

CITY OF AUSTIN, TEXAS

INFORMATION TECHNOLOGY

Transforming your city with best-managed technology

GAATN and the City of Austin Telecommunication Network

austintexas.gov/information-technology



What's GAATN?

Physically, GAATN consists fiber optic cables, on poles and underground.

GAATN itself runs no communication through the fiber, nor does GAATN own equipment to do so.

GAATN members share cost of fiber



GAATN members use their own equipment to make GAATN fiber useful.



- GAATN consists of 488 miles of cable
- And touches 587 member sites

GAATN may expand (more fiber count in the cables or to new sites), with the unanimous agreement of the seven members.

The City of Austin operates a wide area network for ~240 City sites, most connected by using GAATN fiber optic cables.

We call this network the City of Austin Telecommunications Network:

COATN
pronounced “cotton”

COATN...

- Mostly rides on the 12 fiber strands the City has on GAATN
- Max bandwidth of 80 Gbps between data centers
- 10 Gbps between most sites
- CTM provides general fund departments resilient connections to Internet providers.



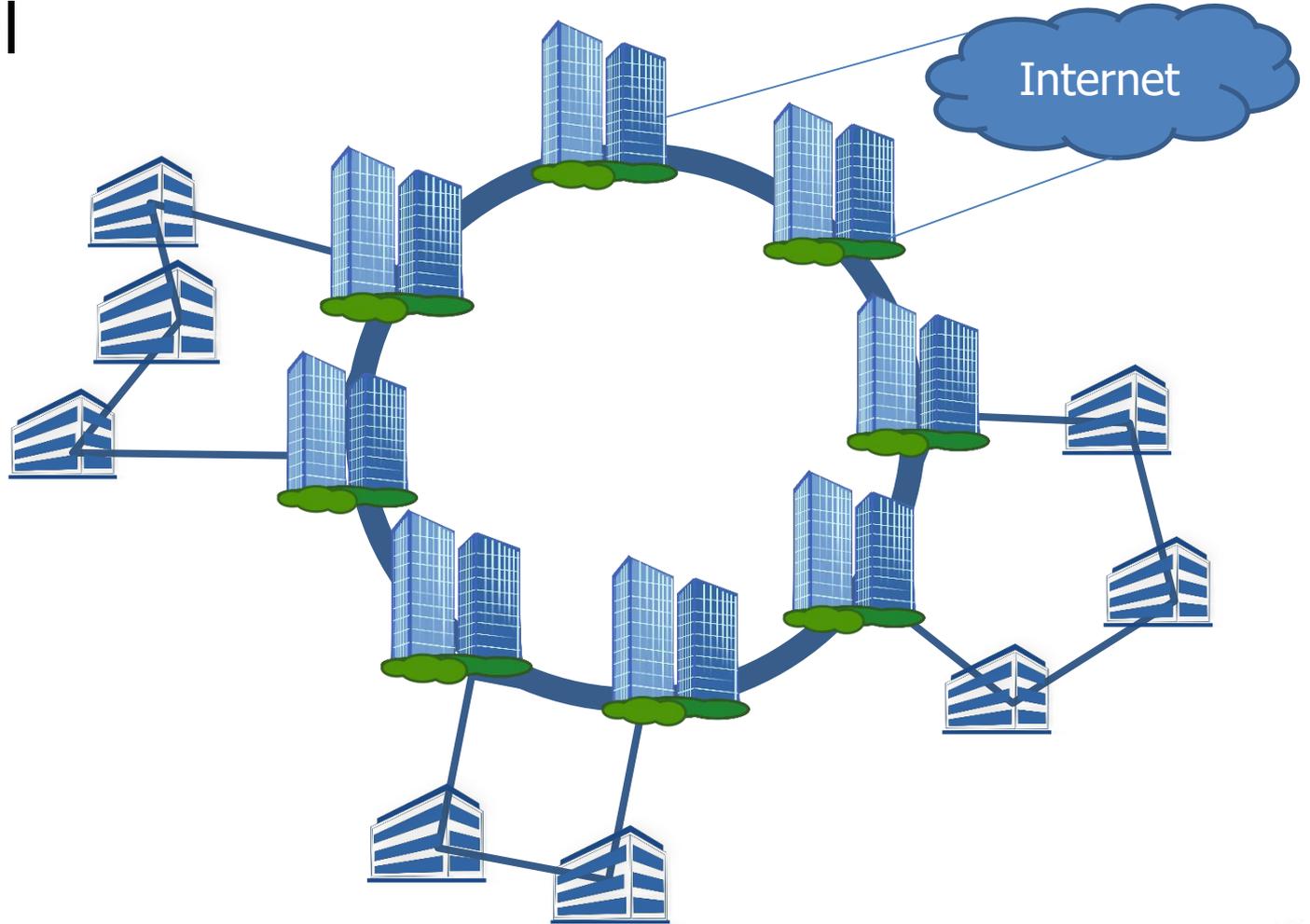
**PUBLIC
INTERNET**



**PUBLIC
INTERNET**



Conceptual View



City of Austin Internet connection

- 3 connections from two providers
 - Max available bandwidth of 2 Gbps*
- Total annual cost ~ \$158K.
- City currently uses about 75% capacity during standard office hours
- Additional capacity available at additional cost

* A "4K" video stream uses about 25Mbps; 1 Gbps supports 40 such streams. Or for HD video, 5 Gbps per stream, so 1 Gbps supports 200 such streams.

When a City site is far from GAATN cable

We connect some sites through alternative secure means, using a contracted commercial Internet provider.

Google Fiber donates service at certain designated locations for public use.

Future

- Continue to maintain our network, to deliver fast, resilient connections
- Continue to support GAATN, to sustain a City-wide government information superhighway at significant savings.
- Continue to grow the pipes connecting to the Internet
 - These will enable many, many digital activities and programs for citizens and staff of the City of Austin