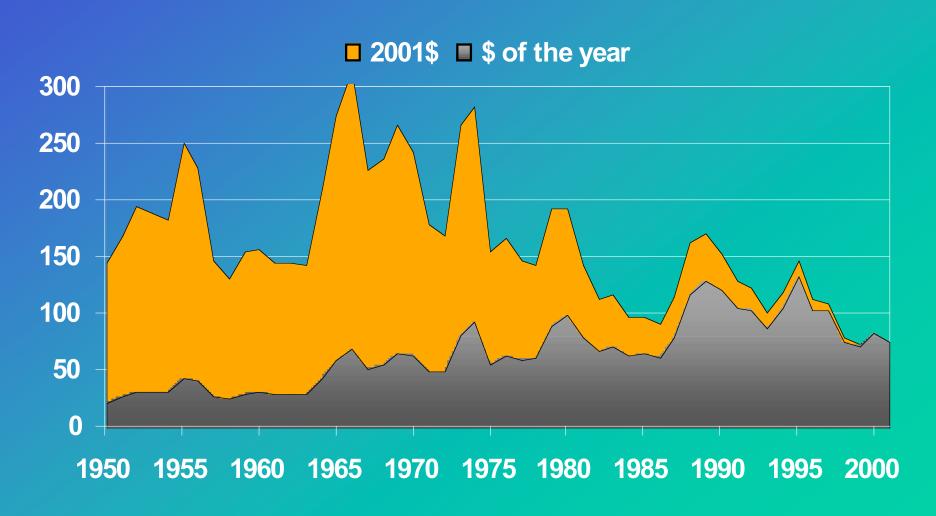
# Outlook for Mining in Alaska

Global Markets
Alaskan Issues
Resource Potential

# Global Consolidation & Change

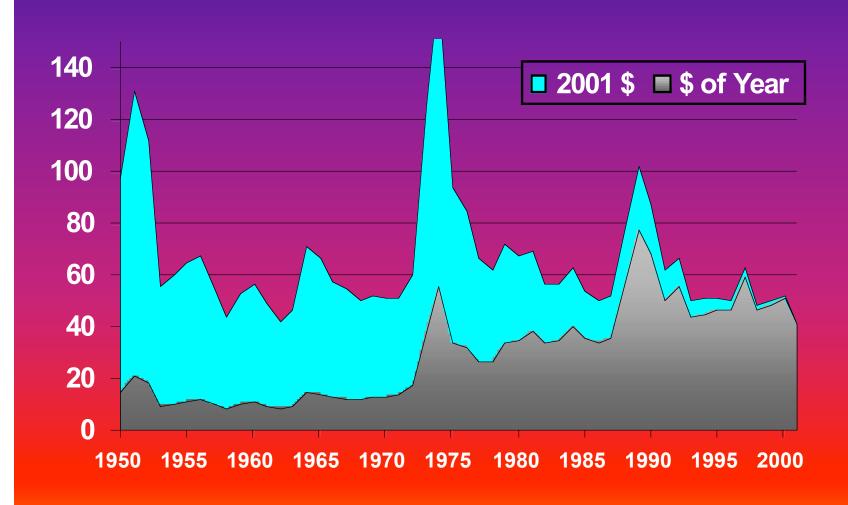
- Capital Markets Are Very Tight
- Junior Capital Market is Dismal
- Management Focused on Return on Capital
- 40% of Top Mining Companies Have Disappeared in the Past 5 Years

# Average Annual Copper Prices (Cents per Pound)



#### Annual Average Zinc Prices

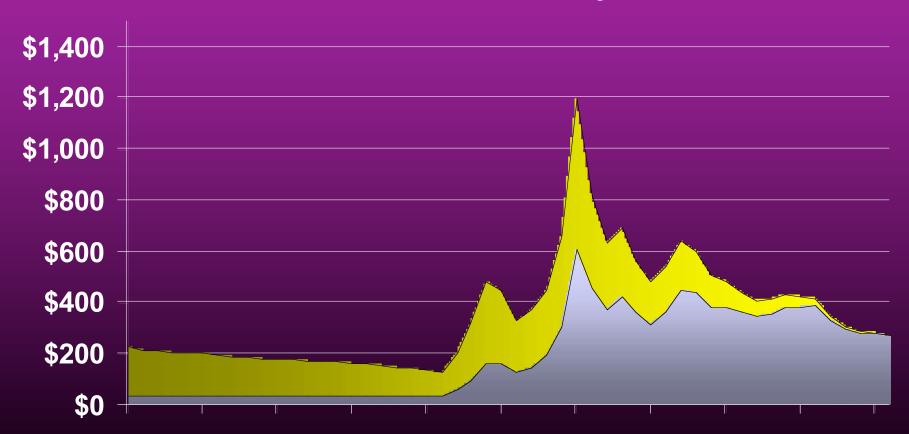
(Cents per pound)



#### **Average Annual Gold Prices**

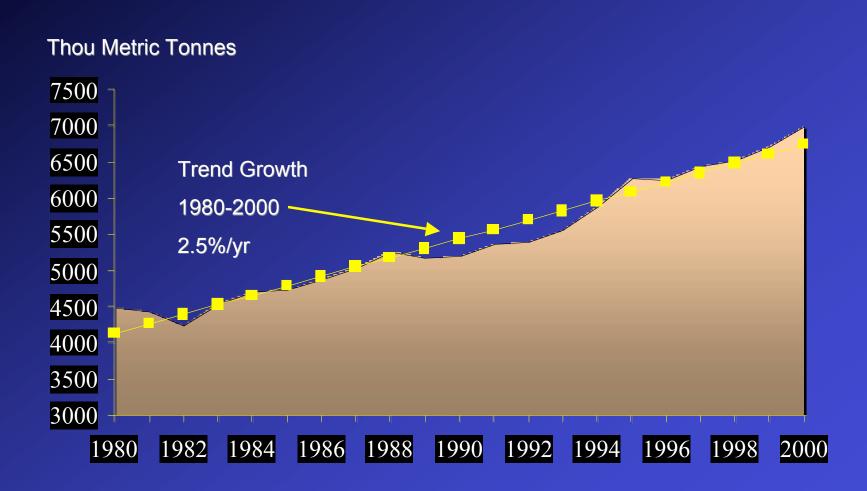
(Dollars per troy ounce)

**■** 2001\$ **■** \$ of the year



1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000

#### Western World Zinc Consumption



Source: ILZSG, Teck Cominco

### ZINC REFINING CAPACITY



Source: Teck Cominco

## Restraints to Mining in Alaska

- Land Status Issues
- Environmental Regulations that are "Urban Oriented"
- Pre-feasibility Costs
- Transportation & Utility Costs

## Dealing With Restraints

- Native Lands
- State Lands, Mining Laws & Taxation
- Effective DEC Committed to Finding Solutions
- AIDEA & Positive State Attitude

#### Alaskan Mine Producers

- Healy (Usibelli) Coal
- Green's Creek Silver/Zinc/+
- Red Dog Zinc/Lead
- Fort Knox Gold

# Known Big Deposits

- Beluga Coal
- Red Dog District Zinc/Lead
- Pogo Gold
- Donlin Creek Gold
- Pebble Copper
- Ambler District Copper/+

#### Gold from Gravels

- Placer industry has contracted enormously in past 20 years
- Outlook is poor considering environmental and market conditions
- Historical placer districts are good places to look for big, hard rock gold deposits

# Do Not Forget Gravel is Mined Too

## Exploration

- Food for Future Industry
- Greatly Reduced in 2002
- Unlikely to Rebound Completely to Historical Levels

### Long Term

- New Big Discoveries
- New Commodities: Platinum,
   Palladium, Gemstones, Tin, Others
- New Technology Especially Related To Local Power Generation and Producing Metals from Concentrate

#### Conclusions

- Excellent Producing Mines Insure Industry for 30 or More Years
- Very Little New Activity in 2002
- Long Term Metal Trends Are Not Favorable
- Unlikely to Rebound Completely to Historical Levels

#### Thanks To...

Paul Glavinovich (Anchorage)

Steve Borell (AMA)

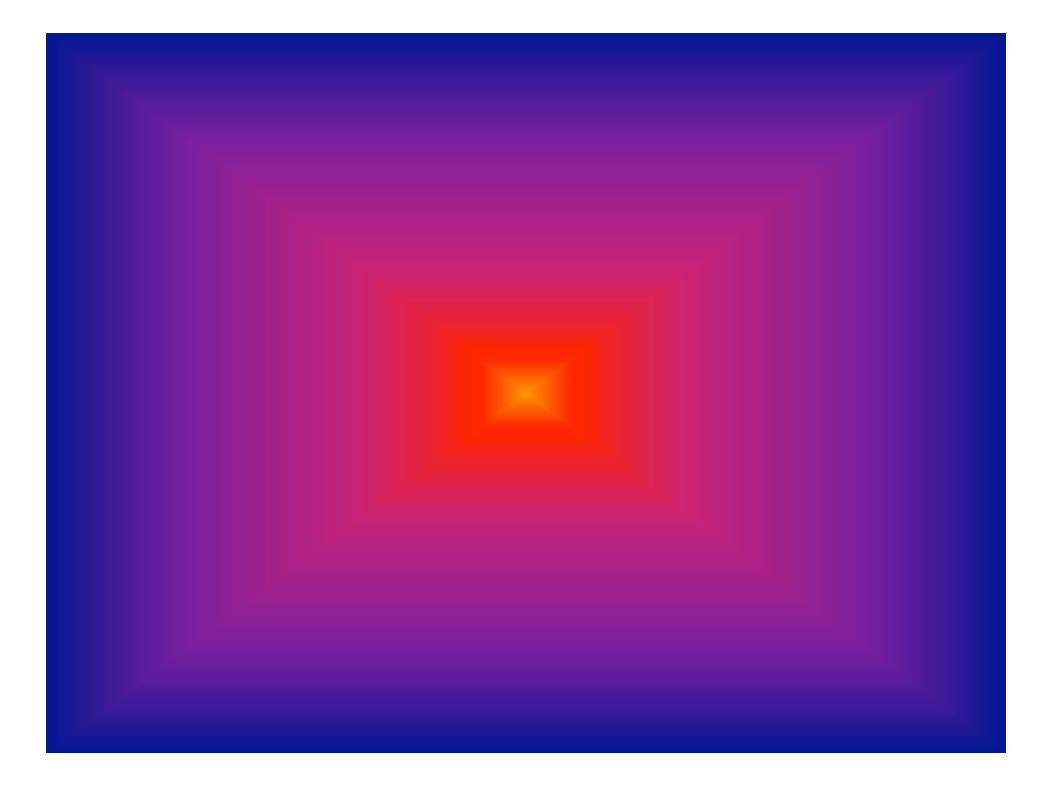
Neil Seldon (Vancouver)

Charlotte MacCay (TeckCominco)

Andy Roebuck (TeckCominco)

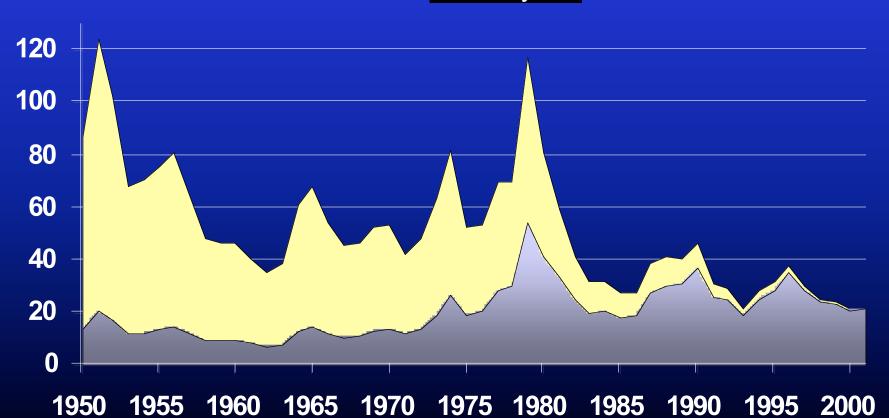
Jason Brune (RDC)

& Others



# Annual Average LEAD Prices (cents/pound)

■ 2001\$ ■ \$ of the year



# Average Annual Silver Prices (\$ Per Troy Ounce)

