

Design and Construction of Local and Regional Exchange Facilities

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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 MMLPA?
- 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?

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www.pch.net/documents/tutorials/ep-construction