Design and Construction of Local and Regional Exchange Facilities

Version 0.2

February, 2001

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Packet Clearing House

Determining Need

Sufficient end-user base?

No existing facility to build upon?

Sufficient degree of locally-destined traffic?

Geographic Location

User population
Fiber facilities or rights-of-way
Founding participants

Density

Centralized in one room
Campus of adjacent buildings
MAN
Frame or ATM cloud

Building Management

Telco hotel
University computing or
telecommunications facility
City emergency services facility

In-Building Facilities

Pathways
Power
Cooling
Access and security

Services

Switch fabric
Crossconnects
Route-server
Remote hands
NTP
Web caching

Business Structure

Incorporated or unincorporated?

Staffed or volunteer?

Non-profit or for-profit?

Cooperative or external ownership?

Cost-recovery (predictive or actuals), ad-hoc, or market pricing?

Policies

BLP, MLPA or MMPLA?

Mandatory looking-glass?

Routing and switch-port information public or members-only?

Secrecy in the event of security problems, failures, or mistakes

Extensible switch fabric?

Thanks, and Questions?

Copies of this presentation can be found
in Keynote, PDF, QuickTime and PowerPoint formats at:

http:// www.pch.net / resources / tutorials / ix-construction

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