



SCHWEITZER
ENGINEERING
LABORATORIES[®]

Making a Great Place to Live, Work, and Raise a Family Even Better

September 8, 2011

Edmund O. Schweitzer, III
Schweitzer Engineering Laboratories, Inc.



Making Electric Power Safer, More Reliable, and More Economical[®]

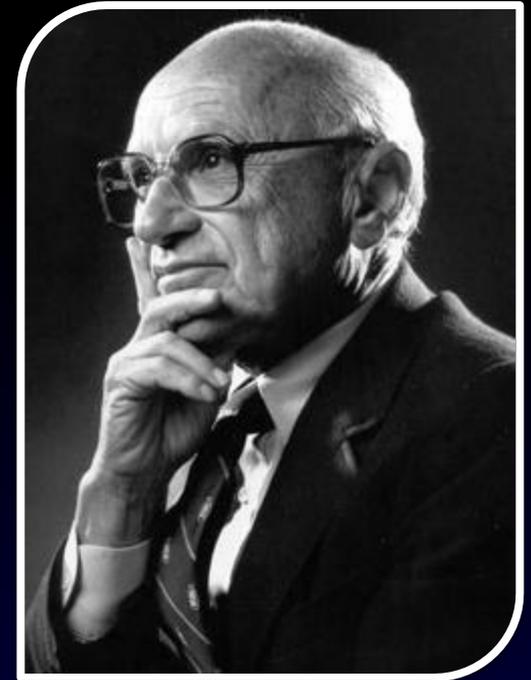
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Economic Freedom

Political Freedom

“Economic arrangements play a dual role in the promotion of a free society... freedom in economic arrangements is an end in itself. In the second place, economic freedom is also an indispensable means toward the achievement of political freedom.”

– Milton Friedman in *Capitalism and Freedom*



Role of Government

Maughmer Freedom Philosophy (WSU)

- Free enterprise
- Limited government
- Maughmer believed in maximum individual liberty and responsibility
- Focus on Constitution and Bill of Rights
- U.S. became the most productive and prosperous nation in the world

2010 Index of Economic Freedom

U.S. Is 8th and Slipping

World Rank	Country	Score	Change	Business Freedom	Trade Freedom	Fiscal Freedom	Gov. Size
1	Hong Kong	89.7	-.03	98.7	90	93	93.7
2	Singapore	86.1	-1	98.2	90	90.7	95.3
3	Australia	82.6	0	90.3	85.1	61.4	64.9
4	New Zealand	82.1	0.1	99.9	86	63.6	51.3
5	Ireland	81.3	-0.9	92.8	87.5	71.1	61.8
6	Switzerland	81.1	1.7	81.2	90	68.2	68.9
7	Canada	80.4	-0.1	96.5	88.1	76.7	54.1
8	United States	78	-2.7	91.3	86.9	67.5	58
9	Denmark	77.9	-1.7	97.9	87.5	35.9	22
10	Chile	77.2	-1.1	64.8	88	77.5	89.6

2010 Index of Economic Freedom

U.S. Is 8th and Slipping

World Rank	Country	Monetary Freedom	Investment Freedom	Financial Freedom	Property Rights	Freedom From Corruption	Labor Freedom
1	Hong Kong	83.1	90	90	90	81	87.4
2	Singapore	80.9	75	50	90	92	98.9
3	Australia	82.7	80	90	90	87	94.9
4	New Zealand	83.1	80	80	95	93	88.8
5	Ireland	79	95	80	90	77	79
6	Switzerland	81.3	80	80	90	90	81.8
7	Canada	75.4	75	80	90	87	81.5
8	United States	78.1	75	70	85	73	94.8
9	Denmark	79.3	90	90	90	93	93.7
10	Chile	73	80	70	85	69	75.4

From <http://www.heritage.org/index/TopTen.aspx>

Fair, Flat, Free, Open Markets

Government Must Defend Them

- “Is it an issue of state?”
- Gov: don’t pick winners and losers.
- Make it **easy** to start a business, build a house.
- Enhance competitiveness through freedom.

“If we are not to destroy individual freedom, competition must be left to function unobstructed.”

– Friedrich Hayek, *The Road to Serfdom*, 1944

Our Purpose

*Making Electric Power Safer,
More Reliable, and More Economical[®]*



Invent, Design, Manufacture, Sell, Support, Teach, Install, Test ...



Secure Digital
Communications



Revenue & Power
Quality Metering



Engineering
Services



Control Houses &
Panel Solutions



Integration &
Automation



Capacitor, Breaker, Bus,
& Transformer Protection



Rugged Computing &
Software Solutions



Generator & Motor
Protection



Fiber-Optic
Communications



Government &
Industrial Solutions



Precise Time &
Synchrophasors



Faulted-Circuit
Indicators

115 kV / 230 kV Avista Substation



677-1

SEL-421
PROTECTION RELAY CONTROL
SEL
INVERTER ENGINEERING LABORATORIES

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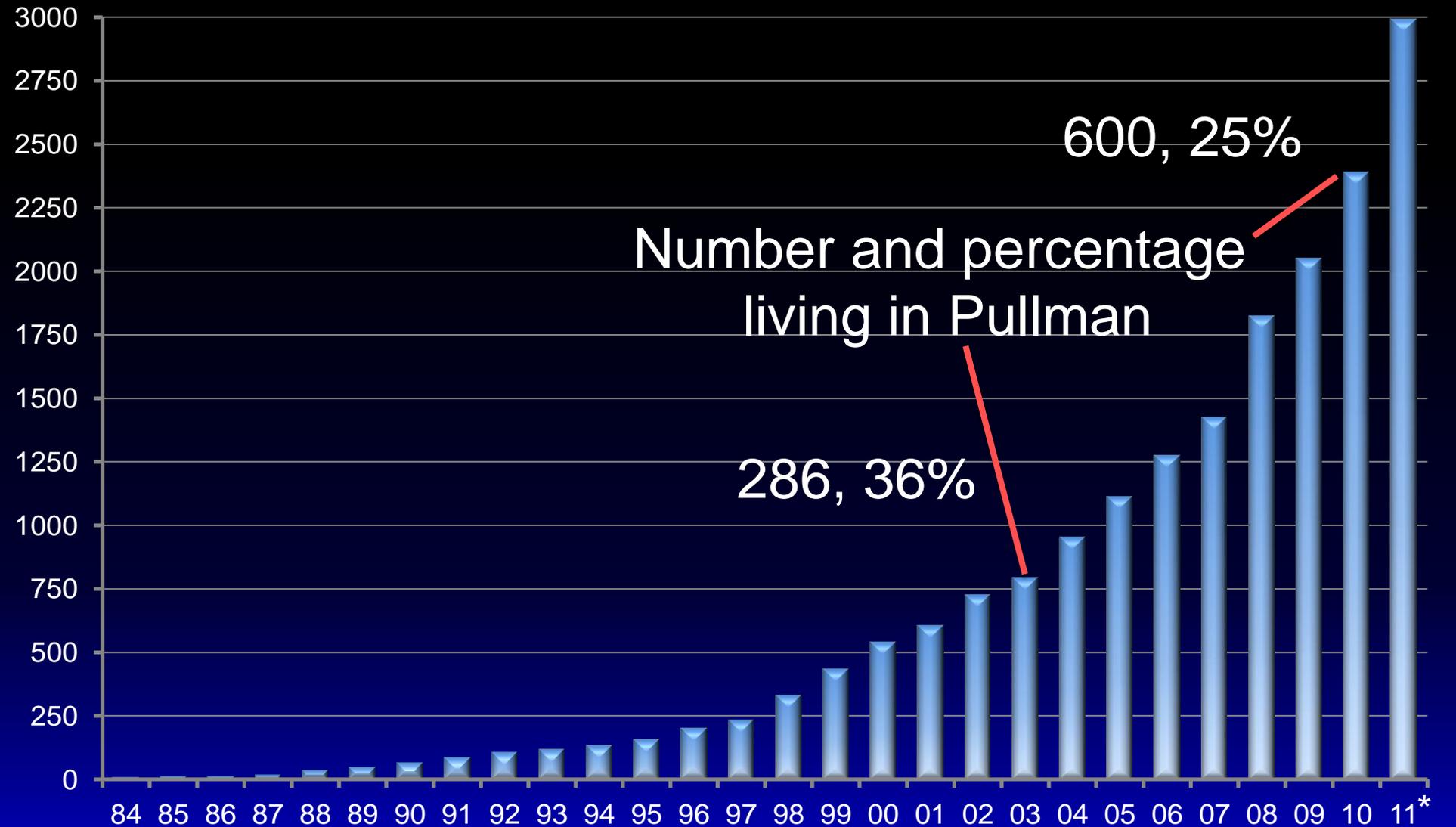
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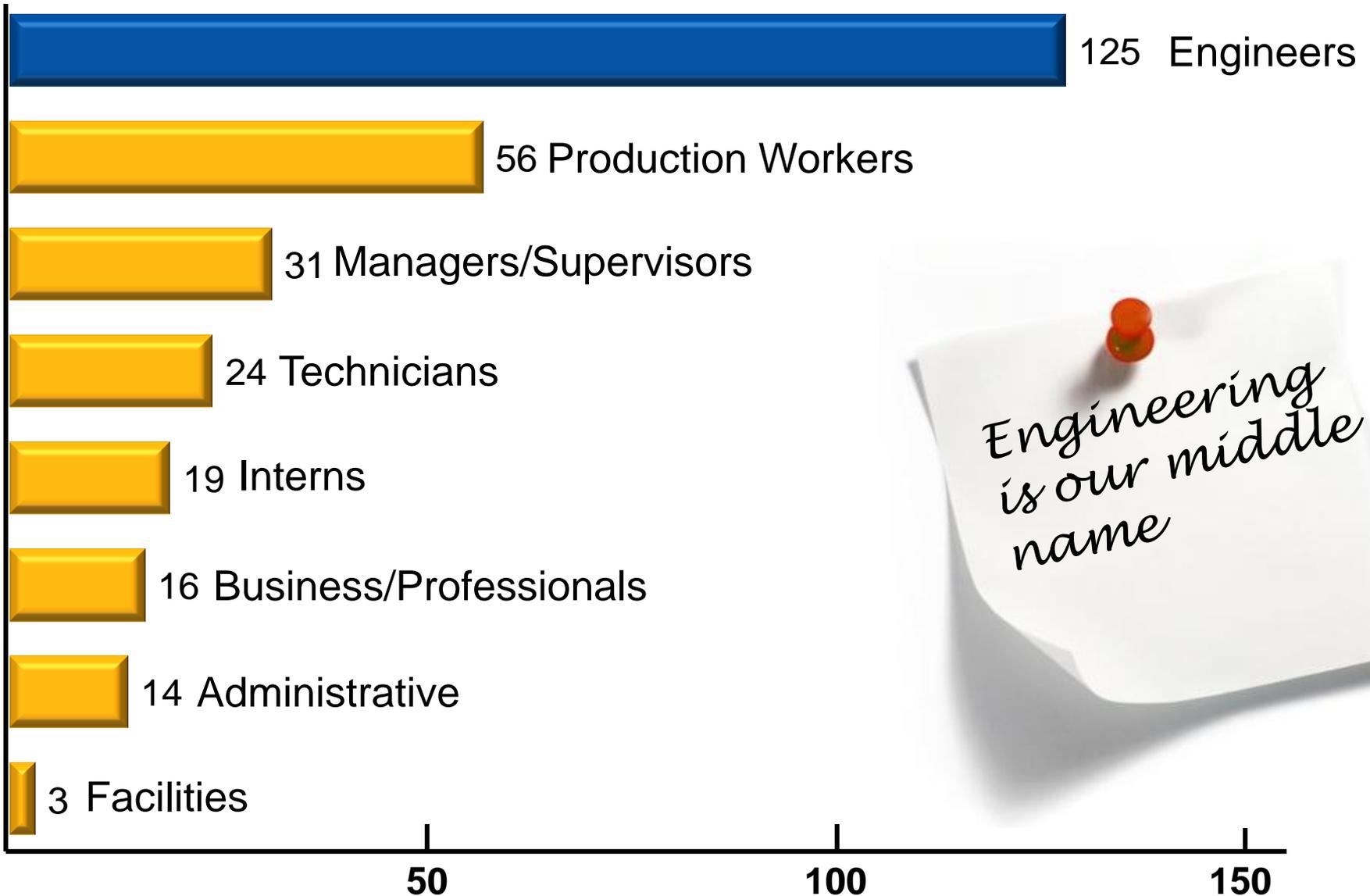
SEL Continues to Grow

Three New Careers per Day



*Estimate

Over 288 Career Opportunities



*Engineering
is our middle
name*

World Class Manufacturing



SEL Headquarters
Pullman, WA

1800



**SEL Fault Indicator and
Sensor Division**
Lake Zurich, IL

80



SEL Mexico
San Luis Potosi, Mexico

400

New Manufacturing Facility: Lewiston, ID

February construction, October production

109,730 square feet



- 100 commuters, 30 miles, 2x/day, 230 days = 1,380,000 miles/year
- \$690,000 @ \$0.50/mile
- 69,000 gallons of gas per year
- 34,500 hours of driving time

**Putting the facility
where the people are**

Solution Delivery Center – Pullman

90,000 Total Square Feet



Some of Pullman's Assets

- City is well-run: building department, water, roads, snow removal.
- Opportunities and resources at WSU and UI.
- Beautiful, safe area.
- Great medical care.
- Quiet, efficient way of life.
- Reasonably-priced utilities.

There's Always Room for Improvement

- More shopping opportunities
- Larger lots, lower housing and construction prices
- Steady increase in regulations
- Improved mobility around town
- Better transportation in and out of Pullman

These are opportunities for government and free enterprise alike.

Pullman has Competition

- SEL: ABB GE Siemens...
- WSU: UW, UI, Phoenix, LCSC, community colleges...
- Pullman: Moscow, Palouse, Lewiston, Clarkston, Albion, Viola ...
- PSD: Private and home schooling ...

Compete to serve!

At first competition makes you sick, then it makes you better.

We are a community of *individuals*.

- Creativity and invention stem from the *self*.
- “Separation of uses” doctrine:
R1 RT R2 R3 R4 C1 C2 C3 I1 I2 IRP WSU
- “Chaos” ...vs... “Unnatural Spaces”
- “Mixed Use” Zoning a positive trend.
- The pharmacist and his family might again live above their drug store.
- Planning *can* proscribe the unforeseen.
- *Is there a Hippocratic Oath for planning?*

Four Decades Fearing Growth?

- County has extreme restrictions on land use, probably causing stagnant growth.
- Pullman plan encourages high densities; more rules for people to get along.
- Fewer choices for Pullman folks.
- Moderation is the key: set the dial midway.
- Government can “convert” farmland to industrial; individual cannot.
- One foot on the gas, one on the brakes.

Preserve Farmland, and Use a Little

- $100 \text{ bu/ac} \times \$8/\text{bu} = \$800 / \text{ac}$
- Whitman Co: 1, 300, 000 acres of farmland
- \$500 000 house on an acre: \$10 000/ac just in property tax!
- SEL: $\$500\text{M} / 130 \text{ ac} = \$4\text{M} / \text{ac}$
0.01% of county farmland
- Seems wise to allow farm landowners to sell some property for other uses.

Free Enterprise Works!

Smith, Hayek, Hazlitt, Friedman

- Invent new products and solutions
- Serve markets worldwide
- Expand services
- Merchants, entrepreneurs, and government: encourage free enterprise; fight for fair free flat and open markets!
- Our businesses and our country will succeed.

The best way to predict the future is to invent it.

– Alan Kay, American Computer Scientist

Growing New Technological Roots

SEL is Bullish about the Future

- Security and Crypto
- Synchrophasors
- Arc Flash
- High-Resistance Faults
- Automated manufacturing
- Communications
- Output relays
- Ferrite materials
- Integrated circuit modules
- Modular buildings
- Ethernet switches
- Precise time
- Most-accurate meters

A City of Opportunity in the Land of Opportunity

- Established formal education x 2!
- Strong agriculture roots can foster more food processing industries here at home.
- High technology industry is a powerful contributor to a strong economy.
- Manufacturing will come back home to America, and we can do it here, responsibly.

Moving Forward

- In *Through the Looking-Glass* the Red Queen tells Alice: 'You have to keep running to stay in the same place'.
- If we stop innovating, we will start fading away.
- I urge the City to foster an efficient, healthy environment of opportunity for all.
- Then, it's up to us to invest in our community.



Thank you!