



IPv4 Market Group
Setting the Standard for IPv4 Transfers

IPv4 Pricing and Transfer Update

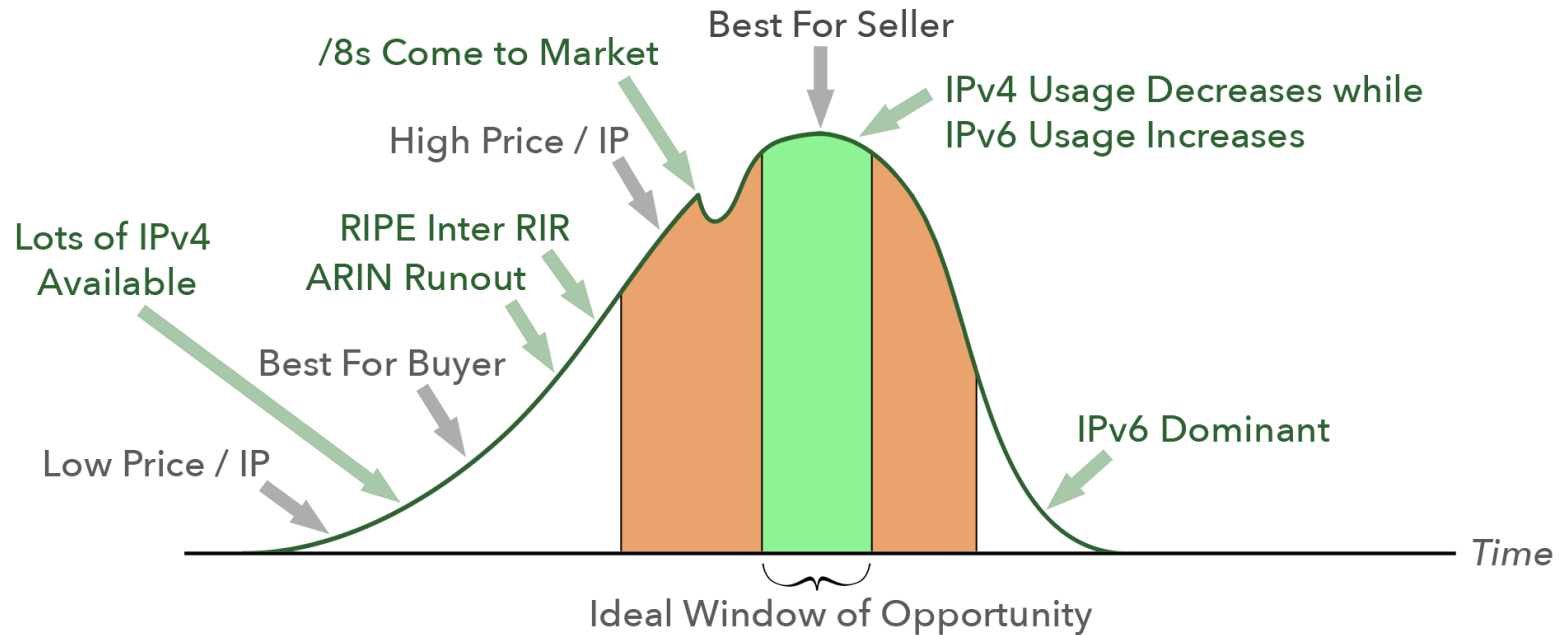
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IPv4 Market Group

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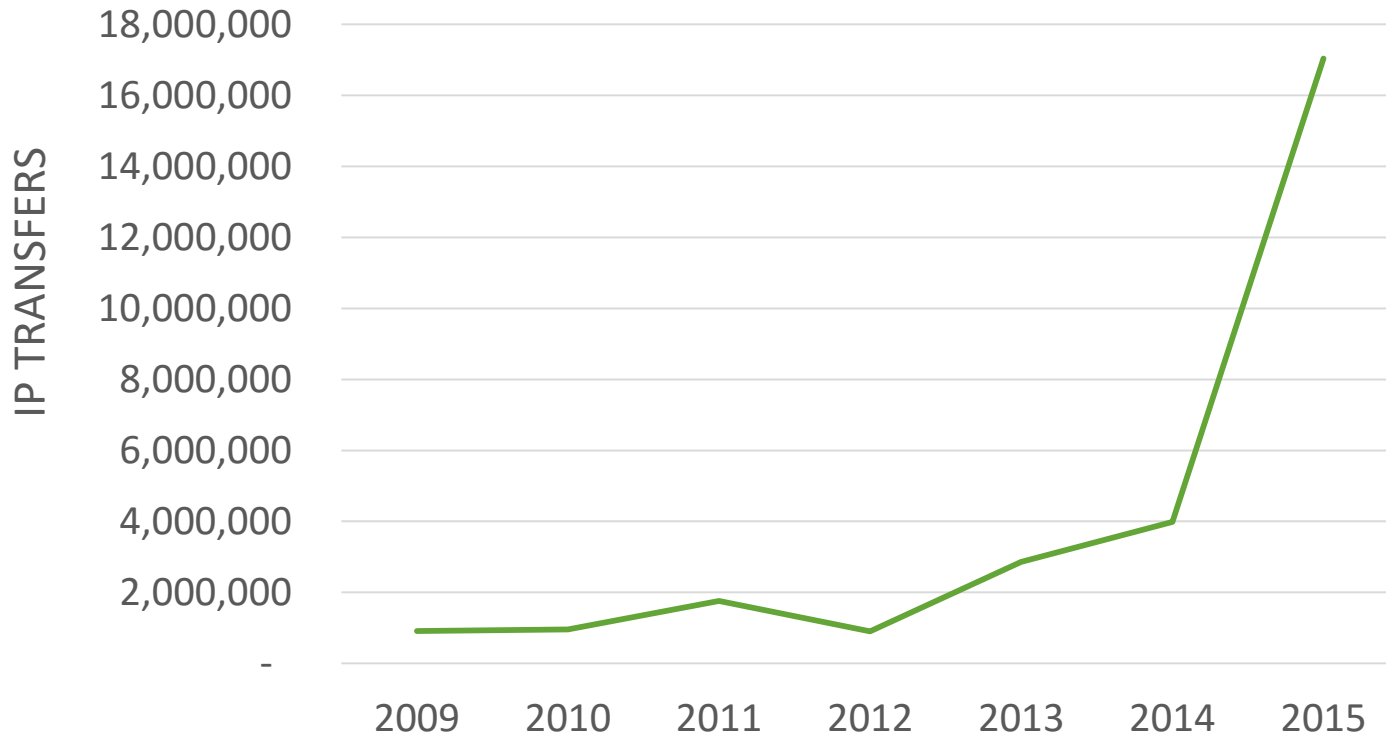
IPv4 Life Cycle



- Events
 - ARIN Runout
 - RIPE Inter-RIR Transfers
 - /8s come to market
 - IPv6 Adoption

Factors Affecting Pricing

OF IP TRANSFERS PER YEAR IN ARIN REGION



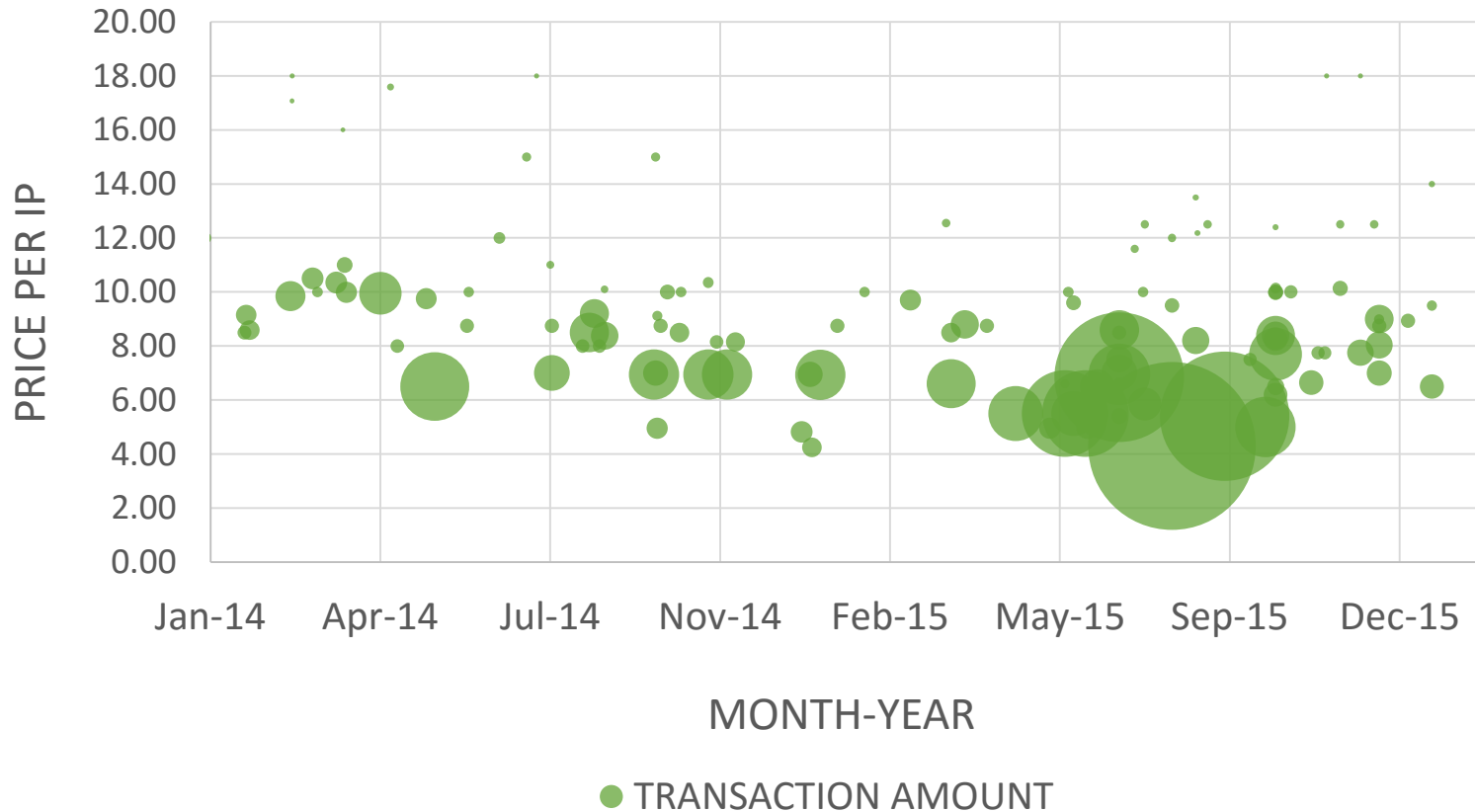
- Supplies are being bought up in ARIN region, following run out in July 2015

Factors Affecting Pricing

- RIPE Inter-RIR Transfers: Possible since September 2015; Prices have equalized across regions
- IPv6 Deployment: Will reduce demand for IPv4 in the long term; Applications still need to support IPv6
- Use of CGN: Stretches use of IPv4 and reduces price pressure
- Supply of IPv4: As more IPv4 comes to market, such as /8s, prices are pushed down
- Demand for IPv4: Increased demand for cloud applications; population growth

Price Trends over Time

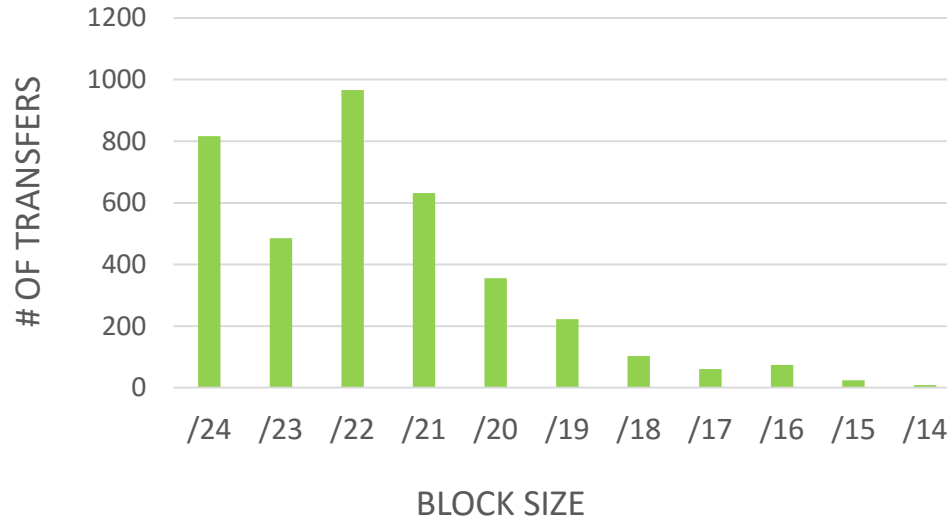
IPv4 TRANSACTIONS OVER TIME



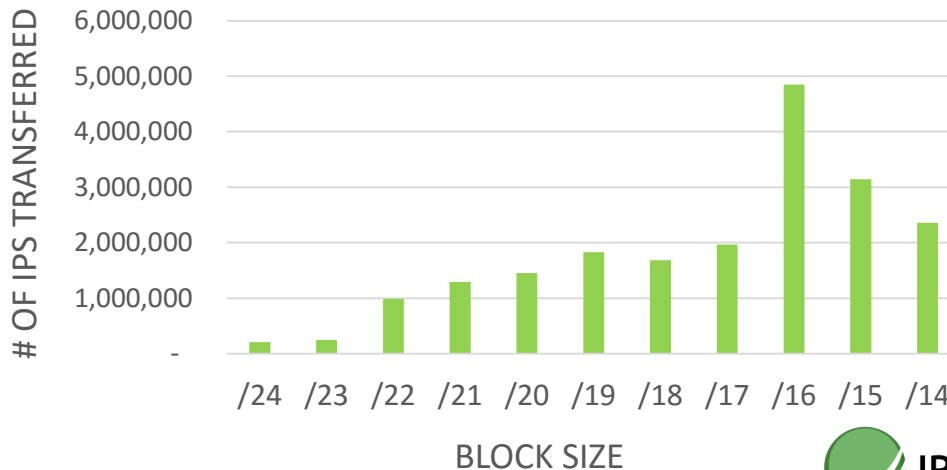
- Inflection point in September 2015 when prices increased

RIPE Transfer Activity

OF TRANSFERS PER BLOCK SIZE

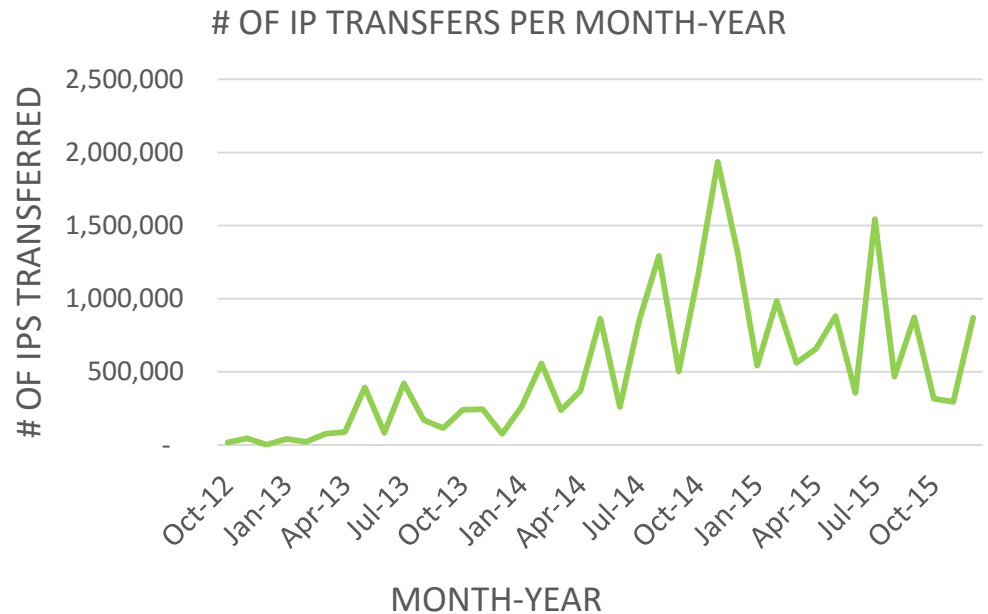


OF IPS TRANSFERRED PER BLOCK SIZE



RIPE Transfer Activity

TO COUNTRY	# IPS TRANSFERRED	%
Iran	3,066,368	18.06%
Saudi Arabia	2,708,480	15.96%
Russia	2,148,608	12.66%
UK	1,539,328	9.07%
Romania	857,600	5.05%
Spain	791,808	4.66%
Netherlands	773,632	4.56%
Germany	766,208	4.51%
Italy	525,824	3.10%
Portugal	409,088	2.41%
Bulgaria	402,944	2.37%
Turkey	338,176	1.99%
France	290,816	1.71%
Denmark	272,384	1.60%
Ukraine	239,616	1.41%



Predictions for the Future

- We are not at the top of the IPv4 Price Curve: Prices will continue to rise somewhat
- /8s will continue to come to market, keeping prices reasonable
- There is a shortage of IPv4 addresses in RIPE region that is starting to be filled from ARIN region