

Presented by:



**Research: White Paper:
Automatic Door Trends Through the Eyes of Consumers and
Key Buyers/Specifiers**

AAADM

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Introduction

The American Association of Automatic Door Manufacturers (AAADM) is a non-profit, trade association of manufacturers of automatic doors founded in 1994. AAADM's mission is to advance the interests of the automatic door systems industry; to increase education, training and professionalism among installers and service providers; and to generally promote the safe use of automatic doors.

To help it fulfill its mission, AAADM commissioned a number of research projects designed to understand the levels of importance, expectations and preferences for automatic doors among various constituencies.

The primary study was divided into two phases. The first phase looked at consumers while the second phase concentrated on those responsible for specifying and buying automatic doors in architectural, retail, hospitality and higher education environments. The second phase considered each group as compared to the entire universe.

This white paper will discuss the findings from these studies.

What Consumers Think About Automatic Doors

Demographics

Four hundred forty-seven (447) on-line surveys were completed among American consumers. The demographic for this sample was described as:

- "Mr. And Mrs. Average Joe," a cross-section of men and women, who reside in the United States with an average family income and an average of two children per family. Among this "Average Joe" designation, there were three subclassifications of interest to AAADM:

-Two hundred twelve (212) men/women who identified themselves as frequent travelers, traveling outside of their metropolitan area at least once per month.

-One hundred fifty five (155) men/women who identified themselves as people who shop at (non-grocery) retail stores over five times a month.

-Thirty-eight (38) identified themselves as parents who have a child in college. **(See A1 and A2)**

An on-line polling service, Survey Sampling, was engaged to complete the consumer study. Via their home computers, participants were asked sixteen questions ranging from matrix ranking and multiple choice to open-ended responses requiring a typed in explanation. Each question required a response before continuing the survey, ensuring complete survey data.

Key Findings

Importance by Application

Participants were asked to assess the level of importance they put on automatic doors at various locations, specifically in hospitals, airports, hotels/motels, shopping mall entrances, retail stores, government buildings, office buildings, colleges/universities, full service restaurants and fast food restaurants.

In every application except for fast food restaurants, the majority of participants reported that they believe automatic doors are “somewhat important” to “most important.” **(See A3)**

Rank	Application	Importance Percentage
1.	Hospital	98.2%
2.	Airport	94.9%
3.	Hotel/Motel	86.8%
4.	Shopping Mall Entrance	84.0%
5.	Retail Store	80.1%
6.	Government Building	70.9%
7.	Office Building	70.0%
8.	College/University	61%
9.	Full service Restaurant	50.1%
10.	Fast Food Restaurant	40.9%

Among the same application choices, hospitals and airports were also ranked highest in the respondents' expectations for finding automatic doors. Fast food and full service restaurants were named as the least likely places to find automatic doors. **(See A4)**

Accessibility was ranked the highest in terms of the most important feature of an automatic door. Safety came in a close second. Fast/responsive and easy-to-use were highly ranked automatic door features as well.

When asked if automatic doors were perceived as a minimal level of service from a business establishment, most respondents suggested it was a convenience that should be offered by a business. Many went on to say that automatic doors are especially important because they show good customer service and provide access for the elderly, handicapped and those with children in tow. Among the respondents who said they did not feel that automatic doors are a minimal level of service, it was reported that the need for automatic doors is heavily dependent on the location. Respondents agreed that automatic doors were important for the elderly and handicapped population or people carrying packages. **(See A5)**

Expectations and Preferences

Significantly, 98.9 percent of consumers who expressed a preference between automatic and manual doors prefer automatic doors. (See A6)

Respondents stated what they liked best about automatic doors was their convenience and ease of use. Some explained that automatic doors could be opened without the use of hands, which can sometimes be filled with packages, children and luggage. Respondents stated that another benefit of automatic doors is the fact that they provide easy accessibility for those pushing strollers and the handicapped.

Many felt that the most conspicuous disadvantage of manual doors is that they are too hard to push open, especially with full hands or while pushing a stroller.

When participants were asked to name specific locations where automatic doors are essential yet not usually present, shopping malls, hotels/motels and post offices were mentioned the most.

When asked to evaluate different automatic door styles, the overwhelming majority, 84 percent, stated they prefer sliding automatic doors to bi-fold, swinging and rotating designs. (See A7)

Key Findings By Demographics

Of the 233 respondents who shopped at a (non-Grocery) retail store five or more times per month, if given two identical businesses, 86 (37 percent) would definitely prefer to shop or stay at a business with automatic doors versus manual doors. One hundred twelve (48 percent) considered automatic doors a minimum level of service. One hundred eighty eight (81 percent) preferred sliding automatic doors versus swinging, bi-fold or rotating doors.

Of the 235 respondents who travel outside their metropolitan area at least once per month, 85 (36 percent) would definitely prefer to shop or stay at a business with automatic doors versus manual doors, if given the choice between two identical businesses. One hundred twelve (48 percent) considered automatic doors a minimum level of service. One hundred ninety one (81 percent) preferred sliding automatic doors swinging, bi-fold or rotating doors.

Of the 38 respondents who have children attending college, if given the choice between two identical locations, 14 (37 percent) would definitely prefer to shop or stay at the business with automatic doors versus manual doors. Seventeen (45 percent) considered automatic doors a minimum level of service. Thirty-three (87 percent) preferred sliding automatic doors to swinging, bi-fold or rotating doors.

Conclusion

Phase I of AAADM's series of research projects indicated a strong preference for automatic pedestrian doors as compared to manual doors. Among 10 different applications, only fast food restaurants stood out as the one application where automatic doors were not expected. According to consumers, the major applications for automatic doors are hospitals, airports, hotels/motels, shopping mall entrances and retail stores.

Architectural, Retail, College/University and Hospitality Research

Methodology

Over 200 telephone survey calls were made, of this number 97 telephone surveys were completed among specifiers/buyers of automatic and manual doors in the architectural, retail, college/university and hospitality markets. The by-market segmentation is as follows:

-Twenty-four (24) national architects specializing in retail, hospitality and educational building design.

- Twenty- five (25) national retail companies including grocery stores, drug stores and discount chains.

- Twenty-five (25) national colleges and universities

- Twenty- three (23) national hotels and resort lodging facilities.

Participants were contacted via telephone by trained researchers and asked fifteen questions ranging from matrix ranking and multiple choice to open-ended responses requiring a more detailed response. For the most part, all four market segment responses regarding automatic doors were similar. The differences from market to market are indicated in this white paper.

Key Findings

Importance and Preference

Features

Respondents were asked to use a scale ranging from one (least important) through five (most important) to rank the level of importance they place on the following automatic door features: original cost, convenience, attractive design, accessibility, customer desire, maintenance costs, safety/security, temperature control and reduction of heating/AC costs. When all four categories of respondents are viewed as the universe, accessibility ranks as the most important feature, followed closely by safety/security, customer desire and convenience. **(See B1)**

When each of the four groups is viewed separately, accessibility remains as the most highly ranked feature of an automatic door. However, the order of the other eight features varies from group to group.

The table below illustrates the importance ranking of the nine features of automatic doors (original cost, convenience, attractive design, accessibility, customer desire, maintenance

costs, safety/security, temperature control and reduction of heating/AC costs) as indicated by each of the groups studied.

IMPORTANCE RANKING BY GROUP

FEATURE	<i>Universe</i>	<i>Architects</i>	<i>Retailers</i>	<i>Colleges/ Universities</i>	<i>Hospitality</i>
Accessibility	1	1	1	1	1
Safety/ Security	2	3	2	2	2
Customer Desire	3	5	5	9	9
Convenience	4	4	4	4	2
Maintenance Costs	5	6	3	3	6
Attractive Design	6	2	7	5	4
Temperature Control	7	9	8	7	5
Original Cost	8	7	6	6	8
Reduced Cost Heating/ AC	9	8	9	8	7

(SEE B2, B3, B4 AND B5)

Prime Locations for Automatic Doors

When given the following options: full service restaurants, fast food restaurants, airports, government buildings, shopping mall entrances, office buildings, colleges/universities, retail stores, hospitals and hotels/motels, the universe indicated that it was most important for automatic doors to be present at hospitals. Airports, hotels/motels, shopping mall entrances and retail stores rounded out the top five most important locations for automatic doors as indicated by all respondents. **(See B6)**

When market segments are looked at separately, the top five most important locations sometimes differed from the universe results.

The **architects** included in this survey pointed to airports and hospitals (tie) as the places they believe automatic doors are most important, followed by hotels/motels and government buildings. (See B7)

Retailers also listed airports and hospitals (tie) as the places where automatic doors are the most necessary. Retailers ranked hotels/motels as the second most important location. Interestingly, retail stores were named by the group as the third most important place for automatic doors to be present. (See B8)

Colleges/universities' personnel surveyed indicated that they felt the most important location for automatic doors is hospitals, followed by airports and hotels/motels. (See B9)

The **hospitality** segment also listed hospitals as the number one location where automatic doors are essential. Airports followed closely behind hospitals, which were listed in advance of the third most important choice of hospitality managers: hotels/motels. (See B10)

As a Universe...

The following information refers to results found when all groups were considered as a universe.

Automatic Door Usage Trend

An overwhelming majority of the respondents (78 percent) believed there would be an overall increase in automatic door usage in the next five years.

Universal Accessibility Versus Handicap Accessibility

There may be a trend in "universal access" of buildings for all people, not just those with disabilities. As mentioned by a few respondents and referenced in the January 2004 issue of *Architectural Record*, there is a move toward more welcoming building entrances that allow easier access. As stated by one respondent, "Let's design not just for the

handicapped, but convenience for all. Where possible, especially with large volumes of people, this should be understood.”

Unmet Needs

When respondents were asked if they had any final comments, many suggested a need for more information related to specification of automatic doors. More information was also requested to show the variety of designs and applications of automatic doors, and a demand for more detail on hardware was also expressed.

A few respondents admitted that they needed more automatic doors but were under budget constraints to purchase them.

According to survey results, it appears that improved technology is an unmet need, especially related to maintenance issues. Many respondents noted that a common perception of automatic doors is that they require a much higher cost to maintain than manual doors. AAADM members believe that life cycle cost analysis refutes this impression to a great degree.

The ability to more easily install and retrofit automatic doors was mentioned by respondents as well.

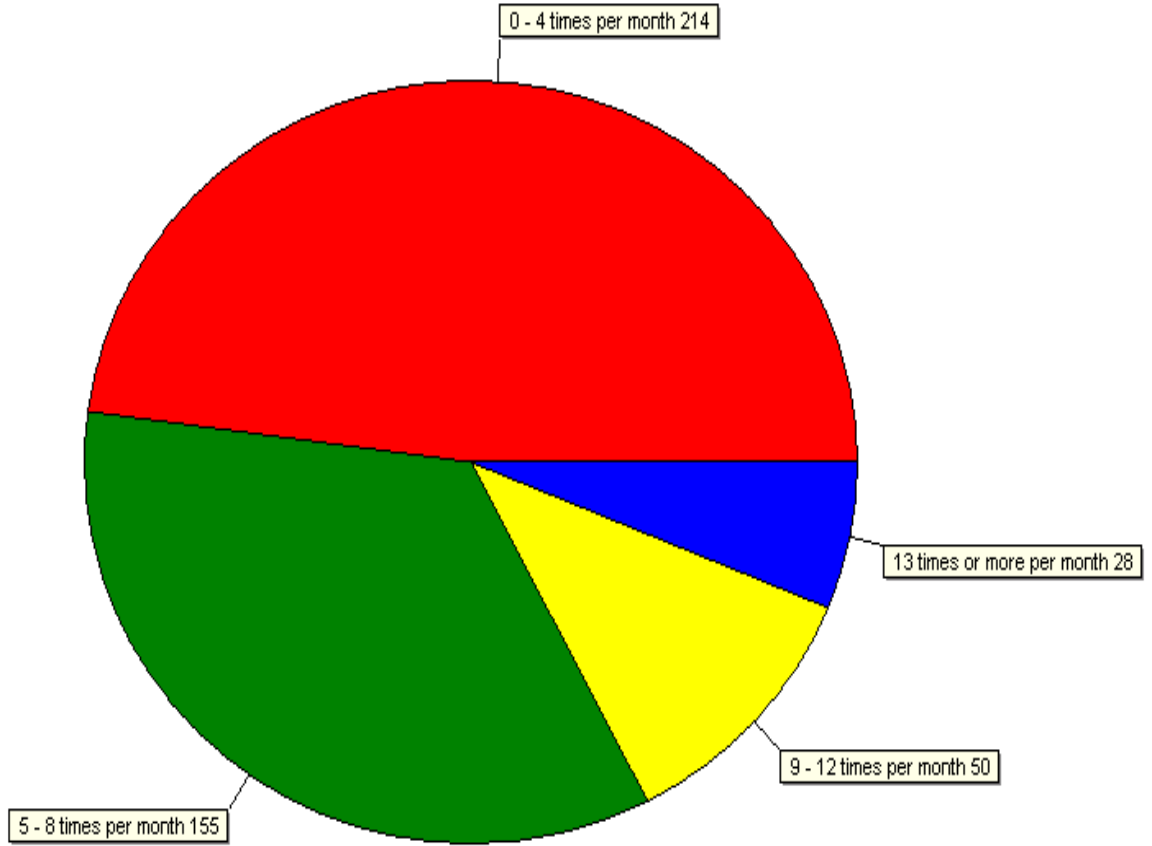
Conclusion

This phase of AAADM’s research indicated that there are only slight differences in viewpoints about automatic doors between architects, colleges/universities, hospitality management and retailers. But the fact remains that there are differences.

For more information or comprehensive survey results, please contact the American Association of Automatic Door Manufacturers (AAADM), 1300 Sumner Avenue, Cleveland, OH 44115-2851. Phone: 216-241-7333; FAX: 216-241-0105; E-mail: aaadm@aaadm.com. Web site: www.aaadm.com.

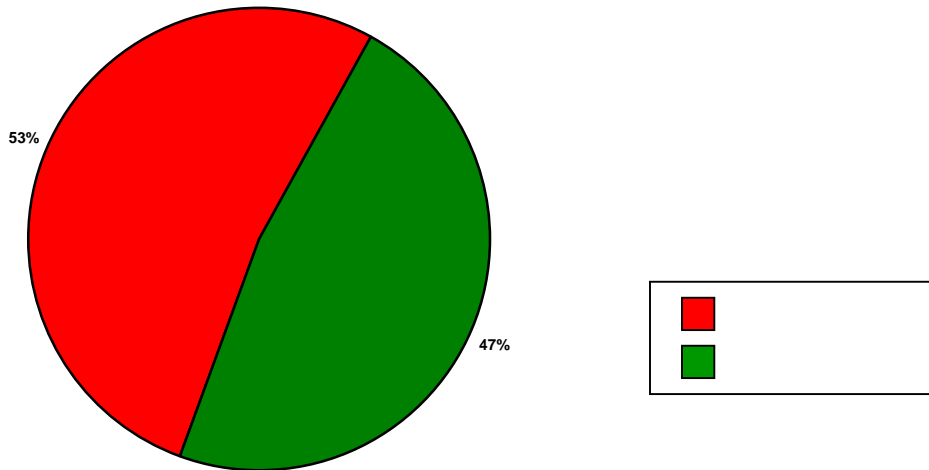
A1

How often do you shop at a (non-grocery) retail store?

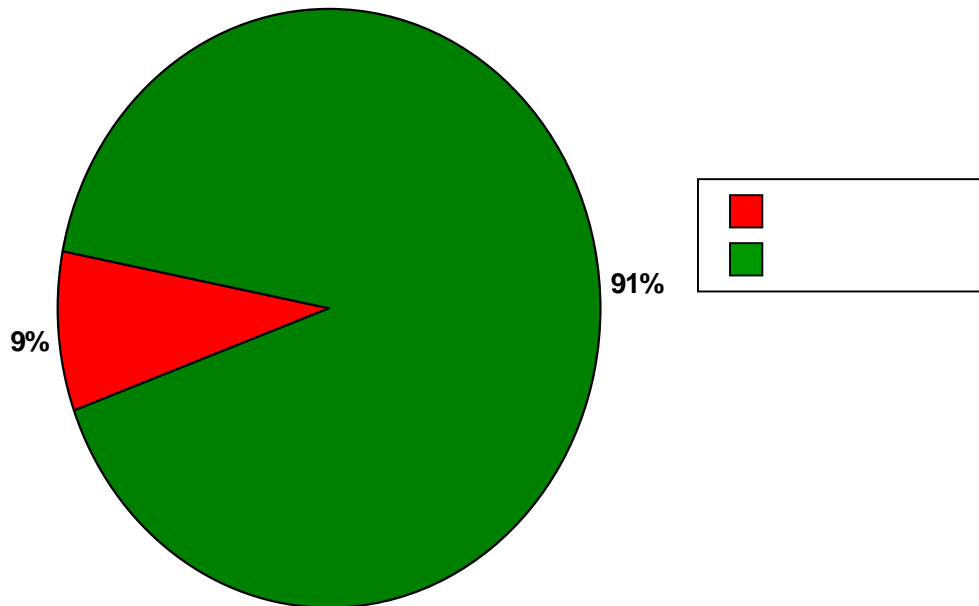


A2

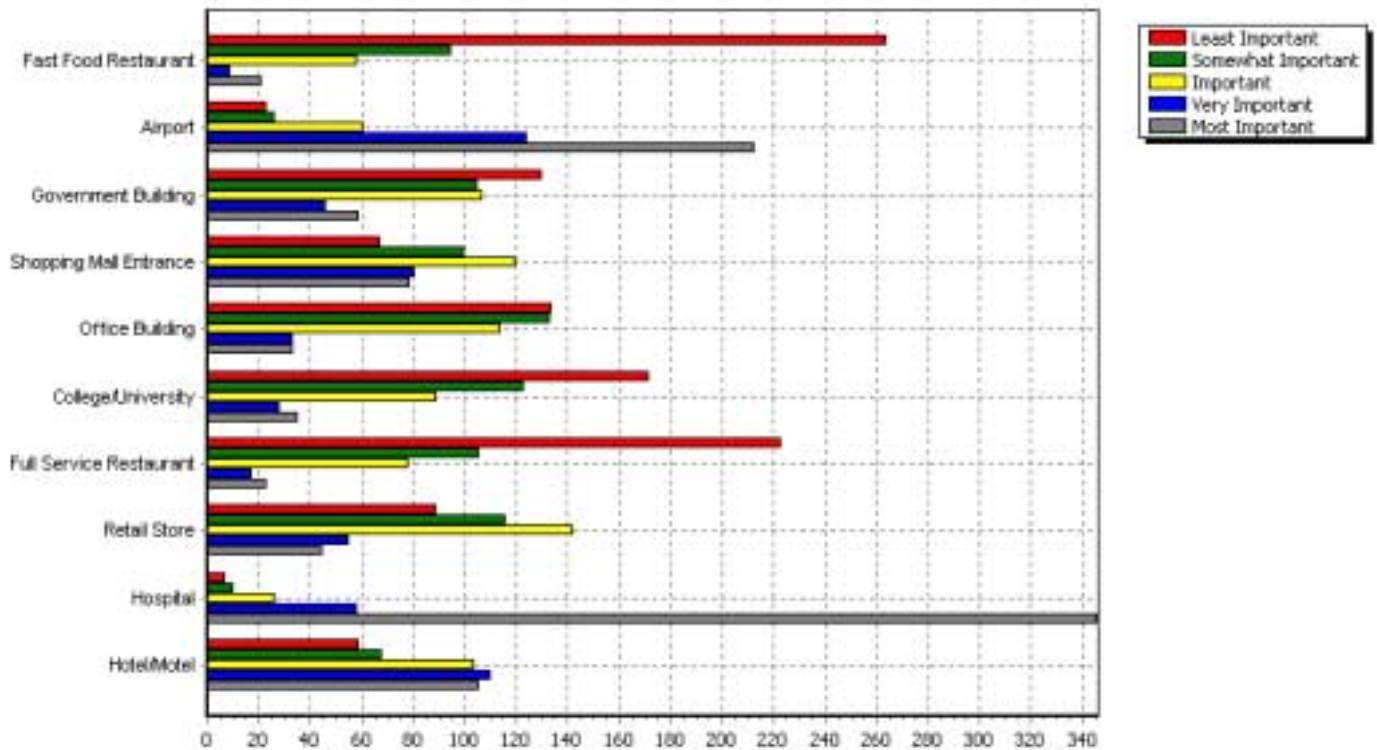
Do you travel outside your metropolitan area at least once per month?



Do you have any children attending college?



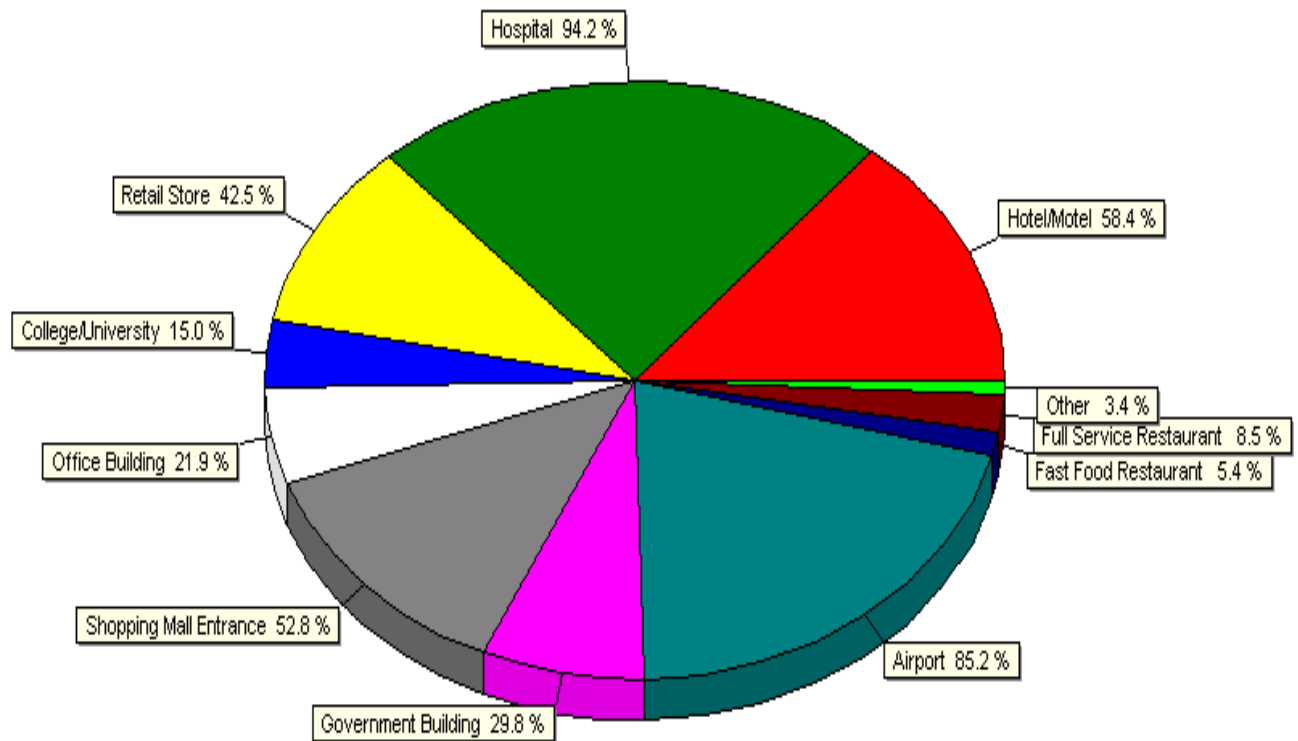
In which of the following locations is it Least Important / Most Important to find an Automatic door rather than a Manual door?



- ◆ 77% of the respondents chose Hospitals as a Most Important location to have automatic doors, with a 4.62 mean.
- ◆ Airports ranked as the second Most Important location with 28% and a mean of 4.07.
- ◆ 59% of the respondents chose Fast Food Restaurants as the Least Important location to find automatic doors with a mean of 1.72.
- ◆ Full Service Restaurants were also chosen by 50% of the respondents as the Least Important location to find automatic door showing a mean of 1.91
- ◆ Hospitals, Airports, Hotels/Motels, Shopping Mall Entrances and Retail Stores were all rated as important locations for automatic doors by more than 52% of the respondents

A4

At what type of location do you expect to find an automatic door?

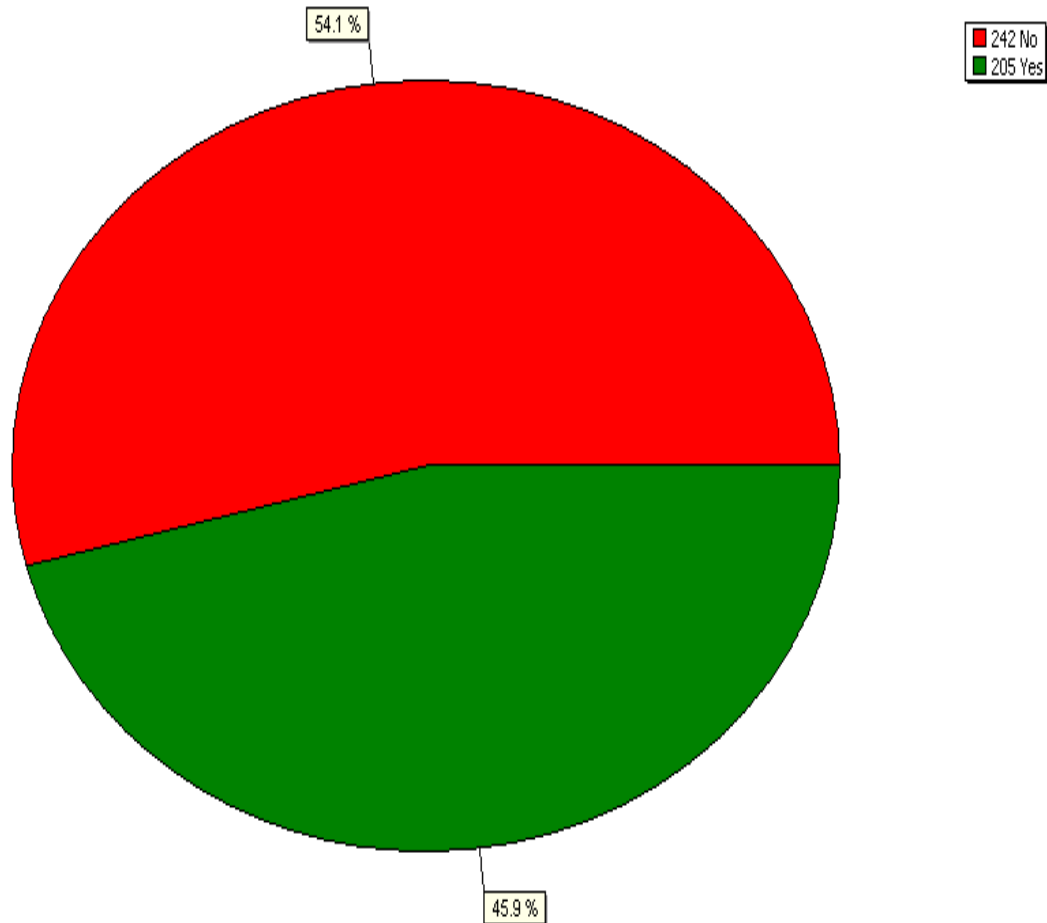


●Hospitals were chosen as the number one location to expect to find automatic doorswith 94% of the responses, followed by Airports (85%)and Hotels/Motels (58%)

●”Other” category included grocery stores, senior and handicap housing and doctors’ offices

A5

Do you consider an Automatic door a minimum level of service from a business establishment?



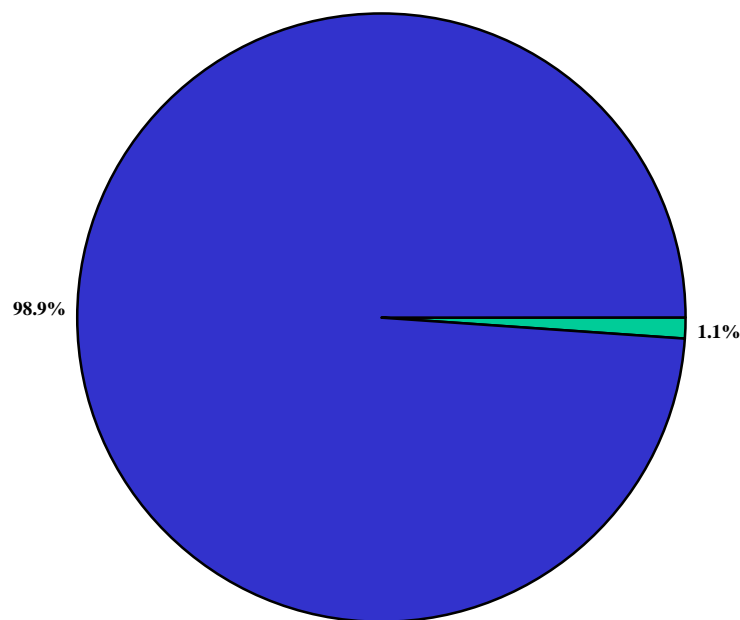
Please Explain why or why not.

- Not all businesses need automatic doors
- •They are a convenience.
- •May be a minimum level of service but not mandatory or necessary.
- •Highly dependent on location – hospitals, airports and hotels need automatic doors. Smaller businesses may not.
- •Automatic doors are nice for the handicapped, disabled and elderly adults.

A6

Given two identical businesses, but one uses manual doors and the other uses automatic doors:

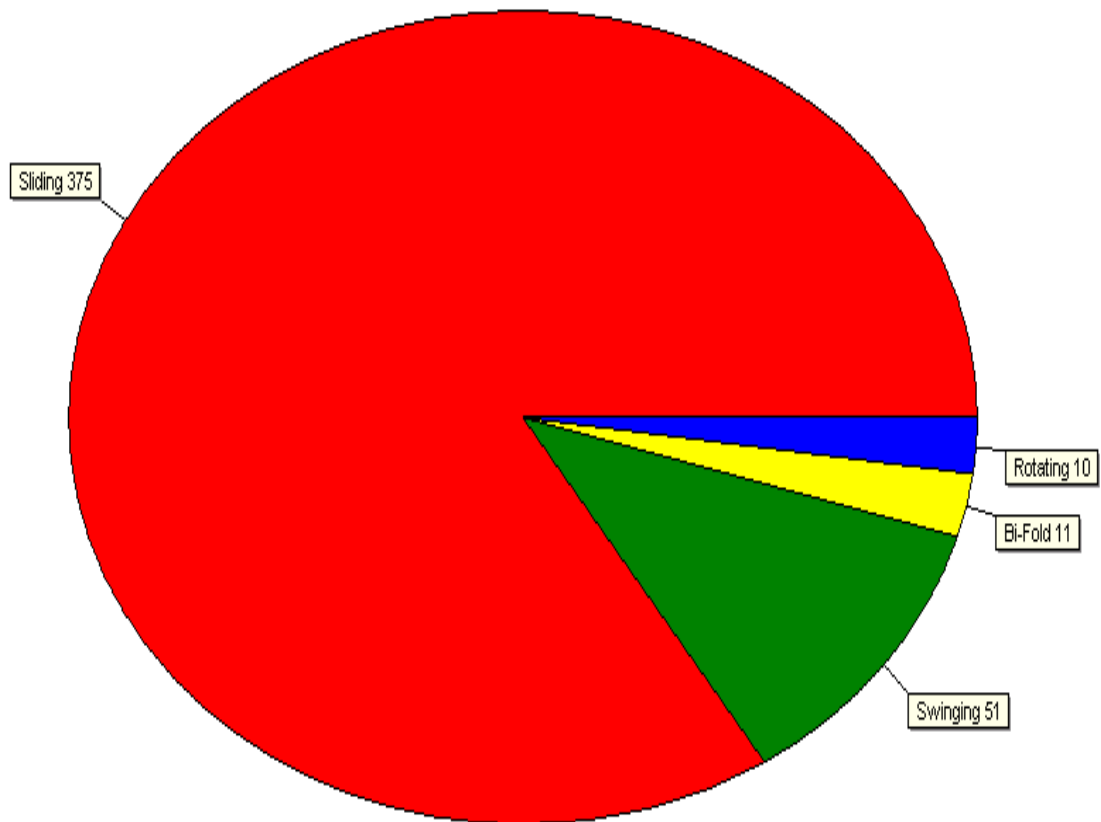
- I would definitely prefer to shop or stay at the business with manual doors
- All others



- Only 1,1% of respondents prefers manual doors.
- The majority, 98.9% of the respondents stated that they would definitely prefer to shop or stay at a business with automatic doors.

A7

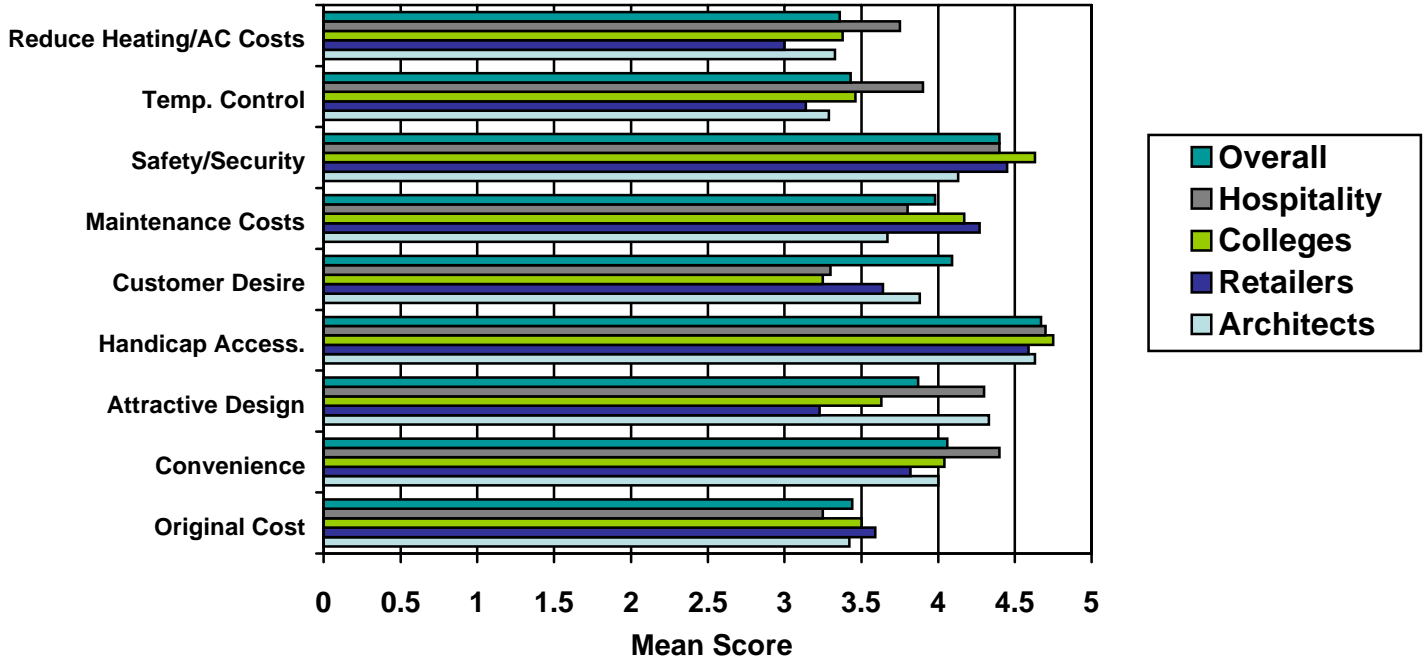
What type of Automatic door do you prefer?



- Of the 375 respondents who preferred sliding automatic doors:
 - 69 (18%) shopped at a (non-grocery) retail store 9 times or more per month
 - 46 (12%) traveled outside their metropolitan area at least once per month
 - 9 (2%) had children attending college

B1

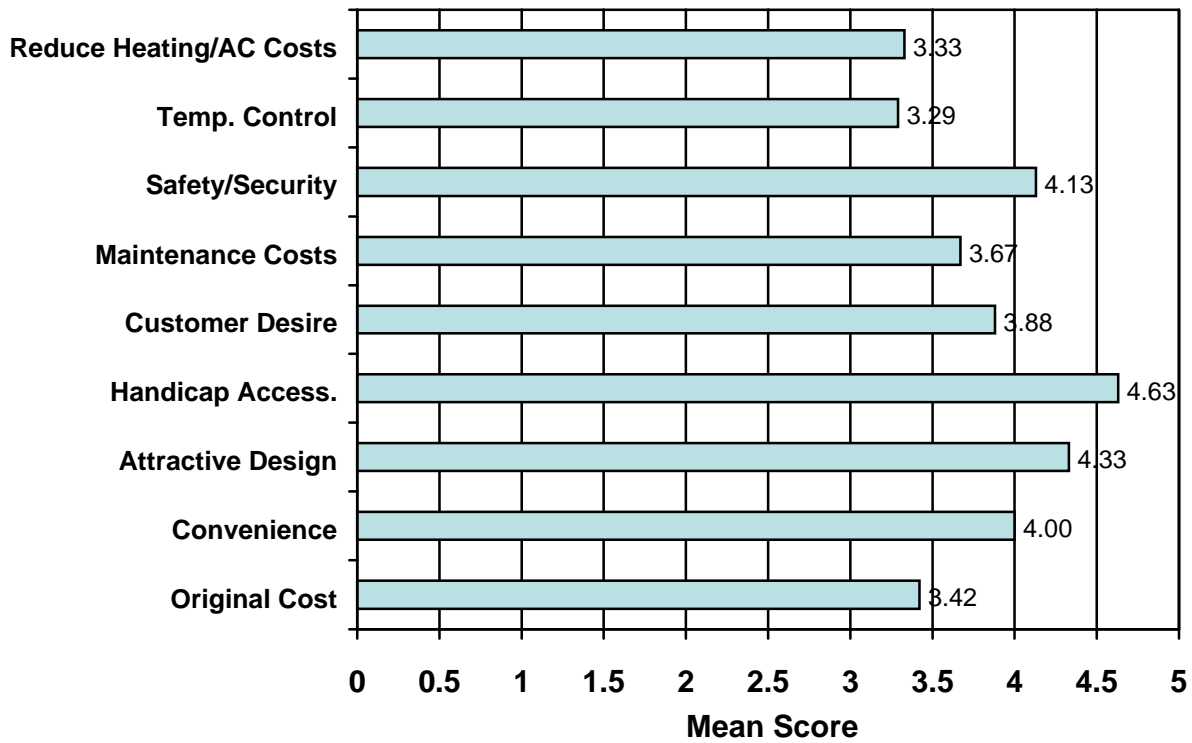
On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following features when specifying an Automatic door?



B2

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following features when specifying an Automatic door?

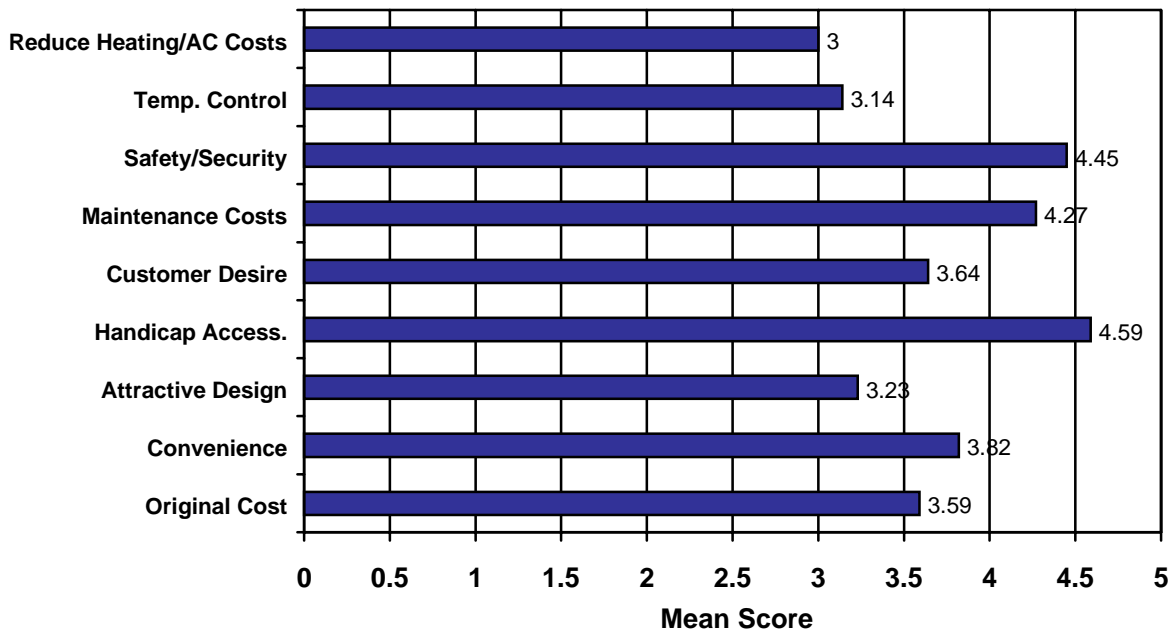
MEAN SCORE- ARCHITECTS



B3

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following features when specifying an Automatic door?

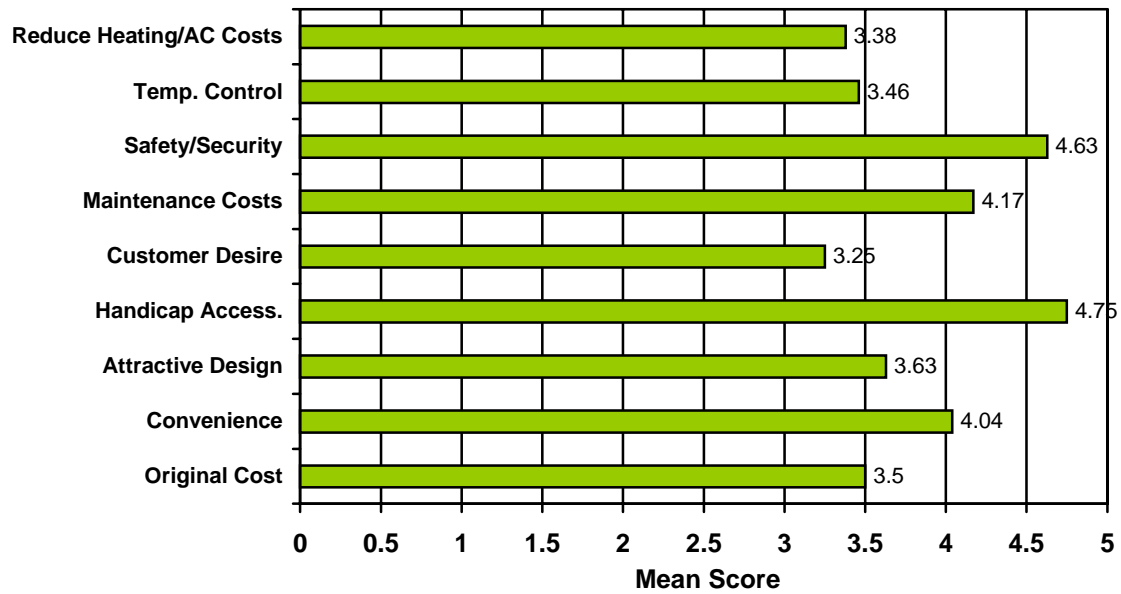
MEAN SCORE- RETAILERS



B4

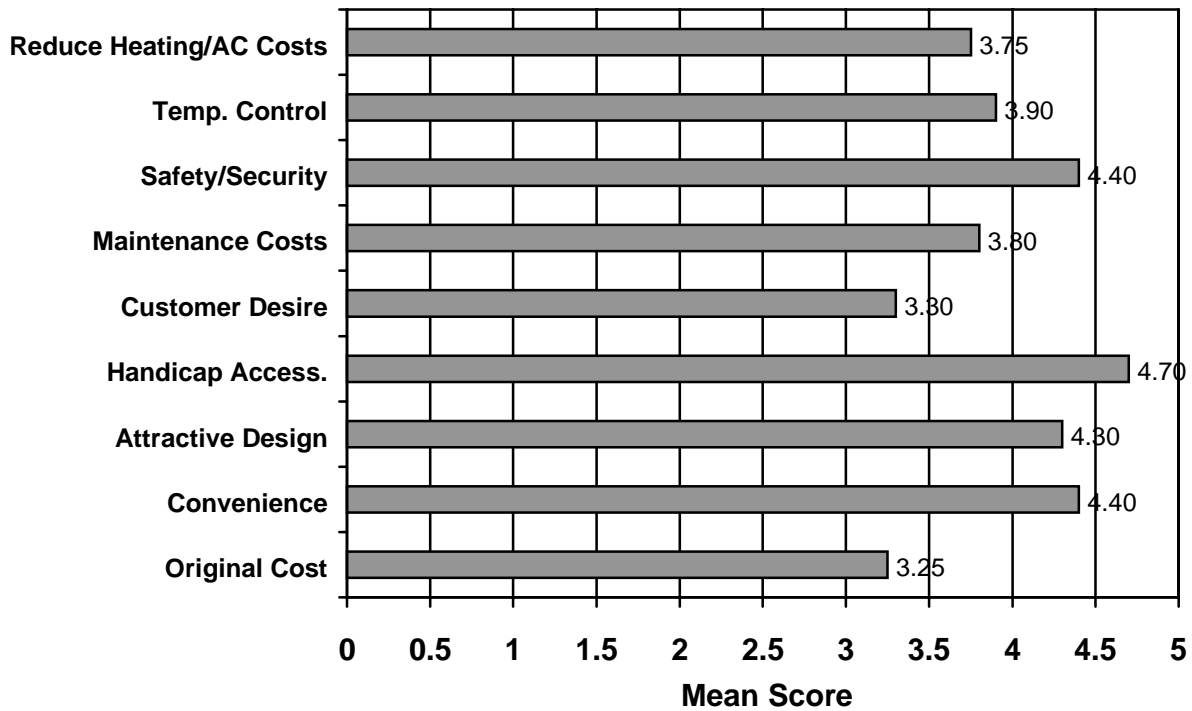
On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following features when specifying an Automatic door?

MEAN SCORE- COLLEGES/UNIVERSITIES



B5

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following features when specifying an Automatic door?

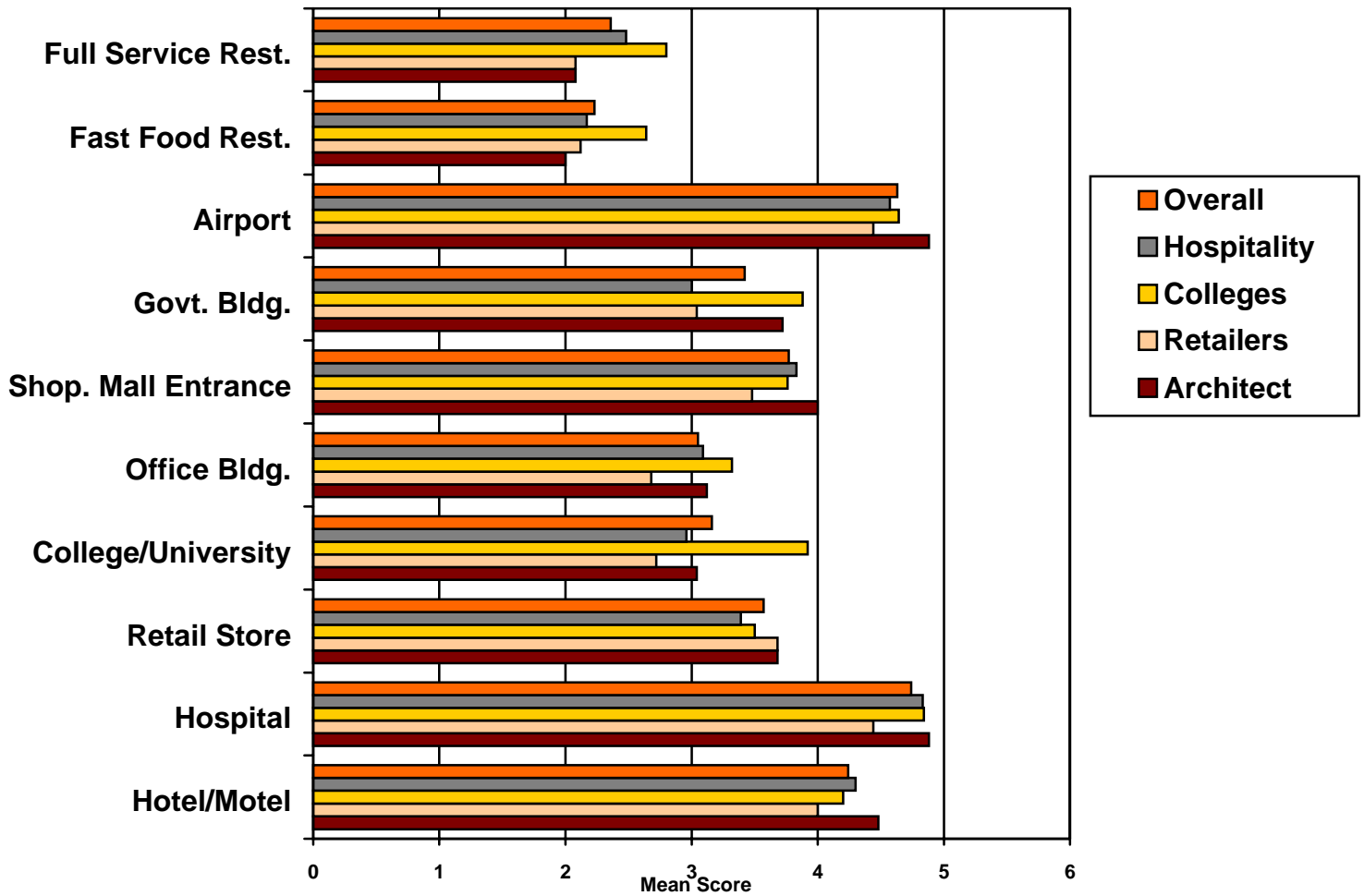


MEAN SCORE- HOSPITALITY

B6

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following locations for Automatic doors?

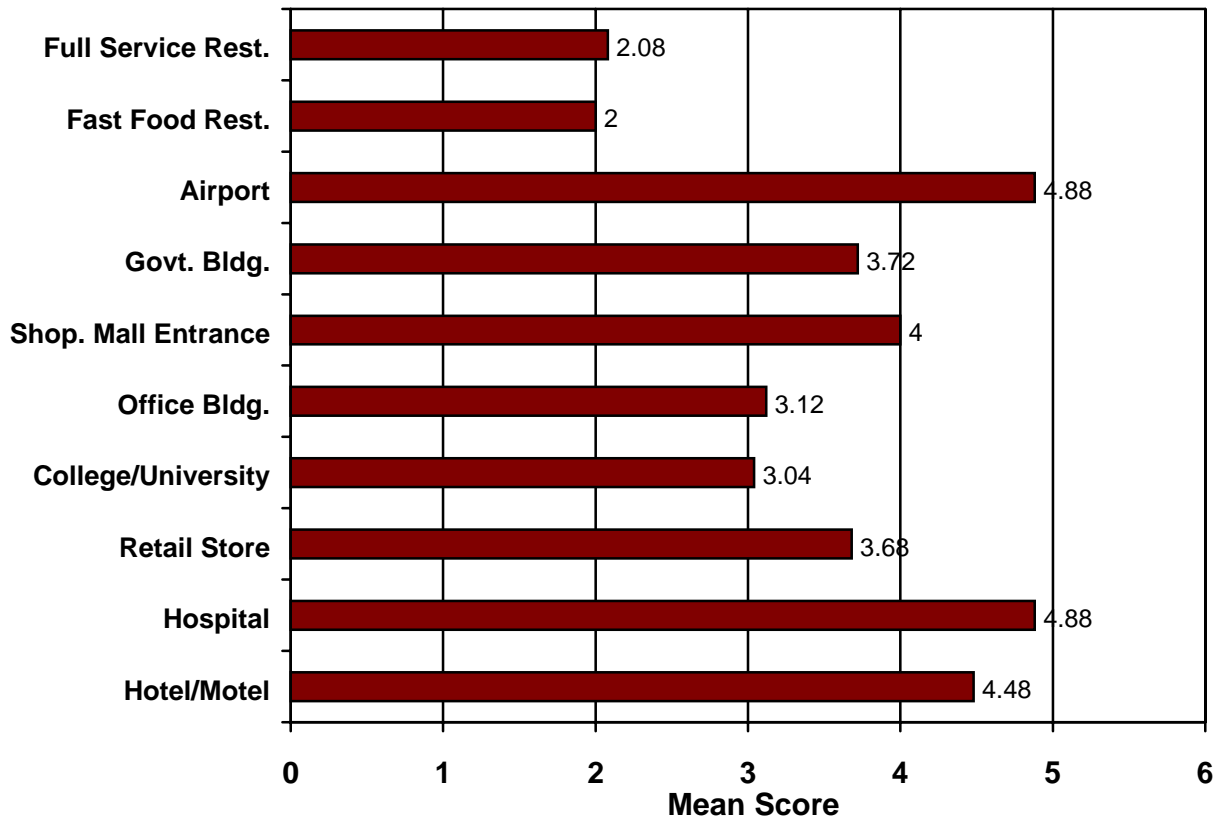
Mean Scores – All Market Segments



B7

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following locations for Automatic doors?

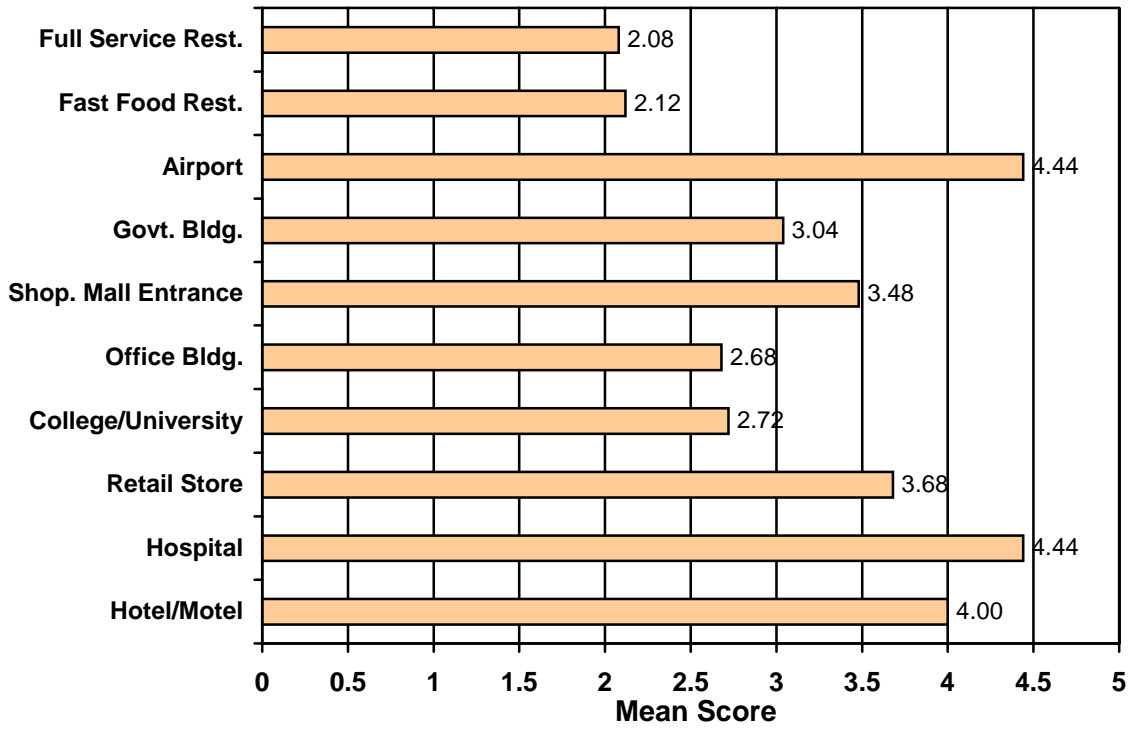
By Market Segment - Architects



B8

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following locations for Automatic doors?

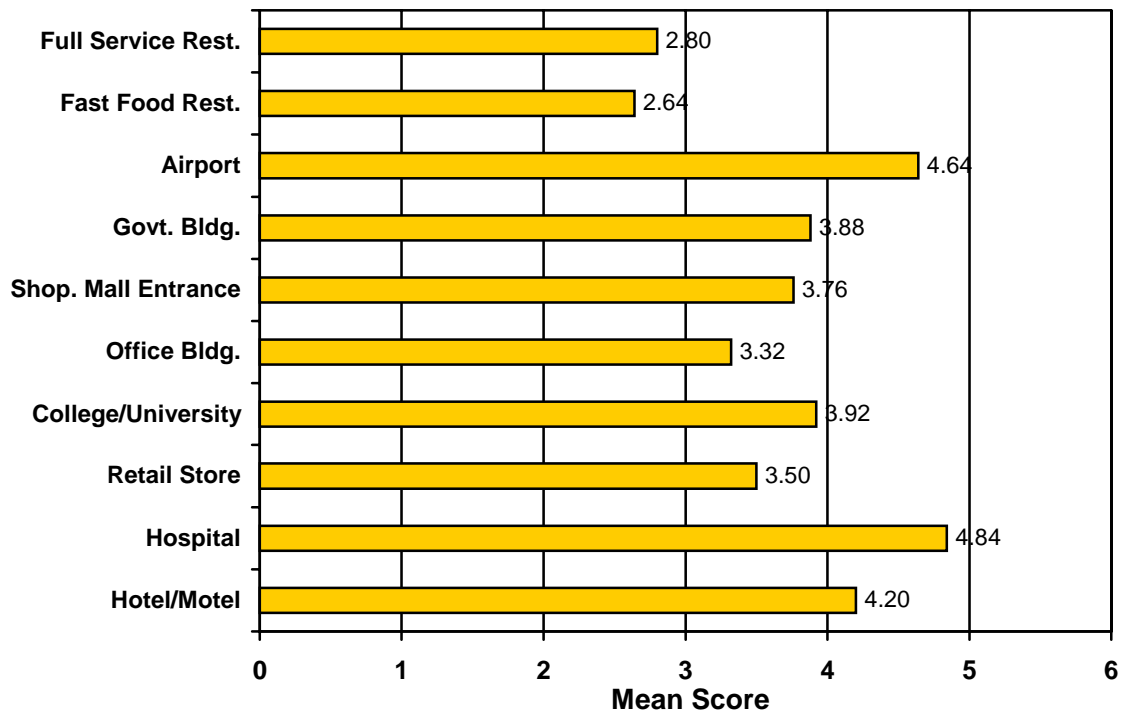
By Market Segment - Retailers



B9

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following locations for Automatic doors?

By Market Segment – Colleges/Universities



B10

On a scale of 1 to 5, 1 being the least important and 5 being the most important, how would you rate the following locations for Automatic doors?

By Market Segment – Hospitality

