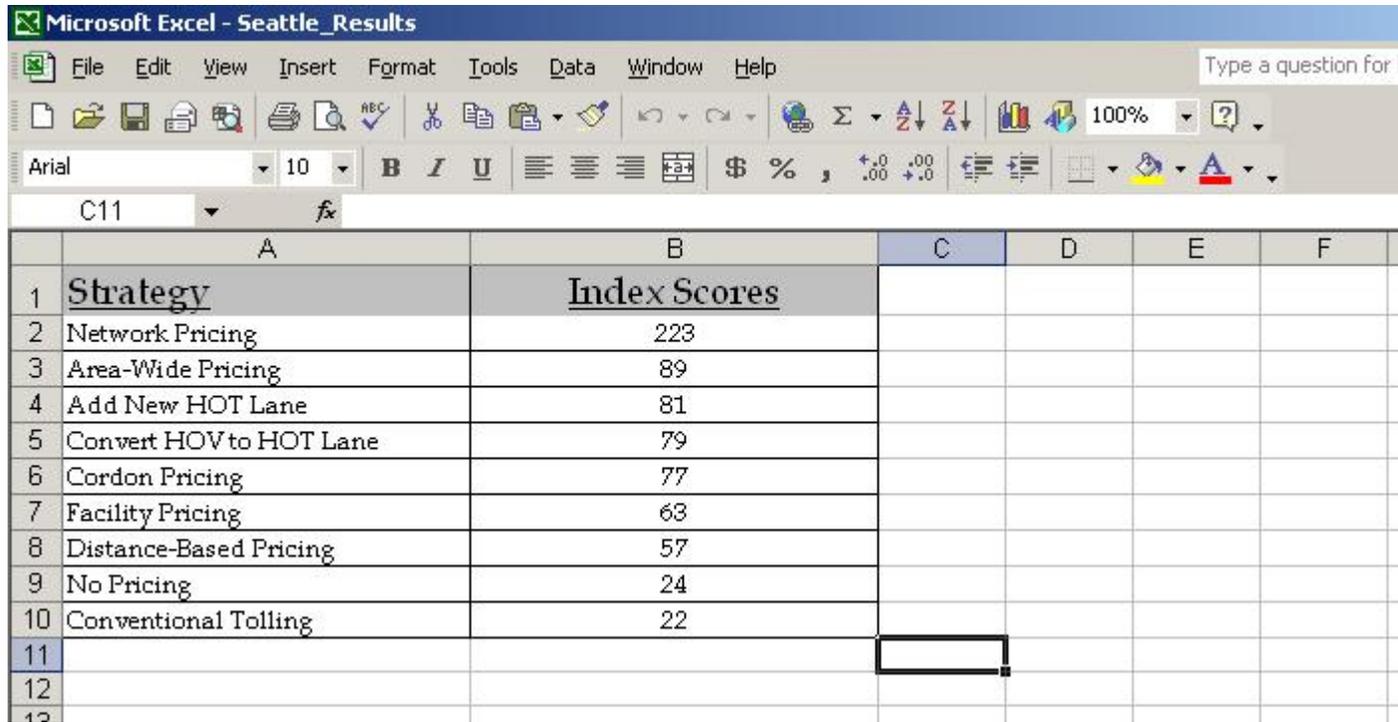


# Focus 3: Congestion pricing

- A form of demand management that provides differentiated customer service
- Why ITS?
  - Provides the technology necessary to carry out pricing
- Decision-making technical tools such as access to the Ensor Model



# Ensur Model



The screenshot shows a Microsoft Excel window titled "Seattle\_Results". The interface includes a menu bar (File, Edit, View, Insert, Format, Tools, Data, Window, Help), a toolbar with various icons, and a ribbon area with text formatting options (Arial, 10, Bold, Italic, Underline, etc.). The active cell is C11. The main data area is a table with the following content:

	A	B	C	D	E	F
1	<b>Strategy</b>	<b>Index Scores</b>				
2	Network Pricing	223				
3	Area-Wide Pricing	89				
4	Add New HOT Lane	81				
5	Convert HOV to HOT Lane	79				
6	Cordon Pricing	77				
7	Facility Pricing	63				
8	Distance-Based Pricing	57				
9	No Pricing	24				
10	Conventional Tolling	22				
11						
12						
13						



# Road pricing options

- **Network Pricing:** Network pricing is the purest form of congestion or marginal-cost pricing, i.e., it is *first-best* pricing.
- **Distance-based pricing:** Distance-based pricing requires vehicles to pay charges that are based on the number of miles traveled.
- **Area-wide pricing:** Area-wide pricing charges vehicles a fee for crossing a cordon (central business district) surrounding a defined area, driving within the area, parking on public roads inside the area, or a combination of these measures.
- **Cordon pricing:** A form of area-wide pricing, but vehicles are not charged for traveling within the cordon zone.
- **Express (e.g. HOT) lanes:** Express lanes charge certain vehicles for the use of dedicated (managed) lanes on an expressway that have a premium level-of-service (LOS). HOT lanes allow HOVs to travel on the express lanes at no charge or at a discount.
- **Facility (congestion) pricing:** Similar to traditional tolling, but the tolls vary either by level-of-congestion or time-of day.
- **Conventional (flat-rate) tolling:** Tolling all lanes of a facility with a charge that does not vary by level-of-congestion or time-of-day.



# Focus 4: Understanding our customers

- Transportation providers have to become “customer-centric” organizations to remain competitive in the 21<sup>st</sup> century
- Why ITS?
  - Allows agencies to provide better information and greater convenience to their end-users
  - Diverse constituent needs, from the daily bus commuter to the international freight shipper



# Focus 5: Seamless transportation system

- Integration of transportation systems using ITS will allow for “seamless” transfers of passengers, goods, and information
- Why ITS?
  - Interagency linkages facilitated by ITS technology *are* the “seamless” systems we seek to develop
  - ITS can provide the incentive for agencies to cooperate to develop seamless linkages



# The Fox Focus

- **F**lexibility
- **O**verarching consistency
- **C**ongestion pricing
- **U**nderstanding our customers
- **S**eamless transportation system



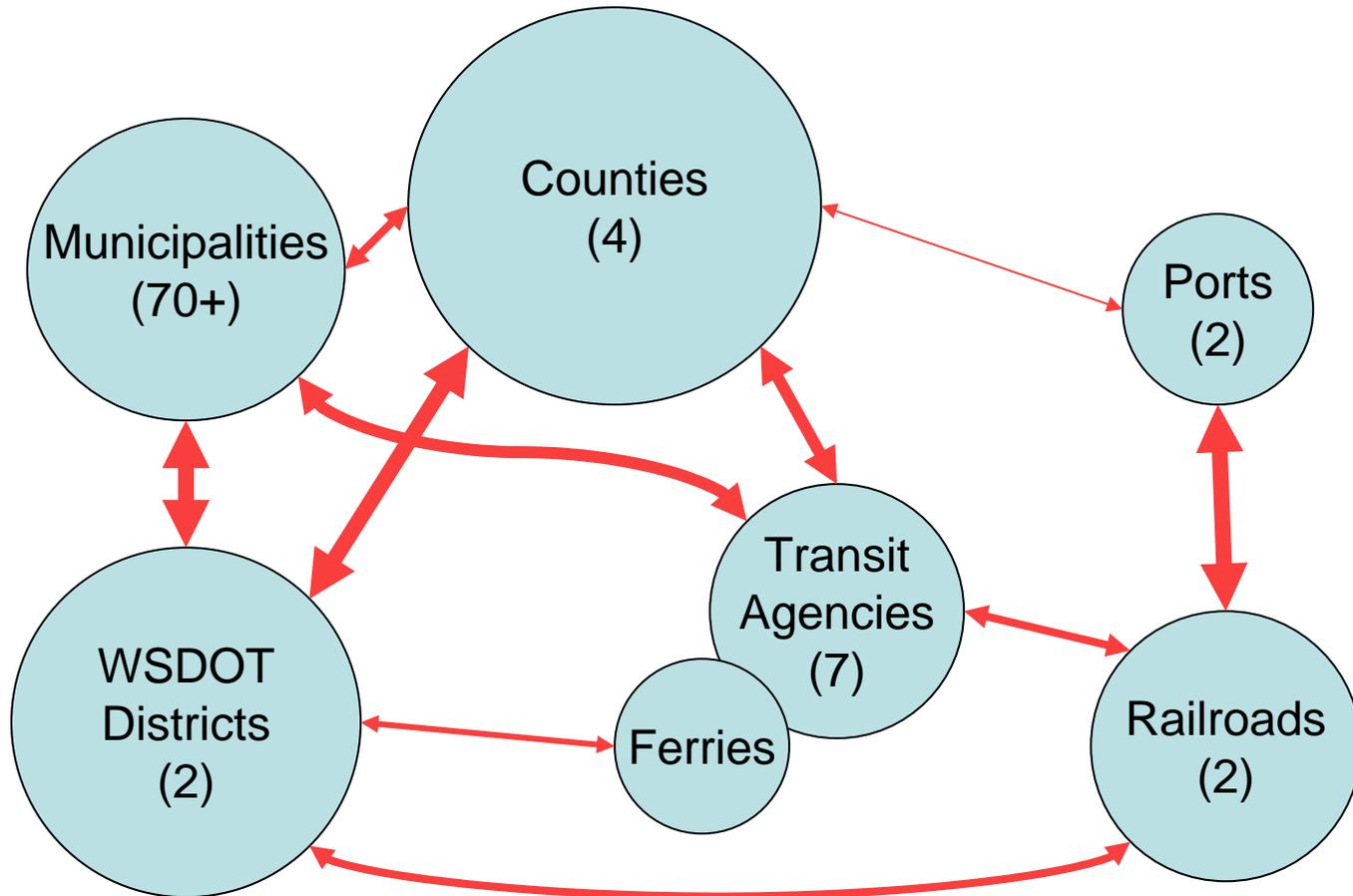
# Contractual Role

- To provide regional integrator services including managing implementation and strategy developments
- To serve as a central, coordinating force among PSRC agencies
- To engage member agencies in strategic subsets for project-specific ITS implementations



# Organizational Structure

Unmanaged Organizational Structure  Structure Managed by Fox Integrators



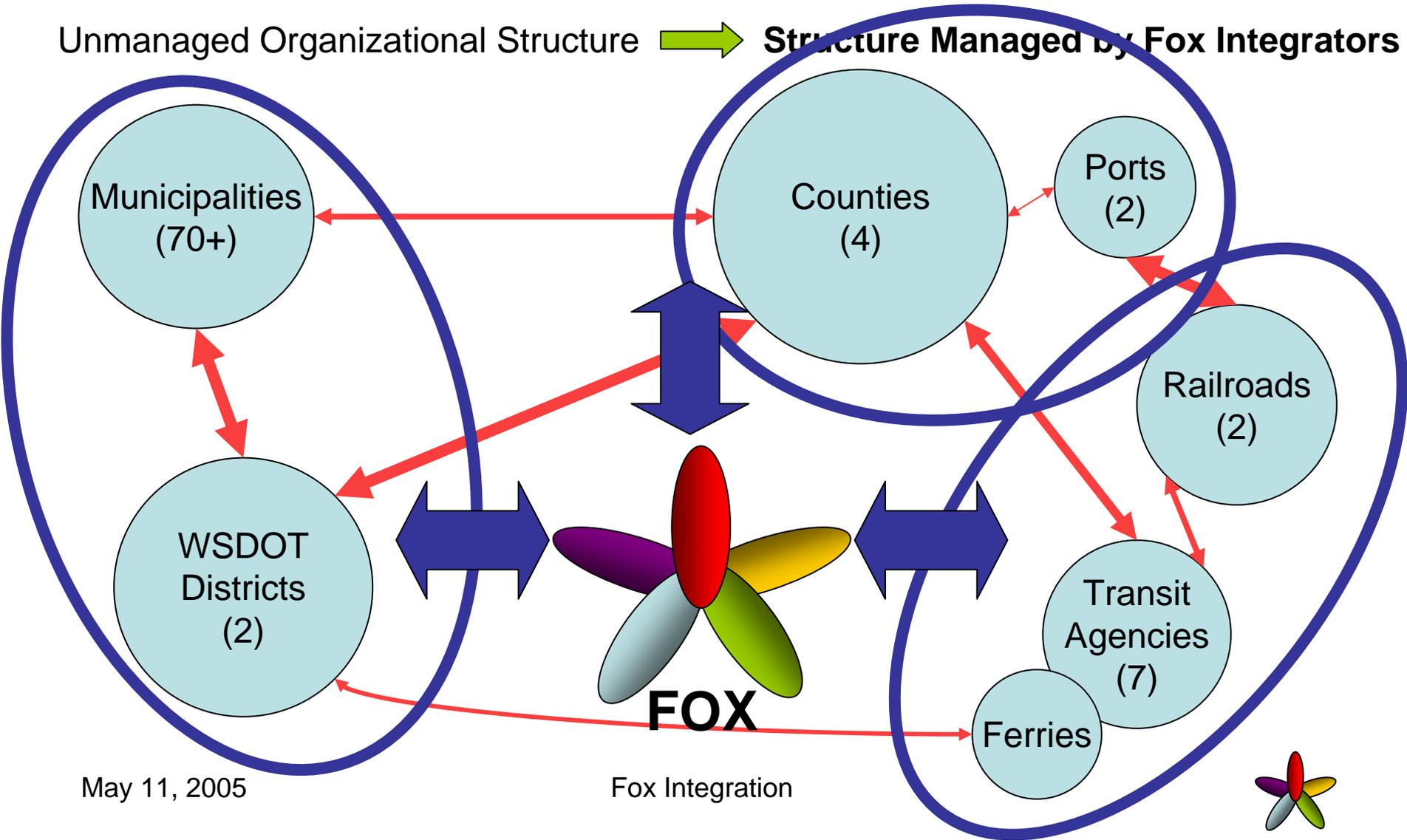
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# Organizational Structure

Unmanaged Organizational Structure  Structure Managed by Fox Integrators



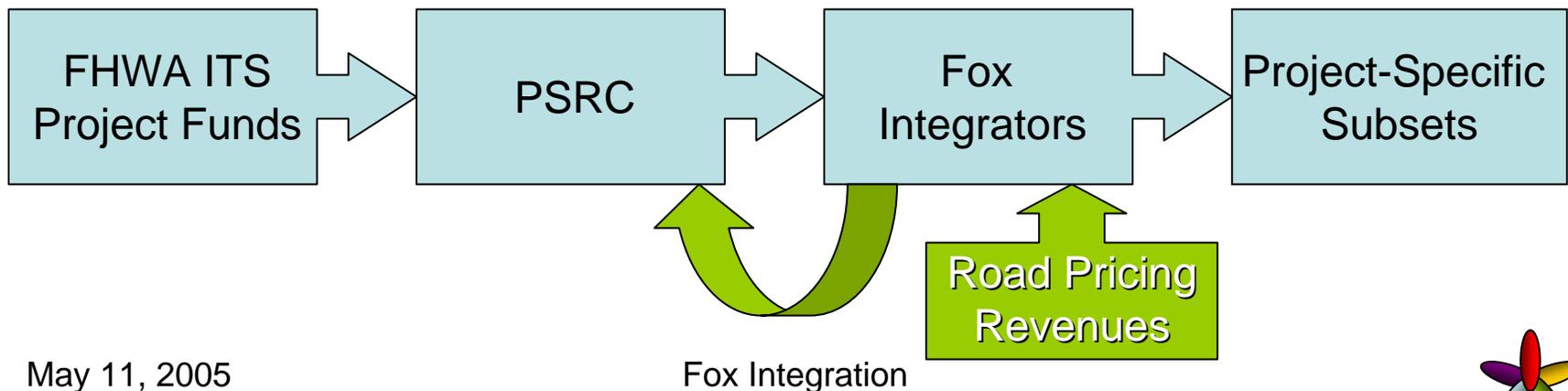
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# Financial Strategy

- Distribute PSRC's ITS funds to member subsets on a project-specific basis
- Revenues from road-pricing initiatives to be repaid to PSRC



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# What is the role of traditional ISPs in PSRC's Destination 2030?

## The Seattle Traveler

EDITORIALS

- Many users unwilling to pay for ATIS that *Destination 2030* advocates
- Growing segment of older travelers rely on traditional media channels for travel information
- Relationships with existing ISPs, therefore, must be preserved by PSRC and any Regional Integrator they commission



# Conclusions

- Myriad of public agencies have not proven ability to implement PSRC's *Destination 2030* on their own
- Implementation goals are littered with 'priorities' and achievement strategies are unfocused as they stand
- Powerful agencies are overlooking potential of initiatives with ports and traditional ISPs

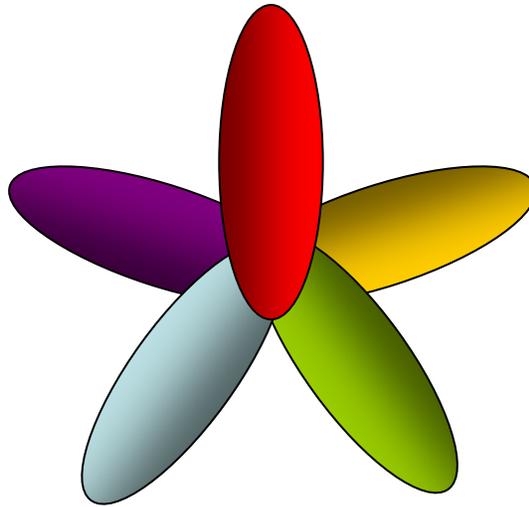


# Conclusions

- Capacity to approach project from a FOCUSed perspective
- Analytical tools and research to optimize implementation goals
- Strengthen existing relationships while building new links
- Integrate technology, systems, and institutions to meet regional transportation system goals



# Questions



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