

ALAMOSA HOLDINGS INC
Form 424B3
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Registration No. 333-122642

PROSPECTUS

ALAMOSA HOLDINGS, INC.

218,054 Shares of Common Stock
300,000 Warrants to Purchase Shares of Common Stock

This prospectus relates to the resale from time to time by the selling securityholders named herein of:

- 300,000 warrants initially sold by iPCS, Inc. in its units offering completed on July 12, 2000, which we refer to collectively as the iPCS warrants. Any iPCS warrant that is resold by a selling securityholder pursuant to this prospectus and the registration statement of which this prospectus is a part, is referred to as a "registered iPCS warrant."
- 209,880 shares of our common stock issuable upon the exercise of the iPCS warrants.

This prospectus also relates to the issuance by us from time to time of 218,054 shares of our common stock issuable upon the exercise of:

- 8,620 warrants initially sold by AirGate PCS, Inc. in its units offering completed on September 30, 1999. We refer to these warrants as the AirGate warrants; and
- registered iPCS warrants.

The warrants were assumed by us in connection with our acquisition of AirGate, which was completed on February 15, 2005.

We will pay all expenses of this offering, other than commissions and discounts of broker-dealers and market makers.

We will not receive any cash proceeds from the resale of iPCS warrants and shares of our common stock by the selling securityholders, but we will receive the proceeds from the exercise of the warrants.

Our common stock is listed on The Nasdaq National Market under the symbol "APCS." The last reported sale price of our common stock on March 31, 2005 was \$11.67 per share.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD CAREFULLY CONSIDER THE RISK FACTORS BEGINNING ON PAGE 4 OF THIS PROSPECTUS BEFORE YOU MAKE AN INVESTMENT IN OUR SECURITIES.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Prospectus dated April 1, 2005.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission using a "shelf" registration process. Under this shelf process, we may issue the shares of our common stock described in this prospectus in one or more offerings as a result of the exercise of registered iPCS warrants and the AirGate warrants. The selling securityholders may also sell the iPCS warrants and the shares of our common stock issuable upon exercise of the iPCS warrants under this prospectus. We will not receive any proceeds from any sale of iPCS warrants or shares of our common stock by the selling securityholders. This prospectus provides you with a general description of the securities that we and the selling securityholders may offer. You should read both this prospectus and the additional information described under the heading "Where You Can Find More Information."

Unless the context otherwise requires, in this prospectus the terms "we," "our" or "us" refer to Alamosa Holdings, Inc, "AirGate" refers to AirGate PCS, Inc. and "iPCS" to iPCS, Inc., a former subsidiary of AirGate. "Sprint PCS" refers to Sprint Communications Company, L.P., Sprint Spectrum L.P. and WirelessCo, L.P. "Sprint" refers to Sprint Corporation and its affiliates. A "PCS Affiliate of Sprint" is an entity whose sole or predominant business is operating (directly or through one or more subsidiaries) a personal communications service business pursuant to affiliation agreements with Sprint Spectrum, L.P. and/or its affiliates, or their successors. "Sprint PCS products and services" refers to digital wireless personal communication services, including wireless voice and data services, and related retail products, including handsets, in any case, offered under the Sprint brand name. Statements in this document regarding Sprint or Sprint PCS are derived from information contained in AirGate's and Alamosa's affiliation agreements with Sprint PCS, periodic reports and other documents filed by Sprint and Sprint Spectrum L.P. with the Securities and Exchange Commission, or press releases issued by Sprint or Sprint PCS.

You should rely only on the information contained in or incorporated by reference in this prospectus. We have not authorized anyone to provide you with information different from that contained in or incorporated by reference in this prospectus. We and the selling securityholders are offering shares of our common stock and warrants to purchase common stock, as applicable, and seeking offers to buy such securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock or warrants.

PROSPECTUS SUMMARY

This summary provides a brief overview of Alamosa. For more complete information on Alamosa and our consolidated financial statements, and a more complete understanding of the terms of the offered securities, before making your investment decision you should carefully read this prospectus, the relevant prospectus supplement, if any, and the documents referred to in "Where You Can Find More Information."

Alamosa Holdings, Inc.

We are the largest PCS Affiliate of Sprint in terms of subscribers. We have the exclusive right to provide wireless mobility communications services under the Sprint brand name in our licensed territory, which includes portions of Texas, New Mexico, Arizona, Colorado, Wisconsin, Arkansas, Illinois, Oklahoma, Kansas, Missouri, Washington and Oregon. We launched Sprint PCS products and services in our first market in June 1999 and, as of December 31, 2004, operated in the 88 basic trading areas assigned to us under our affiliation agreements with Sprint PCS.

At December 31, 2004, our territory had a total population, which we refer to as "POPs," of approximately 15.8 million, of which our network covered approximately 12.9 million. For the twelve months ended December 31, 2004, we generated \$803 million in revenue, \$130 million in cash flows from operating activities and reported a net loss of approximately \$17 million. As of December 31, 2004, we had approximately 915,000 subscribers, representing a market penetration rate of approximately 7.0%.

The principal office of Alamosa is located at 5225 S. Loop 289, Lubbock, TX, telephone number (806) 722-1100.

Acquisition of AirGate PCS, Inc.

On February 15, 2005 we completed the acquisition of AirGate PCS, Inc. AirGate is a PCS Affiliate of Sprint and has the right to provide wireless communications services under the Sprint brand name in its licensed territory, which includes most of the state of South Carolina, parts of North Carolina and the eastern Georgia cities of Augusta and Savannah. As of December 31, 2004, AirGate's licensed territory had a total population of 7.4 million residents, of which its network covered 6.1 million residents. As of December 31, 2004, AirGate had approximately 400,000 subscribers.

Subsequent to the acquisition of AirGate in February 2005, we have a licensed territory encompassing over 23 million residents. Within this territory, the combined company provides coverage to approximately 19 million POPs. Combined subscribers as of December 31, 2004 were approximately 1.3 million. The acquisition of AirGate will be accounted for as a purchase and the results of operations of AirGate will be included in our results of operations from the date of acquisition.

Recent Developments.

Sprint/Nextel Merger

On December 15, 2004, Sprint Corporation and Nextel Communications, Inc. announced that their boards of directors unanimously approved a definitive agreement for a merger of equals. Nextel Communications currently operates a wireless mobility communications network in certain territories in which Alamosa provides digital wireless mobility communications network services under the Sprint or affiliated brands.

Alamosa and Sprint have had only very preliminary communications regarding the potential impact on Alamosa of the pending Sprint-Nextel transaction. Alamosa believes that, based on

currently available information, and assuming that no changes are effected with respect to Sprint's agreements with Alamosa's operating subsidiaries, Sprint could be in violation of the exclusivity provisions of AirGate's agreements with Sprint upon completion of the Sprint-Nextel transaction and Sprint could be in violation of the exclusivity provision of the agreements between Alamosa's other operating subsidiaries and Sprint at some point following completion of the Sprint-Nextel transaction.

Sprint's agreements with each of Alamosa's operating subsidiaries provide for specific remedies in the event of a material violation by Sprint of such agreements if not cured within an applicable time period. Neither Alamosa nor any of its executives has made any definitive determination as to the impact on the value of Alamosa or its business of any of such remedies or whether any such remedy would be more or less favorable to Alamosa or its shareholders than are its existing arrangements with Sprint or any possible renegotiated arrangements with Sprint.

Alamosa is committed to working with Sprint to reach mutually agreeable arrangements with respect to these matters. However, there can be no assurances that Alamosa and Sprint will be able to reach mutually acceptable arrangements or as to the terms of any such arrangements or the likely impact on Alamosa of any such arrangements.

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The Offering.

Securities offered by Alamosa	218,054 shares of our common stock issuable upon the exercise of the AirGate warrants and registered iPCS warrants.
Securities offered by the selling securityholders	300,000 iPCS warrants to purchase shares of our common stock and up to 209,880 shares of our common stock issuable upon the exercise of iPCS warrants.
Use of Proceeds	<p>We estimate that our net proceeds from the exercise of all the warrants would be approximately \$15.6 million. We would use the proceeds for general corporate purposes, which may include:</p> <ul style="list-style-type: none"> • providing working capital; • purchasing or repaying debt; and • funding capital expenditures, including paying for acquisitions. <p>We will not receive any proceeds from the resale of the 300,000 iPCS warrants or any shares of our common stock issuable upon the exercise of such iPCS warrants by the selling securityholders. All such proceeds will be received by the selling securityholders.</p>
The Nasdaq National Market symbol	"APCS"

Risk Factors	Before investing in our common stock or the iPCS warrants, you should carefully read and consider the information set forth in "Risk Factors" beginning on page 4 of this prospectus and all other information appearing elsewhere and incorporated by reference in this prospectus and any accompanying prospectus supplement.
Summary of Terms of the iPCS Warrants.	
Warrants Offered	300,000 iPCS warrants.
Exercise	Each iPCS warrant entitles the holder to purchase, prior to the expiration date, 0.6996 shares of our common stock, at an exercise price of \$74.34 per share, subject to adjustment from time to time upon the occurrence of certain events. The last reported sale price of our common stock on March 31, 2005 was \$11.67 per share.
Expiration Date	Any iPCS warrant not exercised prior to July 15, 2010 will expire.

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RISK FACTORS

Risks Related to the Offering of the iPCS Warrants

Because the iPCS warrants are not listed on a securities exchange and because we can give no assurance that they will be so listed, purchasers of the iPCS warrants may not be able to sell their warrants at the price they desire, if at all.

We cannot assure you that a liquid market will develop for the iPCS warrants, that you will be able to sell the iPCS warrants at a particular time or at all, or that the prices you receive when you sell will be favorable. There is currently no public market for the iPCS warrants. Any market-making activity will be subject to limits imposed by the Securities Act of 1933 and other regulations, and may be limited during the pendency of any shelf registration statement. We do not intend to apply (and are not obligated to apply) for listing of the warrants on any securities exchange or any automated quotation system. Therefore, we cannot make any assurances as to the liquidity of any trading market for the warrants. Future trading prices of the warrants will depend on many factors, including our operating performance and financial condition and the market for similar securities.

You may not receive a return on investment in the iPCS warrants through dividends paid on the shares of our common stock issuable upon the exercise of the iPCS warrants.

We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Instead, we intend to retain future earnings to fund our growth. In addition, our existing indebtedness restricts, and we anticipate our future indebtedness may restrict, our ability to pay dividends. Therefore, you will not receive a return on your investment in the warrants by exercising the warrants and receiving a payment of dividends on the shares of our common stock issuable thereunder.

Risks Related to the AirGate Acquisition

We may fail to realize the anticipated benefits of the acquisition of AirGate completed in 2005.

The success of our merger with AirGate will depend, in part, on our ability to realize the anticipated growth opportunities, economies of scale and other benefits from combining our business with AirGate's business. To realize the anticipated benefits of this combination, our management team must develop strategies and implement a business plan that will:

- effectively manage the networks and markets of AirGate and Alamosa;
- effectively manage the marketing and sales of the services of AirGate and Alamosa;
- successfully retain and attract key employees of the combined company, including management, during a period of transition and in light of the competitive employment market; and
- maintain adequate focus on existing businesses and operations while working to integrate the two companies.

If we do not realize economies of scale and other anticipated benefits as a result of the merger, the value of our common stock may decline.

Risks Related to our Business, Strategy and Operations

We may not be able to sustain our planned growth or obtain sufficient revenue to achieve and sustain profitability.

During 2002 and 2003, we experienced overall declining net subscriber growth compared to periods prior to 2002. This trend was attributable to increased competition and slowing aggregate subscriber growth in the wireless telecommunications industry. We are currently experiencing net losses as we continue to add subscribers, which requires a significant up-front investment to acquire those subscribers. Although we experienced an increase in subscriber growth in 2004, if net subscriber growth does not continue to improve or declines for an extended period of time, it may lengthen the amount of time it will take for us to reach a sufficient number of subscribers to achieve profitability.

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We may not achieve or sustain operating profitability or positive cash flows, which may result in a drop in our stock price.

We have a limited operating history and have incurred significant losses to date. Our future operating profitability and cash flows from operating activities will depend upon many factors, including, among others, our ability to market Sprint PCS products and services, achieve projected market penetration and manage subscriber turnover rates. We will have to dedicate a substantial portion of any future cash flows from operations to make interest and principal payments on our consolidated debt, which will reduce funds available for other purposes. If we do not maintain positive cash flows from operations, or if our operating cash flows are insufficient to cover our debt obligations in the future, we may be unable to conduct our business in an effective or competitive manner. As a result, our stock price could fall and our stockholders could lose all or part of their investment.

If we receive less revenue or incur more fees than we anticipate for PCS roaming from Sprint, our results of operations may be negatively affected.

We are paid a fee from Sprint or a PCS Affiliate of Sprint for every minute that Sprint's or that affiliate's subscribers use our portion of the PCS network of Sprint. Similarly, we pay a fee to Sprint or another PCS Affiliate of Sprint for every minute that our subscribers use the PCS network of Sprint outside our territory. Sprint PCS subscribers based in our territory may spend more time in other PCS coverage areas than we anticipate, and wireless customers from outside our territory may spend less time in our territory or may use our services less than we anticipate. As a result, we may receive less Sprint PCS roaming revenue and/or have to pay more in Sprint PCS roaming fees than we collect in Sprint PCS roaming revenue. Our ratio of inbound to outbound roaming minutes with Sprint PCS was approximately 1.16 to 1 in 2004. We expect this ratio to decline to approximately 1 to 1 over time.

We are a consumer business and a recession in the United States involving significantly lowered consumer spending could negatively affect our results of operations.

Our primary customer base is individual consumers, and in the event that the economic downturn that the United States and other countries have recently experienced becomes more pronounced or lasts longer than currently expected and spending by individual consumers drops significantly, our business may be negatively affected.

Roaming and wholesale revenue from subscribers of wireless communications providers other than Sprint PCS and PCS Affiliates of Sprint may decline in the future.

We derive a significant amount of roaming and wholesale revenue from wireless communications providers other than Sprint and PCS Affiliates of Sprint for permitting their subscribers to roam on or use on a wholesale basis our portion of the PCS network of Sprint when they are in our territory. For the year ended December 31, 2004, approximately 30% of our roaming and wholesale revenue was attributable to revenue derived from these other wireless communications providers. We do not have agreements directly with these providers. Instead, we rely on roaming or wholesale arrangements that Sprint has negotiated. If the rates offered by Sprint are not attractive, these other wireless communications providers may decide to build-out their own networks in our territory or enter into roaming arrangements with our competitors who also already have networks in our territory. The loss of all or a significant portion of this revenue would have a material adverse effect on our financial condition and operating results.

Our roaming arrangements may not be competitive with other wireless service providers, which may restrict our ability to attract and retain customers and thus may adversely affect our operations.

We do not have agreements directly with other wireless service providers for roaming coverage outside our territory. Instead, we rely on roaming arrangements that Sprint has negotiated with other wireless service providers for coverage in these areas. Some risks related to these arrangements are as follows:

- the arrangements may not benefit us in the same manner that they benefit Sprint;
- the quality of the service provided by another provider during a roaming call may not approximate the quality of the service provided by Sprint;

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- the price of a roaming call may not be competitive with prices charged by other wireless companies for roaming calls;
 - customers must end a call in progress and initiate a new call when leaving the PCS network of Sprint and entering another wireless network;
 - Sprint wireless customers may not be able to use advanced PCS features from Sprint, such as PCS Vision, while roaming;

- Sprint or the carriers providing the service may not be able to provide us with accurate billing information on a timely basis; and
- if Sprint wireless customers are not able to have a similar wireless experience as when they are on the PCS network of Sprint, we may lose current subscribers and Sprint PCS products and services may be less attractive to potential new customers.

The technology that we use may become obsolete, which would limit our ability to compete effectively within the wireless telecommunications industry.

The wireless telecommunications industry is experiencing significant technological change. We employ CDMA digital technology, the digital wireless communications technology selected by Sprint and certain other carriers for their nationwide networks. Other carriers employ other technologies, such as TDMA, GSM and iDEN, for their nationwide networks. If another technology becomes the preferred industry standard, we would be at a competitive disadvantage and competitive pressures may require Sprint to change its digital technology, which in turn could require us to make changes to our network at substantial costs. We may be unable to respond to these pressures and implement new technology on a timely basis or at an acceptable cost.

Unauthorized use of, or interference with, our portion of the PCS network of Sprint could disrupt our service and increase our costs.

We may incur costs associated with the unauthorized use of our portion of the PCS network of Sprint, including administrative and capital costs associated with detecting, monitoring and reducing the incidence of fraud. Fraudulent use of our portion of the PCS network of Sprint may impact interconnection costs, capacity costs, administrative costs, fraud prevention costs and payments to other carriers for fraudulent roaming. In addition, some of our border markets are susceptible to uncertainties related to areas not governed by the FCC. For example, unauthorized microwave radio signals near the border in Mexico could disrupt our service in the United States.

Potential acquisitions may require us to incur substantial additional debt and integrate new technologies, operations and services, which may be costly and time consuming.

We intend to continually evaluate opportunities for the acquisition of businesses that are intended to complement or extend our existing operations. If we acquire additional businesses, we may encounter difficulties that may be costly and time-consuming and slow our growth. For example, we may have to:

- assume and/or incur substantial additional debt to finance the acquisitions and fund the ongoing operations of the acquired companies;
- integrate new operations with our existing operations; or
- divert the attention of our management from other business concerns.

If we lose the right to install our equipment on wireless towers or are unable to renew expiring leases for wireless towers on favorable terms or at all, our business and results of operations could be adversely impacted.

Substantially all of our base stations are installed on leased tower facilities that are shared with one or more other wireless service providers. In addition, a large portion of these leased tower sites are owned by a few tower companies. If a master agreement with one of these tower companies were to terminate, or if one of these tower companies were unable to support the use of its tower sites by

us, we would have to find new sites or may be required to rebuild the affected portion of our network. In addition, the concentration of our tower leases with a limited number of tower companies could adversely affect our results of operations and financial condition if any of our operating subsidiaries is unable to renew its expiring leases with these tower companies either on favorable terms or at all. If any of the tower leasing companies that we do business with should experience severe financial difficulties, or file for bankruptcy protection, our ability to use our towers could be adversely affected. That, in turn, would adversely affect our revenues and financial condition if a material number of towers were involved.

The loss of the officers and skilled employees upon whom we depend to operate our business could adversely affect our results of operations.

Our business is managed by a small number of executive officers. We believe that our future success will depend in part on our continued ability to retain these executive officers and to attract and retain other highly qualified technical and management personnel. We may not be successful in retaining key personnel or in attracting and retaining other highly qualified technical and management personnel. The loss of the officers and skilled employees upon whom we depend to operate our business could adversely affect our results of operations.

Risks Related to the Relationship with Sprint

Our ability to conduct our business would be severely restricted if Sprint terminates our affiliation agreements with it.

Our relationship with Sprint is governed by our affiliation agreements with Sprint. Since we do not own any licenses to operate a wireless network, our business depends on the continued effectiveness of these affiliation agreements. However, Sprint may be able to terminate our affiliation agreements with it if we materially breach the terms of the agreements. These terms include operational and network requirements that are extremely technical and detailed and apply to each retail store, cell site and switch site. Many of these operational and network requirements can be changed by Sprint, in certain cases, with little notice. As a result, we may not always be in compliance with all requirements of our affiliation agreements with Sprint. Sprint conducts periodic audits of compliance with various aspects of its program guidelines and identifies issues it believes need to be addressed. There may be substantial costs associated with remedying any non-compliance, and such costs may adversely affect our operating results and cash flows. If Sprint terminates or fails to renew our affiliation agreements or fails to perform its obligations under those agreements, our ability to conduct business would be severely restricted.

If we materially breach our affiliation agreements with Sprint, Sprint may have the right to purchase our operating assets at a discount to market value.

Our affiliation agreements with Sprint require that we provide network coverage to a minimum network coverage area within specified time frames and that we meet and maintain Sprint's technical and customer service requirements. We believe we are in compliance with our network build-out requirements and Sprint's other program requirements. A failure by us to meet any expanded build-out requirements for any one of the individual markets in our territory, or a failure to complete our current network build-out requirements according to our expected time frame, or to meet Sprint's technical or customer service requirements contained in the affiliation agreements would constitute a material breach of the agreements, which could lead to their termination by Sprint. We may amend our affiliation agreements with Sprint in the future to expand our network coverage. Our affiliation agreements with Sprint provide that upon the occurrence of an event of termination caused by our breach of such agreements, Sprint has the right to, among other things, purchase our operating assets for a price equal to 72% of our "entire business value."

Sprint may make decisions that could increase our expenses and/or our capital expenditure requirements, reduce our revenues or make our affiliate relationships with Sprint less advantageous than expected.

Under our affiliation agreements with Sprint, Sprint has a substantial amount of control over factors that significantly affect the conduct of our business. Accordingly, up to newly established limits set forth in the amendments to our affiliation agreements with Sprint executed in 2003 and 2004, Sprint may make decisions that adversely affect our business, such as the following:

- Sprint prices its national calling plans based on its own objectives and could set price levels or change other characteristics of its plans in a way that may not be economically sufficient for our business; and
- Sprint may alter its network and technical requirements or request that we build-out additional areas within our territory, which could result in increased equipment and build-out costs or in Sprint building out that area itself or assigning it to another PCS Affiliate of Sprint.

Certain provisions of our affiliation agreements with Sprint may diminish our value and restrict the sale of our business.

Under specific circumstances, Sprint may purchase our operating assets or capital stock at a discount. In addition, Sprint must consent to any transaction pursuant to which Alamosa Holdings is no longer the "ultimate parent" of any of our operating subsidiaries party to the affiliation agreements with Sprint and must consent to any assignment by us of our affiliation agreements with it. Sprint also has a right of first refusal if we decide to sell our operating assets to a third party. We are also subject to a number of restrictions on the transfer of our business, including a prohibition on the sale of our operating assets to competitors of Sprint. These restrictions and other restrictions contained in our affiliation agreements with Sprint, restrict our ability to sell our business, may reduce the value a buyer would be willing to pay for our business and may reduce our "entire business value."

Problems experienced by Sprint with its internal support systems could lead to customer dissatisfaction or increase our costs.

We rely on Sprint's internal support systems, including customer care, billing and back office support. As Sprint has expanded, its internal support systems have been subject to increased demand and, in some cases, suffered a degradation in service. We cannot assure you that Sprint will be able to successfully add system capacity or that its internal support systems will be adequate. It is likely that problems with Sprint's internal support systems could cause:

- delays or problems in our operations or services;
- delays or difficulty in gaining access to customer and financial information;
- a loss of customers; and
- an increase in the costs of customer care, billing and back office services after the expiration of our contractually fixed rates on December 31, 2006.

Should Sprint fail to deliver timely and accurate information, this may lead to adverse short-term decisions and inaccurate assumptions in our business plan. It could also adversely affect our cash flow because Sprint collects our receivables and sends us a net amount that is based on the financial information it produces for us.

Our costs for internal support systems may increase if Sprint terminates all or part of our services agreements with it.

The costs for the services provided by Sprint under our service agreements with Sprint related to billing, customer care and other back-office functions for the year ended December 31, 2004 was approximately \$70 million. Since we incur these costs on a per subscriber basis, we expect the aggregate costs for such services to increase as the number of

our subscribers increases. Sprint may terminate any service provided under such agreements upon nine months' prior written notice, but if

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we would like to continue receiving such service, Sprint has agreed that it will assist us in developing that function internally or locating a third-party vendor that will provide that service. Although Sprint has agreed in such an event to reimburse us for expenses we incur in transitioning to any service internally or to a third-party, if Sprint terminates a service for which we have not developed or are unable to develop a cost-effective alternative, our operating costs may increase beyond our expectations and our operations may be interrupted or restricted. We do not currently have a contingency plan if Sprint terminates a service we currently receive from it.

If Sprint does not maintain control over its licensed spectrum, the affiliation agreements with Sprint may be terminated.

Sprint, not us, owns the licenses necessary to provide wireless services in our territory. The FCC requires that licensees like Sprint maintain control of their licensed systems and not delegate control to third party operators or managers without the FCC's consent. Our affiliation agreements with Sprint reflect an arrangement that the parties believe meets the FCC requirements for licensee control of licensed spectrum. However, if the FCC were to determine that any of our affiliation agreements with Sprint needs to be modified to increase the level of licensee control, we have agreed with Sprint to use our best efforts to modify the agreements to comply with applicable law. If we cannot agree with Sprint to modify the agreements, those agreements may be terminated. If the agreements are terminated, we would no longer be a part of the PCS network of Sprint and we would not be able to conduct our business.

The FCC may fail to renew the Sprint wireless licenses under certain circumstances, which would prevent us from providing wireless services.

Sprint's wireless licenses are subject to renewal and revocation by the FCC. The Sprint wireless licenses in our territory will expire in 2005 or 2007 but may be renewed for additional ten-year terms. The FCC has adopted specific standards that apply to wireless personal communications services license renewals. Any failure by Sprint or us to comply with these standards could result in the nonrenewal of the Sprint licenses for our territory. Additionally, if Sprint does not demonstrate to the FCC that Sprint has met the construction requirements for each of its wireless personal communications services licenses, it can lose those licenses. If Sprint loses its licenses in our territory for any of these reasons, we and our subsidiaries would not be able to provide wireless services without obtaining rights to other licenses. If Sprint loses its licenses in another territory, Sprint or the applicable PCS Affiliate of Sprint would not be able to provide wireless services without obtaining rights to other licenses and our ability to offer nationwide calling plans would be diminished and the cost of providing these plans could increase significantly.

We rely on Sprint for a substantial amount of our financial information. If that information is not accurate, the investment community could lose confidence in us.

Under our affiliation agreements with Sprint, Sprint performs our billing, manages our accounts receivable and provides a substantial amount of financial data that impact our accounts. We use that information to record our financial results and to prepare our financial statements. If we later find errors in that information, we may be required to restate our financial statements. If that occurs with respect to us or any other PCS Affiliate of Sprint, investors and securities analysts may lose confidence in us.

If Sprint does not succeed, our business may not succeed.

If Sprint has a significant disruption to its business plan or network, fails to operate its business in an efficient manner, or suffers a weakening of its brand name, our operations and profitability would likely be negatively impacted. If Sprint should have significant financial problems, including bankruptcy, our business would suffer material adverse consequences, which could include termination or revision of our affiliation agreements with Sprint. We currently have no reason to believe that Sprint will have significant financial problems, including bankruptcy.

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If other PCS Affiliates of Sprint have financial difficulties, the PCS network of Sprint could be disrupted.

The national PCS network of Sprint is a combination of networks. The large metropolitan areas are owned and operated by Sprint, and the areas in between them are operated by PCS Affiliates of Sprint, all of which are independent companies like us. We believe that most, if not all, of these companies have incurred substantial debt to pay the large cost of building out their networks. If other PCS Affiliates of Sprint experience financial difficulties, the PCS network of Sprint could be disrupted in the territories of those PCS Affiliates of Sprint. Material disruptions in the PCS network of Sprint could have a material adverse effect on our ability to attract and retain subscribers. If the affiliation agreements of those PCS Affiliates of Sprint are like ours, Sprint would have the right to step in and operate the affected territory. However, this right could be delayed or hindered by legal proceedings, including any bankruptcy proceeding related to the affected PCS Affiliate of Sprint. Certain PCS Affiliates of Sprint have declared bankruptcy, some alleging that Sprint violated its agreements with the PCS Affiliate, and others have experienced financial difficulties. In each case, we believe that there has been no material disruption of the PCS network of Sprint to date.

We may have difficulty in obtaining an adequate supply of certain handsets from Sprint, which could adversely affect our results of operations.

We depend on our relationship with Sprint to obtain handsets and other wireless devices. Sprint orders handsets and other wireless devices from various manufacturers. We could have difficulty obtaining specific types of handsets in a timely manner if:

- Sprint does not adequately project the need for handsets for itself, its PCS Affiliates and its other third party distribution channels, particularly in transition to new technologies such as 3G technology;
- Sprint gives preference to other distribution channels;
- We do not adequately project our need for handsets or other wireless devices;
- Sprint modifies its handset logistics and delivery plan in a manner that restricts or delays our access to handsets; or
- There is an adverse development in the relationship between Sprint and its suppliers or vendors.

The occurrence of any of the foregoing could disrupt our customer service and/or result in a decrease in our subscribers, which could adversely affect our results of operations.

The recently announced merger of Sprint and Nextel Communications, Inc. could have an impact on our affiliation agreements with Sprint.

On December 15, 2004, Sprint Corporation and Nextel Communications, Inc. announced that their boards of directors unanimously approved a definitive agreement for a merger of equals. Nextel Communications currently operates a wireless mobility communications network in certain territories in which we also provide digital wireless mobility communications network services under the Sprint or affiliated brands.

We and Sprint have had only very preliminary communications regarding the potential impact on us of the pending Sprint-Nextel transaction. We believe that, based on currently available information, and assuming that no changes are effected with respect to Sprint's agreements with us, Sprint could be in violation of the exclusivity provisions of AirGate's agreements with Sprint upon completion of the Sprint-Nextel transaction and Sprint could be in violation of the exclusivity provisions of the agreements between our other operating subsidiaries and Sprint at some point following completion of the Sprint-Nextel transaction.

Sprint's agreements with us provide for specific remedies in the event of a material violation by Sprint of such agreements if not cured within an applicable time period. Neither we nor any of our executives have made any definitive determination as to the impact on the value to us or our business

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of any of such remedies or whether any such remedy would be more or less favorable to us or our shareholders than are our existing arrangements with Sprint or any possible renegotiated arrangements with Sprint.

We are committed to working with Sprint to reach mutually agreeable arrangements with respect to these matters. However, there can be no assurances that we and Sprint will be able to reach mutually acceptable arrangements or as to the terms of any such arrangements or the likely impact on us of any such arrangement.

Risks Related to Our Indebtedness

Our substantial leverage could adversely affect our financial health.

We are highly leveraged. As of December 31, 2004, our total outstanding debt, including capital lease obligations and excluding unused commitments made by lenders, was approximately \$740 million. In addition, we had 478,987 shares of mandatorily redeemable preferred stock outstanding with a liquidation preference of \$250 per share or \$120 million in the aggregate that would be required to be redeemed by us on July 31, 2013 assuming the shares were not converted into common stock prior to that date. As of December 31, 2004, such indebtedness and preferred stock redemption obligations represent approximately 85% of our total capitalization, which includes total outstanding debt, mandatorily redeemable preferred stock and stockholders' equity as presented in our consolidated balance sheet at December 31, 2004. The indentures governing our existing senior notes permit us and our subsidiaries to incur additional indebtedness subject to certain limitations. Our substantial indebtedness could adversely affect our financial health by, among other things:

- increasing our vulnerability to adverse economic conditions;
- limiting our ability to obtain any additional financing we may need to operate, develop and expand our business;
- requiring us to dedicate a substantial portion of any cash flows from operations to service our debt, which reduces the funds available for operations and future business opportunities; and
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potentially making us more highly leveraged than our competitors, which could potentially decrease our ability to compete in our industry.

The ability to make payments on our debt will depend upon our future operating performance, which is subject to general economic and competitive conditions and to financial, business and other factors, many of which we cannot control. If the cash flows from our operating activities is insufficient to service our debt obligations, we may take actions, such as delaying or reducing capital expenditures, attempting to restructure or refinance our debt, selling assets or operations or seeking additional equity capital.

The terms of our debt place restrictions on us and our subsidiaries, which may limit our operating flexibility.

The indentures governing our senior notes impose material operating and financial restrictions on us and our subsidiaries. These restrictions, subject in certain cases to ordinary course of business and other exceptions, may limit our ability and the ability of our subsidiaries to engage in some transactions, including the following:

- incurring additional debt or in the case of our guarantor subsidiaries, issuing capital stock to a third party;
- paying dividends, redeeming capital stock or making other restricted payments or investments;
- creating liens on assets;
- merging, consolidating or disposing of assets;
- repurchasing our common stock;
- entering into transactions with affiliates;

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- pay dividends; and
 - changing lines of business.

These restrictions could limit our ability to obtain debt financing, repurchase stock, refinance or pay principal or interest on our outstanding debt, complete acquisitions for cash or debt, or react to changes in our operating environment. Any future debt that we incur may contain similar or more restrictive covenants.

Risks Related to Our Common Stock

Future sales or the possibility of future sales of a substantial amount of our common stock may depress the market price of our common stock.

Future sales of substantial amounts of shares of our common stock in the public market could adversely affect prevailing market prices and the market price of our common stock and could impair our ability to raise capital through future sales of our equity securities. Currently we have approximately 142 million shares of common stock issued and outstanding. We have in the past issued shares of our common stock in connection with acquisitions and may issue shares of our common stock from time to time as consideration for future acquisitions and investments. In the event any such acquisition or investment is significant, the number of shares that we may issue may in turn be significant. In addition, we may also grant registration rights covering those shares in connection with any such acquisitions and investments.

In connection with the debt exchange completed in November 2003, we issued 679,495 shares of Series B Convertible Preferred Stock to noteholders who tendered their notes in the exchange. Upon issuance, the Series B Convertible Preferred Stock was convertible into approximately 50 million shares of common stock at the option of the holder. These preferred shares can be converted at any time prior to July 31, 2013 at which point we will be required to

redeem all outstanding shares of Series B Convertible Preferred stock for \$250 per share. Shares of common stock issued in connection with the conversion of the Series B Convertible Preferred Stock could adversely affect the market price of our common stock.

Our certificate of incorporation and bylaws include provisions that may discourage a change of control transaction or make removal of members of the Board of Directors more difficult.

Some provisions of our certificate of incorporation and bylaws could have the effect of delaying, discouraging or preventing a change in control of us or making removal of members of the board of directors more difficult. These provisions include the following:

- a classified board, with each board member serving a three-year term;
- no authorization for stockholders to call a special meeting;
- no ability of stockholders to remove directors without cause;
- prohibition of action by written consent of stockholders; and
- advance notice for nomination of directors and for stockholder proposals.

These provisions, among others, may have the effect of discouraging a third party from making a tender offer or otherwise attempting to obtain control of us, even though a change in ownership might be economically beneficial to us and our stockholders.

The price of our common stock may be volatile, and this may adversely affect our stockholders.

The market price of telecommunications and technology stocks recently have experienced volatility. The market price of our common stock is likely to be highly volatile and could be subject to wide fluctuations in response to factors such as the following, some of which are beyond our control:

- quarterly variations in our operating results;
- operating results that vary from the expectations of securities analysts and investors;

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- changes in expectations as to our future financial performance, including financial estimates by securities analysts and investors;
 - changes in our relationship with Sprint;
 - changes in laws and regulations;
 - announcements by third parties of significant claims or proceedings against us;
 - changes in market valuations of telecommunications and other PCS companies, including Sprint and PCS Affiliates of Sprint;
 - announcements of technological innovations or new services by us or our competitors;
 - announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
 - announcements by Sprint concerning developments or changes in its business, financial condition or results of operations, or in its expectations as to future financial performance;
 - actual or potential defaults by us under any of our agreements;
 - actual or potential defaults in bank covenants by Sprint or PCS Affiliates of Sprint, which may result in a perception that we are unable to comply with our debt covenants;
 - changes in results of operations, market valuations and investor perceptions of Sprint, PCS Affiliates of Sprint or of other companies in the telecommunications industry in general and the

wireless industry in particular, including our competitors;

- additions or departures of key personnel;
- release of transfer restrictions on our outstanding shares of common stock or sales of additional shares of our common stock; and
- general stock market price and volume fluctuations.

Risks Related to the Wireless Personal Communications Services Industry

We may continue to experience a high rate of subscriber turnover, which would adversely affect our financial performance.

The wireless personal communications services industry in general, and Sprint and its PCS Affiliates in particular, have experienced a higher rate of subscriber turnover, commonly known as churn. We believe this higher churn rate has resulted from Sprint's programs for marketing its services to sub-prime credit quality subscribers, Sprint's relatively less established subscriber base and Sprint's focus on adding subscribers from the consumer segment of industry rather than business subscribers.

Due to, among other things, significant competition in our industry and general economic conditions, our future churn rate may be higher than our historical rate. Factors that may contribute to higher churn include:

- inability or unwillingness of subscribers to pay, which results in involuntary deactivations, which accounted for approximately 34% of our deactivations in the year ended December 31, 2004;
- subscriber mix and credit class, particularly sub-prime credit subscribers, which accounted for approximately 36% of our gross subscriber additions for the year ended December, 31, 2004 and account for approximately 25% of our subscriber base as of December 31, 2004;
- The number of Sprint PCS subscribers based in our territory that receive our services under a contract, consisting of approximately 87% of Sprint PCS subscribers based in our territory as of December 31, 2004. Of these subscribers under contracts, approximately 91% were under contracts with original contract terms of two years or longer;
- the attractiveness of our competitors' products, services and pricing;

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- network performance and coverage relative to our competitors;
 - customer service;
 - any increased prices for services in the future; and
 - any future changes by us in the products and services we offer, especially to the Clear Pay program.

An additional factor that may contribute to a higher churn rate is the implementation of the FCC's wireless local number portability ("WLNP") requirement. The FCC regulations relating to WLNP enable wireless subscribers to keep their telephone numbers when switching to another carrier. As of May 24, 2004, all covered commercial mobile radio services ("CMRS") providers, including broadband PCS, cellular and certain specialized mobile radio ("SMR") licensees, must allow customers to retain, subject to certain geographic limitations, their existing telephone number when switching from one telecommunications carrier to another. The overall impact of this mandate is uncertain. We anticipate that the WLNP mandate will impose increased operating costs on all CMRS providers, including us, and may result in higher churn rates and subscriber acquisition and retention costs.

A high rate of subscriber turnover could adversely affect our competitive position, liquidity, financial position, results of operations and our costs of, or losses incurred in, obtaining new subscribers, especially because we subsidize some of the costs of initial purchases of handsets by subscribers.

Regulation by government agencies and taxing authorities may increase our costs of providing service or require us to change our services.

Our operations and those of Sprint may be subject to varying degrees of regulation by the FCC, the Federal Trade Commission, the Federal Aviation Administration, the Environmental Protection Agency, the Occupational Safety and Health Administration and state and local regulatory agencies and legislative bodies. Adverse decisions or regulations of these regulatory bodies could negatively impact Sprint's operations and our costs of doing business. For example, changes in tax laws or the interpretation of existing tax laws by state and local authorities could subject us to increased income, sales, gross receipts or other tax costs or require us to alter the structure of our current relationship with Sprint.

Concerns over health risks posed by the use of wireless handsets may reduce the consumer demand for our services.

Media reports have suggested that radio frequency emissions from wireless handsets may:

- be linked to various health problems resulting from continued or excessive use, including cancer;
- interfere with various electronic medical devices, including hearing aids and pacemakers; and
- cause explosions if used while fueling an automobile.

Widespread concerns over radio frequency emissions may expose us to potential litigation, discourage the use of wireless handsets or result in additional regulation imposing restrictions or increasing requirements on the location and operation of cell sites or the use or design of wireless handsets. Any resulting decrease in demand for these services or increase in the cost of complying with additional regulations could impair our ability to profitably operate our business.

Significant competition in the wireless communications services industry may result in our competitors offering new services or lower prices, which could prevent us from operating profitably and may cause prices for our services to continue to decline in the future.

Competition in the wireless telecommunications industry is intense. Competition has caused, and we anticipate that competition will continue to cause the market prices for two-way wireless products and services to decline. Our ability to compete will depend, in part, on our ability to anticipate and

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respond to various competitive factors affecting the wireless telecommunications industry. While we try to maintain and grow our ARPU, we cannot assure you that we will be able to do so. If prices for our services continue to decline, it could adversely affect our ability to grow revenue, which would have a material adverse effect on our financial condition and our results of operations.

Our dependence on Sprint to develop competitive products and services and the requirement that we obtain Sprint's consent for our subsidiaries to sell non-Sprint approved equipment may limit our ability to keep pace with our

competitors on the introduction of new products, services and equipment. Some of our competitors are larger than us, possess greater resources and more extensive coverage areas, and may market other services, such as landline telephone service, cable television and Internet access, along with their wireless communications services. In addition, we may be at a competitive disadvantage since we may be more highly leveraged than some of our competitors.

Market saturation could limit or decrease our rate of new subscriber additions.

Intense competition in the wireless communications industry could cause prices for wireless products and services to continue to decline. If prices drop, then our rate of net subscriber additions will take on greater significance in improving our financial condition and results of operations. However, as our and our competitors' penetration rates in our markets increase over time, our rate of adding net subscribers could decrease. If this decrease were to happen, it could materially adversely affect our liquidity, financial condition and results of operations.

Alternative technologies and current uncertainties in the wireless market may reduce demand for PCS products and services.

The wireless communications industry is experiencing significant technological change, as evidenced by the increasing pace of digital upgrades in existing analog wireless systems, evolving industry standards, ongoing improvements in the capacity and quality of digital technology, shorter development cycles for new products and enhancements and changes in end-user requirements and preferences. Technological advances and industry changes could cause the technology used on our network to become obsolete. We rely on Sprint for research and development efforts with respect to Sprint PCS products and services and with respect to the technology used on our portion of the PCS network of Sprint. Sprint may not be able to respond to such changes and implement new technology on a timely basis, or at an acceptable cost.

If Sprint is unable to keep pace with these technological changes or changes in the wireless communications market, the technology used on our network or our business strategy may become obsolete. In addition, other carriers are in the process of completing, or have completed, upgrades to 1xRTT, or other 3G technologies. 3G technology provides high-speed, always-on Internet connectivity and high-quality video and audio.

We also face competition from paging, dispatch and conventional mobile radio operations, enhanced specialized mobile radio, called ESMR, and mobile satellite service. In addition, future FCC regulation or Congressional legislation may create additional spectrum allocations that would have the effect of adding new entrants (and thus additional competitors) into the mobile telecommunications market.

Regulation by government or potential litigation relating to the use of wireless phones while driving could adversely affect our results of operations.

Some studies have indicated that some aspects of using wireless phones while driving may impair drivers' attention in certain circumstances, making accidents more likely. These concerns could lead to litigation relating to accidents, deaths or serious bodily injuries, or to new restrictions or regulations on wireless phone use, any of which also could have material adverse effects on our results of operations. A number of U.S. states and local governments are considering or have recently enacted legislation that would restrict or prohibit the use of a wireless handset while driving a vehicle or, alternatively, require the use of a hands-free telephone. Legislation and new restrictions or government regulations that restrict or prohibit wireless phone use could have a material adverse effect on our results of operations.

FORWARD-LOOKING STATEMENTS

This document, and the documents incorporated herein by reference, contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, (1) statements about the benefits of the merger with AirGate, including future financial and operating results; (2) statements with respect to Alamosa's plans, objectives, expectations and intentions and other statements that are not historical facts; and (3) other statements identified by words such as "believes," "expects," "anticipates," "estimates," "intends," "plans," "targets," "projects" and similar expressions. Such statements are based upon the current beliefs and expectations of Alamosa's management and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the forward-looking statements.

The following factors, among others, could cause actual results to differ from those set forth in the forward-looking statements: (1) the businesses of Alamosa and AirGate may not be integrated successfully or such integration may be more difficult, time-consuming or costly than expected; (2) expected combination benefits from the merger may not be fully realized or realized within the expected time frame; (3) disruption from the merger making it more difficult to maintain relationships with clients, employees or suppliers; (4) Alamosa's dependence on its affiliation with Sprint; (5) shifts in populations or network focus; (6) changes or advances in technology; (7) changes in Sprint's national service plans or fee structure with Alamosa; (8) change in population; (9) difficulties in network construction; (10) increased competition in Alamosa's markets; and (11) adverse changes in financial position, condition or results of operations. Additional factors that could cause Alamosa's results to differ materially from those described in the forward-looking statements can be found in the 2004 Annual Report on Form 10-K Alamosa filed with the Commission and available at the Commission's internet site (<http://www.sec.gov>). The forward-looking statements in this prospectus speak only as of the date of this prospectus or the date of any prospectus incorporated by reference in this document. Alamosa assumes no obligation to update the forward-looking statements or to update the reasons why actual results could differ from those contained in the forward-looking statements.

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USE OF PROCEEDS

The proceeds to be received from the exercise of the warrants described in this prospectus, assuming all warrants are exercised, will be approximately \$15.6 million. We intend to use such proceeds for general corporate purposes, including the purchase or repayment of indebtedness outstanding at a particular time, acquisitions, capital expenditures, working capital and investments. Pending such uses, we intend to invest such funds in short-term, investment-grade, interest-bearing instruments.

We will not receive any proceeds from the resale of the iPCS warrants or our common stock by the selling securityholders.

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DESCRIPTION OF THE iPCS WARRANTS

iPCS, Inc., a former subsidiary of AirGate, issued the 300,000 iPCS warrants pursuant to a warrant agreement dated as of July 12, 2000, with Mellon Investor Services LLC (formerly known as ChaseMellon Shareholder Services, L.L.C.), as warrant agent. AirGate assumed all of iPCS' obligations pursuant to the warrant agreement upon the effectiveness of AirGate's acquisition of iPCS in November 2001. We assumed all of AirGate's obligations pursuant to the warrant agreement upon the completion of our acquisition of AirGate in February 2005. As of the date of this prospectus there were 300,000 iPCS warrants outstanding.

The following description is a summary of certain of the material provisions of the warrant agreement. We urge you to read the relevant warrant agreement because it defines your rights as a holder of these warrants.

General

The terms and conditions of the warrants generally remain unaffected by our assumption thereof. However, following completion of the merger, each iPCS warrant entitles the holder to purchase 0.6996 shares of Alamosa common stock at an exercise price of \$74.34 per share. This prospectus includes such additional shares of common stock, which as of this date is indeterminable, that we may have to issue and sell to avoid dilution of the warrants. The iPCS warrants will automatically expire at 5:00 p.m., New York City time, on July 15, 2010.

The iPCS warrants may be exercised by surrendering the warrant certificates with the accompanying form of election to purchase, together with payment of the exercise price. Payment of the exercise price may be made in cash, by wire transfer or by certified or official bank check to the order of Alamosa Holdings, Inc.

Upon surrender of the warrant certificate and payment of the exercise price, we will deliver stock certificates representing the number of whole warrant shares to which the holder is entitled. If less than all of the iPCS warrants represented by a warrant certificate are exercised, such certificate shall be surrendered and a new warrant certificate of the same tenor and for the number of warrants, which were not exercised, shall be executed. Holders of iPCS warrants will be able to exercise their warrants only if a registration statement relating to the common stock underlying the iPCS warrants is then in effect, or the exercise of such iPCS warrants is exempt from the registration requirements of the Securities Act and the securities laws of the states in which the various holders of the iPCS warrants reside.

No fractional shares will be issued upon exercise of the iPCS warrants. Instead, we will pay to the holder of the warrant an amount in cash equal to the current market value of any such fractional shares less a corresponding fraction of the exercise price.

In the event of our liquidation, dissolution or winding up, the holders of the warrants will not be entitled to share in our assets. If a bankruptcy or reorganization is commenced by or against us, a bankruptcy court may hold that unexercised iPCS warrants are executory contracts which may be subject to rejection by us and the holders of the iPCS warrants may, even if sufficient funds are available, receive nothing or less than they would be entitled to if they had exercised their iPCS warrants prior to the commencement of any such proceeding.

In the event of a taxable distribution to holders of our common stock that results in an adjustment to the number of warrant shares, the holders of the iPCS warrants may, in certain circumstances, be deemed to have received a dividend subject to United States federal income tax. See "Certain United States Federal Income Tax Considerations."

No Rights As Stockholders

The holders of unexercised iPCS warrants will have no right to vote on matters submitted to our stockholders and will have no right to receive dividends.

Adjustments

The number of warrant shares purchasable upon exercise of iPCS warrants is subject to adjustment in several circumstances including, among others, the following:

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- the payment by us of dividends or other distributions;
 - changes in our capitalization;
 - the issuance of common stock or securities convertible into common stock at a price which is less than the then fair market value based upon the sale price to a party not related to us or a determination by the members of our board of directors who do not have an interest in the transaction, subject to limited exceptions; and
 - other events that could have the effect of depriving holders of the iPCS warrants of the benefit of all or a portion of the purchase rights evidenced by these warrants.

No adjustment need be made for any of the above transactions if holders of iPCS warrants participate in the transaction on a basis the board of directors determines to be fair and appropriate. In addition, no adjustment need be made for the adoption of a shareholder's rights plan or the issuance of rights under such a plan.

In the case of a consolidation or merger of us, or the sale of all or substantially all of our assets to another corporation, each warrant will represent the right to receive the kind and amount of shares of stock or other securities or property to which the warrant holder would have been entitled had the warrant been exercised immediately prior to such transaction. If we do not survive in any transaction, the surviving entity must assume our obligations under the warrant agreement.

Reservation of Shares

We have authorized, and will at all times reserve and keep available, such number of shares of our common stock as will be issuable upon the exercise of all outstanding iPCS warrants.

Amendment

From time to time, we and the warrant agent, without the consent of the holders of the iPCS warrants, may amend or supplement the warrant agreement for several purposes, including curing defects or inconsistencies or making changes that do not adversely affect the legal rights of any warrant holder. Any amendment or supplement that has an adverse effect on the interests of the warrant holders requires the written consent of a majority of the holders of the then outstanding iPCS warrants, excluding any iPCS warrants held by us or any of our affiliates.

Registration of the Warrant Shares/Liquidated Damages

Under the terms of a registration rights agreement entered into by iPCS in connection with the issuance of the iPCS warrants, which AirGate assumed through the acquisition of iPCS and we assumed in our merger with AirGate, we are required to keep effective the shelf registration statement of which this prospectus is a part covering the resale of the iPCS warrants and the resale of the shares of our common stock issuable upon the exercise of these warrants until the date on which all of the iPCS warrants or shares of our common stock issuable thereunder have been sold pursuant to the shelf registration statement or the iPCS warrants have expired. If we fail to maintain the effectiveness of the shelf registration statement, a registration default will occur and we will be required to pay liquidated damages to each

holder of an iPCS warrant. The liquidated damages will be in an amount equal to \$0.03 per week per iPCS warrant held by such holder for each week or portion thereof that the registration default continues for the first 90-day period immediately following the occurrence of such registration default. This amount will increase by an additional \$0.02 per week per iPCS warrant with respect to each subsequent 90-day period, up to a maximum of \$0.07 per week per iPCS warrant. The provision for liquidated damages will continue until the registration default has been cured. We are not required to pay liquidated damages for more than one registration default at any given time.

Without triggering a registration default, we may suspend the effectiveness of any shelf registration statement or amendment to the shelf registration statement, suspend the use of any prospectus and are not required to amend or supplement the shelf registration statement, any related

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prospectus or any document incorporated by reference other than an effective registration statement being used for an underwritten offering in the event that, and for periods not to exceed 60 consecutive days in any calendar year if:

- an event or circumstance occurs and is continuing, as a result of which the shelf registration statement, any related prospectus or any document incorporated by reference or proposed to be filed would, in our good faith judgment, contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements, in the light of the circumstances under which they were made, not misleading; and
- we determine in our good faith judgment that the disclosure of such event at such time would reasonably be expected to have a material adverse effect on our business, operations, or prospects; or
- the disclosure otherwise relates to a material business transaction which has not yet been publicly disclosed.

Each holder of the iPCS warrants or warrant shares that sells pursuant to this shelf registration statement of which this prospectus is a part generally will:

- be required to be named as a selling securityholder in this related prospectus and to deliver a prospectus to the purchaser;
- be subject to the civil liability provisions under the Securities Act in connection with such shares;
- be bound by the provisions of the warrant agreement which are applicable to such holder; and
- be required to deliver information to be used in connection with this shelf registration statement.

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DESCRIPTION OF OUR CAPITAL STOCK

General

Our authorized capital stock consists of 290 million shares of common stock, par value \$0.01 per share, and 10 million shares of preferred stock, par value \$0.01 per share. As of March 15, 2005, 140,183,356 shares of common stock were issued and outstanding and 478,987 shares of Series B Convertible Preferred Stock were issued and outstanding. The preferred stock may be issued in one or more series with such terms and at such times and for such consideration as our board of directors determines.

The following summary of the terms of our capital stock is not intended to be complete and is subject in all respects to the applicable provisions of the General Corporation Law of the State of Delaware, or DGCL, and is qualified by reference to our certificate of incorporation and bylaws. To obtain copies of these documents, see "Where You Can Find More Information" on page 32.

Common Stock

The outstanding shares of our common stock are fully paid and nonassessable. Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Holders of our common stock do not have pre-emptive rights and are not entitled to cumulative voting rights with respect to the election of directors. Our common stock is neither redeemable nor convertible into other securities, and there are no sinking fund provisions.

Subject to the preferences applicable to any shares of our preferred stock outstanding at the time, holders of our common stock are entitled to dividends when and as declared by our board of directors from funds legally available therefor and are entitled, in the event of liquidation, to share ratably in all assets remaining after payment of liabilities.

Preferred Stock

Our board of directors may, without further action by our stockholders, issue one or more series of our preferred stock and fix the rights and preferences of these shares, including the dividend rights, dividend dates, conversion rights, exchange rights, voting rights, terms of redemption, redemption price or prices, liquidation preferences, the number of shares constituting any series and the designation of such series.

The Series B Preferred Stock is senior to our common stock with respect to the payment of dividends and upon our liquidation, dissolution or winding up. Holders of Series B Preferred Stock are entitled to receive, when and as declared by our board of directors, dividends at the annual rate of 7.5% of the \$250 liquidation preference per share. Dividend payments can be made in cash, shares of Series C preferred stock, shares of our common stock, or in any combination thereof.

The Series B Preferred Stock may be redeemed by us, in whole or in part, at any time on or after the third anniversary of the date of the original issuance at a redemption price of 125% of the \$250 liquidation preference, reduced by 5% annually thereafter until 2011, after which time the redemption price remains at 100%. All outstanding Series B Preferred Stock must be redeemed by us on July 31, 2013.

Each share of Series B Preferred Stock carries one vote on all matters submitted generally to our shareholders, and votes together as a single class with our common stock. Shares of Series B Preferred Stock can be converted at any time into shares of our common stock at a conversion price of \$3.40, subject to adjustment.

We have no outstanding shares of Series C Preferred Stock as of the date of this document. The Series C Preferred Stock has the same terms as those of the Series B Preferred Stock described above, except that the conversion price is \$4.25, subject to adjustment.

AirGate Warrants

As of the date of this document, there were 8,620 AirGate warrants outstanding. Each such warrant entitles the holder to receive 0.9482 shares of our common stock and \$3.64 in cash at an exercise price of \$0.02148 per warrant.

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Anti-Takeover Provisions

Our certificate of incorporation and bylaws provide that our board of directors is to be divided into three classes as nearly equal in number as possible. Directors are elected by classes to three year terms, so that approximately one-third of our directors is elected at each annual meeting of the stockholders. In addition, our bylaws provide that the power to fill vacancies is vested in our board of directors. The overall effect of these provisions may be to prevent a person or entity from seeking to acquire control of us through an increase in the number of directors on our board and the election of designated nominees to fill newly created vacancies.

Shareholder Rights Plan

On February 14, 2001, our board of directors adopted a stockholder rights plan. The rights plan provides that one right will be issued with each share of common stock issued. Each right, when exercisable, will entitle the holder to purchase from us one one-thousandth of a share of Series A preferred stock at a purchase price of \$84 per one one-thousandth of a share, subject to adjustment. Each such fractional share of the Series A preferred stock will essentially be the economic equivalent of one share of our common stock.

A stockholder rights plan is designed to deter coercive takeover tactics and to encourage third parties interested in acquiring us to negotiate with our board. The stockholder rights plan achieves these goals by significantly diluting the ownership interest of a person who acquires a specified percentage of our common stock without first obtaining approval of the board.

Initially, the rights will be attached to all certificates representing outstanding shares of our common stock and will be transferred with and only with such certificates. The rights will separate from our common stock and become exercisable upon the earlier to occur of:

- the close of business on the tenth business day after the public announcement that a person or group of persons has acquired 20% or more of our outstanding common stock, except in connection with an offer approved by our board; or
- the close of business on the tenth business day after the commencement of, or announcement of an intention to commence, a tender offer or exchange offer that would result in a person or group of persons acquiring 20% or more of our outstanding common stock.

A person or group of persons will be considered to have acquired beneficial ownership of our common stock if they have the power to vote or direct the voting of our common stock. Certain stockholders named in our amended and restated certificate of incorporation may enter into voting agreements with each other only, at any time, without being deemed the beneficial owner of securities owned by the other parties to the voting agreements, if the voting agreements:

- were approved by our board prior to the time they were entered into;
- do not govern the voting of our common stock regarding matters other than the election of members of our board of directors; and

- do not govern the voting of our common stock held by persons other than persons who were our stockholders before the date of our initial public offering.

The rights will expire at the close of business on the tenth anniversary of the date of issuance, unless we redeem or exchange the rights before that date or amend the stockholder rights plan to extend the term of the rights.

Flip-in Right. If any person or group of persons acquires 20% or more of our outstanding common stock, each holder of a right, other than the acquiring person, will have the right to receive, upon exercise thereof, the number of shares of common stock, or in certain circumstances, cash, property or other securities of ours, having a value equal to two times the purchase price of the right. The acquiring person's rights will automatically become null and void in that event. In other words, the stockholders other than the acquiring person will be able to buy common stock at half price.

Flip-over Right. If at any time after a person or group of persons acquires 20% or more of our outstanding common stock and the following occurs:

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- we effect a merger or other business combination in which we are not the surviving corporation;
 - we are the surviving corporation in a consolidation, merger or similar transaction in which our shares of common stock are changed into or exchanged for other securities; or
 - we sell or otherwise transfer more than 50% of our assets, cash flow or earning power;

then each holder of a right, except a person who has acquired beneficial ownership of 20% or more of the outstanding common stock, may purchase, upon the exercise of each right at the then-current purchase price, that number of shares of common stock of the acquiring company with a market value equal to two times the purchase price of the right. In other words, the stockholders other than the acquiring person will be able to buy common stock of the acquiring company at half price.

Adjustments. The purchase price and the number of shares of Series A Preferred Stock or other securities issuable upon exercise of the rights may be adjusted to prevent dilution upon:

- stock dividends, subdivisions, combinations or reclassifications of our common stock or the Series A Preferred Stock;
- below market issuances of rights or warrants to subscribe for or convert into Series A preferred stock; or
- distributions to holders of the Series A preferred stock of evidence of indebtedness, cash, excluding regular quarterly cash dividends, assets, excluding dividends payable in Series A preferred stock, or subscription rights or warrants.

Exchange of Rights. After a person or group of persons acquires 20% of our outstanding common stock but before that person or group beneficially owns 50% or more of our common stock, we may, at our option, exchange the rights at an exchange ratio of one-half the number of shares of common stock, Series A preferred stock, or other property for which a right is exercisable immediately prior to our decision to exchange the rights, subject to adjustment. Rights held by an acquiring person are not entitled to these exchange rights. In that event, the stockholders other than the acquiring person would receive common stock in exchange for their rights.

Redemption of Right. At any time before a person or group of persons acquires 20% or more of our outstanding common stock, we may redeem the rights at a price of \$0.001 per right. Upon the effective date of the redemption of the rights, the rights will terminate and the rights holders will only be entitled to receive the \$0.001 redemption price.

Rights as Stockholder. Until a right is exercised, the rights will not entitle the holder to the rights as our stockholder, including, without limitation, the right to vote or to receive dividends.

The rights may have certain anti-takeover effects. The rights may cause substantial dilution to any person or group that attempts to acquire us without the approval of its board. As a result, the overall effect of the rights and other provisions described above may be to make more difficult a merger, tender offer, other business combination or proxy contest involving us, even if such event would be favorable to the interest of our stockholders.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Mellon Investor Services LLC.

Listing

Our common stock has been approved for quotation and is traded in the Nasdaq National Market under the symbol "APCS."

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CERTAIN UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

General

The following discussion addresses the material United States federal income tax consequences of the exercise, ownership and disposition of the warrants. This discussion is based on the Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations, administrative rulings and judicial decisions, all as currently in effect and all of which are subject to change (possibly with retroactive effect) and to differing interpretations. This discussion applies only to warrant holders that hold their warrants as a capital asset within the meaning of Section 1221 of the Code (each referred to as a "holder"). Further, this discussion does not address all aspects of United States federal taxation that may be relevant to a particular holder in light of its personal circumstances or to holders subject to special treatment under the United States federal income tax laws, including:

- banks or trusts,
- tax-exempt organizations,
- insurance companies,
- dealers in securities or foreign currency,
- traders in securities who elect to apply a mark-to-market method of accounting,
- pass-through entities and investors in such entities, and
- foreign persons.

In addition, the discussion does not address any alternative minimum tax or any state, local or foreign tax consequences of exercise of the warrants. For purposes of this discussion, "United States person" means a holder which is, for United States federal income tax purposes, (i) a citizen or resident of the United States, (ii) a corporation, partnership or other entity created or organized in or under the laws of the United States or any State or political subdivision thereof, (iii) an estate the income of which is subject to United States federal income taxation regardless of source or (iv) a trust if a United States court is able to exercise primary supervision over the administration of such trust and one or more United States persons have the authority to control all substantial decisions of such trust.

Non-United States persons should consult their tax advisors regarding the United States federal income tax consequences and any applicable foreign tax consequences of the exercise of warrants.

Exercise of AirGate Warrants

The tax laws concerning the consequences to a holder upon exercise of warrants for a combination of cash and stock of the issuer are unclear, and there is no authority directly addressing the tax consequences to a holder that exercises such warrants.

Since there is no direct authority on the tax consequences of the exercise of AirGate warrants for a combination of cash and stock of the issuer, it is possible that such exercise could be treated in a number of different ways. Although other treatments are possible, the cash received on exercise (excluding cash received in lieu of fractional shares, as discussed below) might be first applied against the holder's tax basis in the AirGate warrants. In that case a holder that exercises AirGate warrants would generally recognize gain (but not loss, except, possibly, in the case of cash in lieu of fractional share as discussed below) in an amount equal to the difference between (i) the amount of cash received (excluding cash received in lieu of fractional shares, as discussed below) and (ii) the sum of (A) the price the holder paid for the AirGate warrants and (B) the amount of cash paid upon exercise of the AirGate warrants. Any recognized gain would generally be long-term capital gain if the holder's holding period with respect to the AirGate warrants were more than one year at the time the AirGate warrants were exercised. If a holder's adjusted basis in the AirGate warrants exceeded the sum of (A) the price the holder paid for the AirGate warrants and (B) the amount of cash paid upon exercise of the AirGate warrants, a holder would be permitted to claim the difference as its aggregate basis in the Alamosa common stock received; in all other cases, the holder's aggregate basis

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in the Alamosa common stock received would be zero. The holding period of the Alamosa common stock received would include the holding period of the AirGate warrants exercised.

Another possible treatment is that the holder's tax basis in the AirGate warrants plus the exercise price is bifurcated between the stock and the cash received upon exercise (excluding cash received in lieu of fractional shares, as discussed below) based upon the relative values of such stock and cash (excluding cash received in lieu of fractional shares, as discussed below). In that case a holder would, with respect to the cash portion, recognize gain or loss equal to the difference between the cash received and the basis of the AirGate warrant and exercise price allocated to such cash portion (excluding cash received in lieu of fractional shares, as discussed below). With respect to the stock portion, the holder would not recognize gain or loss and would hold the stock with a basis equal to the basis and exercise price allocated to it and with a holding period that includes the holding period of such AirGate warrant. A holder of AirGate warrants is urged to consult its tax advisor as to these and other possible tax treatments of an exercise of warrants.

Exercise of iPCS Warrants

A holder of an iPCS warrant will generally not recognize taxable gain or loss upon the exercise of an iPCS warrant, except to the extent of cash received in lieu of fractional shares, as discussed below. The holder's adjusted basis in the Alamosa common stock received upon exercise will equal the sum of the holder's adjusted tax basis in the iPCS warrant immediately prior to exercise, increased by the exercise price paid. The holding period of the Alamosa common stock received upon the exercise of the iPCS warrants would begin on the date of exercise and would not include the period during which the iPCS warrants were held.

Cash in lieu of fractional shares of Alamosa Common Stock

A holder that receives cash in lieu of a fractional share of Alamosa common stock upon exercise of either the AirGate or iPCS warrants should generally be treated as if it received such fractional share and sold it for cash in a transaction in which such holder should recognize short term capital gain or loss in an amount equal to the difference between such cash and any tax basis allocable to the fractional share.

Sale or Exchange of iPCS or AirGate Warrants

The sale or exchange of a warrant will generally result in the recognition of capital gain or loss to the holder in an amount equal to the difference between (i) the amount of cash and the fair market value of property received in exchange therefor and (ii) such holder's adjusted tax basis in such warrant. Capital gain or loss recognized by a holder upon the sale or exchange of a warrant generally will be long-term capital gain or loss if the holding period with respect to the warrant is more than one year.

Expiration of Unexercised Warrants

If a warrant expires unexercised, the holder will recognize a capital loss equal to such holder's tax basis in such warrant.

Under Section 305 of the Code, adjustments to the exercise price or conversion ratio of the iPCS warrants which may occur under certain circumstances, or the failure to make such adjustments, may result in the receipt of taxable constructive dividends by a holder to the extent of Alamosa's current or accumulated earnings and profits, regardless of whether there is a distribution of cash or property.

THE FOREGOING DISCUSSION IS INCLUDED FOR GENERAL INFORMATION ONLY, AND EACH HOLDER IS URGED TO CONSULT ITS TAX ADVISOR WITH RESPECT TO THE PARTICULAR CONSEQUENCES TO THE HOLDER OF OWNERSHIP, EXERCISE AND DISPOSITION OF THE WARRANTS.

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SELLING SECURITYHOLDERS

Set forth below is information with respect to the number of the iPCS warrants and shares of our common stock issuable upon exercise of the iPCS warrants owned by each of the selling securityholders. The iPCS warrants are being registered to permit the resale by the selling securityholders of such warrants. We are also registering the resale by the selling securityholders of the shares of our common stock to be issued upon the exercise of iPCS warrants. See "Plan of Distribution."

We have filed with the Securities and Exchange Commission a registration statement, of which this prospectus forms a part, with respect to the resale of the iPCS warrants and the resale of the shares of our common stock issuable upon the exercise of iPCS warrants from time to time, under Rule 415 under the Securities Act, in the over-the-counter market, in privately negotiated transactions, in underwritten offerings or by a combination of these methods for sale. We are required to keep this registration statement effective until the earlier of:

- July 15, 2010;

- the date on which all of the iPCS warrants have been exercised; or
- the date on which all of the iPCS warrants and shares of our common stock issued upon exercise of iPCS warrants can be sold without registration under the Securities Act and without restriction as to the manner, timing or volume of any such sale.

The iPCS warrants and the shares of our common stock issuable upon the exercise of such warrants offered by this prospectus may be offered from time to time by the persons or entities named below.

Name of Selling Securityholder	Number of iPCS Warrants Owned Prior to the Offering(1)	Number of Shares Issuable Upon Exercise of iPCS Warrants Held by Securityholder (2)	Number of Shares of Alamosa Common Stock Beneficially Owned Prior to the Offering (3)
Dresdner Kleinwort Wasserstein SECS LLC	4,000	2,798	—
AIM High Yield Fund	6,880	4,813	473,533.13 (7)
AIM VI High Yield Fund	100	69	25,689.89 (7)
Invesco US High Yield Fund	20	13	3,754.11 (7)
Columbia Management Group	2,500	1,749	—
AIG Global Investment Group	6,000	4,197	43,335
Ares Leveraged Investment Fund II, L.P.	2,625	1,836	—
Ares Leveraged Investment Fund, L.P.	2,625	1,836	—
Salomon Brothers Asset Management, Inc. (4)	5,500	3,847	—
Bear Stearns & Co. Inc.	2,500	1,749	—
T. Rowe Price High Yield Fund, Inc. (5)	9,150	6,401	—
Penn Series Funds Inc.-High Yield Bond Fund (5)	300	209	—
State Employees Retirement Fund of the State of Delaware (5)	550	384	—
New York City Employees Retirement Systems Enhanced Yield (5)	1,000	699	—
Credit Suisse First Boston Employee Pension C/o Credit Suisse Asset Management	2,100	1,469	—
Credit Suisse Institutional High Yield Fund C/o Credit Suisse Asset Management	500	349	—

Name of Selling Securityholder	Number of iPCS Warrants Owned Prior to the	Number of Shares Issuable Upon Exercise of iPCS Warrants Held	Number of Shares of Alamosa Common Stock
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	Offering(1)	by Securityholder (2)	Beneficially Owned Prior to the Offering (3)
Blackstone Mezzanine Partners L.P.	45,000	31,482	—
Blackstone Mezzanine Holdings L.P.	5,000	3,498	—
Oppenheimer Champion Income Fund (6)	3,600	2,518	—
Oppenheimer Strategic Income Fund (6)	6,600	4,617	—
Oppenheimer Variable Account Funds for the Account of Strategic Bond Fund/VA (6)	300	209	—
Oppenheimer High Yield Fund (6)	3,750	2,623	—
Oppenheimer Variable Account Funds for the Account of Oppenheimer High Income Fund/ VA (6)	750	524	—
Hallmark Cards Inc. Eaton Vance High Yield Diversified Investors High Yield Bond Fund	1,000	699	—
Boston Income Portfolio	4,650	3,253	—
High Income Portfolio	7,670	5,365	—
Trust Company of the West	71,050	49,706	—

(1)All the iPCS warrants beneficially owned by each selling securityholder listed above may be sold by such securityholder in this offering.

(2)All the shares of Alamosa common stock issuable upon the exercise of iPCS warrants held by the security holders listed above may be sold by such securityholder in this offering.

(3)Figures in this column do not include shares of Alamosa common stock issuable upon exercise of the iPCS warrants held by the respective selling securityholders. None of the selling securityholders currently owns one percent or more of Alamosa common stock.

(4)Salomon Brothers Asset Management, Inc. ("SBAM") acts as discretionary investment advisor with respect to the following accounts that hold iPCS warrants: (i) Commonwealth of Pennsylvania State Employees Retirement System (3,000); (ii) Renaissance Reinsurance LTD (1,000); (iii) Southeastern Pennsylvania Transportation Authority (500); (iv) Unisys Corporation (1,000).

(5)T. Rowe Price Associates, Inc. ("T. Rowe Price Associates") serves as investment adviser with power to direct investments and/or sole power to vote the shares owned by these funds, as well as shares owned by certain other individual and institutional investors. For purposes of reporting requirements of the Securities Exchange Act of 1934, T. Rowe Price Associates may be deemed to be the beneficial owner of 11,000 iPCS warrants listed above; however, T. Rowe Price Associates expressly disclaims that it is, in fact, the beneficial owner of such securities. T. Rowe Price Associates is a wholly-owned subsidiary of T. Rowe Price Group, Inc., which is a publicly traded financial services holding company. T. Rowe Price Associates, as Investment Adviser to the T. Rowe Price family of funds and/or Investment Sub-Adviser to T. Rowe Price's institutional clients, may be considered "Indirect" owner of the funds or sub-advised funds. As the funds' adviser or sub-adviser, the investment power and voting power is shared with T. Rowe Price Associates. T. Rowe Price Associates is an indirect owner and has a shared investment power over 606,000 shares of Alamosa common stock.

(6)Oppenheimer Funds, Inc. holds iPCS warrants on behalf of these funds.

(7)Shares of common stock issuable upon the exercise of Alamosa Series B Preferred Stock.

Because the selling securityholders may, under this prospectus, offer all or some portion of the iPCS warrants or the common stock issuable upon exercise of such warrants, no estimate can be given as to the number of the warrants or shares of common stock issuable upon exercise of iPCS warrants that will be held by the selling securityholders upon termination of any sales. In addition, the selling securityholders above may have sold, transferred or otherwise disposed of all or any portion of their warrants, since the date on which they provided the information regarding their warrants, in transactions exempt from the registration requirements of the Securities Act. See "Plan of Distribution."

Only selling securityholders identified above who beneficially own the securities set forth opposite each selling securityholder's name in the table above on the effective date of the registration statement of which this prospectus forms a part may sell those securities under the registration statement. Prior to any use of this prospectus in connection with an offering of the iPCS warrants and/or the shares of our common stock issuable upon exercise of the iPCS warrants by any holder not identified above, this prospectus will be supplemented to set forth the name and number of the warrants and/or shares of our common stock beneficially owned by the selling securityholder intending to sell such warrants and/or shares of our common stock, and the number of warrants and/or shares of our common stock to be offered. The prospectus supplement will also disclose whether any selling securityholder selling in connection with the prospectus supplement has held any position or office with, been employed by or otherwise has had a material relationship with us or any of our subsidiaries or affiliates during the three years prior to the date of the prospectus supplement if this information had not been disclosed in this prospectus.

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PLAN OF DISTRIBUTION

Distributions by Us

This prospectus relates, in part, to the issuance by us from time to time of shares of our common stock issuable upon the exercise of the AirGate warrants and any registered iPCS warrants. The costs of registering, issuing and maintaining an effective registration statement for the shares of common stock underlying these warrants have been and will be borne by us.

Under the terms of the warrant agreement governing the AirGate warrants, we are required to keep a shelf registration statement related to the issuance of shares of our common stock underlying the AirGate warrants continuously effective until the later of the date on which (a) all of the AirGate warrants have been exercised or (b) the AirGate warrants have expired. The warrant agreement provides that if we fail to keep the shelf registration statement continuously effective until such date, then we will be required to pay liquidated damages to each holder of an AirGate warrant which shall accrue from the first such registration default. The liquidated damages paid to each holder of a warrant will be in an amount equal to \$0.03 per week per warrant held by such holder for each week or portion thereof that the registration default continues for the first 90-day period immediately following the occurrence of such registration default. This amount will increase by an additional \$0.02 per week per warrant with respect to each subsequent 90-day period, up to a maximum amount equal to \$0.07 per week per warrant. The provision for liquidated damages will continue until such registration default has been cured. We will not be required to pay liquidated damages for more than one registration default at any given time. Liquidated damages accrued as of April 1 or October 1 of each year will be payable on such date. All accrued liquidated damages shall be paid by us to holders entitled to liquidated damages in accordance with the warrant agreement.

Distributions by the Selling Securityholders

The iPCS warrants and the shares of our common stock issued upon the exercise of iPCS warrants offered hereby may be sold by the selling securityholders from time to time in:

- transactions in the over-the-counter market;
- negotiated transactions;
- underwritten offerings; or
- a combination of such methods of sale.

The selling securityholders may sell their warrants and the shares of our common stock issued upon the exercise of the warrants at:

- fixed prices which may be changed;
- market prices prevailing at the time of sale;
- prices related to prevailing market prices; or
- negotiated prices.

The selling securityholders may effect these transactions by selling their warrants and shares of our common stock issued upon the exercise of such warrants to or through broker-dealers, and these broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling securityholders and/or the purchasers of the warrants for whom such broker-dealers may act as agents or to whom they sell as principals, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions).

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We are required to keep this registration statement effective until the earlier of:

- July 15, 2010;
- the date on which all of the warrants have been exercised; or
- the date on which all of the warrants and shares of our common stock issued upon exercise of the iPCS warrants can be sold without registration under the Securities Act and without restriction as to the manner, timing or volume of any such sale.

However, as long as any affiliate of ours holds any iPCS warrants or shares of our common stock issued upon exercise of iPCS warrants, we will be required to keep this registration statement effective.

In order to comply with the applicable securities laws of particular states, if applicable, the iPCS warrants, and shares of our common stock will be sold in the jurisdictions only through registered or licensed brokers or dealers. In addition, in particular states, the warrants and shares of our common stock may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

The selling securityholders and any broker-dealers or agents that participate with the selling securityholders in the distribution of the iPCS warrants or the shares of our common stock issued upon the exercise of iPCS warrants may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by them and any profit on the resale of the warrants or the shares of our common stock issued upon the exercise of iPCS warrants purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

Each selling securityholder will be subject to applicable provisions of the Securities Exchange Act of 1934, and the rules and regulations thereunder, which provisions may limit the timing of purchases and sales of shares of our

common stock by the selling securityholders.

We will pay for all costs of the registration of the iPCS warrants, including, without limitation, the Securities and Exchange Commission's filing fees and expenses of compliance with state securities or "blue sky" laws; except that, the selling securityholders will pay all underwriting discounts and selling commissions, if any. We have agreed to indemnify the selling securityholders against particular civil liabilities, including some liabilities under the Securities Act, or we will compensate them for some of these liabilities incurred in connection therewith.

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LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Skadden, Arps, Slate, Meagher & Flom LLP, New York, New York.

EXPERTS

The consolidated financial statements of Alamosa and its subsidiaries and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to Alamosa's Annual Report on Form 10-K for the year ended December 31, 2004 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in accounting and auditing.

The consolidated financial statements and schedule of AirGate PCS, Inc. and subsidiaries as of September 30, 2004 and 2003, and for each of the years in the three-year period ended September 30, 2004, have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein and upon the authority of said firm as experts in accounting and auditing.

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WHERE YOU CAN FIND MORE INFORMATION

We are currently subject to the information and reporting requirements of the Exchange Act, and in accordance therewith file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission, or SEC. Those reports and other information so filed with the SEC may be inspected and copied at the public reference facilities maintained by the SEC at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of those materials can be obtained from the Public Reference Section of the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. Information on the operation of the Public Reference Room is available by calling the SEC at 1-800-SEC-0330. The SEC also maintains a site on the World Wide Web at <http://www.sec.gov>, which contains reports and other information regarding registrants. You can also

inspect reports, proxy statements and other information pertaining to us at the offices of the NASDAQ Stock Market, Inc., Investor Relations, One Liberty Plaza, 50th Floor, New York, NY 10006.

We filed a registration statement on Form S-3 to register with the SEC the securities offered by this prospectus. This prospectus is a part of that registration statement. As allowed by the rules of the SEC, this prospectus does not contain all of the information you can find in our registration statement or the exhibits to the registration statement.

You should rely only on the information or representations provided in this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. Our selling securityholders may not make an offer of our securities in any state where the offer is not permitted. The delivery of this prospectus does not, under any circumstances, mean that there has not been a change in our affairs since the date of this prospectus. It also does not mean that the information in this prospectus is correct after this date.

INCORPORATION BY REFERENCE

The following documents, which have been filed by us with the SEC, are incorporated by reference into this prospectus:

Alamosa SEC Filings	Period or Date Filed
Annual Report on Form 10-K	Year ended December 31, 2004
Current Reports on Form 8-K	Filed on January 6, 2005, January 28, 2005, February 9, 2005, February 16, 2005, February 18, 2005, March 11, 2005, March 16, 2005, March 31, 2005 and March 31, 2005
Proxy Statement on Schedule 14A for the 2004 annual meeting of stockholders	
The description of Alamosa common stock set forth in Alamosa's registration statements filed by Alamosa pursuant to Section 12 of the Exchange Act, including any amendment or report filed for purposes of updating any such description	

All documents filed by us under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and prior to the date of the completion of the offering of the securities described in this prospectus shall be deemed to be incorporated by reference in this prospectus and to be a part of this prospectus from the date of filing of those documents. Any statement contained in this prospectus or in a previously filed document incorporated or deemed to be incorporated by reference in this prospectus shall be deemed to be modified or superceded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document that also is or was deemed to be incorporated by reference in this

prospectus modifies or supercedes that statement. Any statement so modified or superceded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

The information relating to us contained in this prospectus should be read together with the information in the documents incorporated by reference.

You can obtain any of the documents incorporated by reference in this document from us, or from the SEC through the SEC's Internet World Wide Web site at the address described above. Documents incorporated by reference are available from us without charge, excluding any exhibits to those documents, unless the exhibit is specifically incorporated by reference as an exhibit in this document. You can obtain documents incorporated by reference in this document, at no cost, by requesting them in writing or by telephone from us at the following address or telephone number:

Alamosa Holdings, Inc.
5225 S. Loop 289
Lubbock, Texas 79424
Attention: Jon D. Drake
(806) 722-1100