

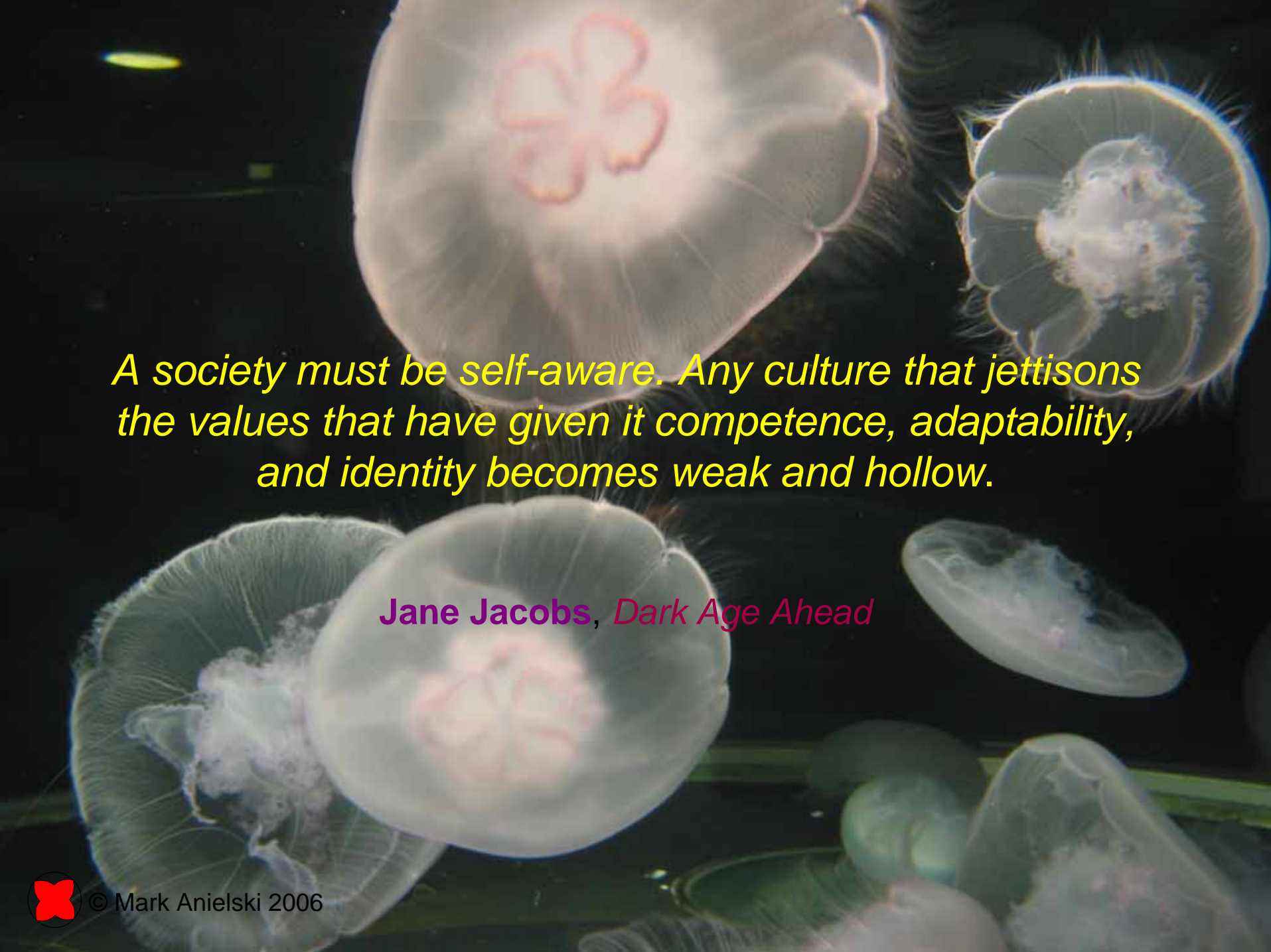


Genuine Progress Indicators (GPI): Measuring the Impacts of Gambling on Well-being

Alberta Gambling Conference
April 21, 2006



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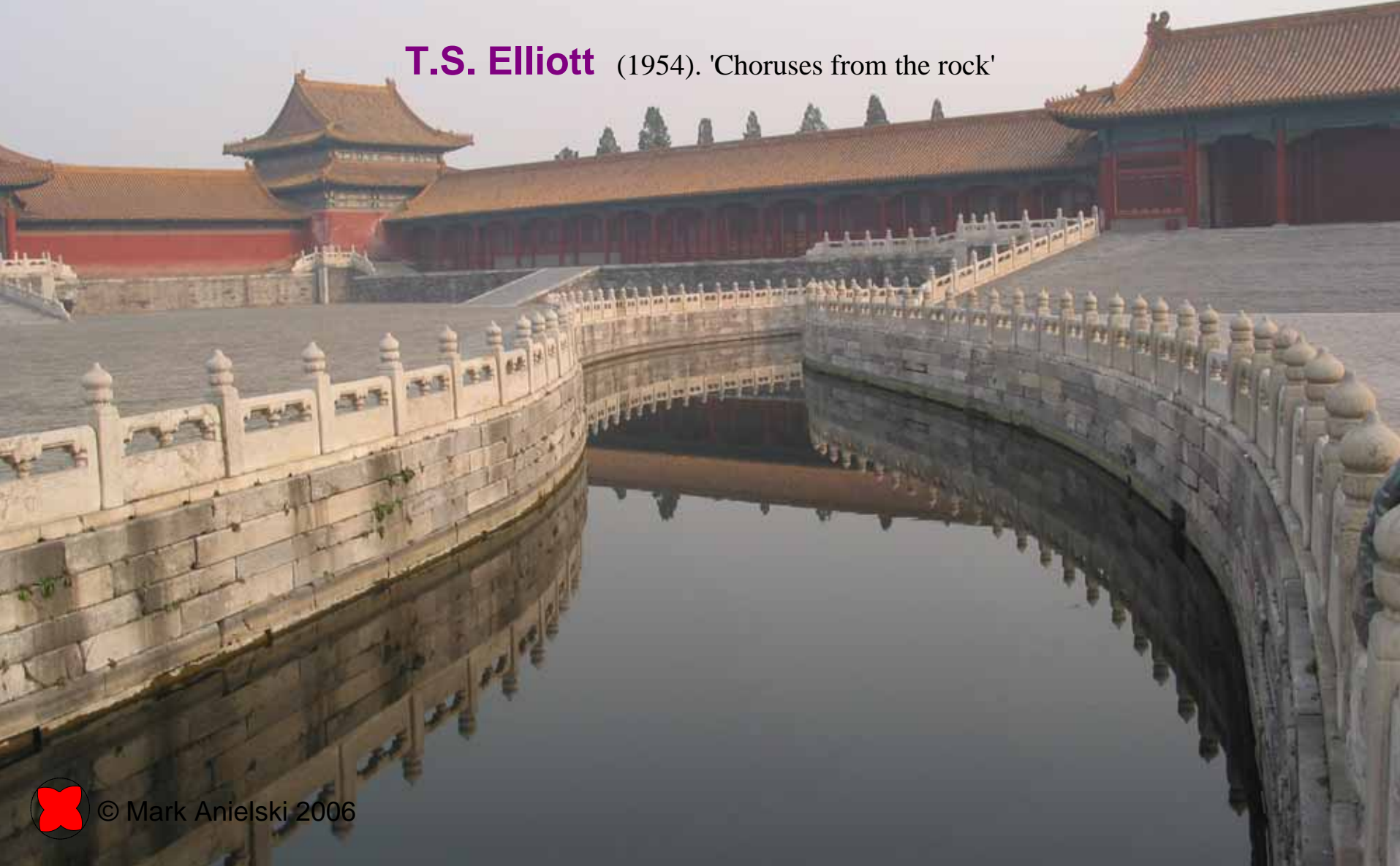
A society must be self-aware. Any culture that jettisons the values that have given it competence, adaptability, and identity becomes weak and hollow.

Jane Jacobs, Dark Age Ahead



Where is the life we have lost in living? Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?

T.S. Elliott (1954). 'Choruses from the rock'



An economy is a wholly-owned subsidiary of the ecosystem

Ecosystem



Sustainability is the possibility that human and other forms of life can flourish on the earth forever

John Ehrenfeld, MIT



What is the good life?

The maximand is life,
measured in cumulative
person-years ever to be
lived by all species at a
standard of resource use
sufficient for the good life.

--- Herman Daly, 1996



The lost language of economics

Wealth

(Old English)

The conditions of well-being

capital

Wealth, in whatever form, used or capable of being used to produce more wealth.*

Value

(Latin:valorum)

To be worthy

Competition

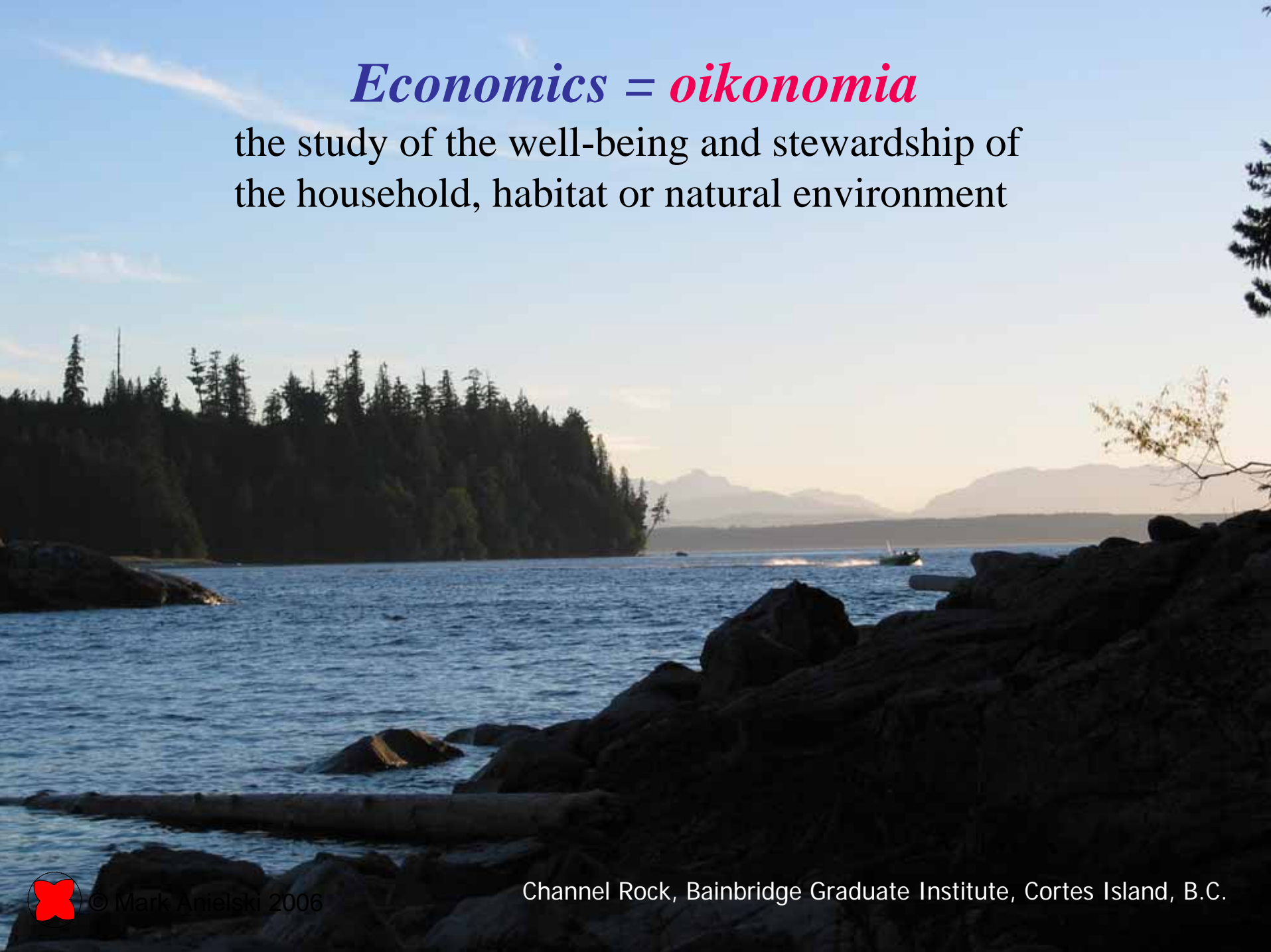
(Latin:competere)

To strive together



Economics = oikonomia

the study of the well-being and stewardship of
the household, habitat or natural environment



La economia es de gente, no de curvas!"
("E conomics is about people, not curves.")



Financial management = *chrematistics*

the study of wealth or a particular theory of wealth as measured by money.



A vibrant garden scene featuring a wooden building with a corrugated metal roof. The building is heavily covered in climbing purple flowers. In the foreground, there are large clumps of green plants with long, narrow leaves and bright orange flowers. A dirt path leads from the foreground towards the building's entrance. The background is filled with dense green foliage and trees.

Building an Economy of Well-being

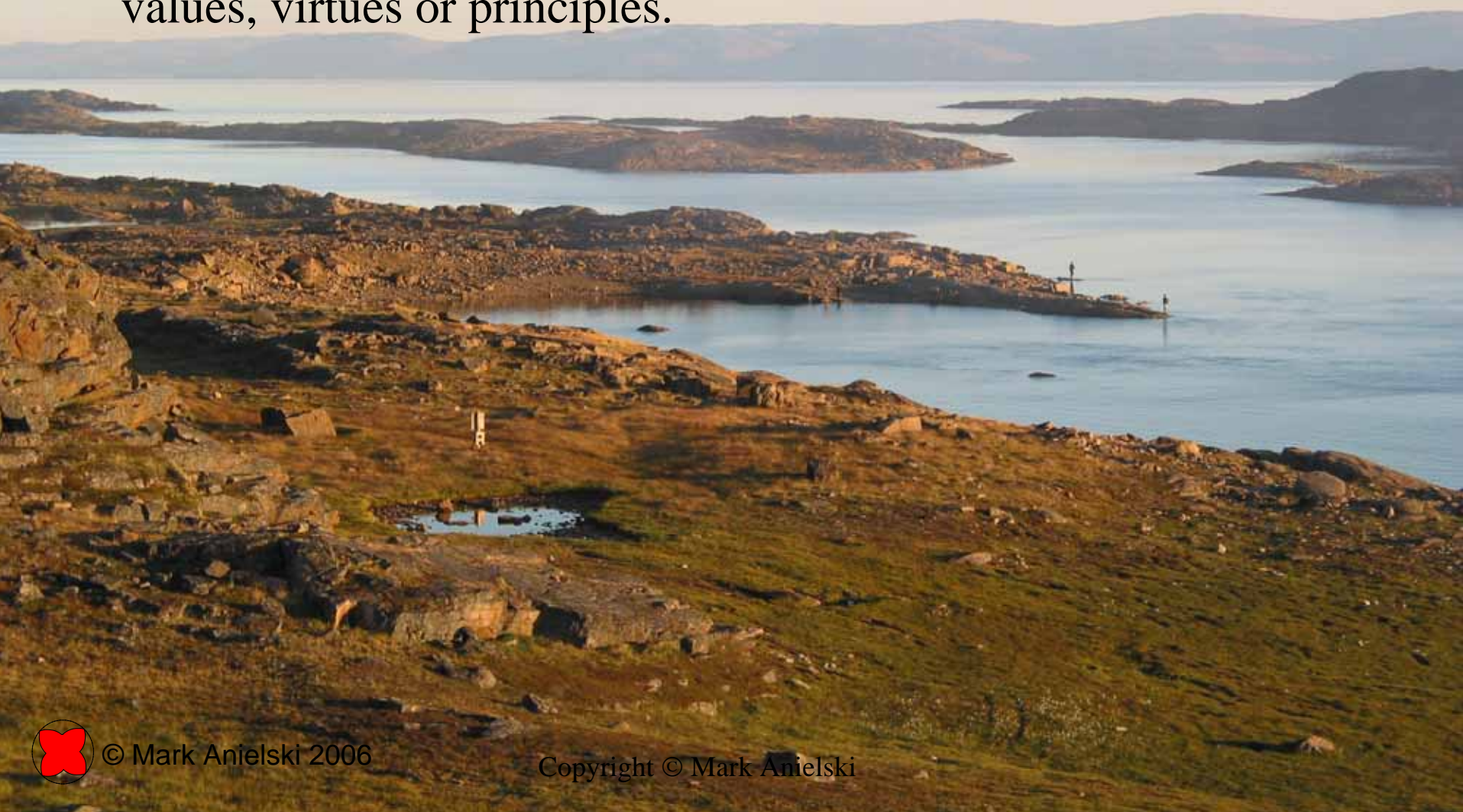


Genuine

To be authentic; true to one's values, virtues or principles.

Wealth

The conditions of well being.



A dark, textured tray containing several compartments of different beans and seeds. The beans are arranged in a roughly circular pattern. The colors include black, green, orange, yellow, red, and white. The seeds are small and brown. The tray is set against a dark background.

Genuine Wealth
assessment: *a*
new kind of bean
counting



What do we mean by well-being?

It is more than happiness and satisfaction – it also includes developing as a person, being fulfilled, and contributing to society.

Being happy is seriously good for you and others.

Happy and fulfilled people live up to seven years longer, have stronger social networks and are more engaged in their communities.

Source: A Well-being Manifesto for a Flourishing Society. New Economics Foundation, UK. 2004



What do key determinants of well-being?

- 50% **Our parents**, through our genes and upbringing
- 40% **Our activities and outlook** –friendships, being involved in our community, sport and hobbies as well as our attitude to life.
- 10% **Our circumstances**, income, where we live, climate.

Source: A Well-being Manifesto for a Flourishing Society. New Economics Foundation, UK. 2004



Towards a flourishing economy of well-being

A well-being manifesto for a flourishing society

A flourishing society needs vibrant, resilient and sustainable communities.

The manifesto raises some big questions:

Can we become a flourishing society that is companionable, sustainable and has time to enjoy the fruits of our economic prosperity?

What do we mean by well-being?

It is more than happiness and satisfaction – it also includes developing as a person, being fulfilled, and contributing to society.

Being happy is seriously good for you and others. Happy and fulfilled people live up to seven years longer, have stronger social networks and are more engaged in their communities.

Why is well-being important to politics?

As well as having massive positive impacts on health, high levels of well-being will also lead to a more entrepreneurial society and greater active citizenship.

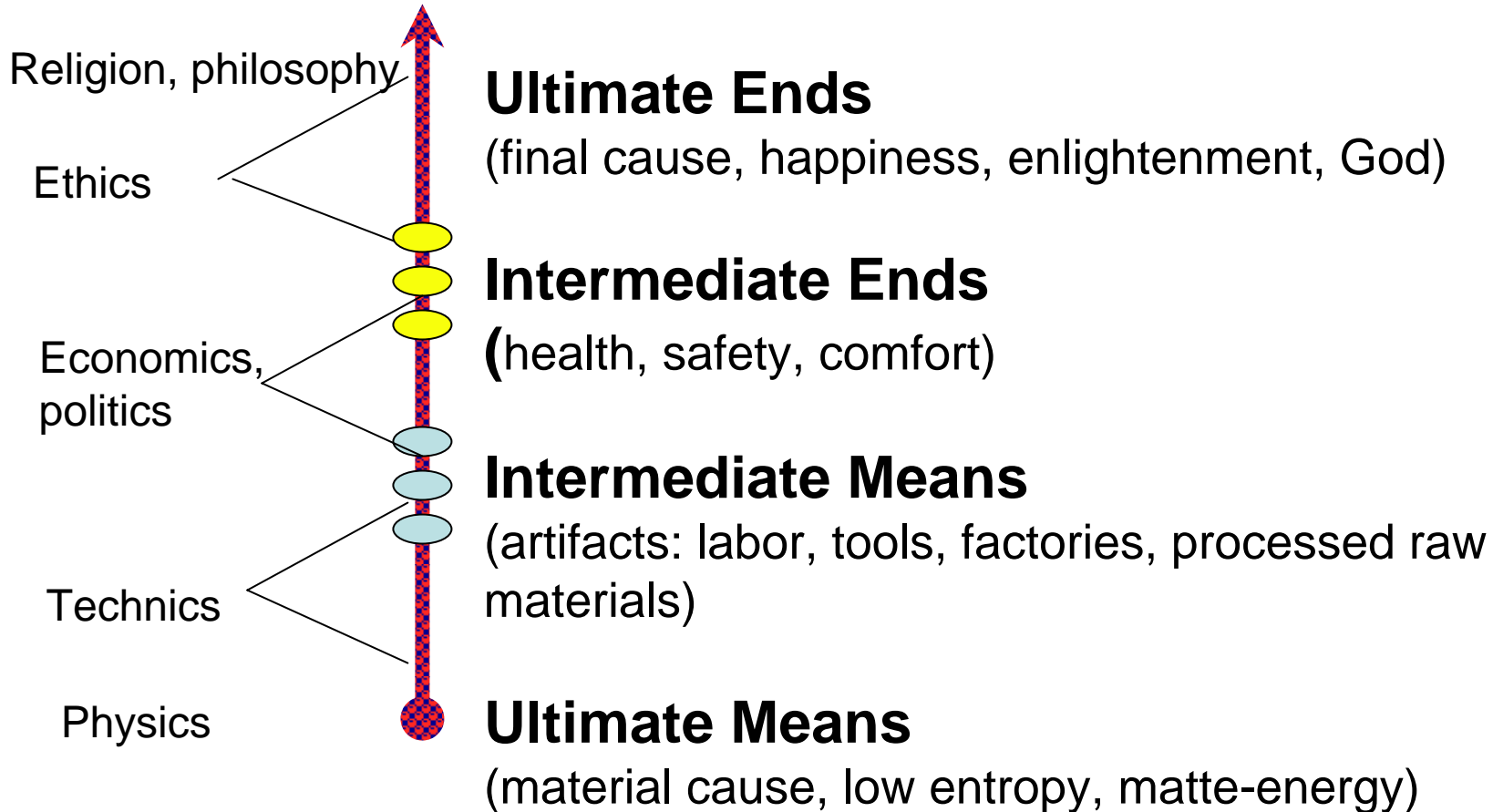
Three major influences on our well-being are:

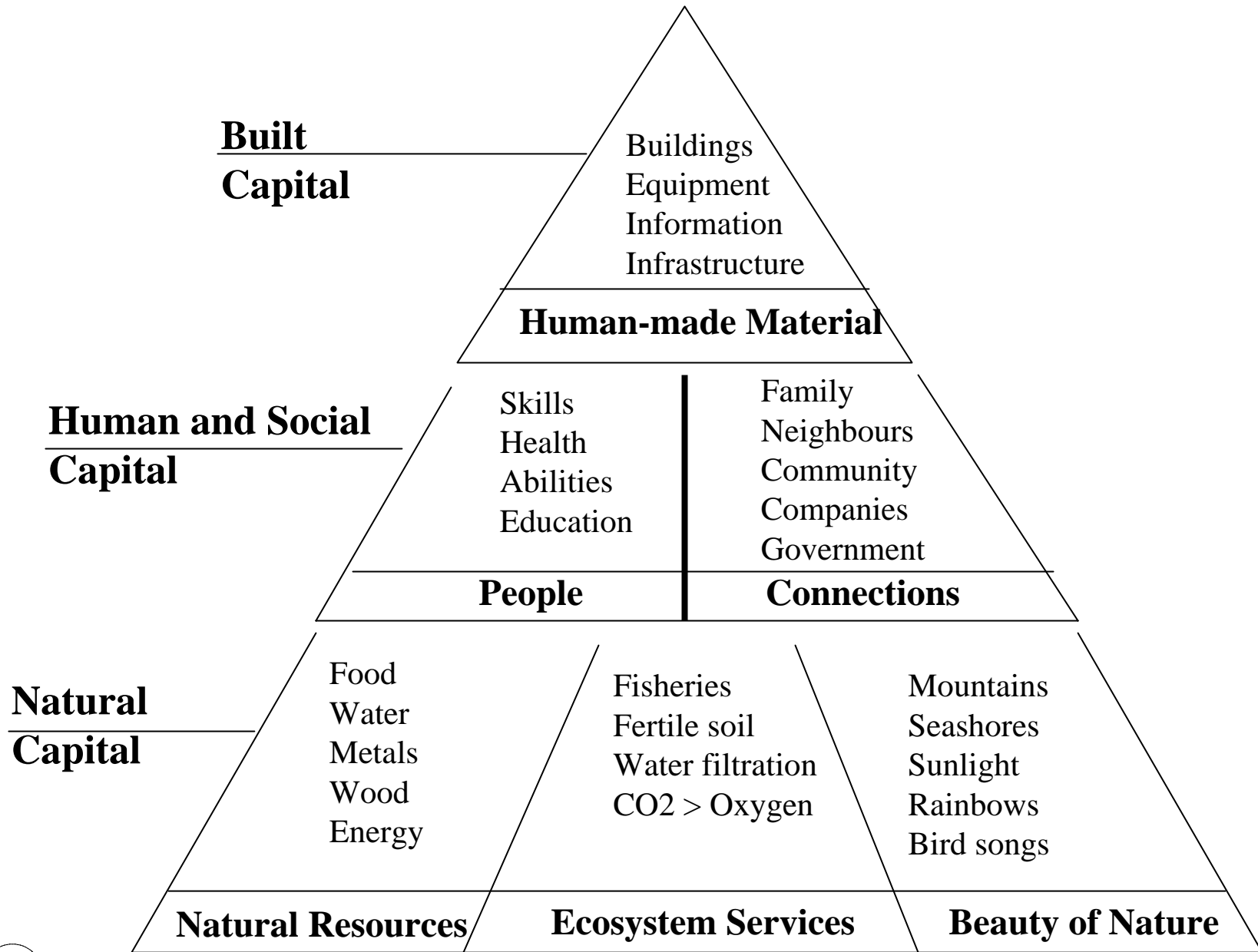
- Our parents, through our genes and upbringing influence about 50 per cent of our well-being
- Our circumstances, which include our income, where we live, the climate and other external factors, account for only 10 per cent.
- Our activities and outlook – like our friendships, being involved in our community, sport and hobbies as well as our attitude to life – account for the remaining 40 per cent.

Source: A Well-being Manifesto for a Flourishing Society. New Economics Foundation, UK. 2004



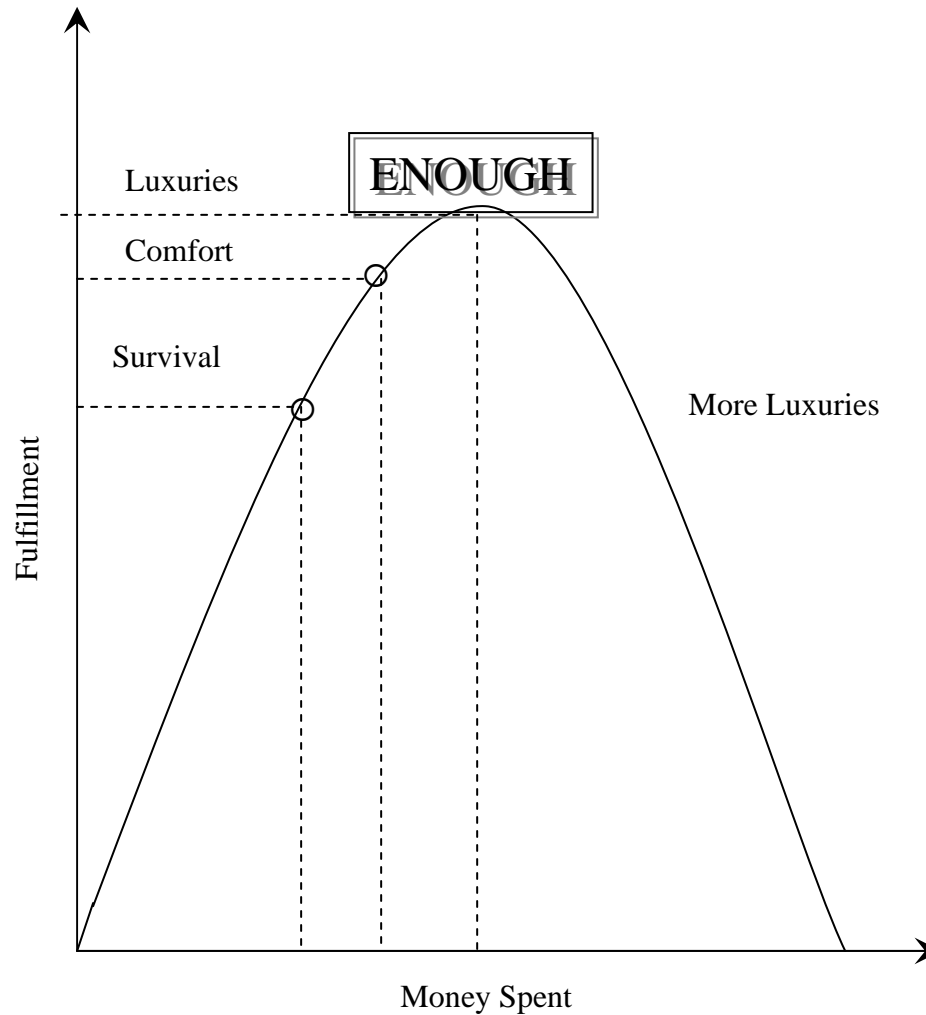
The ends-means spectrum





How much is enough?

The Value of Sufficiency and Moderation



The Fulfillment Curve



Needs vs. Wants

The desirable ends

- How do we provide a high quality of life for this and future generations?
- Consumption is only one narrow component of human needs



A white peacock is shown in a full display of its tail feathers, which are fanned out in a wide, circular pattern. The feathers are long and thin, with a delicate, lace-like texture. The background is dark and out of focus, suggesting an outdoor enclosure. The text "The Genuine Progress Indicator" is overlaid in the center of the image in a yellow, sans-serif font.

The Genuine Progress Indicator



Why Measure Genuine Wealth?

“Too much and too long, we seem to have surrendered community excellence and community values in the mere accumulation of material things.

The **Gross National Product [GNP]** includes air pollution and advertising for cigarettes, and ambulance to clear our highways of carnage.

It counts special locks for our doors, and jails for the people who break them. GNP includes the destruction of the redwoods and the death of Lake Superior. It grows with the production of napalm and missiles and nuclear warheads. And if GNP includes all this, there is much that it does not comprehend.

It does not allow for the health of our families, the quality of their education, or the joy of their play. It is indifferent to the decency of our factories and the safety of our streets alike. It does not include the beauty of our poetry or the strength of our marriages, or the intelligence of our public debate or the integrity of our public officials.

GNP measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country.

It [GNP] measures everything, in short, except that which makes life worthwhile.”

Robert F. Kennedy

March 18, 1968



The GDP Hero

The GDP hero is a daily gambler, chain-smoking, terminal cancer patient going through an expensive divorce whose car is totaled in a 20-car pileup.



*The GDP is like a calculator
that only knows how to add.*



The errors of national income accounting and the GDP

- GDP adds up all money transactions without accounting for costs.
- GDP takes no account of the inequality of income, wealth and spending power.
- GDP treats crime, imprisonment, divorce, problem gambling, and other forms of family and social breakdown as economic gain yet the value of housework, parenting and volunteering count for nothing.
- GDP increases with each environmental calamity, each polluting activity and then again in repairing the damage.
- GDP does not account of the depletion or degradation of natural resources and the environment.
- GDP treats war expenditures as economic gain both during the destruction and the rebuilding phases.
- GDP ignores the liabilities of living on debt and foreign borrowing.



*“The welfare of a nation
can scarcely be inferred
from a measurement of national income
as defined by the GDP...
goals for ‘more’ growth
should specify of what
and for what”*

Simon Kuznets, architect of the GNP, 1962



The Genuine Progress Indicator (GPI) is a new measure of economic well-being that corrects the accounting errors inherent in the system of national accounts from which the GDP is derived.



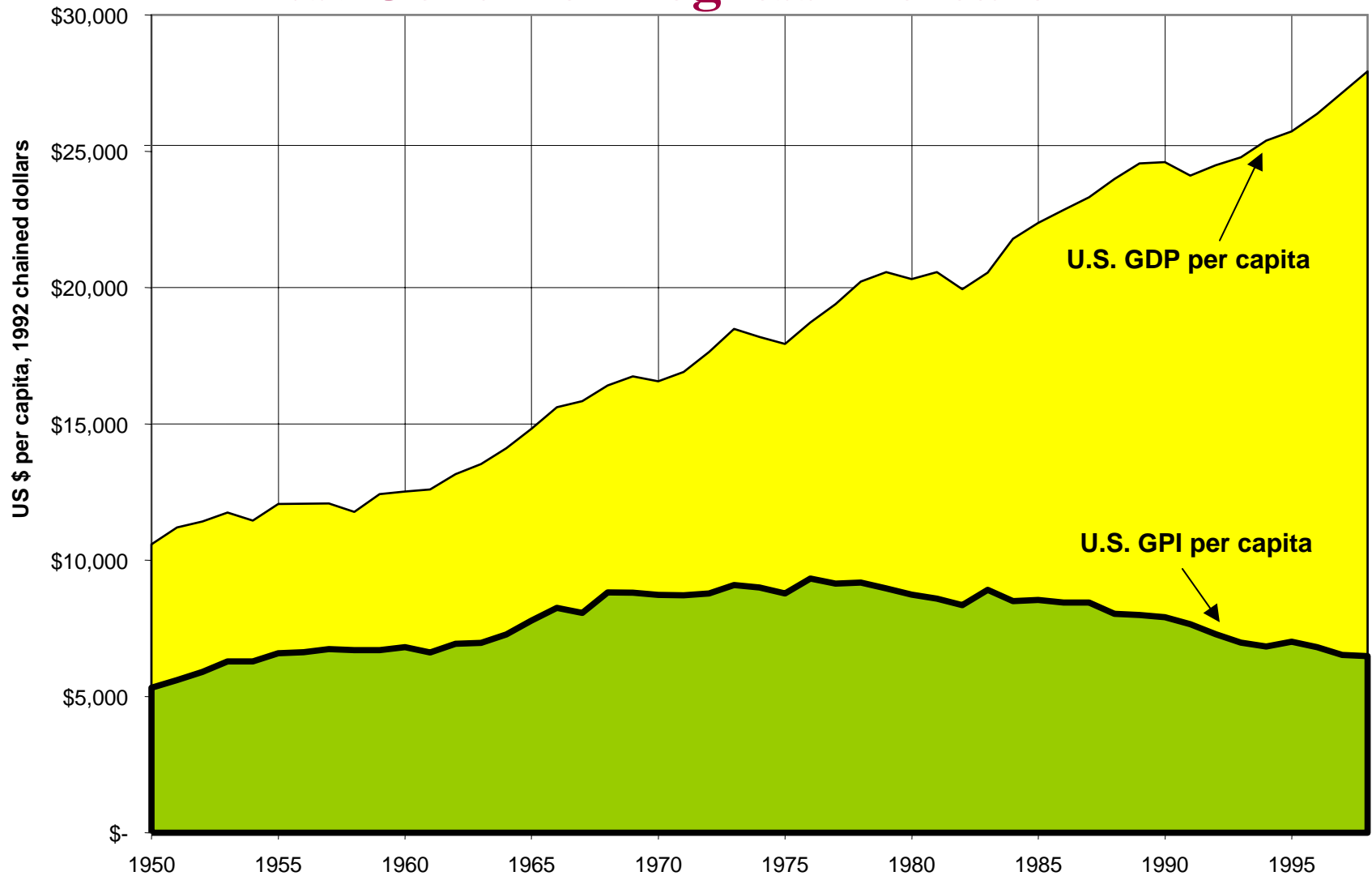
Components of the Genuine Progress Indicator....24

adjustments to GDP

- starts with personal/household consumption expenditures
- adjusted for income distribution...the gap between rich and poor
- **adds** the value of housework and parenting and the value of volunteer work
- **adds** the value of the service from household infrastructure
- **adds** the value of the service from streets and highways
- *subtracts* the value of time including the cost of lost leisure time, family breakdown, commuting time, and underemployment
- *subtracts* the cost of crime, auto accidents, cost of consumer durables (and the costs of problem gambling: Australia/Alberta).
- *subtracts* the cost of long-term environmental degradation, air pollution, water pollution, ozone depletion, air pollution, noise pollution, loss of farmland, loss of forests, loss of wetlands
- adjusts for net capital formation and net foreign borrowing



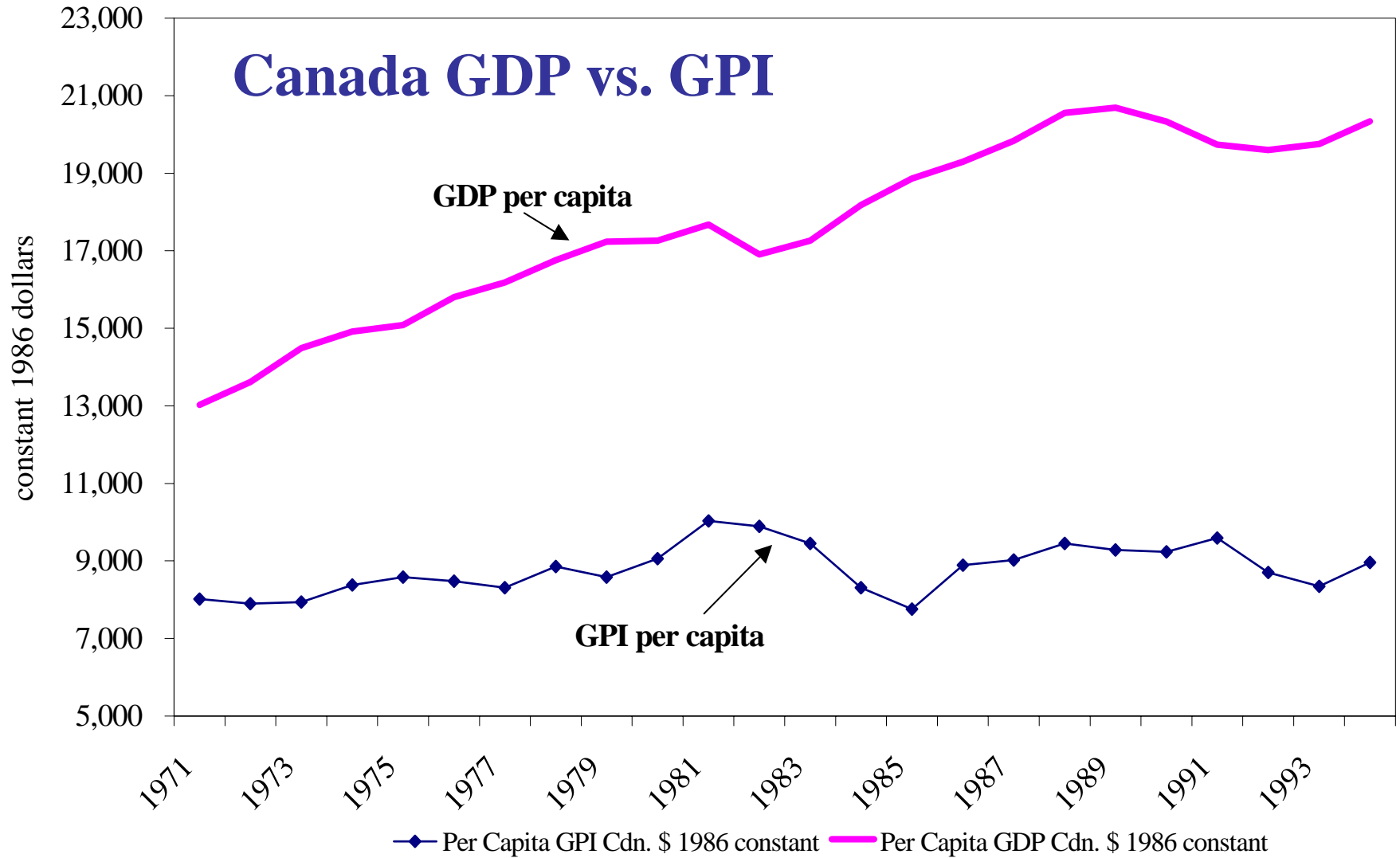
Conventional Economic Growth model vs. Genuine Progress Indicator



Source: Data derived from spreadsheets from the U.S. Genuine Progress Indicator (GPI) for 1999. Redefining Progress, Oakland, CA.

© Mark Anielski 2006
www.redefiningprogress.org

Canada's GPI vs. GDP per capita 1971-1994

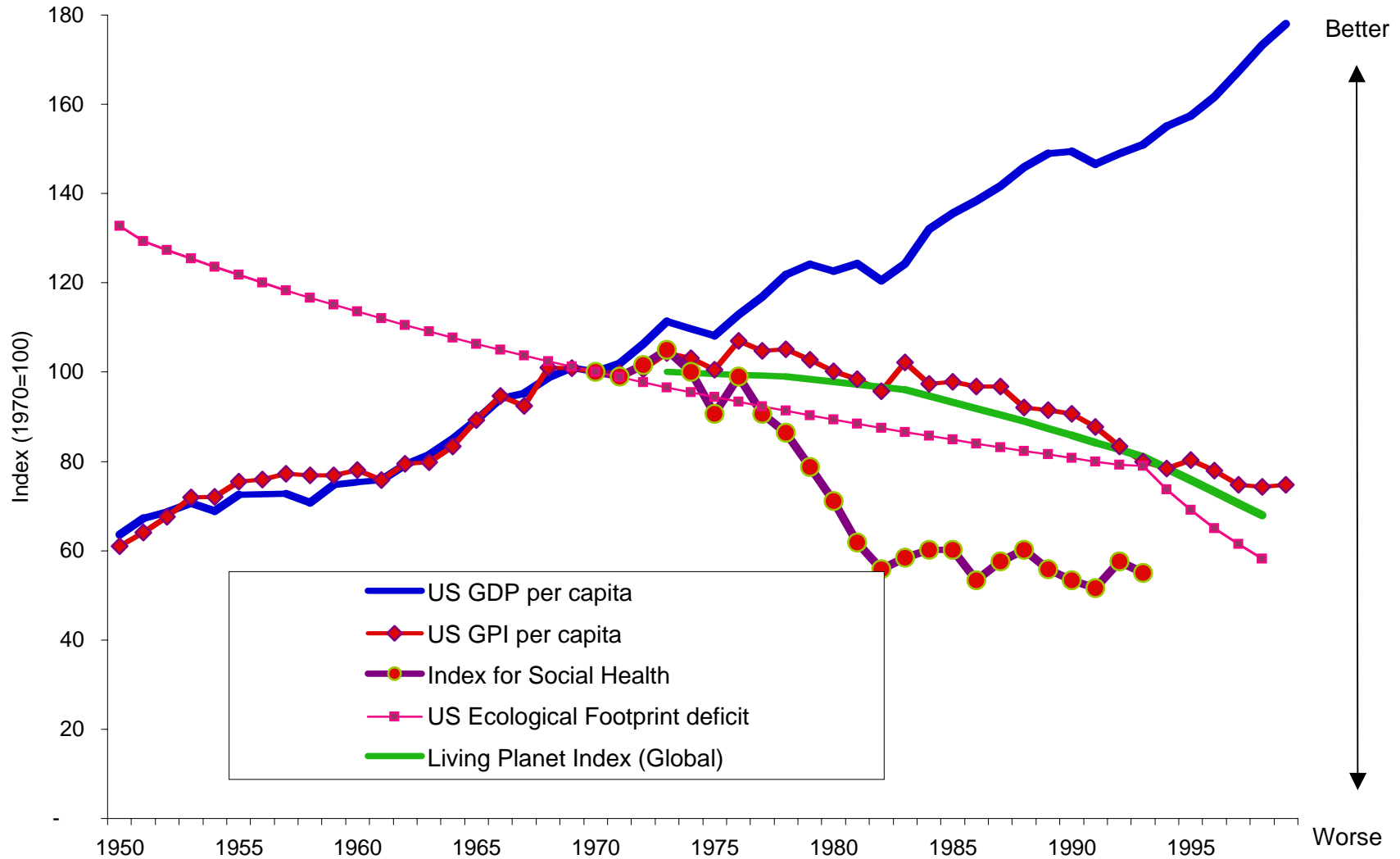


Source: Messinger and Tarasosfky (1997)



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GDP Rises as Life Capital Indicators Decline



Sources: 1. US GDP: U.S. Bureau of Economic Analysis 2. U.S. GPI: Redefining Progress (www.rprogress.org) 3. Index for Social Health: Miringoff (found in Zeesman and Brink (1997)). 4. UN HDI: U.N. Human Development Report 1999 5. U.S. Ecological Footprint: derived from source: Wackernagel & Rees, "Our Ecological Footprint" and www.rprogress.org. 6. Living Planet Index: World Wildlife Fund.



Genuine Wealth Assessment (GWA)

A tool for communities and enterprises to identify, measure, and manage their genuine wealth (well-being): the human, social, natural, manufactured and financial capital assets that contributes to a sustainable and flourishing economy of well-being.

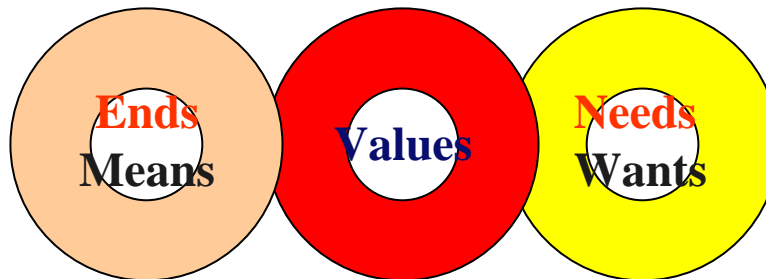


The Genuine ~~Progress~~ Wealth Accounting System

1. Values audit
2. Wellbeing Accounts and Indicators
3. GW Balance Sheet
 - Living capital = human, social, and natural + produced and financial capital
 - assets = liabilities + equity
4. GW Net Sustainable Income Statement
 - Full cost (benefit) accounting of social, human and environmental capital depreciation (appreciation).
5. Genuine Well-being Report



Genuine Wealth sustainability measurement and management system

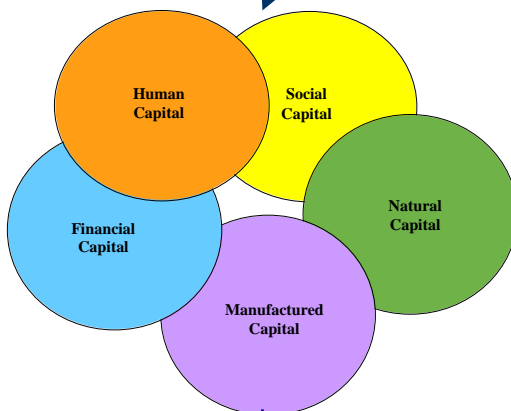


GPA Total Wealth Accounts

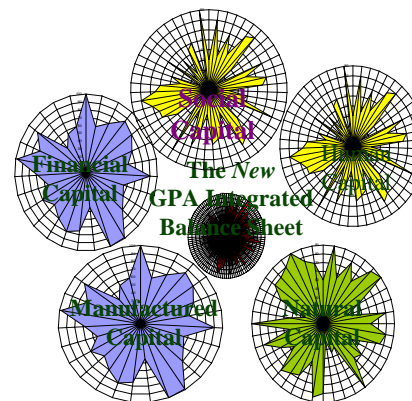
GPA Total Wealth Balance Sheet

GPA Sustainable Income Statement

Accounting & Assessment Tools



Genuine Progress Indicators:
Physical, qualitative and monetary indicators of the conditions of genuine wealth.



Genuine Well-being Index

Revenues

- Operating Expenses
- Full Environmental, Social and Human Costs of Operations

- Depreciation Costs of Five Capital Assets

- Human Capital
- Social Capital
- Natural Capital
- Manufactured Capital
- Financial Capital

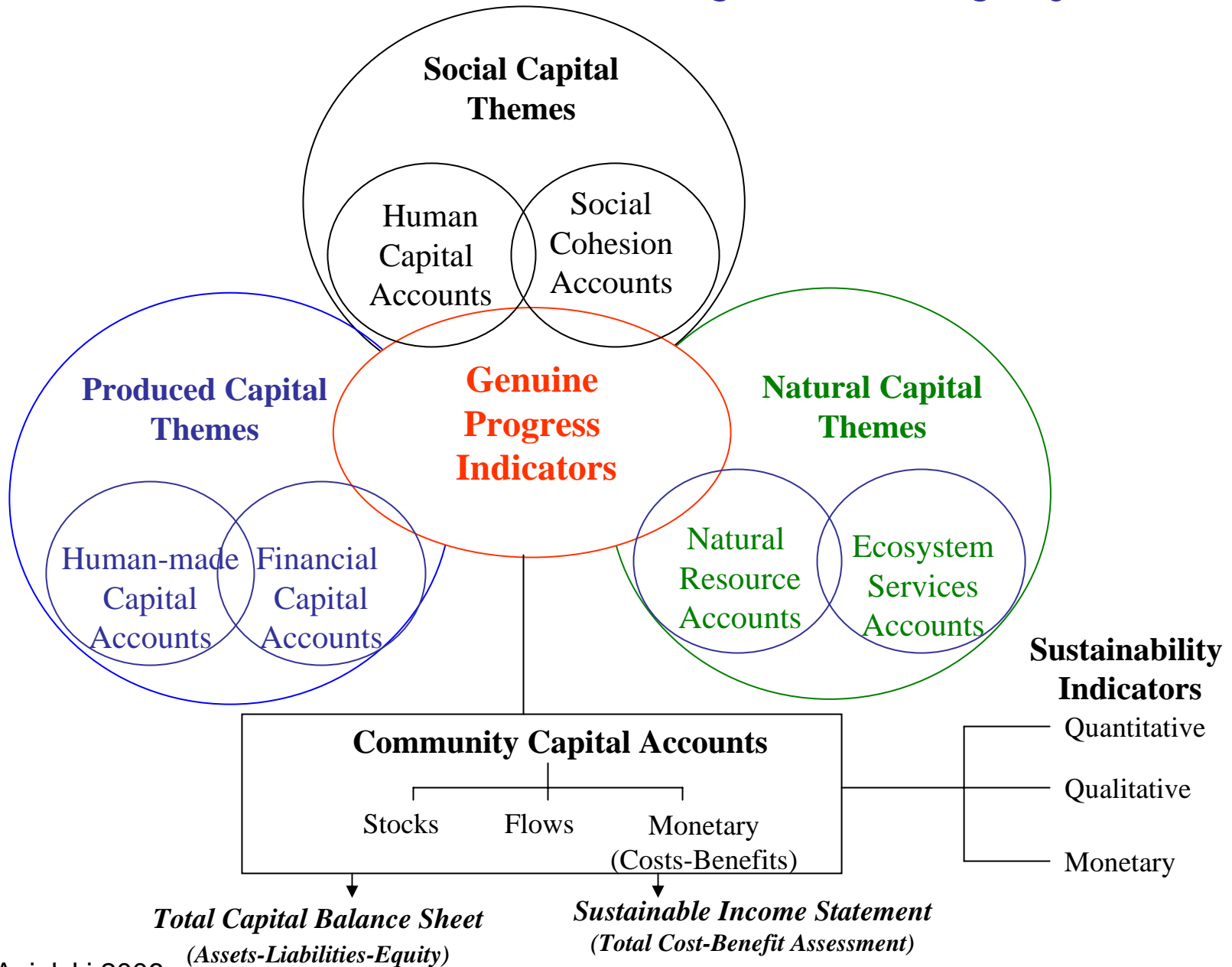
= Sustainable Income (Social, Environmental, Economic Profits)

Full Cost Accounting for the "Sustainable Bottom Line"

Community Well-being Report



Alberta GPI Sustainable Well-being Accounting System



The Alberta GPI Accounts: 51 Elements of Well-being

GPI Balance Sheet

Economic Well-Being Account

- Economic Growth
- Economic Diversity
- Trade
- Disposable Income
- Personal Expenditures
- Taxes
- Debt
- Savings Rate
- Household infrastructure
- Public Infrastructure
- Income inequality

Societal Well-Being Account

- Poverty
- Paid work time
- Unemployment
- Underemployment
- Parenting and Eldercare
- Leisure time
- Volunteerism
- Commuting time
- Family Breakdown
- Crime
- Democracy
- Intellectual Capital
- Life Expectancy
- Infant mortality
- Premature mortality
- Disease
- Obesity
- Suicide
- Substance Abuse
- Auto Crashes
- Gambling

Environmental Well-Being Account

- Ecological Footprint
- Ecosystem Health
- Carbon Budget
- Energy Efficiency
- Oil and Gas Reserve Life
- Agriculture Sustainability
- Timber Sustainability
- Wetlands-Peatlands
- Fish & Wildlife
- Air Quality
- Water Quality
- Toxic Waste
- Landfill Waste



The GPA Net Sustainable Economic Welfare

Gross Domestic Product (GDP)

Personal consumption expenditures

adjusted for: Income inequality

ADD:

+ Value of unpaid work (housework, parenting, volunteerism)

+ Value of services from household and public infrastructure

DEDUCT:

Cost of household debt servicing

Cost of net foreign borrowing

Human and social capital depreciation:

- loss of leisure time

- cost of underemployment and unemployment

- cost of divorce, suicide, auto crashes, **gambling**, commuting

Natural capital depreciation:

- nonrenewable natural capital (minerals, oil, gas, coal)

- unsustainable renewable resource use (forests, agriculture)

Value of loss of ecosystem services:

- carbon sequestration, air pollution, water pollution, forests, wetlands

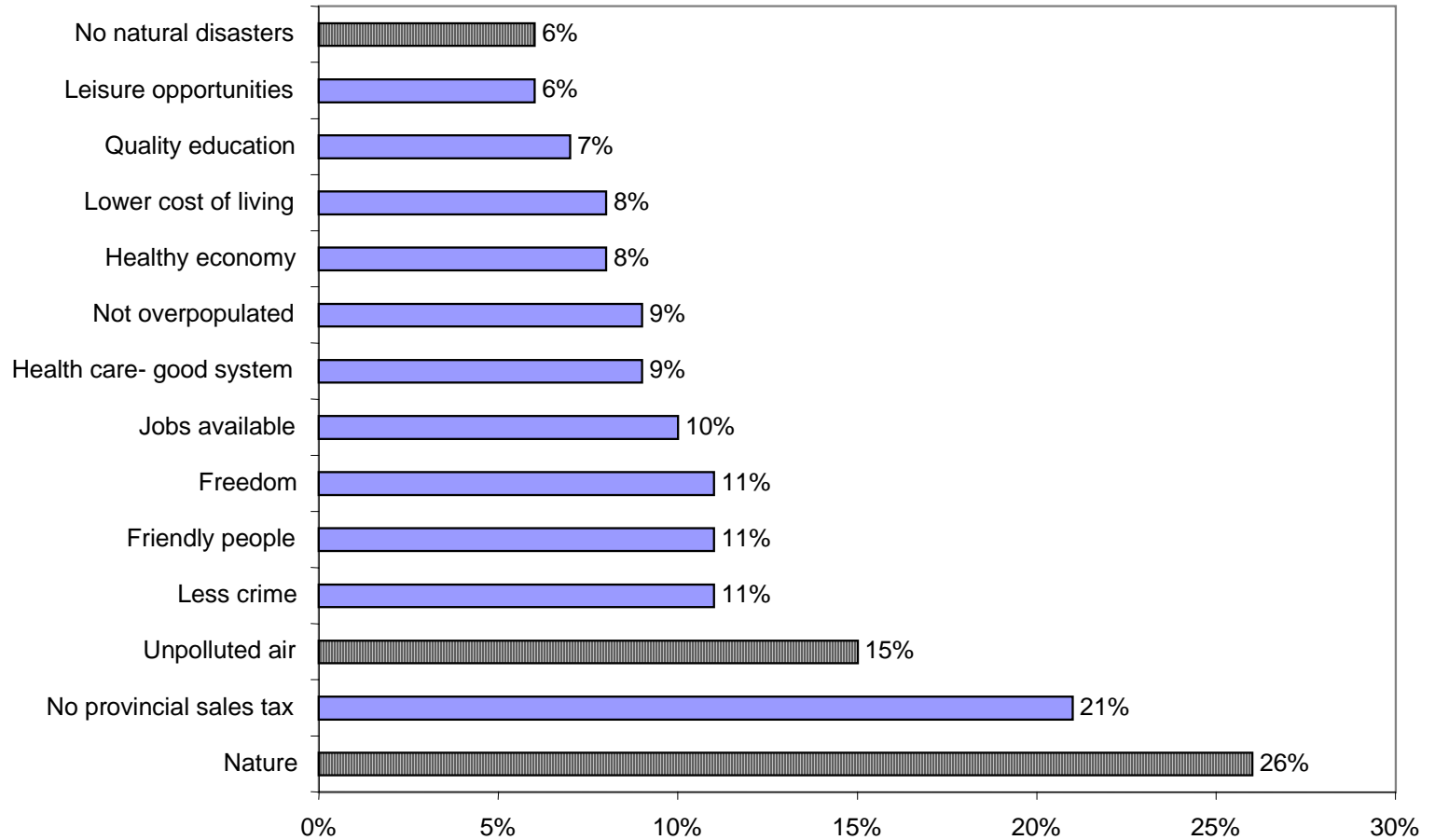
Net Sustainable Economic Welfare (\$ GPI)

GPI Income Statement



What Albertans Value

What Albertans Value Most (1997)



Source: Alberta Growth Summit, 1997, survey of what Albertans value most



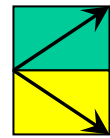
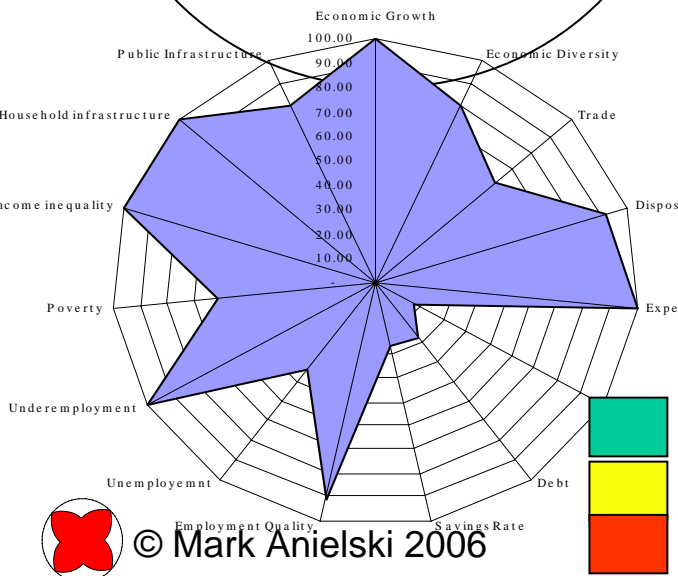
What matters to Canadians

- #1. Democratic rights and participation
- #2. Health
- #3. Education
- #4. The Environment
- #5. Social conditions and programs
- #6. Community
- #7. Personal well-being
- #8. Economy and employment
- #9. Government

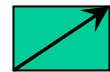


GPI Economic Well-being Account

Economic Well-being Account



GDP (+ 126%)*



Economic diversity (- 62%, 1972)



Trade balance



Disposable income (+113%)



Real weekly wages (+61%)



Personal expenditures (+110%)



Transportation exp. (+285%)



Taxes (+ 494%)



Personal debt (+307%)



Savings Rate



Household infrastructure (+125%)



Public Infrastructure (+25%)



Good Health (Endowments)

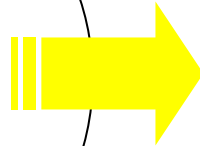
Moderate Health (Caution)

Poor Health (Liabilities)

* % change from base year 1961

GPI Societal Well-being Account

Personal and Societal Well-being Account



Time Use

- Paid work time
- Unemployment
- Underemployment
- Housework
- Parenting and Eldercare
- Leisure time
- Volunteerism
- Commuting time

Intellectual Capital

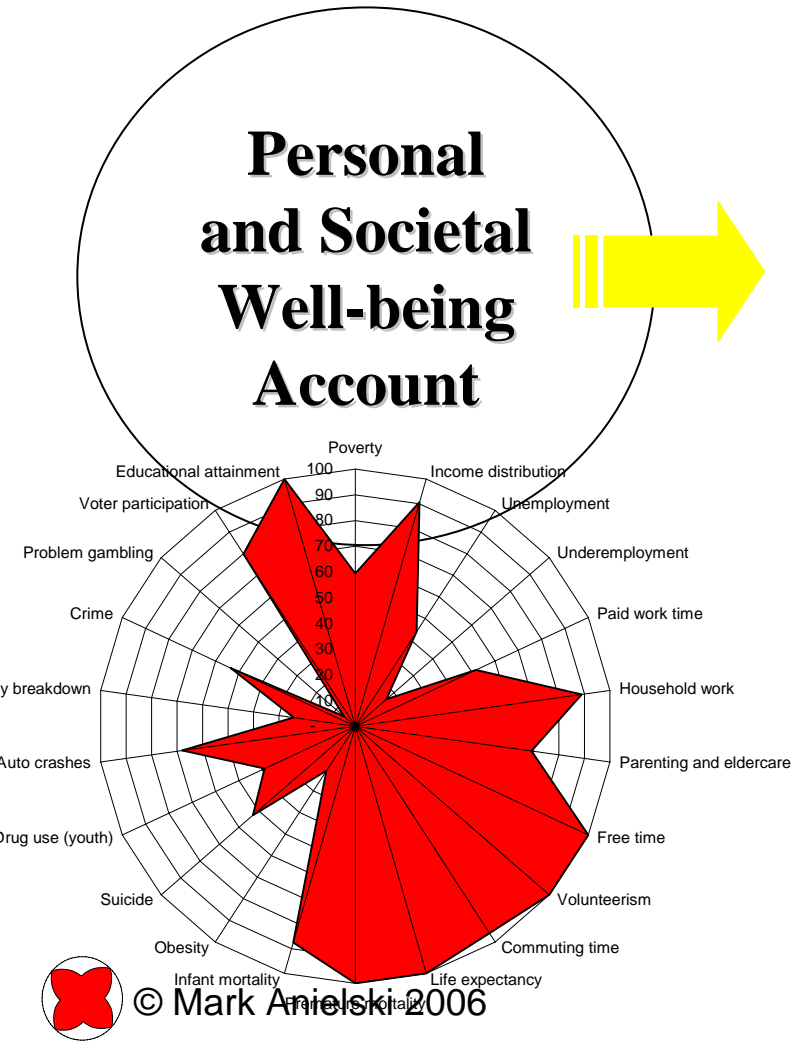
- Educational attainment

Health and Wellness

- Life Expectancy
- Infant mortality
- Premature mortality
- Disease
- Obesity
- Suicide
- Substance Abuse
- Auto Crashes
- Gambling

Social Cohesion

- Divorce/Family Breakdown
- Crime
- Democracy
- Poverty
- Inequality



Time Use

 Paid work, hours paid work per labor force participant (- 48% *)

 Housework (+8%)

 Parenting and eldercare (-31%)




 Leisure time (+19%)

 Volunteerism (+12%)

 Commuting (+4.2%)

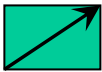
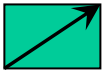
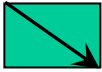





 Unemployment (+128%)




 Underemployment (+525%)

 Good Health (Endowments)
 Moderate Health (Caution)
 Poor Health (Liabilities)



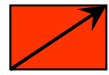
Health and Wellness

-  Life expectancy (+10%)
-  Premature mortality (-37%)
-  Infant mortality (-71%, 1971)
-  Obesity (+135%, 1985)
-  Suicide (+30%)
-  Youth drug abuse (+33%, 1971)
-  Auto crashes (+47%)
-  Problem Gambling (+1637%, 1971)

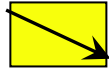
-  Good Health (Endowments)
-  Moderate Health (Caution)
-  Poor Health (Liabilities)



Social Capital



Divorce/Family Breakdown (+312%)



Crime (+59%)



Democracy (-9%)

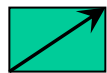


Poverty (+37%)



Income gap between rich and poor (+63%, 1980)

Intellectual Capital



Educational Attainment (+1693%)



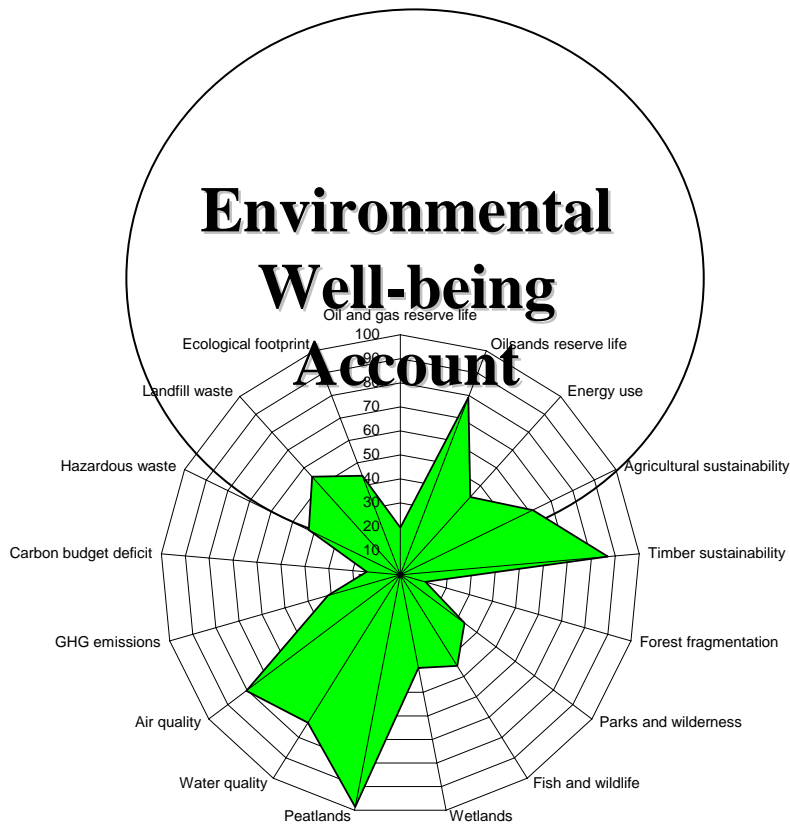
Good Health (Endowments)




Moderate Health (Caution)
















Poor Health (Liabilities)



Environmental Health and Well-being Accounts

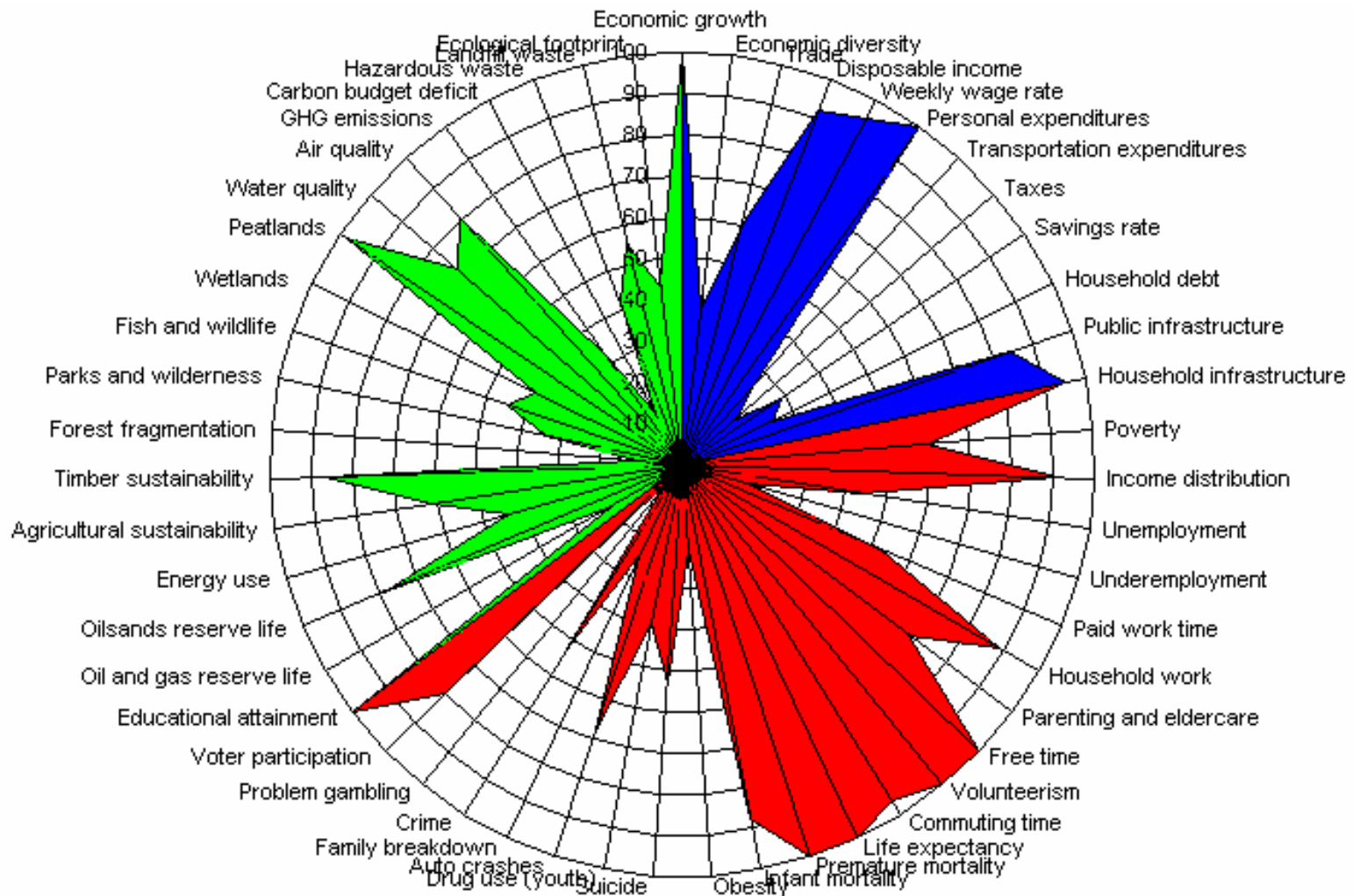


 Good Health (Endowments)
 Moderate Health (Caution)
 Poor Health (Liabilities)

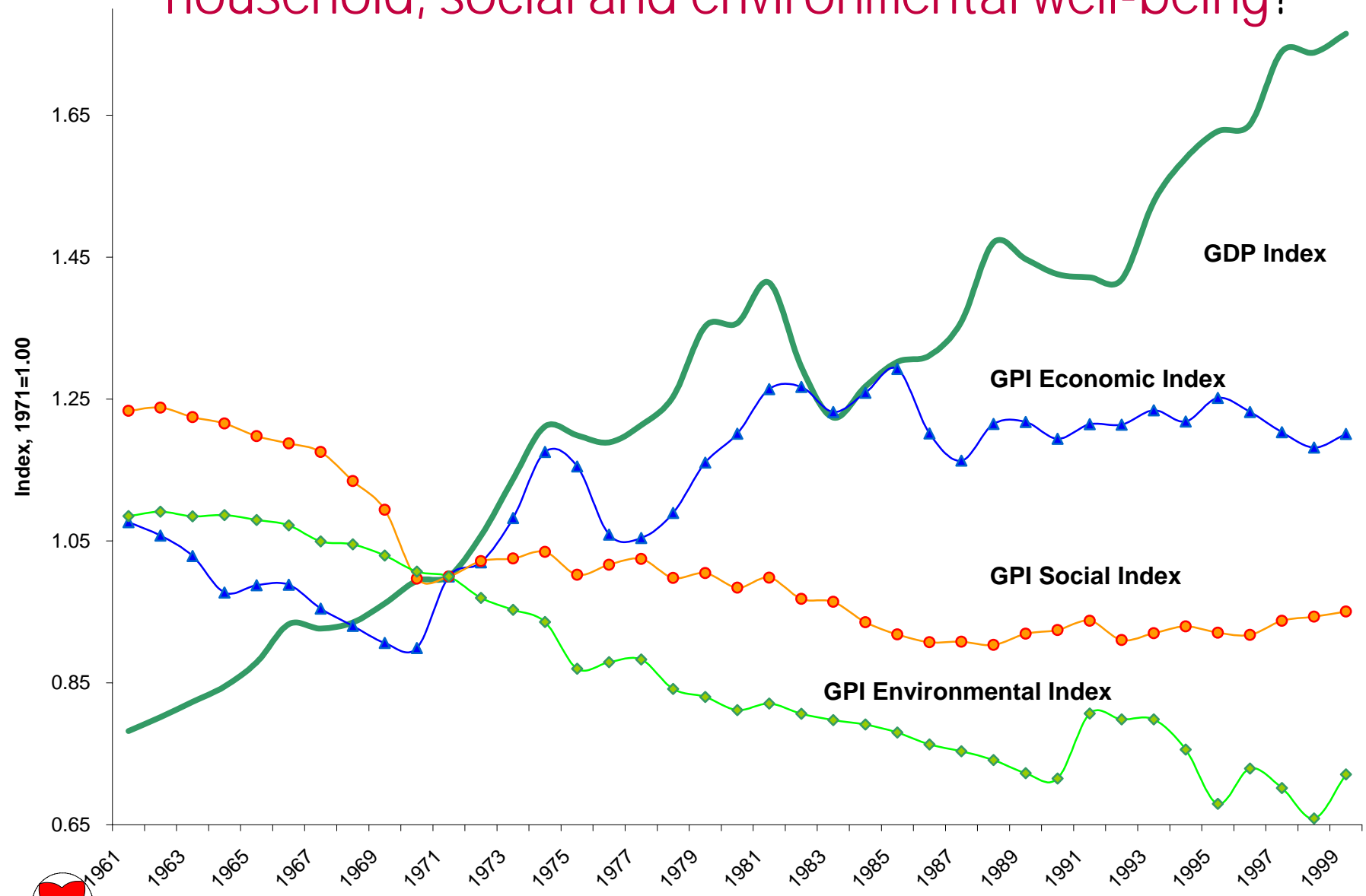
-  Ecological Footprint (+66%)
-  Ecosystem integrity (-89%)
-  Carbon budget deficit (+609%)
-  Greenhouse gas emissions (+211%)
-  Energy use (+123%)
-  Oil and gas reserve life (-78%)
-  Oilsands reserve life (-21%)
-  Agriculture sustainability (+38%)
-  Timber sustainability (-78%)
-  Wetlands-peatlands (-20%)
-  Fish & wildlife (-26%)
-  Air quality index (+26%)
-  Water quality index (+46%)
-  Hazardous waste (+180%)
-  Household waste (-28%)

Alberta Genuine Progress Index

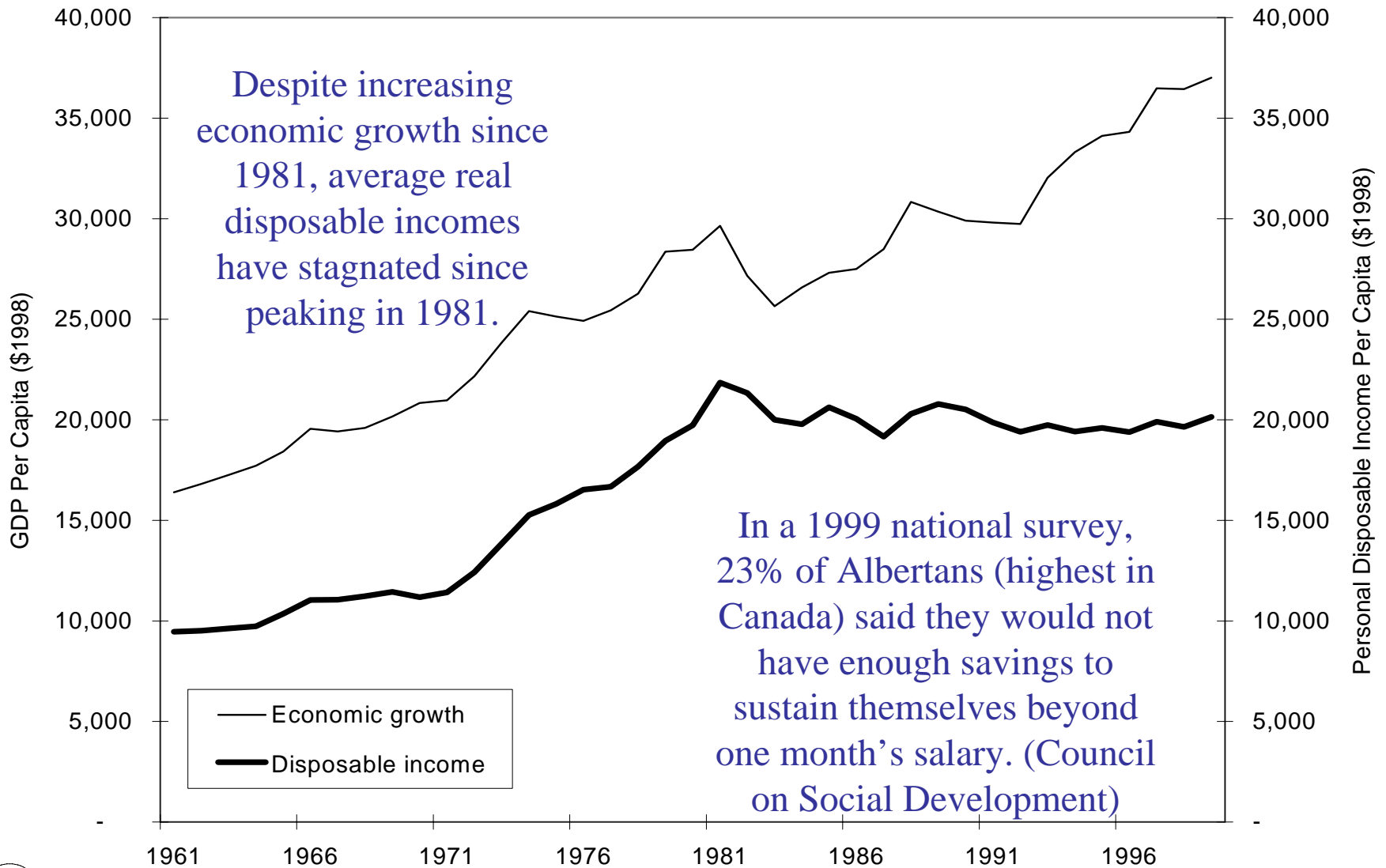
circa 1999



If Alberta's GDP is up, what about household, social and environmental well-being?

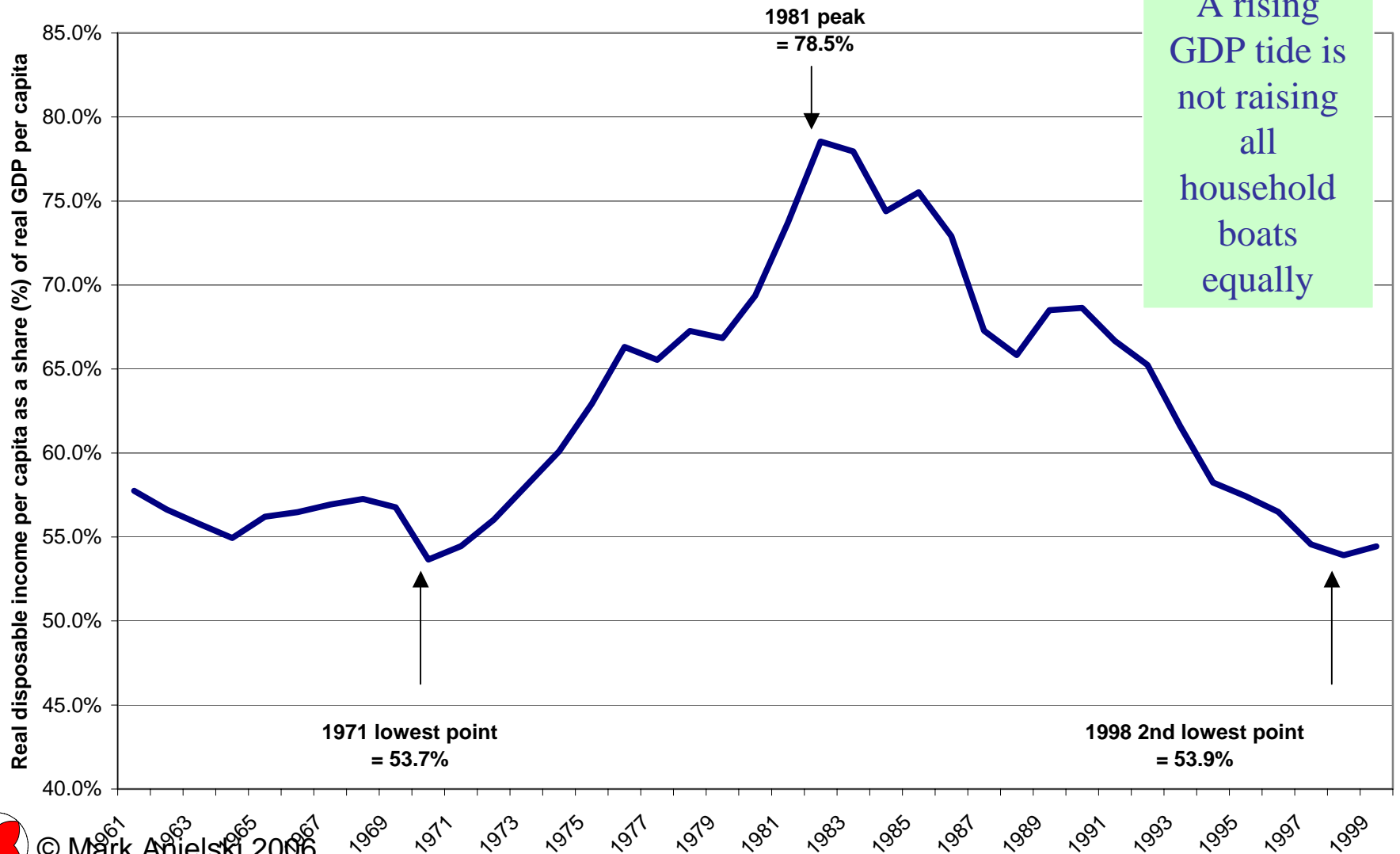


As GDP rose, real disposable incomes stagnated

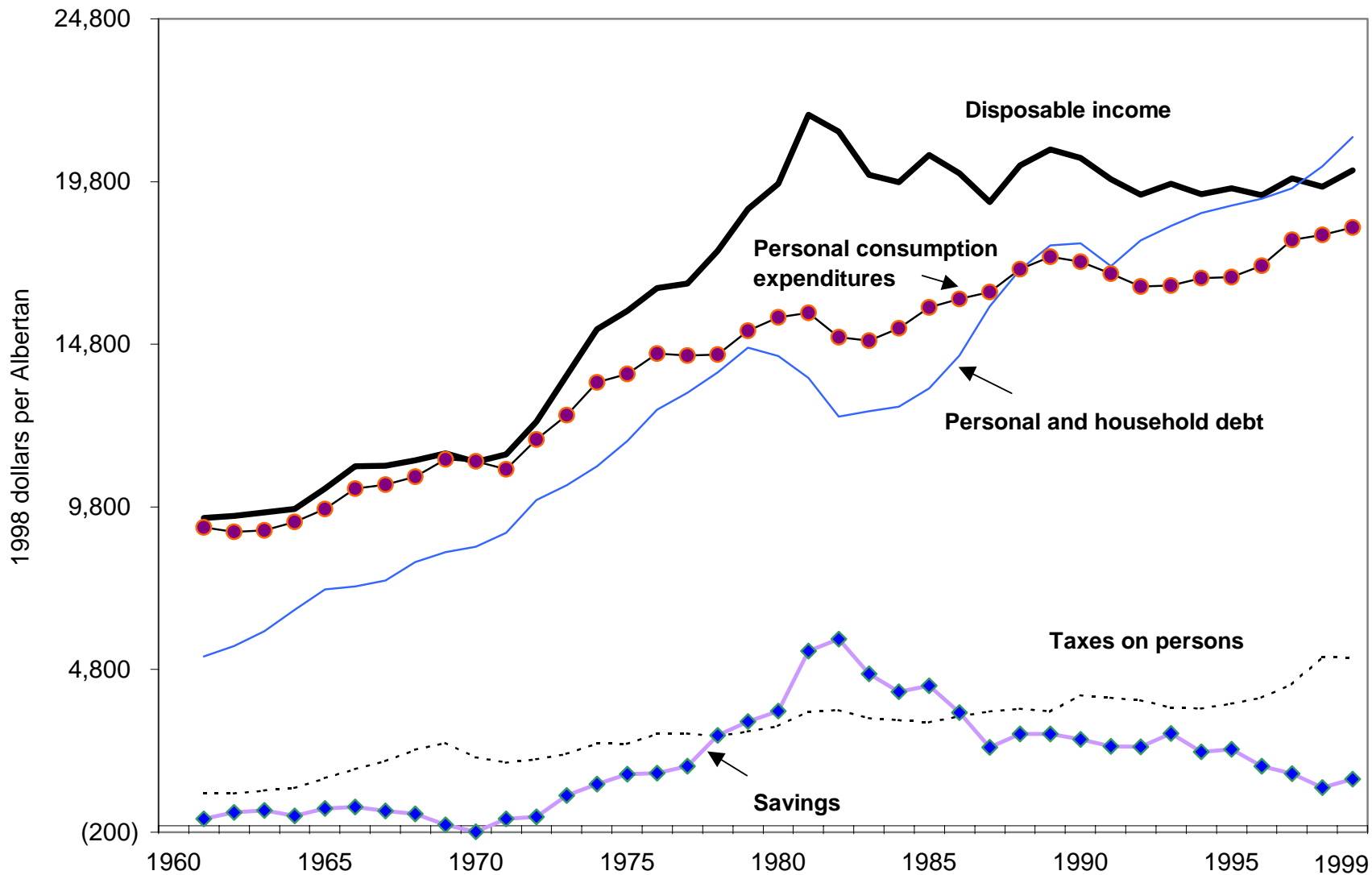


Albertan's share of GDP falling

The Average Albertan's Share of GDP



Albertan's living on debt

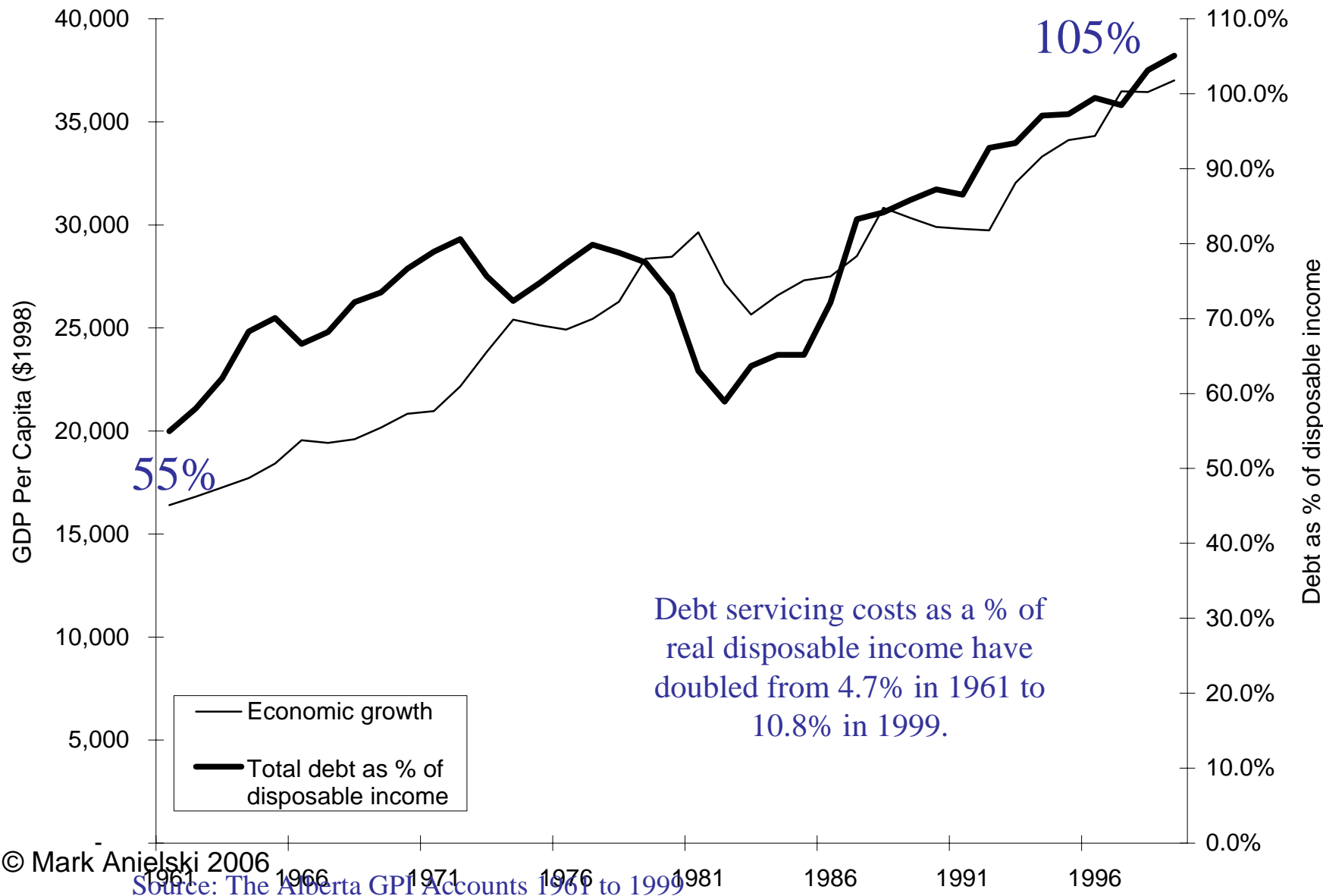


Sources: Alberta Treasury, Alberta Economic Accounts 1999; Statistics Canada, CANSIM Table 384-0035 and Table 384-0012 (92-99)

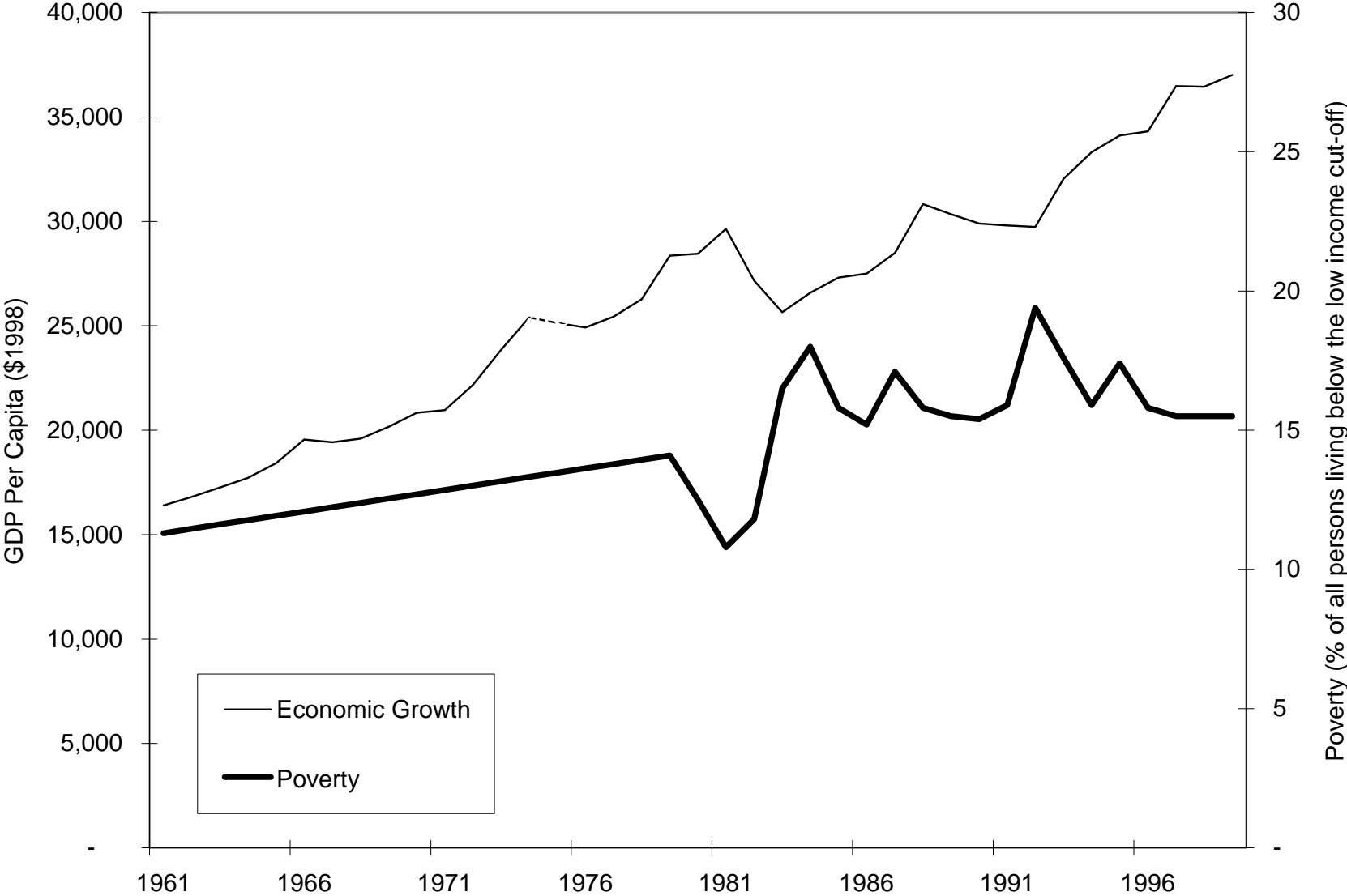
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Household per capita debt has reached 105% of disposable income



Poverty



© Mark Anielski 2006

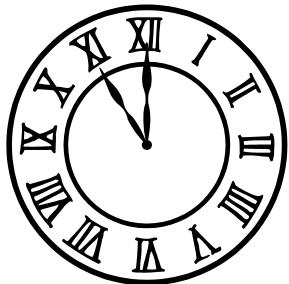
Source: The Alberta GPI Accounts 1961 to 1999

The way Albertans lived in 1961...



Employment

- Hours of paid work: 2,821 per worker per year
- Unemployment rate: 2.5%
- Underemployment rate: 0.55%

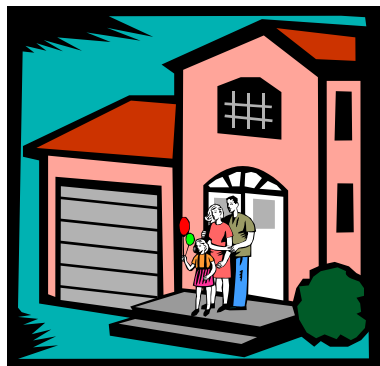


Where does the time go?

(hours per Albertan per year)

- Paid work (per person in work force): 2,821
- Commuting time (minutes per day): 24.0
- Household work: 957
- Parenting and eldercare: 198
- Free time: 1,829

The Household



Income and Spending

(1998\$ per year per Albertan)

- Disposable income: \$9,466
- Personal consumption expenditures: \$8,747
- Taxes: \$870
- Household debt: \$5,204
- Savings rate: 3.7%



Where did the money go in 1961?

(spending in 1998 dollars per Albertan)

- Housing and utilities: \$1,508
- Food and tobacco: \$2,173
- Clothing: \$772
- Personal goods: \$1,129
- Household operations: \$973
- Recreation & entertainment: \$562
- Health care: \$339
- Transportation: \$1,254
- Taxes: \$1,928
- Household debt service costs: \$75



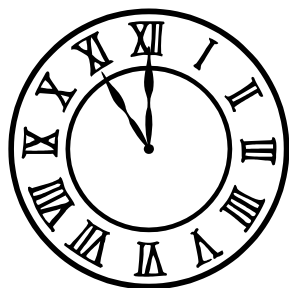
...and the way we live in 1999



Employment

- Hours of paid work: 1,463 per worker per year
- Unemployment rate: 5.7%
- Underemployment rate: 3.45%

The Household



Where does the time go?

(hours per Albertan)

- Paid work (per person in work force): 1,463
- Commuting time (minutes per day): 25.0
- Household work: 1,032
- Parenting and eldercare: 137
- Free time: 2,106
- Volunteering: 75



Income and Spending

(1998\$ per year per Albertan)

- Disposable income: \$19,762
- Personal consumption expenditures: \$17,112
- Taxes: \$4,099
- Household debt: \$21,172
- Savings rate: 6.8%



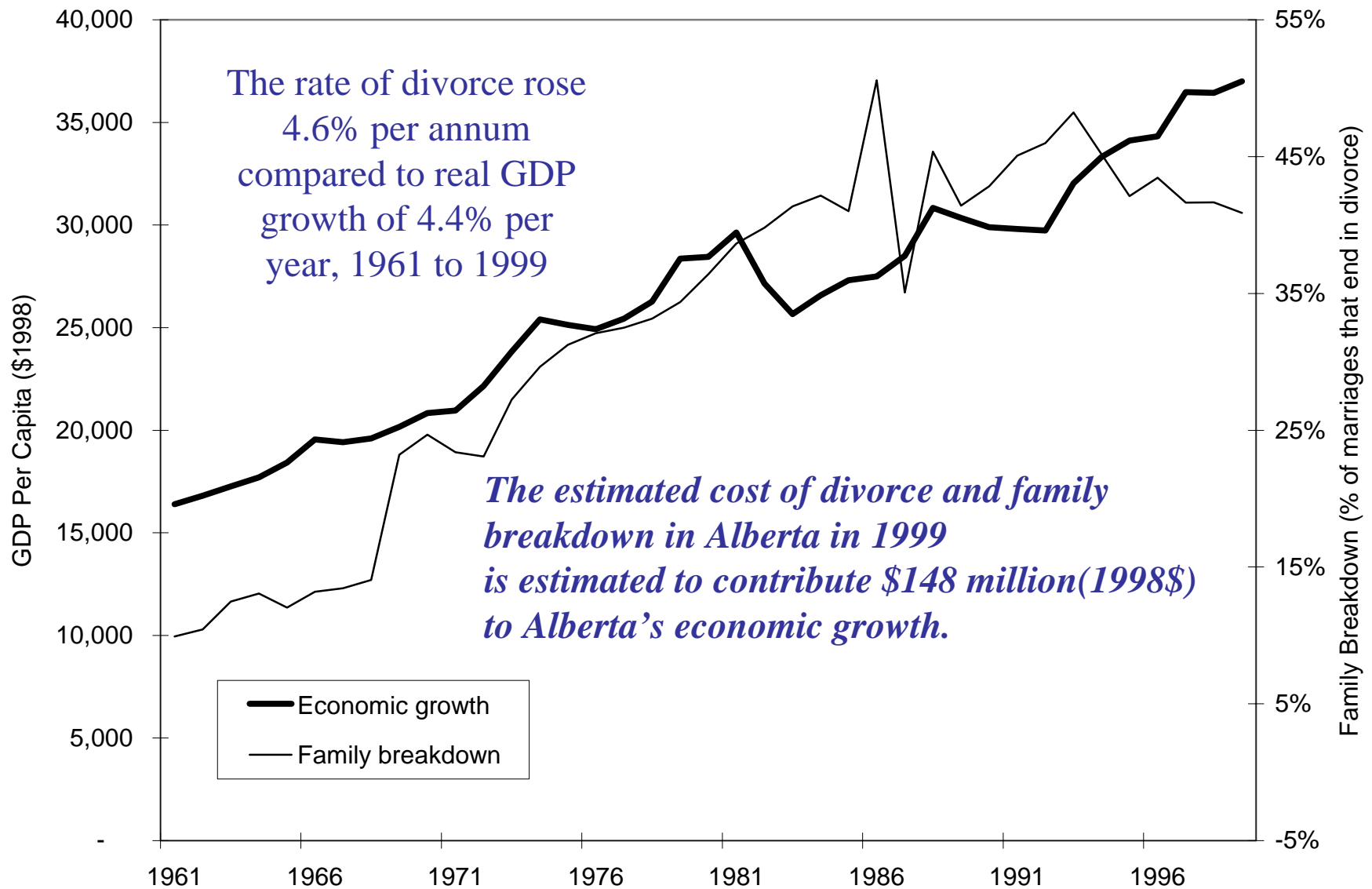
Where did the money go in 1999?

(spending in 1998 dollars per Albertan and % increase since 1961)

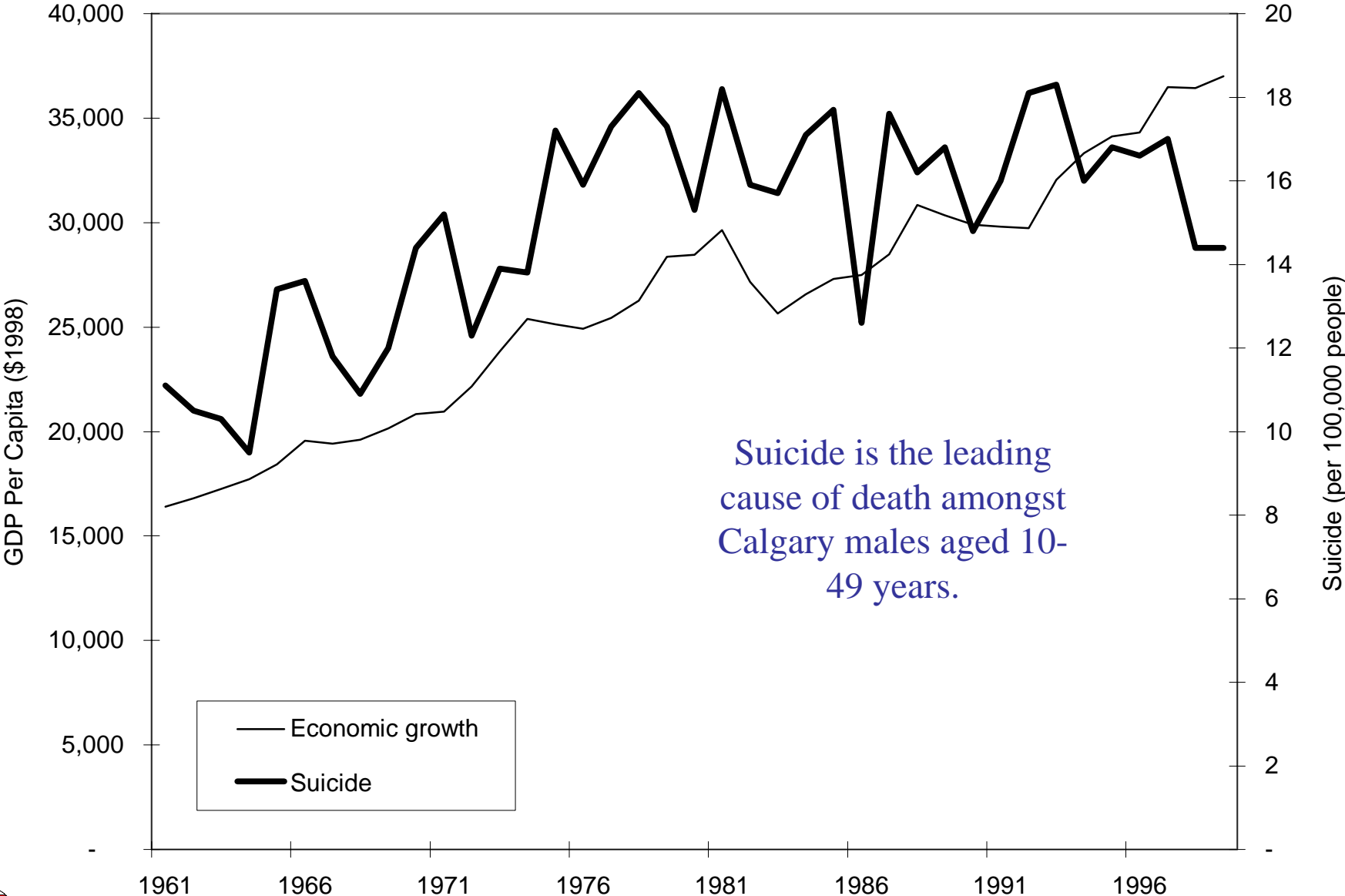
- o Housing and utilities: \$3,869 (+256%)
- o Food and tobacco: \$2,432 (+12%)
- o Clothing: \$838 (+9%)
- o Personal goods: \$3,654 (224%)
- o Household operations: \$1,482 (+52%)
- o Recreation & entertainment: \$2,029 (+261%)
- o Health care: \$805 (+137%)
- o **Games of chance (gambling) \$309 (+%??)**
- o Transportation: \$3,330 (+166%)
- o Taxes: \$5,172 (+494%)
- o Household debt servicing costs: \$2,257 (+2905%)



Family Breakdown: Divorce



Suicide



Suicide is the leading cause of death amongst Calgary males aged 10-49 years.



Youth Drug Use



© Mark Anielski 2006

Source: The Alberta GPI Accounts 1961 to 1999

Problem Gambling



© Mark Anielski 2006

Source: The Alberta GPI Accounts 1961 to 1999

Alberta \$ Genuine Progress

Net Sustainable Economic Welfare, 1999

Alberta GPI Income Statement for 1999, 1998 \$ millions

	1998\$ millions	% of GDP
Gross Domestic Product (expenditure-based)	109,708	
Personal consumption expenditures	52,839	48.2%
Consumption Expenditures adjusted for income distribution	47,957	43.7%
Non-defensive Government Expenditures	7,728	7.0%
Value of Services of Consumer Durables	5,533	5.0%
Value of Public Infrastructure Services	1,661	1.5%
Net Capital Investment	(865)	-0.8%
Cost of Household and Personal Debt Servicing	(6,434)	-5.9%
Cost of foreign borrowing	(31,920)	-29.1%
Value of Unpaid Work and Leisure		
Value of Housework	32,907	30.0%
Value of Parenting and Elder Care	3,292	3.0%
Value of Volunteer Work	2,631	2.4%
Value of Free Time	0	0.0%
	38,830	35.4%
Social Capital Depreciation Costs		
Cost of Consumer Durables	(7,998)	-7.3%
Cost of Unemployment and Underemployment	(3,824)	-3.5%
Cost of Auto Crashes	(3,026)	-2.8%
Cost of Commuting	(4,406)	-4.0%
Cost of Crime	(1,833)	-1.7%
Cost of Family Breakdown	(148)	-0.1%
Cost of Suicide	(2)	0.0%
Cost of Gambling	(2,168)	-2.0%
	(23,406)	-21.3%



Alberta \$ Genuine Progress

Net Sustainable Economic Welfare, 1999...cont.

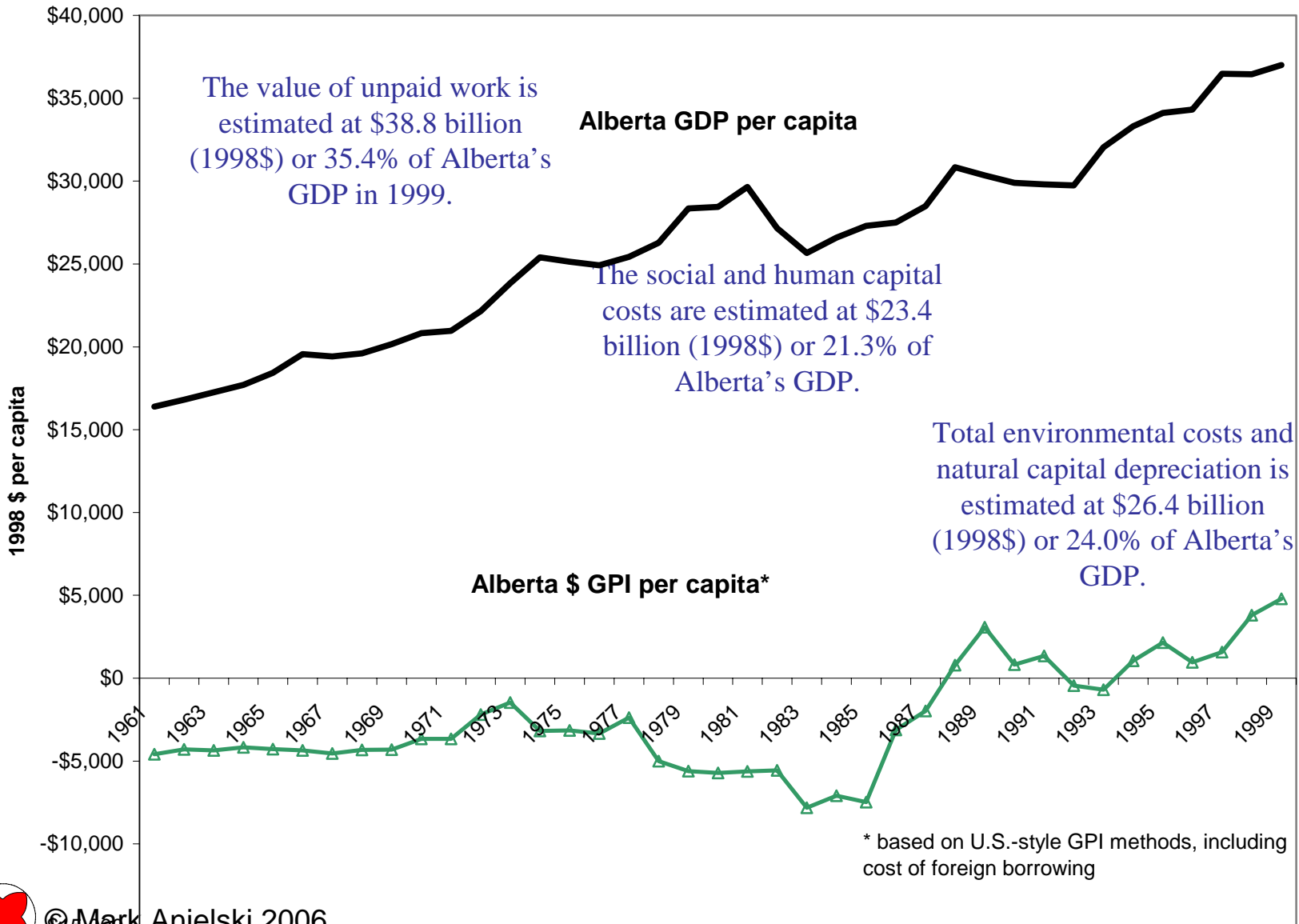
Natural Capital Depreciation Costs

Cost of Nonrenewable Resource Use	(10,656)	-9.7%
Cost of non-timber forest values due to change in productive forest	(24)	0.0%
Cost of Unsustainable Timber Resource Use (loss in pulp production value)	(15)	0.0%
Cost of erosion on bare soil on cultivated land (on-site only)	(13)	0.0%
Cost of reduction in yields due to salinity on dryland and irrigated cropland	(58)	-0.1%
Cost of air pollution	(3,666)	-3.3%
Cost of GHG (climate change costs)	(4,073)	-3.7%
Cost of Loss of Wetlands	(7,682)	-7.0%
Environmental Cost of Human Wastewater Pollution	(1)	0.0%
Non- market Cost of Toxic Waste Liabilities	(5)	0.0%
Non-market Cost of Municipal waste Landfills	(190)	-0.2%
	(26,382)	-24.0%
\$GPI (Net Sustainable Economic Welfare)	12,703	



Alberta GDP vs. \$ GPI

1961-1999



A Alberta Gambling and GPI



Fundamental Questions

- 1. Does gambling (playing games of chance) contribute to a net improvement in the well-being (*utility*) of a household (*oikos*) and the community?**
- 2. What are the positive and negative impacts, benefits and costs of gambling to the overall well-being of society?**
- 3. How should we evaluate these impacts against whose values?**



Fundamental Questions

- If governments are *utilitarian* in their policies and behaviour what onus is on government to be accountable for the changes in well-being (outcomes) of every household in a community?
- How can alternatives to gambling, as a policy for revenue generation, be assessed and weighed?



Flaws in Economic Analysis

“There is a pervasive lack of understanding among legislators and the business community -- even among the rank of economists -- about what economic development is and how to evaluate it...[and] little or no understanding on how to construct the elements of cost-benefit analysis and how to validate its components once they have done so. ”

Earl Grinols

Gambling in America: Costs and Benefits



Gambling analyzed through a GPI lens would..

examine and compare the total well-being impacts (both positive and negative) on the individual, the household and the community as well as the full financial costs and benefits associated with playing games of chance in the context of societal value for all households.



GPI test would ..

Demonstrate the expected net well-being impact of any proposed gambling development and the actual net well-being impacts of existing gambling industry development on individual households and the community.

The analysis should show that gambling activities either have a positive, negative or neutral impact on well-being; if gambling created more social harm and diminished well-being, even for one household, then it would fail the GPI test.

Impacts can be both tangible, intangible and monetary in nature.



Alberta GPI Study (2001) of Gambling

Report attempted to measure the full costs associated with gambling in terms of the estimated monetary losses of problem and pathological gamblers, who represented nearly five percent of Alberta's adult population in 1999 (based on a similar GPI study for Australia by Clive Hamilton).

This report and the GPI accounting system attempt to measure these impacts in a more holistic way than GDP accounting. The incidence of gambling is used, with other indicators, as a proxy for the health of communities and households. This report was a first step toward a more complete and holistic full impact analysis of gambling on household and societal well-being.



Benefits of Gambling for Alberta

- The \$864-million in net revenues to the Alberta Government in 1999-2000 helped to support over 8,000 not-for-profit, community and public initiatives.
- Net revenues earned by charities from licensed gaming activities totaled \$163-million in 1999-2000.
- Gaming revenues were approximately four percent of 1999-2000 Government of Alberta revenues.
- The industry provided 11,000 full and part-time jobs, according to a 1998 KPMG study estimate.



The Costs of Gambling

The Australian GPI estimates for the cost of gambling. Dr. Clive Hamilton of the Australian Institute estimated the GPI for Australia for 1999 and estimated the cost of gambling using “expenditures” by problem gamblers as a proxy for societal costs.

This gross expenditure figure is then deducted from personal consumption expenditures in the GPI net income calculations.

Australian estimates show that around 290,000 people are considered to be problem gamblers (2.1 percent of the adult population).

This group lost \$3.5-billion (Australian dollars) in 1999—approximately one-third of the total expenditure on gambling



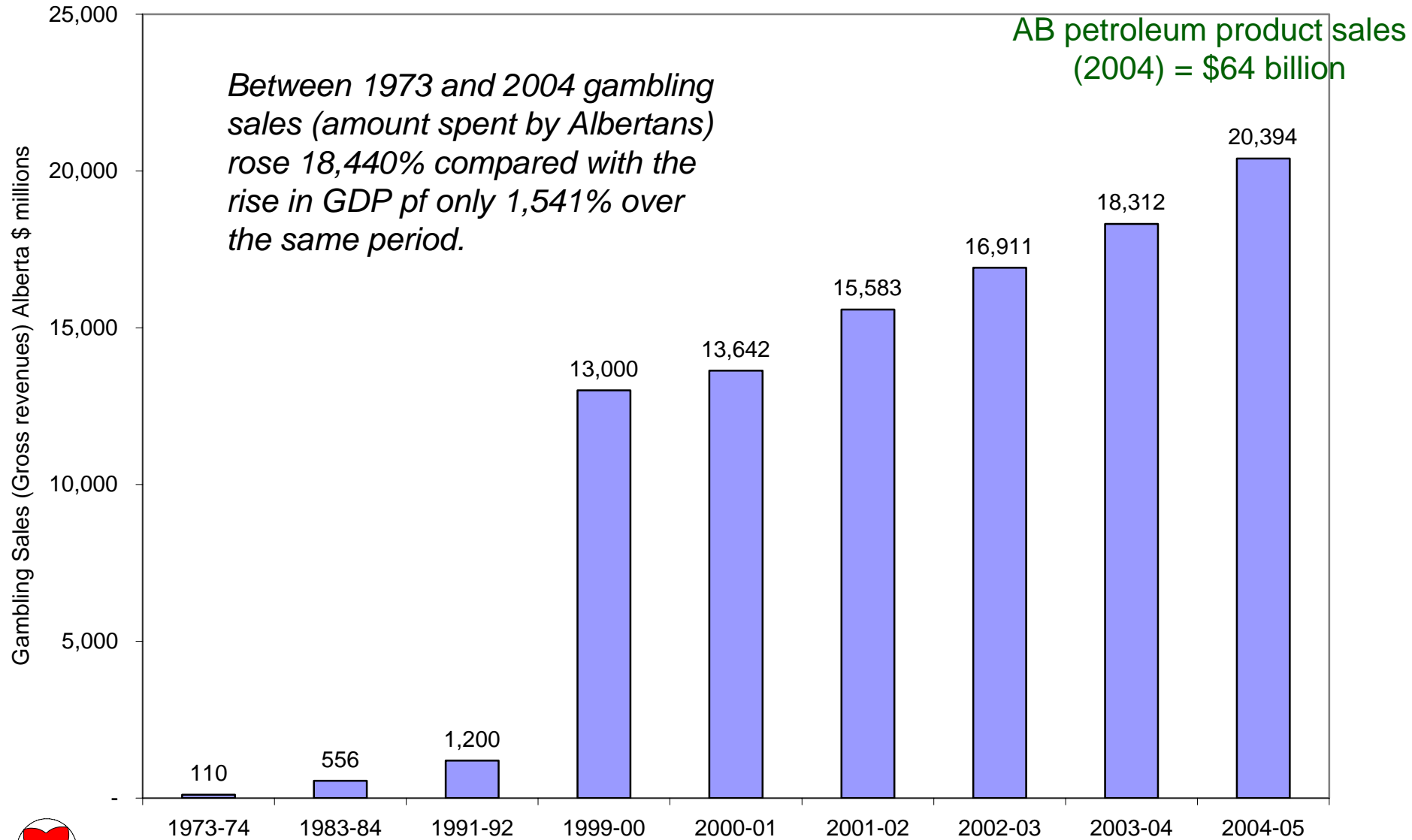
The Alberta GPI Gambling Costs

The costs of gambling for Alberta in 1999 were estimated by taking 17 percent (estimated % of contribution to gambling profits by problem gamblers) multiplied by the \$13-billion gross sales of games of chance = \$2,167-million in 1999-2000 in “cost of gambling” or the equivalent of \$19,360 of disposable income wagered per problem gambler.

This estimated, focused only on problem gamblers, served as a proxy for the total societal cost of all gambling (both problem and non-problem).



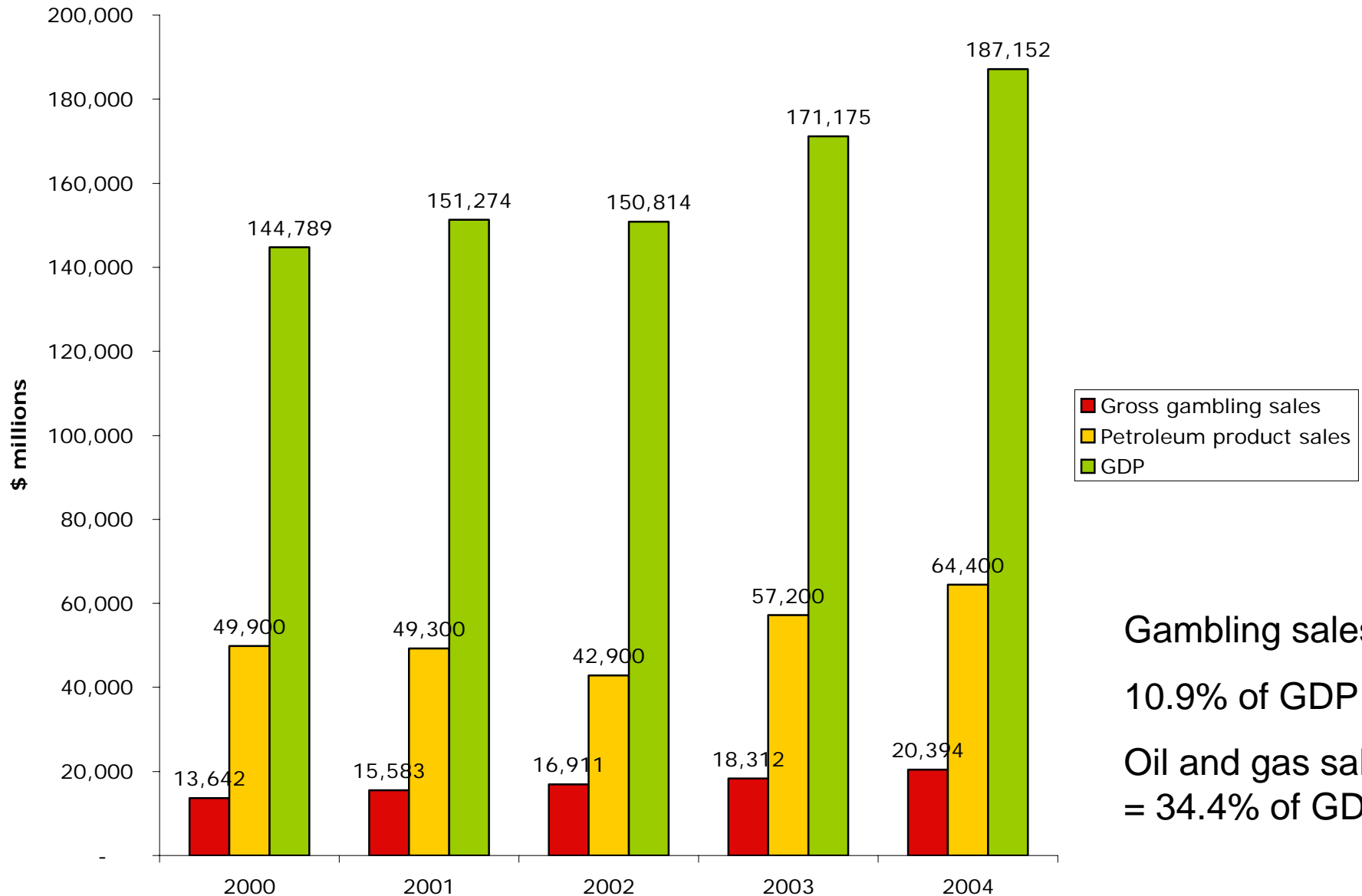
Alberta Gross Gambling Sales



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Source: Alberta Liquor and Gaming Commission annual reports 1974-2005

Gambling in Context of the Alberta Economy

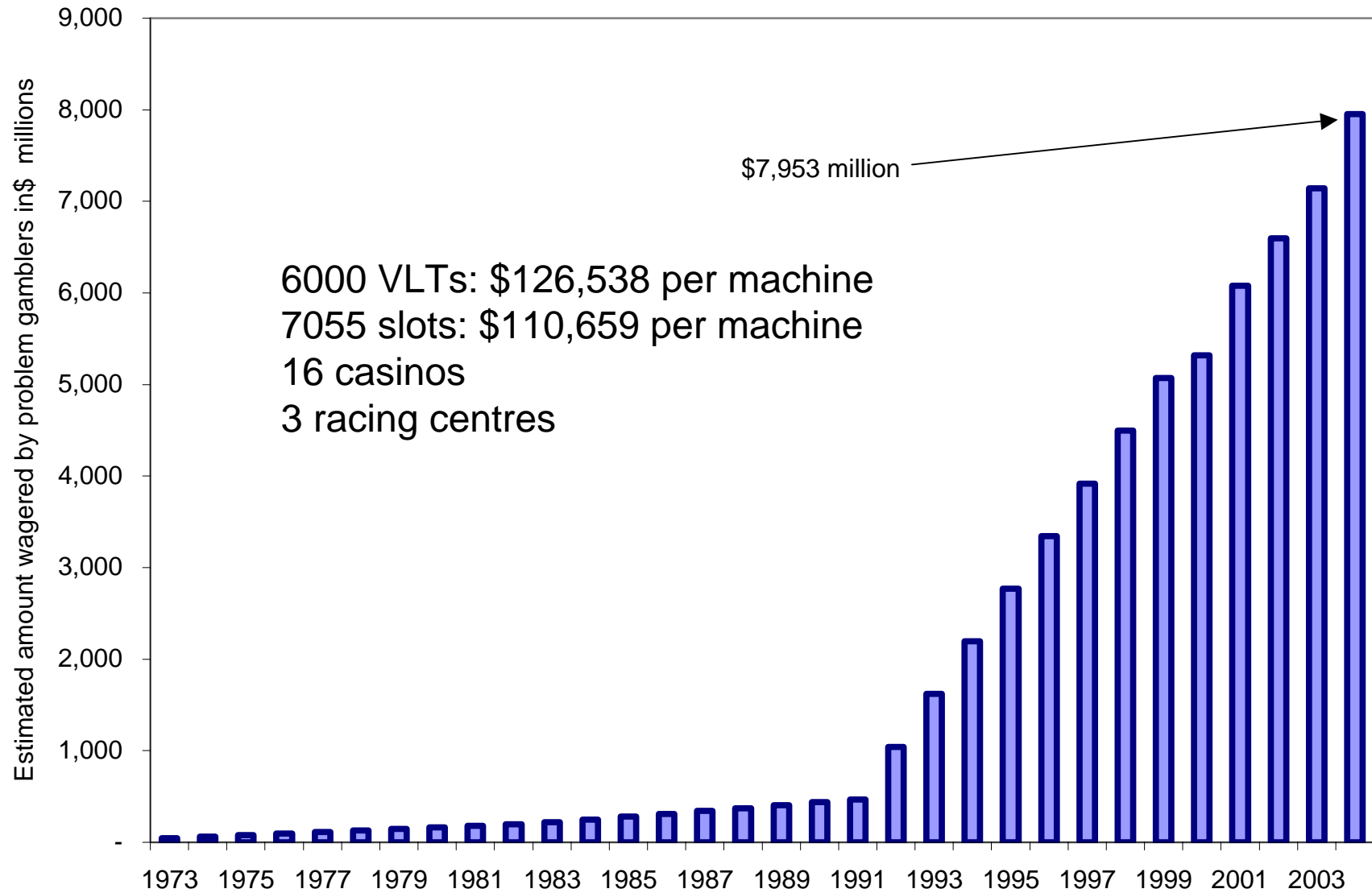


Gambling sales =
10.9% of GDP

Oil and gas sales
= 34.4% of GDP



A mount wagered by Alberta problem gamblers **

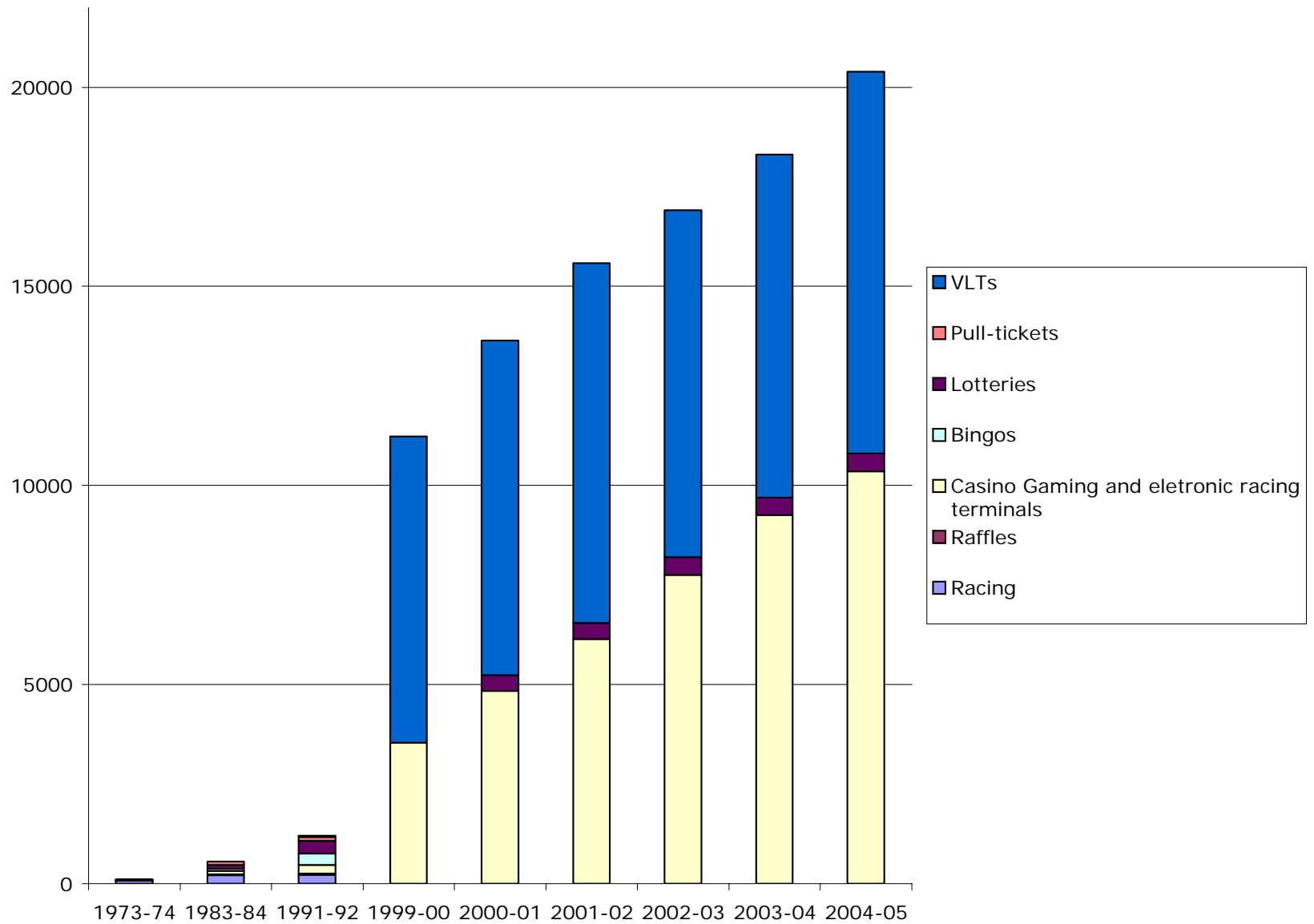


Source: Derived by author from Alberta Lotteries and Gaming annual reports based on 39% of revenues generated by problem gamblers

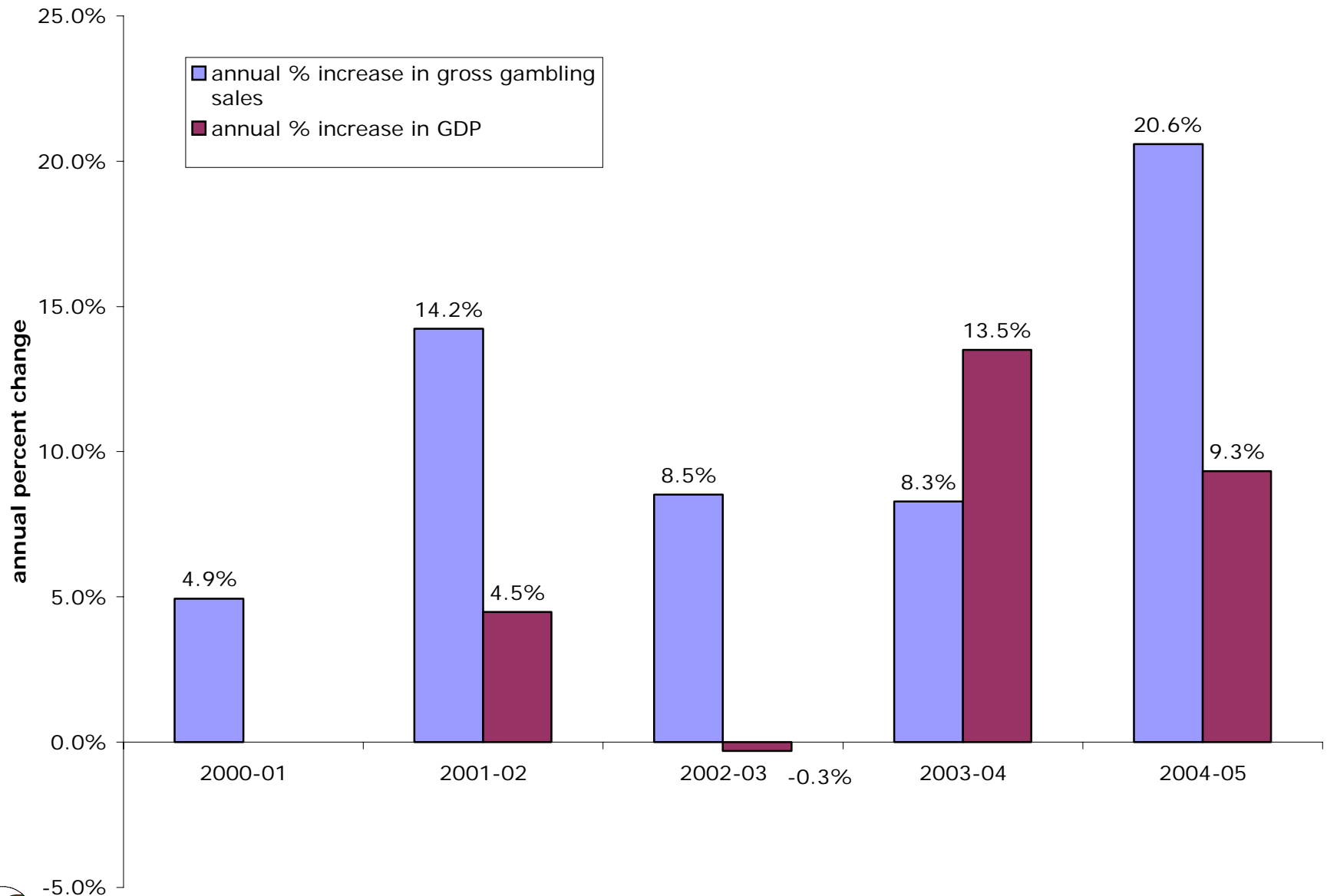
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** Assumes 4% of gambling population are moderate to serve problem gamblers

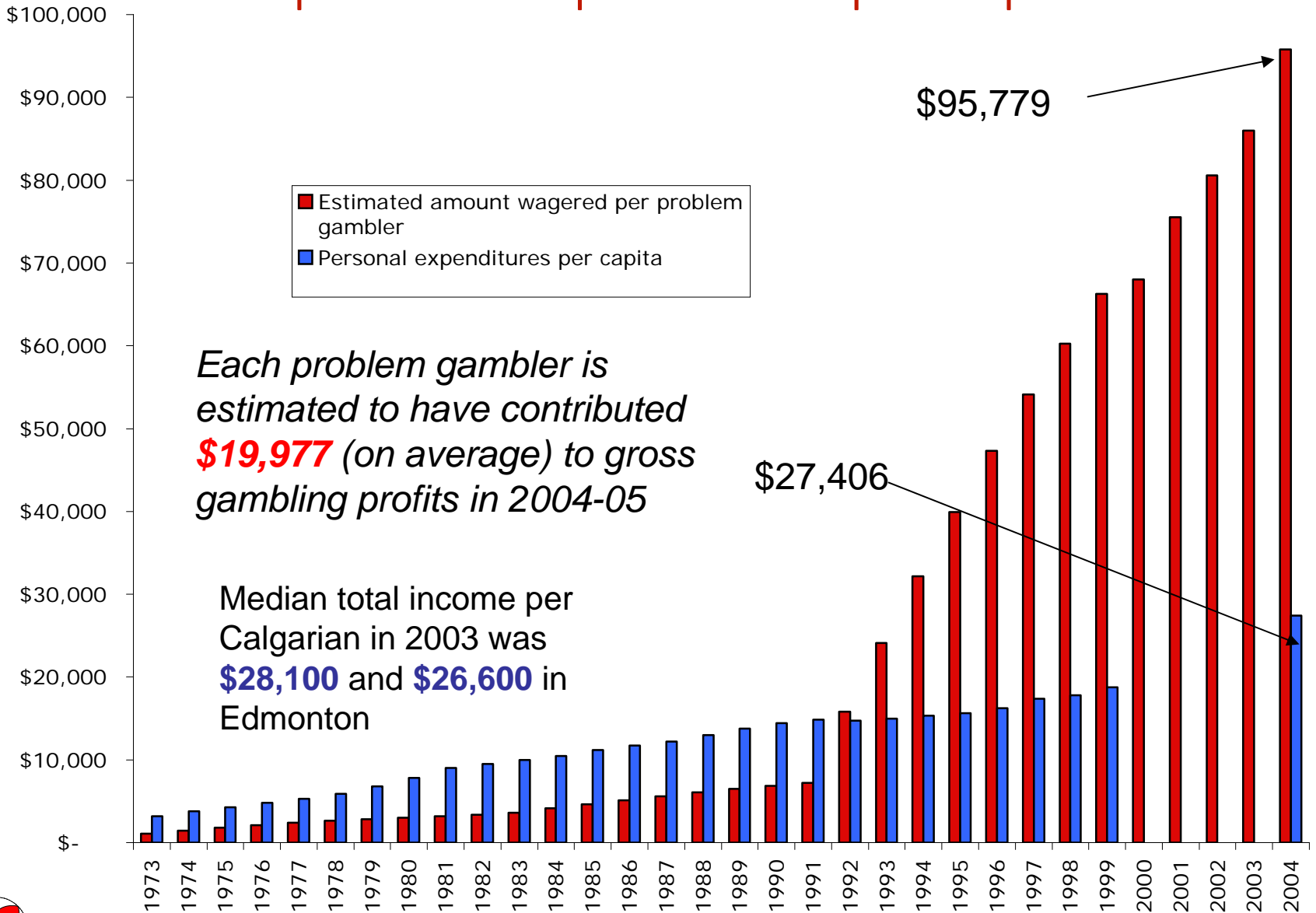
Alberta gross gambling sales by source



Annual % change in gambling revenues vs. GDP

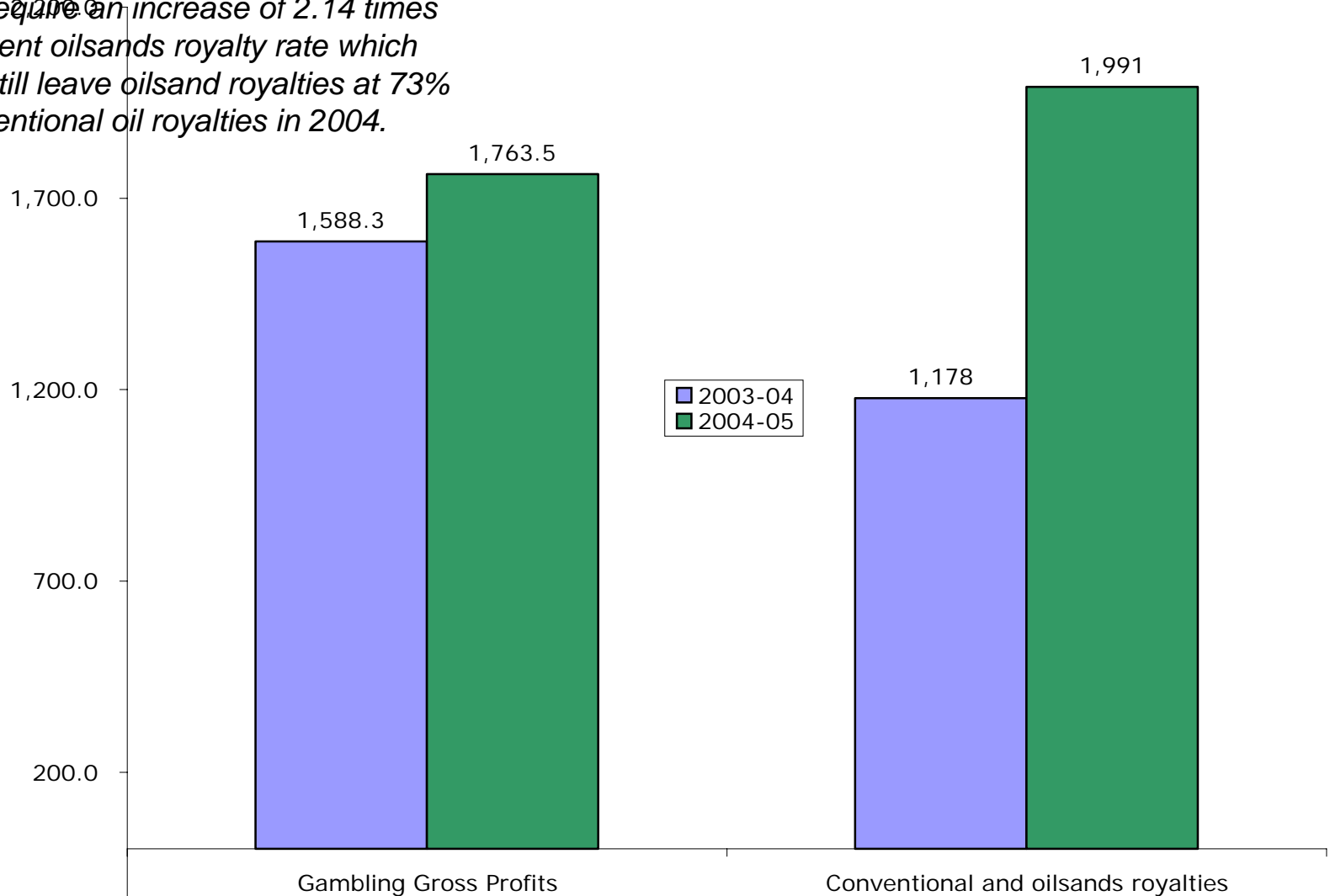


A Alberta amount wagered by each problem gamblers vs. personal expenditures per capita

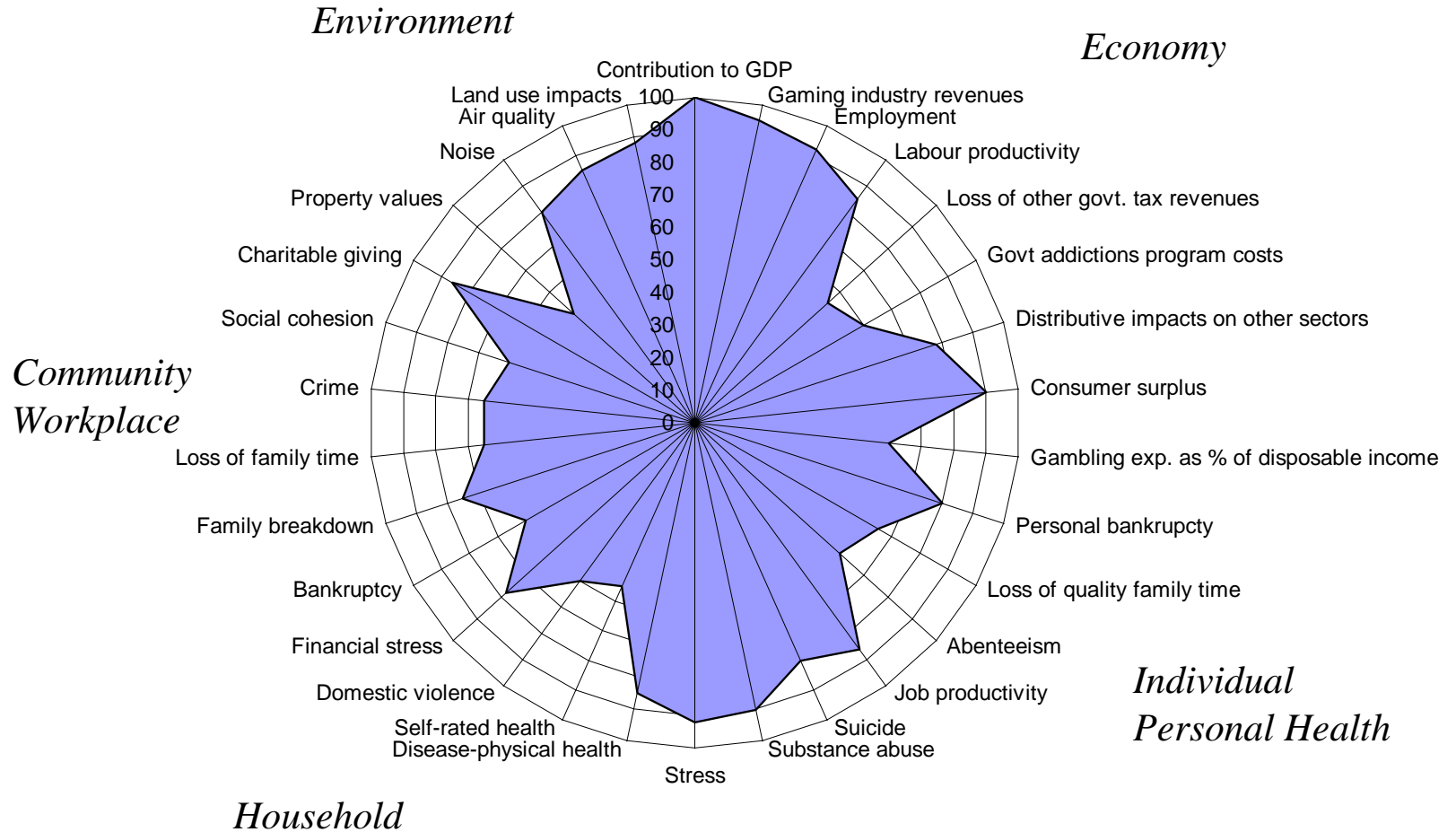


Alberta oil royalties vs. gambling profits

To completely offset VLT and casino gaming and electronic racing terminals would require an increase of 2.14 times the current oilsands royalty rate which would still leave oilsand royalties at 73% of conventional oil royalties in 2004.



A Conceptual GPI Gambling Impact Index



Conceptual GPI Full Benefit-Cost Statement

GPI Full Cost-Benefit of Gambling

Gambling Benefits

Contribution to GDP

- Gambling industry operating and capital expenditures

- Household expenditures on games of chance

- Government gambling gross profits

Regrettable Social Costs

- Government defensive expenditures (addictions programs)

- Cost of loss of labour productivity

- Cost of unemployment/underemployment

- Cost of family breakdown

- Cost of domestic violence

- Cost of crime related to gambling

- Cost of suicide

- Cost of substance abuse related to gambling

- Cost of loss of social cohesion in community and family

- Reductions in charitable giving

- Value of losses to volunteerism

- Value of lost quality time with family, friends and for leisure

- Value of morbidity, disease and premature mortality

- Value of reduced property values

Regrettable Environmental Costs

- Cost of noise pollution

- Cost of loss of ecosystem services due to landuse impacts

- Cost of air quality reductions





Genuine Wealth

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