IPv4 Depletion and IPv6 Adoption

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American Registry for Internet Numbers
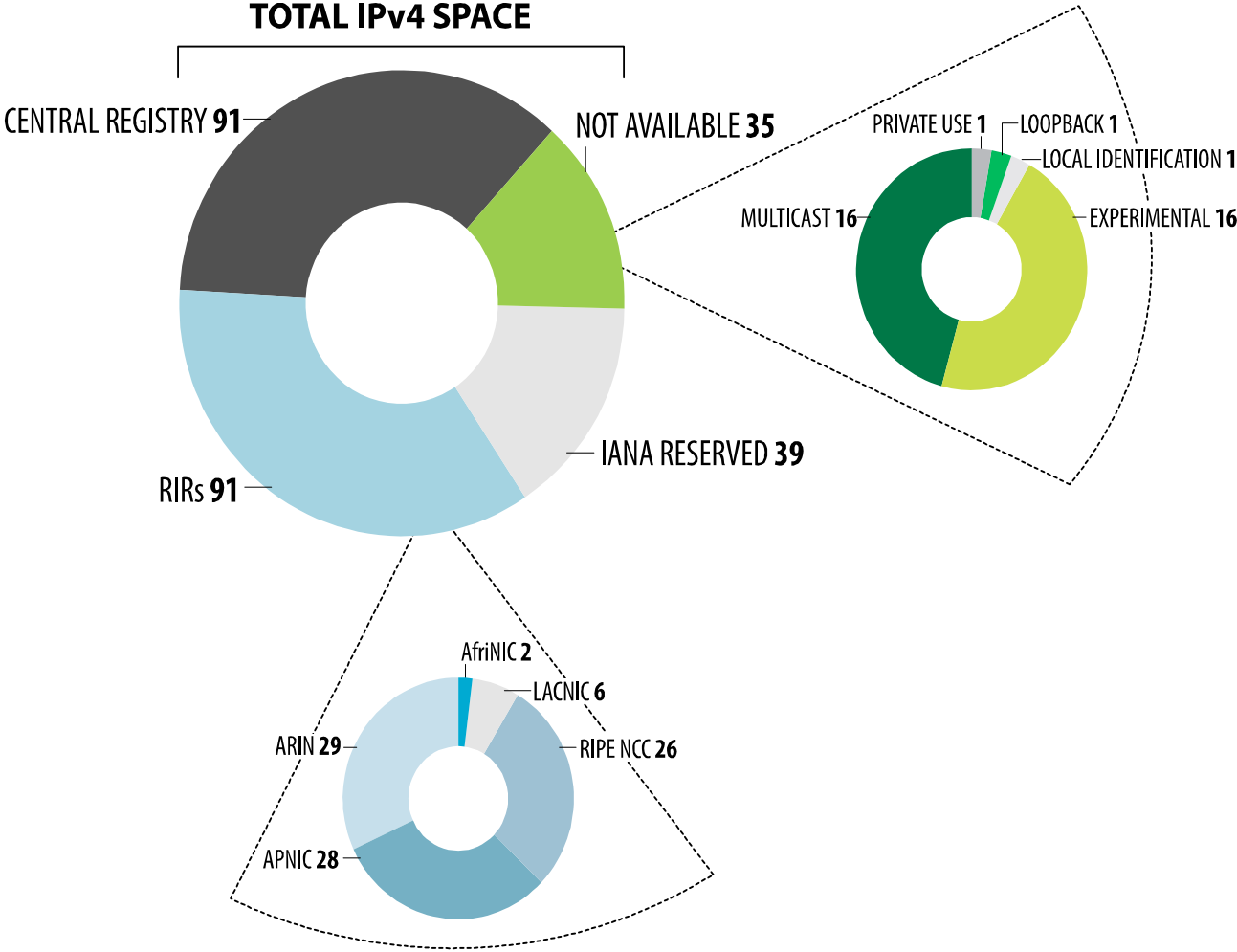
IPv4 Depletion of /8s
As of June 2008
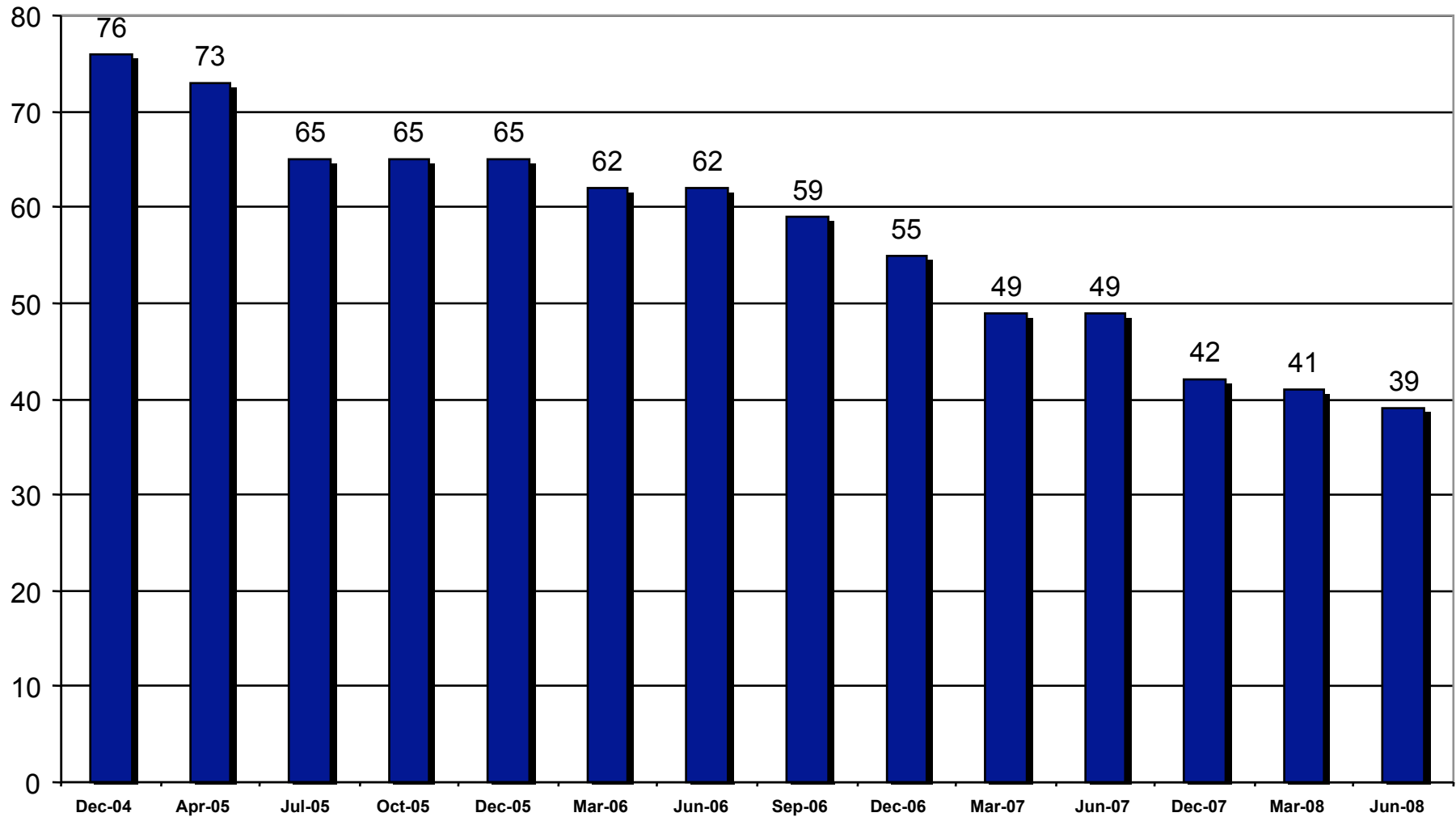
IPv4 Address Space Status
As of June 2008

TOTAL IPv4 SPACE

CENTRAL REGISTRY **91**

NOT AVAILABLE **35**

IANA RESERVED **39**

RIRs **91**

PRIVATE USE **1**

LOOPBACK **1**

LOCAL IDENTIFICATION **1**

MULTICAST **16**

EXPERIMENTAL **16**

AfriNIC **2**

LACNIC **6**

ARIN **29**

RIPE NCC **26**

APNIC **28**

IPv4 Allocations
Cumulative Total as of June 2008

AfriNIC **2%**

LACNIC **7%**

RIPE NCC **28%**

ARIN **32%**

APNIC **31%**

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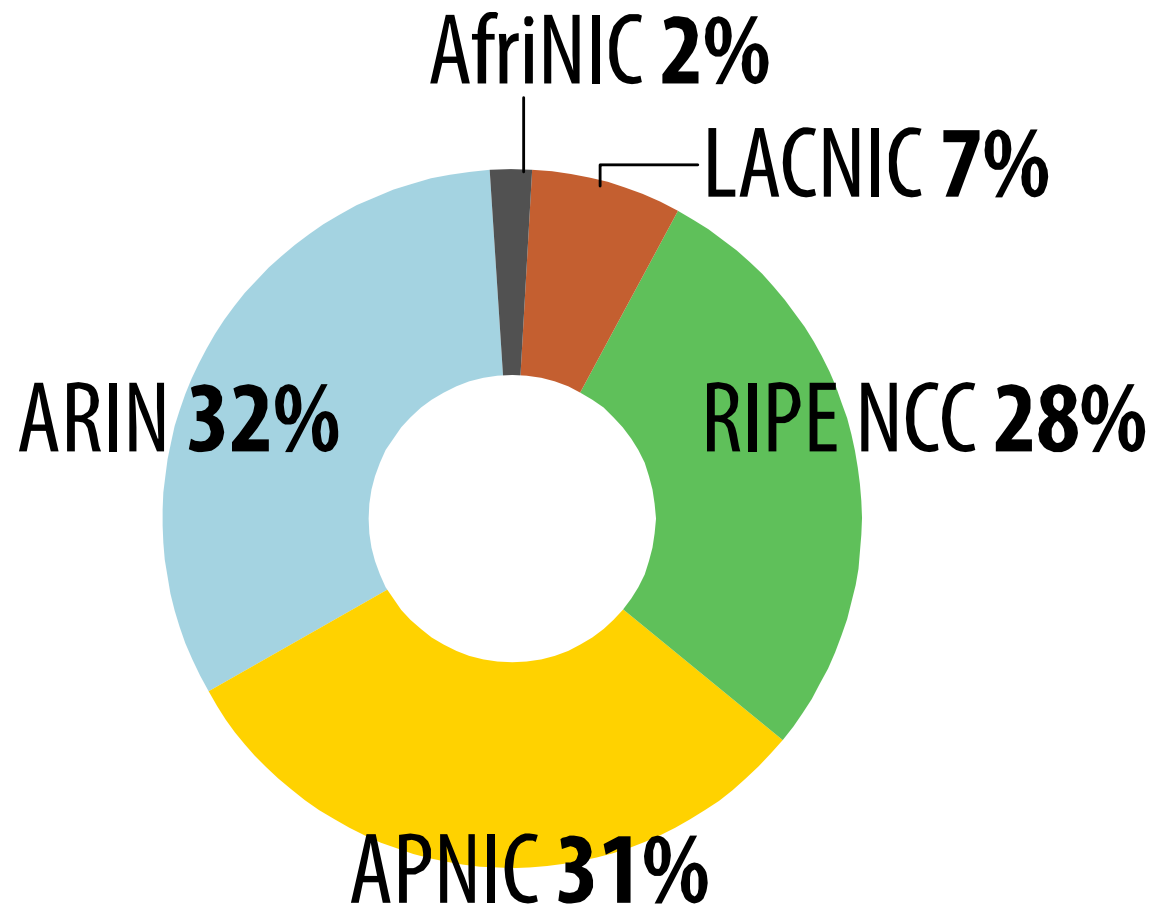
RIRs are consistently allocating over
10 /8s per year

RIRs collectively allocated over
12 /8s for the first time in 2007
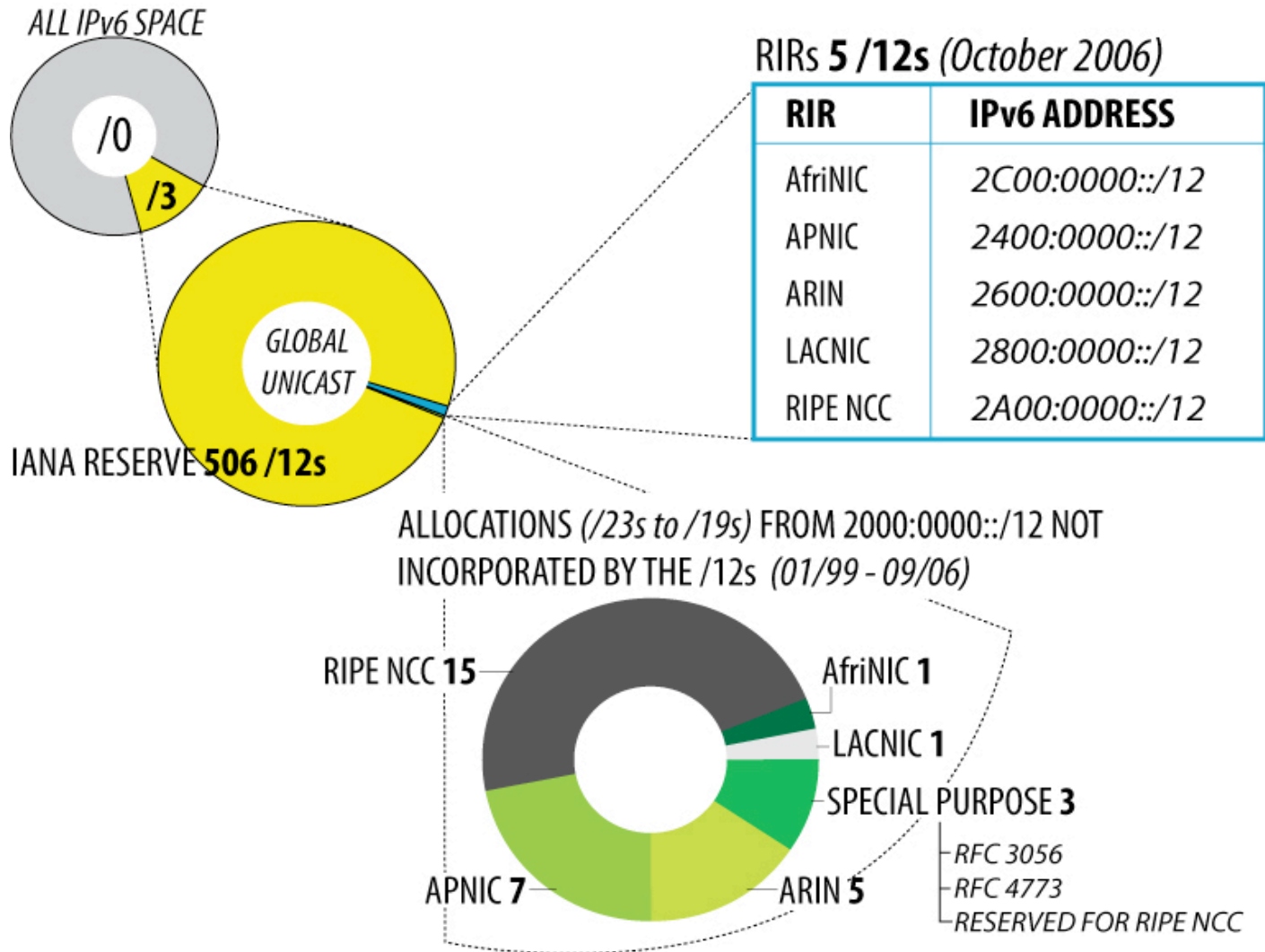
Number of /8s remaining in IANA's
unallocated pool:

39

Estimated Run Out by RIRs on newly allocated IPv4 according to
http://www.potaroo.net/tools/ipv4/ :

December 25, 2011

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IPv6 ADDRESS SPACE
How much has been allocated to the RIRs?

ALL IPv6 SPACE

/0

/3

GLOBAL
UNICAST

IANA RESERVE **506 /12s**

RIRs **5 /12s** *(October 2006)*

RIR	IPv6 ADDRESS
AfriNIC	2C00:0000::/12
APNIC	2400:0000::/12
ARIN	2600:0000::/12
LACNIC	2800:0000::/12
RIPE NCC	2A00:0000::/12

ALLOCATIONS *(/23s to /19s)* FROM 2000:0000::/12 NOT
INCORPORATED BY THE /12s *(01/99 - 09/06)*

RIPE NCC **15**

AfriNIC **1**

LACNIC **1**

SPECIAL PURPOSE **3**

RFC 3056
RFC 4773
RESERVED FOR RIPE NCC

APNIC **7**

ARIN **5**

IPv6 Allocations RIRs to LIRs/ISPs

How many allocations have been made by each RIR by year?

Legend: AfriNIC, APNIC, ARIN, LACNIC, RIPE NCC

y-axis (allocations): 0, 50, 100, 150, 200

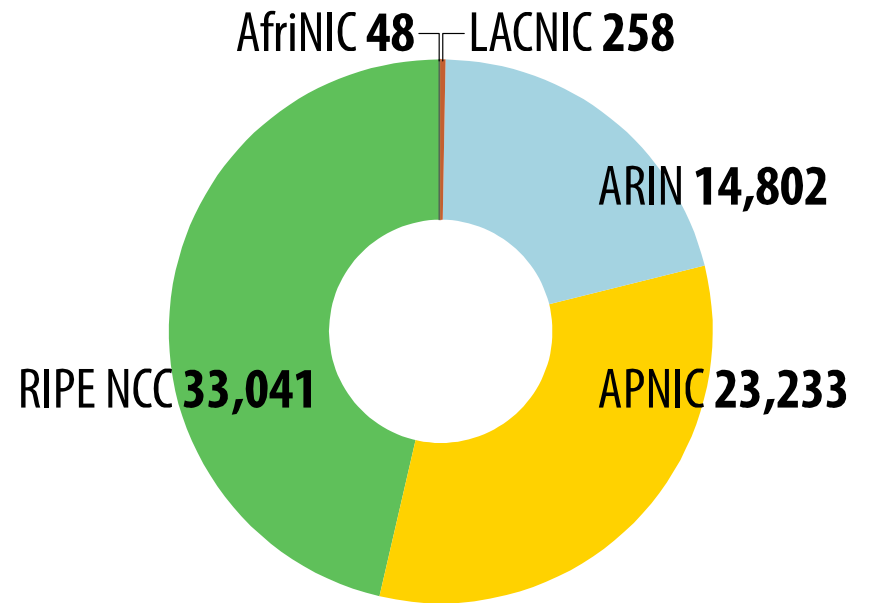x-axis (years): 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007

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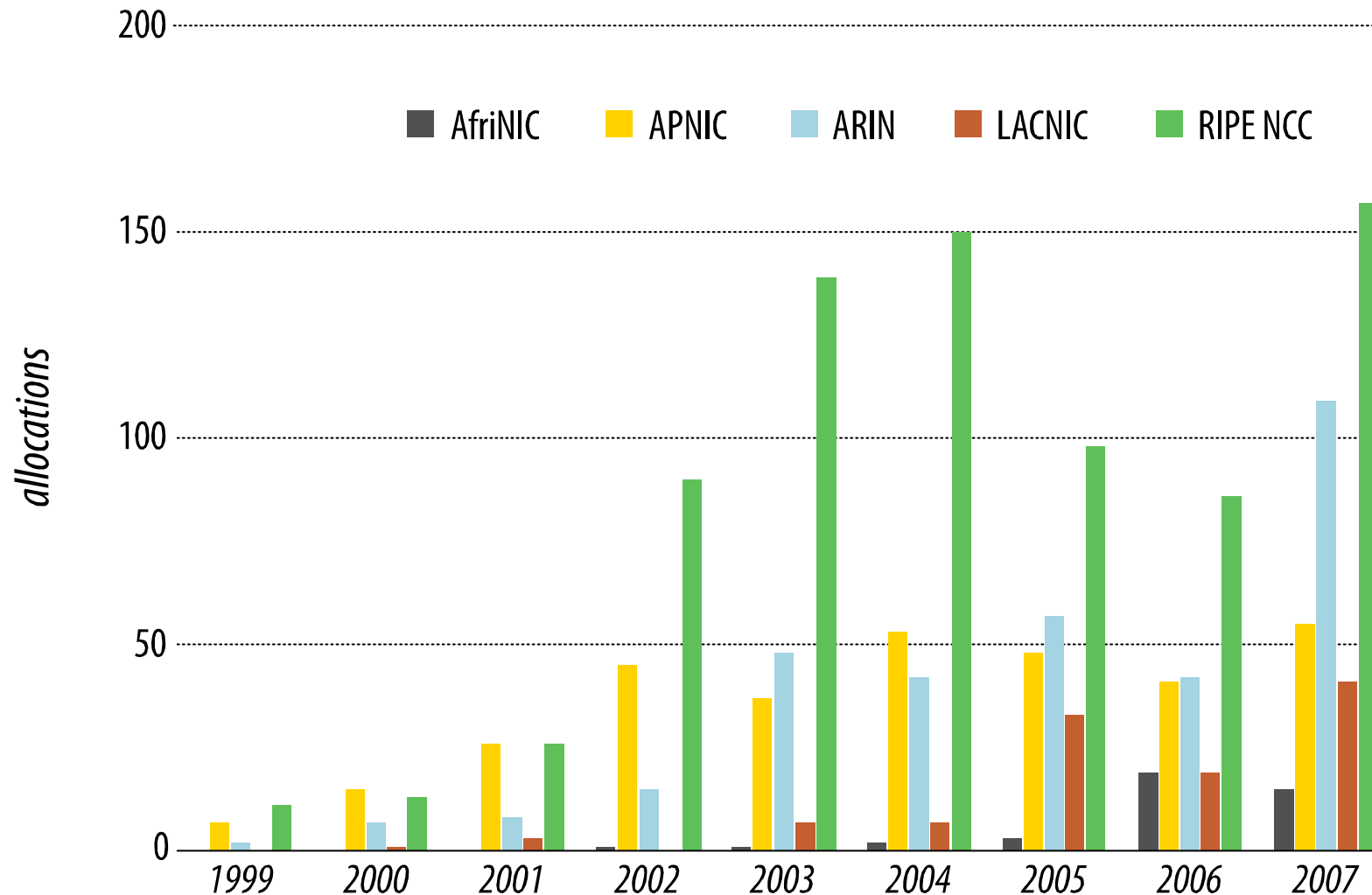
IPv6 ALLOCATIONS RIRs to LIRs/ISPs
(Jan 1999 – July 2008)

How many total allocations have been made by each RIR?

AfriNIC **47 (+7*)**
LACNIC **97**
APNIC **580 (+27*)**
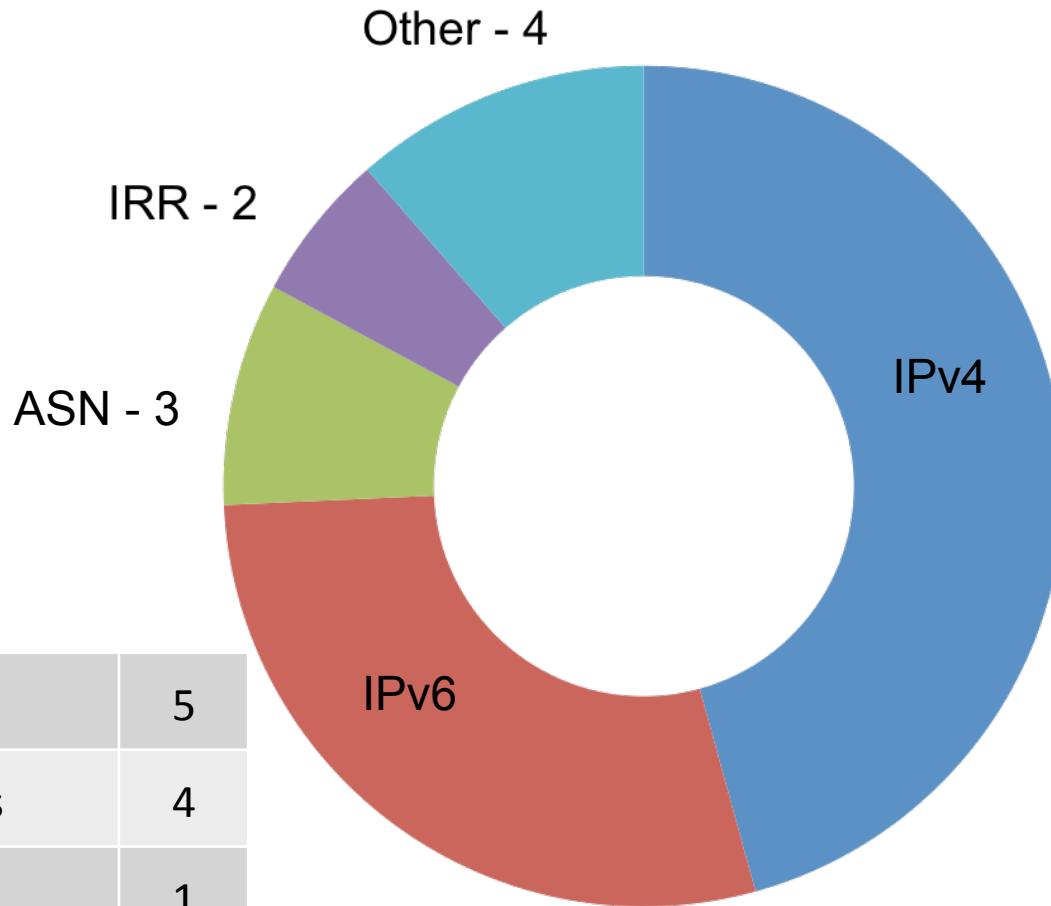ARIN **496 (+173*)**
RIPE NCC **1,208**
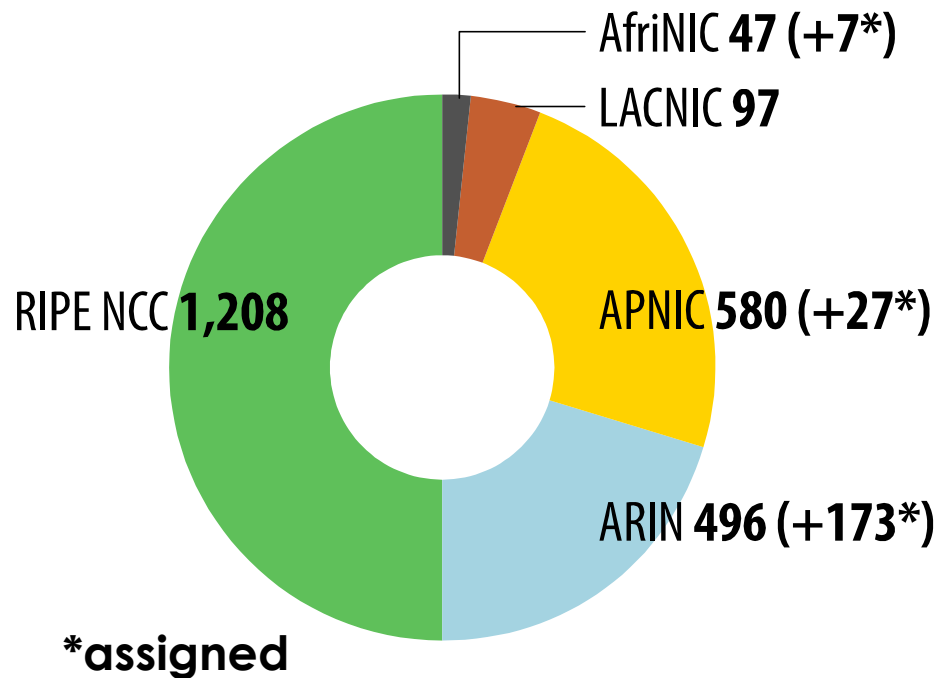
*assigned

In terms of /32s, how much total space has each RIR allocated?

AfriNIC **48**
LACNIC **258**
ARIN **14,802**
APNIC **23,233**
RIPE NCC **33,041**

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Policy Development Process Activity
As of 25 July 2008

Other - 4

IRR - 2

ASN - 3

IPv4

IPv6

| Depletion | 14 |
| Allocation Size | 2 |

Promote	5
Assignments	4
Allocation	1

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RIR	Link
AfriNIC	http://www.afrinic.net/policy.htm
APNIC	http://www.apnic.net/policy/proposals/
ARIN	http://www.arin.net/policy/proposals/proposal_archive.html
LACNIC	http://lacnic.net/en/politicas/
RIPE NCC	http://www.ripe.net/ripe/policies/proposals/
NRO	Policy Comparison Overview http://www.nro.org/documents/index.html

IPv6 Awareness and Promotion
by the RIRs

- IPv6 position statements
- IPv6 awareness raising, education, and deployment workshops
- Publication of research on address allocation and deployment
- Providing expert advice to governments and others
- Providing IPv6 networks during meetings with focus on people using IPv6