

# **THE MARKET FOR LOCAL NUMBER PORTABILITY**

## **REPORT OF RESULTS**

**October 11, 1995**

**Project No. 95-067**

*Report for*

**GTE**

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**INTRODUCTION**

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With the growth of competition in the market for local exchange service, the issue of number portability has moved to the forefront and is currently being addressed by a significant number of states as well as the Federal Communications Commission. Many desiring number portability assert that its absence will be an obstacle to competition in the local exchange service market. Some say that number portability on a national scale is required while others believe that number portability on a smaller scale will be sufficient. While the views of many industry participants on number portability is fairly well documented, the view of the telephone customer is not.

GTE believes that a realistic gauge of potential customer demand must be obtained before, and be a significant factor in, any decision, whether at the state or federal level, to mandate the implementation of any form of number portability. Neither the industry nor any regulatory body can responsibly determine which number portability architecture is in the public interest until it has reasonably assessed how much customers are willing to pay for this feature.

GTE commissioned this survey to gather the data necessary to formulate statistically significant projections of potential customer demand for number portability. With this information, GTE hopes to assist the industry and its regulators in identifying the type of number portability that will best serve the public interest.

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**RESEARCH METHODOLOGY**

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**CONJOINT ANALYSIS**

The purpose of this study was to identify the benefits, if any, of number portability. It was decided that the optimum methodology for the research would be a trade-off analysis. More specifically, a **conjoint** analysis was proposed. This technique reveals how consumers make complex judgements such as purchase decisions. It assumes that such decisions are not based on a single factor or criterion, but rather on several factors which are considered jointly, thus the term "conjoint."

In a manner of speaking, conjoint analysis allows one to "get inside the head" of the consumer to observe how decisions are made. The conjoint analysis technique poses a series of choice decisions about products to survey respondents and in so doing...

- ① reveals consumer preferences in a realistic manner not unlike a shopping situation where people compare and select among real products and services
- ② lets one deduce the values that underlie consumer decisions, and do so in a way that provides more valid and accurate information than if consumers were asked directly how they make their purchase decisions.

The conjoint analysis approach offers several advantages over more traditional methodologies. The primary one is that respondents are forced to make trade-offs in their decisions much in the same way that consumers are forced to do so when they actually make a purchase. Indeed, when consumers shop for products and services, they rarely if ever have the option of having more of every feature or characteristic they consider desirable and less of every one they find undesirable. Rather, almost all purchase decisions involve giving up some features or benefits to get others one values more highly.

To sum up, conjoint analysis was proposed as the method of choice for this research because it provides a model of the customer's decision making process in a realistic manner. The only limitations of conjoint analysis involve the fact that predictions made by this technique take into account just those variables and levels of variables that have been included in the design. Other external factors may, of course, have an influence, such as the level of awareness in the general residential and business customer community of the issues involved, and the advertising, promotions, and marketing efforts of the competing vendors.

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**CONJOINT ANALYSIS AND THE MARKET FOR LOCAL SERVICE**

Customers selecting a local service provider will choose between what could be called competitive "offerings." An offering in this context consists of a local service...

- ➡ that is provided by a specific company (e.g., GTE)
- ➡ that is provided at a certain price
- ➡ that has certain number portability options:
  - 1) keep the current number and area code now, but change the number if the customer moves
  - 2) change the number immediately, and change it again when the customer moves
  - 3) change to a new 300 area code immediately and never have to change it again, even if the customer moves
  - 4) keep the current number and area code and never have to change numbers again, even if the customer moves.

The total number of possible distinct offerings in the universe of offerings tested in the research is simply the product of the number of levels of each offering. This total is beyond the capacity of survey respondents to consider and choose among. However, the conjoint analysis technique requires that only a fraction of all possible offerings actually be exposed to respondents. The essentially regression-based statistical underpinnings of the technique utilize the respondents' ratings of a sample of the offerings to predict what their evaluations would be had they considered all of the offerings.

A specific offering (Local Service) that could be evaluated by respondents would consist of one particular level of each variable combined with one particular level of each and every other variable.

This analysis focuses solely on the customer's demand for various local number portability options (e.g., a 300 number vis-a-vis full geographic portability) and consequently on their relative willingness-to-pay for such service.

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### **CONJOINT ANALYSIS AND THE MARKET FOR LOCAL SERVICE**

Customers selecting a local service provider will choose between what could be called competitive "offerings." An offering in this context consists of a local service...

- ➡ that is provided by a specific company (GTE, an adjacent RBOC, an IC, etc.)
- ➡ that has certain costs and number portability options.

In conjoint analysis terms, the offerings are defined in terms of specific variables and levels of variables. These are defined in the grid on the following page.

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**Steps in the Procedure**

- Step 1: Respondents were screened and recruited by phone to take part in the research in a brief (5-minute) interview.
- Step 2: Those agreeing to participate were mailed a "questionnaire kit" containing:
- ➡ a brochure (produced by Travis Research) describing the various local number portability issues.
  - ➡ a brief questionnaire (covering background characteristics of the respondents (and their companies in the case of business customers) and issues other than those dealt with through the conjoint analysis.) (See materials in Appendix.)
  - ➡ The 27 offerings, these taking the form of small index cards, one offering per card.
- Step 3: The respondents' tasks included the following:
- ➡ Review the brochure at leisure, having the time to fully absorb the essence of the issues at stake, and the variables and levels of variables they will subsequently consider.
  - ➡ For each of the scenarios, rate each of the 27 offerings (cards) on a 100-point intention-to-subscribe scale ranging from "Definitely Would Subscribe" to "Definitely Would Not Subscribe"
  - ➡ Complete the brief self-administered questionnaire.
- Step 4: Subsequently, at a pre-arranged time, Travis Research called back the participants to retrieve their responses.

At no time was GTE identified as the sponsor of the research.

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**Sample Design**

The sample design employed in the research is described below.

**...GTE Customers...**

- ➔ Sampled from lists provided by GTE
- ➔ Randomly drawn throughout all of GTE's serving areas
- ➔ 412 Residential Customers
- ➔ 405 Business Customers
  - ✓ 146 larger ("branch") businesses
  - ✓ 134 medium-sized ("non-branch") businesses
  - ✓ 125 small businesses

**...RBOC Customers...**

- ➔ From purchased lists
- ➔ 101 Residential Customers
  - ✓ 24 in Dallas (Southwestern Bell)
  - ✓ 25 in Los Angeles (Pacific Bell)
  - ✓ 27 in Manassas (Bell Atlantic)
  - ✓ 25 in Seattle (U S WEST)
- ➔ 100 Business Customers
  - ✓ 27 in Dallas (Southwestern Bell)
  - ✓ 24 in Los Angeles (Pacific Bell)
  - ✓ 22 in Manassas (Bell Atlantic)
  - ✓ 27 in Seattle (U S WEST)

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**Data Collection, Tabulation and Analysis**

All of the questionnaires and materials employed in the research were carefully pre-tested to ensure their clarity and understanding on the part of respondents. All surveys were conducted via Computer Assisted Telephone interviewing. Up to six attempts were made to complete an interview before any listing was considered unusable. Finally, 10% of all telephone interviews were monitored.

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**EXECUTIVE SUMMARY**

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**THE IMPORTANCE OF NUMBER PORTABILITY WHEN CHOOSING A LOCAL SERVICE PROVIDER**

- ➔ Number portability accounts for only 17% of the residential customer's decision and 29% of the business customer's decision.

**WILLINGNESS TO PAY FOR NUMBER PORTABILITY**

- ➔ If it were available at no cost, approximately one-third to one-half of residential and business customers would prefer a non-geographic number that they would never have to change. However, these proportions decline substantially at even modest (+ five percent) compensating increases in the basic monthly rate.
- ➔ Similar, but even more pronounced results are found in the case of full geographic local number portability (keeping one's current number, and never having to change it again). At no increase in price, clear-cut majorities of customers would prefer this option as opposed to having to change their number if they should move. However, compensating increases in the basic monthly rate of just five percent, and clearly in the case of 10%, result in these percentages dropping precipitously.

**FULL GEOGRAPHIC VERSUS NON-GEOGRAPHIC NUMBER PORTABILITY**

- ➔ Customers would prefer full geographic over non-geographic number portability. In this context, full geographic number portability means the ability to change service providers or locations without changing one's current telephone number. Non-geographic number portability means changing to a new non-geographic specific area code (e.g., 300) when changing service providers or locations. Residential customers express a moderate degree of preference for full geographic number portability, while their business customer counterparts exhibit a more pronounced preference for it.
- ➔ However, both types of customers are highly price sensitive on this issue. If full geographic local number portability results in a basic monthly rate just two to eight percent higher than that for non-geographic portability, customers become indifferent, i.e., they are equally as likely to choose non-geographic as full geographic local number portability.
- ➔ Thus, while customers may prefer full geographic over non-geographic number portability, they are not willing to pay much of a premium for it.

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**WILLINGNESS TO PAY NOW FOR FUTURE SERVICE PROVIDER NUMBER PORTABILITY**

- ➔ Nearly half of the residential customers surveyed would tolerate a 50¢ surcharge for having this future option, and about three out of five business customers would do so.
- ➔ While a modest drop off in purchase interest occurs when the monthly fee rises from 50¢ to \$1.00, a significant decline occurs when that fee reaches \$2.50.

**WILLINGNESS TO PAY NOW FOR FUTURE SERVICE PROVIDER AND LOCATION PORTABILITY**

- ➔ The same basic pattern emerges as for service provider portability alone. However, the willingness to pay to have both service provider and location portability registers at a moderately lower level.

**IMPLICATIONS OF LOSING THE GEOGRAPHICAL SIGNIFICANCE OF A TELEPHONE NUMBER FROM THE CALLER'S POINT OF VIEW**

- ➔ A number of concerns are expressed when residential and business customers are asked to assume the frame of reference of the person calling a number that has lost its geographic significance. Clear-cut majorities feel it is at least somewhat important to know the location of the number being called, and the time of day or night at that number. However, **decidedly most important to customers is knowing whether they are incurring toll or long distance charges when making calls.**

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**DETAILED FINDINGS**

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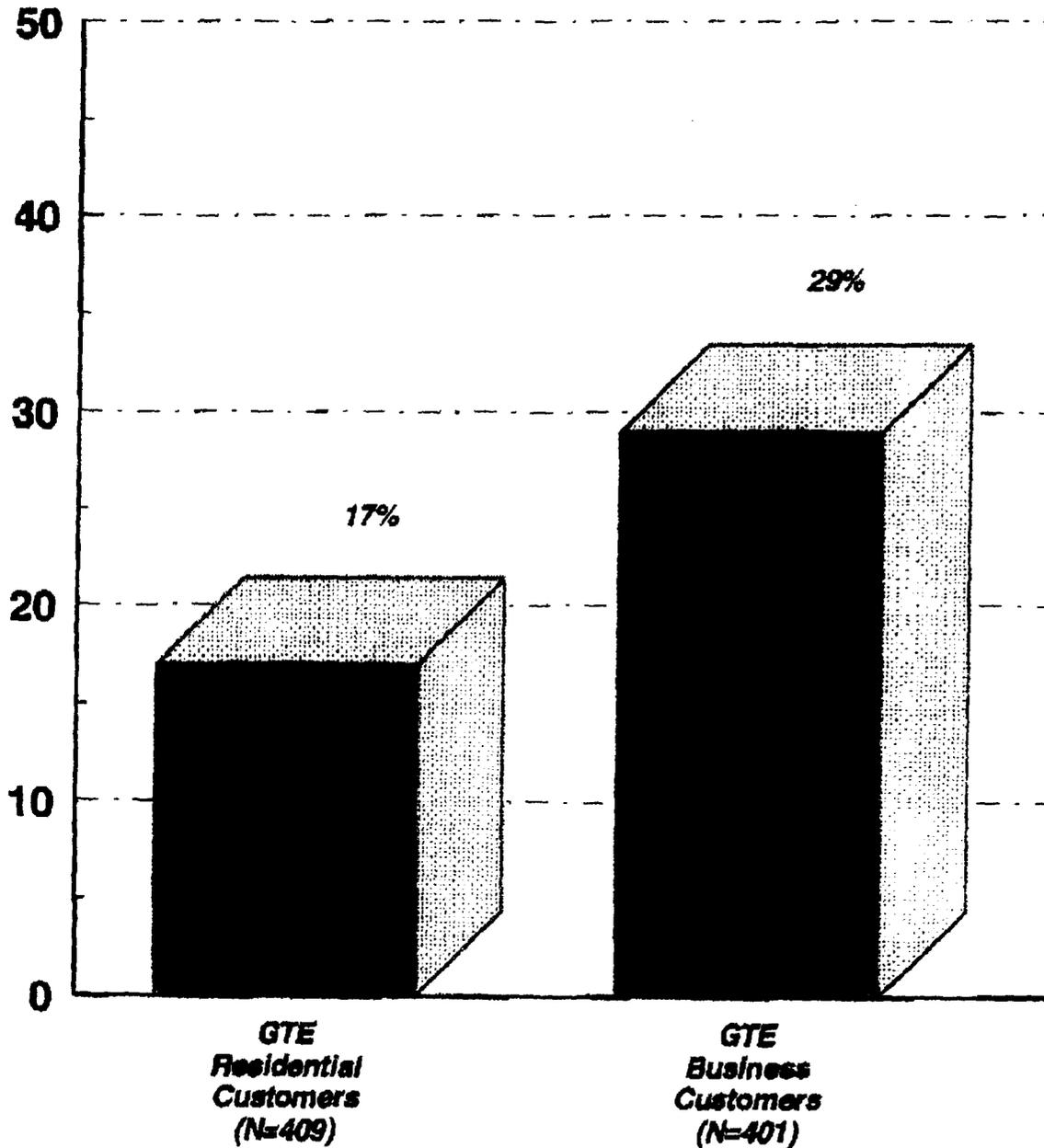
**THE IMPORTANCE OF NUMBER PORTABILITY WHEN CHOOSING A LOCAL SERVICE PROVIDER**

- ➡ Number portability accounts for only 17% of the residential customer's decision and 29% of the business customer's decision.

## THE IMPORTANCE OF NUMBER PORTABILITY IN THE CONSUMER'S DECISION MAKING PROCESS

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Percentage of the Decision Accounted for by Number Portability



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**WILLINGNESS TO PAY FOR NON-GEOGRAPHIC NUMBER PORTABILITY**

Many customers would prefer non-geographic number portability (specifically, being able to "Change to a new 300 area code telephone number immediately and never have to change it again, even if you move") over current number restrictions ("Keep your current number and area code now, but change your number if you ever move"). However, are they willing to pay for it, and if so, how much are they willing to pay? To determine this, the conjoint analysis simulations hold brand (the company providing the local service) constant, and trade off increasing basic monthly rates against preference for this form of local number portability. The results for GTE residential and business customers appear in the succeeding two Exhibits, both of which reveal substantial price sensitivity.

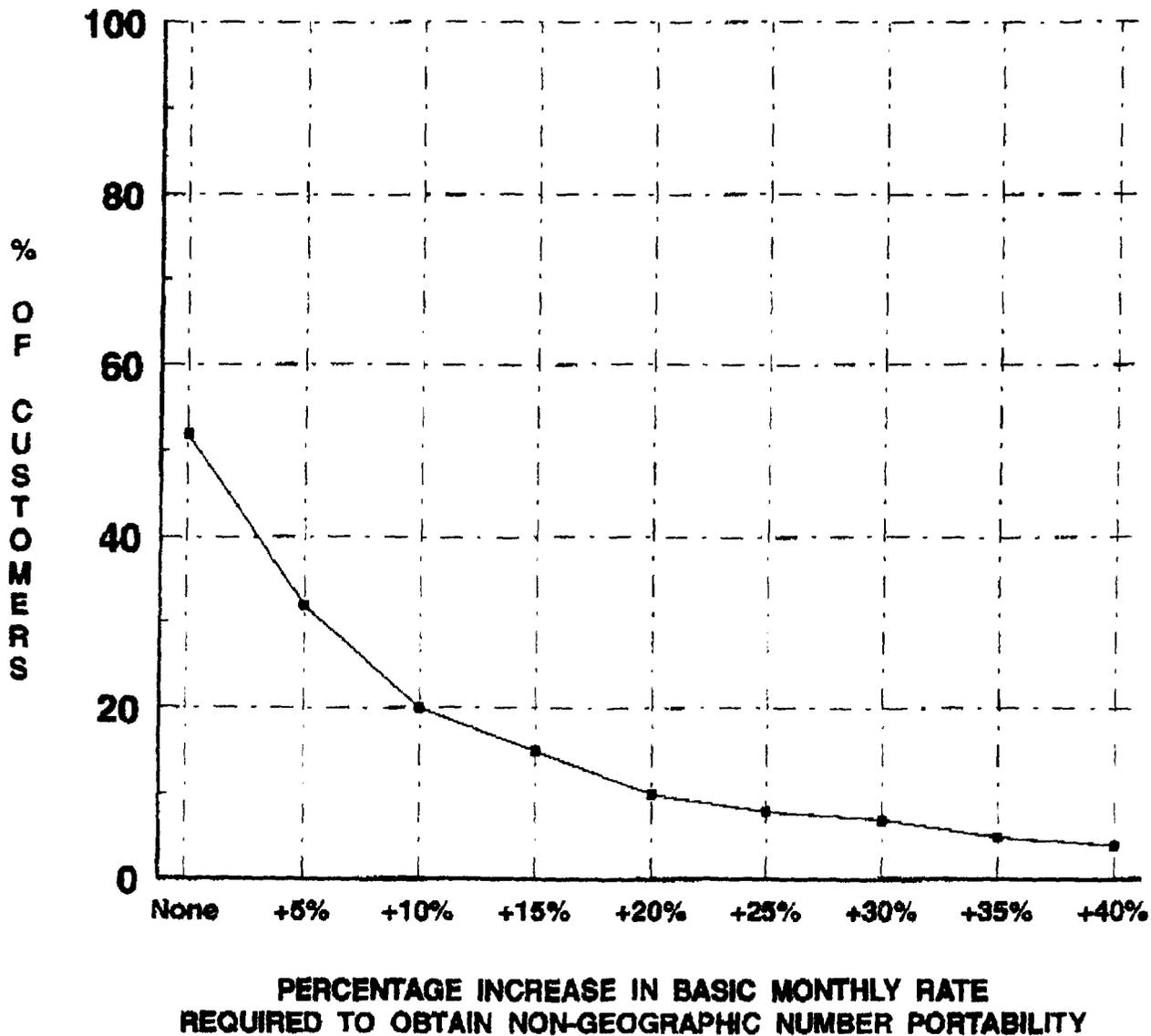
- ➡ For GTE residential customers, 52% would prefer a non-geographic number at no additional cost, but the proportion declines substantially to 32% at a 5% increase in basic monthly rates, 20% at a 10% increase, 15% at a 15% increase, and 10% or less at 20%+ increases.
- ➡ For GTE business customers, the results are similar. Although fewer GTE business as opposed to residential customers would prefer a non-geographic number if it did not cost more to have one (35% vs. 52%), nevertheless that proportion declines substantially as basic monthly rates increase even as little as 5%, and drop much further at rate increases of 10% or more.

(The results of a separate analysis of the responses of RBOC residential and business customers are similar to those stated above.)

# PRICING SENSITIVITY FOR NON-GEOGRAPHIC NUMBER PORTABILITY IN THE GTE RESIDENTIAL MARKET\*

... AND THE PERCENTAGE OF CUSTOMERS WHO WOULD ACCEPT A GIVEN PERCENTAGE INCREASE IN BASIC MONTHLY RATE TO OBTAIN NON-GEOGRAPHIC NUMBER PORTABILITY

Base: Total GTE Residential Sample (N=400)



\*Service provider held constant

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