Political Dimensions of Congestion Pricing: the Case of the San Francisco-Oakland Bay Bridge

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Photo: Barrie Rokeach ©2005; MTC

Roadmap

- Context setting
- First, the not so good news
  Bay Bridge effort
- Second, the better news
  Overcoming challenges &
  political hurdles if the timing is right

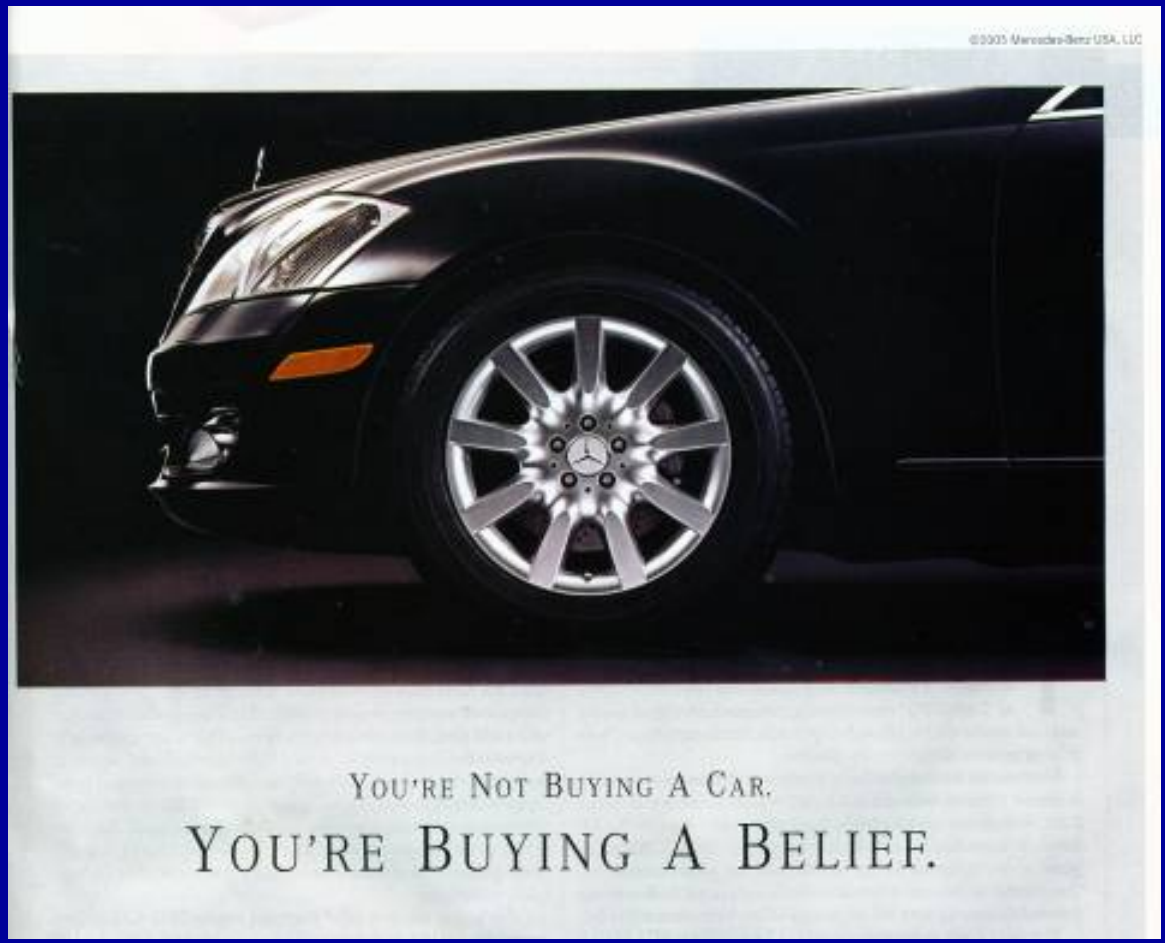
And a thank you to NEXTOR and Professor Mark Hansen

Non-Road Examples

- Airline tickets: peak seasons, time-of-day
- Matinee movie tickets
- Telephone use: business hours vs. evenings/weekends (esp. cell calls)

A student favorite example!

Should freeways be “free-of-charge”?



Congestion Pricing Types: one size does not fit all

- Existing versus new
- All lanes (toll bridge, toll road)
- high-occupancy toll lanes (HOT) lanes
- Area-based (London)

Relevance of Bay Bridge Case

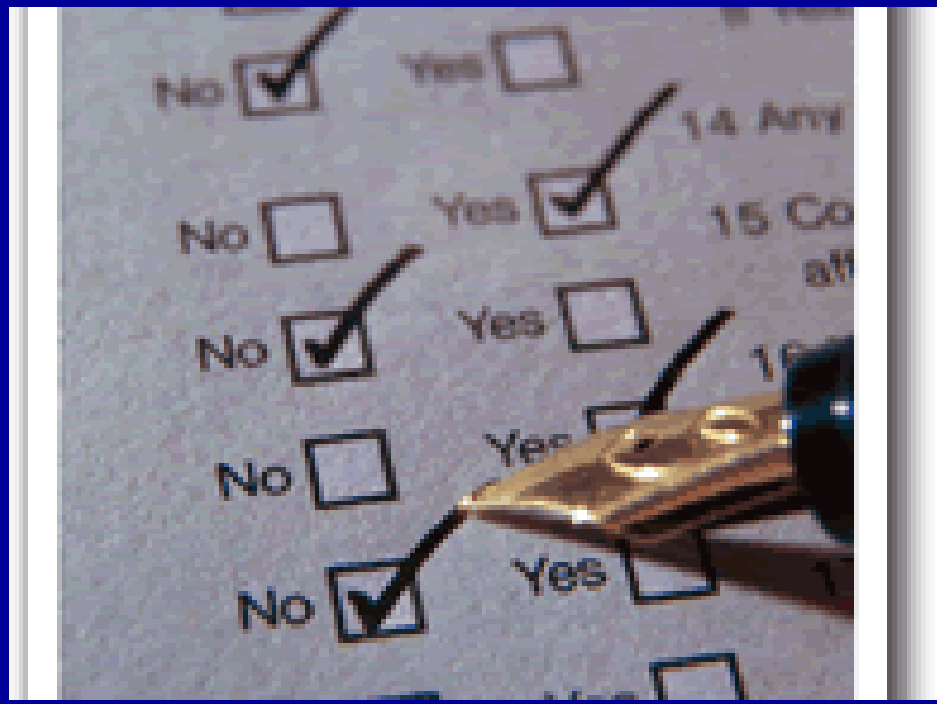
- A new frontier – goal of reducing delay plus others
- No pricing projects in US to point to then
- None on existing facility
- Significant congestion (20 minutes delays)
- Geographically constrained--where expand capacity? new bridge would be costly & major environmental issues
- Equity & political consequences…

- First federal project selected in U.S.
- Funded through federal Congestion Pricing grant (program now called “Value Pricing”)
- Test case for federal grant process, agreements, guidance

Key Partners

- Metropolitan Transportation Commission
- State Dept of Transportation (Caltrans)
- Business and environmental groups—
  Important combination
- Federal Highway Administration (FHWA)

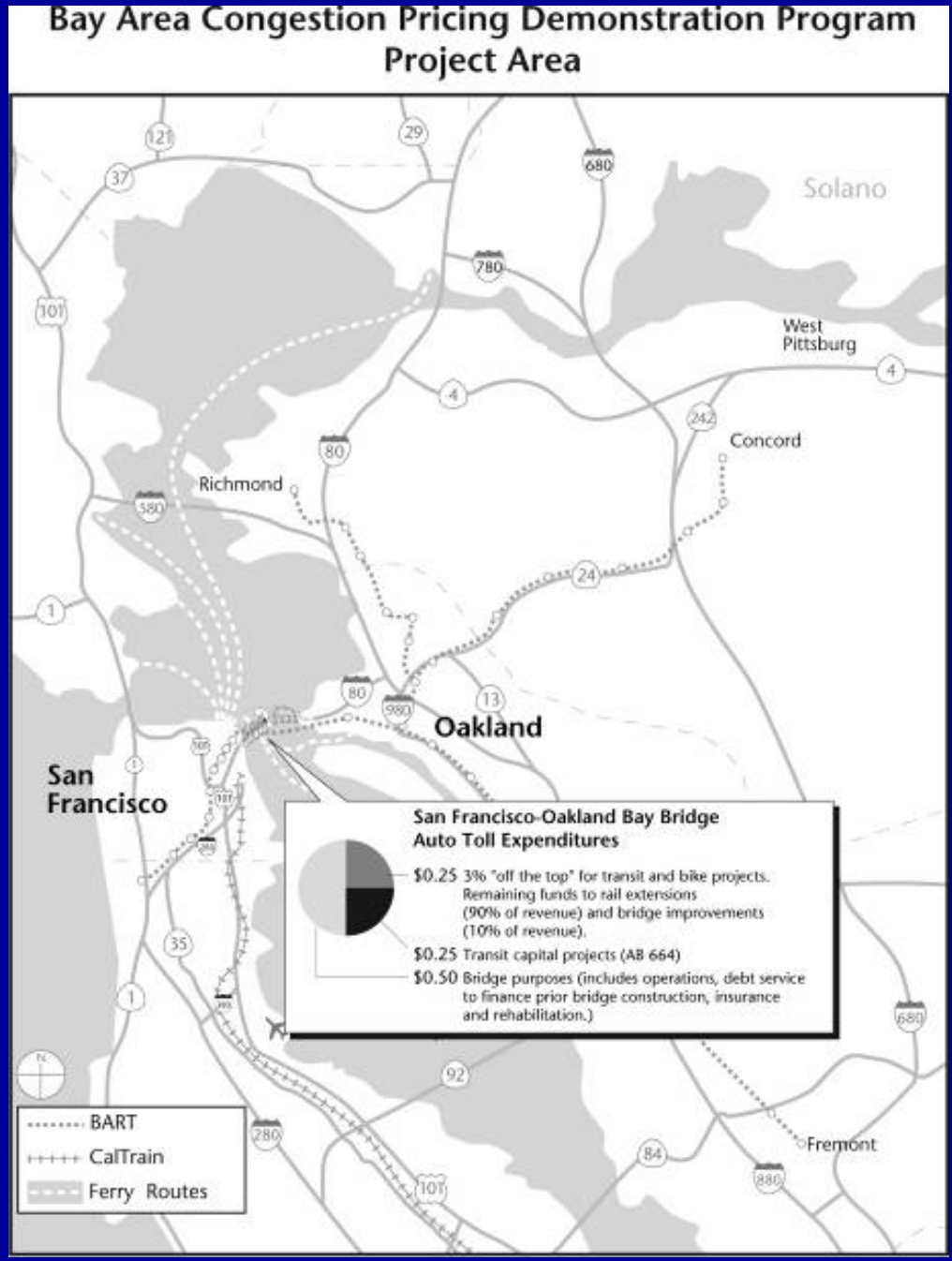
- Need state legislative authorization to increase toll because bridge is a state facility
- Toll was $1, carpools (3+ occupants) free
- Examined $2 to $5 peak toll, both directions with $ to travel alternatives



- Many preconceptions in bridge case
- For airports, preconceptions? historic issues?

Preconception #1

- Bridge already paid for
- Tolls should be removed
- Pricing as “double taxation”
  - regular toll *and* the peak surcharge???
  - What about the gas tax?


Bay Area Congestion Pricing Demonstration Program
Project Area
Solano
West Pittsburg
Concord
Richmond
Oakland
San Francisco
Fremont
San Francisco-Oakland Bay Bridge
Auto Toll Expenditures
$0.25 3% "off the top" for transit and bike projects. Remaining funds to rail extensions (90% of revenue) and bridge improvements (10% of revenue).
$0.25 Transit capital projects (AB 664)
$0.50 Bridge purposes (includes operations, debt service to finance prior bridge construction, insurance and rehabilitation.)
BART
CalTrain
Ferry Routes

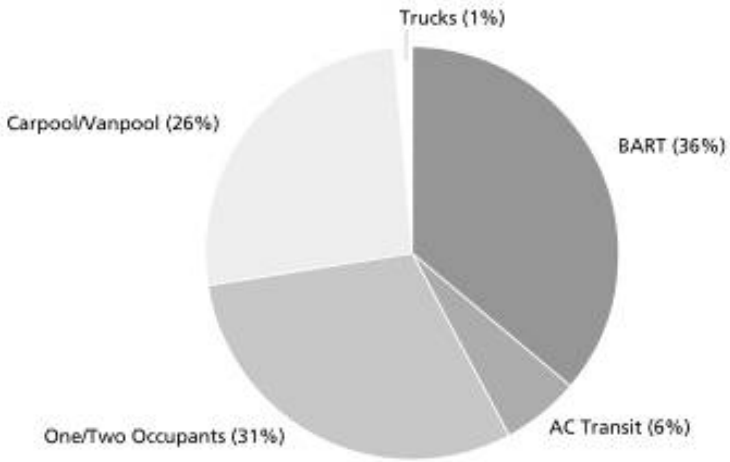
Source: MTC

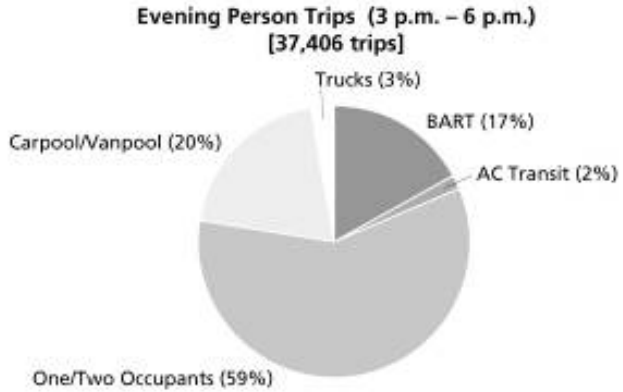
Preconception #2

- Everyone in corridor would pay more

Figure 2

Bay Bridge Trips by Travel Mode
(Westbound)





Source: Caltrans/MTC, Traffic Survey Series, April 1991
(To be updated with April/May 1994 data)

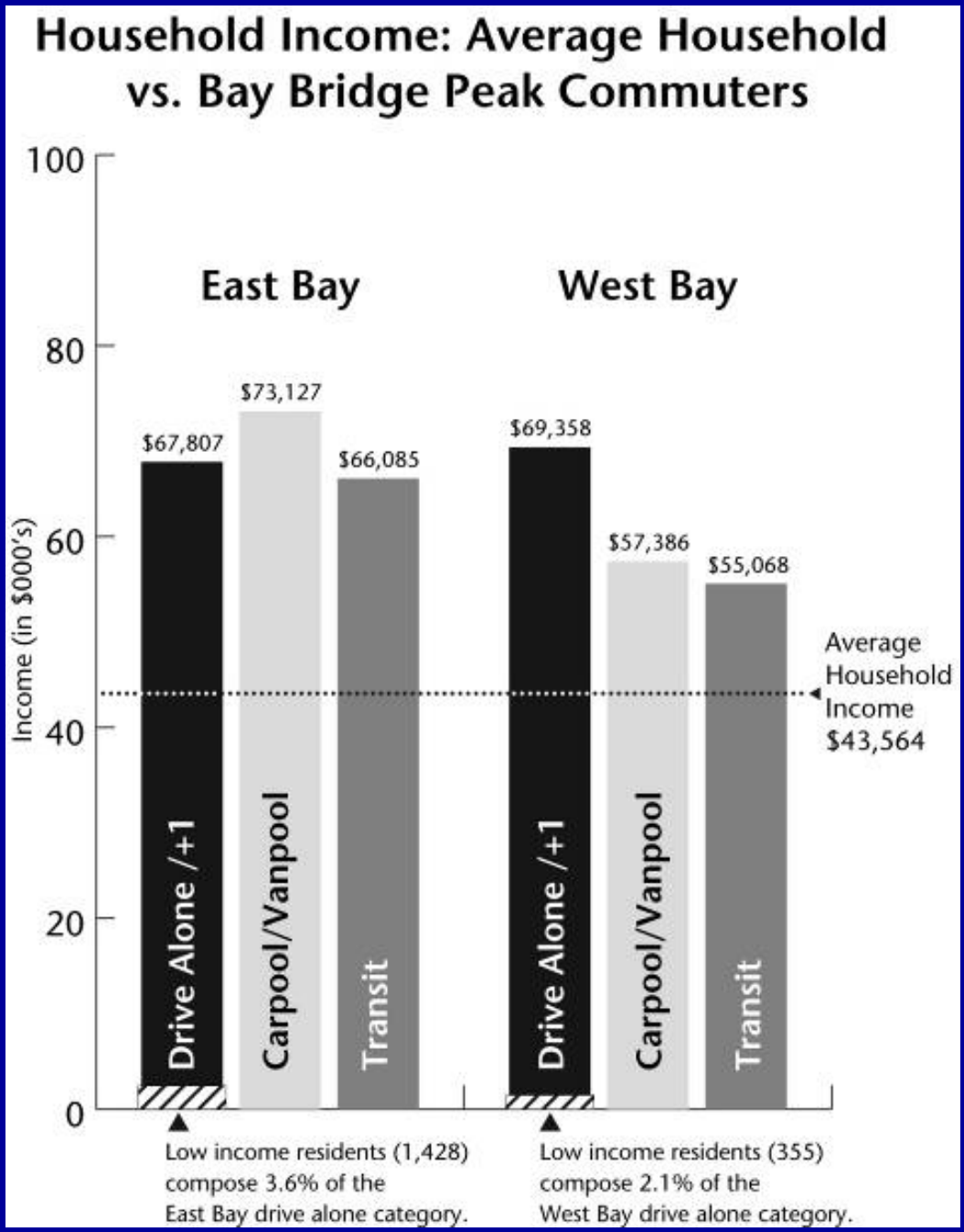
MTC Graphics/pb — 4/5/94

Source: MTC

Preconception #3

- Higher tolls will hurt low income drivers
- Isn’t that the main equity issue?
- Key issue for elected officials—wanted a clear solution to this problem

Household Income: Average Household vs. Bay Bridge Peak Commuters



Source: MTC

Also equity issues — not just income related

- Individual equity:
  - impact on poor
  - “car-dependents” (for work, travel during peaks because of childcare, inflexible work schedules), and/or do not have commute alternatives
- Geographic equity: East vs. West Bay
- Modal equity: $ distribution between transit agencies, carpool, bicycle

Preconception #4

- Drivers will not want to pay a higher toll

http://www.transcoalition.org/reports/wct/i/busidiot.jpg

Photograph by Sarah Leen, National Geographic

Preconceptions gathered through:

- focus groups
- stakeholder interviews
- media accounts

Five major concerns voiced

1. need visible delay reduction

2. toll could not be too high

3. But…skeptical about reducing delay unless very high toll

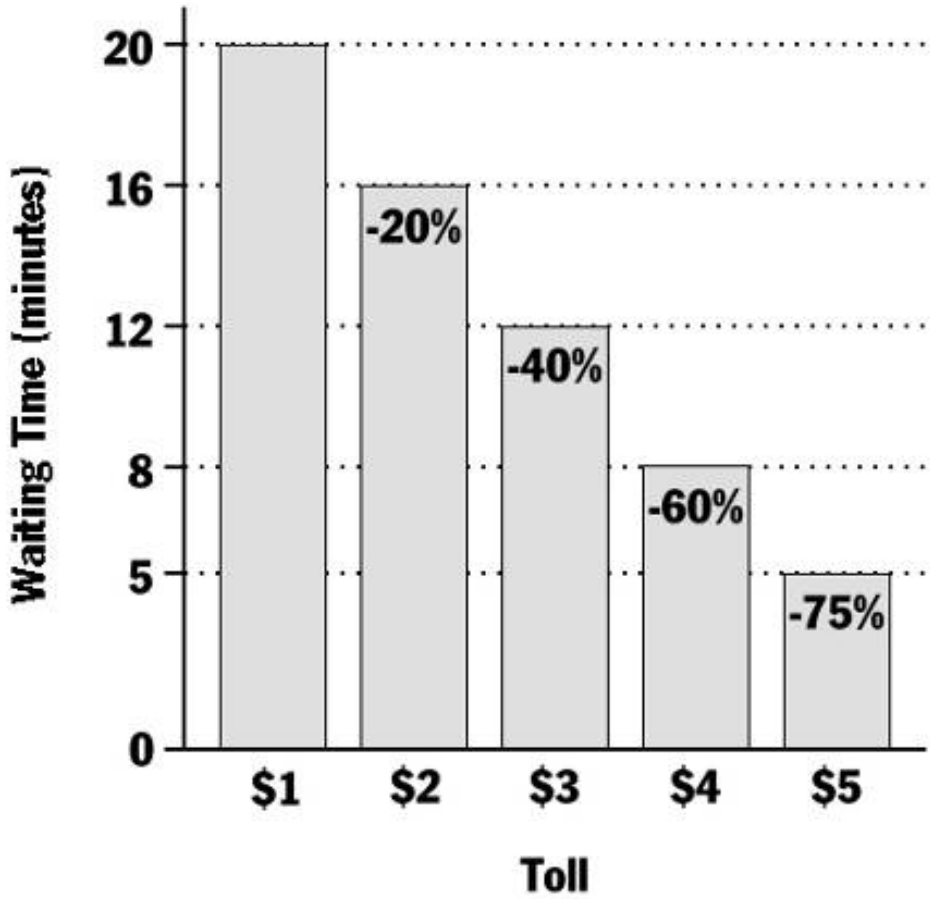
4. need visible transit improvements

5. skeptical on government spending new dollars wisely and delivering promised projects

The Proposal--“package approach”

- $3 peak toll, morning and evening
- Carpools remain toll-free
- $23 million generated to fund transit, rideshare, bicycle improvements
- “Lifeline” toll via electronic toll collection

Reducing Congestion in the Bay Bridge Corridor



Source: MTC

"SHOW ME THE MONEY"

Proposed Mobility Alternatives

The revenue to fund the proposed alternatives listed below is based on a one-time federal demonstration grant of $23.5 million and an estimated $22 million annually in new toll revenues.

	One-Time Expenditure	Estimated Annual Funding Level
Transbay Transit Services	**$3.9 million**	**$6.2 million**
Additional BART service and increased complementary AC Transit transbay service		
Additional ferry service to San Francisco from Vallejo, Alameda, Oakland, and Harbor Bay and new service from Berkeley		
Access Improvements to Transbay Transit Services	**$9.8 million**	**$8.0 million**
Improved feeder service (buses or shuttles) from core areas of transbay commuters' home and work locations to transbay transit services:		
• Oakland Hills/Piedmont, East Oakland/Coliseum, Alameda, Richmond, Hercules, Hayward, Fremont/Union City, Vallejo		
• Hunter's Point/Bayview, Mission/Bernal Heights, Downtown, South of Market, Potrero Hill, Fisherman's Wharf/Embarcadero, Excelsior/Diamond Heights		
• Pleasant Hill, Concord, Lafayette, Orinda		
• San Francisco International Airport, South San Francisco, San Bruno		
Other Components	**$9.8 million**	**$7.8 million**
No increase in the peak toll for low-income travelers who qualify for PG&E/Pacific Bell lifeline programs		
Transit discounts for passengers who transfer between two systems		
Increased security at stations, on vehicles or at bus stops for BART, AC Transit and SF Muni		
Ridesharing, telecommuting and alternative work schedules assistance		
Bike program (additional bike racks/lockers and enhanced bike shuttle service)		
Increased accident-clearing tow service		
Public information and education on congestion pricing and related mobility improvements		
Required monitoring, evaluation and administration		
Total	**$23.5 million**	**$22.0 million**

Source: MTC

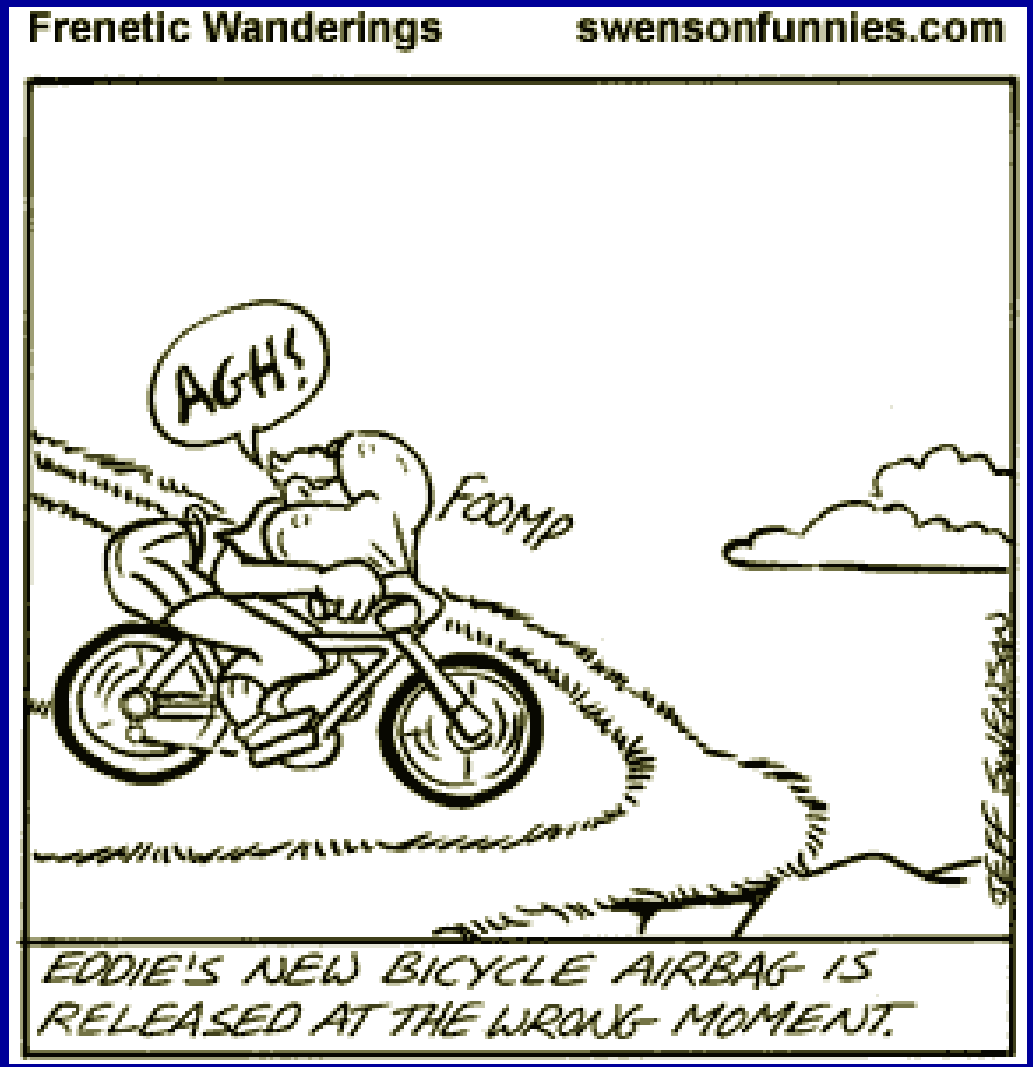
Lifeline Toll Component

- Eligible low-income drivers would remain at $1
- Modeled after Pacific Gas & Electric's program
- 1,780 eligible households estimated out of 56,260 (3%)
- A $3 peak toll = $22.5 million annually
- lifeline toll "cost" = $1.5 million

http://www.680smartlane.org/virthouse.html

Timing, Timing, Timing

- November 1994 election, state and federal
- Revenue Neutrality pitched:
  - off-peak discounts
  - “shoppers special”
- From inception, recommended citizens oversight committee



http://www.veryfunnypics.com/cartoons/trans/page/8.htm


HOME DELIVERED
'EAST BAY EDITION

San Francisco Chronicle

NORTHERN CALIFORNIA'S LARGEST NEWSPAPER

WEDNESDAY, JANUARY 31, 1996

415-777-1111 50 CENTS

★★★★★

Cost of Bay Bridge Retrofit Quadruples

1 Bedrock supporting the western span of the Bay Bridge is faced with cracks and fissures; retrofit plans now include boring deeper into the bedrock and anchoring caissons with steel cables

2 Engineers now recommend fitting the decks and piers on the east span with special shock absorbers

3 East span piers are supported by 60-year-old timbers that need to be reinforced with concrete pilings

The cost of quake repairs to the east span is so high, Caltrans is considering building a new bridge from Yerba Buena Island to Oakland

West span

Caisson

Timber piles

San Francisco

Oakland

Water

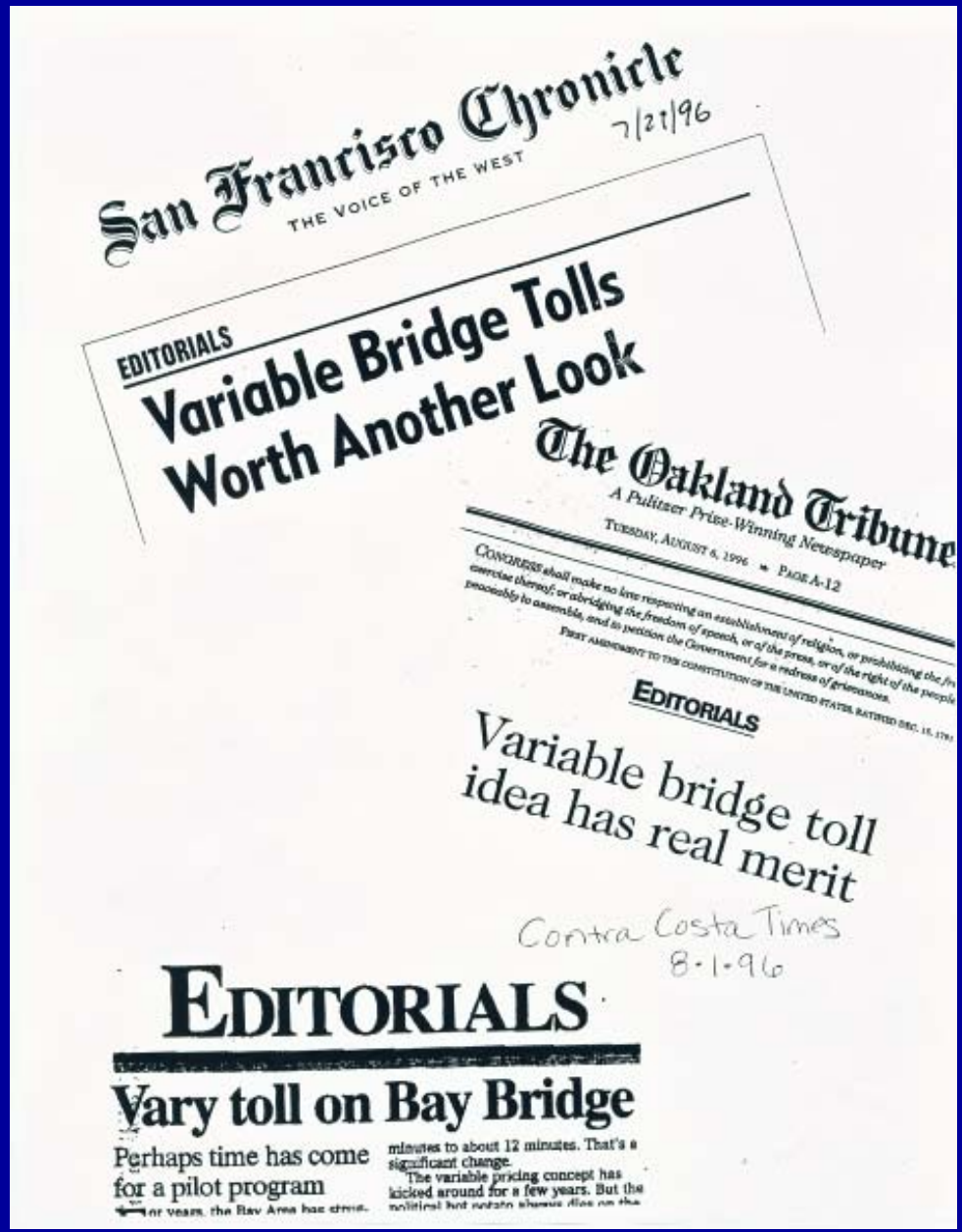
Soil

Bedrock

BY BILL SMITH / THE CHRONICLE

And now the funding crisis…

With a funding crisis, pricing viewed as a potential solution



San Francisco Chronicle
THE VOICE OF THE WEST
7/21/96

EDITORIALS

Variable Bridge Tolls Worth Another Look

The Oakland Tribune
A Pulitzer Prize-Winning Newspaper
TUESDAY, AUGUST 6, 1996 ■ PAGE A-12

CONGRESS shall make no law respecting an establishment of religion, or prohibiting the fr
exercise thereof; or abridging the freedom of speech, or of the press, or of the right of the people
peaceably to assemble, and to petition the Government for a redress of grievances.
FIRST AMENDMENT TO THE CONSTITUTION OF THE UNITED STATES, RATIFIED DEC. 15, 1791

EDITORIALS

Variable bridge toll idea has real merit

Contra Costa Times
8-1-96

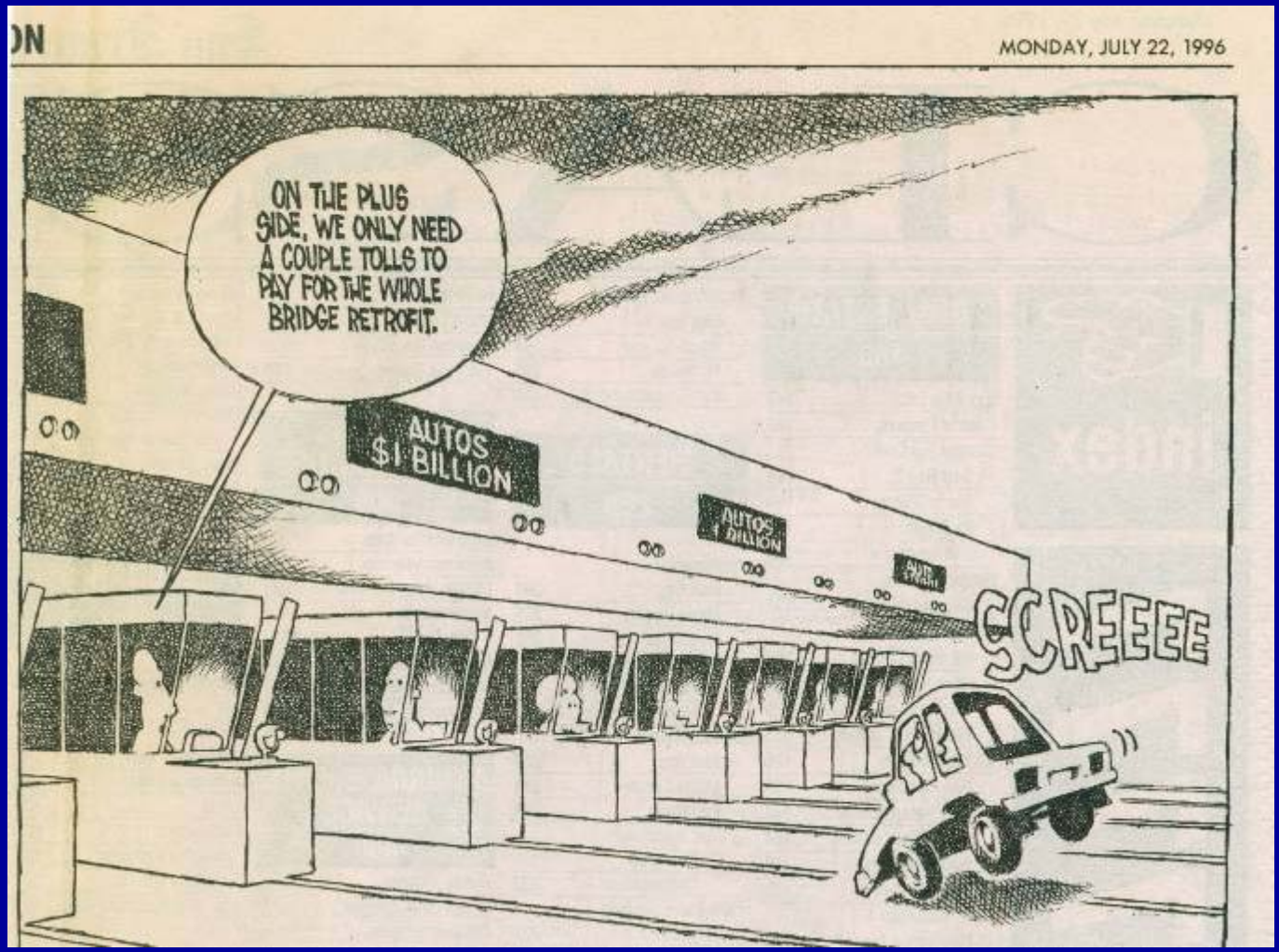
EDITORIALS

Vary toll on Bay Bridge

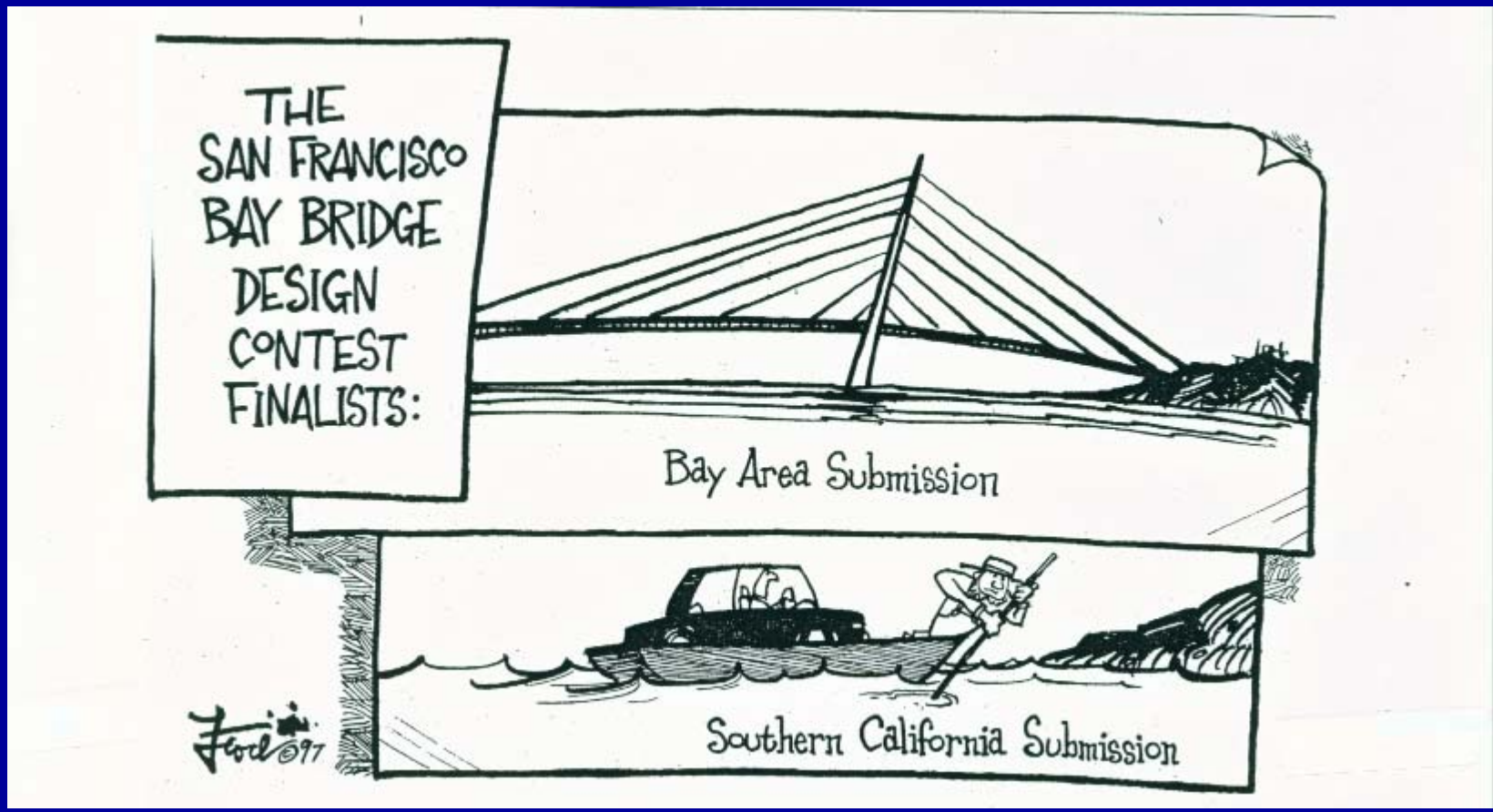
Perhaps time has come for a pilot program

minutes to about 12 minutes. That's a significant change.

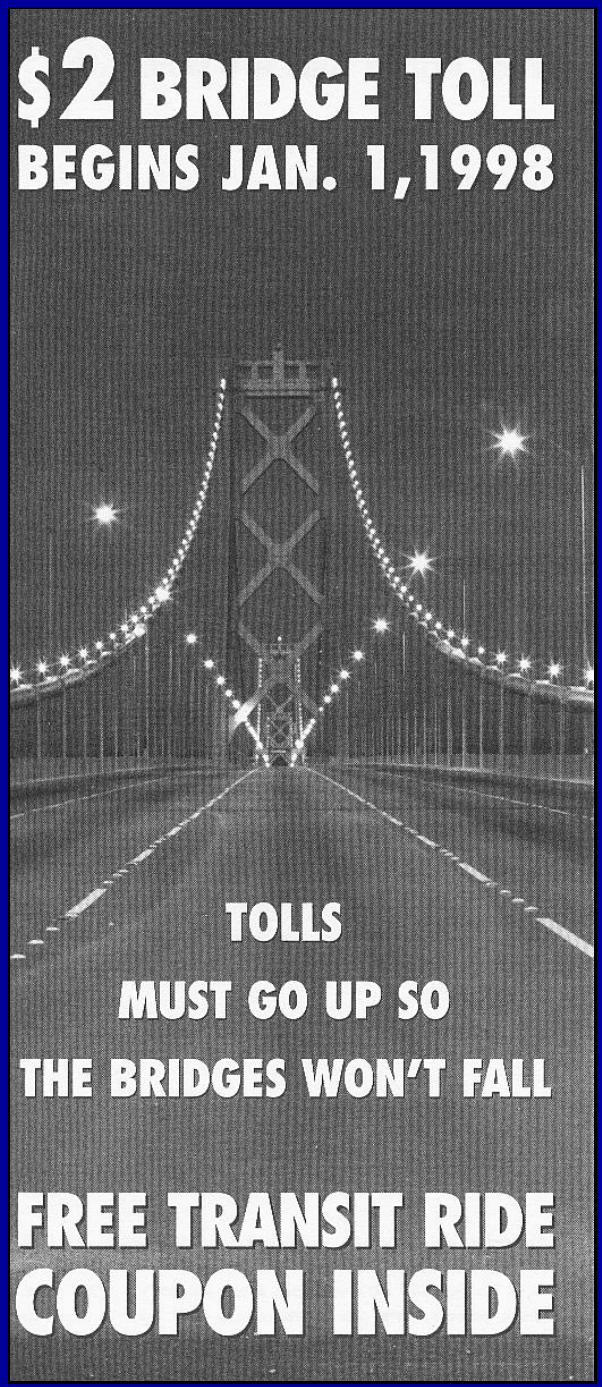
The variable pricing concept has kicked around for a few years. But the



SF Chronicle, 7/22/04



SF Examiner, 7/18/97



Flat toll increase prevailed to fund new bridge

Source: MTC/Caltrans

Existing and New Spans

Existing Bridge

New East Span
(simulation)

Existing span photograph: Barrie Rokeach ©2005; MTC
new bridge simulation: MTC/Caltrans

Bay Bridge Lessons Learned

- Revenue Implications, federal pilot program
- Equity is multi-faceted—need visible projects to address
- Timing, timing, timing
- Partnerships / local champions
- Patience, Flexibility, & Perseverance (also, on-going monitoring & evaluation, transparency, accountability)

Lessons are good…
but from the bridge effort & others
what can we do?

“the better news”

Action Item #1

Marketing & Project Positioning

- ✓Public & media involvement early!
- ✓Clear, visible benefits
- ✓Provide choice (to pay or not pay toll?) or off peak discount?
- ✓reliability
- ✓easier to market new/expanded facilities (ex: new HOT lanes)

Seeing is believing!

Plastic pylons separate priced lanes from free lanes on State Route 91

Above: http://www.ops.fhwa.dot.gov/publications/congestionpricing/congestionpricing.pdf;
Below: SR91 Annual Report, FY 2005

For a commercial of SR 91 in California, see http://www.91expresslanes.com/virtdrive.html

State Route 91; http://www.91expresslanes.com/

"…customers estimated shaving nearly 30 minutes off their morning and afternoon drives, even during rush hour.

That's enough time to
catch a child's soccer game,
stop at a grocery store before dinner or
simply enjoy more time relaxing at home"

Orange County Transportation Authority

SR91 Annual Report, FY 2005, p.4

"HOT lanes really are a form of
'congestion insurance'
for any traveler willing to pay the toll –
whether it is a businessperson late for
a meeting or
a parent racing to pick up a child
at day care"

Metropolitan Transportation Commission

http://www.mtc.ca.gov/planning/hov/faq.htm

Action Item #2

Consider toll setting via a performance measure

- San Diego and in CA future HOT lanes:
  - Price varies to maintain a certain level of service
  - *Shifts toll setting from public officials to drivers!* *(Shoup, 2005)*

Action Item #3

Visible Benefits of New Revenues

Consider whether off-peak discounts and revenue neutrality needed

Where does the $ go? New infrastructure, transit, other

Recent paper looks at not investing in transit/transp. necessarily (King & Shoup)

Action Item #4

Pilot Tests & Sunset Provisions

To find out “real world” impacts &
if preconceptions about equity,
other sticking points come to pass

Demo funding assistance?

Transparency, oversight & accountability

When is pricing implemented on roads?

- benefits are clear & defined
- Clarity on use of funds
- local area perceives a crisis in terms of
  - congestion
  - Needing additional funds
  - Increasing use of an underutilized facility, such as an HOV lane
- diverse constituency in support; strong local champions (policy entrepreneurs)

Is Pricing Worth the Price--

Your thoughts?

Vacaville Reporter, 12/22/94

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