indicate that there are other fiber based collocators in 84 of these 88 central offices and that there are at least 2 other CLECs with fiber-based collocations (in addition to AT&T) in 76 (86 percent) of these central offices.[17]

Table 2.1

Number of Fiber-Based CLEC Collocations in BellSouth Central Offices Where AT&T Is Collocated

Number of Non-AT&T CLECs	Number of COs	Percentage of COs	Average Number of Non-AT&T CLECs per CO
0	4	4.5%	0.0
1	8	9.1%	1.0
2	16	18.2%	2.0
3+	60	68.2%	6.1
Total	88	100.0%	4.6

Source: BellSouth physical survey.

Note: SBC Collocations treated as AT&T Collocations.

3. Respondents fail to acknowledge the limitations of rates of return for special access services based on ARMIS data.

27. As noted above, respondents cite rate of return measures derived from the FCC's Automated Reporting Management Information System (ARMIS) to argue that there is "inadequate competition" [18] in the provision of special access services or that ILECs exercise "dominance"[19] in the provision of special access services.

28. Respondents, however, fail to acknowledge the well-recognized limitations of the ARMIS data for identifying the returns earned by ILECs on special access services. As discussed below, it has been widely noted that ARMIS data overstate

17. Of the four locations with no CLEC other than AT&T, two are "rifle-shot" collocations that are outside of the 11 areas in BellSouth's region where AT&T operates local networks. As the FCC and DOJ concluded in prior transactions, such locations that are not part of a local network raise no competitive concerns.
18. Cooper/Roycroft Declaration, pp. 42-44.
19. Sprint Comments, p. 2.

the economic returns earned by ILECs on special access services and that this distortion has grown over time.

29. Rates of return based on the ARMIS data reflect accounting rules established by the FCC. FCC rules require carriers to apportion operating costs and capital expenditures across services, such as switched access and special access, which share facilities.[20] Costs are further allocated between regulated and non-regulated services and between interstate and intrastate services.[21]

30. The FCC's cost allocation rules relating to these services are based on cost studies from the late 1990s and have been frozen since 2001.[22] Since that time, however, there has been a substantial divergence in demand for special access and switched access services. For example, the FCC's Statistics of Common Carriers report that revenue from special access services increased 61 percent between 2000 and 2004 while revenue from switched access services fell 4 percent.[23]

31. As a general rule, allocation of common costs across specific products does not reflect costs imposed by the production of each. However, even if the FCC's cost allocations made economic sense when initially determined, the divergence in revenue generated by switched and special access implies that these rules would no longer be appropriate. To the extent that too few costs are now allocated to special

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20. Declaration of David Toti on Behalf of SBC Communications, In the Matter of Special Access Rates for Price Cap Local Exchange Carriers, WC Docket 05-25, June 13, 2005, pp. 3-4, hereafter Toti Declaration.
21. Toti Declaration, pp. 8-9.
22. Toti Declaration, pp. 6-7.
23. FCC, "Statistics of Common Carriers 2000/2001 Edition," September 15, 2001, Table 2.10; FCC, "Statistics of Common Carriers 2004/2005 Edition," November 2005, Table 2.8. These calculations are based on total revenues in accounts 5082 (Switched Access Revenues) and 5083 (Special Access Revenues) for all RBOCs.

access services in the ARMIS data, calculation of the return generated by special access services based on these data will be too high.[24]

32. The resulting distortion in special access returns based on ARMIS data has been previously recognized. For example, David Toti, then the Executive Director – Regulatory Accounting for SBC, explained in comments filed in a prior FCC proceeding that, as a result of the FCC's rules:

> ARMIS results that understate the costs an ILEC incurs to provide any service that has experienced significant growth in volumes. The costs for interstate special access services are particularly susceptible to this understatement because demand has increased dramatically over the past several years with the explosive growth in data services. The result is a mismatch between costs which do not properly reflect current utilization and volumes and revenues which do. This mismatch, of course, will overstate the calculated rate of return.[25]

33. Alfred Kahn and William Taylor also highlight the problems in interpreting accounting returns for special access services due to the joint nature of many network costs.

> The allocations of RBOC accounting costs between regulated and unregulated intrastate and interstate services are of necessity, not based on cost-causation. Among interstate services, the allocation of costs to special access services requires additional, similarly arbitrary assumptions . . . each RBOC's network provides interstate and intrastate services, carrier services (special and switched access) and retail services (local and toll): a large fraction of these network costs cannot be assigned on a cost-causal basis to individual services.[26]

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24. Toti Declaration, p. 3. William Taylor and Aniruddha Banerjee also highlight distortions in measuring returns on special access services based on ARMIS data resulting from the FCC's fixed rules for allocating joint costs. Declaration of William Taylor and Aniruddha Banerjee on behalf of BellSouth, November 8, 2004, In the Matter of AT&T Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Special Access Services, RM No. 10593 ¶15.
25. Toti Declaration, p. 3.
26. Declaration of Alfred E. Kahn and William E. Taylor on Behalf of BellSouth Corporation, Qwest Corporation, SBC Communications, Inc. and Verizon, In the Matter of AT&T Corp Petition for Rulemaking to Reform Regulation of Incumbent

34. More generally, the difficulties in using accounting rates of return to estimate economic profits, and in turn, to infer market power are well recognized. For example, Franklin Fisher and John McGowan note that "there is no way in which one can look at accounting rates of return and infer anything about relative economic profitability or, a fortiori, about the presence or absence of monopoly profits."[27]

4. Data on CLEC pricing indicate that there is extensive competition in the provision of special access services in the Bellsouth territory

35. While data on accounting returns suffer from well-recognized limitations, pricing data typically provides better information for analyzing market conditions. Available data indicate that special access prices charged by CLECs in BellSouth's region have fallen rapidly in recent years.

36. Data compiled by RHK, a consulting firm employed by BellSouth, indicate that between January 2003 and January 2005, prices charged by BellSouth's competitors for DS-3 circuits fell from $1,200 per circuit to $775 per circuit, a decline of 35 percent. Similarly, these data indicate that prices of DS-1 circuits fell from $210 to $138 per circuit, a decline of 34 percent.[28] This price decline indicates that special access consumers have been the beneficiaries of increasing competition and productivity improvements.

Local Exchange Carrier Rates for Interstate Special Access Services, RM No. 10593, November 27, 2002, p. 8.

27. Franklin Fisher and John McGowan, "On the Misuse of Accounting Rates of Return to Infer Monopoly Profits," American Economic Review, vol. 73, no. 1, 82-97 (1983)
28. BellSouth, "Competitive Analysis ICS Transport and Data Service," Fall 2005, p. 18.

D. THERE IS NO BASIS FOR RESPONDENTS' REQUEST FOR EXPANSIVE REMEDIES.

37. Certain respondents ask the FCC to impose remedies relating to special access services that are far more expansive than those imposed in the SBC/AT&T proceeding. For example, Cbeyond asks that the FCC order divestiture of all of AT&T's local facilities in the BellSouth territory.[29] Access Point also asks requests divestiture of all of AT&T's facilities and customers in BellSouth's territory.[30] Both firms also request non-divestiture related conditions relating to pricing and requirements to provide unbundled network elements.

38. Such a request cannot be justified based on a comparison of AT&T deployment of local facilities in the BellSouth and legacy SBC regions. More specifically, AT&T had local fiber connections to about 2000 buildings in the legacy SBC region while it has local fiber connections to fewer than 320 buildings in the BellSouth region. In addition, AT&T wholesale local private line sales in the BellSouth region are less than 10 percent of those in the legacy SBC region.

39. More generally, respondents provide no economic basis for granting more expansive relief than that imposed by the DOJ in the SBC/AT&T merger. In the SBC/AT&T merger, the DOJ imposed a remedy in buildings where AT&T was the only CLEC serving a building (e.g., 2 to 1 situations). In other situations (e.g., 3 to 2), there is no necessary basis to conclude that a merger will adversely affect competition because the existence of multiple CLECs in a building can indicate (i) that demand conditions at the building are sufficient to attract entry by multiple CLECs and (ii) that multiple CLECs have the capability of serving the building. In addition, the sunk costs of the

29. Cbeyond Comments, p. 109.
30. Access Point, p. 65.

facilities used to deploy dedicated access services are another factor that stimulates competition.

40. The remedy required by the DOJ reflects its assessment of competitive conditions and was informed by a full evaluation of a variety of sources including "millions of pages of documents, scores of interviews, network maps, lists of online buildings" and other information.[31]

E. RESPONDENTS FAIL TO IDENTIFY MERGER-RELATED HARM IN THE PROVISION OF SPECIAL ACCESS SERVICES DUE TO INCREASED VERTICAL INTEGRATION.

1. Respondents raise no new concerns and present no evidence to support their concerns about vertical integration.

41. As noted above, certain respondents claim that the merger will increase the incentive of the merged firm to discriminate against downstream rivals in the provision of special access services. More specifically, they claim that the merged firm will raise special access prices and/or degrade the quality of service provided to downstream rivals that use special access services provided by BellSouth to provide retail business services in competition with those provided by AT&T.

42. These concerns are similar to those raised by opponents to the SBC/AT&T transaction and discussed in our Reply Declaration in that matter, and rejected by the FCC in approving the SBC/AT&T merger.[32] Respondents present no new analysis or data to support this concern. For example, respondents present no evidence that, at least

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31. Reply of the United States to ACTel's Opposition to the United States' Motion for Entry of the Final Judgments, p. 16.
32. See Reply Declaration of Dennis W. Carlton and Hal S. Sider, WC Docket No. 05-65, In the Matter of SBC Communications and AT&T Corp. Applications for Approval of Transfer of Control, May 9, 2005, ¶¶ 63-73 (hereafter Carlton/Sider SBC/AT&T Reply).

to date, the SBC/AT&T and MCI/Verizon mergers have resulted in higher prices or greater technical discrimination in the provision of special access services to downstream rivals.

2. Sprint's claim is inconsistent with industry experience.

43. Sprint's claim that the proposed transaction increases the merged firm's incentives to discriminate in providing special access services to Cingular's rivals in the provision of wireless service raises only a minor variation on previously presented concerns about increased discrimination resulting from vertical integration.

44. More specifically, Sprint claims that BellSouth's incentive to discriminate against Cingular's rivals (such as Sprint) is currently reduced by the fact that, as a part owner of Cingular, BellSouth reaps only 40 percent of the gains from wireless traffic diverted to Cingular from rival wireless carriers. Sprint claims that competition will be harmed after the proposed transaction because the merged firm will be fully integrated and thus will gain 100 percent of any benefits generated by discriminating against rival wireless carriers.[33]

45. Because the post-merger AT&T would face the same incentives as other ILECs that own 100 percent of wireless service providers, Sprint's claim implies that existing vertical integration between wireless firms and ILECs would lead to discrimination against rival wireless carriers and would give ILECs an advantage in competition with non-affiliated carriers. Sprint, however, presents no evidence to support these views.

33. Sprint Comments, pp. 9-10.

46. Historically, ILECs (including each RBOC as well as independent LECs including Sprint and GTE) have been affiliated with entities that provide wireless services. Further, while AT&T, BellSouth and Verizon today participate in wireless services through joint ventures, these carriers and their predecessors previously had complete ownership of their wireless affiliates. Likewise, Sprint until very recently was a LEC and has wholly owned wireless operations. Despite the presence of these vertically integrated carriers, there has been massive investment and widespread deployment of national and regional wireless networks both by firms with no ILEC affiliation as well as expansion by ILECs outside their footprint, where they gain no advantage from vertical integration.

47. The success of Verizon, Cingular and Sprint outside the footprints served by their ILEC parents, as well as the success of T-Mobile, Nextel (since acquired by Sprint) and AT&T Wireless (since acquired by Cingular), all unaffiliated with ILECs, indicates that the alleged discrimination of the type alleged by Sprint is not of competitive significance. Similarly, past decisions by ILECs such as Qwest and Pacific Telesis to divest their wireless subsidiaries, as well as Sprint's recent decision to divest its own ILEC operations, are inconsistent with Sprint's claims that vertical integration between an ILEC and a wireless carrier can benefit itself and harm competition by disadvantaging non-integrated wireless carriers.

48. While there is no need to fully recount the history of the wireless industry, it is important to note that it has been characterized by explosive growth in subscribers served and in minutes of use as well as by dramatic declines in price per minute of use.

All of these facts are inconsistent with Sprint's concerns that full integration between Cingular and AT&T will adversely affect rival wireless carriers.

49. Sprint's concerns that discrimination against rival wireless carriers will harm competition are further undermined by the fact that special access accounts for only a small portion of the costs faced by wireless carriers. For Cingular, for example, we understand based on discussions with Cingular that costs of special access and transport services accounted for less than five percent of its total costs in 2005. Under these circumstances, even a significant increase in special access prices would not be expected to have a significant impact on wireless carriers.

3. Respondents raise concerns that are independent of the proposed merger.

50. The theoretical concerns about increased special access discrimination raised by the merger opponents derive from BellSouth's alleged market power in the provision of special access service. If special access services are competitively supplied, there can be no concern that the proposed transaction will create an incentive to raise special access prices or to engage in technical discrimination against downstream rivals.

51. However, even if concerns relating to ILECs' position in the provision of special access services exist, then they apply industry wide, not just in BellSouth's region. Such concerns are appropriately addressed in the regulatory arena, not in the context of a merger review. Such a review would also appropriately consider efficiency benefits resulting from vertical integration.

52. As discussed further below, the proposed transaction also would not increase the ability of the merged firm to engage in technical discrimination as the performance of ILECs in providing special access services is now widely reported and

monitored. As we noted in our initial declaration AT&T tracks 2.3 million performance measures on a monthly basis which are readily monitored by regulators and rivals.[34]

CONCLUSION – SPECIAL ACCESS

53. Respondents fail to identify significant merger-related harm in the provision of special access services. Application of the general approach taken by the DOJ in the SBC/AT&T transaction shows that all but a small number of buildings raise no potential competitive concerns. Respondents also fail to identify merger-related harm in the provision of special access services due to increased vertical integration. For example, Sprint's claim that the merger will increase incentives to discriminate in the provision of special access services to rival wireless carriers is inconsistent with industry experience. Given the Commission's on-going jurisdiction over special access pricing and the DOJ's investigation in this matter of building-specific special access issues, among others, we conclude that there is no basis for the FCC to impose merger conditions relating to special access.

34. See Carlton/Sider Declaration ¶ 140.

III. THE PROPOSED TRANSACTION RAISES NO CONCERN REGARDING HARM TO COMPETITION IN THE PROVISION OF BROADBAND WIRELESS SERVICES.

A. OVERVIEW OF RESPONDENTS' COMMENTS[35]

54. Various respondents express the concern that the merged firm will "warehouse" its unused wireless spectrum in order to impede entrants and nascent competitors and harm competition in the provision of wireless services that compete with mobile broadband services and DSL services provided by AT&T. [36]

55. These respondents request that approval of the transaction be conditioned on divestiture of spectrum by the merged firm. Clearwire requests that the transaction be conditioned on the divestiture of the combined firm's 2.5 GHz spectrum.[37] Declarants for the Consumer Federation of America request that approval of the proposed transaction should be conditioned on divestiture of the firms' 2.3 WCS and 2.5 BRS spectrum. Cbeyond[38] and the Center for Digital Democracy also argue that the Commission should require the divestiture of BellSouth's spectrum.[39]

56. This section shows that there is no merit to respondents' claims that the proposed transaction will harm competition in the provision of wireless broadband services because:

- There is much spectrum available to potential entrants and nascent competitors for the provision of wireless broadband services;
- Post-transaction, AT&T will have only limited holdings of such spectrum;

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35. These comments are more fully summarized and cited in Appendix 1.
36. See, generally, Clearwire Comments, Cooper/Roycroft Comments, Center for Digital Democracy Comments, and Cbeyond Comments.
37. Clearwire Comments, pp. 17-18.
38. Cbeyond Comments, pp. 109-110.
39. Center for Digital Democracy Comments, p. 6.

- There is very limited overlap in the merging firms' holdings of such spectrum, so the proposed transaction has no material impact on its incentive to "warehouse" spectrum; and
- AT&T already faces significant competition in the provision of both wireless and landline broadband services, which implies that there is no basis to conclude that any "warehousing" strategy would be successful, and thus no basis to assume it would be attempted.
- Respondents' claims imply that the 2.5GHz spectrum band is a relevant market without recognizing that other spectrum bands can be used to provide the same or similar services.

B. OVERVIEW OF WIRELESS BROADBAND SERVICES

1. Types of wireless broadband services

57. "Wireless broadband services" include three distinct types of service: (i) mobile broadband services; (ii) fixed (point to multipoint) wireless broadband services; and (iii) point-to-point wireless broadband services.

Mobile Broadband Services

58. Mobile broadband services provide subscribers with wireless broadband access to the Internet with full mobility within the network coverage area. Network connections for subscribers that are in transit are handed off between transmitters in precisely the same way that wireless voice calls are handed off.

59. Cingular is in the process of deploying mobile broadband services. It now offers service in 16 metropolitan areas and has announced plans to deploy services in

most of the top 100 metropolitan areas by the end of 2006.[40] Verizon Wireless and Sprint each began network deployment earlier than Cingular and now both offer services in over 150 metropolitan areas.[41] Alltel has also recently deployed mobile broadband services[42] and T-Mobile is also expected to deploy mobile broadband services, although the expected date of their deployment is unknown.[43]

60. Cingular, Verizon Wireless and Sprint each offer two types of services: (i) Internet access for laptop users; and (ii) entertainment-based services accessed on handsets. Each of these services is provided over cellular and PCS spectrum using the facilities also used for wireless voice service.

Fixed Broadband Services

61. Fixed broadband services provide subscribers wireless broadband access to the Internet within an area served by a fixed transmitter. These services provide "point to multipoint" connections and are "portable" in the sense that they allow subscribers to move within the coverage of a transmitter. However, they are not "mobile" because network connections are not handed off between transmitters when the subscriber is in-transit.

62. Fixed broadband services include "WiFi," the service deployed in a variety of airports and public areas by T-Mobile. A number of "WiMax" services which cover larger service areas than WiFi systems are being developed by a variety of firms

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40. BellSouth, "BLS Investor News," April 20, 2006, p. 11.
41. http://www.verizonwireless.com/b2c/mobileoptions/broadband/serviceoverview.jsp; http://www2.sprint.com/mr/news_dtl.do?id=11040
42. Alltel's Axcess Broadband product is currently available in 11 metropolitan areas as of June 8, 2006. See http://www.alltel.com/business/enhanced/mobilelink_coverage.html.
43. Morgan Stanley Equity Research, "Cross-industry insights: the North American 3G wireless report," February 28 2006, p. 4.

using different spectrum bands. Fixed broadband services are expected to compete for certain subscribers now served by cable modem and DSL services.[44]

Point to Point Broadband Services

63. "Point to point" wireless services connect two fixed locations. These services are often used as substitutes for special access services provided on landline facilities and may not be close substitutes for mobile and fixed broadband services. Respondents' comments focus on mobile and fixed broadband services rather than point to point services. Therefore, we focus on spectrum that various parties claim is suited to mobile and fixed services.[45]

2. Spectrum available to provide mobile and fixed broadband services

64. As noted above, the major wireless carriers have deployed mobile broadband services using the cellular and/or PCS spectrum used to provide wireless voice service. There are also a variety of other spectrum bands that various parties have identified as being suitable to use for mobile and fixed broadband services. These spectrum bands are summarized in Table 3.1 and are discussed in more detail below.

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44. FCC, In the Matter of Applications of Nextel Communications, Inc. and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 05-63, Memorandum Opinion and Order, August 2, 2005 , ¶167, hereafter, Sprint-Nextel Order.
45. We understand that AT&T owns spectrum in the 39 GHz band while Cingular and BellSouth do not own spectrum in any of these bands.

Table 3.1

Spectrum Identified as Available for Mobile and/or Portable Broadband Wireless Services

Spectrum Band	MHz	Licensing Status
Lower 700 MHz	18	Current
Lower 700 MHz	30	Future[46]
Upper 700 MHz	6	Current
Upper 700 MHz	30	Future[47]
SMR 800 MHz	14	Current
Cellular 850 MHz	50	Current
SMR 900 MHz	5	Current
WCS 1.4 GHz	8	Future[48]
WCS 1.6 GHz	5	Current
AWS 1.7-2.1 GHz	90	August 2006[49]
PCS 1.9 GHz	130	Current
AWS 1.915-2.180 GHz	40	Future[50]
WCS 2.3 GHz	30	Current
ISM 2.4 GHz ISM	83.5	Unlicensed
BRS/EBS 2.5 GHz	194	Current
U-NII 5 GHz	555	Unlicensed

Note: Additional sources discussed in text.

65. The FCC has identified various spectrum bands as suitable for the provision of mobile and fixed wireless broadband services and has stated that it will be making additional suitable spectrum available. In the Commission's 6th CMRS (Commercial Mobile Radio Services) Competition Report, it discussed spectrum bands below 6 GHz:

46. http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=N2
47. http://wireless.fcc.gov/auctions/default.htm?job=auction_factsheet&id=31
48. http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=N7
49. http://wireless.fcc.gov/auctions/default.htm?job=auction_factsheet&id=66
50 FCC News Release, "FCC Designates Spectrum For Advanced Wireless Services And Proposes Licensing And Service Rules," September 9, 2004.

> these bands have similar technical characteristics, because they are used to offer similar services, and because many lowerband operators employ more than one of these bands to offer these services…[51]

66. More specifically, the FCC found that lower-band operators:

> … generally offer high-speed Internet access at around 1.5 Mbps to residential and small office/home office customers in a range of geographic areas that includes rural and underserved areas.[52]

67. The FCC analysis covered only spectrum in commercial use as of 2001, including cellular spectrum, PCS spectrum, MDS (which included 2.1-2.2 GHz spectrum and 2.5-2.7 GHz spectrum at the time), WCS spectrum, and unlicensed spectrum including the 900 MHz band, the 2.4 GHz band, and the 5 GHz band.[53] The FCC also identified SMR spectrum as intended for "mobile voice and data" services and 700 MHz spectrum as intended for "interactive data."[54] Since the FCC's 2001 6th CMRS report, some spectrum allocations have changed and the FCC has announced that additional spectrum in this range will be licensed.[55]

68. The FCC also identified additional spectrum suitable for mobile broadband services in its Sprint-Nextel Order and explained that the 2.5 GHz band that is the focus of respondents' attention "does not appear to be a uniquely suitable input for any specific market."[56] In discussing mobile and fixed wireless broadband services, the FCC noted that:

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51. FCC, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Sixth Report, June 20, 2001, p. A-5, hereafter 6th CMRS Report.
52. 6th CMRS Report, p. A-4.
53. 6th CMRS Report, pp. A-2 – A-4.
54. 6th CMRS Report, p. B-2.
55. For a more general overview of spectrum uses, see also the National Telecommunications and Information Administration's U.S. Frequency Allocation Chart. http://www.ntia.doc.gov/osmhome/allochrt.pdf.
56. Sprint-Nextel Order, ¶151.

> The onset of competitors' needs for additional spectrum generally will align with the arrival of suitable spectrum in future auctions, including those for Advanced Wireless Services (AWS.)[57] [...] [S]ubstantial opportunities exist for service providers to develop and offer even higher speed services over numerous spectrum blocks that will become available in the future.[58]

69. The first of these auctions is scheduled to occur in August 2006, when the FCC is auctioning 90 MHz of AWS (1.7 to 2.1 GHz) spectrum. The FCC has stated that this spectrum "can be used to offer a variety of wireless services, including Third Generation ('3G') mobile broadband and advanced wireless services."[59]

70. Various other sources also identify spectrum suitable for wireless broadband services. For example, the research firm NPRG reports that:

> Though the entire spectrum is capable of supporting each of these types of wireless communications services, mobile wireless service is provided primarily in the 800 MHz-1.9 GHz range, portable wireless primarily in the 2.4-5.8 GHz range, and fixed wireless primarily in the 10-90 GHz range.[60]

NPRG also notes:

> Numerous frequency bands below 6 GHz are used for fixed, portable, and mobile wireless communications. [...] Indeed, with Wi-Fi, WiMax, and pre-WiMax services deployed and in development, broadband wireless is primarily a sub-6 GHz service offering.[61]

71. In addition, companies holding spectrum in the lower and upper 700 MHz and 1.6 GHz ranges are deploying wireless broadband services. For example, Aloha Partners, a holder of "lower 700 MHz" licenses, states that "700 MHz is the optimum spectrum to deliver wireless broadband."[62] Access Spectrum LLC, a holder of "upper

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57. Sprint-Nextel Order, ¶151.
58. Sprint-Nextel Order, ¶156.
59. http://wireless.fcc.gov/services/index.htm?job=service_home&id=aws
60. NPRG, Fixed Wireless Carriers Report, 2006, Chapter 1, p. 1.
61. NPRG, Fixed Wireless Carriers Report, 2006, Chapter 3, p. 15.
62. http://www.flarion.com/new/pr_2004/101404.asp.
http://www.alohapartners.net/townsend.htm.

700 MHz" licenses, states that "the Upper and Lower 700 MHz bands [are] particularly desirable for broadband applications..."[63] Crown Castle, a holder of 1.6 GHz spectrum with a national footprint, has reported that it is testing a network broadcasting digital video to handsets.[64]

72. As mentioned by the FCC, unlicensed spectrum also is used in the provision of broadband wireless services (e.g., T-Mobile "Hot Spots") and has the prospect of being more fully utilized. In a working paper, FCC staff summarized comments from Microsoft and others submitted to the FCC's Spectrum Policy Task Force highlighting the potential use of unlicensed spectrum for broadband wireless services.

> The Spectrum Policy Task Force sought comment from the industry about whether additional spectrum should be set aside for unlicensed use. [...] Commenters generally expressed support for the allocation of additional unlicensed spectrum. For example, Microsoft argued that [unlicensed spectrum] could be used to supplement cable and DSL services and could "jump-start" the creation of competitive wireless broadband networks in the U.S. Similar support for additional unlicensed spectrum was expressed by Cingular, Cisco Systems, Inc., the Consumer Federation of America, Ericsson, Information Technology Industry Council, Motorola, Proxim, Rural Telecommunications Group, Wireless Ethernet Compatibility Alliance and others. In their joint reply comments, the New America Foundation, Consumers Union, *et al,* state that there is tremendous support in the record for the allocation of additional frequency bands of spectrum for unlicensed use, particularly to facilitate broadband wireless networking.[65]

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63. "Implementing the Vision for 700 MHz: Rebanding the Upper 700 MHz A and B Blocks for Next-Generation Wireless Broadband," White Paper submitted by Access Spectrum et al to the FCC in WT Docket No. 05-157, p. App. 3, available at http://www.accessspectrum.com/images/ASLWhitePaper080305.pdf.
64. Crown Castle International Corp, 10-K, December 31, 2005, p. 9.
65. Kenneth R. Carter, Ahmed Lahjouji and Neal McNeil, "Unlicensed and Unshackled: A Joint OSP-OET White Paper on Unlicensed Devices and Their Regulatory Issues," FCC OSP Working Paper Series 39, May 2003, p. 48.

3. Spectrum held by AT&T, BellSouth and Cingular

73. AT&T and BellSouth hold licenses in certain geographic areas for portions of certain spectrum bands that can be used to provide wireless broadband services. These include:

- **WCS:** AT&T and BellSouth each hold licenses in the WCS spectrum in a range of areas and there is limited overlap in the firms' geographic coverage. BellSouth holds WCS licenses in certain areas in AT&T's ILEC territory (including parts of Southern California, Missouri, Wisconsin, and Texas). None of AT&T's WCS licenses are in BellSouth's territory. Additionally, none of AT&T's WCS licenses overlap BellSouth's BRS/EBS spectrum (discussed below) with the exception of one license that covers a portion of one county in Indiana. Post-transaction, AT&T will have a near national WCS footprint, although it will not have spectrum in several significant areas including New York, Philadelphia, Dallas, San Antonio and surrounding areas. The average bandwidth held by AT&T and BellSouth in the 428 areas in which they have WCS spectrum (calculated as a population-weighted average across areas) is 15.4 MHz.
- **BRS/EBS:** BellSouth holds BRS/EBS licenses or leases in 34 areas that are exclusively within its nine-state territory, with the exception of parts of southern Illinois and Indiana. AT&T does not hold BRS/EBS licenses. The (population-weighted) average bandwidth held by BellSouth in these areas is roughly 90 MHz.

- **Cellular / PCS:** Cingular has a near-national cellular/PCS footprint. The (population-weighted) average bandwidth held by Cingular in the PCS and cellular spectrum bands is 48 MHz.

C. THE TRANSACTION DOES NOT INCREASE AT&T'S ABILITY TO FORECLOSE ENTRY INTO THE PROVISION OF MOBILE OR FIXED WIRELESS SERVICES IN ANY GEOGRAPHIC AREA.

74. As discussed above, respondents claim that the transaction increases the ability of AT&T to exclude potential entrants into the provision of mobile or fixed broadband services by "warehousing" spectrum capable of providing wireless broadband services.

75. Moreover, as noted above, there is virtually no geographic overlap in the holdings by AT&T and BellSouth of WCS or BRS spectrum. Thus, the transaction does not increase the merged firm's ability to foreclose potential entrants by "warehousing" unused spectrum and denying it to potential entrants. That is, with only very limited (and competitively insignificant) exceptions there will be no increase in any given geographic area in the amount of unused spectrum held by the merged firm, and thus no change in the availability of wireless broadband spectrum to compete with the Applicants in any area.

D. THE MERGED FIRM ACCOUNTS FOR A MODEST NATIONWIDE SHARE OF SPECTRUM SUITABLE FOR THE PROVISION OF MOBILE AND FIXED BROADBAND SERVICES.

76. The merged firm will account for only a modest share of spectrum available for fixed or mobile broadband services. Using the bands of spectrum identified by various parties as available for wireless broadband services, we calculate AT&T's post-merger spectrum share in a variety of ways, alternatively including or excluding

unlicensed spectrum, including and excluding spectrum that will be auctioned in the future, and including or excluding cellular/PCS spectrum. These shares are sufficiently low to indicate there should be no significant concern that AT&T will be able to harm competition based on access to spectrum.

77. While these shares are indicative of AT&T average post-merger holdings, calculations such as these should be considered as approximate because of complications due to the geographic differences in territories covered by license areas across spectrum bands, differences in technical characteristics of spectrum bands suitable for mobile and/or fixed broadband services, and variation in spectrum shares across areas. The methodology used to calculate these approximate shares is summarized in Appendix 2.

Table 3.2

AT&T's Approximate Post-Transaction Share of Spectrum Identified as Suitable for Mobile and/or Fixed Broadband Services

(Populated Weighted Average Share in Areas in which AT&T or BellSouth has WCS or BRS Spectrum)

Spectrum Status	CMRS Excluded	CMRS Included
Currently licensed	10.3 %	16.1%
Currently licensed, auction scheduled or expected	5.8 %	11.2%
Currently licensed, auction scheduled or expected, unlicensed	2.4%	5.6%
Note: Based on spectrum bands reported in Table 3.1.		

78. Table 3.2 first shows AT&T's share of currently licensed spectrum identified by various parties as available to potential or nascent entrants and suitable for the provision of mobile or fixed broadband services. The figures reflect population-weighted averages across the 428 areas in which AT&T will have spectrum.

- If we focus on currently licensed spectrum, AT&T would have roughly 10 to 16 percent of available spectrum, depending on whether CMRS spectrum is included;
- If we account for expected future auctions then AT&T's current share of identified spectrum is roughly 6 to 11 percent.
- Finally, accounting for unlicensed spectrum, AT&T's share would range from 2 to 6 percent.

E. THE MERGED FIRM FACES SUBSTANTIAL ACTUAL COMPETITION IN THE PROVISION OF BROADBAND SERVICES, ILLUSTRATING THAT IT HAS NO ABILITY TO HARM COMPETITION BY WAREHOUSING SPECTRUM.

79. Respondents argue that the merger will increase AT&T's incentive to warehouse spectrum in order to block competition for its DSL and mobile broadband services. However, the DSL and mobile broadband services provided by the post-transaction AT&T will continue to face significant competition in the provision of both landline and mobile broadband services as well as significant competition from potential entrants planning to use other spectrum. This competition arises from rivals who are able to use spectrum (and landline bandwidth) that would not be controlled by the merged firm. Therefore, the merged firm cannot use a warehousing strategy to harm competition.

1. Post-transaction AT&T will face substantial actual competition in the provision of mobile broadband services.

80. There is no basis to conclude that "warehousing" spectrum would be an effective mechanism for preventing competition for the new AT&T's mobile broadband services. As discussed above, mobile broadband services are currently provided by Cingular, Sprint Nextel, Verizon Wireless and Alltel, with T-Mobile expected to deploy

such services. T-Mobile currently provides non-mobile wireless broadband services over unlicensed spectrum through "hot spots." As noted above, Verizon Wireless and Sprint both have mobile broadband networks that are now more widely deployed than Cingular's. These competitors do not need to rely on spectrum that the merged firm would control. Under these circumstances, any attempt to warehouse spectrum in order to protect landline or wireless services from competition will instead result in the loss of customers to rival carriers.

2. Post-transaction AT&T will face substantial actual competition in the provision of landline broadband services.

81. There is also no basis to conclude that "warehousing" spectrum would be an effective mechanism for preventing competition for AT&T's DSL services. These services already face significant competition from cable modem services in addition to competition from mobile broadband services and potential and nascent competition from other wireless broadband suppliers, including community-wide WiFi networks.[66] Today, less than 40 percent of the 42.8 million landline broadband customers in the United States obtain DSL service, with the vast majority of the others obtaining cable modem services.[67]

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66. See, for example, San Francisco Chronicle, "Santa Clara ready for wireless MetroFi to finish one of largest Wi-Fi networks in nation," April 19, 2004; CNN Money.com, "Google bids to take San Francisco Wifi," http://money.cnn.com/2005/10/03/technology/google_wifi/; and Washington Technology, "Philadelphia Broadcasts Change," http://www.washingtontechnology.com/news/20_9/statelocal/26152-1.html.
67. FCC, "High-Speed Services for Internet Access: Status as of June 30, 2005," April 2006, Table 1. Roughly another 1.0 million obtain broadband Internet access through satellite, wireless, or "other" technologies.

3. Post-transaction AT&T will face substantial competition from nascent and potential competitors with large spectrum holdings.

82. Finally, there is no basis to conclude that "warehousing" spectrum would be an effective mechanism for preventing competition from nascent and potential competitors, some of which already have large spectrum holdings.

- Sprint Nextel has a near nationwide footprint of BRS/EBS spectrum that averages more than 80 MHz. Sprint and Nextel explained in their merger proceedings that they "envision using BRS-EBS spectrum to provide wireless interactive multimedia services that – unlike CMRS – will be video-optimized, data-centric and focused principally on stationary and portable consumer electronic and computing-oriented devices and hardware."[68] The FCC concluded that Sprint-Nextel's combined BRS/EBS spectrum, which is larger than the post-transaction AT&T's, does not give it a unique or excessive competitive advantage in providing wireless broadband services.[69] As mentioned above, Sprint also is currently a provider of broadband wireless services.
- Clearwire claims that it "is among the largest holders of spectrum in the 2.5 GHz BRS/EBS spectrum through either license or lease and is seeking to acquire more spectrum in this band."[70] Clearwire's SEC filings state that it is the second largest holder of BRS/EBS spectrum, and that its spectrum covers roughly 160 million people.[71]

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68. Sprint-Nextel Joint Opposition to Petition to Deny and Reply to Comments, April 11, 2005, pp. 30-31.
69. Sprint-Nextel Order, ¶147, ¶151.
70. Clearwire Comments, p. 5.
71. Clearwire S-1, May 11, 2006, p. 44.

83. Again, the presence of these potential and/or nascent rivals means that an attempt by AT&T to warehouse spectrum will result in the loss of customers to rival carriers, not protection of existing landline or wireless services, and thus implies that such a strategy would not be undertaken.

CONCLUSION – WIRELESS BROADBAND

84. The transaction raises no concerns regarding harm to competition in the provision of broadband wireless services. There is no support for respondent's argument that the transaction would increase AT&T's ability to foreclose entry into the provision of broadband wireless services. In addition, the merged firm will account for a modest nationwide share of spectrum suitable for broadband wireless services and thus does not have ability to harm competition by denying access to spectrum.