## U.S. Internet Exchange Point Model

U.S. Colocation Operator operates both colo and peering fabric

(one contract)

Colocation space is more valuable with well populated IX access there (e.g. EQIX Ashburn, PAIX Palo Alto). U.S. IX/Colo Operator typically for profit.

## Strategic differential pricing:

Prices set strategically. At steady state they approximate what the market will pay.

Ashburn, PAIX
Palo Alto).

Multi-Tenant Building (e.g. InfoMart in Dallas)

Colo
Colo
Cust
IX
Switch
IX
Switch
IX
Switch
Switch
IX
Switc

U.S. IX may be spread across multiple colocation facilities interconnected with fiber, but typically this is limited to their own colo facilities within a single metro area.

Colocation Provider/IX Operator pays for IX switch(es), fiber between and within their own facilities, then resells fiber capacity to customers in their buildings for private peering.

IXes across U.S. primarily compete, cooperate only when customers push for it (e.g., GPF replaced IX mtqs) Small amounts of public peering traffic comparably (10s of Gbps publicly peered at the larger IXes)

Much more private peering.

Traffic stats typically private

When multiple U.S. colo operators are cohabitants in a multi-tenant a building, there are sometimes conflicts getting inter-colo interconnections, since both competing colo operators have to agree to their respective customers interconnecting.

Physical cross connects comparably expensive (\$250/mo) within U.S. Colocation centers.

Only colocation operators can run cross connects.

The costs of **private** peering between two IX buildings (owned by the same IX Operator) are borne by the ISP. This makes the more densely populated colo more valuable and sought after since in-building cross connects are generally less expensive than inter-building circuits.

Exceptions: The Seattle Internet Exchange (SIX) is perhaps the largest IX that more closely resembles the European model. It is housed in the Westin building in Seattle, and is run on a shoe string budget by and for its membership. It is the chief competitor with PAIX Seattle. There are a few other smallish non-commercial IXes in the U.S. and Canada