

Table 2

**Management Employees Required for Out-of-Region Entry  
Relative to Current SBC/Ameritech Management Force**

	SBC/Ameritech	SBC Only	Ameritech Only
Recent Management Employees - Telco	33,968	22,662	11,306
Out-of-Region Markets Needed for Top 50 Coverage	30	37	43
Average Managers Required Per Out-of-Region Area	95	95	95
Required Out-of-Region Managers	2,850	3,515	4,085
Required Out-of-Region Managers as a Percentage of Recent Management Employees	8%	16%	36%

Source: SBC

stock of SBC and Ameritech managerial employees provides a rough measure of the managerial requirements created by the national/local plan. SBC estimates that deployment of facilities and services in an average out-of-region area will require 270 employees, including 95 managerial employees. Managerial employees are defined to include those involved in engineering, sales and marketing, administration, and customer service. Deployment of facilities in 30 areas would require roughly 2,850 managers. SBC and Ameritech together employ roughly 34,000 managers. Thus, the out-of-region venture would require the equivalent of only about 8 percent of the combined managerial work force of SBC and Ameritech.

34. In contrast, if SBC were to attempt to undertake the out-of-region project in the absence of the Ameritech transaction, it would need to deploy facilities in 37 areas and would require roughly 3,500 managers. This total reflects 16 percent of SBC's current managerial workforce. If Ameritech were to attempt such a strategy alone, it would require roughly 4,100 managers, the equivalent of 36 percent of its current managerial workforce.

35. While these figures are only illustrative because not all managers would be drawn from current SBC and Ameritech employees, they reveal that the merger significantly limits the scope of the management effort required for the 30-region plan relative to the combined firms' current activities. This, in turn, facilitates the rapid deployment of facilities and services.

**V. THERE ARE MANY POTENTIAL ENTRANTS INTO THE PROVISION OF LOCAL EXCHANGE SERVICE ADOPTING A VARIETY OF STRATEGIES**

36. SBC's "national/local" strategy, encompassing the Ameritech merger and 30-city plan, is only one of several recent responses to the changing industry conditions described above. Each of these approaches, including SBC's, involve significant risks and it is unclear which firms and strategies ultimately will succeed. SBC's strategy appears to be distinguished as the only one premised on "following" current customers to new locations and is one of few attempting to provide a "near-national" footprint. Examples of various recent entrants and strategies (in alphabetical order) include:

- Allegiance Telecom: Allegiance plans to offer local exchange services in 24 areas throughout the U.S.<sup>27</sup> It plans to offer local and long distance services, including 800/888 and calling card service.<sup>28</sup> It intends to offer services to "business, government and other institutional users in major metropolitan areas across the United States."<sup>29</sup> Allegiance is pursuing a "smart build" strategy in which it will "deploy digital switching platforms with local and long distance capability and initially lease fiber trunking capacity from the ILECs and other CLECs."<sup>30</sup> The CEO of Allegiance is the former President of MFS.
- AT&T/TCG/TCI: At year end 1997, Teleport Communications Group (TCG) operated local networks in 65 MSAs, including 19 of the 20 largest metropolitan areas.<sup>31</sup> AT&T announced its intention to acquire Teleport in January 1998. TCG provides "basic local exchange telephone services, enhanced switched services, dedicated services, high speed switched data services, Internet service, disaster avoidance

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27. [http://www.allegiancetele.com/html/body\\_aboutallegiancemap.html](http://www.allegiancetele.com/html/body_aboutallegiancemap.html)

28. [http://www.allegiancetele.com/html/body\\_products\\_and\\_services.html](http://www.allegiancetele.com/html/body_products_and_services.html)

29. Allegiance Telecom Inc. Prospectus, 7/2/98, p. 5.

30. Allegiance Telecom Inc. Prospectus, 7/2/98, p. 5.

31. Teleport Communications Group Inc. 10-K, 12/31/97, p. 4.

services and video channel transmission services.”<sup>32</sup> TCG describes its customers as “principally telecommunications-intensive businesses, healthcare and educational institutions, governmental agencies, long distance carriers and resellers, Internet service providers, disaster recovery service providers, wireless communications companies and financial service companies”.<sup>33</sup> AT&T also announced its intention to acquire TCI in June 1998. This transaction has been viewed as providing AT&T with a means to enter into the provision of local service through TCI’s cable facilities.<sup>34</sup> TCI now offers cable television service to 13.9 million households<sup>35</sup> and passes more than 33 million households.<sup>36</sup>

- Covad Communications: Covad “is a packet-based Competitive Local Exchange Carrier which provides high-speed data communications services using Digital Subscriber Line technology.”<sup>37</sup> Covad “depends on leased copper lines and its own DSL central-office and customer premise equipment to reach its customers.”<sup>38</sup> The firm’s target customers are large businesses, government entities, educational institutions, and ISPs. Covad currently offers DSL service in the San Francisco Bay Area, and has “plans to launch its services in other regions, initially including Boston, Los Angeles, New York, Seattle and Washington DC.”<sup>39</sup> Covad’s senior executives were formerly with Intel.
- Cox Communications: Cox Communications is one of the nation’s largest cable television systems. Cox states that its “strategy ... is to capitalize on the capabilities of its advanced broadband platform and the strength of its current cable television business to provide its residential and commercial customers with an integrated package of existing multichannel video and new services, including digital video, high-speed

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32. Teleport Communications Group Inc. 10-K, 12/31/97, p. 5.

33. Teleport Communications Group Inc. 10-K, 12/31/97, p. 4.

34. <http://www.att.com/press/0698/980624.cha.html>

35. TCI Communications Inc. 10-K, 12/31/97, p. 7.

36. <http://www.att.com/press/0698/980624.cha.html>

37. Covad Communications Group Inc. Prospectus, 4/27/98, p. 1.

38. <http://www.clec.com/latest/data/clec/datastory1.cfm>

39. Covad Communications Group Inc. Prospectus, 4/27/98, p. 1.

Internet access and local and long distance telephone services."<sup>40</sup> In 1997, "Cox Digital Telephone" was "introduced to residential customers in Orange County, California and Omaha, Nebraska. During 1998 Cox will launch Cox Digital Telephone in additional markets."<sup>41</sup> Cox additionally offers conventional fiber optic networks to businesses in four cities.

- e.spire: e.spire (formerly American Communication Services) has local networks in service in 32 areas, predominantly in southern states.<sup>42</sup> e.spire offers dedicated access services, switched voice services (both local and long distance), as well as Internet and data services.<sup>43</sup> It "intends to continue to target businesses in the southern half of the United States, ... and strives to be the first to market integrated communications services in each of its markets."<sup>44</sup> The firm targets large businesses and national accounts, and its carrier sales group targets dedicated services to long distance carriers and ISPs.<sup>45</sup>
- Electric Lightwave: Electric Lightwave provides services in five western MSAs.<sup>46</sup> The firm also constructed long-haul fiber optic networks connecting their service areas. Electric Lightwave offers dedicated services (special access and private lines), local dial tone, long distance and enhanced services, such as frame relay and video conferencing.<sup>47</sup> Electric Lightwave" offers services to retail customers, primarily large- and medium-sized communications-intensive businesses, and wholesale customers."<sup>48</sup> Citizens Utility Company owns 83 percent of Electric Lightwave.
- Focal Communications: Focal "is a rapidly growing competitive local exchange carrier which is focused on providing local switched telecommunications services to large corporations, Internet service providers

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40. Cox Communications Inc. 10-K, 12/31/97, p. 3.

41. Cox Communications Inc. 10-K, 12/31/97, p. 8.

42. <http://www2.empire.net/networks/netmap.cfm>

43. American Communications Services Inc. 10-K, 12/31/97, p. 8-10.

44. American Communications Services Inc. 10-K, 12/31/97, p. 7.

45. American Communications Services Inc. 10-K, 12/31/97, p. 7

46. Electric Lightwave Inc. 10-K, 12/31/97, p. 1.

47. Electric Lightwave Inc. 10-K, 12/31/97, p. 1.

48. Electric Lightwave Inc. 10-K, 12/31/97, p. 1.

and value-added resellers in Tier I Markets."<sup>49</sup> Focal currently offers services in Chicago and New York and intends to expand into eight additional large metropolitan markets by the end of 1999.<sup>50</sup> Focal is a "switch-based" CLEC, having "chosen to pursue a network design approach which involves purchasing and maintaining its own switches while leasing fiber optic transmission facilities on an incremental basis as demand dictates."<sup>51</sup> Focal does not offer a bundle of telecommunications services, instead offering a "focused set of value-added local switched services to its customers, which management believes differentiates the Company from a majority of competitors who are seeking to provide 'one-stop' telecommunications services."<sup>52</sup> Former executives of MFS head Focal's management team.

- GST Telecommunications: GST Telecommunications operates in 11 western metropolitan areas.<sup>53</sup> GST also operates long haul fiber optic facilities in three western states.<sup>54</sup> GST offers switched and dedicated local service, long distance, Internet services, and frame relay services.<sup>55</sup> GST's 10-K states that the company "focuses on small to medium sized businesses that have significant telecommunications requirements."<sup>56</sup> Additionally GST "offers shared tenant services to large apartment and residential communities in several western states that bundle local, long distance, Internet access, cable television and home alarm services."<sup>57</sup> The 10-K further notes that the company's "network strategy is to ... assemble, through a combination of owned and leased facilities and joint ventures, an integrated regional network for the on-net provision of CLEC services ..."<sup>58</sup>

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49. Focal Communications Corp. S-4, 4/3/98, p. 1.

50. Focal Communications Corp. S-4, 4/3/98, p. 1.

51. Focal Communications Corp. S-4, 4/3/98, p. 1.

52. Focal Communications Corp. S-4, 4/3/98, p. 2.

53. <http://www.gstcorp.com/location.html>

54. GST Telecommunications Inc. 10-K, 12/31/97, p. 3.

55. GST Telecommunications Inc. 10-K, 12/31/97, p. 3-5.

56. GST Telecommunications Inc. 10-K, 12/31/97, p. 3.

57. GST Telecommunications Inc. 10-K, 12/31/97, p. 5.

58. GST Telecommunications Inc. 10-K, 12/31/97, p. 5.

- Hyperion: Hyperion offers, or has plans to offer, local dial tone in 21 areas, principally in northeastern and south-central states. Hyperion operates in smaller metropolitan areas, including, for example, Albany NY, Louisville KY, and Little Rock AR. In many of these markets Hyperion has established partnerships with other firms to construct and operate the network.<sup>59</sup> Hyperion offers dedicated access, switched local service, long-distance and enhanced data services including frame relay, Internet access and video conferencing.<sup>60</sup> Hyperion states that it "is a leading provider of integrated local telecommunications services to small, medium and large businesses, government and educational end users and resellers, including IXCs, in its markets."<sup>61</sup> Adelphia Communications Corporation, the nation's seventh largest cable company owns 88% of Hyperion.
- ICG Communications: ICG operates in four regional "clusters": California (Sacramento, San Diego, and portions of the Los Angeles and San Francisco areas); Colorado (Denver, Colorado Springs and Boulder); Ohio (Akron, Cleveland, Columbus and Dayton) and the Southeast (Birmingham, Charlotte, Louisville and Nashville). The company has plans to build networks in Atlanta and Texas.<sup>62</sup> ICG offers local, long distance, special access service, voice mail, calling card, and debit card services to its retail customers.<sup>63</sup> Additionally, ICG provides local switched services on a wholesale basis.<sup>64</sup> ICG focuses on offering "bundled services to business end users" as well as resellers.<sup>65</sup>
- Intermedia Communications: Intermedia operates fiber optic networks in 10 southeastern cities. It also owns a 5,000 mile long-haul microwave transmission network in the Northeast. Additionally, Intermedia intends to deploy ATM switching nodes in 35 cities across the US by the end of 1998.<sup>66</sup> Intermedia offers local service, long distance, frame relay services, dedicated Internet access, network management, voicemail,

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59. Hyperion Telecommunications 10-K, 3/31/97, p. 13.

60. Hyperion Telecommunications 10-K, 3/31/97, p. 3.

61. Hyperion Telecommunications 10-K, 3/31/97, p. 8.

62. ICG Telecommunications Inc. 10-K, 12/31/97, p. 8.

63. ICG Telecommunications Inc. 10-K, 12/31/97, p. 11.

64. <http://www.icgcomm.com/telecom/prodserv/wholesale.htm>

65. ICG Telecommunications Inc. 10-K, 12/31/97, p. 9.

66. Intermedia Communications Inc. 10-K, 12/31/97, p. 9.

ISDN, Centrex Service, PBX Trunks, CPE and private lines.<sup>67</sup>

Intermedia targets business customers including "small to medium sized companies whose initial service offering is generally local and long distance voice, ... medium sized companies with both voice and enhanced data needs...[and] the largest multi-location companies whose interests usually begin with Intermedia's enhanced data services."<sup>68</sup>

Intermedia also "plans to introduce a new class of voice products which utilize data protocols to deliver voice traffic over Intermedia's Packet/Cell Switched Network."<sup>69</sup>

- Level 3 Communications: Level 3 is constructing an Internet Protocol network that will "encompass local facilities in approximately 40 North American markets, leased backbone facilities in approximately 10 additional North American markets." In addition, Level 3 plans to establish local facilities in approximately 10 European and 4 Asian markets.<sup>70</sup> Level 3 plans to offer "local, long distance and data transmission as well as other enhanced services..."<sup>71</sup> Level 3's 10-K states that it "intends to optimize its international network to provide Internet based communications services to businesses at low cost and high quality, and to design its network to the extent possible, to more readily include future technological upgrades than older, less flexible networks owned by competitors."<sup>72</sup> The CEO of Level 3 is the former Chairman of MFS.
- McLeodUSA: McLeodUSA refers to itself as a "Super-Regional CLEC".<sup>73</sup> Its 1997 10-K states the company "is a provider of integrated telecommunications services to small and medium-sized businesses"<sup>74</sup> in 10 states in the midwest and upper tier. It also provides service to residential customers in six states. McLeod has plans to deploy services in five additional western and midwestern states.<sup>75</sup> McLeodUSA offers

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67. [http://www.intermedia.com/company/overview/overview\\_f.html](http://www.intermedia.com/company/overview/overview_f.html)

68. Intermedia Communications Inc. 10-K, 12/31/97, p. 8.

69. Intermedia Communications Inc. 10-K, 12/31/97, p. 3.

70. Level 3 Communications Inc. 10-K, 12/27/97, p. 10.

71. <http://www.l3.com/background.html>

72. Level 3 Communications Inc. 10-K, 12/27/97, p. 10.

73. <http://www.mcleod-usa.com/headline925.html>

74. McLeodUSA Inc. 10-K, 12/31/97, p. 1.

75. McLeodUSA Inc. 10-K, 12/31/97, p. 2.

local phone service, long distance phone service, paging, Internet access and e-mail and voice mail.<sup>76</sup> McLeod "principally targets small and mid-sized markets (cities and towns with a population between 8,000 and 350,000) in its service areas."<sup>77</sup>

- NEXTLINK Communications: NEXTLINK provides switched local services in eight states, including a number of communities in California, and plans to offer services in three additional states in 1998. NEXTLINK offers local, long distance, voice messaging, dedicated lines, and high capacity private lines (DS-0/1/3).<sup>78</sup> NEXTLINK'S 10-K identifies its targeted customer base as "small and medium sized businesses, generally those businesses with fewer than 50 access lines."<sup>79</sup> The Company enters into larger markets on a stand alone basis and pursues smaller markets where it can extend or cluster an existing network with relatively little incremental capital.<sup>80</sup> Craig McCaw, founder of cellular-provider McCaw Communications is the founder of NEXTLINK.
- Sprint: Sprint recently announced its Integrated On-Demand Network (ION), which it claims "can provide homes and businesses with virtually unlimited bandwidth over a single existing telephone line for simultaneous voice, video calls and data services."<sup>81</sup> ION will allow Sprint to offer "local and long-distance voice, IP, frame relay, and ATM ... [using] high speed local data circuits leased from local providers and connected to Sprint's nationwide data network ... "<sup>82</sup> This network will rely on a "hub" that "takes voice and data traffic and turns it into an ATM stream."<sup>83</sup> Sprint will use "many different broadband services, such as digital subscriber lines (xDSL), cable modems, and wireless technolo-

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76. <http://www.mcleod-usa.com/>

77. McLeodUSA Inc. 10-K, 12/31/97, p. 4.

78. <http://www.nextlink.net/xpage/xprod1.htm>

79. NEXTLINK Communications Inc. 10-K, 12/31/97, p. 3.

80. NEXTLINK Communications Inc. 10-K, 12/31/97, p. 4.

81. <http://www.sprintbiz.com/ion/press.html>

82. PC Week, June 29, 1998

83. ISDN News, June 16, 1998

gies ... for the last mile to the customer."<sup>84</sup> Sprint states that "ION will be available in 36 metropolitan markets this year and 60 in 1999."<sup>85</sup>

- Time Warner Telecom: Time Warner Telecom describes itself as "a leading facilities-based competitive local exchange carrier in selected metropolitan markets across the United States."<sup>86</sup> Time Warner "plans to provide switched services in all of its [19] current markets by the end of 1998."<sup>87</sup> Time Warner Telecom "provides its customers with a wide range of integrated telecommunications services, including dedicated transmission, local switched, data, and video transmission services and certain Internet services."<sup>88</sup> The company markets its services "primarily to medium- and large-sized business customers and other carriers. The Company's customers are principally telecommunications-intensive business end users, IXCs, ISPs, wireless communications companies and governmental entities."<sup>89</sup> Although Time Warner Telecom's majority owner is Time Warner Inc., one of the nation's largest cable operators, Time Warner Telecom has constructed conventional fiber optic networks, although it does benefit from "TW Cable's access to rights-of-way, easements, poles, ducts and conduits."<sup>90</sup>
- Teligent: Teligent plans to offer services in 10 areas by the end of 1998 and 30 areas by the end of 1999 and ultimately 74 areas.<sup>91</sup> Teligent "plans to focus its primary marketing efforts of small and medium-sized businesses with 5 to 350 telephone lines"<sup>92</sup> and offer "an integrated package of services, including local and long distance telephone service, high speed data connectivity, Internet access and videoconferencing."<sup>93</sup> Teligent is deploying point to multipoint fixed

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84. Communications Today, June 4, 1998

85. <http://www.techweb.com/se/directlink.cgi?INW19980608S0019>

86. Time Warner Telecom Inc. S-1, 4/6/98, p. 7.

87. Time Warner Telecom Inc. S-1, 4/6/98, p. 44.

88. Time Warner Telecom Inc. S-1, 4/6/98, p. 43.

89. Time Warner Telecom Inc. S-1, 4/6/98, p. 43

90. Time Warner Telecom Inc. S-1, 4/6/98, p. 44.

91. Teligent 10K, 12/31/97, p. 3.

92. Teligent 10K, 12/31/97, p. 5.

93. Teligent 10K, 12/31/97, p. 5.

wireless facilities to provide "last mile connectivity" in its licensed market areas. Teligent is led by Alex Mandl, former President and Chief Operating Officer for AT&T. NTT recently made an equity investment in Teligent.<sup>94</sup>

- WinStar: WinStar currently offers CLEC services in 21 MSAs<sup>95</sup> and has plans to offer service in an additional seven MSAs by end of 1998.<sup>96</sup> WinStar offers "local dial tone, private branch exchange trunks, individual business lines, Centrex...long distance, data services such as Internet access, Wide Area Network services utilizing frame relay, IP, and ATM data transport ... private network services...[and] Carrier Services".<sup>97</sup> WinStar provides CLEC service by means of fixed wireless technology. WinStar plans to target business customers. "Initially, WinStar targeted small and medium sized business customers in buildings that have no more than 100,000 square feet of commercial space and which, in most instances, are not served by fiber facilities provided by CLECs."<sup>98</sup> WinStar also plans to offer "its broadband Carrier Services to other telecommunications providers."<sup>99</sup> WinStar holds radio spectrum licenses, which cover 125 MSAs, including the 50 largest MSAs.<sup>100</sup>
- WorldCom/MCI/MFS/Brooks: WorldCom operates facilities in 105 MSAs.<sup>101</sup> Through its purchase of MFS, it provides local exchange services in major metropolitan areas such as Chicago, New York, Los Angeles and Washington DC.<sup>102</sup> Through its purchase of Brooks, it operates in smaller cities such as Tulsa OK, Little Rock AR, Lansing MI, and Albuquerque NM.<sup>103</sup> WorldCom "provides businesses with high quality local, long distance, Internet, data and international communica-

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94. Los Angeles Times, October 1, 1997.

95. WinStar Communications Inc. 10-K, 12/31/97, p. 2.

96. [http://www.winstar.com/buisserv\\_display.html](http://www.winstar.com/buisserv_display.html)

97. WinStar Communications Inc. 10-K, 12/31/97, p. 2.

98. WinStar Communications Inc. 10-K, 12/31/97, p. 4.

99. WinStar Communications Inc. 10-K, 12/31/97, p. 4.

100. WinStar Communications Inc. 10-K, 12/31/97, p. 2.

101. [http://www.wcom.com/products+services/voice\\_products/locals.html](http://www.wcom.com/products+services/voice_products/locals.html)

102. <http://www.mfsdatanet.com/mfs/corporate/index.html>

103. [http://www.brooks.net/site\\_3/locations.html](http://www.brooks.net/site_3/locations.html)

tions services over its global networks.<sup>104</sup> WorldCom also provides local service on a wholesale basis. It recently announced that wholesale service "will be available in all domestic locations where WorldCom owns local facilities during 1999."<sup>105</sup>

37. As these examples suggest, there are a significant number of potential entrants into the provision of local service. Several entrants have adopted regional strategies; others are deploying facilities in "clusters"; some focus on large business customers, others on smaller business and even certain categories of residential customers such as multiple dwelling units. Some entrants exclusively provide retail services; others are attempting to establish roles as wholesale suppliers of local services. Many entrants are deploying "conventional" digital fiber optic technology; others are using alternative technologies such as IP, fixed wireless or cable television. With only two exceptions (Focal and Covad), all of the companies are offering bundles of local, long distance and data services. In general, these entrants are credible, well financed, and often led by experienced and highly successful managers.

38. It is clear that these strategies represent many and varied responses to changes in technology and customer demands. Notice that, other than SBC, none are based on the concept of "following" existing customers and few attempt to establish a "near-national" footprint. All encompass significant risks due in part to the rapid changes in demand and supply conditions in the industry. Although it is difficult to predict the outcome now, some of these strategies undoubtedly will succeed while

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104. WorldCom Inc. 10-K 12/31/97 p. 6.

105. [http://www.wcom.com/about\\_worldcom/press\\_releases/archive/1998/980515.2.shtml](http://www.wcom.com/about_worldcom/press_releases/archive/1998/980515.2.shtml)

others will not. Successful strategies may differ significantly from each other. These are precisely the circumstances in which regulators must be most cautious about interfering with firms' attempts to develop and implement new entry strategies. The more firms that make actual investments in providing new services and facilities, the greater the likelihood that consumers will benefit from increased competition in the provision of local service.

39. These examples also suggest that large established telecommunications companies have no special advantage in entering into the provision of competitive local exchange services. In particular, incumbency may have certain drawbacks during times of rapidly changing technology and smaller firms may be able to respond to these changes more quickly than established ones. As a consequence, new firms have often been the first to implement new technologies and have succeeded in attracting capital to support these ventures. SBC's out-of-region plan appears to reflect its recognition that established firms must rapidly respond to these changes in order to remain competitive.

40. Many firms and competing strategies will remain after the transaction. The proposed transaction does not interfere with the ability of other firms to pursue alternative strategies and deploy services. While it is likely that there will be no substantial reduction in potential competition resulting from the proposed transaction, implementation of the national/local plan will establish a significant competitor in the provision of local exchange services.<sup>106</sup>

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106. The accompanying affidavit by R. Schmalensee and W. Taylor shows that the merger of SBC and Ameritech will not substantially reduce potential competition.

41. The FCC recognizes in the Bell Atlantic/NYNEX decision that evaluation of the competitive effects of mergers requires balancing the benefits and potential harms to consumers.<sup>107</sup> In this case, the evaluation is easy. The transaction creates an actual competitor in the provision of local exchange services in 30 new metropolitan areas without significantly reducing the number of firms that are potential competitors. The benefits to consumers of an increase in actual competition must weigh heavily in this balance.

## VI. CONCLUSIONS

42. The successful implementation of SBC/Ameritech's "national/local" strategy will result in significant consumer benefits by creating a large and significant new competitor in the provision of local exchange services in 30 metropolitan areas. The transaction will create an actual competitor providing nationwide services to business customers as well as services to small business and residential customers in 30 metropolitan areas, and in SBC's and Ameritech's home territories.

43. My review indicates that neither SBC nor Ameritech would have pursued the national/local plan in the absence of this or a similar transaction. Even in the unlikely event that either firm were to pursue the national/local strategy in the absence of this or a similar transaction, deployment of new facilities and services would be significantly slower than would be expected with the transaction. The transaction reduces the number of areas that must be entered to gain a national/local

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107. FCC, Memorandum Opinion and Order in Bell Atlantic/NYNEX, ¶157.

footprint and increases the number of large businesses with headquarters in SBC/Ameritech's home region that can be "followed."

44. Moreover, the Ameritech merger and out-of-region plan together increase the combined firms' ability to provide broad geographic coverage relative to that which would be expected if two firms were to follow individual entry strategies. This enables facilities and services to be deployed more effectively and quickly than otherwise would be possible.

45. While the transaction creates an actual competitor in 30 metropolitan areas, there will not be a significant reduction in the number of potential competitors in the provision of CLEC services. There are now a variety of firms using a variety of strategies attempting to enter into the provision of local exchange services. No opportunities for these alternative suppliers are foreclosed by the proposed transaction.

46. In sum, implementation of the national/local strategy creates a significant competitor in the provision of local services and leaves unchanged many other new entrants and strategies. Public policy should encourage entry under these circumstances and the transaction should be approved.

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EXHIBIT 1

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Member, Advisory Board, Economics Research Network, 1996 - present  
Member, Steering Committee, Social Science Research Council, Program in Applied Economics, 1997 - Present  
Participant in meetings with Committee of the Federal Reserve on Payment Systems, June 5, 1997  
Participant in round table discussions on "The Role of Classical Market Power in Joint Venture Analysis," before the Federal Trade Commission, November 19, 1997 and March 17, 1998.

BOOKS

"Market Behavior Under Uncertainty," Ph.D. Thesis, Massachusetts Institute of Technology (September 1975); Garland Publishing (1984).

Modern Industrial Organization, Scott, Foresman & Co., co-authored with Jeffrey Perloff, second edition (1994), first edition (1990).

RESEARCH PAPERS

- "The Equilibrium Analysis of Alternative Housing Allowance Payments," (with Joseph Ferreira) Chapter 6 of Analysis of a Direct Housing Allowance Program, The Joint Center for Urban Studies of M.I.T. and Harvard University, (July 1975).
- "Theories of Vertical Integration," presented at Fourth Annual Telecommunications Conference. Appears in a volume of Proceedings of the Fourth Annual Telecommunications Conference, Office of Telecommunications Policy, (April 1976).
- "Uncertainty, Production Lags, and Pricing," American Economic Review, (February 1977).
- "Selecting Subsidy Strategies for Housing Allowance Programs," (with Joseph Ferreira) Journal of Urban Economics, (July 1977).
- "Peak Load Pricing With Stochastic Demand," American Economic Review, (December 1977).
- "The Distribution of Permanent Income," (with Robert Hall) presented at the Symposium on Income Distribution and Economic Inequality, (May 1976). Published in Income Distribution and Economic Inequality, edited by Zvi Griliches, et al. (Halsted Press, 1978).
- "Market Behavior with Demand Uncertainty and Price Inflexibility," American Economic Review, (September 1978).
- "Why New Firms Locate Where They Do: An Econometric Model," in Studies in Regional Economics, edited by W. Wheaton, (Urban Institute, 1980). Presented at the Conference on Regional Economics, sponsored by the Committee on Urban and Public Affairs, Baltimore, Maryland (May 1978).
- "Vertical Integration--An Overview," in Congressional Record Hearings on the Communications Act of 1978. Bill H.R. 13105, (August 3, 1978).
- "Vertical Integration in Competitive Markets Under Uncertainty," Journal of Industrial Economics, (March 1979). Awarded the P.W.S. Memorial Prize for the best essay in the field of Industrial Organization by a scholar under the age of thirty.
- "Valuing Benefits and Costs in Related Output and Input Markets," American Economic Review, (September 1979).
- "Contracts, Price Rigidity and Market Equilibrium," Journal of Political Economy, (October 1979).
- "Benefits and Costs of Airline Mergers: A Case Study," (with W. Landes and R. Posner) Bell Journal of Economics, (Spring 1980).
- "The Limitations of Pigouvian Taxes as a Long Run Remedy for Externalities," (with G. Loury) Quarterly Journal of Economics, (September 1980).
- "The Law and Economics of Rights in Valuable Information: A Comment," Journal of Legal Studies, (December 1980).

- "Price Discrimination: Vertical Integration and Divestiture in Natural Resources Markets," (with J. Perloff) Resources and Energy, (March 1981).
- "The Spatial Effects of a Tax on Housing and Land," Regional Science and Urban Economics, (November 1981).
- "Comments on Weicher," Journal of Law and Economics, (December 1981).
- Comment, in Sherwin Rosen ed. Studies in Labor Markets, University of Chicago Press, (1981).
- "Planning and Market Structure," in The Economics of Information and Uncertainty, edited by J.J. McCall, University of Chicago Press, (1982).
- "The Disruptive Effect of Inflation on the Organization of Markets," in Robert Hall, ed. The Economics of Inflation, University of Chicago Press, (1982).
- "A Reexamination of Delivered Pricing," Journal of Law and Economics, (April 1983).
- "Futures Trading, Market Interrelationships, and Industry Structure," American Journal of Agricultural Economics, (May 1983).
- "The Location and Employment Choices of New Firms: An Econometric Model with Discrete and Continuous Endogenous Variables," The Review of Economics and Statistics, (August 1983).
- "The Need for Coordination Among Firms With Special Reference to Network Industries," (with J. M. Klammer) University of Chicago Law Review, (Spring 1983).
- "The Regulation of Insider Trading" (with D. Fischel), Stanford Law Review, (May 1983).
- "Economic Goals and Remedies of the AT&T Modified Final Judgement" (with W. Lavey), Georgetown Law Review, (August 1983).
- "Equilibrium Fluctuations When Price and Delivery Lags Clear the Market," Bell Journal of Economics, (Autumn 1983).
- "Futures Markets: Their Purpose, Their History, Their Growth, Their Successes and Failures," paper presented at the Columbia University Conference on Futures Markets, February 1984, Journal of Futures Markets, (September 1984). (Reprinted in Futures Markets edited by A.G. Malliaris and W.F. Mullady, Edward Elgar Publishing Limited, 1995.)
- "Energy and Location," presented at the Brookings Conference on Housing and Energy, Washington, D.C., (November 1981), Energy Costs, Urban Development, and Housing, Brookings Institution, (1984).
- "The Limitations of Pigouvian Taxes As A Long Run Remedy for Externalities: Extension of Results," (with G. Lorry) Quarterly Journal of Economics, (August 1986).
- "The Rigidity of Prices," American Economic Review, (September 1986).

- "The Theory and The Facts of How Markets Clear: Is Industrial Organization Valuable for Understanding Macroeconomics?" in Handbook of Industrial Organization, eds. Schmalensee and Willig, (1989).
- "Market Power and Mergers in Durable Good Industries," (with R. Gertner), Journal of Law and Economics, (October 1989).
- Comments on Vertical Foreclosure, Brookings Papers on Economic Activity, (December 19, 1989).
- Book Review of Tirole's The Theory of Industrial Organization, Journal of Political Economy, (June 1990).
- "The Genesis of Inflation and the Costs of Disinflation: Comment," Journal of Money, Credit & Banking, (August 1991, Part 2).
- "The Theory of Allocation and its Implications for Marketing and Industrial Structure: Why Rationing is Efficient," Journal of Law and Economics, (October 1991).
- "The Economics of Cooperation and Competition in Electronic Services Network Industries," in Economics of Electronic Service Networks, Wildman Steven ed., Praeger Press, (1992).
- "Merger Policy and Market Definition Under the EC Merger Regulation," Conference on Antitrust in a Global Economy, Fordham Corporate Law Institute, (1994).
- "The Antitrust Economics of Credit Card Networks," (with A. Frankel) Antitrust Law Journal, (Winter 1995).
- "Economic Organization and Conflict", Journal of Institutional and Theoretical Economics, (March 1995).
- "Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?" (with G. Bamberger and R. Epstein) The Rand Journal of Economics, (Vol. 26, No. 1, Spring 1995, pp. 131-147).
- "The Competitive Effects of Line-of-business Restrictions in Telecommunications," (with K. Arrow and H. Sider), Managerial and Decision Economics, (Vol. 16, pp. 301-321, 1995). (Reprinted in Deregulating Telecommunications - The Baby Bells Case for Competition, edited by Richard S. Higgins and Paul H. Rubin, John Wiley & Sons Ltd., 1995.)
- "The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee," (with A. Frankel), Antitrust Law Journal, (Spring 1995).
- "Antitrust and Payment Technologies," (with A. Frankel), Review, Federal Reserve Bank of St. Louis (November/December 1995).
- "Antitrust Policy Toward Mergers When Firms Innovate: Should Antitrust Recognize the Doctrine of Innovation Markets?" Testimony before the Federal Trade Commission Hearings on Global and Innovation-based Competition (October, 1995).

- "You Keep on Knocking But You Can't Come In: Evaluating Restrictions on Access to Input Joint Ventures," (with S. Salop), Harvard Journal of Law & Technology, (Volume 9, Summer, 1996).
- "Comments on Causes and Consequences of Airline Fare Wars," Micro Brookings Papers on Economic Activity, (1996).
- "A Critical Assessment of the Role of Imperfect Competition in Macroeconomics," in Market Behaviour and Macro Economic Modeling, Brakman, Van Ees, & Kuipers (eds.), MacMillan Press (1997).
- "Price Rigidity," Business Cycles and Depressions, David Glasner ed., Garland Publishing, Inc., (1997).
- "Communication Among Competitors: Game Theory and Antitrust," (with R. Gertner and A. Rosenfield), George Mason Law Review, (1997).
- "Antitrust and Higher Education: MIT Financial Aid (1993)" (September 1997) (with G. Bamberger), The Antitrust Revolution, (Oxford University Press), 3rd edition (October, 1998) (forthcoming).
- "An Analysis of the Toys 'R' Us Case," (with H. Sider), The Academic Economist and Economic Analysis in Litigation Support, edited by Daniel Slottje, (forthcoming).

#### UNPUBLISHED PAPERS

- "Modeling the Housing Allowance Program," M.A. Thesis, Massachusetts Institute of Technology (September 1974).
- "The Cost of Eliminating a Futures Market and The Effect of Inflation on Market Interrelationships," (1984).
- "The Empirical Importance of Delivery Lags as an Explanation of Demand," (1984).
- "Airline Networks and Fares," (with G. Bamberger), (1996).
- "The Choice of Organizational Form in Gasoline Retailing and The Costs of Laws Limiting that Choice," (with A. Blass), (1996).
- "Statistical Supplement to The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee Comment, 63 Antitrust Law Journal 903 (1995)," (with Alan Frankel), (May 1997).

EXPERT TESTIMONIAL EXPERIENCE

- Testimony of Dennis W. Carlton in Re: "Vertical Integration--An Overview." Congressional Record Hearings on the Communications Act of 1978: Proceedings before the House on Bill H.R. 13105, August 3, 1978.
- Testimony of Dennis W. Carlton, William M. Landes and Richard A. Posner in Re: Competitive Effects of the Proposed North Central-Southern Airline Merger: Proceedings before the Civil Aeronautics Board, Docket No. 33136, Exhibit NC/SO-T-7, October 13, 1978 and October 9, 1979.
- Testimony of Dennis W. Carlton in Re: McNeilab, Inc.: Proceedings before the United States Department of Justice, Drug Enforcement Administration, Docket No. 78-13, March 13, 1980 and May 1980 (Oral).
- Testimony of Dennis W. Carlton in Re: Acco Industries, Inc. v. Kresl Power Equipment, Inc.: In the U.S. Court of Appeals For the Seventh Circuit, Docket No. 80-2024, March 29, 1980.
- Deposition, Testimony, and Rebuttal Testimony of Dennis W. Carlton in Re: Ethyl Corporation: Proceedings before the Federal Trade Commission, Docket No. 9128, November 10 & 11, 1980 (Deposition), November 13 & 14, 1980 (Testimony), and February 20, 1981 (Rebuttal).
- Deposition of Dennis W. Carlton in Re: Independence Tube Corporation v. Copperweld Corporation, Regal Tube Company, The Yoder Company v. David F. Grohne (counter-defendant): In the U.S. District Court for the Northern District of Illinois, Eastern Division, No. 76 C 4201, January 24, 1981.
- Affidavit of Dennis W. Carlton in Re: Ellis Banking Corporation, Ellis First National Bank of Bradenton, and Ellis First Security Bank v. Barnett Banks of Florida, Inc., Barnett Bank of Manatee County, and Westside National Bank of Manatee County: In the U.S. District Court for the Middle District of Florida, Tampa Division, No. 81-693-Civ-T-H, July 28, 1981.
- Deposition and Economic Report of Dennis W. Carlton in Re: Schneider Industrial Sales and Service Company, William Schneider and Mary Emily Schneider v. Acco Industries, Inc.: In the U.S. District Court for the District of New Jersey, April 19, 1982.
- Deposition and Testimony of Dennis W. Carlton in Re: City of Batavia, et al. v. Commonwealth Edison Company: Proceedings before the U.S. District Court, Northern District of Illinois, Eastern Division, No. 76 C 4388, May 17, 18 & 25, 1982 (Deposition), and July 22, 1982 (Testimony).
- Deposition of Dennis W. Carlton in Re: M. K. Metals Inc., et al. v. National Steel Corporation: In the U.S. District Court for the Northern District of Illinois, Eastern Division, No. 79 C 1661, September 15, 1983.
- Declaration and Deposition of Dennis W. Carlton in Re: Carter Hawley Hale Stores, Inc. v. The Limited, Inc., et al.: In the U.S. District Court, Central District California, No. CV 84 22000 AWT (JRX), April 21, 1984 (Declaration), and April 23, 1984 (Deposition).

Verified Statements and Testimony of Dennis W. Carlton in Re: Denver & Rio Grande Western Railroad v. Santa Fe Southern Pacific Corporation et al.: Proceedings before the Interstate Commerce Commission, Docket No. 30400, August 28, 1984, November 14, 1984, and May 22, 1985, (Statements), and January 30, 1985, and June 19, 1985, (Testimony).

Affidavit of Dennis W. Carlton and William M. Landes in Re: United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company: In the United States District Court for the District of Columbia, December 19, 1984.

Statement of Carlton, DeMuth, Landes, and Rosenfield in Response to the National Telecommunications Information Administration (NTIA) Request for Comments in Connection with the Comprehensive Study of the Structure and Regulation of the U.S. Telecommunications Industry, March 29, 1985.

Deposition and Affidavit of Dennis W. Carlton in Re: L&W Industries, Inc. v. American Standard, Inc.: In the U.S. District Court, Eastern District of Wisconsin, Civil Action No. 81-C-1409, May 14, 1985 (Deposition) and August 30, 1985 (Affidavit).

Testimony of Dennis W. Carlton in Re: E. I. Du Pont De Nemours and Company's Thebaine Import Application: Proceedings before the U.S. Department of Justice, Drug Enforcement Administration, Docket No. 84-51, May 31, 1985.

Testimony of Dennis W. Carlton, William M. Landes and Sam Peltzman in Re: Joint Application of Pan American World Airways, Inc. and United Airlines, Inc., Pacific Division Transfer Case: Proceedings before the U.S. Department of Transportation, Docket No. 43065, August 7, 1985.

Deposition of Dennis W. Carlton in Re: General Motors "THM 200" Transmission Litigation: Proceedings before the U.S. District Court, Northern District of Illinois, Eastern Division, No. 79 C 1249, 80 C 2151 and 85 C 4805, July 2, 1986.

Affidavit of Dennis W. Carlton in Re: Norwest Bank Fire Case: Proceedings before the U.S. District Court, Fourth Judicial District, State of Minnesota, Court File No. 83-08122, August 28, 1986.

Affidavit of Dennis W. Carlton in Re: Policy and Rules Concerning Rates for Dominant Carriers: Before the Federal Communications Commission, Washington, D.C., Docket No. 87-313, October 16, 1987.

Deposition of Dennis W. Carlton in Re: Research Institute for Medicine and Chemistry, Inc. v. Wisconsin Alumni Research Foundation: In the U.S. District Court, Western District of Wisconsin, Case No. 85-C-1060-D, October 20 & 21, 1986.

Affidavit and Deposition of Dennis W. Carlton in Re: United States Football League, et al. v. National Football League, et al.: In the U.S. District Court, Southern District of New York, 84 Civ. 7484 (PKL), November 24, 1986 (Affidavit), February 26, 1986 and December 4, 1986 (Deposition).

Verified Statements of Dennis W. Carlton in Re: Coal Trading Corporation, et al. v. The Baltimore and Ohio Railroad Co., et al.: Before the Interstate Commerce Commission, ICC Docket No. 38301S, December 16, 1986 and September 8, 1987.

Testimony of Dennis W. Carlton in Re: The Application of Pacific Bell, a Corporation, for Authority to Increase Certain Intrastate Rates and Charges Applicable to Telephone Services Furnished within the State of California, California Public Utilities Commission, Application No. 85-01-034, December 19, 1986, and January 22 & 28, 1987.

Deposition of Dennis W. Carlton in Re: John H. Torphy v. Touche Ross & Co., et al.: In the Circuit Court Dane County, State of Wisconsin, Case No. 82-CV-4033, August 25, 1987.

Deposition of Dennis W. Carlton in Re: Martin Exploration Management Company, et al. v. Panhandle Eastern Corporation, et al.: In the U.S. District Court for the District of Colorado, Civil Action No. 86-Z-804, May 5, 6 & 18, 1988.

Deposition of Dennis W. Carlton in Re: The Dow Chemical Company v. Halliburton Company and The Dow Chemical Company v. Mississippi Power & Light Company: In the U.S. District Court for the Northern District of Mississippi Greenville Division, No. GC-78-31-GD-D and No. GC-78-32-GD-D, June 16, 1988.

Statements and Testimony of Dennis W. Carlton in Re: Trailer Train Company et al., Approval of Pooling of Car Service With Respect to Flat Cars: Before the Interstate Commerce Commission, Finance Docket No. 27590. (Sub-No. 1), July 7 & 14, 1988 (Statements) and July 25 & 26, 1988 (Testimony).

Testimony of Dennis W. Carlton in Re: Pontarelli Limousine, Inc. v. City of Chicago, Finance Docket No. 83-C-6716, September 25 & 26, 1989.

Deposition of Dennis W. Carlton in Re: Great Northern Nekoosa Corporation v. Georgia-Pacific Corporation: Before the United States District Court District of Connecticut, Civ. Action No. B-89-607-WWE, December 28, 1989 and January 15, 1990.

Testimony of Dennis W. Carlton in Re: The Matter of the Physicians and Surgeons Medical Malpractice Insurance Rates of St. Paul Fire & Marine Insurance Company: Before the State of Minnesota Office of Administrative Hearings for the Commissioner of Commerce, O.A.H. Docket No. 0-1004-3412-2, January 1990.

Deposition of Dennis W. Carlton in Re: Dale A. Ervin, et al. v. Amoco Oil Company, et al.: In the District Court, City and County of Denver, State of Colorado, No. 88-CV-11994, September 5, 1990.

Reply Affidavit of Dennis W. Carlton and George J. Stigler in Re: United States of American v. Western Electric Company Inc. and American Telephone and Telegraph Company: In the United States District Court for the District of Columbia, Civil Action No. 82-0192, January 10, 1991.

Testimony of Dennis W. Carlton in Re: Westreco, Inc. v. Commissioner of Internal Revenue: In the United States Tax Court, Washington, D.C. 20217, Docket No. 24078-88, January 29, 1991.