

Maritime Administration
Workshop on Alternative Fuels for Ferries and Other Vessels

Evolution of Bay Area Ferry Plans & Environmental Issues

Ian Austin, Ph.D.

Vice President, Marine Services

URS/Dames & Moore

OUTLINE

HISTORICAL FERRY SYSTEM: 1850-1950
From Gold Rush to Golden Gate

EVOLUTION OF BAY AREA FERRY PLANS: 1990-2000
Metropolitan Transportation Commission
Bay Area Water Transit Authority

EVOLUTION OF ENVIRONMENTAL ISSUES
Waterside Issues
Wake, Air Emissions, Safety

Evolution of Bay Area Ferry Plans & Environmental Issues

SF BAY HISTORICAL SYSTEM

- 1850** Gold Rush - twice-weekly San Francisco to Oakland Estuary
- 1900** 19 routes, many extensions of railroad systems
- 1928** 43 ferries carried 47 million passengers, 6 million cars
- 1936 – 1937** Bay Bridge, Golden Gate Bridge Open
- 1950** Ferries in the wrecker's yard

REBIRTH

- 1970 – 1986** Sausalito, Larkspur, Vallejo services restart
- 1989** Loma Prieta Earthquake
Oakland, Alameda to SF service starts: 20,000 passengers/day
- 1997 – 1998** High-speed ferries on Vallejo, Larkspur routes
- 1999** 7 routes, 11 ferries carry 3.8 million passengers

Evolution of Bay Area Ferry Plans & Environmental Issues

BAY AREA FERRY PLANS (1)

Metropolitan Transportation Commission

Responsible for Bay Area Transit Planning and Funding

1990 Legislation: Proposition 116 contained \$30 million for ferries

1992 MTC Regional Ferry Plan

Findings

Transit travel time not competitive with automobile: Fast Ferries

Frequency not adequate

Terminals facilities lack basic amenities and accessibility

New Routes: Port Sonoma, Berkeley, Martinez

1999 MTC Regional Ferry Plan Update

Recommendations

15-minute service on inner Bay routes 149-passenger vessels

15-minute service to Larkspur 350-passenger

vessels

30-minute service to Vallejo

350-passenger vessels

Evolution of Bay Area Ferry Plans & Environmental Issues

BAY AREA FERRY PLANS (2)

1997 Senate Resolution No. 19 forms Blue Ribbon Task Force
Action Plan in May 1999

1999 SF Bay Area Water Transit Authority Created
Initial funding for the WTA, September 2000

Long-range, high-speed water transit planning authority given to WTA

WTA charged with developing Implementation and Operation Plan
Feasibility analysis and proposal for use of new technologies and
fuels

To minimize marine and ground transportation emissions
In cooperation with BAAQMD and BCDC

Safety plan

Programmatic EIR

Funding, financing, cost effectiveness

Evolution of Bay Area Ferry Plans & Environmental Issues

EVOLVING ENVIRONMENTAL ISSUES

Landside

NEPA checklist issues: land use changes including induced growth, biological resource impacts, transportation impacts (congestion and parking), noise, public services, aesthetics

Waterside

Wake Wash impacts on shoreline

Air Emissions

Safety (VTS)

Wildlife Habitat and Seasonal Foraging Areas

Dredge Disposal

Noise

Air Emissions getting most attention recently

Transit mode emissions debate

NOx and PM emissions, GHGs

WTA is charged with evaluating vessels and fuels

WTA can establish a low-emission policy

Evolution of Bay Area Ferry Plans & Environmental Issues

SUMMARY

SF Bay provides great opportunity for expanded Water Transit

Water Transit attracts ridership when:

- **Fast enough to compete with automobiles**
- **Frequency and equipment reliability build confidence**
- **On longer routes, slow vessels not an option**

Recreational vessels place less emphasis on speed,

- **Equal importance on safety and reliability**

WTA can, and should, set a higher standard for engine emissions

- **Challenge is to provide reliable, safe, cost-effective engines**
- **Safety paramount for both vessels and landside infrastructure**

Vallejo Baylink Ferry

- **SB 1662 provides \$5 million towards low-emission high-speed vessel**
- **What can be delivered in 18 months that meets Vallejo to SF service profile, has proven reliability, known life-cycle costs, safety and maintenance records**
 - **within budget?**