

**Arab Population
In the West Bank & Gaza**
The Million and a Half Person Gap

1997 PA Census & Projection
3.83 Million

A presentation at

**Update of 1997 PA Projection
with Official Data**
3.06 Million

*The American Enterprise Institute**
Washington, DC

Residents Only Update from 1996
2.73 Million

January 10, 2005

**Update of Israel Projection
from 1990**
2.41 Million

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Michael Wise, Ph.D.

Bennett Zimmerman
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Arab Population In the West Bank & Gaza *The Million and a Half Person Gap*

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- Conducted 1990 Israel Population Survey of West Bank

Prof. Ezra Sohar

- Published research papers on demographics in Israel, W. Bank, and Gaza since 1970

Dr. David Passig

- Expert in mathematical forecasting techniques

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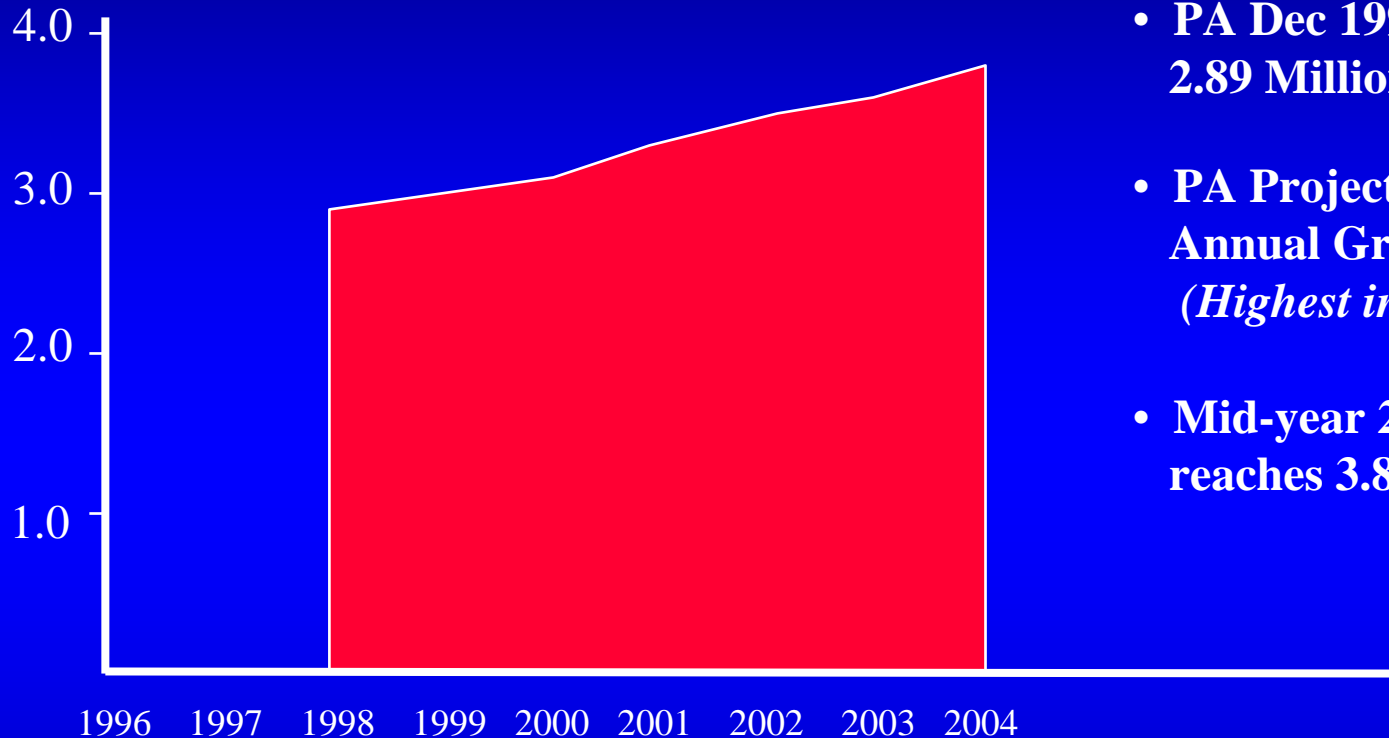
- Demographer/Geographer of West Bank since 1980
- Part of 1990 Population Survey Team for West Bank

The Current Model

1997 PA Census and Projection

(1997 - 2004)

Millions of People



- PA Dec 1997 Census Population **2.89 Million**
- PA Projects Compound Annual Growth Rate of **4.75%** (*Highest in the World*)
- Mid-year 2004 Population reaches **3.83 Million**

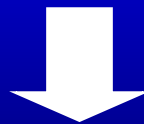
Source: Palestine Central Bureau of Statistics 1997 Census and Projection (2)

- PA population + Israeli Arab population (1.3 million) means Number of Arabs = Number of Jews in Israel, the West Bank, and Gaza.
- Israel faces a demographic threat: Jews will rapidly become a minority.

Arab Population
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Why we formed a team

- PA Reports for population and growth . . .
 - . . . did not match the declines in fertility and birthrates seen throughout the Middle East
 - . . . did not match the numerous reports citing emigration from the PA territories
 - . . . did not match the picture we saw when visiting the areas in different trips over the years
 - . . . did not match independent reports of population in West Bank and Gaza urban areas
- Figures released by the PA were never corroborated by any independent body



The PA was due for an audit

Arab Population
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Primary Palestinian Sources

“Palestinian vs. Palestinian”

**Palestinian Central Bureau
Of Statistics (PCBS)**

- PA 1997 Census
& Projection
- Published growth assumptions
for births, deaths, and migration
- Unmodified by actual data

**Palestinian Authority Ministry
Of Health (PA MOH)**

- Reports births and deaths in
West Bank in Gaza annually
- Annual statistics consistently
below PCBS figures

**Palestinian Central Election
Commission (CEC)**

- Statistics on eligible voters 18
and above.
 - October 2004 Municipal
& Presidential Elections
 - PA Parliamentary Elections
January 1996

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Primary Israeli Sources

Israel Central Bureau of Statistics (ICBS)

- Annual population statistics for Israel
- Annual population statistics for West Bank and Gaza through mid 1990s

Israel Civil Administration for West Bank and Gaza

- Formal census of West Bank and Gaza in 1967
- Issued resident ID Cards
- Maintained school records
- Population studies:
 - last for West Bank in 1990
 - last for Gaza in 1987

Israel Border Police

- Records of Exits/Entries at all Israel, West Bank and Gaza borders

Israel Ministry of Interior

- Records of ID Cards issued to internal migrants from West Bank and Gaza into Israel

Arab Population
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Methodology

Population measurement requires accurate recording and verification of:

Base Population

plus Births

less Deaths

plus Immigration

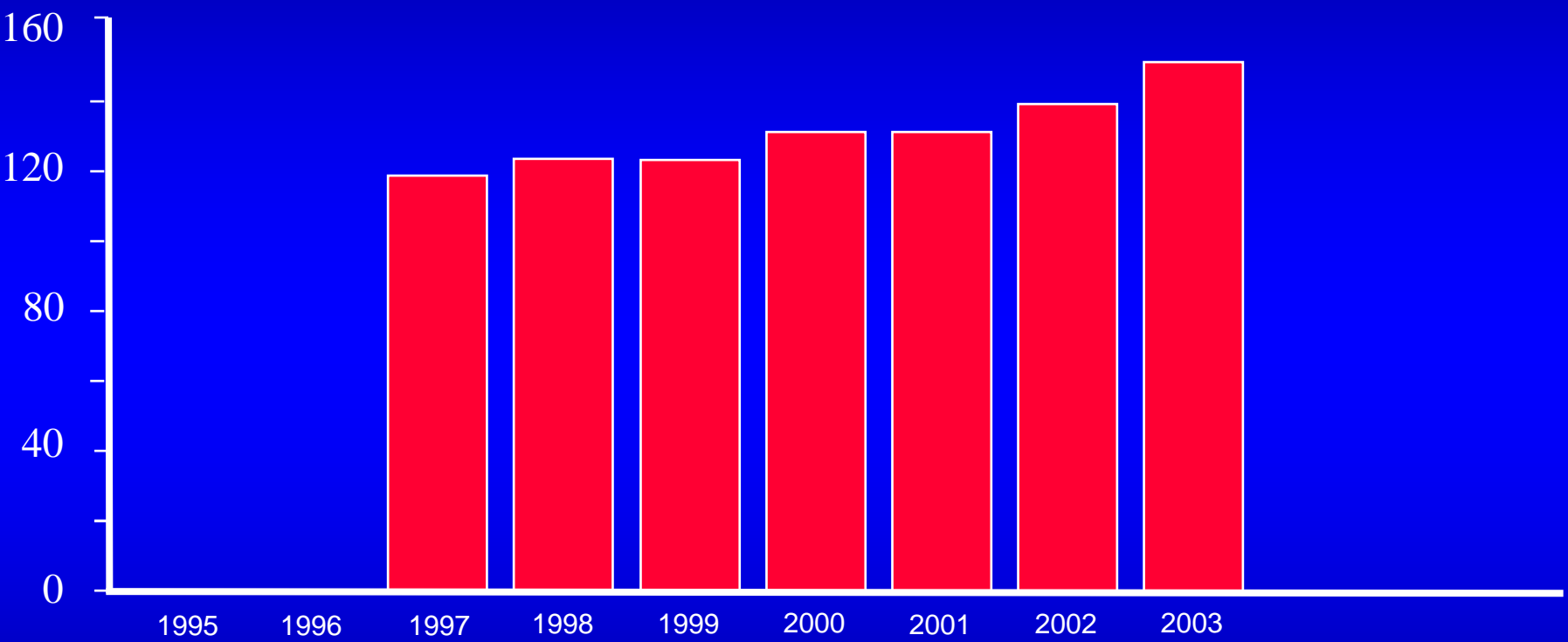
less Emigration

equals Base Population -- End Period

We investigated the 1997 PA Projection each year, factor by factor.

Births/Year PA 1997 Projection

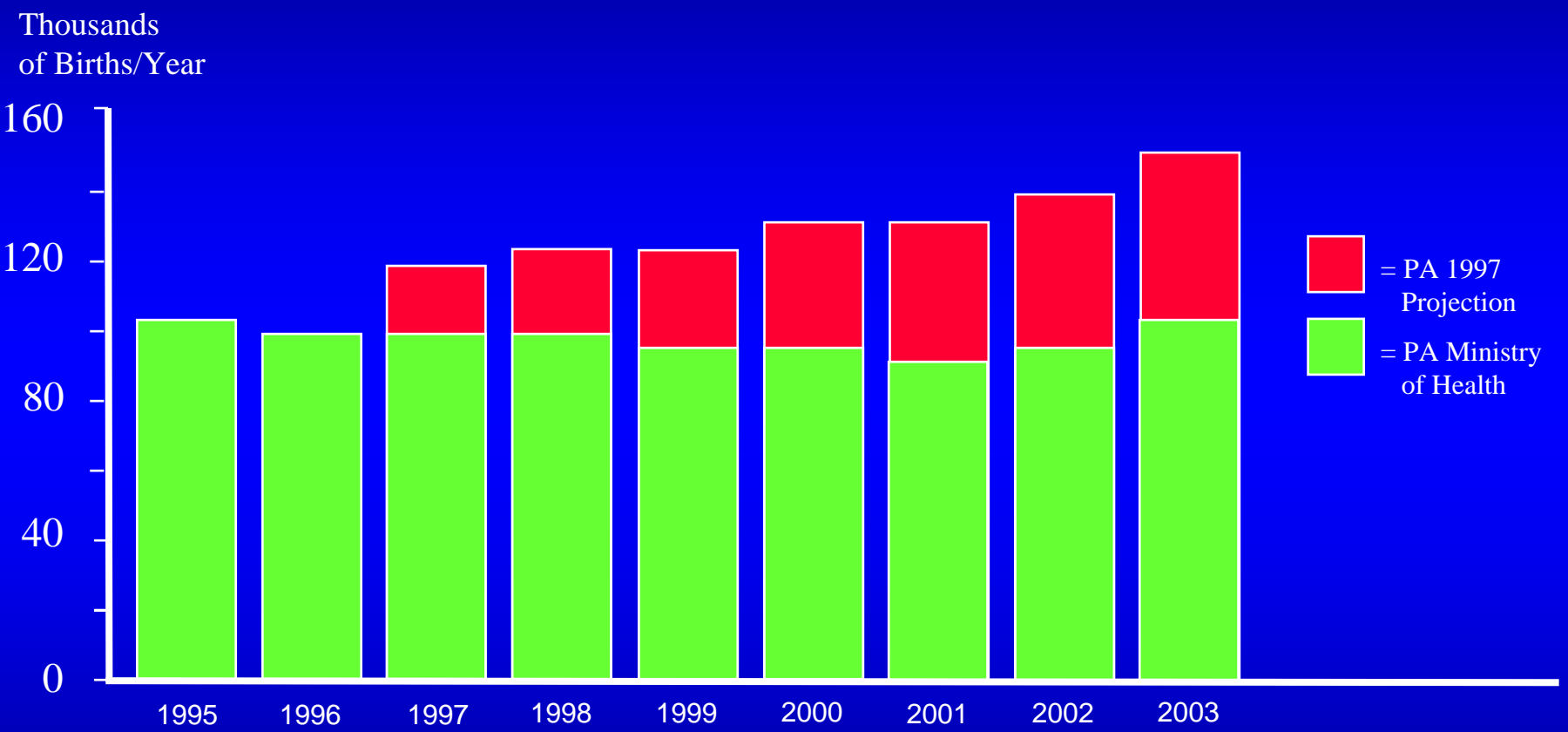
Thousands
of Births/Year



Births/Year

PA 1997 Projection

vs. Births *reported* by PA Ministry of Health



PA Ministry of Health Statistics

Natural Growth Rates (Birth Rate less Death Rate)

as published annually

Natural Growth Rates



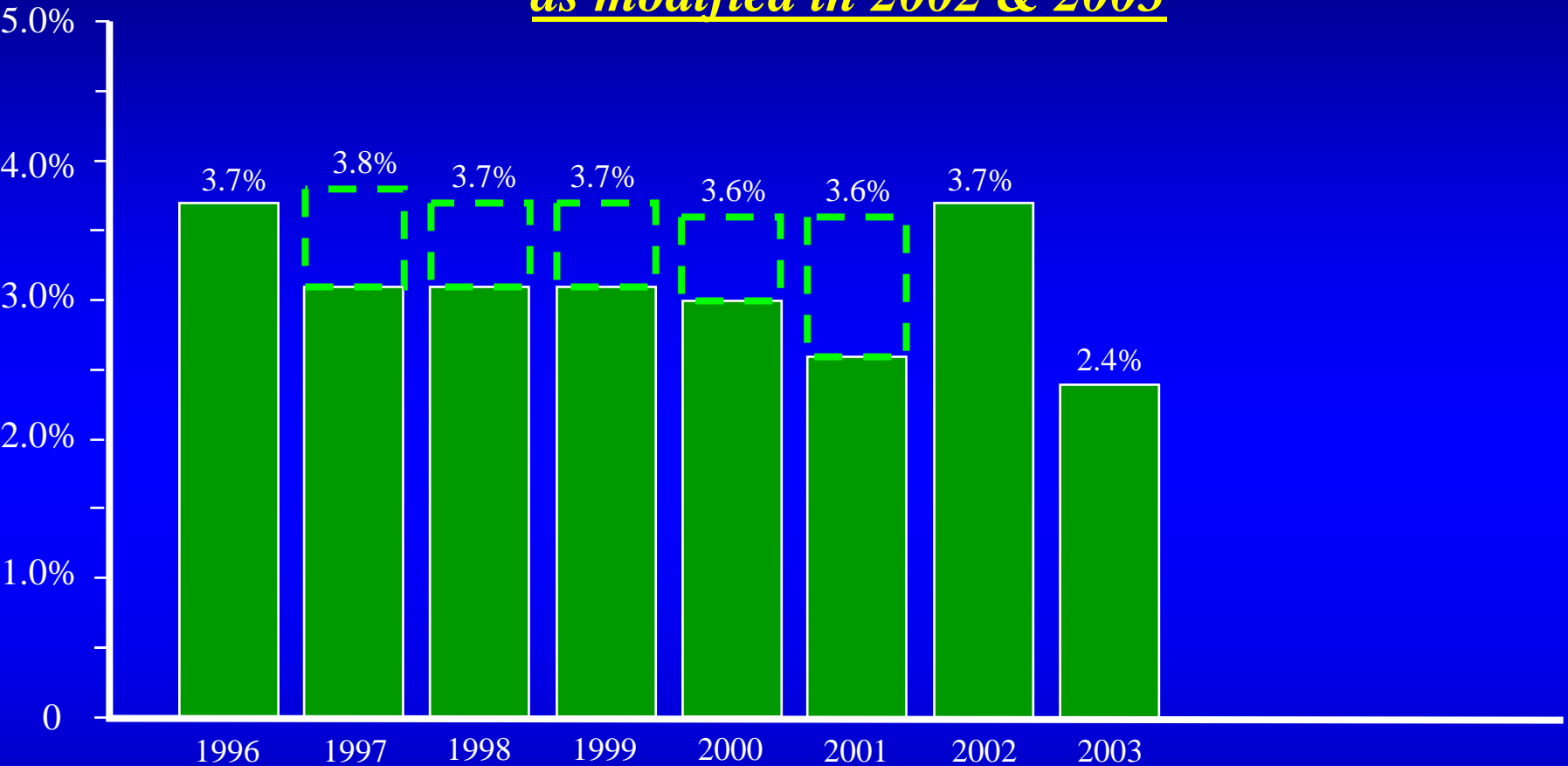
- The PA Ministry of Health also published *each year* a figure for natural growth rate (Birth Rate less Death Rate) for the West Bank and Gaza.

PA Ministry of Health Statistics

Natural Growth Rates

as modified in 2002 & 2003

Natural Growth Rate



- **Retroactive *Alteration* of Growth Rates:** In 2002, the PA MOH changed previously released growth rates to match the natural growth assumptions contained in the original PA Projection.
- **Growth Rate fall to 2.4%:** In 2003, the PA Ministry of Health reported that natural growth rates had fallen to 2.4% for the West Bank and Gaza.

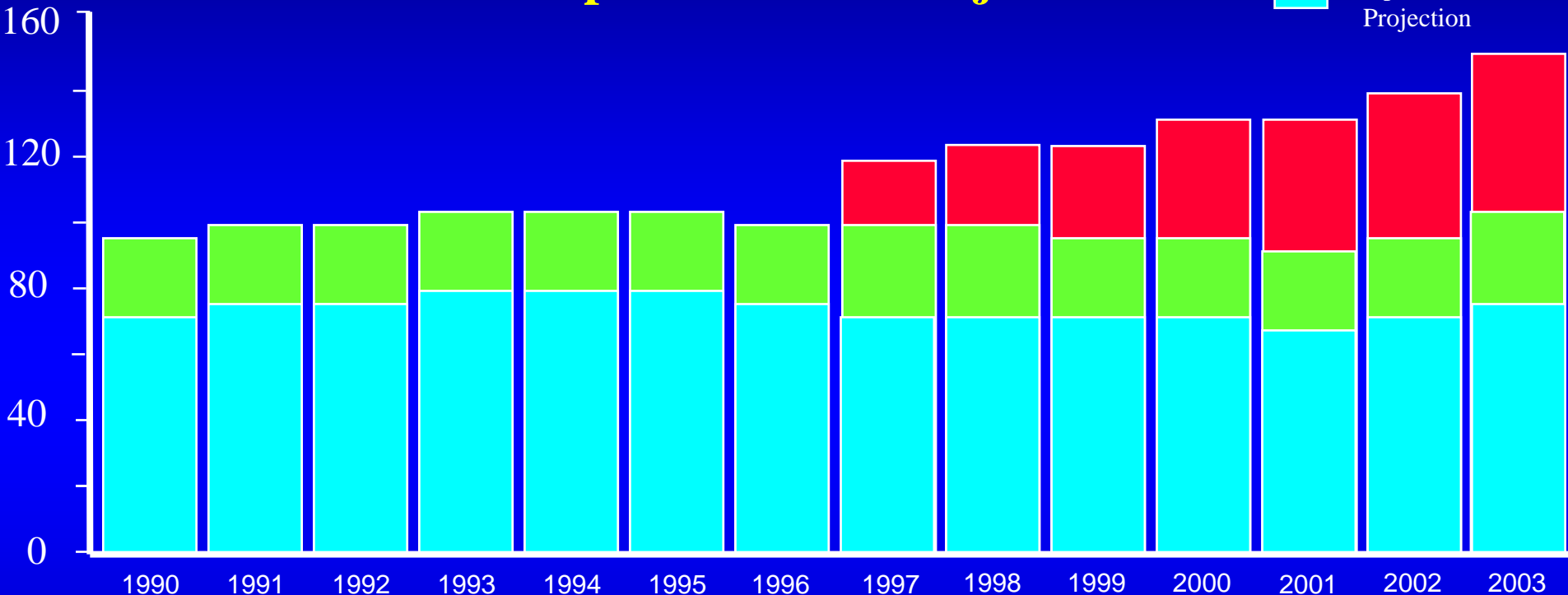
Births/Year

PA 1997 Projection

vs. Births Reported by PA Ministry of Health
vs. Updated Israel Projection

■ = PA 1997 Projection
■ = PA Ministry of Health
■ = Updated Israel Projection

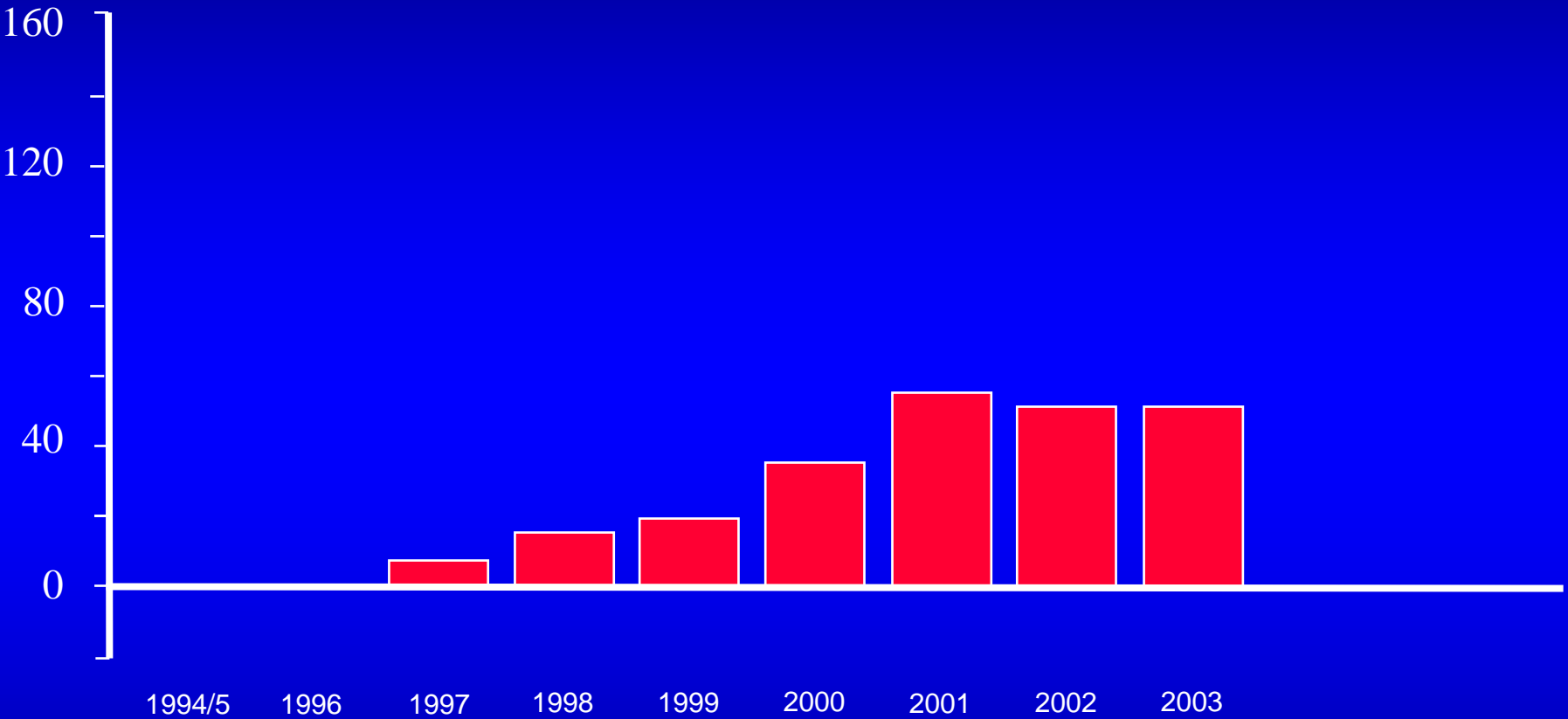
Thousands of Births/Year



- The PA Ministry of Health's back-reported births were significantly higher than births recorded by Israel between 1990 and 1993. We applied this difference to align 1994 – 2003 PA births to previous data

Immigration/Year PA 1997 Projection

Net Entries(Exits)
In Thousands/Year

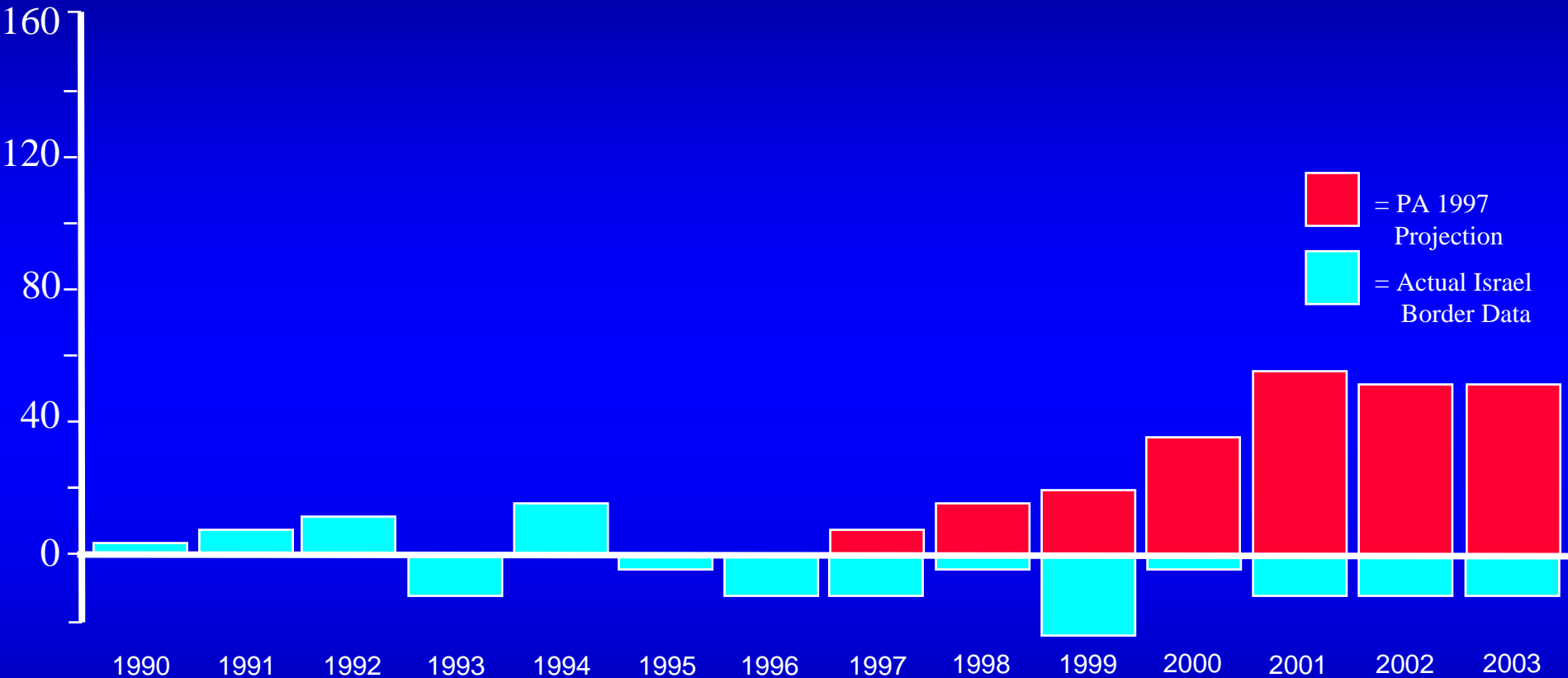


Immigration/Year

PA 1997 Projection

vs. Actual Israel Border Data

Net Entries (Exits)
In Thousands/Year

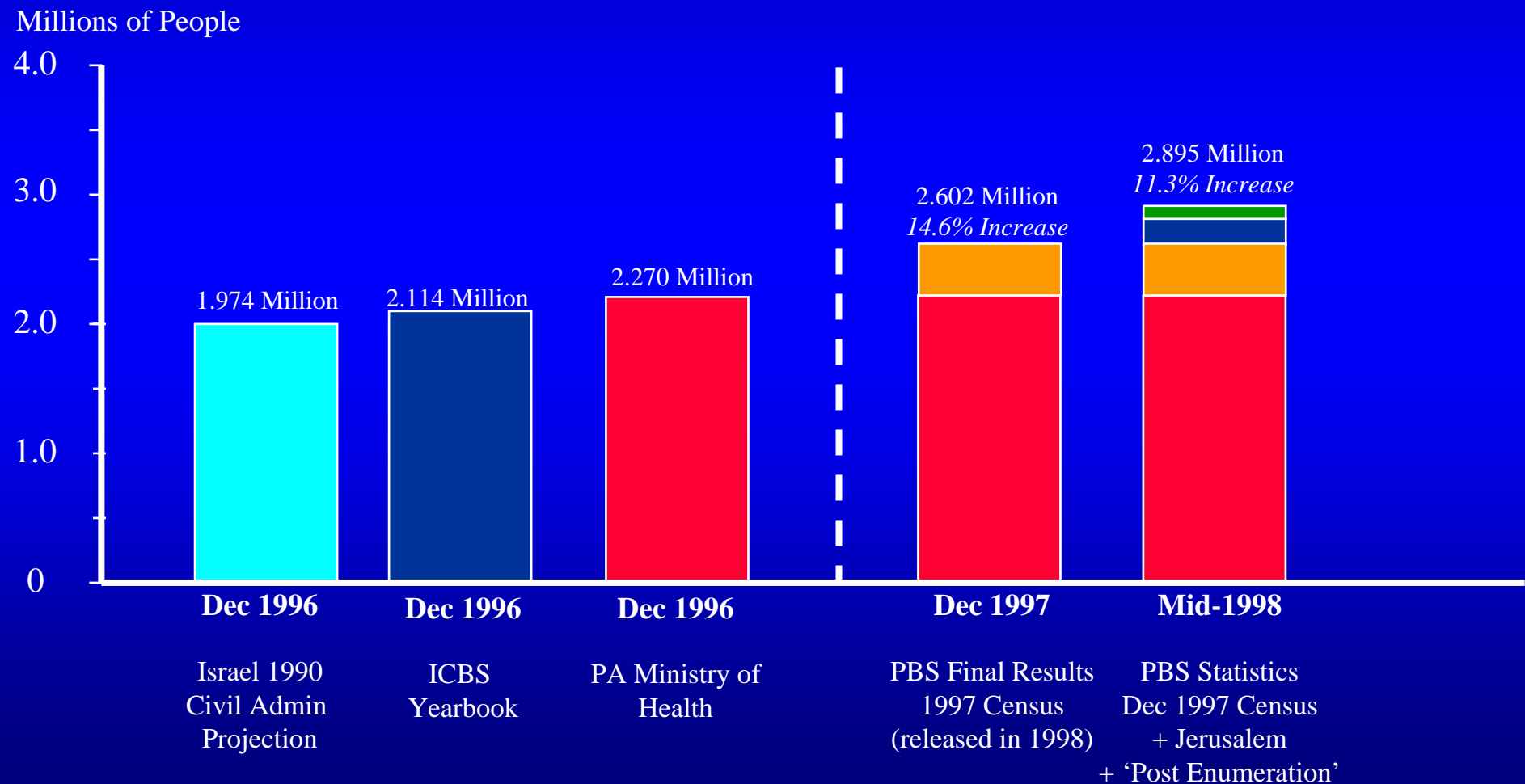


- Border data shows consistent net emigration
 - After Gulf War, there was modest +25 thousand immigration
 - After Oslo I, there was a one year positive balance when PA leadership entered area
- Since 1995, any new immigrants were counterbalanced by a greater number of emigrants.

PA Announces Upward Adjustment in Base (1996 – Mid-Year 1998)

B.efore **C**.ensus

C.ensus **E**.ra



Arab Population In the West Bank & Gaza The Million and a Half Person Gap Appendix A

Palestine Central Bureau of Statistics Census Coverage *De-Facto or De-Jure?*

http://www.pcbs.org/phc_97/phc_covr.aspx

Census Coverage

A comprehensive population enumeration always depends on the essence and the nature of the census. In general, population censuses cover all persons residing within the limits of a certain country, at a specific time. A population census is based on the following:

1. De-facto Approach: Based on the enumeration of individuals according to their existence in the area of enumeration at census moment, regardless of their usual place of residence.
2. De-jure Approach: Based on the enumeration of individuals according to their usual place of residence, regardless of their presence at the census moment.

For the first ever Palestinian census, the de-facto approach was adopted with some exceptions. The census count included the following categories:

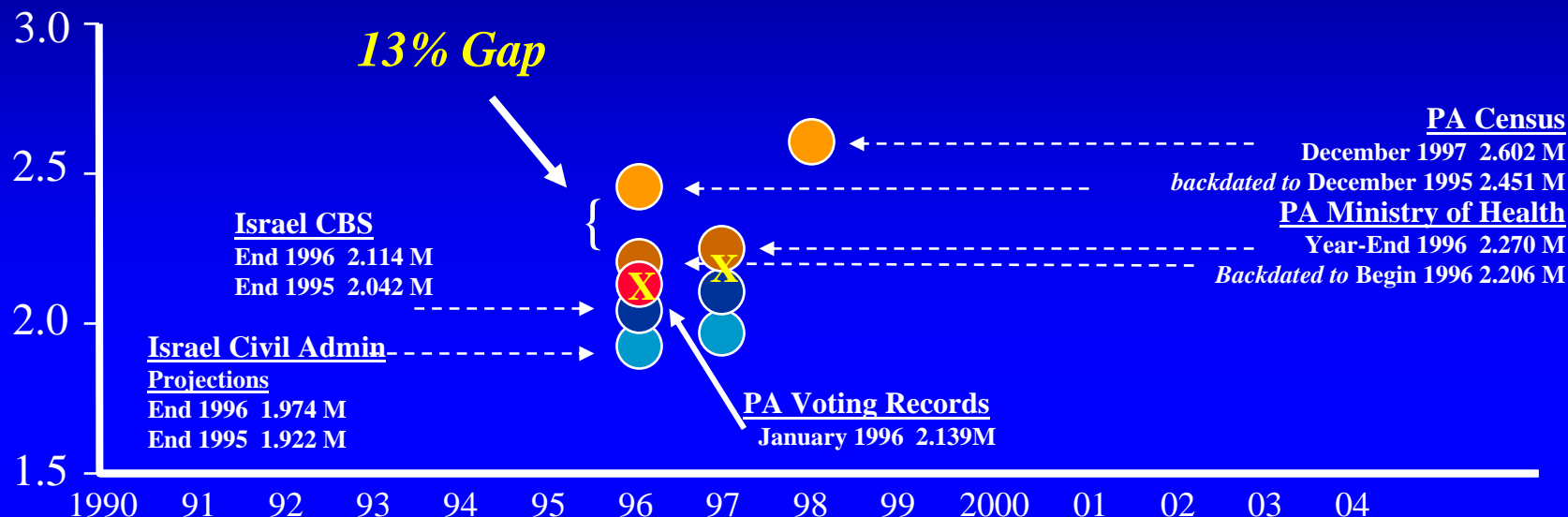
A – The Categories underwent complete data collection.

1. All persons present in the Palestinian territories on the census reference date, irrespective of nationality, purpose of stay and place of residence in the Palestinian territories.
2. All temporarily living abroad (for one year prior to the night of the reference date) and who have a usual place of residence in the Palestinian territories. Those persons are enumerated as parts of their households.
3. All Palestinians studying abroad irrespective of the study period and the period of stay abroad along with all Palestinian detainees in the Israeli jails regardless of the detention period.

B – Palestinian abroad: Categories underwent data collection on their numbers and sex only This category includes Palestinians who live abroad for more than one year and who have a usual place of residence in the Palestinian territories and have identity cards (except for students and detainees enumerated in the previous category) irrespective of the purpose of stay abroad.

The 13% Gap Between *Residents Only* & PA 1997 Census Base

Millions of People



- In 1996, the PA and Israeli average for *residents* was 2.12 million -- 300 thousand, or **13%**, less than level reported in the PA 1997 Census.
 - This figure was confirmed by PA Voting Records from January 1996 which yielded a total Population of 2.139 million.
- In 1997, the PA increased the base by 300 thousand, the same level that has been acknowledged as the number of Palestinians living abroad.
 - In September 1993, the World Bank estimated Palestinians *living abroad* at 300 – 350 thousand.
 - In October 2004, the PA Central Election Commission Voting Report confirmed the number of Palestinians *living abroad* at exactly **13%**.

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The Population Scenarios

1997 PA Census & Projection
3.83 Million

Arab Population
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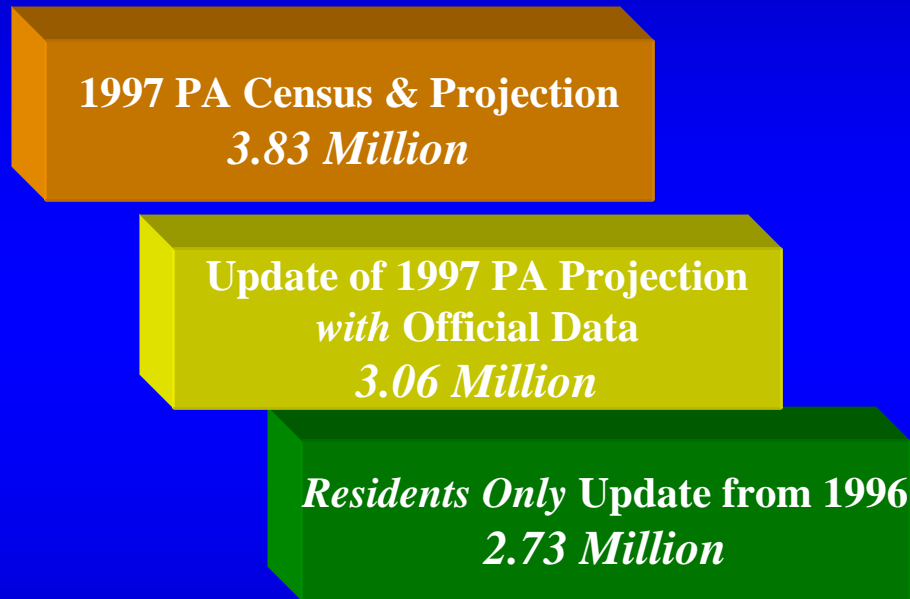
The Population Scenarios

1997 PA Census & Projection
3.83 Million

Update of 1997 PA Projection
with Official Data
3.06 Million

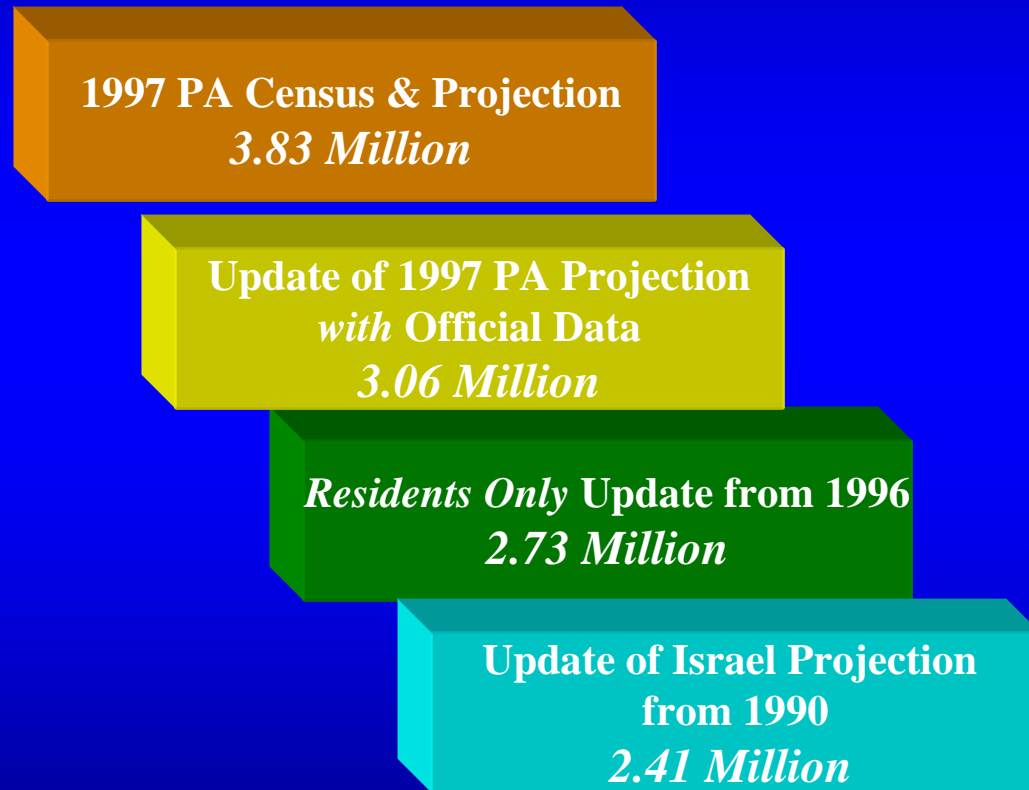
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The Population Scenarios



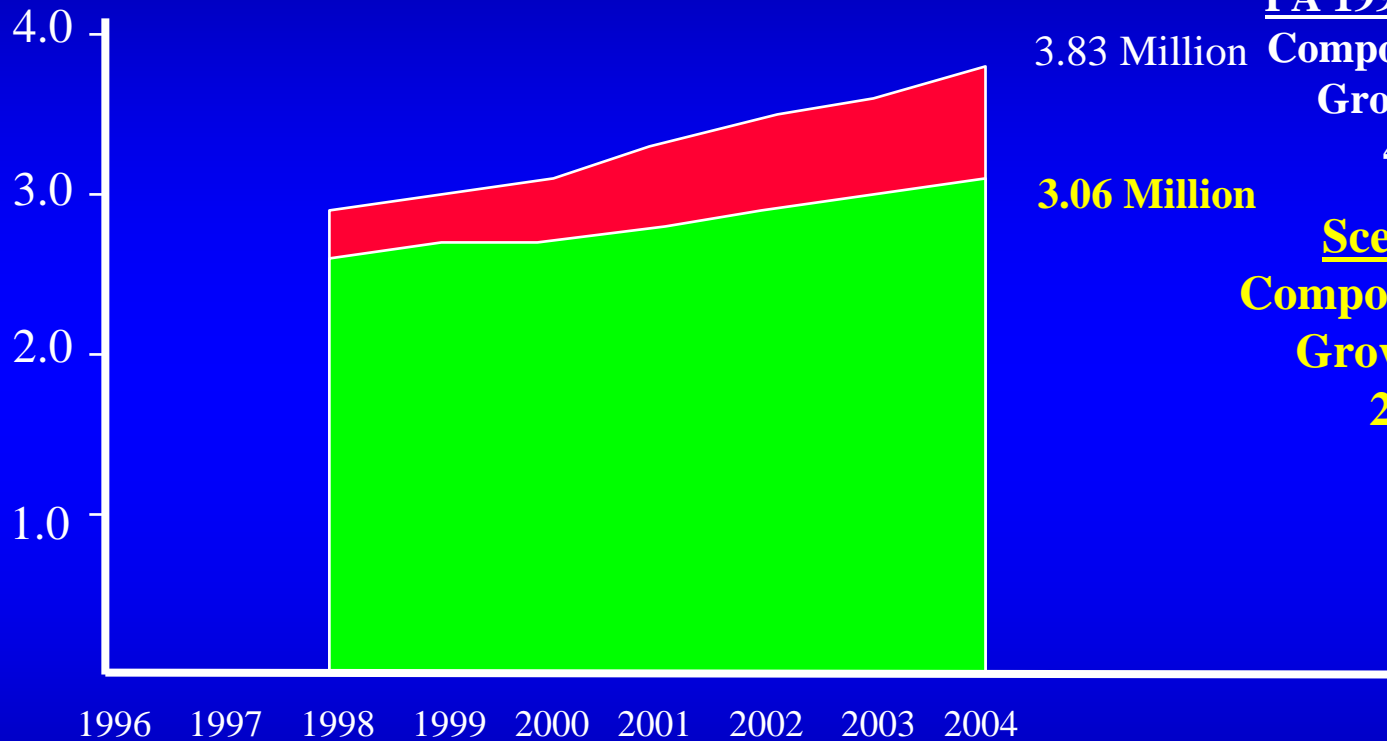
**Arab Population
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The Population Scenarios



Scenario #1: Update of 1997 PA Projection with Official Data (1998 - 2004)

Millions of People



PA 1997 Projection
3.83 Million **Compound Annual
Growth Rate**
4.75%

3.06 Million

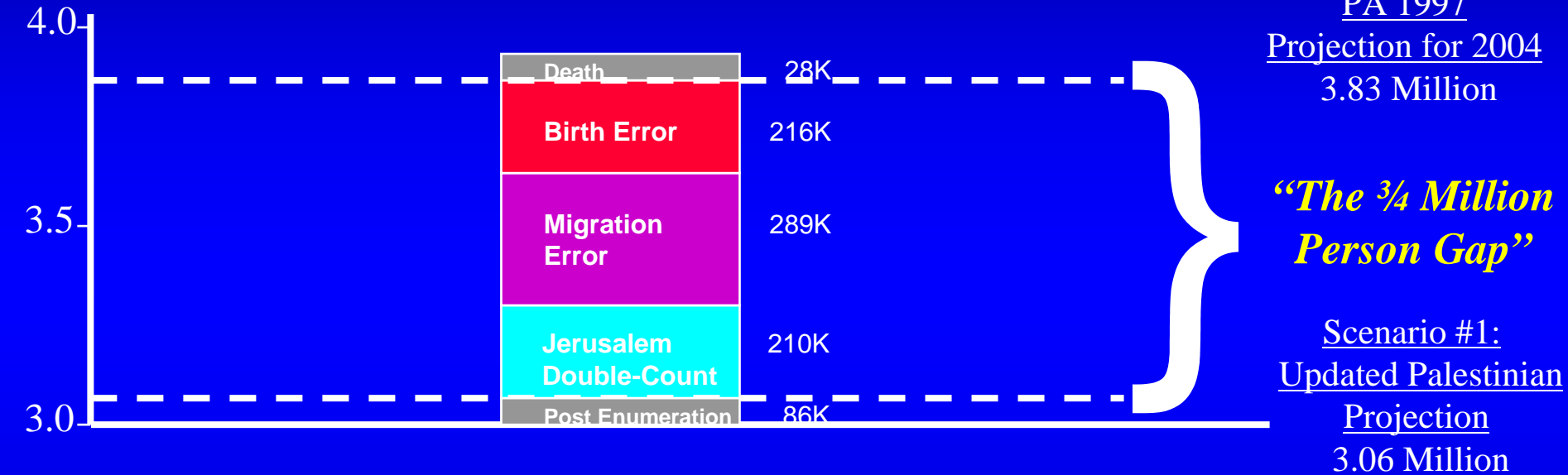
Scenario#1
**Compound Annual
Growth Rate**
2.72%

Source: Palestine Central Bureau of Statistics 1997 Census and Projection (2)
PA Ministry of Health Reports 1996 – 2003 (5)
Border Data for Jordan, Egypt & Ben Gurion Airport (6)

Scenario #1: Update of 1997 PA Projection

“The ¾ Million Person Gap”

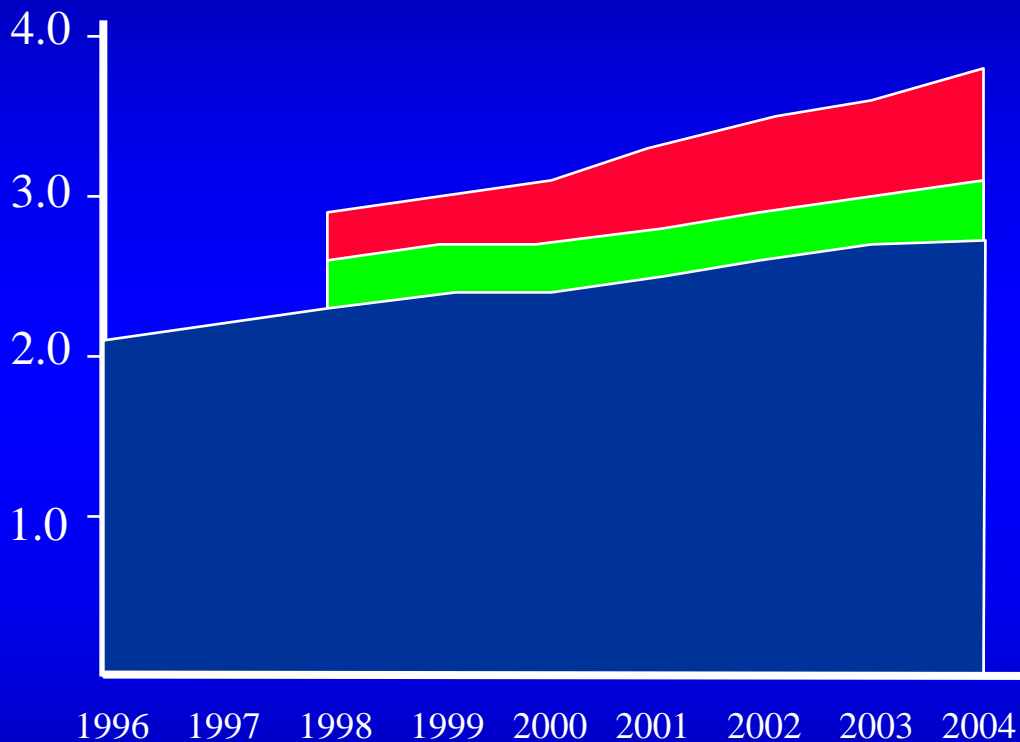
Millions of People



Scenario #2: Residents Only Base Update

(1996 - 2004)

Millions of People



3.83 Million

PA 1997 Projection
Compound Annual
Growth Rate
4.75%

3.06 Million

Scenario#1
Compound Annual
Growth Rate
2.72%

2.73 Million

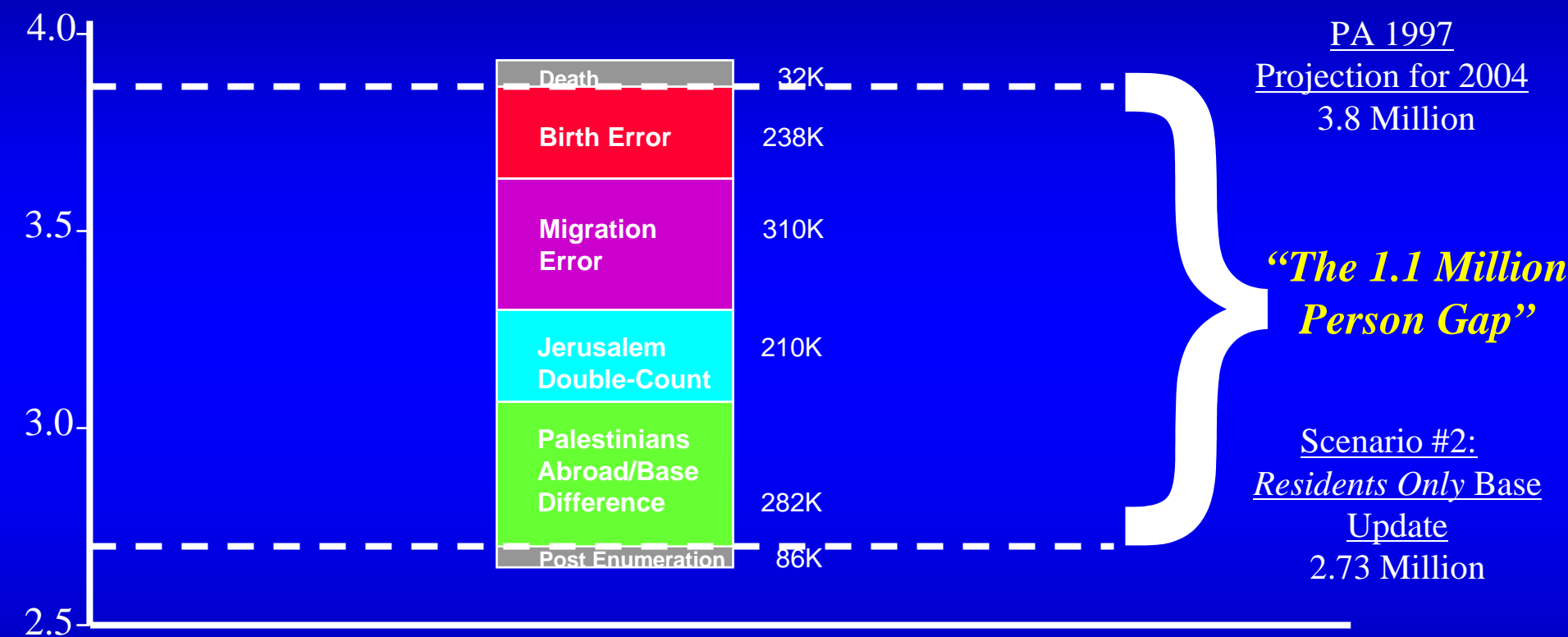
Scenario#2
Compound Annual
Growth Rate
3.21%

Source: Palestine Central Bureau of Statistics 1997 Census and Projection (2)
PA Ministry of Health Reports 1996 – 2003, PA Voting Report for January 1996 (5)
Border Data for Jordan, Egypt & Ben Gurion Airport (6)
Israel Central Bureau of Statistics 1996 (7)

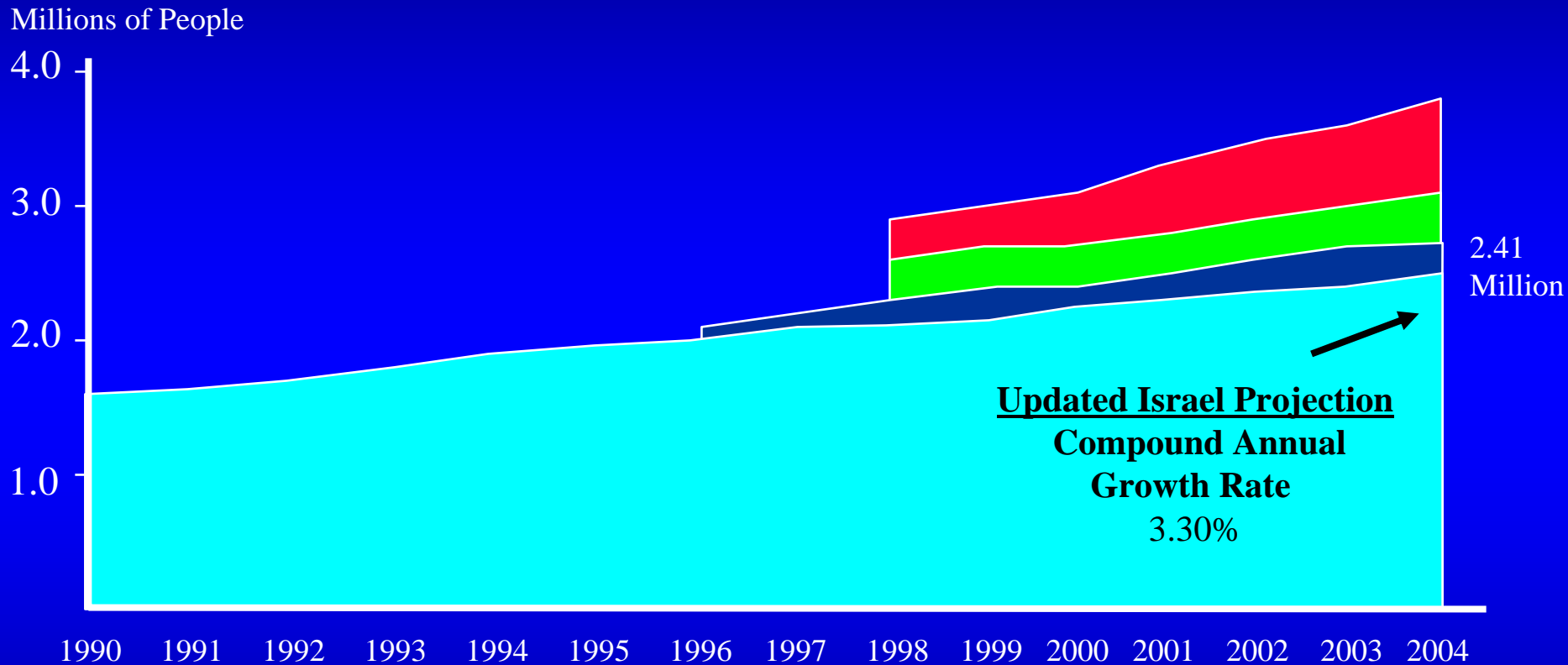
Scenario #2: Residents Only Base Update from 1996

“The 1.1 Million Person Gap”

Millions of People



Scenario #3: Update of Israel Projection from 1990 (1990-2004)

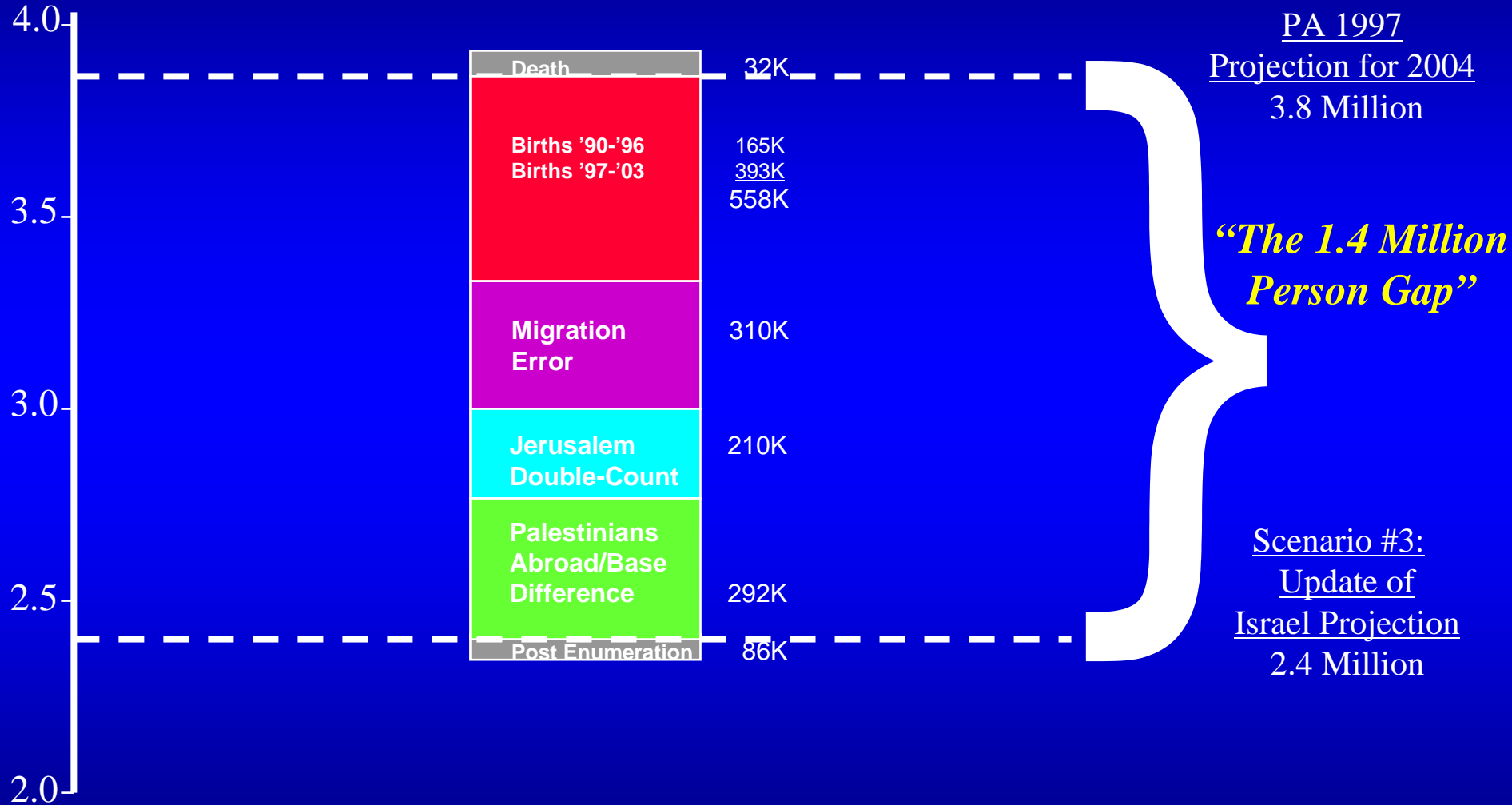


Source: Palestine Central Bureau of Statistics 1997 Census and Projection (2)
 PA Ministry of Health Reports 1996 – 2003 (5)
 Border Data for Jordan, Egypt & Ben Gurion Airport (6)
 Israel Central Bureau of Statistics 1990-1993, (8) PA Ministry of Health Births 1994 – 2003 aligned to Israel data (5)

Scenario #3: Update of Israel Projection from 1990

“The 1.4 Million Person Gap”

Millions of People



Population Scenarios

Summary of Results for 2004

West Bank

Gaza

Total

PA 1997
Projection
(1997-2004)

2.42 Million

1.41 Million

3.83 Million

Scenario #1
Update of 1997
PA Projection
(1998-2004)

1.86 Million

1.20 Million

3.06 Million

Scenario #2
Residents Only
Base Update
(1996-2004)

1.58 Million

1.15 Million

2.73 Million

Scenario #3
Update of
Israel Projection
(1990-2004)

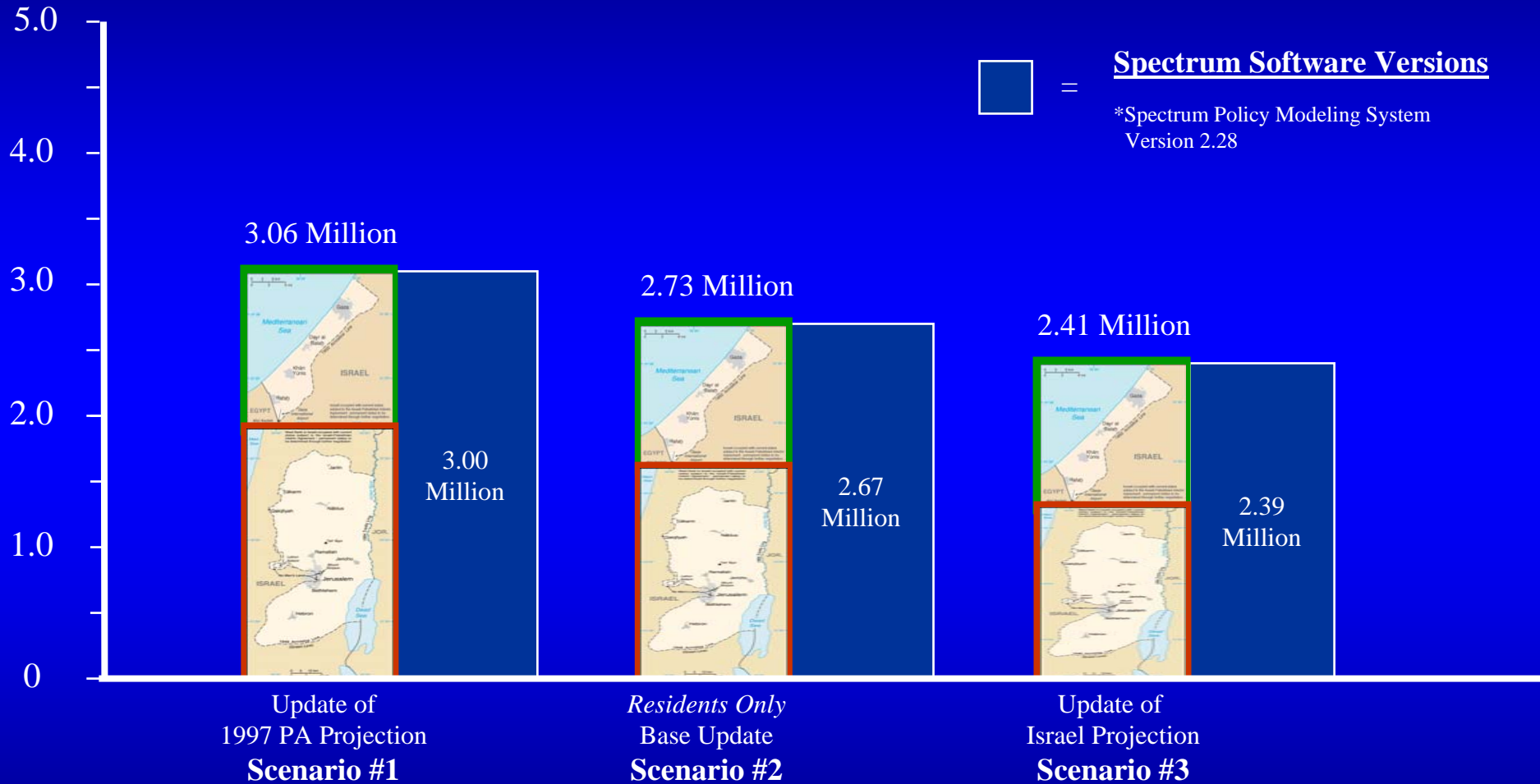
1.35 Million

1.06 Million

2.41 Million

Population Scenarios Verification with *Spectrum Demographic Software**

Millions of People



A Comparison of Methodologies & Sources

	Population Base	Births	Deaths	Immigration/ Emigration*	Double Counts
PA 1997 Projection (1997-2004) 3.8 Million	Dec. 1997 Population Base of 2.89 Million	Assumes High Birthrate will continue all years of Projection (4-5% annually)	Assumes Low Death-Rate (0.4% to 0.5% annually)	Assumes High Annual Immigration reaching over 50 thousand a Year	Double-Counts Jerusalem Arabs counted in Israel Population Survey
Scenario #1 Update of PA Census (1998-2004) 3.06 Million	Uses PA Census Base of 2.6 Million for West Bank & Gaza without question	Uses <i>actual</i> Births as reported by PA Ministry of Health	Uses <i>actual</i> Deaths as reported by PA Ministry of Health	Uses <i>actual</i> data recorded at border crossings to Jordan, Egypt, and Ben Gurion Airport	Removes Jerusalem Double-Count
Scenario #2 Residents Only Base Update (1996-2004) 2.73 Million	Uses <i>Residents Only</i> Base between Israeli and PA estimates for begin-year '96 Base corroborated with World Bank data and PA Voting Records	Uses <i>actual</i> Births as reported by PA Ministry of Health	Uses <i>actual</i> Deaths as reported by PA Ministry of Health	Uses <i>actual</i> data recorded at border crossings to Jordan, Egypt, and Ben Gurion Airport	Removes Jerusalem Double-Count
Scenario #3 Update of Israel Projection (1990-2004) 2.41 Million	Uses Israel Civil Admin. Survey from 1989/1990 Base corroborates to Israel ID Cards and School Records	Uses actual Births as Recorded by Israel Civil Admin '90-'93 Adjusts PA Births '94-2003 to be consistent with previously recorded data	Uses actual Deaths as Recorded by Israel Civil Admin '90-'93 Uses <i>actual</i> Deaths as reported by PA Ministry of Health '94-2003	Uses <i>actual</i> data recorded at border crossings to Jordan, Egypt, and Ben Gurion Airport	Never included Jerusalem Double-Count

*Note: None of the scenarios account for the internal migration from the West Bank and Gaza into pre-'67 Israel and Jerusalem. This migration will be subtracted as a last step after evaluation of all population scenarios.

A Modular Approach: Rationalization by Growth Factor

	Population Base	Births	Deaths	Immigration/ Emigration*	Double Counts
PA 1997 Projection 3.8 Million	BASE	BASE	BASE	BASE	BASE
<u>Scenario #1</u> Update of PA Census 3.06 Million Less 772 K	Less 86 K Post Enumeration Adjustment	Less 216 K	More <28 K>	Less 289 K	Less 210 K Jerusalem Double-Count
<u>Scenario #2</u> Residents Only Base Update 2.73 Million Less 1.093 M	Less 86 K Mid-Year Adjustment Less 282 K Non-Resident Adjustment	Less 283 K (2 More Years of Divergence)	More <32 K> (2 More Years of Divergence)	Less 310 K (2 More Years of Divergence)	Less 210 K Jerusalem Double-Count
<u>Scenario #3</u> Update of Israel Projection 2.41 Million Less 1.423 M	Less 86 K Mid-Year Adjustment Less 292 K Non-Resident Adjustment	Less 393 K '97 – 2003 Less 165 K '90 – '96	More <32 K>	Less 310 K	Less 210 K Jerusalem Double-Count

*Note: None of the scenarios account for internal migration from the West Bank and Gaza into pre-'67 Israel and Jerusalem. This figure, which is the same for all scenarios, will be subtracted as a last step after evaluation of all population scenarios.

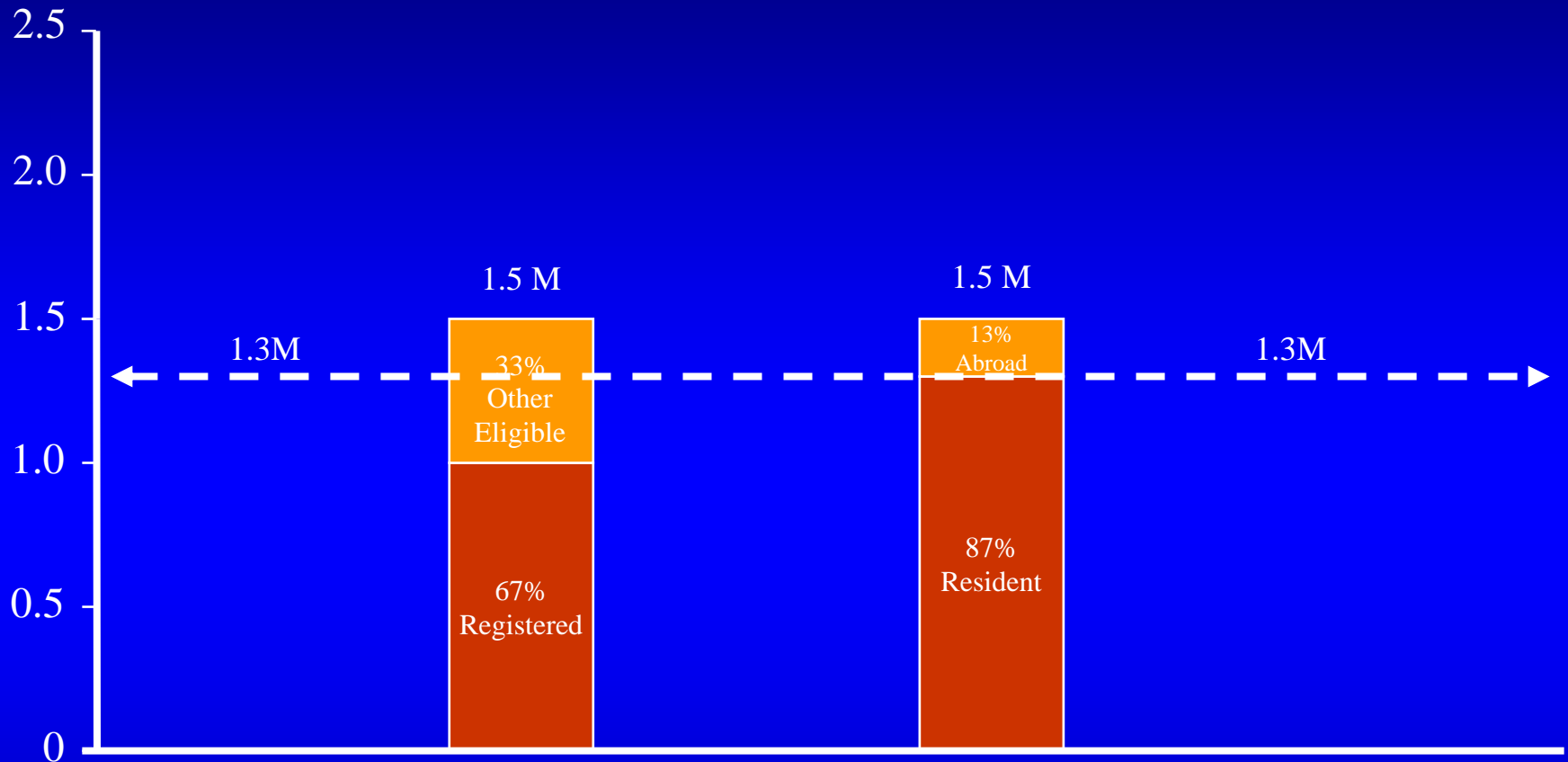
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Corroboration of Population Scenarios

- October 2004 PA Central Election Commission Voting Report
- Israel Central Bureau of Statistics Growth Scenarios (1984 – 2002)
- Jordanian Growth as Base Line for West Bank

PA October 2004 Central Election Commission Report

Millions of People



- 1 Million Registered
- 1.5 Million Eligible Voters 18 & Above

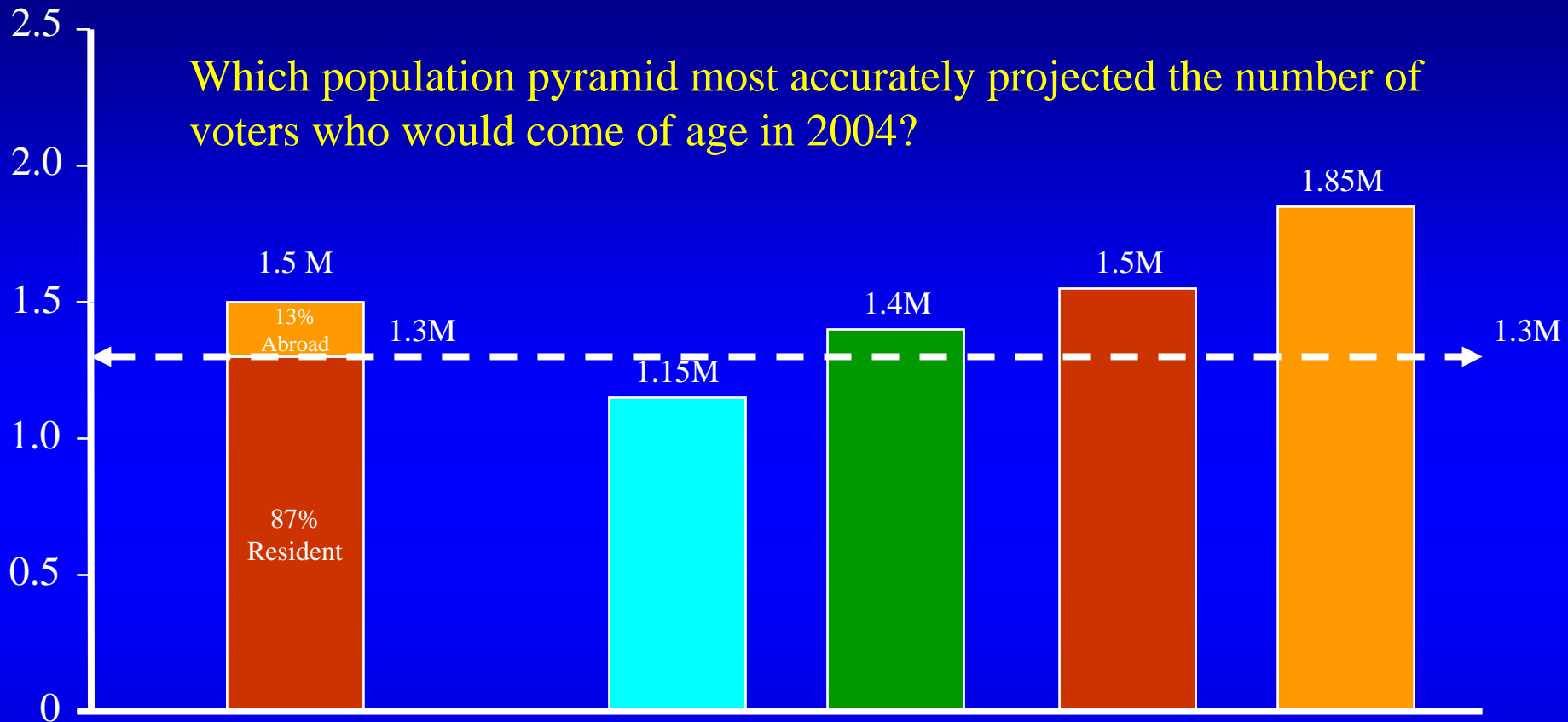
- 1.3 Million Eligible Voters *Resident* in Territories
- 200K Eligible Voters *Living Abroad*

• The PA Election report indicated there are 1.3 million adult *residents* in the West Bank and Gaza

PA October 2004 Central Election Commission Report

Millions of People

Which population pyramid most accurately projected the number of voters who would come of age in 2004?



PA October 2004 Voting Report (10)

- 1.3 Million Eligible Voters
Resident in Territories
- 200K Eligible Voters
Living Abroad

ICBS 1989 Base (Scenario #3)

+ 15 Years

PA Ministry Health 1996 Base (Scenario #2)

+ 8 Years

Update of 1997 PA Census (Scenario #1)

+ 8 Years

PCBS 2003 (Original Projection)

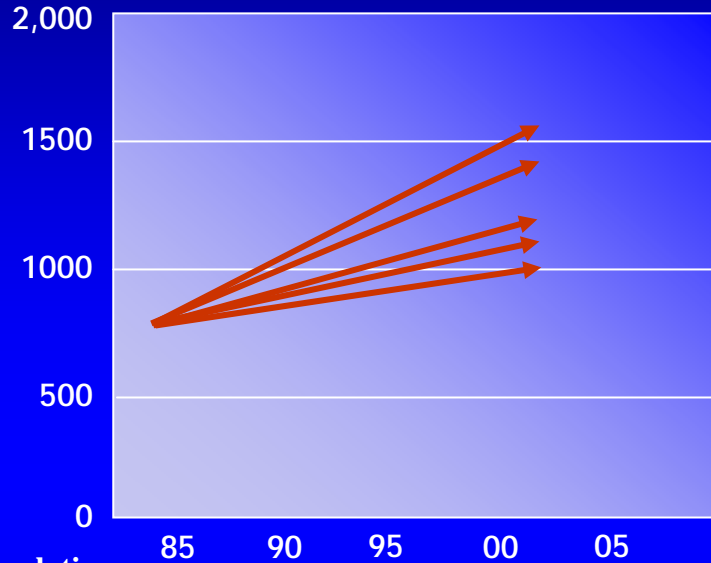
+ 1 Year

The October 2004 Voting Report disqualified the original 1997 PA Projection, confirmed that the 1997 Census Base included Palestinians *living abroad* and demonstrated that Scenarios #2 and #3 are the only possible estimates compatible with current voter rolls in the West Bank and Gaza.

Israel Central Bureau of Statistics Projections*

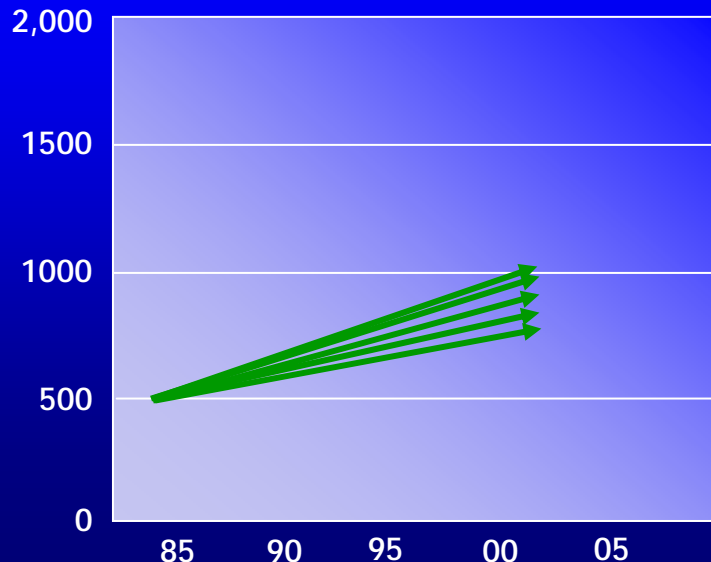
(1984 – 2002)

Population
In Thousands **West Bank Population**



	<u>1984</u>	<u>2002</u>	<u>Pop Growth Rate</u>	<u>Total Fertility Rate</u>	<u>Net Migration/Thousand</u>
• 1 st Projection	783K	1,061K	1.7%	3.75	-10
• 2 nd Projection	783K	1,136K	2.1%	5.00	-10
• 3 rd Projection	783K	1,211K	2.4%	5.00	-8
• 4 th Projection	783K	1,430K	3.4%	5.00	0
• 5 th Projection	783K	1,550K	3.9%	6.50	0

Population
In Thousands **Gaza Population**



	<u>1984</u>	<u>2002</u>	<u>Pop Growth Rate</u>	<u>Total Fertility Rate</u>	<u>Net Migration/Thousand</u>
• 1 st Projection	510K	741K	2.1%	4.45	-10
• 2 nd Projection	510K	789K	2.5%	5.70	-10
• 3 rd Projection	510K	865K	3.0%	5.70	-6.5
• 4 th Projection	510K	992K	3.8%	5.70	0
• 5 th Projection	510K	1,070K	4.2%	7.20	0

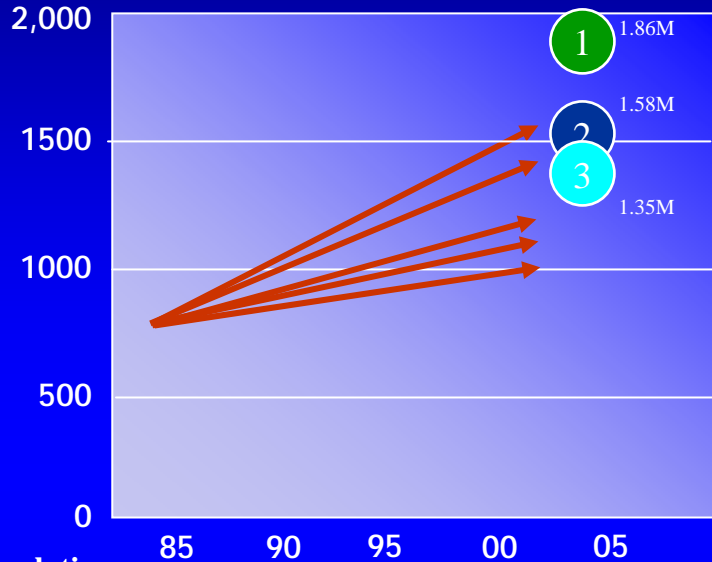
**Projections based on different assumptions for Fertility Rates and Net Migration*

ICBS Projections vs. New Analyses

(1984 – 2002)

Population
In Thousands

West Bank Population

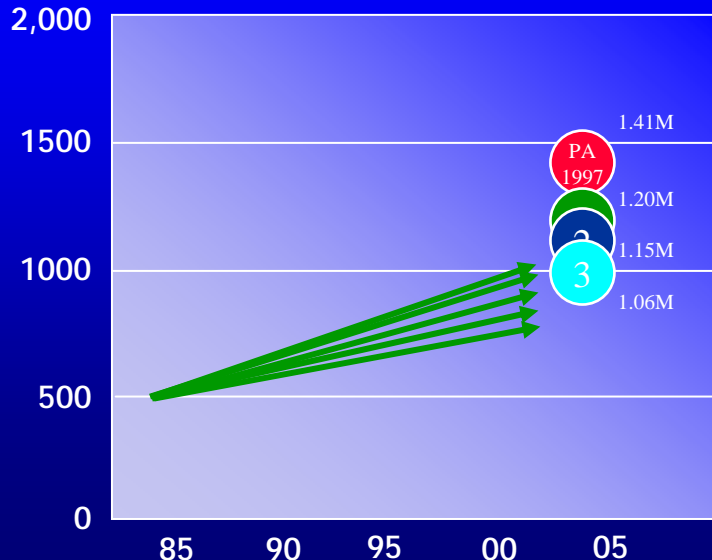


	<u>Various</u>	<u>2004</u>	<u>Pop Growth Rate</u>	<u>Total Fertility Rate</u>	<u>Net Migration/Thousand</u>
• Scenario #1	1,600K	1,856K	2.5%	N/A	-4.9
• Scenario #2	1,240K	1,585K	3.1%	N/A	-6.3
• Scenario #3	916K	1,350K	2.7%	N/A	-5.0

- PA Projection and Scenario #1 are out of range
- Scenario #2 is at top of range
- Scenario #3 is in range

Population
In Thousands

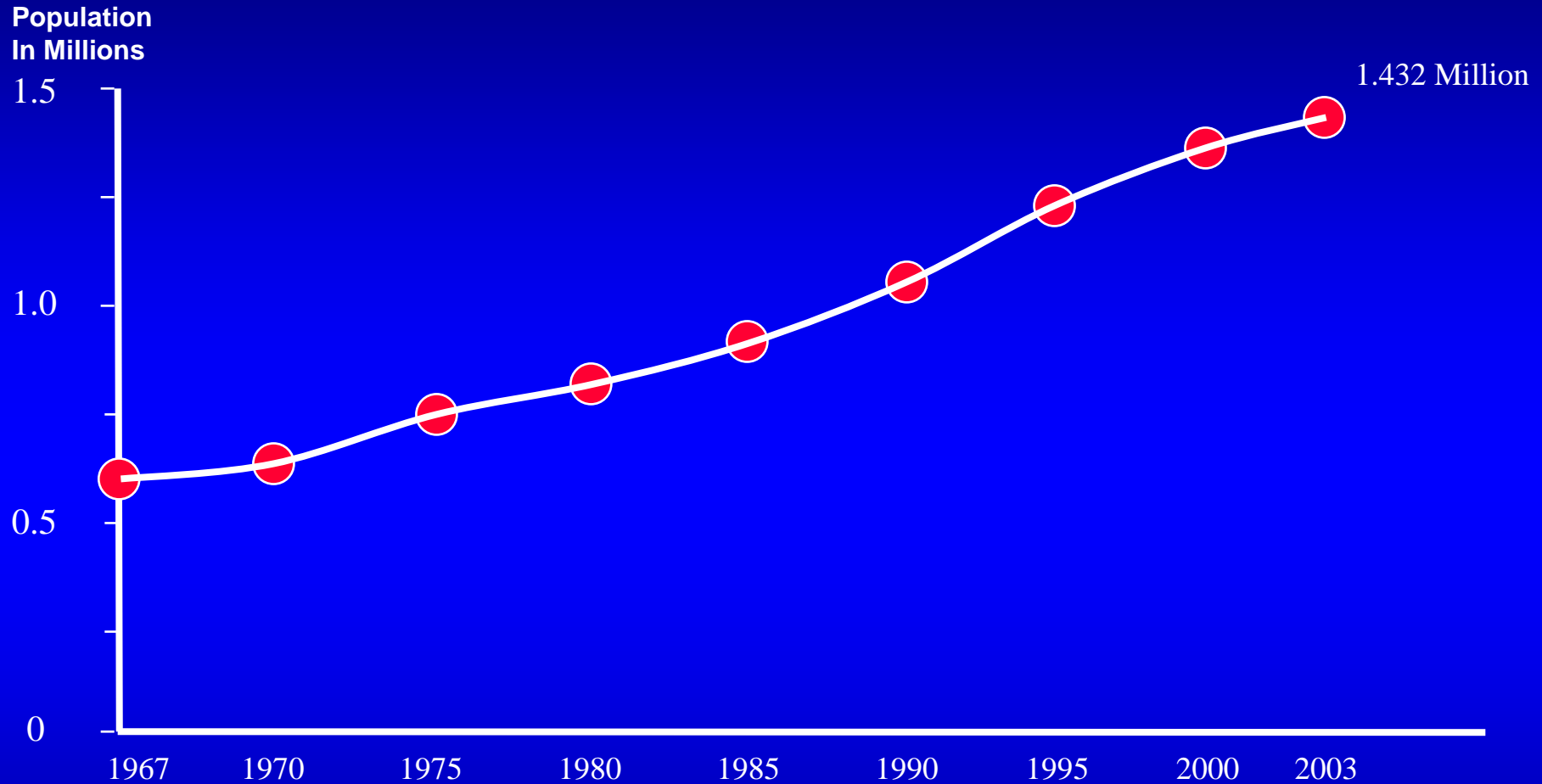
Gaza Population



	<u>Various</u>	<u>2004</u>	<u>Pop Growth Rate</u>	<u>Total Fertility Rate</u>	<u>Net Migration/Thousand</u>
• ABC Scenario #1	1,000K	1,200K	3.1%	N/A	-2.6
• ABC Scenario #2	884K	1,150K	3.3%	N/A	-3.2
• ABC Scenario #3	611K	1,056K	3.9%	N/A	-2.5

- PA Projection and Scenario #1 and Scenario #2 are out of range
- Scenario #3 is in range

Jordanian Growth as Base Line for West Bank



- As Jordan shares many characteristics and links with the West Bank, the Team used Jordan's Natural Growth Rate for every 5 year period since 1967 to calculate a likely population for the West Bank.
- Annual migration data, recorded at Israel's borders, is added or subtracted for each year.
- The final result was 1.432 million – 83 thousand above Scenario #3's 1.35 million and 148 thousand below Scenario #2's 1.585 million.

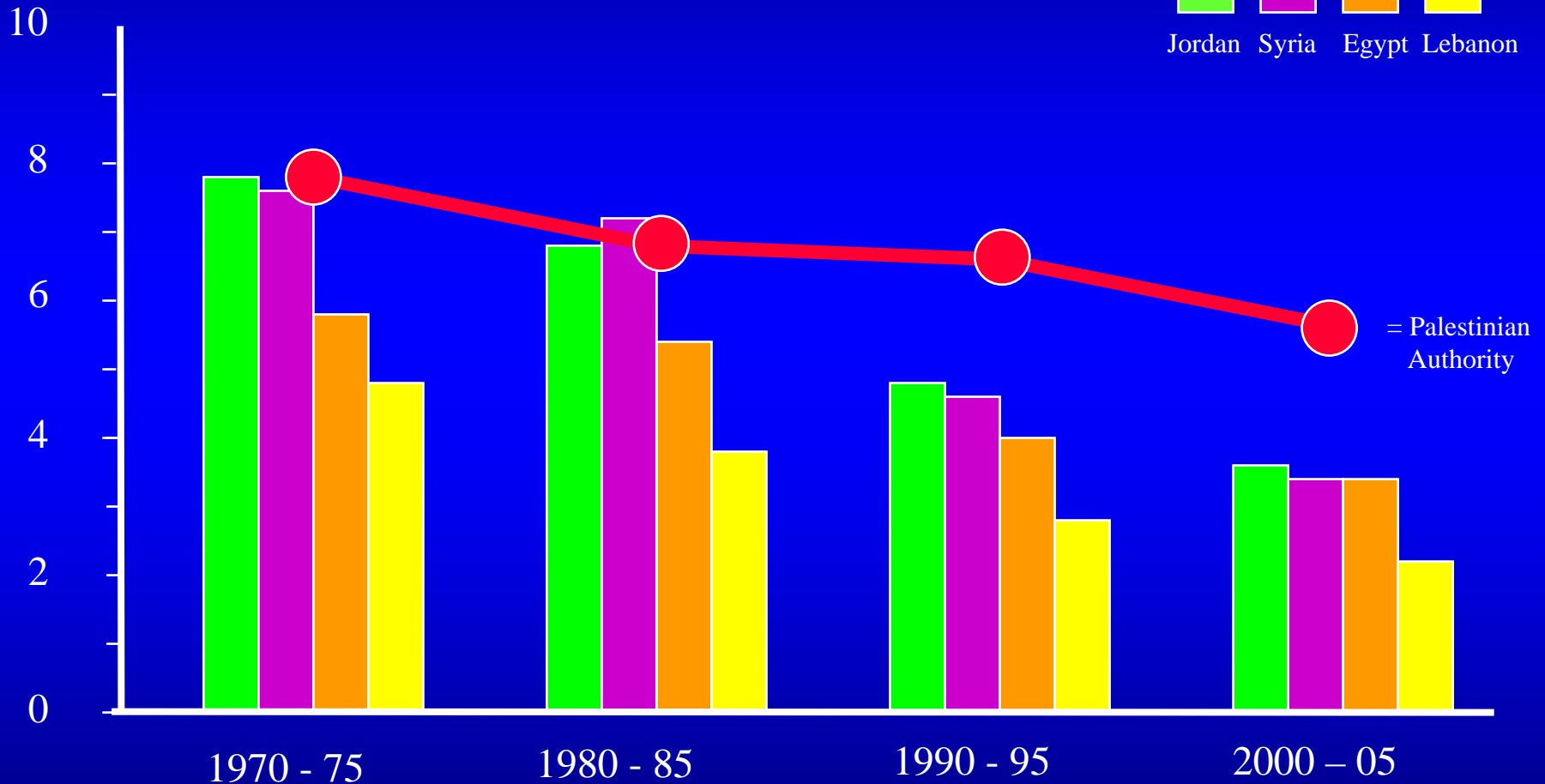
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Corroboration of Population Scenarios

- Middle East: Total Fertility Rates, Birthrates, Population Growth Rates
- Worldwide Characteristics of High & Low Birth Societies

Total Fertility Rates (TFR) Middle Eastern Comparisons vs. PA

Total Fertility Rate
Births/Woman

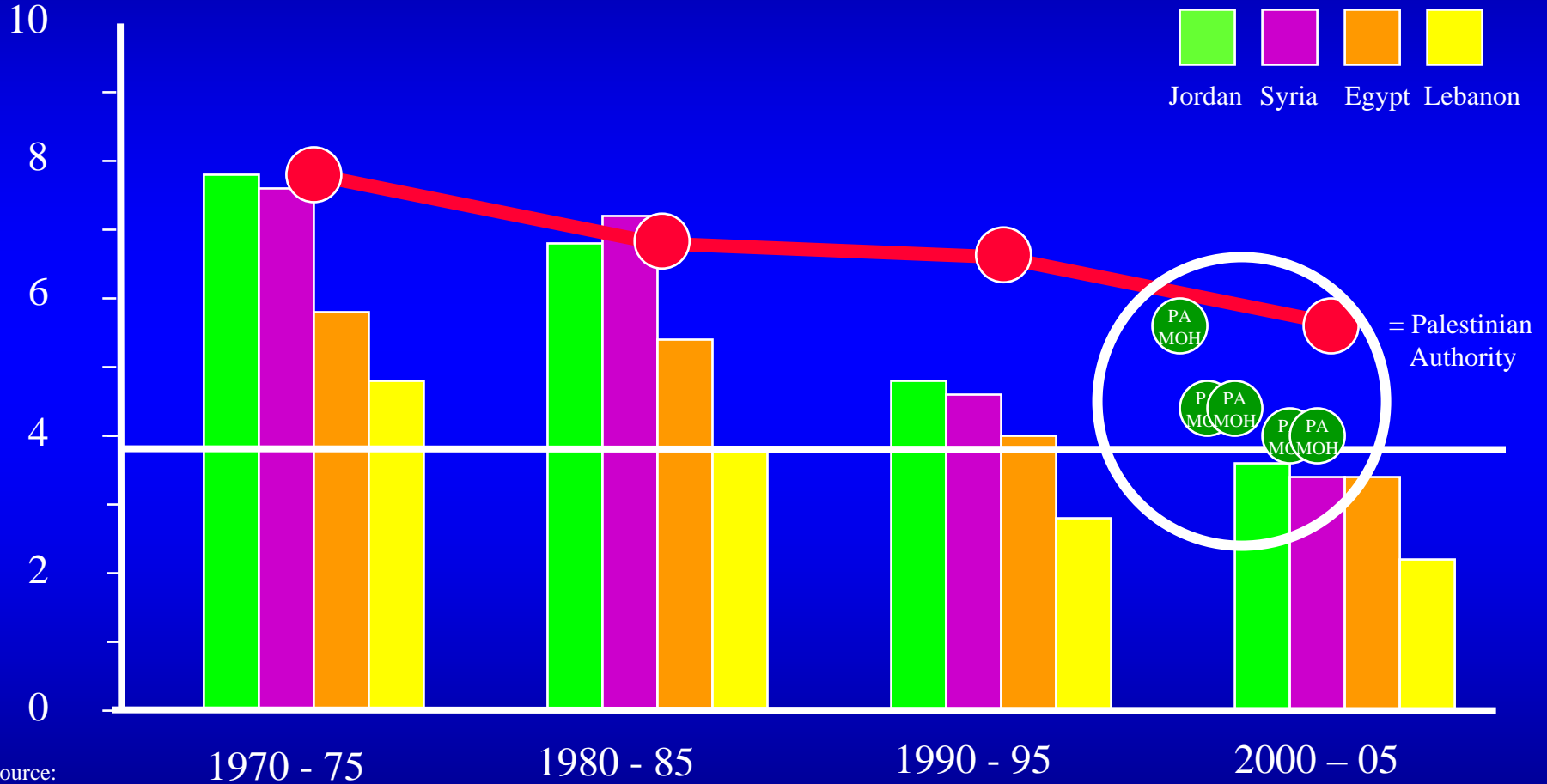


Source:
UN Population Division (16)

Total Fertility Rates (TFR) Middle Eastern Comparisons vs. PA

(with PA Ministry of Health Updates)

Total Fertility Rate
Births/Woman

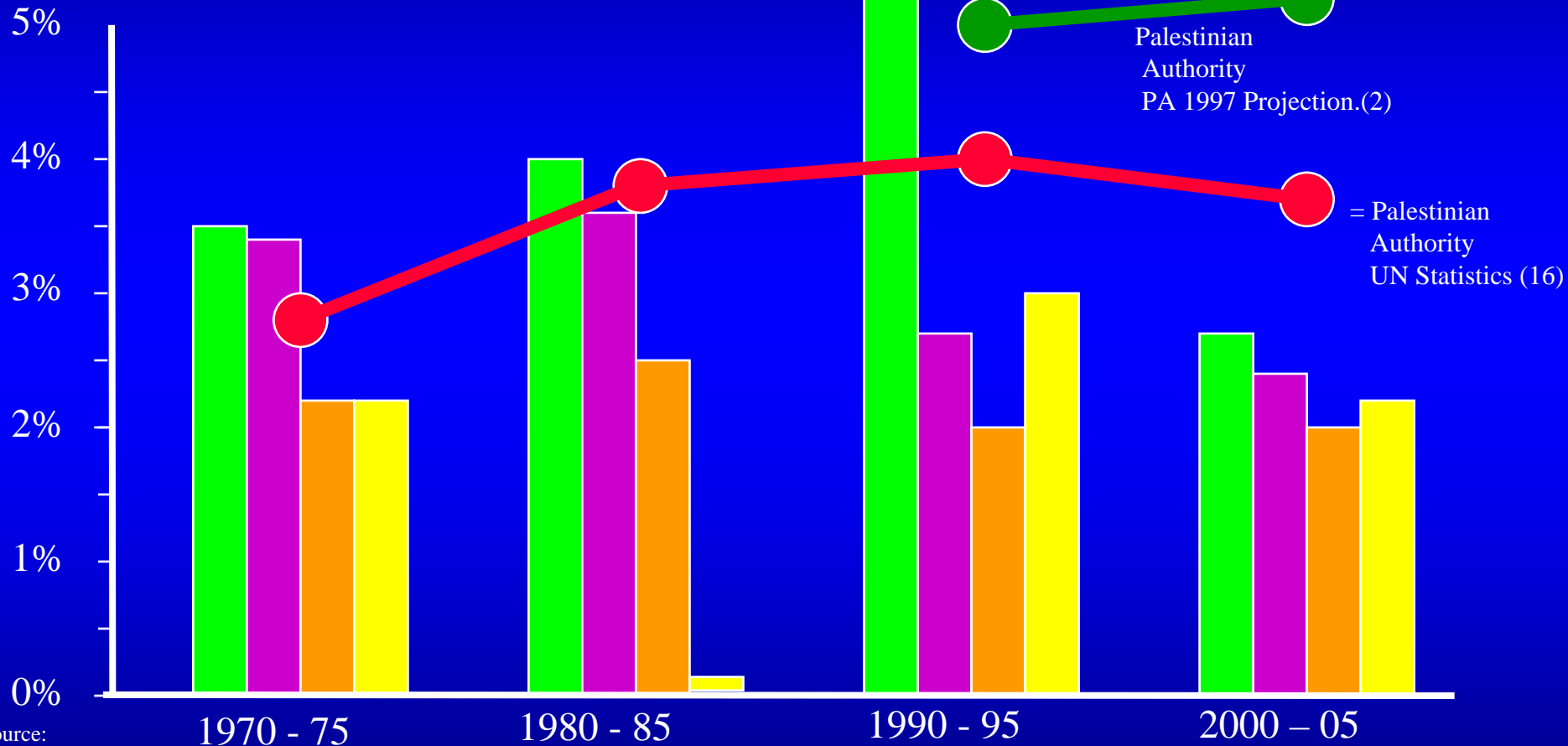


Source:
UN Population Division (16)

Population Growth Rates (PGR) Middle Eastern Comparisons vs. PA

Jordan
 Syria
 Egypt
 Lebanon

Annual Population Growth Rates

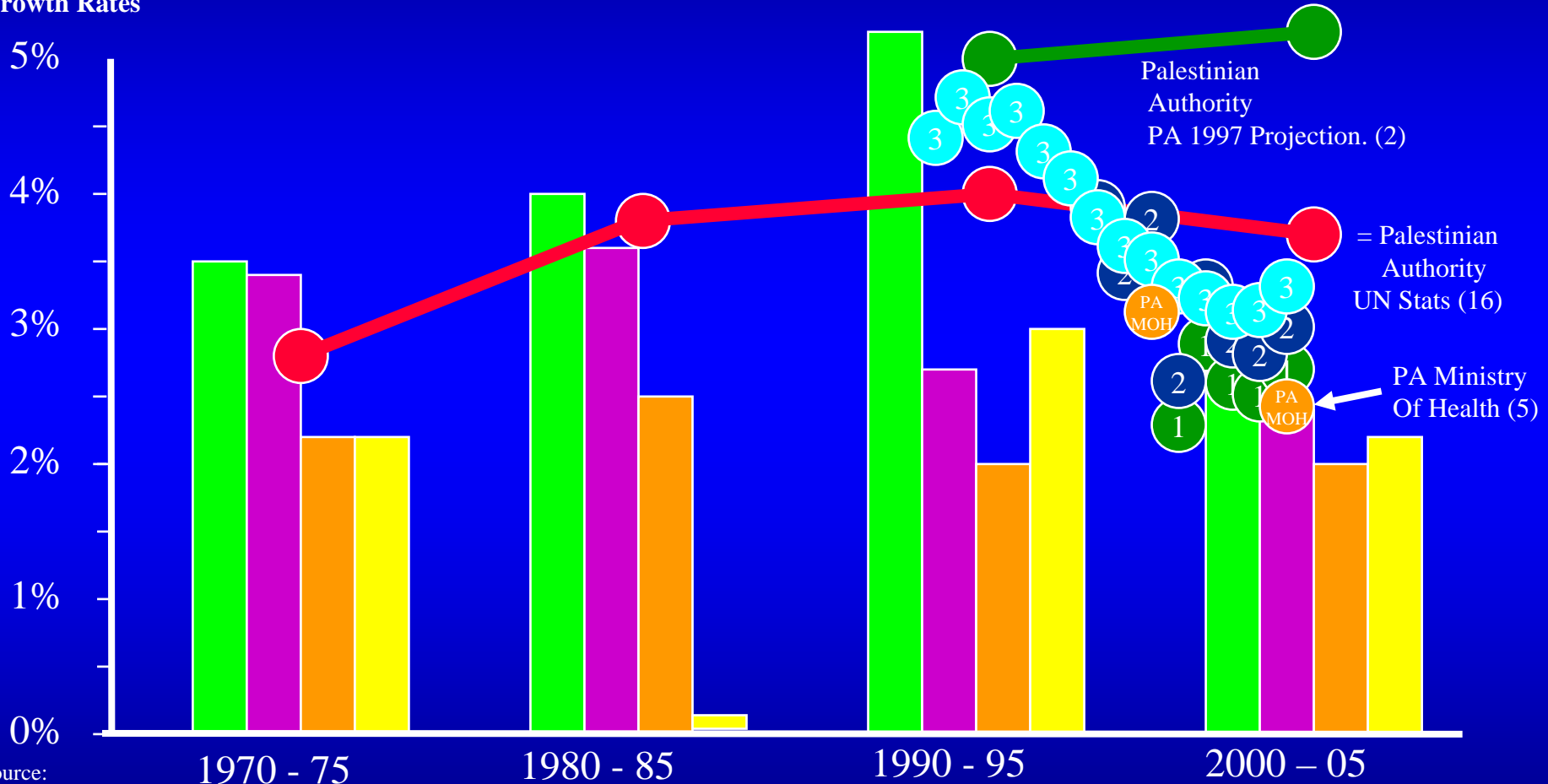


Source: UN Population Reports (16)

Population Growth Rates (PGR) Middle Eastern Comparisons vs. PA (with Scenarios #1, #2, #3)

Jordan
 Syria
 Egypt
 Lebanon

Annual Population Growth Rates



Source: UN Population Reports (16)

High Birth Societies vs. Other Factors



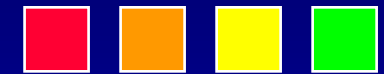
“The World Factbook – 2004”

	Birth Rank	Births per Thousand	Deaths per Thousand	Total Fertility Rate	Infant Mortality/Thousand	Life Expectancy	Migration per Thousand	Pop. Growth Rate
Niger	1	48.91	21.51	6.83	122.66	42.18	0.00	2.67%
Mali	2	47.29	19.12	6.58	117.99	45.28	0.00	2.78%
Afghanistan	3	47.27	21.12	6.78	165.96	42.46	23.06	4.92%
Chad	4	46.50	16.38	6.38	97.78	48.24	0.00	3.00%
Uganda	5	46.31	16.61	6.64	86.15	45.28	0.00	2.97%
Somalia	6	46.04	17.30	6.91	118.52	47.71	5.37	3.41%
Angola	7	45.14	25.86	6.33	192.50	36.79	0.00	1.93%
Liberia	8	44.81	17.86	6.16	130.51	47.93	0.00	2.70%
Congo, Democratic Republic	9	44.73	14.64	6.62	94.69	49.14	-0.17	2.99%
Burkina Faso	10	44.46	18.79	6.28	98.67	44.20	0.00	2.57%
Malawi	11	44.35	23.01	6.04	104.23	37.48	0.00	2.14%
Sierra Leone	12	43.34	20.62	5.79	145.24	42.69	0.00	2.27%
Yemen	13	43.16	8.78	6.75	63.26	61.36	0.00	3.44%
Benin	14	42.57	13.69	5.95	50.81	50.81	0.00	2.89%
Guinea	15	42.26	15.53	5.87	91.82	49.70	-3.06	2.37%
Mayotte	16	42.19	8.11	5.98	64.19	60.99	6.78	4.09%
Madagascar	17	41.91	11.62	5.70	78.52	56.54	0.00	3.03%
Mauritania	18	41.79	12.74	6.01	72.35	52.32	0.00	2.91%
Sao Tome and Principe	19	41.36	6.89	5.80	44.58	66.63	-2.72	3.18%
Gaza Strip	20	40.62	3.95	6.04	23.54	71.59	1.60	3.83%

Source: The CIA World Factbook 2004 (28)

- High birth societies, when ranked from top to bottom, share characteristics of high death rates, low life expectancy, high infant mortality – except for the Gaza Strip.
- The PCBS reports 3rd World statistics when it comes to births but 1st World characteristics when it comes to death and life expectancy.
- This aberration alone should have prompted an examination of statistics reported to world bodies by the PA.

High Birth Societies vs. Other Factors



“The World Factbook – 2004”

3rd World Med Low 1st World

	Birth Rank	Births per Thousand	Deaths per Thousand	Total Fertility Rate	Infant Mortality/Thousand	Life Expectancy	Migration per Thousand	Pop, Growth Rate
Djibouti	21	40.39	19.42	5.48	105.54	43.12	0.00	2.10%
Gambia	22	40.30	12.08	5.46	73.48	54.79	1.57	2.98%
Rwanda	23	40.01	21.86	5.55	101.68	39.18	0.00	1.82%
Burundi	24	39.68	17.61	5.90	70.40	43.36	-0.06	2.20%
Cote d'Ivoire	25	39.64	18.48	5.42	97.10	42.48	-0.07	2.11%
Ethiopia	26	39.23	20.36	5.44	102.12	40.88	0.00	1.89%
Eritrea	27	39.03	13.36	5.67	75.59	52.70	0.00	2.57%
Tanzania	28	39.00	17.45	5.15	102.13	44.39	-2.06	1.95%
Zambia	29	38.99	24.35	5.14	98.40	35.18	0.00	1.47%
Nigeria	30	38.24	13.99	5.32	70.49	50.49	0.26	2.45%
Guinea-Bissau	31	38.03	16.57	5.00	108.72	46.98	-1.57	1.99%
Comoros	32	38.00	8.63	5.15	77.22	61.57	0.00	2.94%
Oman	33	37.12	3.91	5.90	20.26	72.85	0.28	3.35%
Equatorial Guinea	34	36.56	12.27	4.68	87.08	35.15	0.00	2.43%
Laos	35	36.47	12.10	4.86	87.06	54.69	0.00	2.44%
Gabon	36	36.40	11.43	4.80	54.34	56.46	0.00	2.50%
Maldives	37	36.06	7.44	5.14	58.32	63.68	0.00	2.86%
Mozambique	38	36.06	23.86	4.78	137.08	37.10	0.00	1.22%
Sudan	39	35.79	9.37	4.97	64.05	58.13	-0.02	2.64%
Senegal	40	35.72	10.74	4.84	56.53	56.56	0.20	2.52%
Central African Republic	41	35.55	19.99	4.59	92.15	41.36	0.00	1.56%
Cameroon	42	35.08	15.34	4.55	69.18	47.95	0.00	1.97%
Guatemala	43	34.58	6.79	4.60	36.91	65.19	-1.67	2.61%
Bhutan	44	34.41	13.20	4.87	102.56	53.99	0.00	2.12%
Togo	45	34.36	11.64	4.79	67.66	53.05	0.00	2.27%
Marshall Islands	46	33.88	4.94	4.02	30.50	69.70	-6.04	2.29%
Haiti	47	33.76	13.21	4.76	74.38	51.78	-3.40	1.71%
Namibia	48	33.51	21.02	4.65	69.58	40.53	0.00	1.25%
West Bank	49	33.21	4.07	4.52	20.16	72.88	2.98	3.21%
Iraq	50	33.09	5.66	4.40	52.71	68.26	0.00	2.74%

• The same pattern is reported for the West Bank.

Low Birth Societies vs. Other Factors



3rd World Med Low 1st World

“The World Factbook – 2004”

	Birth Rank	Births per Thousand	Deaths per Thousand	Total Fertility Rate	Infant Mortality/Thousand	Life Expectancy	Migration per Thousand	Pop. Growth Rate
Pakistan	54	31.22	8.67	4.29	74.43	62.61	-2.77	1.98%
Bangladesh	59	30.03	8.52	3.15	64.32	61.71	-0.71	2.08%
Saudi Arabia	62	29.74	2.66	4.11	13.70	75.23	-2.71	2.44%
Syria	63	28.93	4.96	3.61	30.60	69.71	0.00	2.40%
Libya	70	27.16	3.48	3.42	25.70	76.28	0.00	2.37%
Egypt	84	23.84	5.30	2.95	33.90	70.71	-0.22	1.83%
Turks and Caicos Islands	90	22.85	4.26	3.11	16.27	74.25	11.68	3.03%
India	91	22.80	8.38	2.85	57.92	63.99	-0.07	1.44%
Jordan	93	22.73	2.62	2.86	18.11	78.06	6.59	2.67%
Kuwait	96	21.85	2.44	3.03	10.26	76.84	14.18	3.36%
World Average	106	20.24	8.86	2.62	50.31	64.05	0.00	1.14%
Lebanon	114	19.31	6.28	1.95	25.48	72.35	0.00	1.30%
Israel	122	18.45	6.19	2.47	7.21	79.17	0.68	1.29%
United States	160	14.13	8.34	2.07	6.63	77.43	3.41	0.92%
France	175	12.34	9.06	1.85	4.31	79.44	0.66	0.39%



- Arab societies with high life expectancy have also seen a dramatic drop in birthrate.
- Note the low Jordanian birthrate, a society that shares many characteristics with West Bank Arabs.
- Western nations have developed low birth rates matched by high life expectancy rates
 - Israel and the United States have among the highest growth rates in the developed world.
 - Many Western European nations have reached levels where they may begin to contract in population.

Final Scenario Selection

Scenario #2 and Scenario #3 Win

	October 2004 PA Voting Report	ICBS Projections 1984 – 2002	Trend Impact Analysis (TIA)	Region/World Pop. Growth Rates	Jordan Base Line (W. Bank Only)	
1997 Palestinian Authority Census & Projection	X	X	X	X	X	3.83 Million
Scenario #1: Update of 1997 PA Projection	X	X	✓	✓	X	3.06 Million
Scenario #2: <i>Residents Only</i> Base Update from 1996	✓	✓	✓	✓	✓	2.73 Million ✓
Scenario #3: Update of Israel Projection from 1990	✓	✓	✓	✓	✓	2.41 Million ✓

- The Team evaluated each population scenario against a variety of corroborative data from Palestinian, Israeli and 3rd Party sources to reach the following determinations:
 - Scenario #3, the Update of Israel's Projection from 1990, and Scenario #2, the *Residents Only* Base Update from 1996 have the most corroboration.
 - Scenario #1, the Update of the 1997 PA Projection, is only possible if one includes Palestinians *living abroad*
 - The original 1997 PA Projection fails when tested against even Palestinian sources.

Internal Migration

Officially Counted *Only*

1993 - 2003



- 129,434 Residents of the West Bank and Gaza received Israeli IDs and settled in pre-'67 Israel and eastern Jerusalem.
- Another 21,303 residents from the West Bank and Gaza were in the pipeline with pending applications to receive Israeli IDs.
- This 150,737 is split approximately $\frac{3}{4}$ from the West Bank and $\frac{1}{4}$ from Gaza:

115 thousand “official” internal migration from West Bank
35 thousand “official” internal migration from Gaza
150 thousand internal migration

- Source: Israel Ministry of Interior, November 2003

- The Team has not yet made any calculations for unofficial “illegal” immigrants into Israel. This subject deserves further examination to fully understand the population patterns for the West Bank and Gaza.

Most Probable 2004 Population Count West Bank and Gaza

	West Bank	Gaza	Total
<u>Scenario #2</u> Residents Only Base Projection (1997-2004)	1.58 Million	1.15 Million	2.73 Million
<u>Scenario #3</u> Update of Israel Projection (1990-2004)	1.35 Million	1.06 Million	2.41 Million
Average of Scenario #2 & Scenario #3	1.47 Million	1.10 Million	2.57 Million
Internal Migration Into pre-'67 Israel & Jerusalem (30)	<115 K>	<35 K>	<150 K>
Final Population Count	1.35 Million	1.06 Million	2.42 Million

Arab Population In the West Bank & Gaza *The Million and a Half Person Gap*

Implications & Conclusions



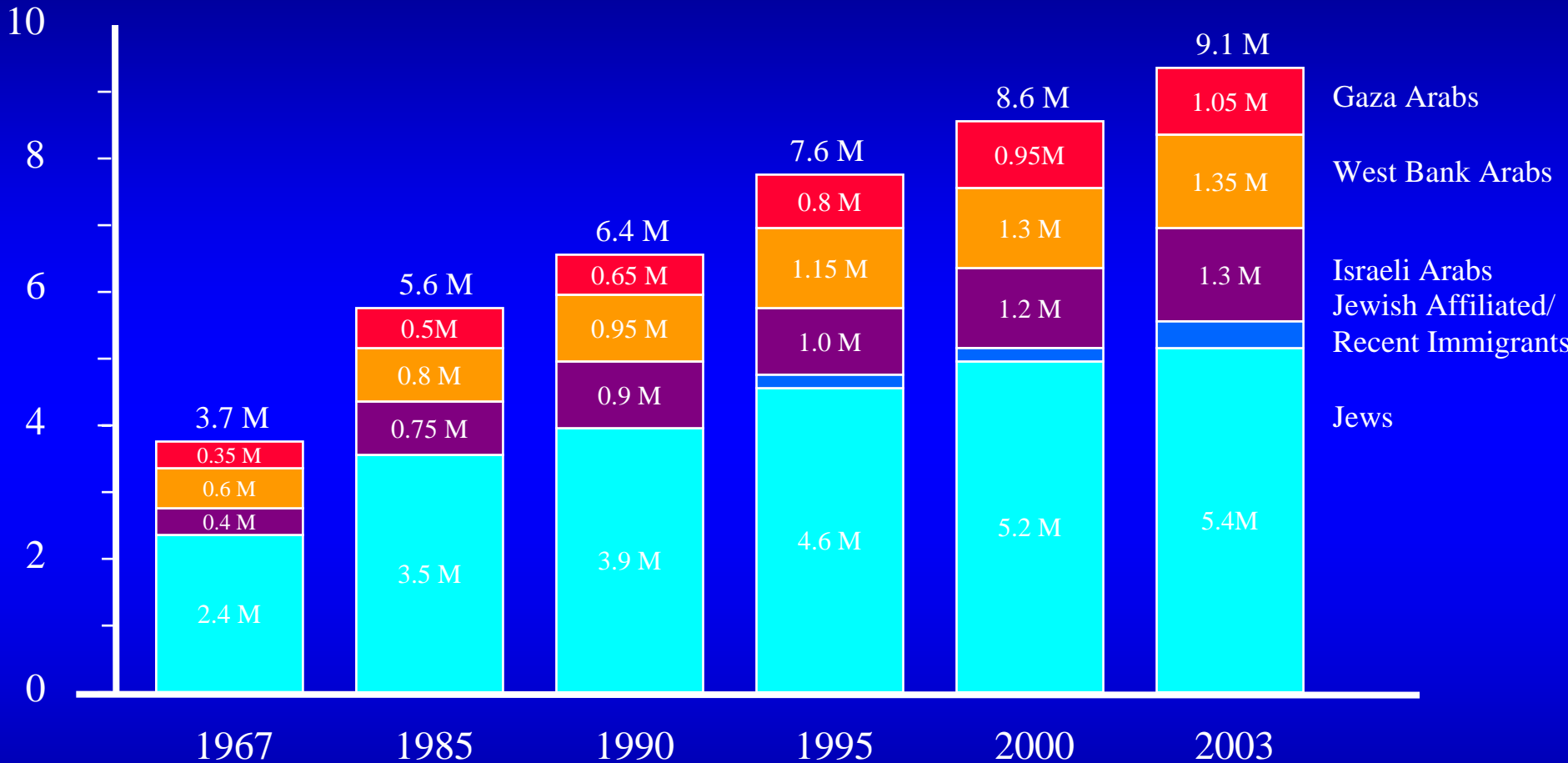
- Final Population Calculation: 1.35 million for West Bank, 1.07 million for Gaza
- 60/40 Jewish to Arab Ratio Holds in Israel, West Bank & Gaza
- Jewish Population grows at same rate as Arab West Bank Population
- Israeli Arab growth rate inflated by internal migration from West Bank and Gaza

Population Breakdown

By Segment

(1967 –2004)

Population
In Millions

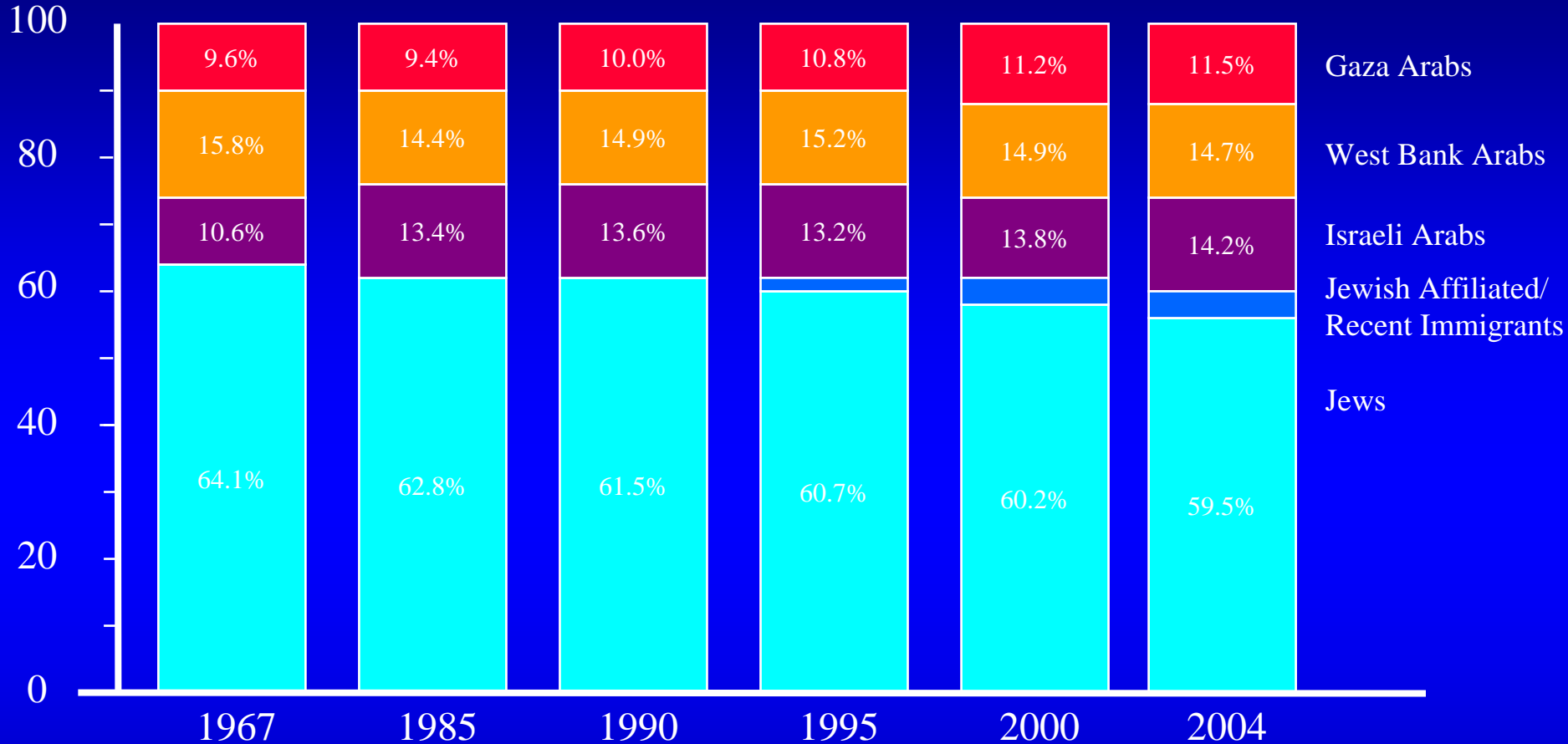


Source: Israel Central Bureau of Statistics Website, ICBS Annual Yearbook 1996, Team Average of Scenario #2 and #3 less Internal Migration Statistics from Israel Ministry of Interior (7) (30) (31)
See Appendix E for detail.

Population Breakdown

(1967 –2004)

% Population
Entire Land

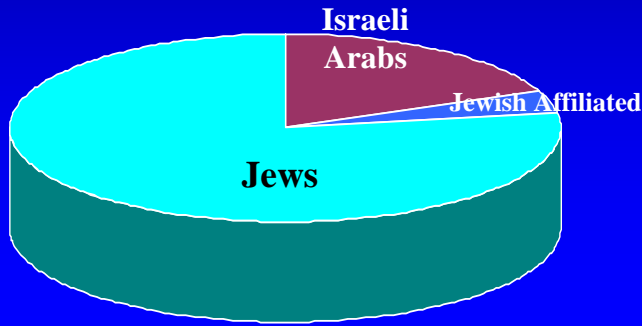


- Jews have maintained their demographic position in Israel and the territories since 1967. This ratio has remained stable through the years.
 - Jews & Jewish affiliated groups maintain a 60% majority
 - The diverse Israeli Arab group, including Druze, Christian Arabs, and Moslems, has been the fastest growing segment in Israeli society.
 - The proportion of Palestinian Arabs in the West Bank and Gaza has remained stable at one quarter of the population in the land.
- Many analysts count recent non-Jewish immigrants (who are related to Jews) as “Palestinian” even though they, along with other Israeli citizens, including Israeli Arabs, fully participate in the State, its army, and its institutions.
- Israel is more multicultural, but not more “Palestinian Arab”.

Population Breakdown

Israel, the West Bank, and Gaza

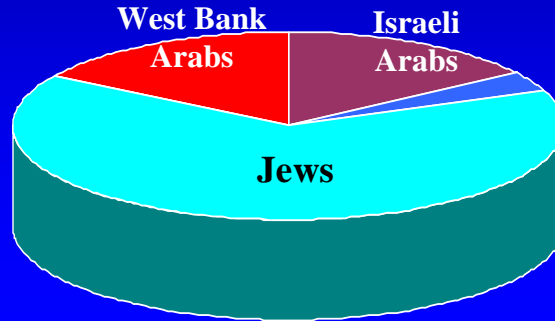
(2004)



Israel

81% Jewish

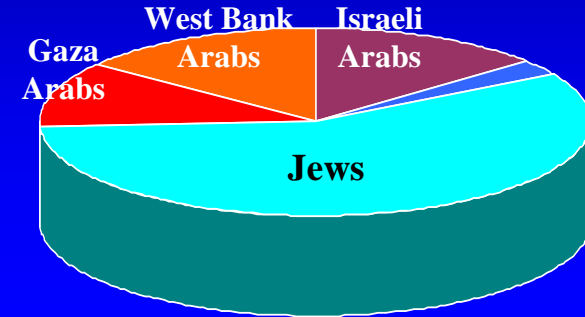
4:1 Jewish/Arab Ratio



Israel
& West Bank

67% Jewish

2:1 Jewish/Arab Ratio



Israel
& West Bank
& Gaza

60% Jewish

3:2 Jewish/Arab Ratio

Source: Israel Central Bureau of Statistics Website, ICBS Annual Yearbook 1996, Team Average of Scenario #2 and #3 less Internal Migration Statistics from Israel Ministry of Interior (7) (30) (31)
See Appendix E for detail.

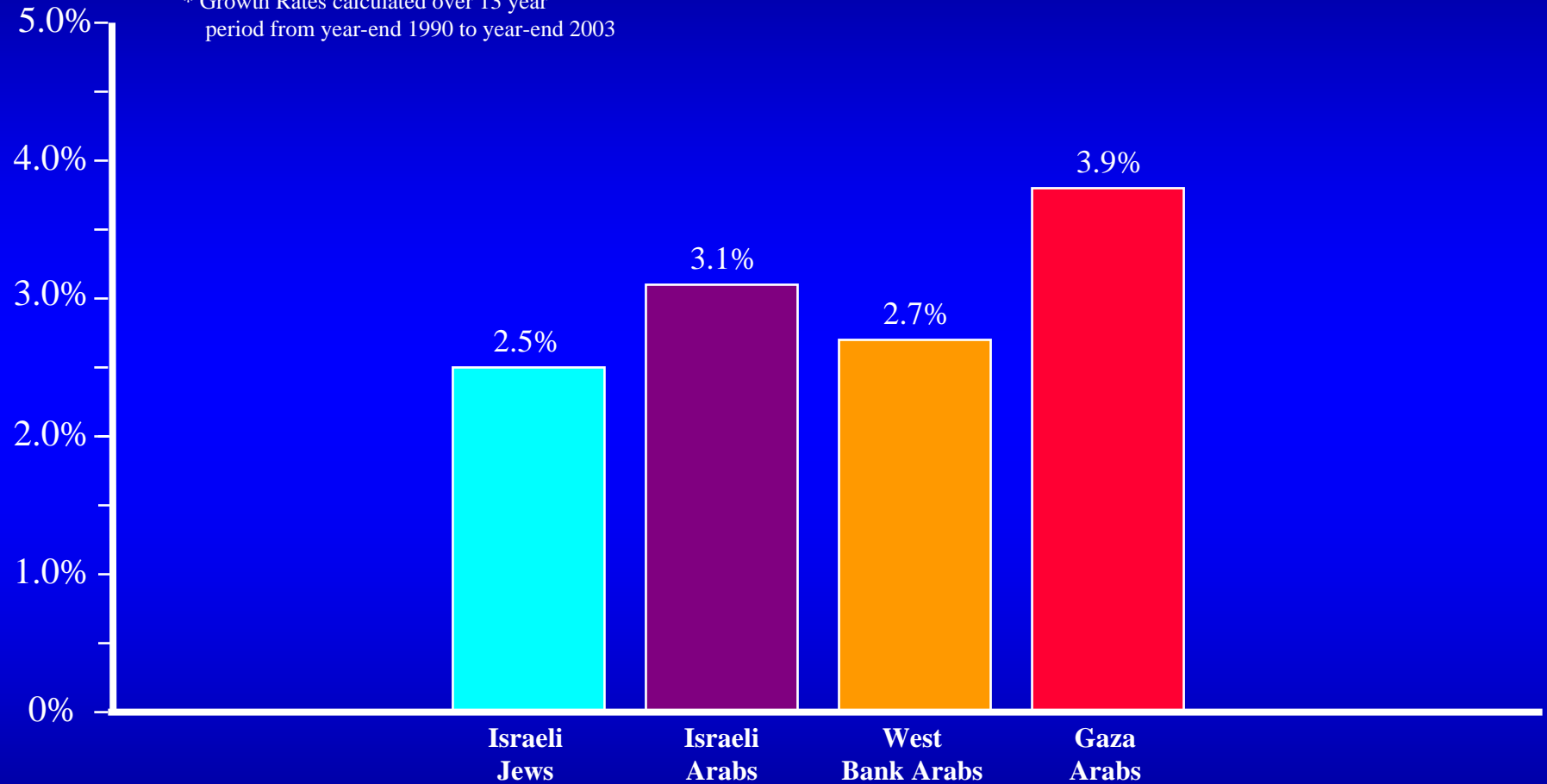
Population Growth Rates

Growth Rates by Segment

1990 – 2004*

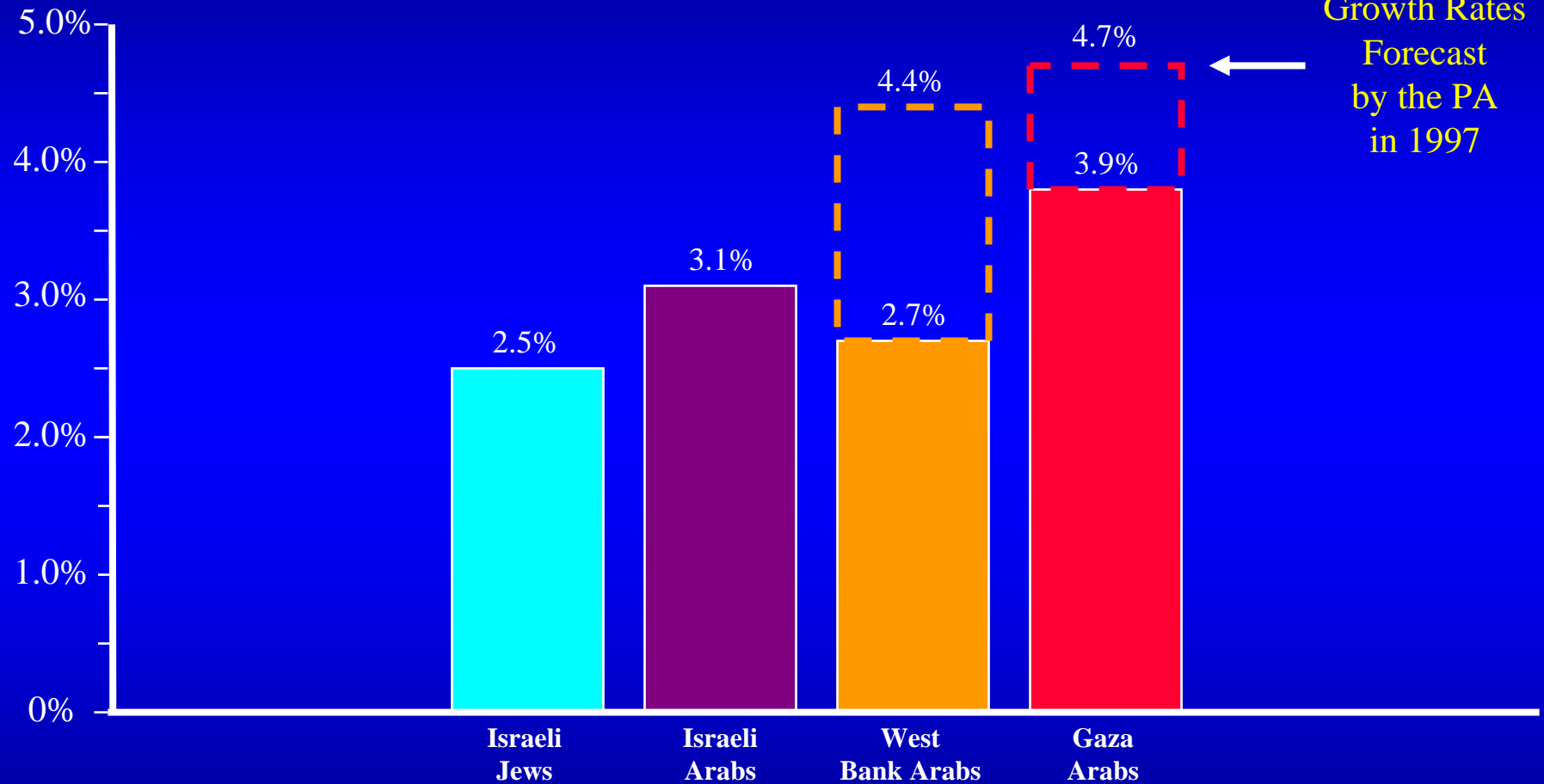
Compound Annual
Growth Rate

* Growth Rates calculated over 13 year
period from year-end 1990 to year-end 2003



Population Growth Rates Growth Rates by Segment 1990 – 2004

Compound Annual
Growth Rate



Population
Growth Rates
Forecast
by the PA
in 1997

Population Growth Rates

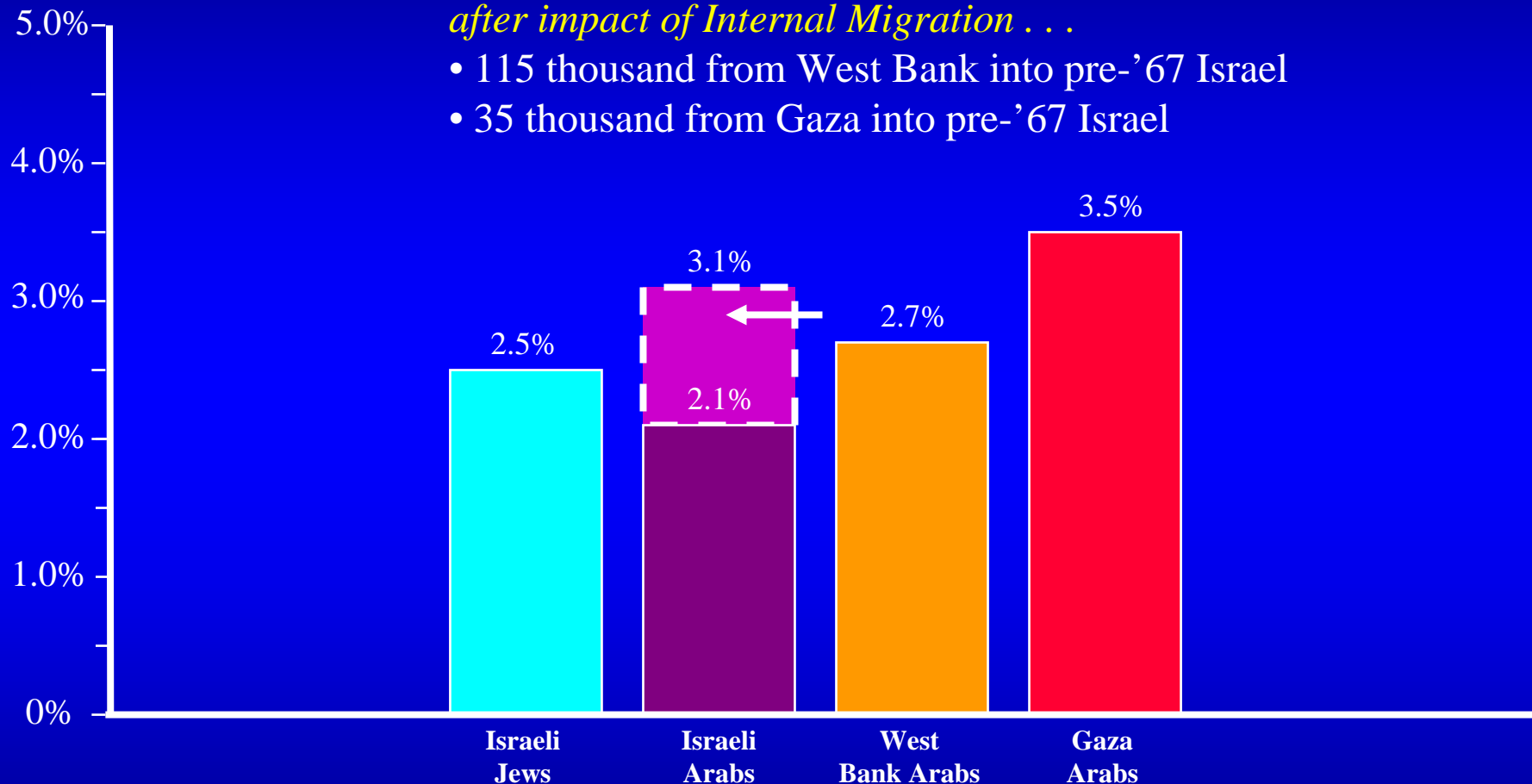
Growth Rates by Segment

1990 – 2004

Compound Annual
Growth Rate

after impact of Internal Migration . . .

- 115 thousand from West Bank into pre-'67 Israel
- 35 thousand from Gaza into pre-'67 Israel



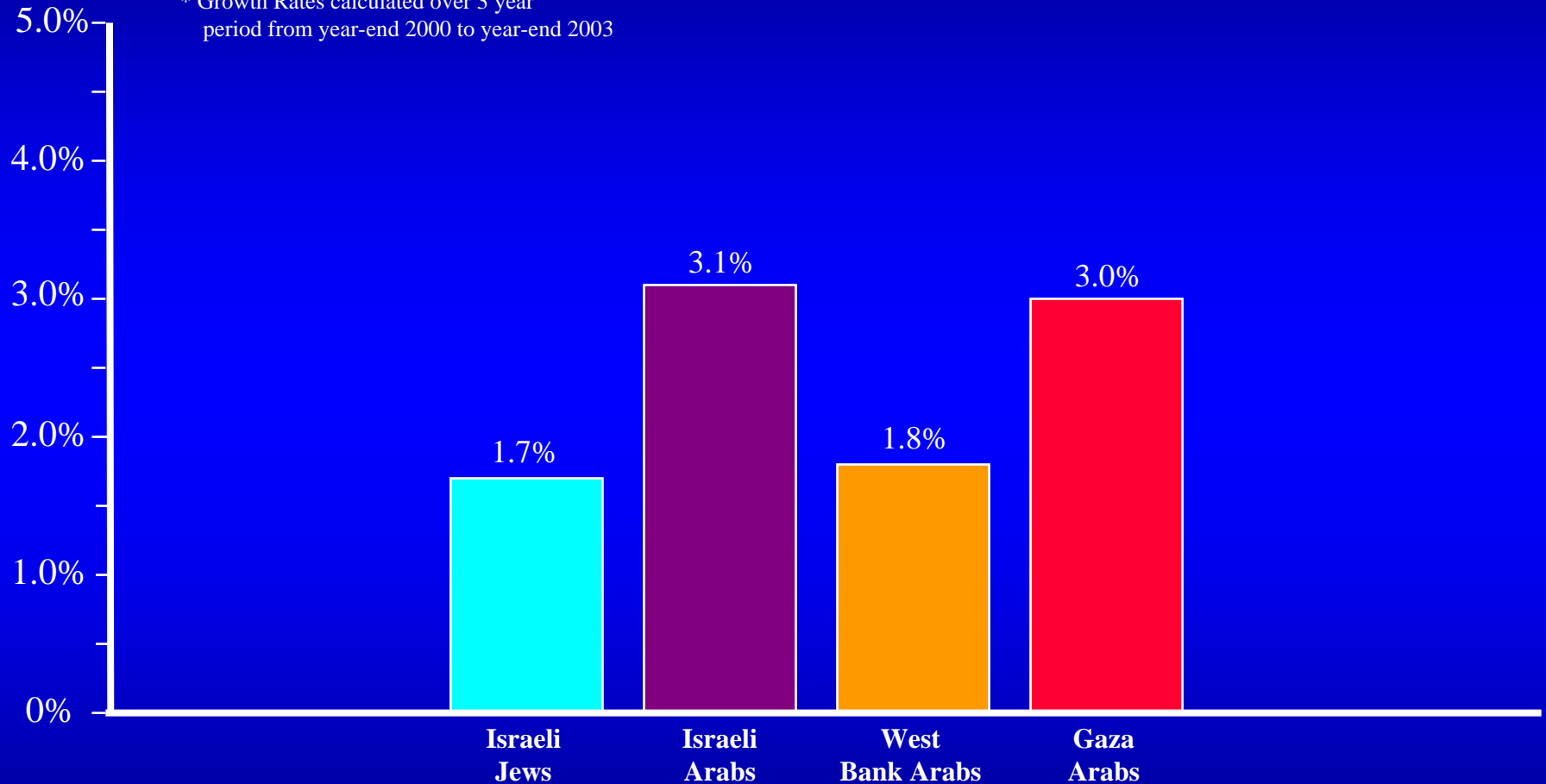
Population Growth Rates

Growth Rates by Segment

2000 – 2004*

Compound Annual
Growth Rate

* Growth Rates calculated over 3 year
period from year-end 2000 to year-end 2003



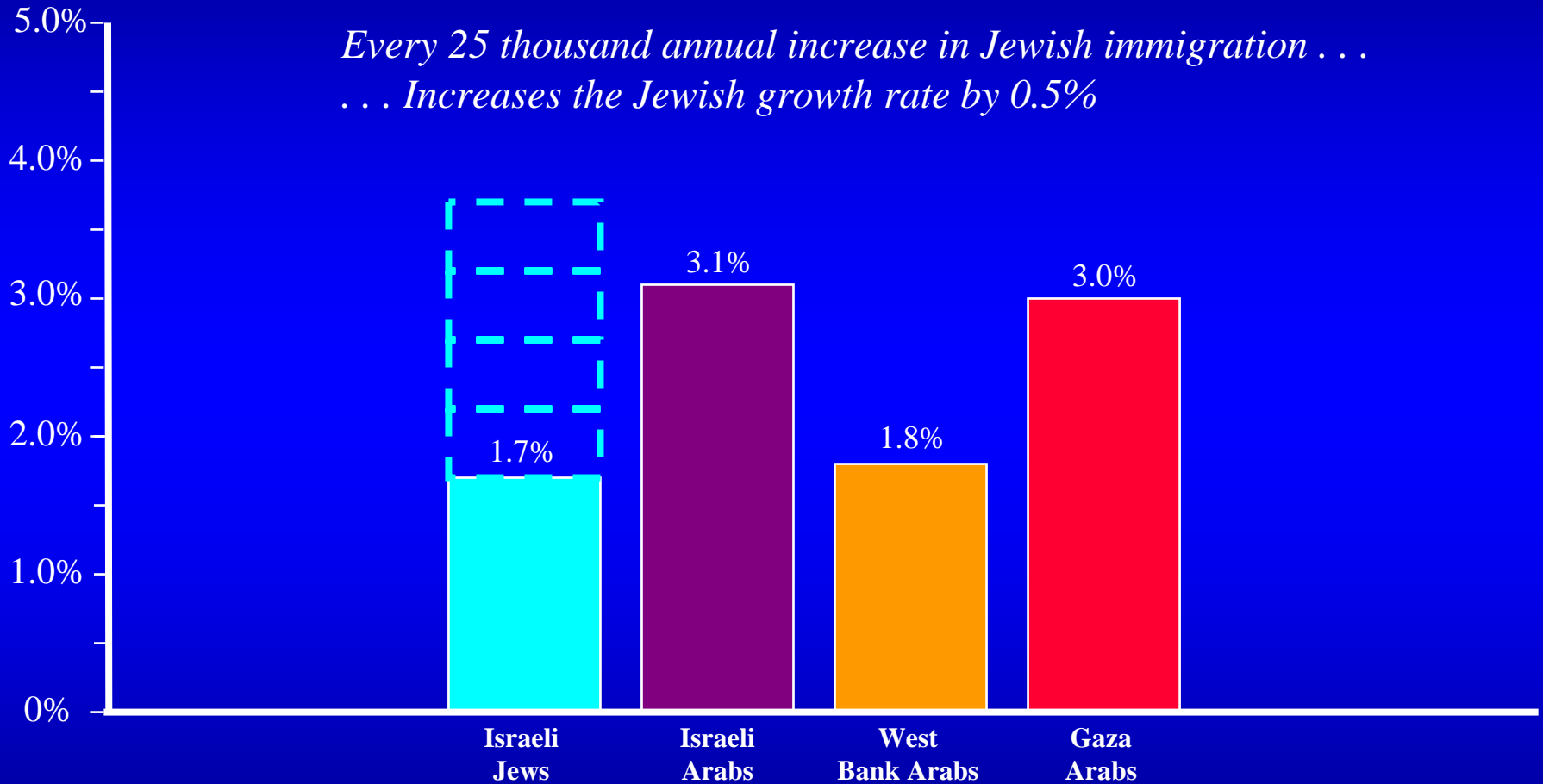
- All groups have experienced a slowdown in growth over the past few years except for the Israeli Arab sector
- Growth rate in West Bank is no faster than growth rate for Israeli Jews
- The difference in growth rates of the listed groups are low enough that demographic change will be slow and gradual

Population Growth Rates

Growth Rates by Segment

2000 - 2004

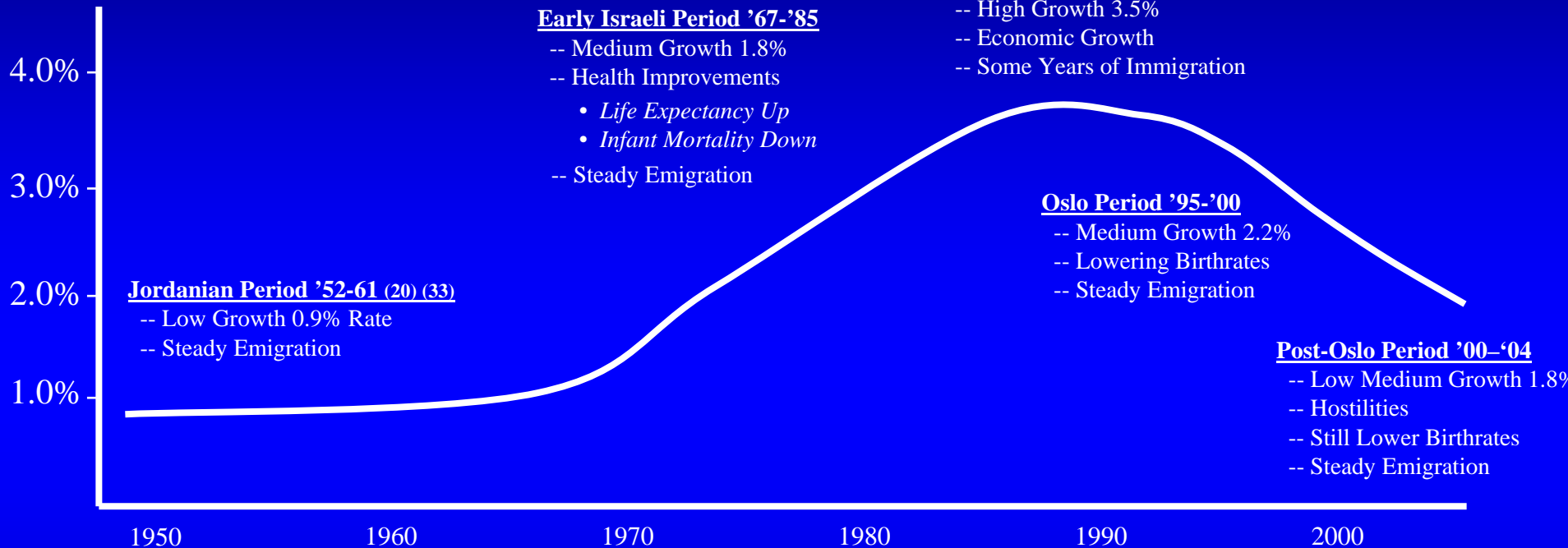
Compound Annual
Growth Rate



Phases of Population Growth

West Bank (1950-2004)

Annual Population Growth Rates



The “Swedish Model”

Stage 1: Agricultural society. High Birth and High Death Rate

Stage 2: Improvements in hygiene/medicine/nutrition lower Mortality Rate

Stage 3: Birth rates drop. Mortality Rates drop again.

Stage 4: Forces in Balance (or Negative Growth as in Europe today)

- Growth rates in the West Bank are experiencing the normal stages of population development
- Growth rates for the West Bank are approaching levels of a developed Western society and are now equal to growth rates for Israeli Jews.

**Palestinian Arab Population
In the West Bank & Gaza**
The Million and a Half Person Gap

Summary of Findings

Projections are often wrong.

The Team found that the PA's growth assumptions in the West Bank and Gaza did not occur for *even one year* during the period from 1997 through 2004.

By applying the PA's erroneous assumptions over many years, the error in population forecasting compounds exponentially. These errors have created a Million and a Half Person Gap between what is commonly cited for Arab population in the West Bank and Gaza and what our data shows to be the 2004 population: 2.4 Million instead of the reported 3.8 million.

In the Team's research we found:

-- *Less Births*

-- *Lower Fertility Rates*

-- *Net Emigration*

-- *Internal Migration*

-- *Double-Count*

-- *Inclusion of Non-Residents*

**Palestinian Arab Population
In the West Bank & Gaza
*The Million and a Half Person Gap***

A Final Word

Demographers should ask the following *Four Questions* of the PA:

- #1) Why did the PA Central Bureau of Statistics not update its forecast with PA Ministry of Health birth data?
- #2) Why did the PA not use net emigration figures in place of the forecasted 1.5% annual immigration into the West Bank and Gaza?
- #3) Why does the PA not report a *de facto residents only* population figure for the West Bank and Gaza?
- #4) Why does the PA retroactively restate birth data and growth statistics that differ from annually reported figures?

Given that the topic of demography in the West Bank and Gaza is sensitive we anticipate intense scrutiny of our work. We welcome that examination and demand only that the same scrutiny be applied to the original PA Projection.

**Palestinian Arab Population
In the West Bank & Gaza
*The Million and a Half Person Gap***

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