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A green silhouette map of New Zealand, showing the North Island, South Island, and the Chatham Islands. The map is positioned diagonally across the slide.

NEW ZEALAND

- **Population 4.0 million**
- **100.3 million bank notes in circulation at 30/06/03**

RESERVE BANK OF NEW ZEALAND:

Decision to go Polymer:

- **1988 – New technology substrate revealed.**
- **1992 - Australia introduces polymer notes.**
- **1991 – NZ Tender for new design.**
 - (paper notes only).
- **1995 – NZ Tender - paper notes only.**
 - (Technology not proven)
- **1998 – Technology proven – Tender for quotes on both paper & polymer for a 3 year supply.**

Decision to go Polymer (2):

Decision taken in 1998 to change all NZ bank notes to polymer for the following reasons:

- **The advantages of the polymer technology is valid for all denominations.**
- **A relatively small circulation (70 million).**
- **Tradition of similarity of design for all denominations, (e.g. security features).**

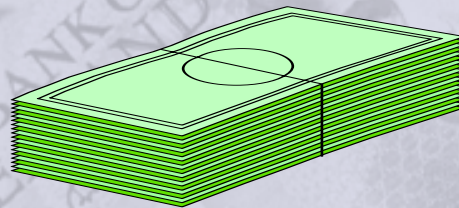




Key Expectations for Polymer:

- **Note Quality - notes retain cleanliness & structure.**
 - **Reduction in counterfeiting.**
 - **Improved Performance (e.g. fewer jams in ATM's).**
 - **Environmental friendly (waste notes recycled).**
- = ongoing public acceptance.**
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- **Increased note life (at least 4 times paper).**
- = efficiencies for RBNZ.**

Meeting key expectations: 4 years on!





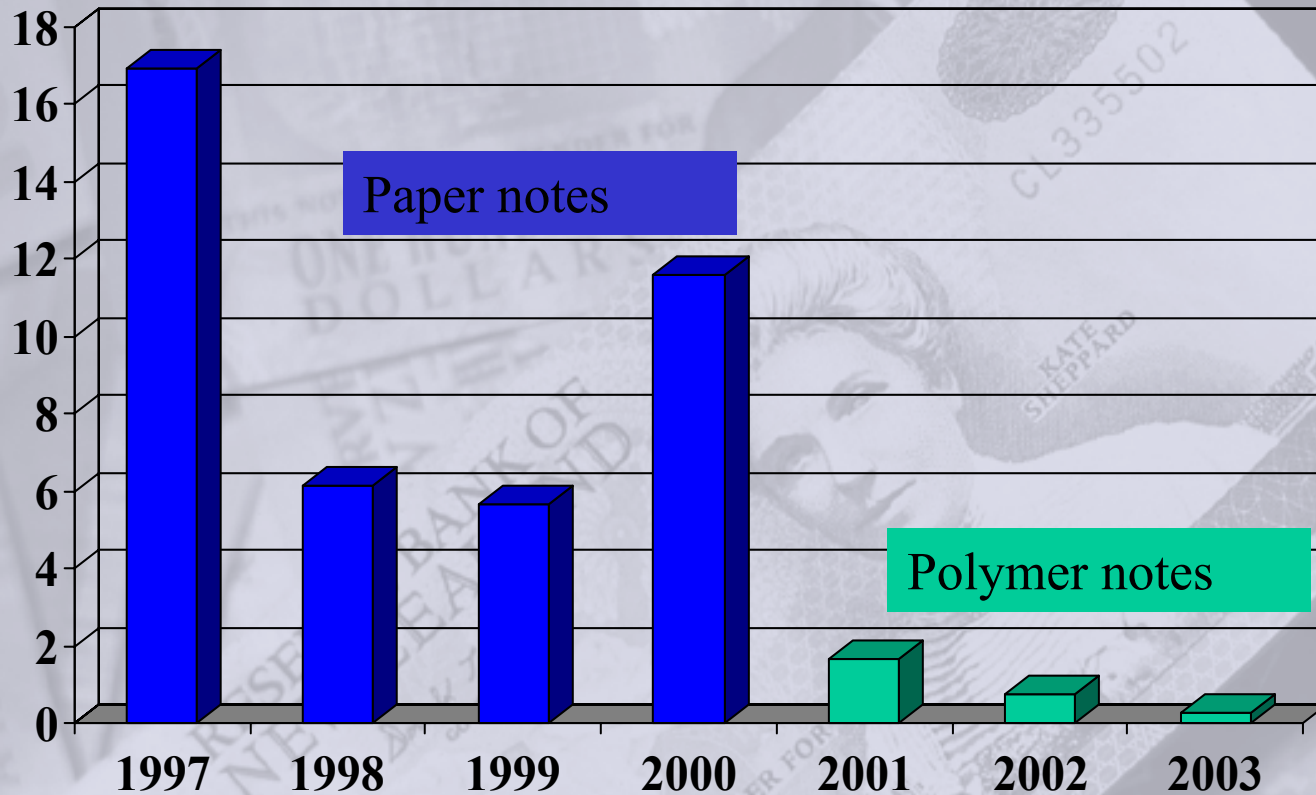
NOTE QUALITY:

\$20 note:

- First Issued May 1999.
- 51% of all notes in circulation.
- Default ATM note.
- Since 1999 we have issued 77 million & destroyed 11 million (14%) as unfit.
- In past 12 months we have destroyed just 8.8% of all \$20 notes in circulation.

Counterfeits detected - June years:

(per million notes in circulation)



Typical NZ Forgery (on paper):



PERFORMANCE

- **Polymer notes same design and size as paper notes.**
- **ATM servicing costs reduced.**
- **77% of public and 80% of retailers give a positive rating for ease of handling.**

Environmental Friendly:

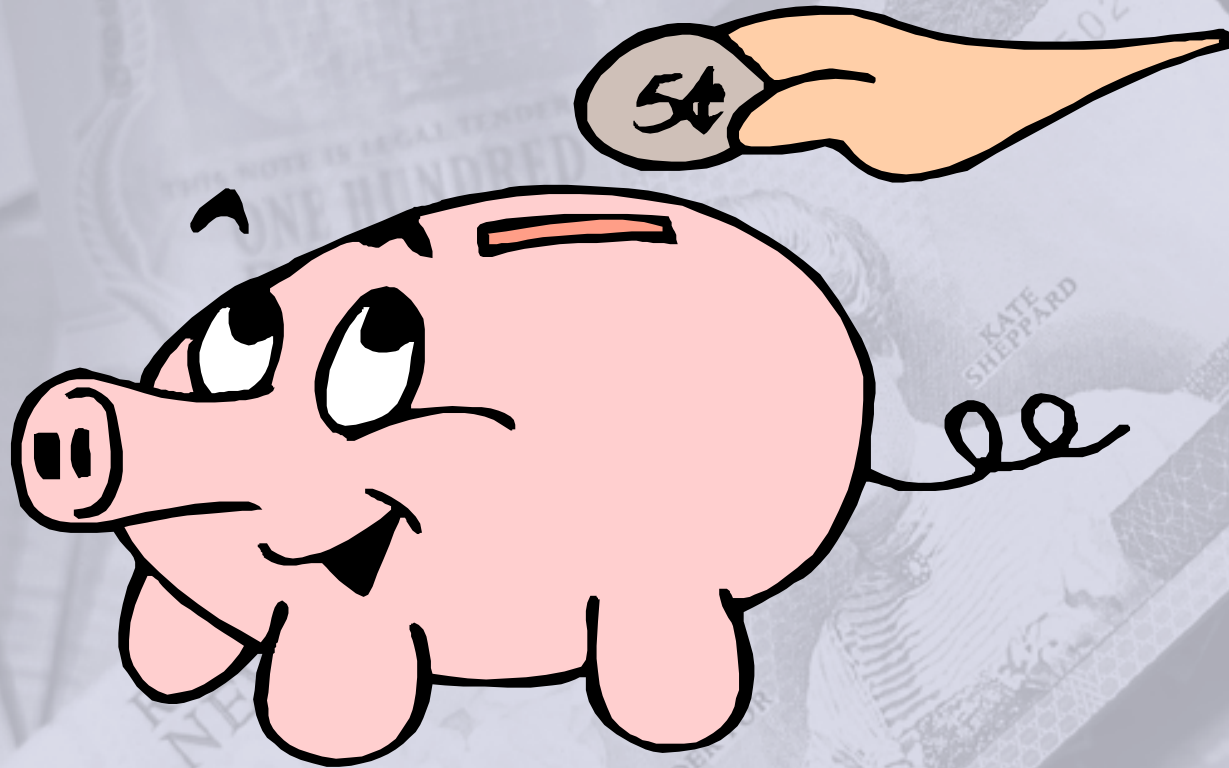
- **To date, the extent of old paper notes being repatriated has prevented us from recycling polymer waste. We will shortly commence making the polymer waste available to re-cycling companies.**

PUBLIC ACCEPTANCE:

November 2000 survey:

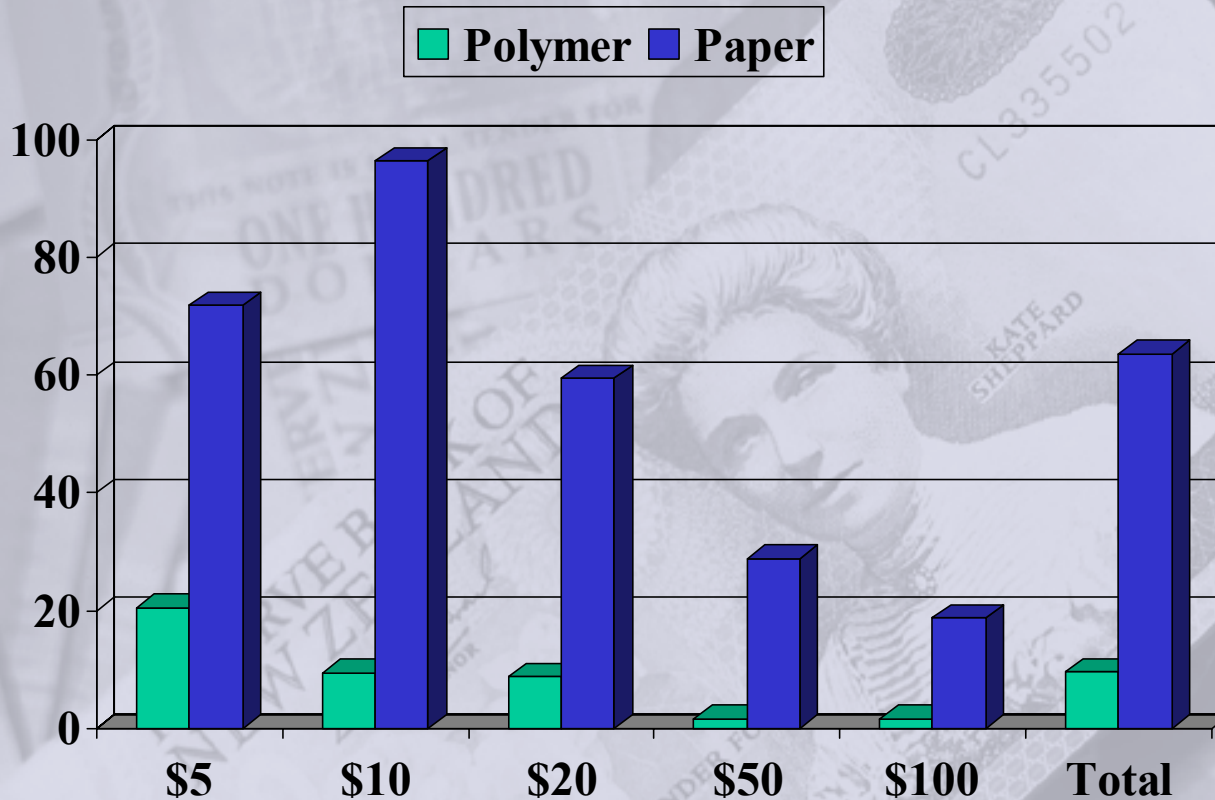
- **90% of public and 100% of retailers consider polymer notes cleaner than paper.**
- **74% of public and 90% of retailers prefer or strongly prefer polymer notes over paper.**
- **Continued acceptance; no major problems.**

Central Bank Efficiency:



Note Life: notes destroyed as a % of NIC

Polymer (2003) Paper (1998)



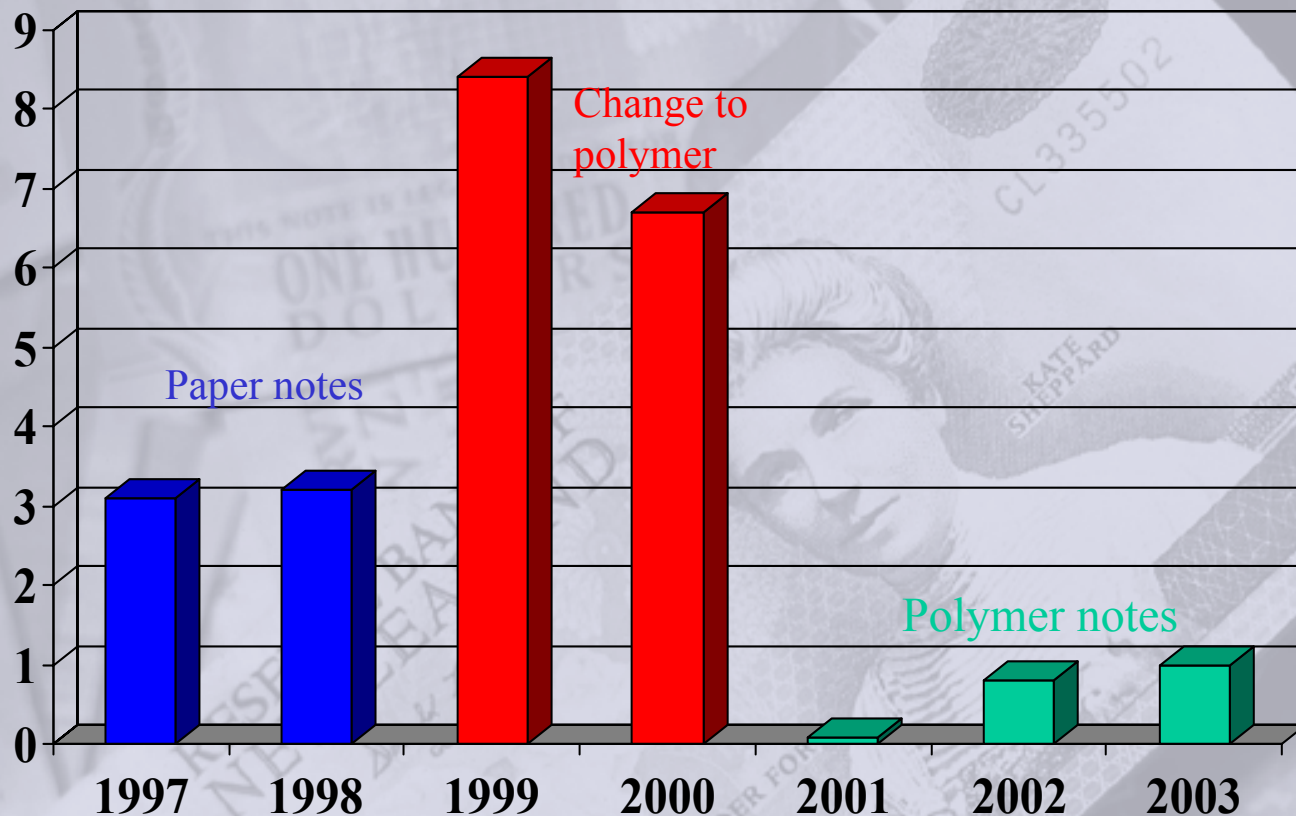
Note Replacement Cost:

Transition cost 1999/00: \$7.2 million.

	Paper	Polymer
1999/00	\$2.5 mil (est.)	\$0.1 mil
2000/01	\$2.8 mil (est.)	\$0.2 mil
2001/02	\$2.9 mil (est.)	\$0.8 mil
Total:	\$8.2 mil	\$1.1 mil (\$7.1 mil)
2002/03	\$3.0 mil (est.)	\$1.0 mil

Replacement Cost per note in circulation:

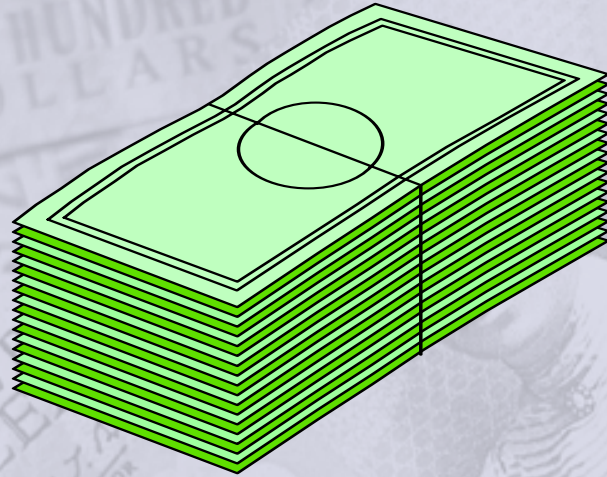
(NZ cents per note)



Inventory Management:

- **With paper notes we kept in ‘reserve’ a minimum of 100% of notes in circulation (60% destruction rate, 40% contingency).**
- **With polymer our minimum ‘reserve’ has been reduced to 50% of notes in circulation (10% destruction rate, 40% contingency).**

DISTRIBUTION of BANKNOTES:



TRADITIONAL CASH CYCLE - 1998

**Cash Positive
Banks**



**RBNZ – 3 sites
540 mill deposited
544 mill issued**



**Cash Negative
Banks**

68 million notes
in circulation.

Cash issued and
deposited (41 mill
unfit, 499 mill fit).

WHOLESALE CASH CYCLE - Issues

**Cash Positive
Banks**



RBNZ – 1 site

Issued 64 mil
(37 mill Xmas/Easter)



**Cash Negative
Banks**

100 million notes
In circulation.

Cash issued by
arrangement.

(under traditional
arrangements 800
mill notes would
have been issued by
RBNZ).

WHOLESALE CASH CYCLE - Deposits

**Commercial
Banks**

100 million notes
In circulation.

**RBNZ
10 mill unfit
52 mill fit**

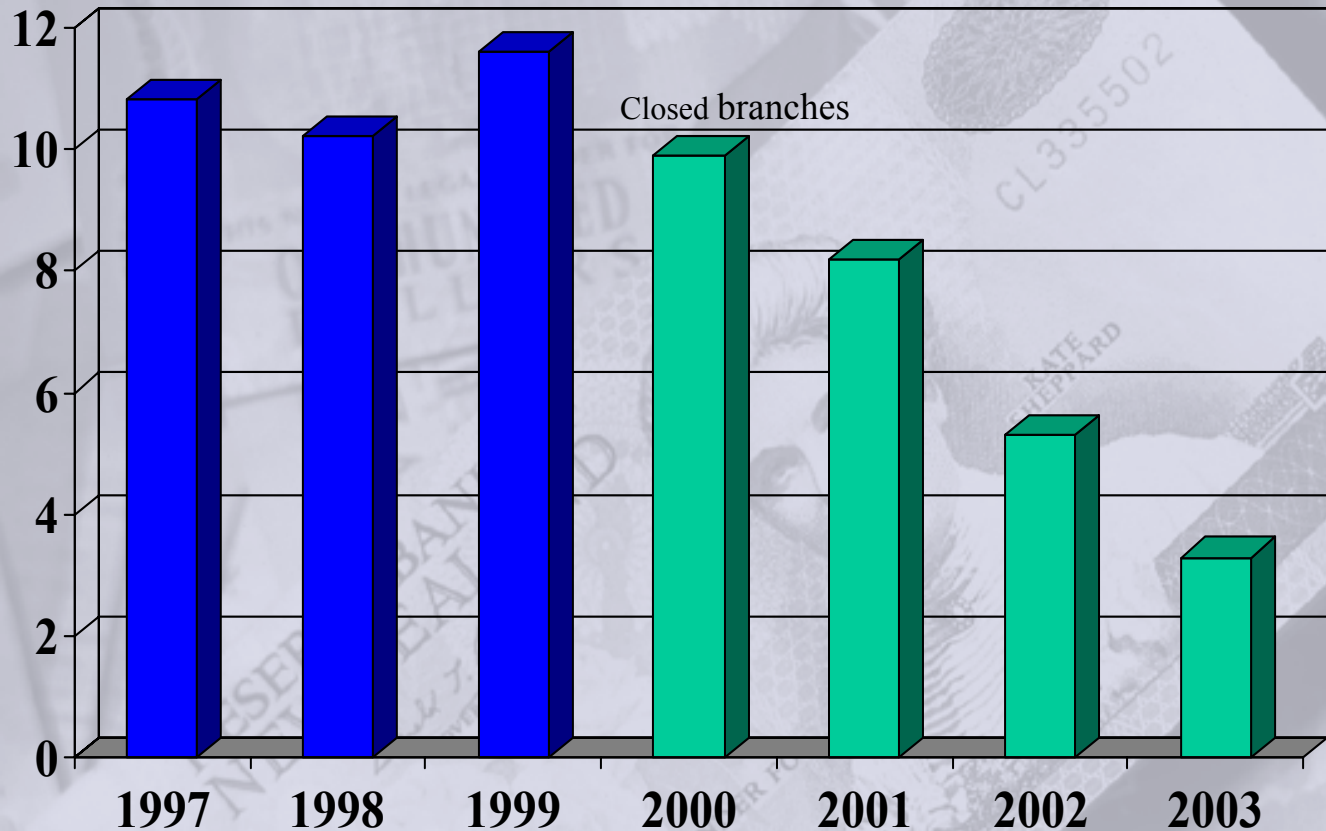
Unfit and post-
seasonal notes
repatriated.

Identified Risks

- **Supply to the public.**
No problems reported - strong incentive on banks to supply.
- **An increase in counterfeits.**
Not occurred – polymer notes.
- **A significant deterioration in quality.**
Also not occurred – polymer notes.

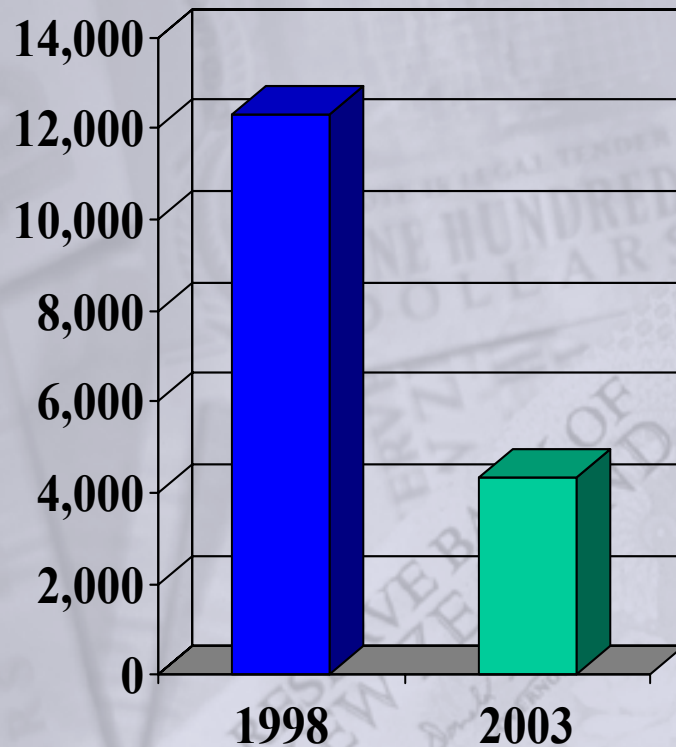
Currency operating expenses (excluding note issue) – June years:

(NZ \$ million)



Currency Operating Expenses – (including note issue) – June years:

(NZ \$ million)



Total expense of \$12.4 million in 1997/98 compared with \$4.3 million in 2002/03, a decline of 65%.