

A. *Competitive Environment in Local Exchange Services: The Macro View*

1. *Indicators of Current Local Exchange Competition*

Some of the data collected and described by Mr. Dunny in his affidavit provide us with overview facts from which we can derive inferences about the openness of the local exchange market in Michigan. Table IV.1 contains data obtained from and generally discussed by Mr. Dunny. Five items are presented: unbundled loops, numbers disconnected, numbers ported, end-office integration (EOI) trunks, and reciprocal compensation minutes of use (RC-MOU). These items are selected because each is relevant to the ability of firms to enter the local exchange business in Michigan. Each of these items is a very imperfect measure of competitive entry, however, because each captures only that part of entry which requires action by Ameritech; the measures do not capture the extent of self-supply, which, as we discuss later, is substantial. However, the rate of change in the indicators provides evidence that new entrants are obtaining the network elements that they need from Ameritech to provide local exchange service, that they are providing such exchange services to end users, and that their success in entering the market is unambiguous. Taken together, these data demonstrate that entry requirements into the local exchange business has been eased and that competitive entry is occurring at a fast rate.

Unbundled Loops. Unbundled loops are the direct connection between the local network and the subscriber's premises.^{30/} Entrants can provision loops themselves, they

^{30/} We do not address unbundled switching here because Ameritech Information Industry Services (AIIS) has not had any orders for this element. As discussed in Section II, (continued...)

can lease unbundled loops from Ameritech or other suppliers of local facilities, or they can resell the full retail service. Because entrants can self-provision loops using their own physical infrastructure, the number of unbundled loops necessarily understates the extent of existing competition in local exchange services. Firms such as MFS/Worldcom and TCG generally serve business customers using almost exclusively self-provisioned loops that extend from their SONET fiber rings to a converter (to bring a DS-3 or DS-1 facility down to DS-0 level on the network side of a PBX). The growth of unbundled loops—from 918 in September 1995 to 15,162 in November 1996—demonstrates that entrants have no trouble entering the local exchange business using this particular facilities-based entry path. This 15-month experience translates into an annualized growth rate of about 1000 percent.

Numbers Disconnected and Numbers Ported. Ameritech tallies a disconnected number only in those instances where the new carrier informs Ameritech that the customer has switched providers and no longer desires services from Ameritech. If an end user terminates service to move to a competitive local exchange carrier (CLEC), the disconnected number is not counted in this tally, because Ameritech's wholesale unit would not be notified of the change and it is that unit that tallies these figures. Similarly, a ported number comes at the request of the entrant who informs Ameritech Information Industry Services (AIIS) that the entrant has taken over service provisioning to the customer (who in this case desires to keep his or her existing telephone number).

³⁰/(...continued)

this is hardly surprising given the high value added contributed by the switch and its relatively low cost.

Neither of these indicators of competitive presence accounts for sales of additional lines by CLECs to existing businesses or residences or new lines purchased by customers who have just moved into an area, so both of the indicators understate the extent of competition. Still, the growth of disconnects is evidence of the openness of the local exchange business in Michigan. Between December 1995 and November 1996, disconnects increased 205 percent while numbers ported increased 226 percent during the same period.

The rapid increase in disconnects adds some dimension to the evidence provided by unbundled loops. An entrant may request that a number be disconnected because the entrant is self-supplying both the loop and the switch so that there is no need for an unbundled loop. Similarly, the rapid increase in numbers ported adds some dimension to the evidence that competitors are obtaining the services that they want from Ameritech. Taken together, the data on disconnects and numbers ported serve to confirm the unbundled loop evidence indicating that entry into the local exchange business in Michigan is progressing rapidly.

End Office Integration Trunks and Reciprocal Compensation Minutes of Use.

EOI trunks and RC-MOU are indicators that actual local exchange traffic is being exchanged between the entrants and Ameritech. The EOI trunks reported in Table IV.1 are the voice-grade equivalent connections between the competitor's switches and Ameritech's switches. Under normal calling patterns, each EOI trunk will handle approximately 9,000 minutes of traffic per month.^{31/} An EOI trunk group is not needed to exchange CLEC-to-CLEC traffic

^{31/} For perspective, under normal conditions, each trunk supports about 15 lines. This will vary, however, depending on the intensity of usage of the lines (the more intense the line usage, the fewer lines a single trunk can support).

or to handle traffic that originates and terminates on the entrant's own network (on-net traffic), and therefore EOI trunks understate the actual volumes of traffic generated by customers of new entrants.

Similarly, the number of minutes exchanged between the entrants and Ameritech for purposes of reciprocal compensation will not include CLEC-to-CLEC traffic or on-net traffic. Especially for former CAPs such as MFS and TCG, the exclusion of on-net traffic represents a downward bias in the true extent of competitive presence in an area.

Even so, the traffic data show extraordinarily high growth rates for the number of minutes exchanged between Ameritech and the CLECs: over 1000 percent per year (September 1996 over September 1995) and 486 percent on an annualized basis (September 1996 over August 1996 (the latest month for which data are available)). EOI trunks have increased somewhat more slowly, but still have increased at about 140 percent per year (compound average growth rate) during the May 1996 through December 1996 period. That RC-MOU are increasing faster than EOI trunks indicates that CLECs are gaining efficiencies in their network throughput.^{32/}

^{32/} One item should be noted in the RC-MOU data. Traffic originating on the Ameritech network and terminating on a CLEC network is both higher and growing faster than the number of minutes originating on the CLEC networks. This is the result of entrants having signed up Internet access providers. The Internet access providers stimulate large numbers of Ameritech-to-CLEC minutes, but do not generate many outgoing minutes. Under the reciprocal compensation arrangement, the unbalanced traffic means that these CLECs are receiving substantial revenues every month from charges to Ameritech for terminating its traffic, thereby enhancing the financial viability of the CLECs.

TABLE IV.1
MACRO INDICATORS OF ACTIVE FACILITIES-BASED COMPETITION
- MICHIGAN -

	Unbundled Loops	Numbers Disconn.	Numbers Ported	EOI Trunks	Reciprocal Comp MOU		Total
					CLEC TO AIT	AIT TO CLEC	
Sep-95	918		2,699		708,734	1,799,906	2,508,640
Oct-95	1,284		3,033		1,126,812	2,758,061	3,884,873
Nov-95	1,795		4,875		1,708,056	3,580,735	5,288,791
Dec-95	2,919	7,822	5,854		2,116,208	4,591,742	6,707,950
Jan-96	3,765	8,612	6,494		2,659,765	6,541,539	9,201,304
Feb-96	4,558	9,402	7,110		3,053,452	7,767,951	10,821,403
Mar-96	5,178	9,933	7,464		2,451,393	8,743,613	11,195,006
Apr-96	5,750	10,928	8,137		2,176,844	8,980,155	11,156,999
May-96	6,898	11,652	8,545	5,524	2,814,873	10,526,075	13,340,948
Jun-96	7,708	12,273	9,063	5,908	3,103,288	17,591,560	20,694,848
Jul-96	9,000	18,056	14,634	5,956	4,165,569	21,227,180	25,392,749
Aug-96	10,539	18,813	15,057	5,956	4,854,446	25,684,130	30,538,576
Sep-96	11,774	19,572	15,571	6,538	4,998,171*	30,388,469*	35,386,640*
Oct-96	13,151	20,530	16,221	7,426			
Nov-96	15,162	23,843	19,093	9,010			
Dec-96				9,250			
% increase	419%	205%	226%	67%	136%	562%	427%
	(Dec-Nov)	(Dec-Nov)	(Dec-Nov)	(May-Dec)	(Dec-Sep)	(Dec-Sep)	(Dec-Sep)

Source: Ameritech Information Industry Services.

*Data for one carrier were unavailable for September and therefore August data for that carrier were used to present an estimate for September.

The trends that emerge from Ameritech's provisioning data indicate that the local exchange market segment in Michigan is open. Growth appears to be limited only by the managerial and operational limits of the firms themselves — and even these limits appear to allow for extraordinary increases in market participation. The high growth rates also provide evidence regarding Ameritech's implementation of interconnection and number portability.

B. Analysis of Competitors and Competition in Michigan: The Micro View

In this section we describe the current and imminent local exchange competition in Michigan. We move to a competitor-by-competitor analysis to assess which services competitors are providing, which geographical areas and customer classes they are targeting, how they are provisioning the services, and how their shareholders view their activities and plans. The purpose of this analysis is to determine the robustness of the currently active competitors and whether the openness of the local exchange business and rapid growth of competition observed in the macro data can be expected to continue.

We have identified the current and potential competitors in Michigan by compiling a list of those firms that have applied to the MPSC for certification as local exchange carriers. Table IV.2 lists the firms, along with some of our own annotations and findings. The Table is in alphabetical order by provider. The second column describes the services that the firm offers or has stated that it intends to offer. The third and fourth columns indicate whether the company is authorized to provide services to business or residential customers, according to the certification application or MPSC Approval.

TABLE IV.2
SUMMARY STATUS OF COMPETITIVE ENTRANTS
- MICHIGAN -

Service Provider	Summary Description of Services	Available to Bus	Res	Expected Offer Date	Data Source and Comments
AT&T	"Everything you can imagine." (Fac. Based local. LD, internet, data, specialized business services, wireless (PCS), video (DBS)).	Y	Y	1997-1	Press releases, trade press.
BRE	Saginaw area.	Y	N	—	—
Brooks Fiber	Local & LD, business services (data, high-speed, access, vertical etc.) Grand Rapids, Traverse City, other areas.	Y	Y	Now	Ads; Certification; AIIS data.
Building Communic.	Centrex telemanagement reseller (MDUs, business, commercial)	Y	N	Now	AIIS data; cert. application.
Climax	Exchange service, expand into Kalamazoo, Battle Creek, Y and environs. "Metro" exchange.	Y	Y	Now	Press accounts; Certification.
Comcast	Exchange and Broadband services resold and over own network in SE Michigan.	Y	Y	—	—
Continental Cablevision	Lansing, Ann Arbor, Southfield. HFC "ring-ring", ATT 5 ESS in Plymouth (1997E); SS7; internet access.	Y	Y	—	AIIS data; Certification Application.
Coast-to-Coast	Centrex telemanagement reseller (MDUs, business, commercial) mostly in Detroit area and lower Penn. internet.	Y	Y	Now	AIIS data; Certification.
Cypress Telecom	Mid-market price-competitive exchange service (Detroit Y area). Resale and F.B.	Y	Y	—	Certification Application.
LCI	Local & LD to residential and business via resale	Y	Y	Now	Certification. (Resale)
MCI/MCI Metro	Business communications services on-net. Local, LD, data, internet, CO services, wireless (Nova-resale), and DBS in 1997 or 1998.	Y	—	Now	MCI brochures; Application for Cert.
MFS/Worldcom	Local, LD, data, internet, CO svc over own networks.	Y	—	Now	Based on company brochures and proposals.
Sprint	Initially a reseller in Detroit, Grand Rapids, Lansing, other.	Y	Y	—	Certification Application.
TCG	FB switched local esp for multi-line customers. Multi-line access, analog & digital PBX, A/D DID, Centrex, payphone. Also usage services for direct dial calling, toll-free, operator assisted, sw. access for interexchange carriers.	Y	Y	Now	Application for Certification.
Tele-Phone	Detroit LATA; Resell services to business and residence Y in the Chaldean and Arab communities.	Y	Y	—	Detroit; Certification Application.
US Network	Local, LD, data, internet, CO svc by resale in Detroit Y metro, Ann Arbor, Ypsilanti, other areas. F.B. later.	Y	Y	Now	Certification Application, ads, Tariff Filing.
WinStar	Primarily transport (microwave) and wireless local loop. LD reseller.	Y	Y	Now	Press releases, analyst reports.

Sources: Data sources primarily are the companies' applications for certification before the MPSC, but other data sources include company advertisements, brochures, Ameritech IIS provisioning data, trade press, and investment analyst reports.

The fifth column lists our estimate of the start-up date for local exchange service or services that reasonably compete with local exchange service, as noted in our annotations. For example, we state that WinStar is offering service "Now," but we qualify that the service offered currently is wireless transport, an element of local exchange service. Resellers are listed along with facilities-based carriers, and we note the difference in the Table. The final column and footnote describe our data sources.

To briefly summarize Table IV.2: facilities-based local exchange service currently is being provided in Michigan by Brooks Fiber, MFS/Worldcom, TCG, and MCI Metro.^{33/} Facilities-based wireless transport services are provided by WinStar and TCG's BizTel subsidiary. Initial market entry is expected shortly from AT&T and Sprint, who are licensed to provide local exchange service in Michigan. Current resellers include LCI (long distance), Building Communications (business only), Coast-to-Coast and US Network.

It is important to realize that firms that have not applied for certification, and therefore are not listed on Table IV.2, can nevertheless provide local exchange service. Uncertified carriers include multi-family dwelling unit (MDU) service providers such as GE Capital/Rescom, MFS/Realcom, Americom Telemanagement, Frontier Telemanagement, Inc., Long Distance of Michigan, Proctor Home Warren, Inc., and Activetec LD, Inc. that provide service through Centrex resale or through their own PBXs. These service providers

^{33/} Climax is an independent telephone company licensed in Michigan as a CLEC that seeks to provide exchange service in the combined Ameritech exchanges of Battle Creek and Kalamazoo (and others). Climax may be providing competitive service through its own facilities already interconnected with Ameritech.

have an important role in the competitive entry story that is occurring in Michigan, which we describe later.

Having identified the certified and uncertified carriers, we will now review the currently active, full-service local exchange service providers in Michigan: Brooks Fiber, TCG, MFS, and MCI Metro. We will then describe the four other types of currently active service providers: (1) MDU (apartments and condos) service providers; (2) resellers; (3) wholesale service providers; and (4) private networks. In addition to our descriptions we also submit as Appendix A to this Affidavit examples of advertisements, brochures, press releases, news articles, and internet web-site pages from or about these competitors and potential competitors.

1. Currently Active Local Exchange Competitors

Table IV.3 provides an overview of Brooks, TCG, MFS, and MCI Metro. The Table shows that the companies are providing service primarily in the metro areas of Grand Rapids, Detroit, Ann Arbor, and Lansing and that they have deployed physical plant — fiber optic backbone networks, Class 5 switches, and unbundled loops requisitioned from Ameritech — to provide the services.^{34/} Each of these companies provides evidence of the openness of the local exchange business in Michigan.

^{34/} The data on Route Miles of Fiber, Switches, and Number of Buildings On-Net shown on the Table are from proprietary reports commissioned by Ameritech. White Pages Listings were obtained from Ameritech Advertising Services. Information on loops was obtained from AIIS.

a) *Brooks Fiber Communications*

The history of Brooks Fiber in Michigan illustrates how successful competitive entry can have rather humble beginnings. The competitive entry story in Michigan actually begins in 1989 with a competitive access provider named City Signal. City Signal was formed by a local entrepreneur, Ron VanderPol. The company offered special access to large businesses. The company built a fiber-optic SONET ring around the Grand Rapids metro area, and in 1993 installed a switch, a Nortel DMS-500, a Class 3/4/5 switch that combines local, tandem, and carrier switching. In so doing, City Signal became the nation's first competitive provider of local exchange service.

City Signal linked with Teledial, a long distance reseller, to provide a local/long distance package. In 1994, the link between Teledial and City Signal was formalized with a merger that formed US Signal. US Signal expanded its marketing initiatives as a "full service provider," a "company that's easy to do business with and easy to reach," and as a "partner" that helps provide business solutions and a single-source telecommunications provider.^{35/} The old City Signal teamed up with Teledial's marketing resources for outbound telemarketing and inbound sales and service.

^{35/} See advertisement supplied in Appendix A. Also, "Competitor profiles," ALDIS, December, 1995."

**TABLE IV.3
INFRASTRUCTURE INDICATORS - MICHIGAN**

	Data Sources	Brooks	MCI Metro	TCG	MFS
1	ROUTE MILES OF FIBER				
2	Detroit (a)	16	60	approx. 150	120
3	Grand Rapids (a)	300	-	-	-
4	LOOPS				
5	On-Net (b)	6000	4800	6000	24400
6	Unbundled (10/96) (c)	X	X	X	X
7	Resold Lines (d)	X	X	X	X
8	SWITCHES				
9	Number (e)	3	1	1	2
10	Type (e)	Nortel DMS-500	1 Siemens	AT&T SESS	1 AXE and 1 AT&T SESS
11	Location (e)	Gr Rapids, Lansing, Traverse City	Southfield	Southfield	Southfield, Detroit
12	NUMBER OF BUILDINGS ON NET				
13	Detroit (f)	9	20+	25+	102+
	Gr Rpd/Ann Arbor (f)	240			

(a) Based on Ameritech-sponsored research by an independent market research firm. Report entitled "CAP Network Descriptions," ALDIS, June 28, 1996.

(b) On-Net estimate for Brooks based on the 1:2 on-net-to-loop ratio described by the company in its September, 1996 press release on the Grand Rapids operations. Estimates for MCI Metro, TCG and MFS are based on the following formula: Based on the Number of On-Net Buildings x 40 floors per building x 100 handsets per floor x 10:1 handsets per line out of PBX x .6 to reflect overlap of buildings by CLECs.

(c) Unbundled loops are based on the October, 1996 ordering data provided by Ameritech.

(d) Resold lines for MFS are based on the company's telemanagement subsidiary.

(e) Number, type and location of switches obtained from an Ameritech market research report entitled "ALDIS Competitor Profiles, December, 1995."

(f) Number of buildings on-net is supplied by Ameritech based on the reports described in (e) and a separate report "CAP Network Descriptions," Ameritech, June 28, 1996.

US Signal initially focused on large business, but later moved downmarket to serve small and medium businesses. In Grand Rapids alone, the network connects over 200 buildings.^{36/} Residential service was provided mostly on an opportunistic basis such as when a residence (or MDU) was near the network.

In 1995, Teledial and the US Signal name were sold to LCI, a long distance reseller, and the local service company became City Signal once more. In May 1996, Brooks Fiber Properties merged with City Signal and the local exchange company became Brooks Fiber Communications.

Brooks itself was formed in 1993 by Robert A. Brooks, the firm's current Chairman. According to the company, Brooks' strategy is to provide competitive local exchange service in Tier 2 and 3 MSAs such as Grand Rapids. Brooks currently serves 30 metro areas from Connecticut to California, including expansions into Lansing, Ann Arbor, Traverse City, and Toledo (Ohio). The Grand Rapids area is the largest single presence of Brooks' 30 geographical service territories. In addition to its Grand Rapids switch, Brooks has installed switches in Traverse City and Lansing (which have not yet been activated). Brooks offers customers a full array of local exchange services and enhanced telecommunications capabilities including frame relay, LAN-to-LAN interconnection, high speed video conferencing, and internet access.

^{36/} Gail Lawyer, "Brooks Jumpstarts Mich. & Ohio Entry With City Signal Acquisition," *Local Competition Report*, February 5, 1996, p. 7.

The company has entered into several alliances to leverage its network. One alliance is a three-year agreement with ARC Networks, a telecommunications integrator, which will resell Brooks' local services in Grand Rapids and other areas. According to Brooks' Director of National Resale Services, "we think the reseller market can be a tremendous arena for our services."^{37/}

Brooks also has entered into alliances with MCI and AT&T. MCI Metro has designated Brooks as its preferred telecommunications provider in 17 of Brooks' markets, which means that Brooks will provide transport and access (loops) for MCI. The agreement between the two companies translates into additional cash investments by MCI in Brooks Fiber and a significant increase in MCI's usage of Brooks' networks for local access services.^{38/} Similarly, Brooks has agreed to provide transport and loops to AT&T in 22 markets.

As to the future of Brooks as a competitor in Michigan and elsewhere, the evidence is provided by the capital market's evaluation. Table IV.4 develops a statistic, the ratio of firm value to total gross telco plant, as a way of putting the capital market's evaluations into perspective. Firm value is constructed by adding total equity value to net (of cash) debt.^{39/} Dividing firm value by gross plant allows us to compare how investors value the assets of

^{37/} "Brooks Fiber Chosen to Provide ARC Networks with Local Resale Services," *PR Newswire*, Nov. 18, 1996.

^{38/} "MCI Metro Makes Additional Investment in Brooks Fiber," *PR Newswire*, July 9, 1996.

^{39/} Book value of debt was used in these calculations, but the market value could also be used instead.

firms of different sizes.^{40/} The calculations in Table IV.4 show that Brooks' valuation ratio of 5.3 means that investors are willing to pay \$5.30 for every \$1.00 that Brooks so far has invested in telecommunications plant. Investors therefore are affirming their belief in the Brooks' upside potential. Table IV.4 also shows that the capital market holds high expectations of two other facilities-based carriers in Michigan. Similar to Brooks, TCG has a market value-to-gross plant ratio of 5.4 and MFS has a ratio of 5.1.^{41/}

A map provided in Appendix A illustrates Brooks' fiber network in the Grand Rapids area. Appendix A also includes a study of Brooks performed by an independent market research firm on behalf of Ameritech assessing Brooks' capabilities. The attachments also show the print ads used by Brooks in its Grand Rapids marketing initiatives.

^{40/} The ratio is akin to Tobin's q, which is the ratio of value to replacement cost: a q ratio in excess of 1.0 indicates that profitable investment is possible.

^{41/} The Salomon Brothers data from which these numbers were obtained did not calculate a Gross Telco Plant or Value-to-Telco Plant for WinStar. MCI Metro is owned and controlled by MCI Corporation and so has no independent share price. Accordingly, the ratio for MCI Metro is not calculated, either.

TABLE IV.4
CAPITAL MARKET ANALYSIS OF ACTIVE MICHIGAN CLECS

	Unit	Brooks	TCG	MFS	Winstar	
1	No. Shares	millions	28.4	162.0	184.0	40.0
2	Share Price (11/29/96)	\$	31.4	33.1	48.3	20.8
3	Equity Capitalization	\$millions	891.1	5,366.3	8,878.0	830.0
4	Total Debt	\$millions	314.4	968.3	1,363.6	268.1
5	Net Debt	\$millions	111.4	591.6	1,014.5	213.6
6	Firm Value	\$millions	1,002.5	5,957.9	9,892.5	1,043.6
7	Gross Telco Plant	\$millions	188.0	1,097.6	1,950.6	-
8	Firm Value/Gross Plant	times	5.3	5.4	5.1	-

Source of Data for Brooks, TCG, MFS, and WinStar is:
Comfort, S., "Can You Make Money Competing in the Local Market?", Morgan Stanley, December 4, 1996, p. 5.

b) *MCI and MCI Metro*

MCI Metro, a wholly owned subsidiary of MCI, provides a case study of competitive local exchange entry by a major interexchange company. MCI Metro was established in 1994 in part to be "a full-service local telephone company,"^{42/} and also to provide access for large businesses to the MCI long distance network. As of December 1995, MCI Metro had constructed 38 operational networks in 25 cities and had installed ten Class 5 local switches. The company says that by the end of 1997 it will have 50 switches up and running.

MCI Metro began offering facilities-based local service to business customers in Detroit in June 1996. The SONET-based backbone network was estimated (in 1995) to be in excess of 60 route miles, and has its own switching capabilities. Three new rings were expected to have been completed by year-end 1996.^{43/}

MCI has announced publicly that it will provide local exchange service using a mix of self-provided infrastructure and partnering with others (such as Brooks). According to Joan Campion, MCI's regional public policy director, "MCI is committed to providing local service throughout Michigan by building its own facilities, partnering with others to build and lease, leasing network elements from existing carriers, and reselling service."^{44/}

^{42/} "MCI Details Local Plans," *Information Week*, May 2, 1994, p. 18.

^{43/} MCI as a whole has about 36,000 route miles now (and over 500,000 fiber miles).

^{44/} "MCI Challenges Ameritech to Open Local Telephone Markets; Asks Michigan Public Service Commission to Arbitrate Interconnection Agreement," *PR Newswire*, Aug. 30, 1996.

“Michigan is a critical state in MCI’s national efforts to offer local service. MCI has made a considerable commitment to Michigan . . . and wants to expand that commitment even further.”^{45/}

In addition, MCI announced that it will spend \$1 billion to expand both existing service areas, such as Detroit, and to add 13 new markets to its local network. The expansion would increase total coverage of the MCI Metro network to 45% of the nation’s business customers.^{46/} The company also said that it would invest \$400 million annually on a going-forward basis in local exchange services.^{47/} As impressive as the \$400 million per year is on its own, it is even more important than it looks: the annual \$400 million can be targeted to “success” investing — incremental money spent to get new customers onto the network.

However, MCI’s plans for future investment in self-provided network infrastructure are uncertain due to the favorable economics of leasing unbundled elements or reselling Ameritech-provided services. In the wake of the MCI/British Telecom (BT) merger announcement, both BT and MCI officials signaled a desire to slow investment in local service infrastructure and instead use the assets of others (resale or unbundled network

^{45/} Id.

^{46/} “MCI Says it Will Provide Switched Local Service in 13 More Cities,” *Washington Telecom Newswire*, August 27, 1996.

^{47/} “MCI Deal Reverberates,” *New York Times* November 4, 1996.

elements, or agreements with third parties such as TCG) to provide local exchange services.^{48/} The disinclination to invest in self-provided plant also reflects MCI's conservative approach on capital investment that the company exhibited in cellular telephones, where it resells services and thereby avoids expenditures for spectrum. Instead, MCI has indicated that it may use its capital to improve its customer care and marketing activities.

As for its service offerings, MCI Metro's initial local service products have been focused on businesses and include basic local exchange service, business lines (including a "feature rich" line provisioned like Centrex), private branch exchange (PBX) trunks and access services to businesses.^{49/} High-speed data services now are available on the MCI Metro SONET ring in Detroit. MCI's internet web pages (provided in Appendix A) list many of MCI's local exchange business services.

MCI also is offering one-stop shopping to its business customers with the introduction of "networkMCI One," an integrated package of service including local, long distance, and international services plus a wide array of additional services such as cellular, internet

^{48/} BT's President of International Operations, Alfred Mockett, said "There is a lot we can bring to the table in terms of helping accelerate MCI into the local loop [such as] how to leverage other people's infrastructure that has been resold [and] how to look at the approach of business versus residential." "London on the Line: Once a Stodgy Monopoly," *Washington Post*, November 10, 1996.

^{49/} MCI 1995 Annual Report, pp. 9-10, and MCI marketing brochures.

access, paging, data services, and conferencing.^{50/} Detroit is one of 13 markets where network MCI One is available today. According to MCI's Senior Vice President of Business Marketing, Brian Brewer, "No other company offers so many communications services and consolidates them on one single bill. Many telecom companies are just beginning to catch on — frantically merging and spending billions of dollars in acquisitions to get where MCI is today."^{51/}

In Michigan, MCI has periodically launched newspaper ad campaigns to position itself as a one-stop provider to businesses.^{52/} For example, MCI has promoted itself as a one-stop provider through its slogan, "MCI Goes Local: Suddenly It Is A Buyer's Market."^{53/} MCI's head of advertising, Gretchen Gehrett, says that the new ads are meant to present the benefits MCI provides through its multiple services, "all from one company, all on one bill."^{54/} A key competitive strength of MCI and a key to MCI's integrated service offering capabilities may lie in the company's back-office infrastructure. Indeed, MCI recently

^{50/} An August 14, 1996 MCI ad in the Detroit Free Press introduces MCI local service for business by saying that it allows business customers to "get an array of communication products and services — local, long distance, international, data, conferencing, cellular, paging, and Internet — all on one bill."

^{51/} "The Integrated SOHO: MCI Delivers Industry's First Fully Integrated Communications Package for Business. Will offer Long Distance, Local, Internet, Wireless and More — All On One Bill," *EDGE Publishing*, Sept. 16, 1996.

^{52/} Ad campaign: "MCI Goes Local: Suddenly Its A Buyer's Market."

^{53/} "MCI Strikes with Local Phone Service Ad Campaign," *Telecom A.M.*, August 9, 1996.

^{54/} "MCI Launches Major Ad Campaign," *Telecommunications Alert*, August 15, 1996.

announced the development of a new billing system called "Horizon," designed to reconfigure customer packages on nearly a real-time basis.^{55/} In essence, the company appears to have identified as its strategic assets its name and its billing system. MCI appears to rely on its brand name and marketing capabilities to sell self-provisioned, leased, and resale services, and upon its billing system to allow it to tailor products quickly to changing customer needs.

MCI's plans to move beyond business service and extend local exchange services to residential customers appear to be unsettled. In the past, the company said that it had imminent plans to offer service to residential customers in Michigan. For example, the company has engaged in preselling in its Illinois service area to test the waters — though we have not seen evidence of such preselling in Michigan.^{56/} Speaking specifically about the residential market in Michigan, MCI representative Joan Campion said, "We are optimistic that with the clear direction from the FCC and the favorable competition rules and decisions adopted by the Michigan Public Service Commission during the last several months, the

^{55/} John Rendleman, "Customized Billing Is On MCI Horizon," *Communications Week*, August 12, 1996, p. 1.

^{56/} In its Chicago preselling, MCI has sent out letters soliciting residential subscribers. Calls from interested recipients have resulted in their being asked screening questions (about telephone usage and bills) by the MCI representative without any subsequent follow up. We have not confirmed whether such activity has occurred in Michigan.

arbitration process will accelerate local market competition and bring MCI local phone service to Michigan [consumers] shortly.”^{57/}

In addition, some of MCI’s recent strategic acquisitions and product offerings are obviously geared toward top-tier residential consumers. MCI’s acquisition of Nationwide Cellular, the nation’s largest cellular reseller,^{58/} enables it to provide packages of long distance and cellular services to residential and business customers alike.^{59/} MCI also added PCS services to its potential service offerings through an agreement with Nextwave Telecom, Inc., the largest bidder in the recent C-Block PCS auctions. Through the agreement, MCI is committed to purchasing 10 billion PCS minutes, which it will market in combination with other services under the name “MCI One.”^{60/}

On the other hand, MCI’s plans for residential service are expected to be very focused and targeted. During one of the BT/MCI merger conferences, BT’s Alfred Mockett said that BT’s plans do not include penetrating below the “top 30 percent” of US residential customers

^{57/} “MCI Challenges Ameritech to Open Local Exchange Market; Asks Michigan Public Service Commission to Arbitrate Interconnection Agreement,” *PR Newswire*, Aug. 30, 1996.

^{58/} “MCI Gains Wireless Access to 75 Percent of U.S. Market,” *The Reuters Business Report*, August 2, 1995. The five cellular partners are: GTE Mobilnet, BellSouth, AT&T’s McCaw, Frontier Corp. and NewPar (a joint venture between AirTouch and Cellular Communications).

^{59/} “MCI Gains Wireless Access to 75 Percent of U.S. Market,” *The Reuters Business Report*, August 2, 1995.

^{60/} Lawrence M. Fisher, “MCI Joins Nextwave in Wireless Communications Venture,” *New York Times*, August 27, 1996, p. C4.

at all.^{61/} Moreover, after winning a federal auction for a satellite slot to provide television service through a joint venture with News Corp. (its DBS partner),^{62/} MCI restructured its relationship in a way that drops residential traffic.^{63/}

We conclude that MCI's move into residential service is likely to be opportunistic, which is to say that the company will focus on businesses and will try to pick up very high usage residential customers that are on-net or that it can reach fairly easily using unbundled network elements or infrastructure provided by other carriers such as TCG and Brooks.

As for staying power, MCI clearly has the financial resources as well as technical and marketing know-how to compete effectively. At present the merged entity is the world's third-largest capitalized telecom company after NTT and AT&T. BT controls the UK market, and the firm can use its dominant position in the UK to fund expansion into the U.S.^{64/} The merger unlocks any scale economies (e.g., equipment buying power) that

^{61/} "London on the Line: Once a Stodgy Monopoly," *Washington Post*, November 10, 1996.

^{62/} "MCI, News Corp. Announce Joint Venture for DBS Service," *Washington Telecom Newswire*, January 25, 1996.

^{63/} "BT/MCI Merger Would Again Shake Telecom Landscape: Fiber Seen as Beneficiary as MCI Lessens Satellite Use," *Fiber Optics News*, November 11, 1996.

^{64/} British Telecom and MCI officials called the UK the "most open market in the world," (*Wall Street Journal*, Nov. 4, 1996). But the same WSJ article said that BT controls 90 percent of country's domestic traffic, most international calling, and 40 percent of the wireless industry in a market called "invulnerable." Moreover, there are no legal and regulatory requirements comparable to those in the 1996 US Telecommunications Act to facilitate local competition. In addition, BT has benefitted from an international calling system that permits foreign monopolists and dominant carriers to extract subsidies from US consumers making international calls, which provides a cash source to BT/MCI.

might exist, providing MCI with a head-start should the galactic-sized carrier thesis play out. But the main short-term benefit of the merger is the cash it provides MCI for its local service expansion in Detroit — though probably in the form of more marketing capabilities rather than network infrastructure investment — and in other areas around the U.S. In announcing the merger, MCI Chairman Bert C. Roberts, Jr. said that BT's money will be used "in the sense of adding sales [capabilities] more than adding capital [for local facilities]."^{65/}

c) TCG

Like Brooks Fiber, TCG is an example of a CAP-turned-CLEC. TCG built its business as an alternative telephone company (and access provider) to large businesses in the financial services, media, and health care industries. Spurred by the Telecommunications Act, TCG in November 1996 announced its intent to move downmarket to provide telecommunications services to medium and small businesses. TCG can leverage its nationwide network of 6,255 route miles of fiber by leasing unbundled loops from incumbent telephone companies. Further, TCG's acquisition of BizTel (a 38 Ghz wireless transport provider) provides it with a delivery method to provide service to off-net customers or customers in lower teledensity areas. BizTel covers 175 million pops in over 156 cities (and 20 more cities pending FCC approval). As for current facilities in Michigan, TCG has an AT&T 5ESS switch in downtown Southfield^{66/} and a 150 route-mile fiber optic network in

^{65/} "London on the Line: Once a Stodgy Monopoly," *Washington Post*, November 10, 1996.

^{66/} See Ameritech responses to Attachment A of the MPSC's Case No. U-11104, For the Matter, On Its Own Motion to Consider Ameritech Michigan's Compliance with the
(continued...)

Detroit and its surrounding suburbs.^{67/} A map of TCG's SONET network is provided in Appendix A.

TCG's business strategy has several layers.^{68/} First, serving large businesses is the foundation of its business case, and is the motivation for building network infrastructure. Second, the TCG network, although built for large businesses, also has the capacity to serve medium and small businesses. As a result of the unbundling provisions of the Act, this capacity can be used to provide a revenue layer on top of the large-business foundation.^{69/} A third layer in the strategy is serving as a wholesale carrier to other carriers (e.g., providing transport and loops to MCI and AT&T), which further allows TCG to leverage its basic network. Indeed, in August of this year, TCG signed an agreement with AT&T to provide local network access in nine markets, including the greater metropolitan area of Detroit. The affiliation with AT&T leverages TCG's capabilities into the residential market using AT&T's brand name and marketing. A fourth way that TCG can leverage its existing network infrastructure is by entering interLATA long distance via resale (and via its self-provided facilities on the east coast as a consequence of its acquisition of Eastern Telelogic).

^{66/}(...continued)

Competitive Checklist in Section 271 of the Telecommunications Act of 1996, Table 6.a.1 Description of CLEC Network Architectures.

^{67/} Ameritech, "CAP Network Descriptions," Ameritech-sponsored study, June 28, 1996.

^{68/} See Conrad, S.P., "Teleport Communications Group, Inc.," Deutsche Morgan Grenfell, November 4, 1996; Weller, T.N., "Teleport Communications Group, Inc.," October 28, 1996; Bath, B., "TCG," Lehman Brothers, December 3, 1996.

^{69/} Appendix A presents examples of TCG in competition with Ameritech for small and medium-sized business accounts.

An additional layer of revenues may be on the horizon: TCG is actively working with cable companies to provide local exchange services over cable networks.

Analyst reviews of TCG's management are positive (the "team functions like a John Wooden UCLA basketball team")^{70/}. Like MCI Metro, TCG is moving into a phase of "success building" wherein capital dollars are used to capture new customers rather than build the basic infrastructure. And, as shown in Table IV.4, investors perceive that each dollar's worth of TCG's investment in physical telecommunications infrastructure has a value of over \$5.00.

d) *MFS/Worldcom*

The merger between MFS and Worldcom created a \$5.4 billion, fully integrated local and long distance telephone company. The local part of the combined entity (MFS) has networks in more than 40 areas throughout the country, including Detroit.^{71/} In the last five years, MFS's route-miles have increased by a factor of 25, circuits in service have increased by a factor of 17, and monthly recurring revenue has increased by a factor of 48.^{72/}

Like TCG and Brooks Fiber, MFS has migrated from CAP status to a full-service facilities-based local exchange company. In Michigan, MFS uses AT&T 5ESS and Ericsson

^{70/} Weller, T.N., *et al*, "TCG," *Donaldson, Lufkin & Jenrette*, October 28, 1996, p.7.

^{71/} A map of MFS's fiber backbone is provided in Appendix A.

^{72/} MFS 1995 Annual Report, pp. 4-5.