

**Camel SNUS Modified Risk Messaging:
Likelihood of Use among Tobacco Users and Non-Users
- First Execution of Consumer Testing -**

Amended Final Report

[Refer to Final Report, “Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users”, dated February 13, 2016; and, Amended Final Report, “Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users – First Execution of Consumer Testing”, dated March 24, 2016]

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This research was conducted on behalf of RAIS in support of tobacco product-related regulatory submissions, and will only be used and/or disseminated for such purposes.

Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users – First Execution of Consumer Testing – Amended Final Report

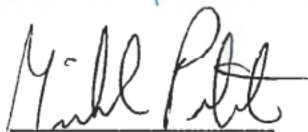
This study was conducted in accordance with the specifications noted in the study protocol (Protocol Identifier: RO-BR-2014-03; "Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users") and in accordance with the Council of American Survey Research Organizations (CASRO) and the International Organization for Standardization (ISO 20252:2012) guidelines. The principals below have reviewed and approved the report, and are forwarding it as the "Amended Final Report".

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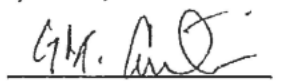
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Change Log for Amended Final Report¹

- 1) *Section 1.2 Study Objectives* specifies a modification to the analyses conducted for statistical modeling;² specifically, likelihoods of use estimates for Camel SNUS with proposed modified risk messaging are projected among current regular cigarette users (versus current regular tobacco users) who were likely versus not likely to quit using tobacco. This modification is similarly reflected in *Section 3.1 Analytic Approach*, *Section 4.3 Inputs to Statistical Modeling*, and *Appendix A: Supplemental Data Tables* (Tables A-11, A-12 and A-13).
- 2) *Section 1.2 Study Objectives* specifies modifications to the analyses that examine product use intentions and likely switching behaviors for Camel SNUS with and without modified risk messaging; specifically, outcome measures are examined among current regular cigarette users and non-users (versus current regular tobacco users and non-users). This modification is similarly reflected in *Section 3.1 Analytic Approach*, *Section 4.4 Tobacco Use Intentions among Potential Camel SNUS Users* (Tables 18A, 18B and 19), and *Appendix A: Supplemental Data Tables* (Tables A-15 and A-17).
- 3) Additional information is provided in *Section 2.1 Sample Design* to describe the programming logic used to ensure appropriate balance (i.e., by demographic dimensions within self-defined tobacco user groups) as respondents are assigned to study arms.
- 4) Additional information is provided in *Section 2.2 Survey Content* regarding the manner in which messaging materials are presented to study participants, and briefly describing the information provided in each of the three (3) screen images.
- 5) Descriptive information is provided in *Section 3.1 Analytic Approach* on product use among current and former tobacco users participating in the study; information is provided on product type used (cigarettes, smokeless tobacco and snus), as well as frequency of use (every day, some days or not at all).

¹ Refer to Amended Final Report, “Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users – First Execution of Consumer Testing”, dated March 24, 2016.

² Findings from statistical modeling are not provided within the current report.

- 6) Additional information is provided in *Section 3.2 Statistical Analyses* to describe the calculation of confidence intervals for predicted purchase rates, and to specify that results of post-hoc t-tests are presented for significant interactions identified in *Section 4 Study Findings*, as appropriate.
- 7) Additional information is provided in *Section 4.2 Model Estimates of Purchase Rates* regarding power analyses conducted on all statistical tests related to purchase projections.
- 8) *Appendix C: Study Protocol, Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users, Appendix D: New Tobacco Product “Likelihood” Study: An Algorithm to Predict Usage of New Tobacco Products Prior to Market Launch, and Appendix E: Original Final Report, Camel Snus Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users* were removed, and are provided as independent reports.

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1. STUDY BACKGROUND AND OBJECTIVES

1.1 Study Background

The U.S. Food and Drug Administration (FDA), prior to issuing a “risk modification order”, requires the manufacturer of a modified risk tobacco product (MRTP) to demonstrate that the product will likely benefit the health of the population as a whole, taking into account both users and non-users of tobacco products.³ Key areas of investigation suggested as necessary to support an MRTP application include the likely effect the tobacco product and its marketing may have on tobacco use behaviors among current tobacco users and the likely effect the product and its marketing may have on tobacco initiation among tobacco non-users (i.e., both never users and former users). These research questions may be operationalized in terms of likelihoods of MRTP use, among consumers overall and within tobacco user groups (i.e., current, never and former regular tobacco users).

Projecting likelihoods of use for a tobacco product prior to that product being in the market requires either (1) use of an uptake algorithm based on sales of existing products; or, (2) development of a tobacco product-specific algorithm by surveying consumers about a product prior to market launch, and then re-interviewing those same consumers with regard to whether or not they purchased the product following market launch. To project likelihoods of use for a tobacco product prior to that product being in the market, RAI Services Company (RAIS)⁴ commissioned two-wave survey research⁵ to create a ratings conversion algorithm that translates continuous ‘likelihood to purchase for personal trial’ ratings into predicted purchase rates. The basis for the algorithm is a survey-weighted logistic regression model that uses ratings from an initial survey wave (prior to market launch) and actual purchase incidence from self-reported survey data collected among those same respondents nine months after market launch.

³ Guidance for Industry: Modified Risk Tobacco Product Applications (Draft Guidance; March 2012) <http://www.fda.gov/downloads/TobaccoProducts/GuidanceComplianceRegulatoryInformation/UCM297751.pdf>.

⁴ RAIS is a wholly owned subsidiary of Reynolds American Inc. (RAI), which bears primary responsibility for coordinating implementation of the Family Smoking Prevention and Tobacco Control Act for itself and RAI’s FDA-regulated tobacco operating companies, namely R. J. Reynolds Tobacco Company, American Snuff Company, LLC, and Santa Fe Natural Tobacco Company, Inc.

⁵ The initial survey wave of the “Algorithm Development” research was conducted from December 23, 2009 through January 6, 2010, and 9-month follow-up wave was conducted from September 16, 2010 through October 5, 2010 (refer to “New Tobacco Product “Likelihood” Study: An Algorithm to Predict Usage of New Tobacco Products Prior to Market Launch”).

1.2 Study Objectives

RAI Services Company, on behalf of R. J. Reynolds Tobacco Company, intends to submit an MRTTP application to FDA requesting that the agency issue a “risk modification” order for Camel SNUS. The MRTTP application will propose modified risk messaging for six (6) Camel SNUS products (collectively “Camel SNUS”) currently marketed in the United States. Specifically, RAIS will seek an order for “reduced risk” messaging on Camel SNUS, intended for current regular tobacco users, as follows:

“Smokers who switch completely from cigarettes to Camel SNUS can significantly reduce their risk of lung cancer, oral cancer, respiratory disease, and heart disease.”

This study was developed to support the intended MRTTP application by assessing the potential effects of the proposed Camel SNUS modified risk messaging on the likelihood that:

- current regular tobacco users, including those who are likely to quit using tobacco (i.e., ‘potential quitters’), will start using Camel SNUS;
- former regular tobacco users will re-initiate tobacco use with Camel SNUS; and,
- never regular tobacco users will initiate tobacco use with Camel SNUS.

The primary objective of this research was to project likelihoods of use⁶ for Camel SNUS, with versus without the proposed modified risk messaging, among consumers overall and among the following self-defined tobacco user groups:⁷

- current regular tobacco users, defined as currently using tobacco on a regular or occasional basis; included are ‘potential quitters’, or those

⁶ Likelihood of use operationalized in terms of likelihood to purchase for personal trial and predicted purchase rate (refer to Study Protocol, “Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users”).

⁷ There are several ways to define tobacco use status. Self-reported behavior is used because self-reported behavior aligns more closely with the dependent variable (i.e., ratings of likelihood of use). A number of published studies [Patrick, DL, Cheadle, A, et al. (1994). The validity of self-reported smoking: a review and meta-analysis. *Am J Public Health*. 84(7):1086-1093. Tennekoon, V, Rosenman, R. (2015). The Pot Calling the Kettle Black? A Comparison of Measures of Current Tobacco Use. *Appl Econ*. 47(5):431-448.] demonstrate the utility of this measure. Survey questions that include more conventional definitions of tobacco use (i.e., ever usage; lifetime usage; current usage on some days, every day, or not at all) allow, for example, determinations of product use (by category) among self-reported tobacco user groups.

current regular tobacco users who report an intention to quit using tobacco;⁸

- former regular tobacco users, defined as having been regular tobacco users in the past, but not currently using tobacco on a regular or occasional basis; and,
- never regular tobacco users, defined as never having been regular tobacco users.

Likelihoods of use for Camel SNUS MRTTP were also projected among young adults (ages 18-24 years) and White males, overall and by self-defined tobacco user group.

While not specified within the study protocol,⁹ likelihoods of use were projected among self-defined current, former and never regular cigarette users.¹⁰ As the proposed modified risk messaging for Camel SNUS is intended for current cigarette users, these additional analyses were conducted to further inform on the potential effects that the product and its proposed marketing may have on population health.

Additional analyses also included likelihoods of use projections among never regular tobacco users who were likely versus not likely to initiate tobacco use, and current regular cigarette users who were likely versus not likely to quit using tobacco. These tobacco users groups were further stratified by age interval, to inform statistical modeling on the potential population health impact of changes in tobacco use behaviors that may result from the product and its proposed marketing.¹¹

⁸ 'Potential quitters' are a subset of current regular tobacco users who do not intend to be using any tobacco product 9 months from the time of the survey. A time frame of 9 months was used to match the follow-up time period used when creating the algorithm developed to project purchase rate (refer to "New Tobacco Product "Likelihood" Study: An Algorithm to Predict Usage of New Tobacco Products Prior to Market Launch").

⁹ Refer to Study Protocol, "Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users".

¹⁰ Categorization of current, former and never regular cigarette users does not include use of 'roll-your-own cigarettes'; the number of unique current/former tobacco users indicating use of 'roll-your-own cigarettes' is <1.0% of that indicating use of 'cigarettes'.

¹¹ Findings from statistical modeling are not provided within the current report.

A secondary objective of this research was to understand product use intentions among current regular cigarette users and non-users who anticipate using Camel SNUS (i.e., rate their likelihood to purchase Camel SNUS as “2” or greater), with and without modified risk messaging, as follows:

- among current regular cigarette users who do not report an intention to quit tobacco, the percentages who anticipate using Camel SNUS instead of, in addition to, or in place of some portion of their current tobacco product(s); and, for those who anticipate using Camel SNUS instead of their existing product, the likelihood they would switch back to their current product(s); and,
- among former regular and never regular cigarette users, the likelihood they would switch to a different tobacco product (including one that presents more risk) after using Camel SNUS.

In fulfillment of these research objectives, an online survey was conducted from November 24 through December 22, 2014, with a sample of 14,511 adults drawn from a national web panel.

The survey displayed Camel SNUS advertising materials in a ‘test’ (with modified risk messaging) versus ‘control’ (without modified risk messaging) format, and posed a question about consumers’ likelihood to purchase Camel SNUS for personal trial. Among those who anticipate using Camel SNUS (i.e., rate their likelihood to purchase Camel SNUS as “2” or greater), questions were asked with regard to how they intend to use the product.

2. DETAILED STUDY DESIGN

2.1 Sample Design

The relevant universe for this research is all adults legally eligible to purchase tobacco (as legislated by the states in which they resided) up to 75 years old, regardless of current or prior tobacco use. The sampling frame was the Research Now consumer panel, a demographically balanced, web-based consumer panel containing over three million panelists from all 50 states and the District of Columbia.

To provide a robust sample, more than 14,500 respondents were surveyed across three self-defined tobacco user groups (i.e., current, former and never regular tobacco users). This sample size was selected to provide:

- balance on key demographic dimensions within each tobacco user quota group, allowing the sample to be weighted to population counts for all parameters of interest;
- the ability to perform statistical comparisons of 'test' (with modified risk messaging) versus 'control' (without modified risk messaging) Camel SNUS advertising materials; and,
- adequate statistical sensitivity to allow for measurement within a narrow band, i.e., confidence intervals smaller than $\pm 2\%$ among the sample overall for survey data as well as modeled data, and smaller than $\pm 3\%$ within each tobacco user group.

Within each tobacco user group in each survey arm, respondents were sampled to ensure adequate representation of demographic groups that might not otherwise appear in sufficient numbers. The data were weighted to the U.S. adult population in order to support population-level generalizations (*refer to Table 3 of this report for population estimates used in this study*).

Respondents were assigned via survey programming logic to one of eight monadic arms, defined by crossing the advertising materials (i.e., with or without modified risk messaging) with one of four government-mandated health warnings. The programming logic used an algorithm to ensure the arms were balanced by demographic dimensions within the self-defined tobacco users groups (i.e., current, former and never regular tobacco users), as follows:

- identification of the respondent's demographic variables (i.e., region, age, gender, race/ethnicity and education)

- verification of each arm's overall quota for the number of respondents in each self-defined tobacco user group; if the quota has been met, then the respondent is deemed to be over quota
- verification of the respondent's demographic variables against the demographic quota for each arm; if any part of an arm's quotas have been met, the respondent cannot be assigned to that arm
- for each of the respondent's demographic variables:
 - determine the number of respondents with each of those demographic variables in each arm among respondents in each self-defined tobacco user group
 - determine the maximum counts for each of the arms
- for each arm, calculate the number of respondents remaining to meet the quota for each demographic variable, and then sum the counts to determine a total score
- the respondent is assigned to the arm with the highest total score

2.2 Survey Content

The survey consisted of the following elements:¹²

- Questions on demographic characteristics (age, gender, race/ethnicity and education) to ensure that key consumer groups are represented and that results can be weighted appropriately as to be representative of the universe of consumers.
- Questions on current and past regular use of tobacco products to classify respondents into tobacco user groups, and to ensure that tobacco use was balanced across arms (i.e., current versus former versus never regular tobacco users; and, users of cigarettes versus smokeless tobacco).
- Question on anticipated use of tobacco products nine months into the future to permit analysis of additional sub-groups (i.e., 'potential quitters').
- Presentation of advertising materials for Camel SNUS (*refer to Appendix B*); half of respondents viewed materials without modified risk messaging ('control' arm) and half viewed materials with modified risk messaging ('test' arm).

¹² Refer to Section 7 of this report for survey instrument.

Camel SNUS modified-risk messaging materials ('test' stimuli) consisted of three images: the first image contained the statement, "SWAP THE SMOKE FOR MORE FREEDOM & LESS RISK"; the second image provided product information (what is it, how is it different, how do I use it); and, the third image provided information about the benefits of switching completely from cigarettes to Camel SNUS (may reduce the risk of lung cancer, oral cancer, respiratory disease, and heart disease).

The 'control' stimuli (no modified risk messaging) likewise consisted of three images: the first image contained the statement, "SWAP THE SMOKE FOR MORE FREEDOM"; the second image provided product information (what is it, how do I use it); and, the third image provided additional product information (how is it different) and information on why a smoker should switch (no hassle, no lingering smoke smell, more freedom).

The bottom fifth of each 'test' and 'control' stimuli provided one of four government-mandated warning labels, as follows:

- This product is addictive;
- This product can cause mouth cancer;
- This product is not a safe alternative to cigarettes; or
- This product can cause gum disease and tooth decay¹³.

The three separate images appeared one above another on the same screen, with respondents instructed to scroll down to view all the product information. Questions about the stimuli followed on separate screens, with no way to go back to review the stimuli.

- Question on ratings of likelihood of purchase for personal trial, to provide the purchase intent data for a projected purchase rate model.
- Question to determine how current regular tobacco users, who rate likelihood to purchase as "2" or greater, would envision using Camel SNUS.
- Question to determine how likely current regular tobacco users, who rate their likelihood of purchase as "2" or greater and envision using Camel SNUS instead of their current tobacco product(s), are to switch back to their current tobacco product(s) after trying Camel SNUS.

¹³ One of the four government-mandated warning labels was misworded within the modified risk messaging materials; specifically, the warning, "This product can cause gum disease and tooth decay" should have stated, "This product can cause gum disease and tooth loss". This miswording was only present during this first execution of consumer testing for likelihoods of use, and was viewed by only 25% of study participants.

- Question to determine how likely former regular and never regular tobacco users, who rate likelihood of purchase as “2” or greater, are to switch to a more harmful tobacco product after trying Camel SNUS.
- Question to determine why current regular tobacco users, who intend to quit tobacco and rate likelihood of purchase as “2” or greater, have some interest in using Camel SNUS.
- Questions that allow self-defined tobacco user groups to be further categorized based on historical and current tobacco usage.
- Questions among current regular tobacco users to assess interest, and anticipated success, in quitting tobacco use (i.e., ‘likely versus not likely to quit’).¹⁴
- Question to determine how long ago former regular tobacco users quit using tobacco.
- Questions to determine whether never regular tobacco users are likely to start using cigarettes (i.e., ‘likely versus not likely to initiate’).¹⁵

2.3 Field Process and Distribution of Completed Interviews

On the day the survey was launched, invitations were issued at rates projected to reach a first-day goal of 5% completion in all quota groups, as a sampling quality control check. Invitations were then issued every day, focusing initially on reaching lower-incidence populations to ensure that an adequate sample size would be reached for all key sub-populations. A total of 14,511 consumers completed the survey, with overall demographic distributions shown below (*Table 1*), by tobacco status.

¹⁴ Food and Drug Administration (2010). Experimental Study on Graphic Warning Labels. http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201009-0910-002.

¹⁵ Bunnell, RE, Agaku, IT, et al. (2014). Intentions to smoke cigarettes among never-smoking US middle and high school electronic cigarette users, National Youth Tobacco Survey, 2011-2013. *Nicotine & Tobacco Research*, 17 (2): 228-235.

Coleman, BN, Apelberg, BJ, et al. (2014). Association between electronic cigarette use and openness to cigarette smoking among US young adults. *Nicotine & Tobacco Research*, 17 (2): 212-218.

**Table 1: Unweighted Sample Distribution
- Demographics by Tobacco Status -**

		Tobacco Status [†]			
		Total	Current Regular Users	Former Regular Users	Never Regular Users
(n)*=		14,511	4,497	4,972	5,042
<u>Region:</u>					
Northeast		2,577	786	931	860
Midwest		3,323	1,039	1,163	1,121
South		5,305	1,680	1,713	1,912
West		3,306	992	1,165	1,149
<u>Age (years):</u>					
18-30		3,246	1,169	611	1,466
31-50		5,566	1,919	1,746	1,901
51-75		5,699	1,409	2,615	1,675
<u>Gender:</u>					
Male		6,786	2,088	2,210	2,488
Female		7,725	2,409	2,762	2,554
<u>Race/Ethnicity:</u>					
Hispanic		2,394	752	759	883
Non-Hispanic White		9,316	2,817	3,333	3,166
Non-Hispanic Black		1,556	552	451	553
Non-Hispanic Asian/Other		1,476	464	504	508
<u>Education Level:</u>					
High School (or less)		5,769	1,886	2,009	1,874
Some College		4,092	1,507	1,396	1,189
Bachelor's Plus		4,650	1,104	1,567	1,979

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Table 2 shows that the survey programming logic successfully balanced tobacco user groups and demographic characteristics between the 'test' and 'control' arms.

**Table 2: Unweighted Sample Distribution of Test versus Control Arms
- Demographics by Tobacco Status -**

		Tobacco Status [†]							
		Test				Control			
		Total	Current Regular Users	Former Regular Users	Never Regular Users	Total	Current Regular Users	Former Regular Users	Never Regular Users
	(n)*=	(7,253)	(2,248)	(2,483)	(2,522)	(7,258)	(2,249)	(2,489)	(2,520)
Region:									
Northeast		1,288	393	463	432	1,289	393	468	428
Midwest		1,660	519	581	560	1,663	520	582	561
South		2,657	840	859	958	2,648	840	854	954
West		1,648	496	580	572	1,658	496	585	577
Age (years):									
18-30		1,622	584	306	732	1,624	585	305	734
31-50		2,774	957	868	949	2,792	962	878	952
51-75		2,857	707	1,309	841	2,842	702	1,306	834
Gender:									
Male		3,391	1,044	1,104	1,243	3,395	1,044	1,106	1,245
Female		3,862	1,204	1,379	1,279	3,863	1,205	1,383	1,275
Race/Ethnicity:									
Hispanic		1,194	375	378	441	1,200	377	381	442
Non-Hispanic White		4,651	1,407	1,663	1,581	4,665	1,410	1,670	1,585
Non-Hispanic Black		775	275	223	277	781	277	228	276
Non-Hispanic Asian/Other		736	230	252	254	740	234	252	254
Education Level:									
High School (or less)		2,886	943	1,005	938	2,883	943	1,004	936
Some College		2,047	754	698	595	2,045	753	698	594
Bachelor's Plus		2,320	551	780	989	2,330	553	787	990

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

2.4 Weighting Process

A multi-step statistical weighting process was required to account for differential sampling rates used in the survey design, and to support the ability to make more accurate inferences regarding the populations of interest (e.g., consumers overall).

Step 1: Population counts were developed to estimate the number of individuals in each cell represented by the intersection of tobacco status and each demographic category (i.e., region, age, gender, race/ethnicity and education level). The Census Bureau's Population Estimates Program, the

Annual Social and Economic Supplement to the Current Population Survey (ASES-CPS; March 2014), and the Tobacco Use Supplement to the Current Population Survey (TUS-CPS; May 2010, August 2010 and January 2011) were used to develop population counts (*Table 3*).¹⁶

Table 3: Population Counts

		Tobacco Status [†]			
		Total	Current Regular Users	Former Regular Users	Never Regular Users
N =		222,096,066	35,171,156	36,496,245	150,428,665
Region:					
Northeast		39,948,804	5,537,029	6,914,188	27,497,587
Midwest		47,034,583	8,886,165	8,724,079	29,424,339
South		83,079,363	14,176,164	12,614,765	56,288,434
West		52,033,316	6,571,798	8,243,213	37,218,305
Age (years):					
18-30		55,473,091	8,935,246	3,557,023	42,980,822
31-50		81,944,032	13,830,976	10,742,212	57,370,844
51-75		84,678,943	12,404,934	22,197,010	50,076,999
Gender:					
Male		108,833,856	19,712,755	20,475,084	68,646,017
Female		113,262,210	15,458,401	16,021,161	81,782,648
Race/Ethnicity:					
Hispanic		35,047,357	3,727,930	3,041,331	28,278,096
Non-Hispanic White		143,077,689	25,138,685	28,966,621	88,972,383
Non-Hispanic Black		26,854,082	4,214,825	2,704,676	19,934,581
Non-Hispanic Asian/Other		17,116,938	2,089,716	1,783,617	13,243,605
Education Level:					
High School (or less)		90,374,223	19,862,150	14,464,796	56,047,277
Some College		65,458,788	10,881,047	11,261,753	43,315,988
Bachelor's Plus		66,263,055	4,427,959	10,769,696	51,065,400

[†] Tobacco status is based on self-reported tobacco usage.

Step 2. Base weights were then created separately for respondents in the test and control arms by dividing the population counts by the number of completed interviews in the cells that represent the intersection of tobacco

¹⁶ Population counts source: ASES-CPS (March 2014) and TUS-CPS (May 2010, August 2010, and January 2011); retrieved from http://thedataweb.rm.census.gov/ftp/cps_ftp.html#cpsupps.

status and each demographic characteristic (refer to Tables 4 & 5 for 'test' and 'control' arms, respectively).

Table 4: Base Weights for Test Arm
- Population Counts Divided by Completed Interviews in Each Cell -

	Tobacco Status [†]		
	Current Regular Users	Former Regular Users	Never Regular Users
<u>Region:</u>			
Northeast	14,089.13	14,933.45	63,651.82
Midwest	17,121.71	15,015.63	52,543.46
South	16,876.39	14,685.41	58,756.19
West	13,249.59	14,212.44	65,066.97
<u>Age (years):</u>			
18-30	15,300.08	11,624.26	58,716.97
31-50	14,452.43	12,375.82	60,454.00
51-75	17,545.88	16,957.23	59,544.59
<u>Gender:</u>			
Male	18,881.95	18,546.27	55,226.08
Female	12,839.20	11,617.96	63,942.65
<u>Race/Ethnicity:</u>			
Hispanic	9,941.15	8,045.85	64,122.67
Non-Hispanic White	18,309.31	17,749.16	57,216.97
Non-Hispanic Black	15,610.46	12,238.35	73,288.90
Non-Hispanic Asian/Other	9,085.72	7,077.85	52,140.18
<u>Education Level:</u>			
High School (or less)	21,062.73	14,392.83	59,751.89
Some College	14,431.10	16,134.32	72,799.98
Bachelor's Plus	8,036.22	13,807.30	51,633.37

[†] Tobacco status is based on self-reported tobacco usage.

Table 5: Base Weights for Control Arm
- Population Counts Divided by Completed Interviews in Each Cell -

	Tobacco Status [†]		
	Current Regular Users	Former Regular Users	Never Regular Users
<u>Region:</u>			
Northeast	14,089.13	14,773.91	64,246.70
Midwest	17,088.78	14,989.83	52,449.80
South	16,876.39	14,771.39	59,002.55
West	13,249.59	14,090.96	64,503.13
<u>Age (years):</u>			
18-30	15,273.92	11,662.37	58,556.98
31-50	14,377.31	12,234.87	60,263.49
51-75	17,670.85	16,996.18	60,044.36
<u>Gender:</u>			
Male	18,881.95	18,512.73	55,137.36
Female	12,828.55	11,584.35	64,143.25
<u>Race/Ethnicity:</u>			
Hispanic	9,888.41	7,982.50	63,977.59
Non-Hispanic White	18,389.67	17,694.94	57,364.53
Non-Hispanic Black	15,552.86	12,350.12	73,020.44
Non-Hispanic Asian/Other	8,930.41	7,077.85	52,140.18
<u>Education Level:</u>			
High School (or less)	21,062.73	14,407.17	59,879.57
Some College	14,450.26	16,134.32	72,922.54
Bachelor's Plus	8,007.16	13,684.49	51,581.21

[†] Tobacco status is based on self-reported tobacco usage.

For each of the intersections of tobacco status and demographics in the 'test' and 'control' arms (*Tables 4 & 5*), a weight range ratio was developed by dividing the maximum base weight value by the minimum base weight value. *Table 6* shows the base weight ranges and ratios for each of the tobacco status/demographic intersections.

Table 6: Base Weight Ranges and Ratios

	Base Weight Ranges and Ratios	
	Test	Control
<u>Region:</u>		
Maximum	65,066.97	64,503.13
Minimum	13,249.59	13,249.59
Ratio	4.91	4.87
<u>Age (years):</u>		
Maximum	60,454.00	60,263.49
Minimum	11,624.26	11,662.37
Ratio	5.20	5.17
<u>Gender:</u>		
Maximum	63,942.65	64,143.25
Minimum	11,617.96	11,584.35
Ratio	5.50	5.54
<u>Race/Ethnicity:</u>		
Maximum	73,288.90	73,020.44
Minimum	7,077.85	7,077.85
Ratio	10.35	10.32
<u>Education Level:</u>		
Maximum	72,799.98	72,922.54
Minimum	8,036.22	8,007.16
Ratio	9.06	9.11

Higher ratios indicate less representative sampling and greater bias for a given dimension. The iterative weighting process was initiated from the dimension with the largest ratio (i.e., race/ethnicity for both test and control) in order to achieve weighting targets with the fewest number of iterations and to minimize the impact of the weighting (i.e., the distance between a respondent's final weight and their starting weight).

Step 3. Base weights were then adjusted using raking;¹⁷ specifically, base weights were weighted up to population counts in cells represented by the intersection of tobacco status and gender; tobacco status and ethnicity; tobacco status and education; tobacco status and age; tobacco status and region; and, age and ethnicity.

¹⁷ Battaglia, MP, Hoaglin, DC, and Frankel, MR. (2009). Practical Considerations in Raking Survey Data. Survey Practice. 2(5).

Raking helps to account for under coverage and other sources of bias by adjusting the individual weights that result from the previously applied steps so that weighted estimates match independent estimates of population sizes from ASES-CPS (March 2014) and TUS-CPS (May 2010, August 2010 and January 2011).¹⁸ The weighted demographics for respondents completing the survey in the test and control arms are provided below (*refer to Tables 7 & 8, respectively*).

Table 7: Weighted Sample Distribution for Test Arm

		Tobacco Status [†]			
		Total	Current Regular Users	Former Regular Users	Never Regular Users
(n)*=		(7,253)	(2,248)	(2,483)	(2,522)
Gender:					
Male		49% (0%)	56% (0%)	56% (0%)	46% (0%)
Female		51% (0%)	44% (0%)	44% (0%)	54% (0%)
Age (years):					
18-30		25% (0%)	25% (0%)	10% (0%)	29% (0%)
31-50		37% (0%)	39% (0%)	29% (0%)	38% (0%)
51-75		38% (0%)	35% (0%)	61% (0%)	33% (0%)
Region:					
Northeast		18% (0%)	16% (0%)	19% (0%)	18% (0%)
Midwest		21% (0%)	25% (0%)	24% (0%)	20% (0%)
South		37% (0%)	40% (0%)	35% (0%)	37% (0%)
West		23% (0%)	19% (0%)	23% (0%)	25% (0%)
Race/Ethnicity:					
Hispanic		16% (0%)	11% (0%)	8% (0%)	19% (0%)
Non-Hispanic White		65% (+1%)	73% (+1%)	80% (+1%)	60% (+1%)
Non-Hispanic Black		12% (0%)	12% (0%)	7% (0%)	13% (0%)
Non-Hispanic Asian/Other		8% (0%)	6% (0%)	5% (0%)	9% (0%)
Education Level:					
High School (or less)		41% (0%)	56% (0%)	40% (0%)	37% (0%)
Some College		29% (0%)	31% (0%)	31% (0%)	29% (0%)
Bachelor's Plus		30% (0%)	13% (0%)	30% (0%)	34% (0%)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Percentages in parentheses provide differences between weighted demographics and actual population counts.

¹⁸ Population counts source: ASES-CPS (March 2014) and TUS-CPS (May 2010, August 2010, and January 2011); retrieved from http://thedataweb.rm.census.gov/ftp/cps_ftp.html#cpssupps.

Table 8: Weighted Sample Distribution for Control Arm

		Tobacco Status [†]			
		Total	Current Regular Users	Former Regular Users	Never Regular Users
(n)* =		(7,258)	(2,249)	(2,489)	(2,520)
Gender:					
Male		49% (0%)	56% (0%)	56% (0%)	46% (0%)
Female		51% (0%)	44% (0%)	44% (0%)	54% (0%)
Age (years):					
18-30		25% (0%)	25% (0%)	10% (0%)	29% (0%)
31-50		37% (0%)	39% (0%)	29% (0%)	38% (0%)
51-75		38% (0%)	35% (0%)	61% (0%)	33% (0%)
Region:					
Northeast		18% (0%)	16% (0%)	19% (0%)	18% (0%)
Midwest		21% (0%)	25% (0%)	24% (0%)	20% (0%)
South		37% (0%)	40% (0%)	35% (0%)	37% (0%)
West		23% (0%)	19% (0%)	23% (0%)	25% (0%)
Race/Ethnicity:					
Hispanic		16% (0%)	11% (0%)	8% (0%)	19% (0%)
Non-Hispanic White		66% (+1%)	73% (+1%)	80% (+1%)	61% (+1%)
Non-Hispanic Black		12% (0%)	12% (0%)	8% (0%)	13% (0%)
Non-Hispanic Asian/Other		8% (0%)	6% (0%)	5% (0%)	9% (0%)
Education Level:					
High School (or less)		41% (0%)	56% (0%)	40% (0%)	37% (0%)
Some College		29% (0%)	31% (0%)	31% (0%)	29% (0%)
Bachelor's Plus		30% (0%)	13% (0%)	30% (0%)	34% (0%)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Percentages in parentheses provide differences between weighted demographics and actual population counts.

The percentages in parentheses in these tables provide the differences between the weighted demographics and the actual population counts, and demonstrate that the weights brought the samples into very close alignment with the U.S. population overall. The weighted demographics for respondents in the test and control arms are virtually identical, and the differences versus actual population counts are negligible.

3. ANALYSIS PLAN

3.1 Analytic Approach

The primary objective of this study was to estimate the likelihood of use for Camel SNUS, with and without the proposed modified risk messaging, among consumers overall and among self-defined tobacco user sub-groups (including 'potential quitters'). Likelihoods of use were also estimated among young adults (ages 18-24 years) and White males, overall and by self-defined tobacco user group; and, among self-defined current, former and never cigarette users.

Based on more conventional definitions for tobacco use, the study population for the 'test' arm consisted of current regular tobacco users (n=2,248) who predominantly used cigarettes (62% every day, 19% some days), with substantially fewer current regular tobacco users reporting the use of smokeless tobacco (5% every day, 4% some days) or snus (1% every day, 3% some days); 6% of current regular tobacco users reported dual/poly use of cigarettes, smokeless tobacco and/or snus (*see table below*). Among former regular tobacco users (n=2,483), 93% reported having used cigarettes, with 11% having used smokeless tobacco and 3% having used snus.

Comparatively, the study population for the 'control' arm consisted of current regular tobacco users (n=2,249) who predominantly used cigarettes (61% every day, 20% some days), with substantially fewer current regular tobacco users reporting the use of smokeless tobacco (4% every day, 5% some days) or snus (1% every day, 5% some days); 7% of current regular tobacco users reported dual/poly use of cigarettes, smokeless tobacco and/or snus (*see table below*). Among former regular tobacco users (n=2,489), 94% reported having used cigarettes, with 11% having used smokeless tobacco and 3% having used snus.

	Test			Control		
Product Use among Current Tobacco Users*^	Every Day	Some Days	Not at All	Every Day	Some Days	Not at All
Cigarettes	62% (2.2)	19% (1.7)	19% (1.9)	61% (2.3)	20% (1.8)	19% (1.9)
Smokeless Tobacco	5% (1.1)	4% (1.0)	91% (1.4)	4% (1.1)	5% (1.0)	91% (1.5)
Snus	1% (0.4)	3% (0.8)	96% (0.9)	1% (0.4)	5% (1.0)	94% (1.0)
Dual/Poly Use of Cigarettes, Smokeless Tobacco and/or Snus Among Current Tobacco Users	6% (1.1)			7% (1.2)		
Former Tobacco Users#^	Ever Used, But Not Currently					
Cigarettes	93% (1.2)			94% (1.1)		
Smokeless Tobacco	11% (1.5)			11% (1.5)		
Snus	3% (0.8)			3% (0.8)		

* Current regular tobacco users defined as currently using tobacco on a regular or occasional basis.

Former regular tobacco users defined as having been regular tobacco users in the past, but not currently using tobacco on a regular or occasional basis.

^ Sums of percentages for 'every day/some days' and 'ever used' do not necessarily equal 100%, due to the fact that only cigarette, smokeless tobacco and snus use are accounted for (i.e., consumers who report using products in other tobacco categories are not included in this table).

A predictive algorithm was developed to transform 'likelihood to purchase for personal trial' ratings to projected purchase rates for a tobacco product prior to market launch (*for full detail on methodology, refer to "New Tobacco Product "Likelihood" Study: An Algorithm to Predict Usage of New Tobacco Products Prior to Market Launch"*). The analytic focus for this study was to project likely Camel SNUS purchase rates, which are based on the ratings conversion algorithm that takes account of ways in which consumers from different demographic and tobacco user groups use the scale. The following table provides the coefficients for the demographic groups that are shown empirically to use the rating scale differently, and illustrates how the same rating leads to different purchase probabilities for those groups.

Rating	Age	User status	Formula	Score	Purchase Probability
4	18–30	Current	$= -6.4985706591 + (4) * (0.3366880555) + 1.7425282439 + 0.8429617702$	-2.57	0.07
4	31–50	Current	$= -6.4985706591 + (4) * (0.3366880555) + 1.7425282439 + 0.5153230900$	-2.89	0.05
4	51–75	Current	$= -6.4985706591 + (4) * (0.3366880555) + 1.7425282439$	-3.41	0.03
4	18–30	Former	$= -6.4985706591 + (4) * (0.3366880555) + 1.6292067550$	-3.52	0.03
4	31–50	Former	$= -6.4985706591 + (4) * (0.3366880555) + 1.9443701686$	-3.21	0.04
4	Any others		$= -6.4985706591 + (4) * (0.3366880555)$	-5.15	0.01

Secondary objectives were to understand product use intentions and reasons for product use among current regular cigarette users and non-users who anticipate using Camel SNUS, with and without the proposed modified risk messaging; and, to project likelihoods of use estimates¹⁹ among never regular tobacco users who were likely versus not likely to initiate tobacco use, and current regular cigarette users who were likely versus not likely to quit using tobacco.

3.2 Statistical Analyses

Confidence intervals are provided as descriptive statistics, and are calculated using standard formulas that use the normal approximation to the sampling distribution of a sample mean (which is justified by the large sample sizes via the Central Limit Theorem), appropriately incorporating the survey weights.²⁰

Confidence intervals for proportions that are reported as percentages are calculated in the same way as confidence intervals for means, as a proportion is the mean of 0's and 1's. The survey-weighted mean of the 0's and 1's is the

¹⁹ The specified tobacco user groups were further stratified by age interval, to inform statistical modeling on the potential population health impact of changes in tobacco use behaviors that may result from the product and its proposed marketing; findings from statistical modeling are not provided within the current report.

²⁰ Confidence intervals for predicted purchase rates are not symmetrical, as they are calculated for each respondent from a logistic regression model that is not symmetrical. Calculating confidence intervals in this manner eliminates the possibility of having a mean lower bound that dips below 0 or mean upper bound that rises above 1.0, either of which would represent logical impossibilities. Confidence intervals are calculated by taking the mean of the lower bound and mean of the upper bound for all respondents, specific to the analysis sample.

reported proportion, and the corresponding survey-weighted standard error is used to calculate the confidence interval.

In addition to the confidence intervals, parametric statistics (i.e., analysis of variance [ANOVA] and t-test) that incorporate survey weights are employed to test differences in ratings and projected purchase rates between tobacco user groups. When significant interactions are observed, results of post-hoc t-tests are presented to characterize the nature of the interaction. It has been shown empirically that parametric statistics are robust with respect to violation of the normality assumption with large samples of similar sizes across groups.²¹ Finally, chi-square analyses are conducted to compare distributions of responses across groups of consumers.

²¹ Harwell, MR, Rubinstein, EN, et al. (1992). "Summarizing Monte Carlo results in methodological research: the one- and two-factor fixed effects ANOVA cases." *Journal of Educational Statistics* 17: 315-339.

Lunney, G. (1970). "Using Analysis of Variance with a Dichotomous Dependent Variable: An Empirical Study." *Journal of Educational Measurement*, 7: 263-269.

4. STUDY FINDINGS

4.1 Purchase Intent Ratings

Table 9A presents the weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among consumers overall and in each of the self-defined tobacco user groups (refer to Tables A-1 & A-2a in Appendix A for distribution of intent ratings, and A-2b for time since quit tobacco among former regular users). A two-factor ANOVA reveals a significant main effect of tobacco user group ($p<.0001$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). The main effect of tobacco user group reflects the fact that current regular tobacco users offer significantly higher ratings than former and never regular tobacco users.

Table 9A: Weighted Mean Likelihood to Purchase for Personal Trial Ratings - Test versus Control Camel SNUS Advertising Materials by Tobacco Status[†] -

	Total (consumers overall)	Current Regular Tobacco Users	Former Regular Tobacco Users	Never Regular Tobacco Users
Test (with modified risk messaging)	1.7 (.04) (n*=7,253)	3.1 (.13) (n*=2,248)	1.6 (.07) (n*=2,483)	1.4 (.05) (n*=2,522)
Control (without modified risk messaging)	1.7 (.04) (n*=7,258)	3.0 (.13) (n*=2,249)	1.6 (.07) (n*=2,489)	1.4 (.06) (n*=2,520)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

Table 9B presents the weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) by potential quitter status among self-defined current regular tobacco users (refer to Table A-2a in Appendix A for distributions of intent ratings). A two-factor ANOVA reveals significant main effects of potential quitter status ($p<.0001$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, ratings of likelihood to purchase Camel SNUS for personal trial among potential tobacco quitters are significantly lower than among consumers who are not likely to quit tobacco in both the test and control arms.

**Table 9B: Weighted Mean Likelihood to Purchase for Personal Trial Ratings
- Test versus Control Camel SNUS Advertising Materials among Current
Regular Tobacco Users by Potential Quitter Status[†] -**

	Current Regular Tobacco Users	Potential Tobacco Quitters	Not Potential Tobacco Quitters
Test (with modified risk messaging)	3.1 (.13) (n*=2,248)	2.3 (.25) (n*=430)	3.3 (.14) (n*=1,818)
Control (without modified risk messaging)	3.0 (.13) (n*=2,249)	2.2 (.26) (n*=375)	3.1 (.14) (n*=1,874)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

Table 10A presents the weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among young adults (ages 18-24 years), overall and for each of the self-defined tobacco user groups (refer to Tables A-3 & A-4 in Appendix A for distributions of intent ratings). A two-way ANOVA reveals a significant main effect of tobacco user group ($p<.0001$), no main effect of arm ($p>.05$), and an interaction between those two factors ($p<.05$). Post-hoc comparisons reveal the difference in mean ratings between test and control arms is statistically significant for current regular tobacco users, but not for former and never regular tobacco users.

**Table 10A: Weighted Mean Likelihood to Purchase for Personal Trial Ratings
- Test versus Control Camel SNUS Advertising Materials among Young Adults
by Tobacco Status[†] –**

	Total (young adults)	Current Regular Tobacco Users	Former Regular Tobacco Users	Never Regular Tobacco Users
Test (with modified risk messaging)	2.2 (.21) (n*=462)	4.8[^] (.51) (n*=181)	3.0 (.74) (n*=69)	1.6 (.20) (n*=212)
Control (without modified risk messaging)	2.1 (.23) (n*=416)	4.1 (.55) (n*=163)	2.2 (.66) (n*=53)	1.7 (.25) (n*=200)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

[^] Statistically significantly higher than control.

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

Table 10B presents the weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) among young adult self-defined current regular tobacco users by potential quitter status (refer to Table A-4 in Appendix A for distributions of intent ratings). A two-factor ANOVA reveals a significant main effect of potential quitter status ($p<.05$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, ratings of likelihood to purchase Camel SNUS for personal trial among young adult potential tobacco quitters are significantly lower than among young adults who are not likely to quit tobacco in both the test and control arms.

Table 10B: Weighted Mean Likelihood to Purchase for Personal Trial Ratings - Test versus Control Camel SNUS Advertising Materials among Young Adult Current Regular Tobacco Users by Potential Quitter Status[†] –

	Current Regular Tobacco Users	Potential Tobacco Quitters	Not Potential Tobacco Quitters
Test (with modified risk messaging)	4.8 [^] (.51) (n*=181)	3.6 (1.1) (n*=29)	5.0 (.56) (n*=152)
Control (without modified risk messaging)	4.1 (.55) (n*=163)	3.1 (.1.4) (n*=22)	4.2 (.59) (n*=141)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

[^] Statistically significantly higher than control (denotes significance from previous analysis; refer to Table 10A).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

Table 11A presents the weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among White males, overall and for each of the self-defined tobacco user groups (refer to Tables A-5 & A-6 in Appendix A for distributions of intent ratings). A two-way ANOVA reveals a significant main effect of tobacco user group ($p<.0001$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, in both arms, ratings among White males who are current regular tobacco users are significantly higher than ratings among White males who are former and never regular tobacco users.

**Table 11A: Weighted Mean Likelihood to Purchase for Personal Trial Ratings
- Test versus Control Camel SNUS Advertising Materials among White Males
by Tobacco Status[†] –**

	Total (White males)	Current Regular Tobacco Users	Former Regular Tobacco Users	Never Regular Tobacco Users
Test (with modified risk messaging)	1.9 (.08) (n*=2,199)	3.6 (.24) (n*=649)	1.8 (.13) (n*=757)	1.4 (.09) (n*=793)
Control (without modified risk messaging)	1.9 (.08) (n*=2,207)	3.4 (.24) (n*=651)	1.7 (.13) (n*=780)	1.4 (.10) (n*=776)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

Table 11B presents the weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) among White male self-defined current regular tobacco users by potential quitter status (refer to Table A-6 in Appendix A for distributions of intent ratings). A two-factor ANOVA reveals a significant main effect of potential quitter status ($p<.05$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, ratings of likelihood to purchase Camel SNUS for personal trial among White male potential tobacco quitters are significantly lower than among White males who are not likely to quit tobacco in both the test and control arms.

**Table 11B: Weighted Mean Likelihood to Purchase for Personal Trial Ratings
- Test versus Control Camel SNUS Advertising Materials among White Male
Current Regular Tobacco Users by Potential Quitter Status[†] –**

	Current Regular Tobacco Users	Potential Tobacco Quitters	<u>Not</u> Potential Tobacco Quitters
Test (with modified risk messaging)	3.6 (.24) (n*=649)	2.7 (.49) (n*=116)	3.8 (.27) (n*=533)
Control (without modified risk messaging)	3.4 (.24) (n*=651)	3.0 (.57) (n*=93)	3.5 (.26) (n*=558)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

Table 12A presents the weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among each of the self-defined cigarette user groups (refer to Table A-7 in Appendix A for distributions of intent ratings). A two-factor ANOVA reveals significant main effects of cigarette user group ($p<.0001$) and arm ($p<.05$), and an interaction between those two factors ($p<.05$). Post-hoc comparisons reveal the difference in projected purchase rate between test and control arms is statistically significant for current regular cigarette users, but not for former and never regular cigarette users.

Table 12A: Weighted Mean Likelihood to Purchase for Personal Trial Ratings - Test versus Control Camel SNUS Advertising Materials by Cigarette Status[†] -

	Current Regular Cigarette Users	Former Regular Cigarette Users	Never Regular Cigarette Users
Test (with modified risk messaging)	3.0 [^] (.15) (n*=1,624)	1.9 (.08) (n*=2,818)	1.4 (.05) (n*=2,811)
Control (without modified risk messaging)	2.8 (.14) (n*=1,631)	1.9 (.08) (n*=2,836)	1.4 (.06) (n*=2,791)

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample size (on which the weighted data are based).

[^] Statistically significantly higher than control.

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

Table 12B presents weighted mean ratings of likelihood to purchase for personal trial and the corresponding 95% confidence intervals ($p=.05$) among self-defined current regular cigarette users by potential quitter status (*refer to Table A-7 in Appendix A for distributions of intent ratings*). A two-factor ANOVA reveals significant main effects of potential quitter status ($p<.0001$) and arm ($p<.05$), but no interaction between those two factors ($p>.05$). Thus, ratings of likelihood to purchase Camel SNUS for personal trial among potential cigarette quitters are significantly lower than among consumers who are not likely to quit cigarettes in both the test and control arms, and ratings are higher in the test arm than in the control arm.

**Table 12B: Weighted Mean Likelihood to Purchase for Personal Trial Ratings
- Test versus Control Camel SNUS Advertising Materials among Current
Regular Cigarette Users by Potential Quitter Status[†] -**

	Current Regular Cigarette Users	Potential Cigarette Quitters	<u>Not</u> Potential Cigarette Quitters
Test (with modified risk messaging)	3.0 [^] (.15) (n*=1,624)	2.3 (.31) (n*=264)	3.2 (.17) (n*=1,360)
Control (without modified risk messaging)	2.8 (.14) (n*=1,631)	2.1 (.31) (n*=235)	2.9 (.16) (n*=1,396)

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample size (on which the weighted data are based).

[^] Statistically significantly higher than control (denotes significance from previous analysis; *refer to Table 12A*).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

4.2 Model Estimates of Purchase Rates

The 10-point purchase for personal trial ratings were subjected to a transformational algorithm that yielded predicted purchase rates.²² That

²² Tables presented in Section 4.2 provide mean projected purchase rates from the algorithm, and associated confidence intervals, that account for both modeling error and sampling error. However, statistical findings presented in the tables only account for sampling error, as there is no formal statistical test comparable to an ANOVA that can take into account both types of error. Although it would be possible to test for significance between cells on a pairwise basis, based on overlap in confidence intervals, such a method would not allow for interactions testing.

Power analyses using G*Power software (<http://www.gpower.hhu.de/>) were conducted on all statistical tests related to purchase projections (presented in Section 4.2) to minimize concern regarding the absence of effects, in particular in sub-group analyses. Results from these power analyses indicate small effect sizes (Cohen's $f=0.10$) could be detected in all analyses, except the analysis specific to Table 14B, in which case

algorithm was developed previously²³ for the explicit purpose of projecting purchase rates for tobacco products based on pre-market purchase intent.

Table 13A presents the projected purchase rates and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among consumers overall and among each of the self-defined tobacco user groups. A two-factor ANOVA reveals a significant main effect of tobacco user group ($p<.0001$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, in both arms, purchase rates among current regular tobacco users are significantly higher than purchase rates among former and never regular tobacco users.

**Table 13A: Weighted Mean Purchase Rates among Consumers Overall
- Test versus Control Camel SNUS Advertising Materials by Tobacco Status[†] -**

	Total (consumers overall)	Current Regular Tobacco Users	Former Regular Tobacco Users	Never Regular Tobacco Users
Test (with modified risk messaging)	1.3% (0.9-2.1) (n*=7,253)	5.9% (4.3-8.2) (n*=2,248)	1.2% (0.6-2.4) (n*=2,483)	0.3% (0.2-0.5) (n*=2,522)
Control (without modified risk messaging)	1.3% (0.9-2.0) (n*=7,258)	5.8% (4.2-8.0) (n*=2,249)	1.2% (0.6-2.4) (n*=2,489)	0.3% (0.2-0.5) (n*=2,520)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence intervals.

medium effect sizes (Cohen's $f=0.25$) could be detected [refer to Cohen, J. 1988. "Statistical power analysis for the behavioral sciences". Hillsdale, New Jersey: Lawrence Erlbaum Associates.]

²³ For full detail on survey methodology, refer to "New Tobacco Product "Likelihood" Study: An Algorithm to Predict Usage of New Tobacco Products Prior to Market Launch".

Table 13B presents the weighted mean purchase rates and the corresponding 95% confidence intervals ($p=.05$) by potential quitter status among self-defined current regular tobacco users. A two-factor ANOVA reveals a significant main effect of potential quitter status ($p<.0001$), but no main effect of arm ($p>.05$) or interaction between those two factors ($p>.05$). Thus, mean purchase rates of Camel SNUS among potential tobacco quitters are significantly lower than among consumers who are not likely to quit tobacco in both the test and control arms.

**Table 13B: Weighted Mean Purchase Rates among Consumers Overall
- Test versus Control Camel SNUS Advertising Materials among Current
Regular Tobacco Users by Potential Quitter Status[†] -**

	Current Regular Tobacco Users	Potential Tobacco Quitters	<u>Not</u> Potential Tobacco Quitters
Test (with modified risk messaging)	5.9% (4.3-8.2) (n*=2,248)	4.2% (2.9-6.0) (n*=430)	6.4% (4.6-8.8) (n*=1,818)
Control (without modified risk messaging)	5.8% (4.2-8.0) (n*=2,249)	4.0% (2.8-5.8) (n*=375)	6.1% (4.4-8.5) (n*=1,874)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence intervals.

Table 14A presents the projected purchase rates and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among young adults (ages 18-24 years), overall and for each of the self-defined tobacco user groups. A two-way ANOVA reveals a significant main effect of tobacco user group ($p<.0001$), no main effect of arm ($p>.05$), and an interaction between those two factors ($p<.05$). Post-hoc comparisons reveal the difference in projected purchase rates among young adults in the test and control arms are statistically significant for current regular tobacco users, but not for former and never regular tobacco users.

**Table 14A: Weighted Mean Purchase Rates among Young Adults
- Test versus Control Camel SNUS Advertising Materials by Tobacco Status[†] -**

	Total (young adults)	Current Regular Tobacco Users	Former Regular Tobacco Users	Never Regular Tobacco Users
Test (with modified risk messaging)	2.5% (1.7-3.7) (n*=462)	12.9%^ (9.3-17.5) (n*=181)	3.1% (1.2-7.5) (n*=69)	0.3% (0.2-0.6) (n*=212)
Control (without modified risk messaging)	2.1% (1.4-3.2) (n*=416)	10.6% (7.6-14.7) (n*=163)	2.1% (0.8-5.3) (n*=53)	0.4% (0.2-0.7) (n*=200)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

^ Statistically significantly higher than control.

Numbers in parentheses represent the 95% confidence intervals.

Table 14B presents the weighted purchase rates and the corresponding 95% confidence intervals ($p=.05$) among young adult self-defined current regular tobacco users by potential quitter status. A two-factor ANOVA reveals significant main effects of potential quitter status ($p<.05$) and arm ($p<.05$), but no interaction between those two factors ($p>.05$). Thus, mean purchase rates among young adult potential tobacco quitters are significantly lower than among young adults who are not likely to quit tobacco in both the test and control arms.

**Table 14B: Weighted Mean Purchase Rates among Young Adults
- Test versus Control Camel SNUS Advertising Materials among Current
Regular Tobacco Users by Potential Quitter Status[†] -**

	Current Regular Tobacco Users	Potential Tobacco Quitters	<u>Not</u> Potential Tobacco Quitters
Test (with modified risk messaging)	12.9%^ (9.3-17.5) (n*=181)	8.4% (5.8-12.0) (n*=29)	13.7% (9.9-18.5) (n*=152)
Control (without modified risk messaging)	10.6% (7.6-14.7) (n*=163)	8.4% (5.9-11.8) (n*=22)	11.0% (7.8-15.2) (n*=141)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

^ Statistically significantly higher than control (denotes significance from previous analysis; refer to Table 14A).

Numbers in parentheses represent the 95% confidence intervals.

Table 15A presents the projected purchase rates and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among White males, overall and for each of the self-defined tobacco user groups. A two-factor ANOVA reveals a significant main effect of tobacco user group ($p<.0001$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, in both arms, White males who are current regular tobacco users are more likely to purchase Camel SNUS than White males who are former and never regular tobacco users.

**Table 15A: Weighted Mean Purchase Rates among White Males
- Test versus Control Camel SNUS Advertising Materials by Tobacco Status[†] -**

	Total (White males)	Current Regular Tobacco Users	Former Regular Tobacco Users	Never Regular Tobacco Users
Test (with modified risk messaging)	1.9% (1.3-2.9) (n*=2,199)	7.3% (5.3-9.9) (n*=649)	1.6% (0.8-3.1) (n*=757)	0.3% (0.2-0.5) (n*=793)
Control (without modified risk messaging)	1.9% (1.3-2.9) (n*=2,207)	7.1% (5.2-9.7) (n*=651)	1.5% (0.8-3.1) (n*=780)	0.3% (0.2-0.5) (n*=776)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence intervals.

Table 15B presents the weighted purchase rates and the corresponding 95% confidence intervals ($p=.05$) among White male self-defined current regular tobacco users by potential quitter status. A two-factor ANOVA reveals a significant main effect of potential quitter status ($p<.01$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, mean purchase rates among White male potential tobacco quitters are significantly lower than among White males who are not likely to quit tobacco in both the test and control arms.

**Table 15B: Weighted Mean Purchase Rates among White Males
- Test versus Control Camel SNUS Advertising Materials among Current
Regular Tobacco Users by Potential Quitter Status[†] -**

	Current Regular Tobacco Users	Potential Tobacco Quitters	<u>Not</u> Potential Tobacco Quitters
Test (with modified risk messaging)	7.3% (5.3-9.9) (n*=649)	5.1% (3.6-7.2) (n*=116)	7.8% (5.7-10.5) (n*=533)
Control (without modified risk messaging)	7.1% (5.2-9.7) (n*=651)	5.8% (4.1-8.2) (n*=93)	7.3% (5.3-9.9) (n*=558)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence intervals.

Table 16A presents the projected purchase rates and the corresponding 95% confidence intervals ($p=.05$) for respondents in the test and control arms among each of the self-defined cigarette user groups. A two-factor ANOVA reveals significant main effects of cigarette user group ($p<.0001$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, in both arms, mean purchase rates among current regular cigarette users are significantly higher than among former and never regular cigarette users.

Table 16A: Weighted Mean Purchase Rates among Cigarette User Groups - Test versus Control Camel SNUS Advertising Materials by Cigarette Status[†] -

	Current Regular Cigarette Users	Former Regular Cigarette Users	Never Regular Cigarette Users
Test (with modified risk messaging)	5.8% (4.2-8.0) (n*=1,624)	2.1% (1.3-3.4) (n*=2,818)	0.4% (0.2-0.7) (n*=2,811)
Control (without modified risk messaging)	5.4% (3.8-7.5) (n*=1,631)	2.2% (1.4-3.6) (n*=2,836)	0.4% (0.2-0.7) (n*=2,791)

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence intervals.

Table 16B presents the weighted purchase rates and the corresponding 95% confidence intervals ($p=.05$) among self-defined current regular cigarette users by potential quitter status. A two-factor ANOVA reveals significant main effects of potential quitter status ($p<.0001$), no main effect of arm ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, mean purchase rates among potential cigarette quitters are significantly lower than among consumers who are not likely to quit cigarettes in both the test and control arms.

**Table 16B: Weighted Mean Purchase Rates among Cigarette User Groups
- Test versus Control Camel SNUS Advertising Materials among Current
Regular Cigarette Users by Potential Quitter Status[†] -**

	Current Regular Cigarette Users	Potential Cigarette Quitters	<u>Not</u> Potential Cigarette Quitters
Test (with modified risk messaging)	5.8% (4.2-8.0) (n*=1,624)	3.9% (2.7-5.7) (n*=264)	6.2% (4.5-8.5) (n*=1,360)
Control (without modified risk messaging)	5.4% (3.8-7.5) (n*=1,631)	3.7% (2.6-5.4) (n*=235)	5.6% (4.0-7.8) (n*=1,396)

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence intervals.

4.3 Inputs to Statistical Modeling

To inform statistical modeling of the potential population health impact of changes in tobacco use behaviors that may result from the product and its proposed marketing,²⁴ never regular tobacco users were identified as ‘likely versus not likely to initiate’ tobacco use (*refer to Table A-8 in Appendix A*). Weighted mean ratings of likelihood to purchase for personal trial were then calculated for each of those groups (*refer to Table A-9 in Appendix A for the distributions and mean intent ratings among the two groups*). Finally, mean purchase rates were modeled for each group further stratified by 5-year age categories (*refer to Table A-10 in Appendix A for mean projected purchase rates among the two groups*). Estimated purchase rates were low among all age categories of self-defined never regular tobacco users, regardless of whether never users were likely or not likely to initiate tobacco use.

A similar set of analyses were conducted on current regular cigarette users who were identified as ‘likely versus not likely to quit’ using tobacco (*refer to Table A-11 in Appendix A*). Weighted mean ratings of likelihood to purchase for personal trial were then calculated for each of those groups (*refer to Table A-12 in Appendix A for the distributions and mean intent ratings among the two groups*). Finally, mean purchase rates were modeled for each group further stratified by 5-year age categories (*refer to Table A-13 in Appendix A for mean projected purchase rates among the two groups*). Estimated purchase rates among self-defined current regular cigarette users were higher than those projected for never regular tobacco users, and generally trended higher among younger versus older age categories, regardless of whether current users were likely or not likely to quit using tobacco.

4.4 Tobacco Use Intentions among Potential Camel SNUS Users

A. Intended Product Use among Current Regular Cigarette Users Not Intending to Quit Tobacco Use

Table 17 presents findings on how current regular cigarette users, in particular those who do not report an intention to quit tobacco use and who also rate their likelihood to purchase Camel SNUS as “2” or greater, expect to use Camel SNUS. These findings reveal no statistically significant differences between the test and control arms (i.e., viewed advertising with versus without modified risk messaging, respectively; $X^2= 2.75$, $p>.05$). In both arms, respondents are about equally likely to offer each of the four responses (i.e., instead of current

²⁴ Analyses intended to inform statistical modeling are provided within Appendix A, as noted; however, findings from statistical modeling are not provided within the current report.

tobacco, in addition to current tobacco, in place of some current tobacco, and don't know).

Table 17: Reported Intended Use of Camel SNUS among Current Regular Cigarette Users[†] Not Reporting an Intention to Quit Tobacco Use

	Current Regular Cigarette Users <u>Not</u> Intending to Quit Tobacco Use	
	Test	Control
<i>Would use Camel SNUS...</i>	n* = 693	n* = 636
Instead of current tobacco (stop using current tobacco completely)	14% (2.9)	11% (2.6)
In addition to current tobacco (overall increase in tobacco use)	20% (3.3)	18% (2.4)
In place of some of current tobacco (no net increase in tobacco use)	34% (4.0)	35% (4.2)
Don't know	32% (3.9)	37% (4.3)

Analysis includes current regular users who indicated likelihood of use rating of "2" or greater.

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate).

As part of the original final report,²⁵ a similar analysis among current regular tobacco users who do not report an intention to quit tobacco use and who also rate their likelihood to purchase Camel SNUS as "2" or greater provided comparable findings (*refer to Table A-14 in Appendix A for the distribution of responses*).

B. Intended Product Switching among Current Regular Cigarette Users, and among Former and Never Regular Cigarette Users

The subset of current regular cigarette users who did not report an intention to quit tobacco use and who report they will use Camel SNUS *instead of* their current tobacco product(s) (*refer above*) also rated how likely they would be to switch back to their current tobacco product (i.e., cigarettes) after trying Camel SNUS, based on a 10-point scale. These current regular cigarette users, who viewed the advertising with modified risk messaging, report they are no more likely to switch back to their current tobacco product after trying Camel SNUS

²⁵ Refer to Final Report, "Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users", dated February 13, 2016.

than respondents who viewed the advertising without modified risk messaging (Table 18A, $p>.05$; refer to Table A-15 in Appendix A for the distribution of responses).

Table 18A: Mean Ratings of Likelihood to Switch Back to Current Tobacco Product after Trying Camel SNUS among Current Regular Cigarette Users[†]

	Current Regular Cigarette Users
Test (with modified risk messaging)	5.9 (.49) (n*= 99)
Control (without modified risk messaging)	6.5 (.55) (n*=69)

Analysis includes current regular cigarette users who indicated likelihood of use rating of “2” or greater.

[†] Cigarette status is based on self-reported usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

As part of the original final report,²⁶ a similar analysis among current regular tobacco users who did not report an intention to quit tobacco use and who report they will use Camel SNUS *instead of* their current tobacco product provided mean ratings of 6.0 for the test group compared to 6.3 for the control group (refer to Table A-16 in Appendix A for the distribution of responses).

Former and never regular cigarette users who rate their likelihood to purchase Camel SNUS as “2” or greater similarly rated how likely they would be to switch to a different tobacco product (one that presents more risk) after trying Camel SNUS, based on a 10-point scale (Table 18B; refer to Table A-17 in Appendix A for distribution of intent ratings). A two-way ANOVA reveals a main effect of arm ($p<.0001$), no effect of cigarette user group ($p>.05$), and no interaction between those two factors ($p>.05$). Thus, ratings of likelihood to switch to a different tobacco product after trying Camel SNUS are significantly lower in the test than the control arm (Table 18B).

²⁶ Refer to Final Report, “Camel SNUS Modified Risk Messaging: Likelihood of Use among Tobacco Users and Non-Users”, dated February 13, 2016.

Table 18B: Mean Rating of Likelihood to Switch to a Different Tobacco Product after Trying Camel SNUS among Former and Never Regular Cigarette Users[†]

	Former Regular Cigarette Users	Never Regular Cigarette Users
Test (with modified risk messaging)	3.3 (.29) (n*=386)	3.5 (.30) (n*=328)
Control (without modified risk messaging)	4.2 (.30) (n*=349)	4.1 (.30) (n*=314)

Analysis includes former regular and never regular cigarette users who indicated likelihood of use rating of "2" or greater.

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample size (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

C. Reasons for Product Use among Potential Cigarette Quitters

Table 19 presents information on why potential cigarette quitters who rate their likelihood to purchase Camel SNUS as "2" or greater are interested in trying the product. The most commonly selected responses are "to help me quit" and "just curious about it." The distribution of responses does not differ for consumers in the test and control arms ($\chi^2 = 2.04$, $p > .05$).

Table 19: Reasons for Trying Camel SNUS among Potential Cigarette Quitters[†]

	Potential Cigarette Quitters	
	Test	Control
<i>Which of the following reasons best explain why you have some interest in trying Camel SNUS?</i>	n* = 91	n* = 66
To help me quit	48% (11.3)	39% (13.6)
It will allow me to use tobacco in situations where I cannot use my current product	8% (5.4)	15% (10.3)
I'm just curious about it	36% (10.8)	38% (13.4)
Don't know	8% (5.9)	8% (7.4)

Analysis includes potential cigarette quitters who indicated likelihood of use rating of "2" or greater.

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate).

5. CONCLUSIONS

Projected likelihoods of use among consumers overall, as well as among self-defined current, former and never regular tobacco users suggest that the proposed modified risk messaging for Camel SNUS is unlikely to have an adverse effect on the health of the population. Specifically:

- The overall projected purchase rate for Camel SNUS among respondents viewing the modified risk messaging is 1.3%. Confirming the ingoing hypothesis, the purchase rate is driven primarily by self-defined current regular tobacco users (5.9%), followed by former regular users (1.2%); the projected purchase rate is virtually zero among never regular users (0.3%).
- Among self-defined current regular tobacco users, projected purchase rates are significantly lower among individuals who self-identify as potential quitters than among those who do not self-identify as potential quitters.
- Similar patterns of results are observed among all three key sub-groups of interest: (a) young adults; (b) White males; and, (c) cigarette users. Specifically, purchase rates are highest for self-defined current regular tobacco (or cigarette) users, followed by former and then never regular tobacco (or cigarette) users.
- Estimated purchase rates are likely overstated by the algorithm, as demonstrated by five validation studies of the model in which actual purchase was consistently over-predicted (*refer to “New Tobacco Product “Likelihood” Study: An Algorithm to Predict Usage of New Tobacco Products Prior to Market Launch” for full discussion*).

6. STUDY STRENGTHS AND LIMITATIONS

As with any research, this study has several identifiable strengths and limitations. The key strengths of this research are:

- The methodological rigor with which the study was conducted, including a large random sample of more than 14,500 consumers and quotas to allow meaningful sub-group analyses. In addition, a multi-step statistical weighting process yielded weighted estimates that closely match population sizes obtained from the Census Bureau's Population Estimates Program,²⁷ which, in turn, increases confidence in the population-based projections. Finally, the current study has approximately 80% power to detect mean differences in predicted purchase rate of roughly 1.1% across the arms for the primary analyses by tobacco user groups, based on sample size and assuming a standard deviation of 0.22 based on previous studies.²⁸ Power analyses likewise reveal that small effect sizes could be detected in all but one sub-group analysis (young adult current regular tobacco users, potential quitters versus not potential quitters), for which a medium effect size could be detected.
- The reliance on relevant statutes,²⁹ FDA's draft guidance on submitting an MRTP application,³⁰ and information obtained during face-to-face meetings with FDA's Center for Tobacco Products to frame research questions. The research began with a comprehensive review of these materials to maximize the probability that the study design would appropriately and sufficiently project consumers' likelihood of use for the MRTP. For example, a test versus control format was used in response to a recommendation in FDA's draft guidance.
- The administration of the survey online, which allows for more complex skip patterns in survey design and more accurate data capture than paper-and-pencil methodologies.

²⁷ Population counts source: ASES-CPS (March 2014) and TUS-CPS (May 2010, August 2010, and January 2011); retrieved from http://thedataweb.rm.census.gov/ftp/cps_ftp.html#cpssupps.

²⁸ Power calculation was conducted using JMP software, http://www.jmp.com/en_us/software.html.

²⁹ Family Smoking Prevention and Tobacco Control Act (June 2009); <http://www.gpo.gov/fdsys/pkg/PLAW-111publ31/pdf/PLAW-111publ31.pdf>.

³⁰ Guidance for Industry: Modified Risk Tobacco Product Applications (Draft Guidance; March 2012) <http://www.fda.gov/downloads/TobaccoProducts/GuidanceComplianceRegulatoryInformation/UCM297751.pdf>.

- The exclusion of consumers who participated in any previous Camel SNUS modified risk messaging surveys to avoid any bias that might be associated with previous exposure to the tested messaging.
- Use of a survey that was thoroughly tested as part of the process of developing an algorithm to convert likelihood to purchase ratings to projected purchase rates. The primary survey questions underwent extensive pre-testing prior to fielding the original algorithm survey, and have been answered by more than 50,000 consumers over the past few years. In addition, the Camel SNUS modified risk messaging materials were thoroughly tested and evaluated prior to fielding the survey.
- The algorithm that is used to convert likelihood to purchase ratings to projected purchase rates was developed and subsequently tested using tobacco products. Rather than relying on an “off-the-shelf” model to estimate purchase rates, this research relied on a model custom-built for tobacco products prior to market launch. Notably, the pattern of results across test and control arms is similar for mean ratings and estimated rates of purchase, demonstrating the algorithm did not distort the data.

The key limitations of this research are:

- The sample was drawn from an internet panel, which excludes consumers who do not have access to the internet or who choose not to join the panel. Panel surveys have, however, become the industry standard, and have been used by FDA in its own research. In addition, we have no reason to believe that purchase ratings for tobacco products among non-panel members would be sufficiently different from demographically similar internet panel users to have a material effect on the research findings.
- The inability to verify respondents’ actual tobacco behaviors. Similar to virtually all other comparable tobacco-related studies, this study categorized consumers based on self-reported data regarding tobacco use behavior. It is, therefore, possible that consumers misrepresented their actual tobacco use behavior, but given the anonymous nature of the data collection methodology, they would have no known motivation to do so.
- The model that estimates purchase rates was developed using a combustible tobacco product that was a market leader (Marlboro), which resulted in over-prediction in five subsequent studies, including two smokeless tobacco products (*refer to “New Tobacco Product “Likelihood” Study: An Algorithm to Predict Usage of New Tobacco Products Prior to*

Market Launch” for full discussion). It remains to be determined if the model would over-predict purchase rates for an MRTP, but it is reasonable to believe that it would.

7. SURVEY INSTRUMENT

Research conducted on behalf of RAIS in anticipation of potential FDA requirements. Research shall only be used and/or disseminated for compliance-related activities.

Camel SNUS Likelihood of Use Survey - Screener -

Thank you for visiting our survey site to answer a few qualifying questions. This survey is strictly for research purposes only.

It is NAXION's policy to keep interviews anonymous and responses confidential. Consistent with this policy, NAXION will only entrust survey data with other entities when: 1) the participant gives explicit permission to release this data; 2) the data is shared with an entity who agrees in writing that the data will be held strictly confidential and that the data will be used for research purposes only; or, 3) the release of this data is required by law.

You will not be contacted for sales purposes as a result of participating in this survey.

For further information on NAXION's privacy policy, you can view our website at www.naxionthinking.com/privacy-policy/privacy-policy-domestic-and-global-information. To view our respondent incentive statement, visit www.naxionthinking.com/incentivestatement.

All questions on each screen must be answered before you move to the next screen, so please be sure you have answered every question before trying to move forward. On the next few screens you will be asked a few questions to see if you qualify for this study. If you qualify, the survey itself should take 10 minutes to complete.

PROGRAMMER:

1) INSERT STANDARD INSTRUCTION SCREEN

FIELD OPS: RECRUIT RESPONDENTS FROM ONLY "TRADITIONAL" RESEARCH NOW PANEL
DO NOT ALLOW SURVEY TO BE TAKEN VIA iPHONE/BLACKBERRY, etc.

HAVE RECRUITERS DRAW SAMPLE...

- 1) ACCORDING TO MINIMUM PURCHASE AGE IN STATE (SEE S7 INSTRUCTIONS)
- 2) ACCORDING TO QUOTA
- 3) NOTE THAT NO STATES ARE EXCLUDED

S2. What is your current age?

_____ Years

PROGRAMMER:

1. RANGE IS 10-99
 2. IF < 18 OR IF > 75, TERMINATE NOW
-

S7. In what state do you currently reside?

[SHOW POP UP LIST OF STATES]

PROGRAMMER:

1. IF STATE IS ALABAMA, ALASKA, NEW JERSEY OR UTAH AND S2= 18, TERMINATE NOW
(minimum age for tobacco purchase in these states is 19)
 2. NOTE THAT RESPONDENTS IN ALL 50 US STATES AND DISTRICT OF COLUMBIA ARE ELIGIBLE TO PARTICIPATE IN THIS STUDY
-

In this survey we are interested in the opinions of people who have been, or are, regular users of certain products, as well as people who have never used them.

S1a. Would you consider yourself to be – or to have been at any time in the past – a “regular user” of any of the following products? We leave it to you to define regular use.

Select “yes” or “no” in each row.

	Yes I am – or was – a regular user	No, I have never been a regular user
Beer or malt-based beverages?	<input type="radio"/>	<input type="radio"/>
Bottled water (still or carbonated)?	<input type="radio"/>	<input type="radio"/>
Nutritional supplements/vitamins?	<input type="radio"/>	<input type="radio"/>
Tobacco products?	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

- 1) DISPLAY ROWS IN RANDOM ORDER
-

S1b. Focusing only on the present, how would you currently describe yourself, relative to each of the following categories?

Select one response in each row.

	Current Non-user	Current Occasional User	Current Regular User
Beer or malt-based beverages?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bottled water (still or carbonated)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nutritional supplements/vitamins?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tobacco products?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

1) DISPLAY ONLY ROWS ANSWERED AS "Yes" IN S1a, IN SAME ORDER AS IN S1a

CLASSIFY AS:

A) Current Regular User: S1b "Tobacco product" IS "Occasional" or "Regular" (col 2 or 3)

B) Former Regular User: S1b "Tobacco product" IS "Non-user" AND S1a "Tobacco product" IS "Yes"

C) Never Regular User: S1a "Tobacco product" IS "No"

S3. What is your gender?

Male	<input type="radio"/>
Female	<input type="radio"/>

S4. What is the highest grade you have completed in school? *(Select one)*

High school or less	<input type="radio"/>
Some college or technical/vocational training	<input type="radio"/>
Four years of college (Bachelor's degree)	<input type="radio"/>
More than Bachelor's degree	<input type="radio"/>

S5a. Do you consider yourself to be of Hispanic, Latino, or Spanish origin?

Yes	<input type="radio"/>
No	<input type="radio"/>

S5b. What do you consider to be your race? *(Select all that apply)*

White	<input type="checkbox"/>
African American / Black	<input type="checkbox"/>
Asian	<input type="checkbox"/>
Other	<input type="checkbox"/>

PROGRAMMER:

1. DISPLAY S5a AND S5b ON SAME SCREEN

S6. Which of the following best describes your total household income?

Under \$25,000	<input type="radio"/>
\$25,000 to \$49,999	<input type="radio"/>
\$50,000 to \$74,999	<input type="radio"/>
\$75,000 to \$99,999	<input type="radio"/>
\$100,000 or more	<input type="radio"/>

- S8. Earlier you indicated that you [currently use tobacco products./have used tobacco products on a “regular basis” in the past, but that you no longer do.] [Please indicate your usage, if any, of each of the following types of tobacco products./Which of the following types of tobacco products did you use regularly?] *(Select [one response in each row/all that apply])*

		Use Currently	Used in the Past	Never Used	Used in the Past
1	Cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
2	Roll-your-own Cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
3	E-cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
4	Tobacco Heating Cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
5	Cigarillos (si-geh-RI-lohs) and Filtered Cigars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
6	Bidis (BEE-dees) or Kreteks (KREH-techs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
7	Traditional Cigars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
8	Pipe Tobacco	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
9	Hookah (WHO-kah)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
10	Smokeless Tobacco, like dip, chew, or snuff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
11	SNUS (SNOOS) Pouches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
12	Dissolvable tobacco	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
13	Other tobacco product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

PROGRAMMER:

1. ASK IF CLASSIFIED AS “CURRENT” OR “FORMER” TOBACCO USER
2. IF S1b “Tobacco product” IS “Occasional” OR “Regular,” USE FIRST TEXT IN BRACKETS, ELSE USE 2ND TEXT
3. SHOW FORMER TOBACCO USERS COLUMN 4 ONLY

- S9. Which of the following brands of SNUS do you currently use?
Select "yes" or "no" in each row.

	Yes	No
Camel	<input type="radio"/>	<input type="radio"/>
Copenhagen	<input type="radio"/>	<input type="radio"/>
General	<input type="radio"/>	<input type="radio"/>
General Swedish Variety	<input type="radio"/>	<input type="radio"/>
Grand Prix	<input type="radio"/>	<input type="radio"/>
Klondike	<input type="radio"/>	<input type="radio"/>
Marlboro	<input type="radio"/>	<input type="radio"/>
Nordic Ice	<input type="radio"/>	<input type="radio"/>
Skoal	<input type="radio"/>	<input type="radio"/>
Tourney	<input type="radio"/>	<input type="radio"/>
Triumph	<input type="radio"/>	<input type="radio"/>
Some other brand of SNUS	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

1. ASK IF S8 ROW 11 COLUMN 1 IS SELECTED
2. MUST SAY "YES" TO AT LEAST 1 ROW
3. TERMINATE IF ROW 1 IS "YES"

**ARM ASSIGNMENT: CHECK QUOTAS TO SEE IF ELIGIBLE FOR EACH SURVEY ARM
THERE ARE 8 ARMS IN THIS STUDY:**

- Arm 1: Control Warning #1
- Arm 2: Control Warning #2
- Arm 3: Control Warning #3
- Arm 4: Control Warning #4
- Arm 5: Test Warning #1
- Arm 6: Test Warning #2
- Arm 7: Test Warning #3
- Arm 8: Test Warning #4

IF ELIGIBLE FOR MORE THAN ONE ARM, ASSIGN WHERE NEEDED THE MOST TO BALANCE:

1. SMOKING STATUS (CURRENT, FORMER, NEVER)
2. CURRENT CIGARETTE USER (S8 ROW 1 IS "USE CURRENTLY")
3. CURRENT SNUS USER (S8 ROW 11 IS "USE CURRENTLY")
4. FORMER SNUS USER (S8 ROW 11 IS "USED IN PAST")
5. DEMOGRAPHICS

You have qualified for our survey, and we'd like to invite you to participate. The survey will require ten minutes to complete, and we ask for your undivided attention once you begin it. If you do not have ten minutes right now, please click "Stop," and return any time during the next 24 hours when you have an uninterrupted ten minutes.

Camel SNUS MRTP Likelihood of Use Survey

– Survey –

1. Now, please think ahead to nine months from now. Based on your experience, product preferences, and personal goals, do you expect that you will be using the following types of products nine months from now?

Select “yes” or “no” in each row.

	Yes	No
Cigarette	<input type="radio"/>	<input type="radio"/>
Cigar/cigarillos	<input type="radio"/>	<input type="radio"/>
Pipe	<input type="radio"/>	<input type="radio"/>
Chewing tobacco	<input type="radio"/>	<input type="radio"/>
Snuff	<input type="radio"/>	<input type="radio"/>
SNUS	<input type="radio"/>	<input type="radio"/>
Any other type of tobacco	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

1. **ASK ALL**
2. **DEFINE AS “CURRENT REGULAR USER INTENDING TO QUIT” IF CURRENT REGULAR USER AND ALL ROWS ARE “NO”**

This survey focuses on new information about an existing tobacco product. Everyone is asked all of the questions in this survey, regardless of the products they currently use or their expectations regarding future tobacco use.

Please take your time and review the information on the next few screens closely so that you will be able to answer the questions that follow.

[INSERT CAMEL SNUS MRTP STIMULI]

- 2a. Assuming the product were available today, how likely would you be to purchase Camel SNUS in order to try it?
Select one.

Definitely Would <u>Not</u> Purchase It (to Try) ↓					Definitely Would Purchase It (to Try) ↓				
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

1) ASK ALL

- 2b. You indicated that you have some interest in purchasing Camel SNUS in order to try it.
 How would you envision using Camel SNUS?
Select one.

I would use Camel SNUS <i>instead of</i> my current tobacco product(s) (would stop using my current tobacco product completely)	<input type="radio"/>
I would use Camel SNUS <i>in addition to</i> my current tobacco product(s) (leading to an overall increase in tobacco use)	<input type="radio"/>
I would use Camel SNUS <i>in place of some</i> of my current tobacco product(s) (leading to <u>no</u> net increase in tobacco use)	<input type="radio"/>
Don't know	<input type="radio"/>

PROGRAMMER:

1. ASK IF CURRENT REGULAR USER AND Q2a RATING IS ≥ 2
2. SKIP IF CURRENT REGULAR USER INTENDING TO QUIT

- 2c. How likely would you be to switch back to your current (existing) tobacco product after you try Camel SNUS?

Select one.

Not At All Likely to Switch Back to my Current Tobacco Product(s) ↓					Very Likely to Switch Back to my Current Tobacco Product(s) ↓				
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

1. ASK IF Q2b ROW 1 IS SELECTED
-

- 2d. You indicated that you have some interest in purchasing Camel SNUS in order to try it. If you were to try Camel SNUS, how likely would you be to switch to a different tobacco product [that presents more risk, such as cigarettes,] after you try Camel SNUS?

Select one.

Not At All Likely to Switch to a Different Tobacco Product(s) [that Presents More Risk] ↓					Very Likely to Switch to a Different Tobacco Product(s) [that Presents More Risk] ↓				
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

1. ASK IF FORMER REGULAR OR NEVER REGULAR USER AND Q2a RATING IS ≥ 2
 2. SHOW REPLACEMENT TEXT IN THE QUESTION TEXT AND GRID IF ARM 5, 6, 7, OR 8 (TEST)
-

- 2e. You indicated that you plan to quit using tobacco, but that you have at least some interest in purchasing Camel SNUS in order to try it (that is, you did not rate your intention to try Camel SNUS a "1" in the previous question).

Which one of the following reasons best explains why you have some interest in trying Camel SNUS?

Select one.

To help me quit	<input type="radio"/>
It will allow me to use tobacco in situations where I cannot use my current product	<input type="radio"/>
I'm just curious about it	<input type="radio"/>
Don't know	<input type="radio"/>

PROGRAMMER:

1. ASK IF CURRENT REGULAR USER INTENDING TO QUIT AND Q2a RATING IS ≥ 2
-

3a1. Have you ever used any of the following tobacco products, even one or two times?

(Select "yes" or "no" in each row)

		Yes	No
1	Cigarettes	<input type="radio"/>	<input type="radio"/>
2	Roll-your-own Cigarettes	<input type="radio"/>	<input type="radio"/>
3	E-cigarettes	<input type="radio"/>	<input type="radio"/>
4	Tobacco Heating Cigarettes	<input type="radio"/>	<input type="radio"/>
5	Cigarillos (si-geh-RI-lohs) and Filtered Cigars	<input type="radio"/>	<input type="radio"/>
6	Bidis (BEE-dees) or Kreteks (KREH-techs)	<input type="radio"/>	<input type="radio"/>
7	Traditional Cigars	<input type="radio"/>	<input type="radio"/>
8	Pipe Tobacco	<input type="radio"/>	<input type="radio"/>
9	Hookah (WHO-kah)	<input type="radio"/>	<input type="radio"/>
10	Smokeless Tobacco, like dip, chew, or snuff	<input type="radio"/>	<input type="radio"/>
11	SNUS (SNOOS) Pouches	<input type="radio"/>	<input type="radio"/>
12	Dissolvable tobacco	<input type="radio"/>	<input type="radio"/>
13	Other tobacco product	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

1) ASK ALL

3a2. Have you ever used any of the following tobacco product(s) fairly regularly?

(Select "yes" or "no" in each row)

		Yes	No
1	Cigarettes	<input type="radio"/>	<input type="radio"/>
2	Roll-your-own Cigarettes	<input type="radio"/>	<input type="radio"/>
3	E-cigarettes	<input type="radio"/>	<input type="radio"/>
4	Tobacco Heating Cigarettes	<input type="radio"/>	<input type="radio"/>
5	Cigarillos (si-geh-RI-lohs) and Filtered Cigars	<input type="radio"/>	<input type="radio"/>
6	Bidis (BEE-dees) or Kreteks (KREH-techs)	<input type="radio"/>	<input type="radio"/>
7	Traditional Cigars	<input type="radio"/>	<input type="radio"/>
8	Pipe Tobacco	<input type="radio"/>	<input type="radio"/>
9	Hookah (WHO-kah)	<input type="radio"/>	<input type="radio"/>
10	Smokeless Tobacco, like dip, chew, or snuff	<input type="radio"/>	<input type="radio"/>
11	SNUS (SNOOS) Pouches	<input type="radio"/>	<input type="radio"/>
12	Dissolvable tobacco	<input type="radio"/>	<input type="radio"/>
13	Other tobacco product	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

- 1) ASK IF ANY ROW IN 3a1 IS "YES"
 - 2) ONLY SHOW ROWS THAT ARE "YES" IN 3a1
-

- 3b. How many cigarettes have you smoked in your entire life? A pack usually has 20 cigarettes in it. *Select one.*

1	1 or more puffs but never a whole cigarette	<input type="radio"/>
2	1 to 10 cigarettes (about ½ pack total)	<input type="radio"/>
3	11 to 20 cigarettes (about ½ pack to 1 pack)	<input type="radio"/>
4	21 to 50 cigarettes (more than 1 pack but less than 3 packs)	<input type="radio"/>
5	51 to 99 cigarettes (more than 2 ½ packs but less than 5 packs)	<input type="radio"/>
6	100 or more cigarettes (5 packs or more)	<input type="radio"/>

PROGRAMMER:

- 1) ASK IF 3a1 ROW 1 = "YES"
-

- 3c. Please indicate how often you currently use each of the following types of tobacco.
Select one response in each row.

		Every Day	Some Days	Not at All
1	Cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Roll-your-own Cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	E-cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Tobacco Heating Cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Cigarillos (si-geh-RI-lohs) and Filtered Cigars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Bidis (BEE-dees) or Kreteks (KREH-techs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Traditional Cigars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Pipe Tobacco	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	Hookah (WHO-kah)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Smokeless Tobacco, like dip, chew, or snuff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	SNUS (SNOOS) Pouches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Dissolvable tobacco	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	Other tobacco product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PROGRAMMER:

- 1) ASK IF ANY ROW IS "YES" IN 3A1
- 2) SHOW ROWS THAT ARE "YES" IN 3A1

PROGRAMMER TO CLASSIFY RESPONDENTS AS FOLLOWS:

DEFINE AS NEVER USER IF:

- 3a1 is "NO" FOR ALL ROWS

IF DO NOT QUALIFY AS NEVER USER, DEFINE AS CURRENT CIGARETTE USER IF:

- 3a1 ROW 1 (Cigarettes) IS "Yes" AND
- 3b IS ROW 6 (100+ Cigarettes) AND
- 3c ROW 1 (Cigarettes) IS "EVERY DAY" OR "SOME DAYS"

IF DO NOT QUALIFY AS NEVER OR CURRENT CIGARETTE USER, DEFINE AS CURRENT TOBACCO USER (NON-CIGARETTE) IF:

- 3a1 ROW 2 IS "YES" AND
- 3a2 ROW 2 IS "YES" AND
- 3c ROW 2 IS "EVERY DAY" OR "SOME DAYS"
- CYCLE THROUGH THIS LOGIC FOR ALL ROWS 2 THROUGH 13 TO SEE IF AT LEAST ONE ROW/PRODUCT QUALIFIES

IF DO NOT QUALIFY FOR ANY OF THE ABOVE, DEFINE AS CIGARETTE EXPERIMENTER IF:

- 3a1 ROW 1 IS "YES" AND
- 3b IS NOT ROW 6 (100+ CIGARETTES) AND
- 3c ROW 1 IS "EVERY DAY" OR "SOME DAYS"

IF DO NOT QUALIFY FOR ANY OF THE ABOVE, DEFINE AS NON-CIGARETTE EXPERIMENTER IF:

- 3a1 ROW 2 IS "YES" AND
- 3a2 ROW 2 IS "NO" AND
- 3c ROW 2 IS "EVERY DAY" OR "SOME DAYS"
- CYCLE THROUGH THIS LOGIC FOR ALL ROWS 2 THROUGH 13 TO SEE IF AT LEAST ONE ROW/PRODUCT QUALIFIES

IF DO NOT QUALIFY FOR ANY OF THE ABOVE, DEFINE AS FORMER CIGARETTE USER IF:

- 3a1 ROW 1 IS "YES" AND
- 3b IS ROW 6 (100+ Cigarettes) AND
- 3c ROW 1 IS "NOT AT ALL"

IF DO NOT QUALIFY FOR ANY OF THE ABOVE, DEFINE AS FORMER TOBACCO USER (NON-CIGARETTE) IF:

- 3a1 ROW 2 IS "YES" AND
- 3a2 ROW 2 IS "YES" AND
- 3c ROW 2 IS "NOT AT ALL"
- CYCLE THROUGH THIS LOGIC FOR ALL ROWS 2 THROUGH 13 TO SEE IF AT LEAST ONE ROW/PRODUCT QUALIFIES

IF DO NOT QUALIFY FOR ANY OF THE ABOVE, DEFINE AS FORMER CIGARETTE EXPERIMENTER IF:

- 3a1 ROW 1 IS "YES" AND
- 3b IS NOT ROW 6 (100+ CIGARETTES) AND
- 3c ROW 1 "NOT AT ALL"

IF DO NOT QUALIFY FOR ANY OF THE ABOVE, DEFINE AS FORMER NON-CIGARETTE EXPERIMENTER IF:

- 3a1 ROW 2 IS "YES" AND
- 3a2 ROW 2 IS "NO" AND
- 3c ROW 2 IS "NOT AT ALL"
- CYCLE THROUGH THIS LOGIC FOR ALL ROWS 2 THROUGH 13 TO SEE IF AT LEAST ONE ROW/PRODUCT QUALIFIES

ANALYSES GROUPS:

- 1) CURRENT USERS =
 - a. CURRENT CIGARETTE USERS
 - b. CURRENT TOBACCO USERS (NON-CIGARETTE)
- 2) FORMER USERS =
 - a. FORMER CIGARETTE USERS
 - b. FORMER TOBACCO USERS (NON-CIGARETTE)
 - c. FORMER CIGARETTE EXPERIMENTERS
 - d. FORMER NON-CIGARETTE EXPERIMENTERS
- 3) NEVER USERS
- 4) EXPERIMENTERS =
 - a. CIGARETTE EXPERIMENTERS
 - b. NON-CIGARETTE EXPERIMENTERS

4a. During the past 12 months, have you stopped using tobacco for one day or longer because you were trying to quit using tobacco? *Select one.*

Yes	<input type="radio"/>
No	<input type="radio"/>

PROGRAMMER:

- 1) ASK IF "CURRENT REGULAR USER" (BASED ON S1 SERIES) OR "CURRENT USER" (NEW DEFINITION BASED Q3 SERIES)
-

For this next series of questions, we are interested in your anticipated behavior if no new tobacco products are introduced to the market.

4b. How much do you want to quit using tobacco? *Select one.*

Not at all	<input type="radio"/>
A little	<input type="radio"/>
Somewhat	<input type="radio"/>
A lot	<input type="radio"/>
No opinion	<input type="radio"/>

PROGRAMMER:

- 1) ASK IF "CURRENT REGULAR USER" (BASED ON S1 SERIES) OR "CURRENT USER" (NEW DEFINITION BASED Q3 SERIES)
-

- 4c. How likely do you think it is that you will try to quit using tobacco within the next 30 days?

Select one.

Very unlikely	<input type="radio"/>
Somewhat unlikely	<input type="radio"/>
Somewhat likely	<input type="radio"/>
Very likely	<input type="radio"/>
No opinion	<input type="radio"/>

PROGRAMMER:

- 1) ASK IF "CURRENT REGULAR USER" (BASED ON S1 SERIES) OR "CURRENT USER" (NEW DEFINITION BASED Q3 SERIES)
-

- 4d. If you did try to quit using tobacco within the next 30 days, how likely do you think it is that you would succeed in quitting? *Select one.*

Very unlikely	<input type="radio"/>
Somewhat unlikely	<input type="radio"/>
Somewhat likely	<input type="radio"/>
Very likely	<input type="radio"/>
No opinion	<input type="radio"/>

PROGRAMMER:

- 1) ASK IF "CURRENT REGULAR USER" (BASED ON S1 SERIES) OR "CURRENT USER" (NEW DEFINITION BASED Q3 SERIES)

CLASSIFY RESPONDENT AS POTENTIAL QUITTER IF:

- 4a = YES AND
 - 4b = SOMEWHAT OR A LOT AND
 - 4c = SOMEWHAT OR VERY LIKELY AND
 - 4d = SOMEWHAT OR VERY LIKELY
-

5. How long has it been since you quit using tobacco? *Select one.*

Less than 6 months	<input type="radio"/>
6 months or longer	<input type="radio"/>

PROGRAMMER:

- 1) ASK FORMER REGULAR USER (BASED ON S1 SERIES) OR FORMER USER (NEW DEFINITION BASED Q3 SERIES)**
-

6a. Do you think you will smoke a cigarette in the next year? *Select one.*

1	Definitely yes	<input type="radio"/>
2	Probably yes	<input type="radio"/>
3	Probably no	<input type="radio"/>
4	Definitely no	<input type="radio"/>
5	Don't know	<input type="radio"/>

6b. If one of your best friends were to offer you a cigarette, would you smoke it?
Select one.

1	Definitely yes	<input type="radio"/>
2	Probably yes	<input type="radio"/>
3	Probably no	<input type="radio"/>
4	Definitely no	<input type="radio"/>
5	Don't know	<input type="radio"/>

PROGRAMMER:

- 1) ASK Q6A AND Q6B IF NEVER REGULAR USER (BASED ON S1 SERIES) OR NEVER USER (NEW DEFINITION BASED Q3 SERIES)
- 2) ROTATE ROW ORDER (BUT ALWAYS KEEP ROW 5 LAST) SO THAT HALF OF RESPONDENTS SEE ROWS 1, 2, 3, 4, 5 AND HALF SEE 4, 3, 2, 1, 5 (ROW ORDER SHOULD BE THE SAME IN BOTH GRIDS)

Please note that the goal of this survey is only to examine likelihood of use for tobacco products in the presence and absence of modified risk messaging among current tobacco users and non-users. It is **not** intended to encourage you or anyone else to continue or start using tobacco products.

- Individuals should consider the conclusions of the U.S. Surgeon General, as well as information from the Centers for Disease Control and Prevention, and other public health and medical officials when making decisions regarding the use of tobacco.
- The best course of action for tobacco users concerned about their health is to quit.
- Minors should never use tobacco products, and adults who do not use or have quit using tobacco products should not start.
- Adults who smoke should avoid exposing minors to secondhand smoke; and, adult smokers should comply with rules and regulations designed to respect the rights of other adults.

PROGRAMMER:

1. SHOW ALL

All information contained in this advertising is provided for your information only and for regulatory research purposes only. [In order to advertise that a smokeless tobacco product is less harmful than a cigarette or another smokeless tobacco product, the company must first obtain clearance from the U.S. Food and Drug Administration ("FDA"). As part of that clearance process, a company must present evidence on the potential for modified risk messaging to affect likelihood of product use among current tobacco users and non-users.] The advertisements used in this research study [, those that include modified risk messaging for Camel SNUS,] have not and will not be used by the company to promote its products commercially without first obtaining clearance from FDA to do so.

The information and opinions expressed here are believed to be accurate, based on sound science and the best judgment available to the company. However, no action or inaction should be taken based on the contents of this information; instead, you should consult appropriate health professionals on any matter relating to your health.

THANK YOU SCREEN

PROGRAMMER: SHOW ALL

SHOW REPLACEMENT TEXT TO ARMS 5, 6, 7, AND 8 ONLY

Table 1 (n=15,000): Quotas per Arm (8 arms)

	Current Tobacco User	Former Tobacco User	Never-Tobacco User
	625	625	625
Northeast	88 – 125	88 – 125	88 – 125
Midwest	113 – 163	113 – 163	113 – 163
South	188 – 250	188 – 250	188 – 250
West	113 – 163	113 – 163	113 – 163
18-30	163 – 200	75 – 100	163 – 200
31-50	238 – 275	200 – 238	238 – 275
51-75	163 – 200	288 – 325	163 – 200
Male	282 – 344	282 – 344	282 – 344
Female	282 – 344	282 – 344	282 – 344
Hispanic	82 – 107	82 – 107	82 – 107
Non-Hispanic - White	375 – 438	375 – 438	375 – 438
Non-Hispanic - Black	63 – 88	63 – 88	63 – 88
Non-Hispanic - Asian/Other	44 – 63	44 – 63	44 – 63
Up to High School	300 – 338	213 – 250	200 – 238
Some College	163 – 200	163 – 200	150 – 188
Bachelor's Plus	100 – 138	188 – 225	213 – 250

Northeast
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
New Jersey
New York
Pennsylvania
Vermont

Midwest
Indiana
Illinois
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

South
Alabama
Arkansas
Delaware
District of Columbia
Florida
Georgia
Kentucky
Louisiana
Maryland
Mississippi
North Carolina
Oklahoma
South Carolina
Tennessee
Texas
Virginia
West Virginia

West
Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

Appendix A: Supplemental Data Tables

**Table A-1: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among All Respondents –**

		All Respondents	
		Test	Control
(n)* =		(7,253)	(7,258)
Definitely Would Not Purchase	1	82% (1.0%)	83% (0.9%)
	2	4% (0.5%)	4% (0.5%)
	3	3% (0.4%)	2% (0.4%)
	4	1% (0.3%)	2% (0.3%)
	5	3% (0.4%)	2% (0.4%)
	6	2% (0.3%)	2% (0.3%)
	7	2% (0.3%)	2% (0.3%)
	8	2% (0.3%)	2% (0.3%)
	9	1% (0.2%)	1% (0.2%)
Definitely Would Purchase	10	1% (0.3%)	1% (0.3%)
Mean		1.7 (.04)	1.7 (.04)

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimates or \pm mean estimate).

**Table A-2a: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among All Respondents by Tobacco Status[†] –**

		All Respondents									
		Current Regular Tobacco Users		Potential Tobacco Quitters		Not Potential Tobacco Quitters		Former Regular Tobacco Users		Never Regular Tobacco Users	
		Test (n*=2,248)	Control (n*=2,249)	Test (n*=430)	Control (n*=375)	Test (n*=1,818)	Control (n*=1,874)	Test (n*=2,483)	Control (n*=2,489)	Test (n*=2,522)	Control (n*=2,520)
Definitely Would Not Purchase	1	52% (2.3)	55% (2.3)	65% (5.1)	69% (5.4)	49% (2.6)	53% (2.6)	84% (1.6)	86% (1.5)	89% (1.2)	89% (1.2)
	2	8% (1.2)	6% (1.1)	7% (2.8)	5% (2.6)	8% (1.4)	7% (1.2)	5% (1.0)	3% (0.7)	3% (0.7)	3% (0.7)
	3	7% (1.1)	7% (1.1)	6% (2.6)	6% (3.0)	7% (1.3)	7% (1.2)	3% (0.7)	2% (0.6)	2% (0.5)	1% (0.4)
	4	4% (0.9)	5% (1.0)	4% (2.0)	3% (2.0)	4% (1.0)	5% (1.1)	1% (0.5)	1% (0.5)	1% (0.4)	1% (0.4)
	5	8% (1.2)	7% (1.3)	5% (2.4)	7% (3.0)	8% (1.4)	7% (1.4)	2% (0.5)	2% (0.6)	2% (0.5)	1% (0.5)
	6	5% (1.0)	5% (1.0)	4% (2.2)	2% (1.6)	6% (1.2)	5% (1.1)	2% (0.5)	2% (0.6)	1% (0.4)	1% (0.4)
	7	6% (1.1)	5% (1.0)	3% (1.9)	3% (1.9)	7% (1.3)	5% (1.1)	1% (0.5)	1% (0.4)	1% (0.3)	1% (0.4)
	8	5% (1.0)	5% (1.0)	3% (1.7)	3% (1.9)	5% (1.1)	5% (1.1)	2% (0.5)	1% (0.4)	1% (0.4)	1% (0.4)
	9	2% (0.7)	2% (0.6)	<1% (0.7)	1% (1.3)	2% (0.8)	2% (0.7)	<1% (0.2)	1% (0.3)	<1% (0.2)	<1% (0.2)
Definitely Would Purchase	10	4% (0.8)	4% (0.9)	2% (1.6)	1% (1.3)	4% (1.0)	4% (1.0)	1% (0.5)	1% (0.5)	1% (0.3)	1% (0.3)
	Mean	3.1 (.13)	3.0 (.13)	2.3 (.25)	2.2 (.26)	3.3 (.14)	3.1 (.14)	1.6 (.07)	1.6 (.07)	1.4 (.05)	1.4 (.06)

[†] Tobacco status is based on self-reported tobacco usage.

**Table A-2b: Length of Time since Quit Tobacco
– Among Former Regular Tobacco Users[†] –**

Former Regular Tobacco Users Length of Time Since Quit Tobacco (Q5)		
	Test (n* = 2,483)	Control (n* = 2,489)
Less than 6 months	9% (1.2)	8% (1.1)
6 months or longer	91% (1.2)	92% (1.1)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

**Table A-3: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among Young Adults –**

		All Young Adults	
		Test	Control
	(n)* =	(462)	(416)
Definitely Would Not Purchase	1	70% (4.7)	71% (5.0)
	2	7% (2.7)	7% (3.0)
	3	5% (2.2)	4% (2.1)
	4	3% (1.7)	4% (2.2)
	5	4% (1.7)	3% (1.6)
	6	3% (1.8)	3% (1.8)
	7	3% (1.6)	3% (1.7)
	8	3% (1.6)	3% (1.9)
	9	1% (0.5)	1% (0.8)
Definitely Would Purchase	10	2% (1.1)	2% (1.2)
Mean		2.2 (.21)	2.1 (.23)

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

**Table A-4: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among Young Adults by Tobacco Status[†] –**

All Young Adults											
		Current Regular Tobacco Users		Potential Tobacco Quitters		Not Potential Tobacco Quitters		Former Regular Tobacco Users		Never Regular Tobacco Users	
		Test (n*=181)	Control (n*=163)	Test (n*=29)	Control (n*=22)	Test (n*=152)	Control (n*=141)	Test (n*=69)	Control (n*=53)	Test (n*=212)	Control (n*=200)
Definitely Would Not Purchase	1	25% (6.9)	39% (8.5)	42% (20.1)	51% (22.8)	22% (7.2)	37% (9.1)	48% (13.8)	62% (15.4)	81% (5.3)	78% (5.8)
	2	7% (4.2)	2% (1.7)	0% (0.0)	4% (7.1)	9% (4.9)	2% (1.5)	10% (8.5)	12% (10.7)	6% (3.3)	8% (3.7)
	3	8% (4.0)	11% (5.4)	11% (11.0)	21% (20.2)	7% (4.3)	9% (5.2)	9% (7.2)	8% (8.1)	4% (2.6)	3% (2.3)
	4	7% (4.1)	6% (3.9)	6% (7.6)	2% (3.8)	7% (4.7)	7% (4.5)	6% (6.2)	1% (2.1)	2% (2.0)	4% (2.6)
	5	13% (5.5)	7% (4.3)	17% (16.3)	0% (0.0)	12% (5.7)	8% (5.0)	6% (6.3)	4% (4.2)	2% (1.8)	2% (1.8)
	6	5% (3.5)	8% (4.5)	6% (12.0)	7% (10.6)	5% (3.5)	8% (5.0)	10% (8.8)	11% (10.5)	2% (2.1)	2% (2.0)
	7	10% (4.8)	10% (5.2)	8% (9.6)	0% (0.0)	10% (5.4)	11% (6.0)	6% (8.2)	0% (0.0)	1% (1.6)	2% (1.8)
	8	10% (5.0)	8% (4.8)	4% (6.7)	9% (12.8)	12% (5.8)	8% (5.2)	2% (2.1)	4% (6.7)	1% (1.6)	2% (2.1)
	9	3% (2.8)	2% (2.4)	5% (10.0)	0% (0.0)	3% (2.8)	3% (2.8)	0% (0.0)	0% (0.0)	0% (0.0)	<1% (0.8)
Definitely Would Purchase	10	11% (5.3)	7% (4.9)	0% (0.0)	8% (14.0)	13% (6.2)	7% (5.2)	4% (5.7)	0% (0.0)	<1% (0.5)	1% (1.1)
Mean		4.8 (.51)	4.1 (.55)	3.6 (1.1)	3.1 (1.4)	5.0 (.56)	4.2 (.59)	3.0 (.74)	2.2 (.66)	1.6 (.20)	1.7 (.25)

[†] Tobacco status is based on self-reported tobacco usage.

*. Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

**Table A-5: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among All White Males –**

		All White Males	
		Test	Control
		(2,199)	(2,207)
Definitely Would Not Purchase	(n)* =		
	1	76% (1.8)	77% (1.8)
	2	6% (1.1)	5% (1.0)
	3	4% (0.8)	4% (0.9)
	4	2% (0.6)	2% (0.6)
	5	3% (0.8)	3% (0.7)
	6	3% (0.7)	3% (0.6)
	7	2% (0.6)	2% (0.6)
	8	2% (0.5)	2% (0.6)
	9	1% (0.3)	1% (0.4)
Definitely Would Purchase	10	2% (0.4)	1% (0.4)
Mean		1.9 (.08)	1.9 (.08)

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

Table A-6: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among White Males by Tobacco Status[†] –

		All White Males									
		Current Regular Tobacco Users		Potential Tobacco Quitters		Not Potential Tobacco Quitters		Former Regular Tobacco Users		Never Regular Tobacco Users	
		Test (n*=649)	Control (n*=651)	Test (n*=116)	Control (n*=93)	Test (n*=533)	Control (n*=558)	Test (n*=757)	Control (n*=780)	Test (n*=793)	Control (n*=776)
Definitely Would Not Purchase	1	44% (4.1)	46% (4.2)	59% (9.5)	46% (11.4)	40% (4.5)	46% (4.5)	79% (2.9)	81% (2.7)	86% (2.4)	86% (2.5)
	2	9% (2.3)	7% (2.1)	8% (5.2)	10% (6.8)	9% (2.6)	7% (2.2)	7% (1.8)	4% (1.4)	5% (1.5)	4% (1.5)
	3	6% (2.0)	8% (2.2)	4% (3.9)	11% (7.5)	7% (2.2)	7% (2.3)	4% (1.4)	3% (1.1)	3% (1.1)	3% (1.2)
	4	5% (1.7)	5% (2.0)	6% (4.6)	6% (5.4)	4% (1.8)	5% (2.1)	1% (0.8)	2% (0.9)	1% (0.8)	1% (0.7)
	5	9% (2.4)	9% (2.4)	7% (4.8)	10% (7.1)	10% (2.7)	8% (2.5)	2% (1.0)	2% (1.0)	2% (1.0)	1% (0.8)
	6	7% (2.0)	6% (1.9)	6% (4.5)	<1% (0.8)	7% (2.3)	7% (2.2)	2% (1.0)	3% (1.2)	2% (0.8)	1% (0.8)
	7	8% (2.2)	6% (2.0)	4% (3.5)	5% (4.4)	9% (2.5)	6% (2.1)	2% (0.9)	1% (0.8)	1% (0.6)	1% (0.7)
	8	6% (1.9)	7% (2.1)	3% (3.6)	6% (5.3)	7% (2.2)	7% (2.2)	2% (1.0)	1% (0.7)	1% (0.6)	1% (0.7)
	9	3% (1.4)	3% (1.3)	1% (1.8)	2% (3.1)	4% (1.6)	3% (1.4)	<1% (0.3)	1% (0.5)	<1% (0.2)	<1% (0.4)
Definitely Would Purchase	10	5% (1.7)	4% (1.7)	3% (3.4)	2% (3.3)	5% (1.9)	4% (1.8)	1% (0.8)	2% (0.9)	<1% (0.4)	<1% (0.3)
	Mean	3.6 (.24)	3.4 (.24)	2.7 (.49)	3.0 (.57)	3.8 (.27)	3.5 (.26)	1.8 (.13)	1.7 (.13)	1.4 (.09)	1.4 (.10)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

Table A-7: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among All Respondents by Cigarette Status[†] –

All Respondents											
		Current Regular Cigarette Users		Potential Cigarette Quitters		Not Potential Cigarette Quitters		Former Regular Cigarette Users		Never Regular Cigarette Users	
		Test (n*=1,624)	Control (n*=1,631)	Test (n*=264)	Control (n*=235)	Test (n*=1,360)	Control (n*=1,396)	Test (n*=2,818)	Control (n*=2,836)	Test (n*=2,811)	Control (n*=2,791)
Definitely Would Not Purchase	1	52% (2.7)	57% (2.7)	64% (6.4)	70% (6.8)	50% (2.9)	55% (2.9)	79% (1.7)	80% (1.6)	88% (1.2)	89% (1.2)
	2	8% (1.5)	6% (1.3)	8% (3.7)	5% (3.2)	8% (1.7)	7% (1.5)	5% (0.9)	4% (0.7)	3% (0.7)	3% (0.7)
	3	7% (1.4)	7% (1.4)	8% (3.5)	6% (3.5)	7% (1.5)	7% (1.5)	3% (0.7)	3% (0.7)	2% (0.5)	1% (0.4)
	4	4% (1.0)	5% (1.2)	4% (2.8)	4% (3.1)	4% (1.1)	5% (1.3)	2% (0.5)	2% (0.5)	1% (0.4)	1% (0.4)
	5	8% (1.5)	7% (1.5)	5% (3.0)	6% (3.7)	8% (1.7)	8% (1.6)	3% (0.6)	3% (0.7)	2% (0.5)	2% (0.5)
	6	5% (1.1)	4% (1.0)	4% (2.4)	2% (1.6)	5% (1.3)	4% (1.2)	3% (0.7)	3% (0.7)	1% (0.4)	1% (0.4)
	7	5% (1.2)	5% (1.1)	3% (2.3)	3% (2.5)	6% (1.4)	5% (1.2)	2% (0.6)	2% (0.6)	1% (0.3)	1% (0.4)
	8	5% (1.1)	4% (1.1)	2% (1.9)	3% (2.4)	5% (1.3)	4% (1.2)	2% (0.6)	2% (0.6)	1% (0.4)	1% (0.4)
	9	2% (0.7)	2% (0.7)	0% (0.0)	1% (1.7)	2% (0.9)	2% (0.8)	1% (0.3)	1% (0.3)	<1% (0.2)	<1% (0.2)
Definitely Would Purchase	10	4% (1.1)	3% (1.0)	3% (2.3)	1% (1.2)	4% (1.2)	4% (1.1)	1% (0.5)	2% (0.6)	1% (0.3)	1% (0.3)
Mean		3.0 (.15)	2.8 (.14)	2.3 (.31)	2.1 (.31)	3.2 (.17)	2.9 (.16)	1.9 (.08)	1.9 (.08)	1.4 (.05)	1.4 (.06)

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

**Table A-8: Likelihood to Initiate Tobacco Use
– Among Never Regular Tobacco Users[†] –**

Never Regular Tobacco Users		
Q6a: Do you think you will smoke a cigarette in the next year?	Test (n* = 2,522)	Control (n* = 2,520)
Definitely yes	1% (0.4)	1% (0.4)
Probably yes	3% (0.6)	3% (0.6)
Probably no	5% (0.9)	6% (1.0)
Definitely no	89% (1.2)	88% (1.3)
Don't know	2% (0.6)	2% (0.6)
Q6b: If one of your best friends were to offer you a cigarette, would you smoke it?	Test (n* = 2,522)	Control (n* = 2,520)
Definitely yes	1% (0.3)	1% (0.3)
Probably yes	3% (0.7)	4% (0.8)
Probably no	6% (0.9)	6% (1.0)
Definitely no	88% (1.3)	87% (1.3)
Don't know	2% (0.6)	2% (0.5)
Q6a & Q6b (refer above for questions)	Test (n* = 2,522)	Control (n* = 2,520)
Answered "definitely no" to both questions (not likely to initiate)	87% (1.3)	86% (1.4)
Did not answer "definitely no" to both questions (likely to initiate)	13% (1.3)	14% (1.4)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate).

**Table A-9: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among Never Regular Tobacco Users by Intent[†] –**

		Never Regular Tobacco Users Likely to Initiate Tobacco Use		Never Regular Tobacco Users <u>Not</u> Likely to Initiate Tobacco Use	
		Test (n*=343)	Control (n*=359)	Test (n*=2,179)	Control (n*=2,161)
Definitely Would Not Purchase	1	56% (5.4)	54% (5.3)	94% (1.0)	95% (0.9)
	2	11% (3.3)	12% (3.5)	2% (0.6)	2% (0.5)
	3	9% (3.0)	6% (2.4)	1% (0.4)	1% (0.3)
	4	5% (2.4)	4% (2.1)	<1% (0.3)	1% (0.4)
	5	7% (2.7)	7% (2.8)	1% (0.4)	<1% (0.3)
	6	5% (2.4)	5% (2.2)	1% (0.3)	1% (0.3)
	7	3% (1.9)	5% (2.3)	<1% (0.2)	<1% (0.2)
	8	3% (2.0)	5% (2.1)	1% (0.3)	<1% (0.2)
	9	1% (1.0)	1% (1.0)	<1% (0.2)	<1% (0.1)
Definitely Would Purchase	10	1% (1.1)	1% (1.3)	1% (0.3)	1% (0.3)
	Mean	2.5 (.25)	2.7 (.26)	1.2 (.05)	1.2 (.04)
Mean Modeled Purchase Rate		0.5 (0.3-0.9)	0.6 (0.3-1.0)	0.3 (0.1-0.5)	0.6 (0.1-0.5)

[†] Intent to initiate tobacco use is based on responses to Q6a and Q6b (*refer to Section 7*).

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

**Table A-10: Weighted Mean Modeled Purchase Rate
- Test versus Control Camel SNUS Advertising Materials among Never Regular
Tobacco Users by Intent to Initiate[†] –**

	Never Regular Tobacco Users Likely to Initiate Tobacco Use		Never Regular Tobacco Users <u>Not</u> Likely to Initiate Tobacco Use	
	Test	Control	Test	Control
Ages 18-22 years	0.5% (0.3-0.9) (n*=35)	0.5% (0.3-0.9) (n*=46)	0.3% (0.2-0.5) (n*=105)	0.3% (0.1-0.5) (n*=87)
Ages 23-27 years	0.6% (0.3-1.0) (n*=72)	0.6% (0.4-1.1) (n*=79)	0.2% (0.1-0.4) (n*=229)	0.2% (0.1-0.5) (n*=247)
Ages 28-32 years	0.4% (0.2-0.8) (n*=96)	0.6% (0.3-1.1) (n*=85)	0.3% (0.1-0.5) (n*=287)	0.3% (0.2-0.5) (n*=276)
Ages 33-37 years	0.5% (0.3-1.0) (n*=37)	0.7% (0.4-1.2) (n*=40)	0.3% (0.2-0.5) (n*=183)	0.3% (0.2-0.5) (n*=180)
Ages 38-42 years	0.6% (0.3-1.0) (n*=27)	0.5% (0.3-0.8) (n*=31)	0.3% (0.2-0.5) (n*=183)	0.3% (0.1-0.5) (n*=161)
Ages 43-47 years	0.6% (0.3-1.1) (n*=25)	0.6% (0.3-1.0) (n*=22)	0.3% (0.1-0.5) (n*=230)	0.3% (0.1-0.5) (n*=251)
Ages 48-52 years	0.4% (0.2-0.7) (n*=14)	0.6% (0.4-1.1) (n*=19)	0.3% (0.1-0.5) (n*=205)	0.3% (0.2-0.5) (n*=221)
Ages 53-57 years	0.4% (0.2-0.7) (n*=17)	0.5% (0.3-0.8) (n*=14)	0.2% (0.1-0.5) (n*=188)	0.2% (0.1-0.4) (n*=183)
Ages 58-62 years	0.3% (0.2-0.6) (n*=7)	0.7% (0.4-1.2) (n*=5)	0.3% (0.2-0.6) (n*=220)	0.2% (0.1-0.4) (n*=193)
Ages 63-67 years	0.7% (0.4-1.2) (n*=6)	0.3% (0.2-0.6) (n*=11)	0.2% (0.1-0.4) (n*=174)	0.2% (0.1-0.4) (n*=189)
Ages 68+ years	1.3% (0.7-2.3) (n*=7)	0.2% (0.1-0.4) (n*=7)	0.3% (0.1-0.5) (n*=175)	0.2% (0.1-0.4) (n*=173)

[†] Intent to initiate tobacco use is based on responses to Q6a and Q6b (refer to Section 7).

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval.

**Table A-11: Likelihood to Quit Tobacco Use
– Among Current Regular Cigarette Users[†] –**

Current Regular Cigarette Users		
Q4a: During the past 12 months, have you stopped using tobacco for one day or longer because you were trying to quit using tobacco?	Test (n* = 1,624)	Control (n* = 1,631)
Yes	47% (2.7)	45% (2.7)
No	53% (2.7)	55% (2.7)
Q4b: How much do you want to quit using tobacco?	Test (n* = 1,624)	Control (n* = 1,631)
Not at all	10% (1.7)	10% (1.6)
A little	16% (2.0)	16% (2.0)
Somewhat	33% (2.5)	38% (2.7)
A lot	39% (2.6)	34% (2.6)
No opinion	2% (0.7)	2% (0.8)
Q4c: How likely do you think it is that you will try to quit using tobacco within the next 30 days?	Test (n* = 1,624)	Control (n* = 1,631)
Very unlikely	36% (2.6)	38% (2.6)
Somewhat unlikely	29% (2.4)	27% (2.4)
Somewhat likely	23% (2.3)	22% (2.3)
Very likely	12% (1.7)	11% (1.7)
No opinion	1% (0.6)	2% (0.7)
Q4d: If you did try to quit using tobacco within the next 30 days, how likely do you think it is that you would succeed in quitting?	Test (n* = 1,624)	Control (n* = 1,631)
Very unlikely	21% (2.2)	24% (2.4)
Somewhat unlikely	27% (2.4)	27% (2.4)
Somewhat likely	33% (2.5)	30% (2.5)
Very likely	15% (1.9)	15% (1.9)
No opinion	4% (1.1)	4% (1.1)
Q4a, Q4b, Q4c & Q4d (refer above for questions)	Test (n* = 1,624)	Control (n* = 1,631)
Answered "yes" to Q4a, "a lot" to Q4b, and "very likely" to Q4c & Q4d (likely to quit)	19% (2.1)	18% (2.1)
Did not Answer "yes" to Q4a, "a lot" to Q4b, and "very likely" to Q4c & Q4d (not likely to quit)	81% (2.1)	82% (2.1)

[†] Cigarette status is based on self-reported tobacco usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate).

**Table A-12: Weighted Rating Distribution: Test versus Control Camel SNUS Materials
– Purchase Intent Ratings among Current Regular Cigarette Users by Intent[†] –**

		Current Regular Cigarette Users Likely to Quit Tobacco Use		Current Regular Cigarette Users <u>Not</u> Likely to Quit Tobacco Use	
		Test (n*=298)	Control (n*=315)	Test (n*=1,309)	Control (n*=1,333)
Definitely Would Not Purchase	1	56% (6.1)	60% (6.1)	52% (3.0)	57% (3.0)
	2	10% (3.7)	7% (3.3)	8% (1.6)	6% (1.5)
	3	7% (2.8)	7% (3.3)	8% (1.5)	7% (1.5)
	4	1% (1.2)	3% (2.2)	4% (1.2)	5% (1.4)
	5	7% (3.3)	7% (3.4)	8% (1.6)	7% (1.7)
	6	5% (2.9)	3% (1.9)	5% (1.2)	4% (1.2)
	7	4% (2.5)	4% (2.2)	6% (1.4)	5% (1.3)
	8	4% (2.4)	5% (3.1)	5% (1.3)	4% (1.1)
	9	1% (0.7)	1% (1.5)	2% (0.9)	2% (0.8)
Definitely Would Purchase	10	5% (2.8)	3% (2.1)	4% (1.1)	3% (1.1)
	Mean	2.8 (.34)	2.7 (.34)	3.1 (.17)	2.8 (.16)
Mean Modeled Purchase Rate		5.6 (4.0-7.7)	5.2 (3.7-7.2)	5.9 (4.2-8.1)	5.4 (3.9-7.5)

[†] Intent to quit tobacco use is based on responses to Q4a, Q4b, Q4c and Q4d (*refer to Section 7*).

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

**Table A-13: Weighted Mean Modeled Purchase Rate
- Test versus Control Camel SNUS Advertising Materials among Current Regular
Cigarette Users by Intent[†] –**

	Current Regular Cigarette Users Likely to Quit Tobacco Use		Current Regular Cigarette Users <u>Not</u> Likely to Quit Tobacco Use	
	Test	Control	Test	Control
Ages 18-22 years	20.0% (14.8-26.3) (n*=14)	11.3% (8.1-15.5) (n*=7)	16.5% (12.0-22.0) (n*=40)	11.4% (8.1-15.7) (n*=34)
Ages 23-27 years	8.6% (6.0-12.0) (n*=22)	11.2% (8.0-15.5) (n*=34)	10.9% (7.7-15.0) (n*=136)	10.6% (7.6-14.7) (n*=124)
Ages 28-32 years	6.5% (4.5-9.4) (n*=56)	4.3% (2.9-6.5) (n*=39)	8.6% (6.2-11.9) (n*=165)	8.8% (6.3-12.2) (n*=185)
Ages 33-37 years	4.5% (3.3-6.1) (n*=37)	5.9% (4.5-7.8) (n*=22)	6.0% (4.6-7.9) (n*=138)	7.4% (5.8-9.6) (n*=134)
Ages 38-42 years	7.4% (5.7-9.5) (n*=30)	5.6% (4.2-7.4) (n*=28)	6.0% (4.5-7.9) (n*=124)	4.7% (3.5-6.4) (n*=122)
Ages 43-47 years	5.4% (4.1-7.2) (n*=28)	6.1% (4.7-8.0) (n*=49)	5.7% (4.4-7.6) (n*=153)	5.5% (4.1-7.3) (n*=143)
Ages 48-52 years	5.5% (4.2-7.3) (n*=37)	4.3% (3.1-5.9) (n*=40)	4.1% (3.0-5.8) (n*=141)	4.5% (3.3-6.1) (n*=159)
Ages 53-57 years	2.9% (1.9-4.5) (n*=39)	2.0% (1.2-3.1) (n*=31)	2.5% (1.6-3.8) (n*=164)	2.2% (1.4-3.5) (n*=170)
Ages 58-62 years	1.8% (1.1-3.0) (n*=28)	1.8% (1.1-3.0) (n*=26)	3.4% (2.3-5.1) (n*=123)	2.6% (1.7-4.0) (n*=125)
Ages 63-67 years	2.1% (1.3-3.3) (n*=18)	1.8% (1.1-3.0) (n*=12)	3.3% (2.2-4.9) (n*=85)	2.4% (1.5-3.7) (n*=91)
Ages 68+ years	2.1% (1.3-3.3) (n*=6)	3.8 (2.6-5.6) (n*=10)	2.3% (1.4-3.5) (n*=40)	1.7% (1.0-2.8) (n*=46)

[†] Intent to quit tobacco use is based on responses to Q4a, Q4b, Q4c and Q4d (*refer to Section 7*).

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval.

Table A-14: Reported Intended Use of Camel SNUS among Current Regular Tobacco Users[†] Not Reporting an Intention to Quit Tobacco Use

	Current Regular Tobacco Users Not Intending to Quit Tobacco Use	
	Test	Control
<i>Would use Camel SNUS...</i>	n* = 936	n* = 900
Instead of current tobacco (stop using current tobacco completely)	15% (2.5)	12% (2.4)
In addition to current tobacco (overall increase in tobacco use)	20% (2.9)	21% (3.0)
In place of some of current tobacco (no net increase in tobacco use)	33% (3.4)	34% (3.5)
Don't know	32% (3.4)	34% (3.5)

Analysis includes current regular users who indicated likelihood of use rating of "2" or greater.

Numbers in parentheses represent the 95% confidence interval half-width (\pm mean estimate).

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample sizes (on which the weighted data are based).

Table A-15: Likelihood to Switch Back to Current Tobacco Product after Trying Camel SNUS – Current Regular Cigarette Users[†] Who Rate Likelihood to Use Camel SNUS “2” or Greater and Expect to Use Camel SNUS Instead of Current Tobacco Product(s) –

		Current Regular Cigarette Users	
		Test	Control
		(99)	(69)
Not At All Likely to Switch Back to Current Tobacco Product	(n)* =		
	1	5% (5.0)	2% (4.6)
	2	5% (5.2)	2% (2.9)
	3	6% (4.6)	6% (6.2)
	4	4% (4.2)	6% (6.9)
	5	28% (9.9)	18% (10.4)
	6	16% (7.9)	12% (8.8)
	7	13% (7.3)	17% (9.8)
	8	13% (7.0)	19% (9.7)
	9	6% (5.0)	15% (9.2)
Very Likely to Switch Back to Current Tobacco Product	10	6% (4.8)	4% (3.7)
	Mean	5.9 (.49)	6.5 (.55)

[†] Cigarette status is based on self-reported cigarette usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

Table A-16: Likelihood to Switch Back to Current Tobacco Product(s) After Trying Camel SNUS – Current Regular Tobacco Users[†] Who Rate Likelihood to Use Camel SNUS “2” or Greater and Expect to Use Camel SNUS Instead of Current Tobacco Product(s) –

		Current Regular Tobacco Users	
		Test	Control
		(n)* =	(104)
Not At All Likely to Switch Back to Current Tobacco Product	1	4% (3.8)	2% (2.9)
	2	3% (3.8)	1% (1.9)
	3	6% (4.1)	5% (4.2)
	4	3% (3.0)	6% (5.6)
	5	26% (8.1)	26% (9.6)
	6	18% (7.1)	19% (8.6)
	7	14% (6.4)	14% (7.2)
	8	14% (6.2)	14% (6.8)
	9	6% (4.2)	12% (6.5)
Very Likely to Switch Back to Current Tobacco Product	10	6% (4.0)	3% (2.8)
Mean		6.0 (.40)	6.3 (.39)

[†] Tobacco status is based on self-reported tobacco usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

**Table A-17: Likelihood to Switch to a Different Tobacco Product(s) After Trying Camel SNUS
– Former and Never Regular Cigarette Users[†] Who Rate Likelihood to Use Camel
SNUS “2” or Greater –**

		Former Regular Cigarette Users		Never Regular Cigarette Users	
		Test (n*=386)	Control (n*=349)	Test (n*=328)	Control (n*=314)
Not At All Likely to Switch to a Different Tobacco Product	1	39% (5.5)	20% (4.8)	34% (5.4)	18% (4.4)
	2	13% (3.9)	11% (3.7)	17% (4.4)	19% (4.6)
	3	9% (3.1)	14% (4.4)	7% (2.8)	11% (3.7)
	4	7% (2.8)	7% (3.1)	10% (3.4)	7% (3.1)
	5	11% (3.4)	20% (4.8)	11% (3.7)	18% (4.6)
	6	6% (2.8)	9% (3.4)	7% (2.7)	9% (3.3)
	7	6% (2.7)	6% (2.8)	4% (2.3)	4% (2.8)
	8	5% (2.5)	6% (2.6)	5% (2.5)	8% (3.3)
	9	2% (1.3)	3% (1.9)	2% (1.7)	2% (1.5)
Very Likely to Switch to a Different Tobacco Product	10	2% (1.7)	4% (2.2)	3% (2.1)	4% (2.3)
Mean		3.3 (.29)	4.2 (.30)	3.5 (.30)	4.1 (.30)

[†] Cigarette status is based on self-reported tobacco usage.

* Unweighted sample sizes (on which the weighted data are based).

Numbers in parentheses represent the 95% confidence interval half-width (\pm percentage estimate or \pm mean estimate).

Appendix B: Camel SNUS MRTP Likelihood of Use Stimuli
-First Execution of Consumer Testing -
"TEST" STIMULI (*WITH* MODIFIED RISK MESSAGING)

(b) (4)



(b) (4)



(b) (4)



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