

NYC IXP Overall Summary and Independent View

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Summary

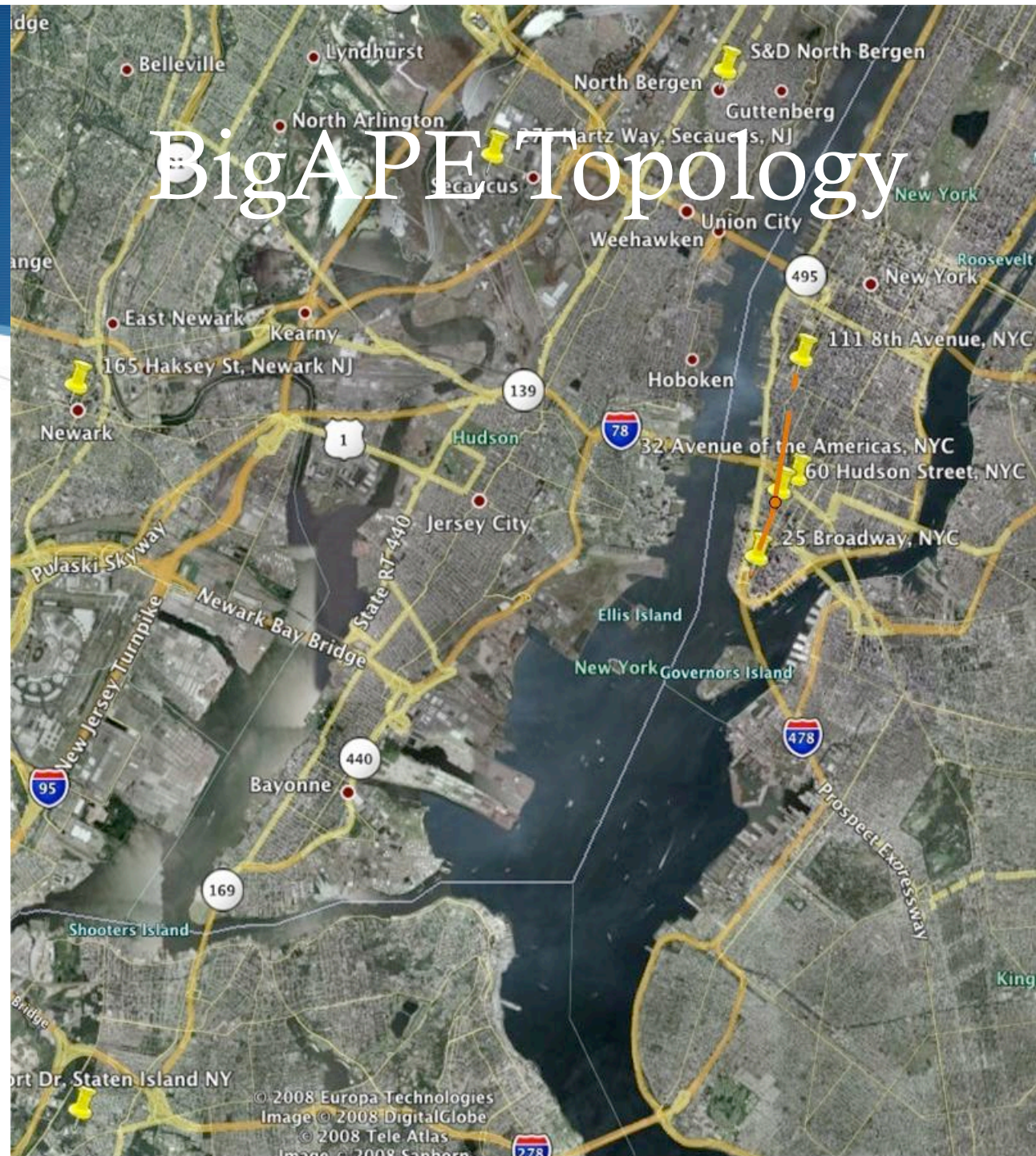
- What you just heard:
 - Any2
 - BigAPE
 - Equinix
 - NYCNAP
 - Switch & Data (PAIX)
 - Telehouse (NYIIX)

Any 2 Topology

Belleville, Lyndhurst, North Arlington, Secaucus, North Bergen, S&D North Bergen, Guttenberg, 75 Hartz Way, Secaucus, NJ, Union City, Weehawken, New York, Roosevelt, New York, 111 8th Avenue, NYC, Hoboken, 32 Avenue of the Americas, NYC, 60 Hudson Street, NYC, 25 Broadway, NYC, Jersey City, Hudson, Ellis Island, New York, Governors Island, Bayonne, Shooters Island, Port Dr, Staten Island NY, Prospect Expressway, New Jersey Turnpike, Polaski Skyway, Newark Bay Bridge, State RT 440, Newark, East Newark, Kearny, 165 Haksey St, Newark NJ, 169, 440, 139, 495, 78, 95, 478, 278.

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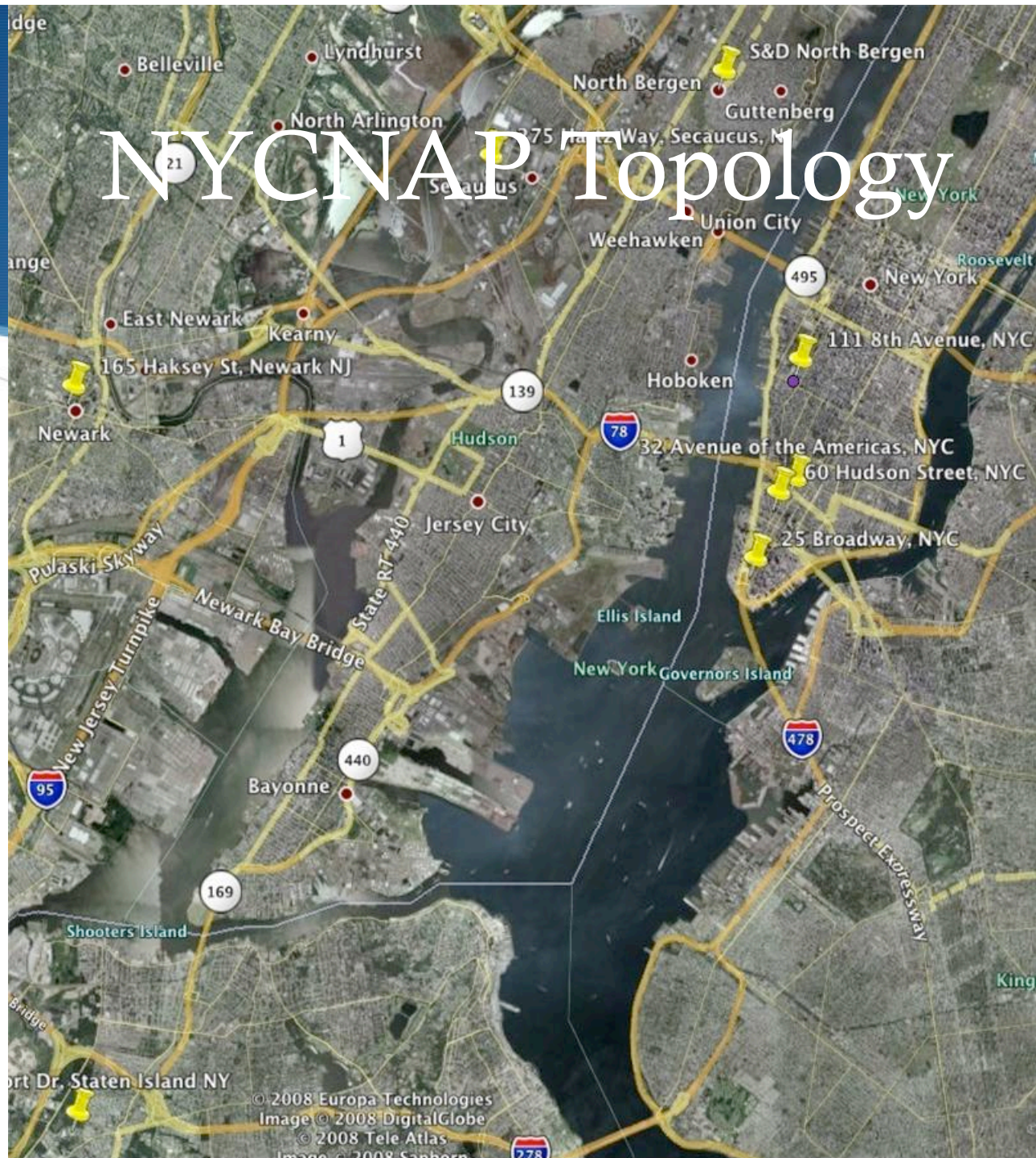
BigAPE Topology



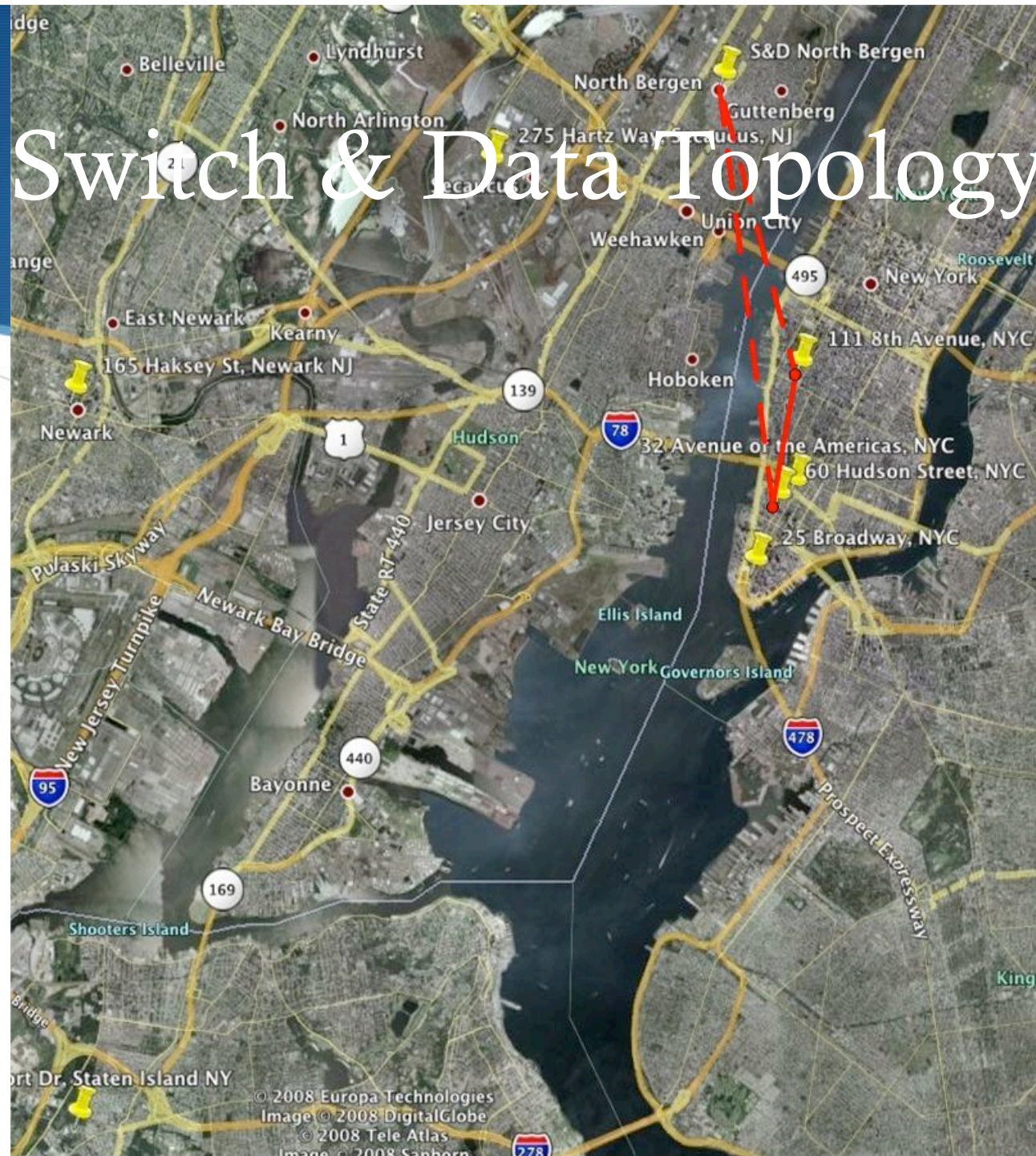
Equinix Topology



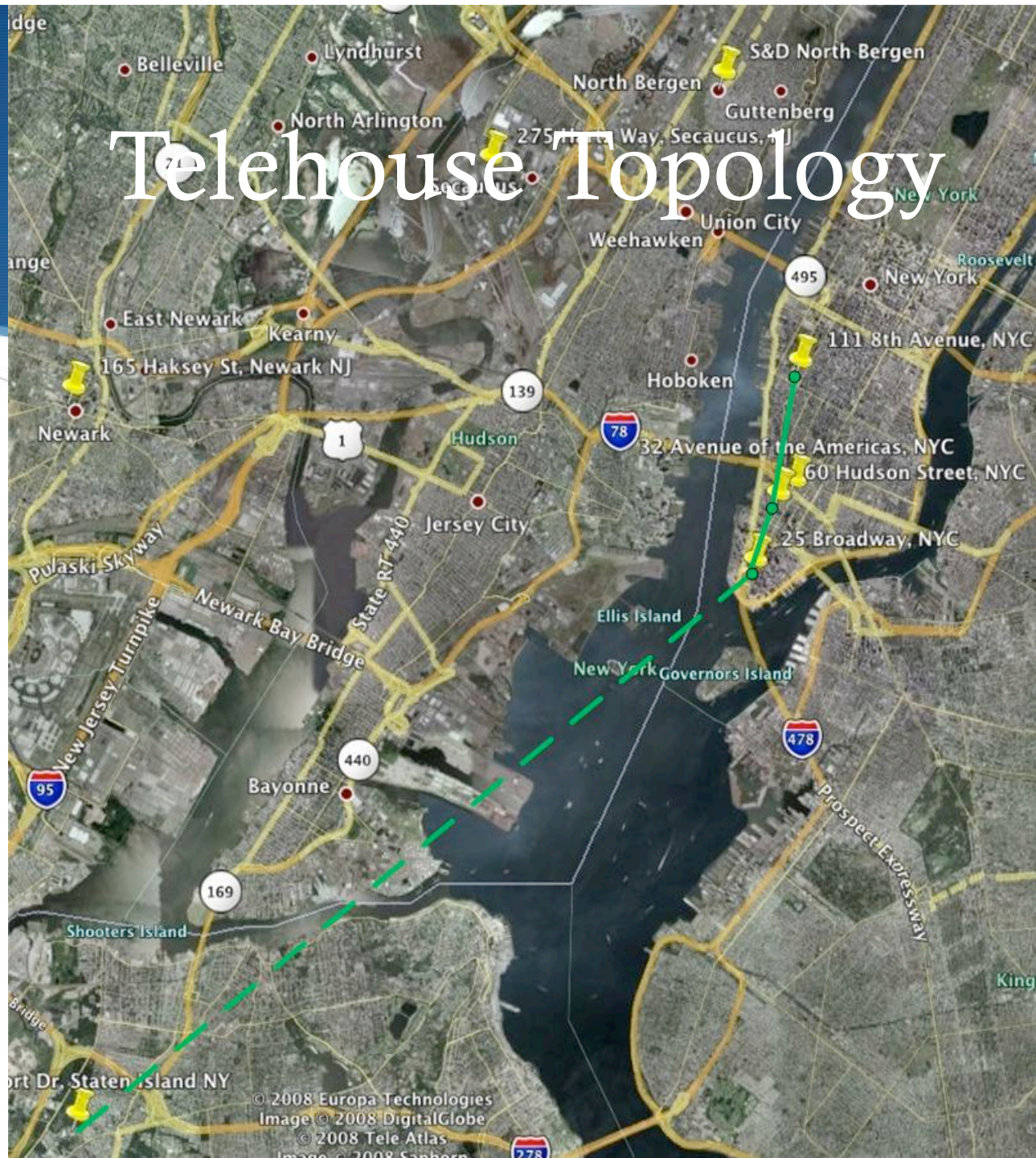
NYC NAP Topology



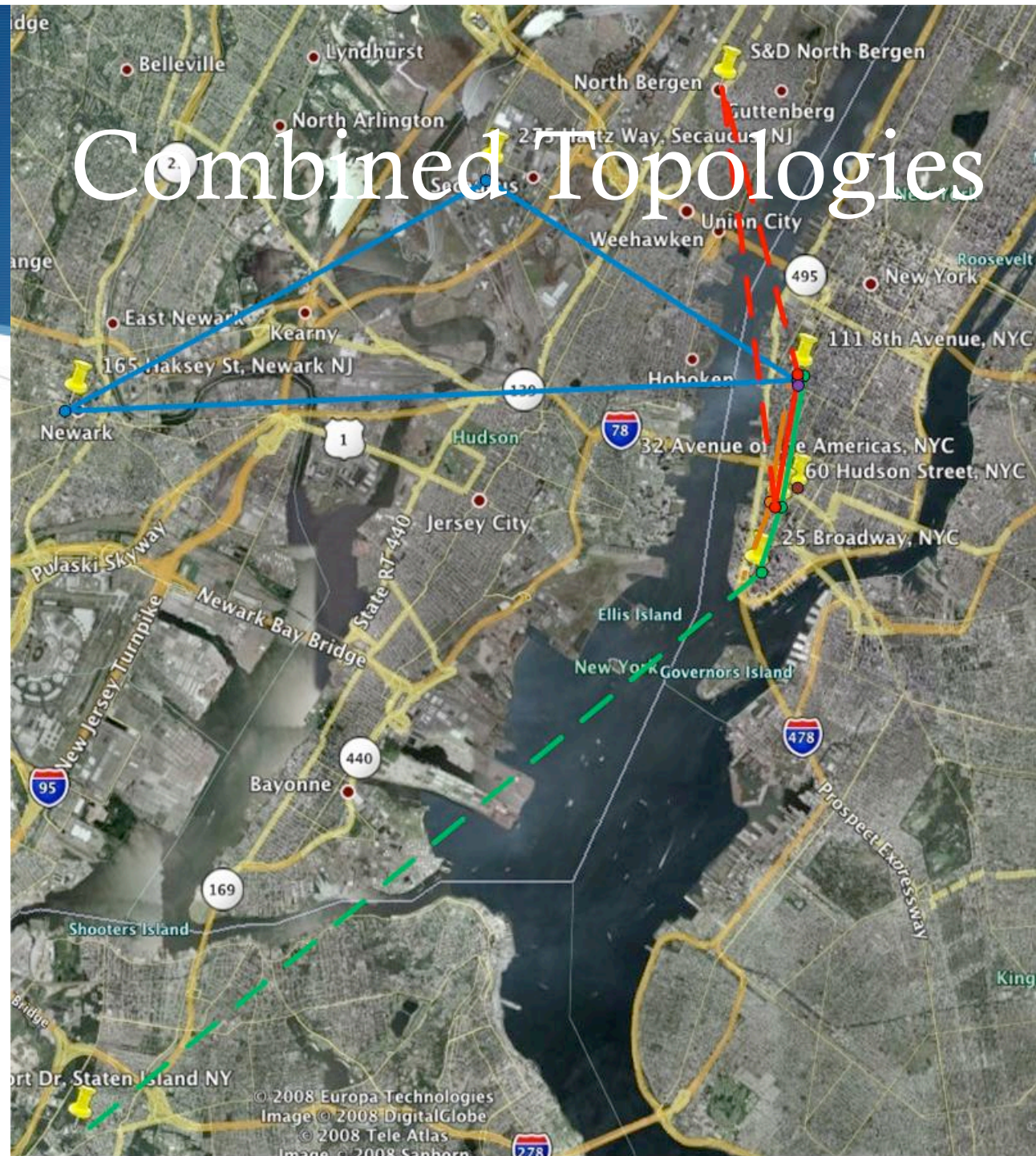
Switch & Data Topology



Telehouse Topology



Combined Topologies



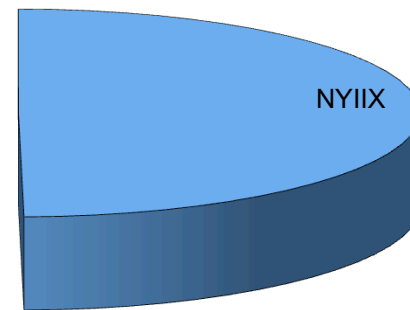
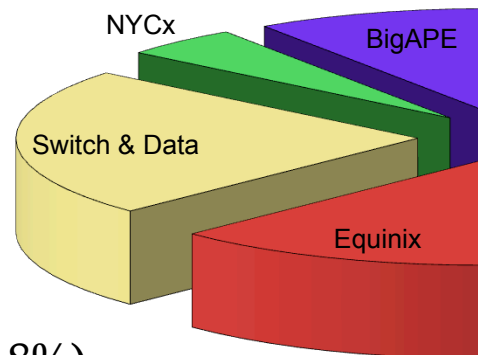
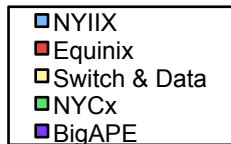
Independent View

- ◆ Disclaimers

- ◆ Not all IPs are created equal (in this view they are tho!)
 - ◆ Only IPv4 has been used. IPv6 has grown, but enough to be useful for this view.
- ◆ Customer to Provider Relationships have NOT been taken into account.
- ◆ Only information publically available has been used.
 - ◆ No Usage Information was collected or used.
- ◆ Only Exchange Information for BigAPE, Equinix, NYCx, Switch & Data and Telehouse has been used.
 - ◆ NYCNAP and Any2 data was not available.
- ◆ All of the data used was collected on or about June 1st 2008.
- ◆ Audience Participation is encouraged – Speak Up!

Number of Ports per Exchange

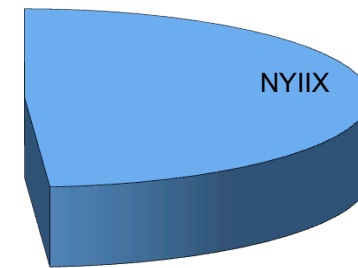
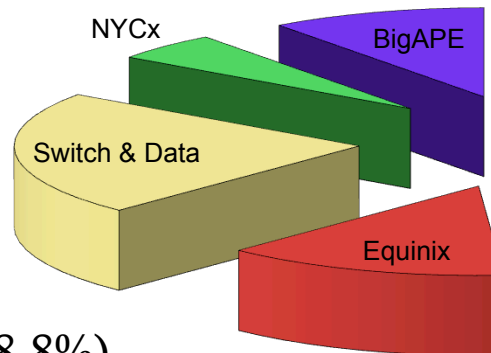
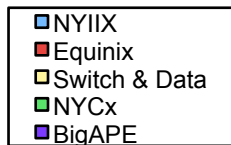
of Ports Per Exchange



NYIIX	116 (49.8%)
Switch & Data	54 (23.2%)
Equinix	30 (12.9%)
BigAPE	22 (9.4%)
NYCx	11 (4.7%)

Total Unique ASNs per Exchange

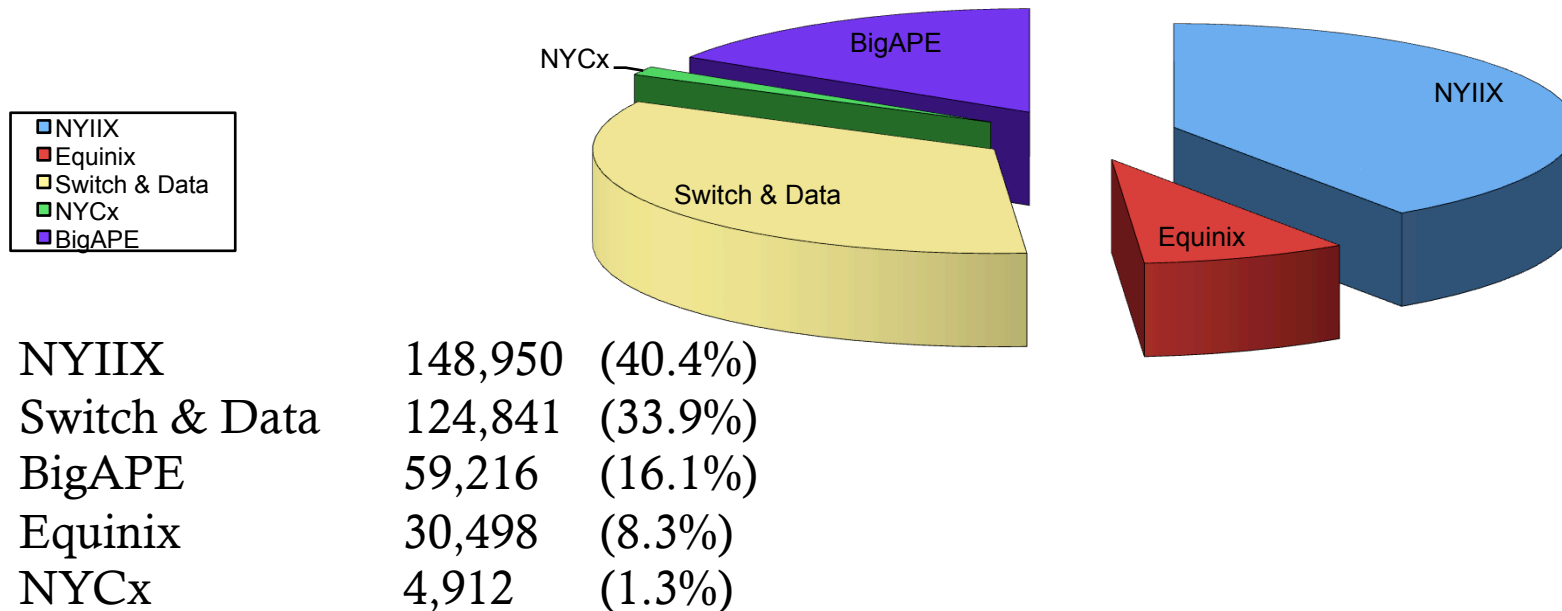
Unique ASN Per Exchange



NYIIX	106 (48.8%)
Switch & Data	49 (22.6%)
Equinix	29 (13.4%)
BigAPE	22 (10.1%)
NYCx	11 (5.1%)

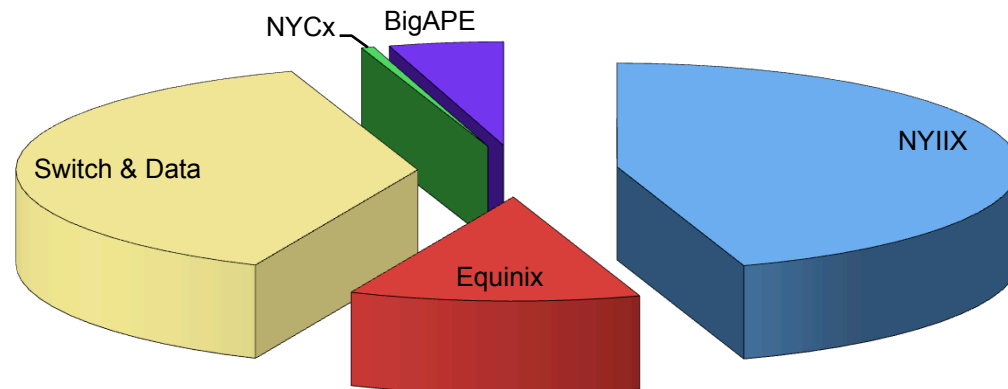
Total Routes per Exchange (without ASN duplication on each Exchange)

Total Routes Per Exchange (Unique ASN Per Exchange)



Total Routes without the top 5% of ASNs per Exchange

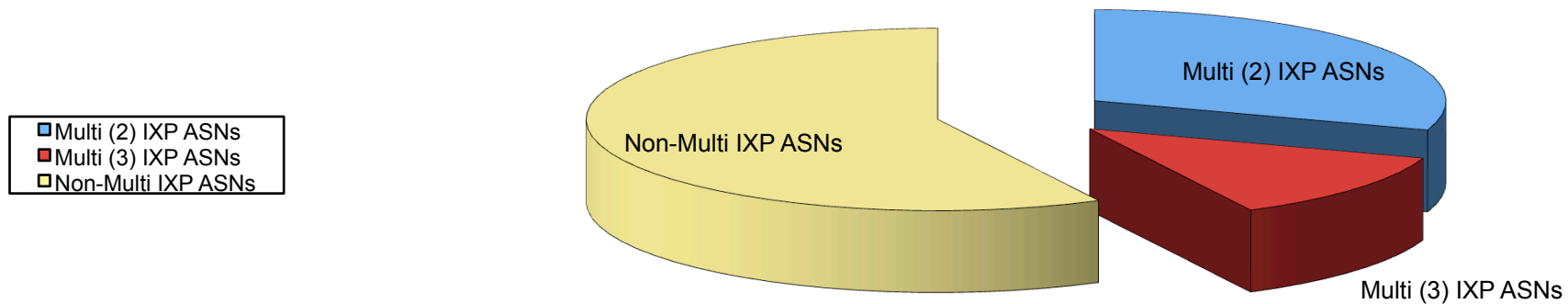
Total Routes Minus 5% of Top ASNs per Exchange



NYIIX	52,085	(45.0%)
Switch & Data	44,416	(38.3%)
Equinix	13,552	(12.0%)
BigAPE	5,335	(4.6%)
NYCx	582	(0.1%)

Unique ASNs across exchanges

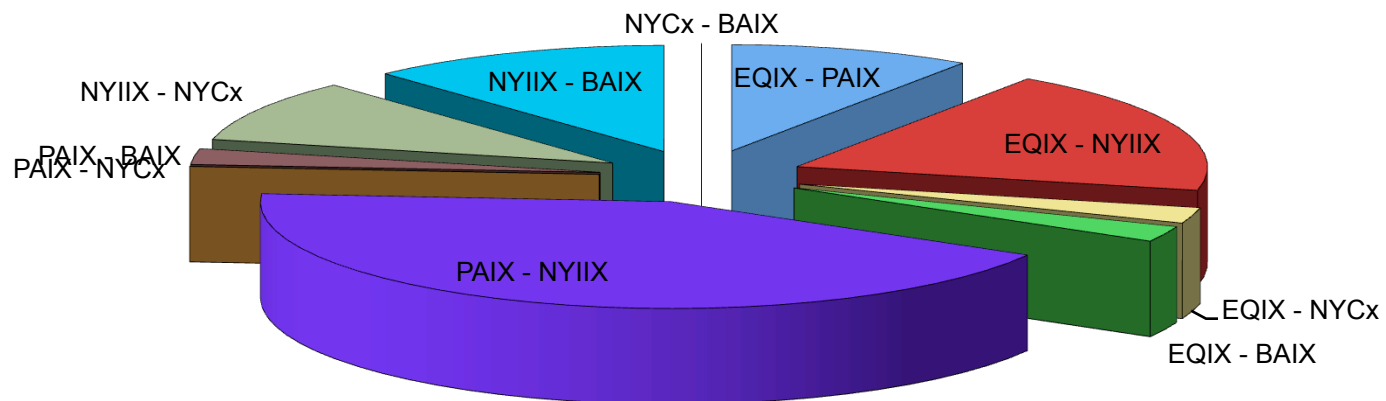
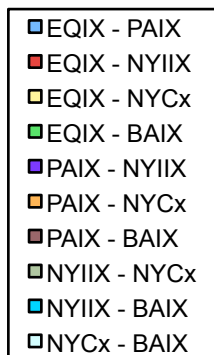
Total of 139 Unique ASNs



Total Unique ASNs	139	
Multi (2) IXP ASNs	42	(30.2%)
Multi (3) IXP ASNs	17	(12.2%)
Non-Multi IXP ASNs	80	(57.6%)

Participants peering on 2 IXPs

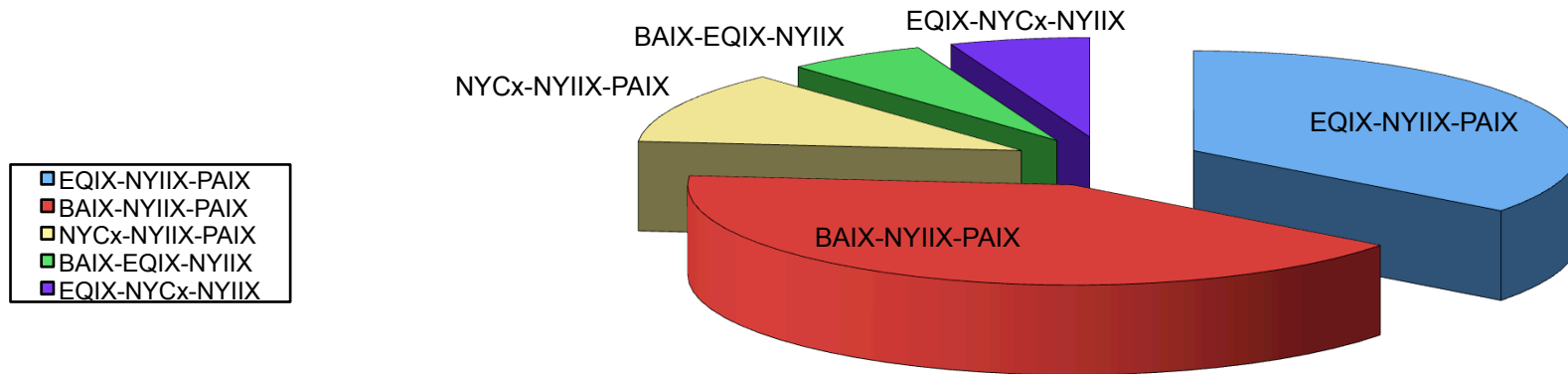
Multi (2) IXP ASNs



PAIX - NYIIX 18 (42.9%)	PAIX - BAIX 1 (2.4%)
EQIX - NYIIX 8 (19.0%)	EQIX - BAIX 1 (2.4%)
NYIIX - BAIX 5 (11.9%)	EQIX - NYCx 1 (2.4%)
EQIX - PAIX 4 (9.5%)	PAIX - NYCx 0 (0.0%)
NYIIX - NYCx 4 (9.5%)	NYCx - BAIX 0 (0.0%)

Participants peering on 3 IXPs

Multi (3) IXP ASNs



BAIX-NYIIX-PAIX 7	(41.2%)
EQIX-NYIIX-PAIX 6	(35.3%)
NYC _x -NYIIX-PAIX 2	(11.8%)
BAIX-EQIX-NYIIX 1	(5.9%)
EQIX-NYC _x -NYIIX 1	(5.9%)

Wrap Up

- ◆ The NYC peering Market is fragmented.
 - ◆ Will it continue?
- ◆ NYIIX is the overall market leader, but by how much?
 - ◆ Do they have critical mass?
- ◆ Thoughts from the Audience? Opinions sought!