

## **Attachment 5**

### **Summary of Proposed Changes to Instruments**

## Attachment 5 - Summary of Changes to PATH Study Instruments

The purpose of this attachment is to provide a high-level overview of changes to the PATH questionnaires from Wave 2 to Wave 3. This overview includes the change in total item counts per section across Waves (tables 'a'), as well as a description summary of the content that was added or deleted in Wave 3 that corresponds to the fluctuations in item counts (tables 'b').

The following tables outline changes in the (a) item counts and (b) questionnaire content across Waves for the:

- Adult Questionnaire (see Tables 1a and 1b),
- Youth Questionnaire (see Tables 2a and 2b),
- Parent Questionnaire (see Tables 3a and 3b), and
- Nicotine Exposure Questionnaire (see Tables 4a and 4b).

**Table 1a. ADULT QUESTIONNAIRE - Change in Total Item Counts<sup>1</sup> from Wave 2 to Wave 3**

Adult Questionnaire Section	Total Number of Items per Section				Change in Total Item Count from W2 to W3	
	Wave 2		Wave 3		Extended	Aged-Up
	Extended	Aged-Up	Extended	Aged-Up		
Introductory Demographics	3	3	11	11	+8	+8
Tobacco Use	129	129	102	102	-27	-27
Cigarette	53	57	48	56	-5	-1
Primary Electronic Nicotine Products	61	65	68	76	+7	+11
Secondary Electronic Nicotine Products	--	--	5	5	+5	+5
Cigar	42	46	63	79	+19	+33
Pipe	38	42	39	47	+1	+5
Hookah	49	53	51	59	+2	+6
Snus (formerly in "Smokeless Tobacco")	46	50	46	54	--	+4
Smokeless Tobacco	41	45	43	51	+2	+6
New Product - Placeholder <sup>2</sup>	--	--	5	5	+5	+5
Dissolvable Tobacco	42	46	--	--	-42	-46
Polyuse	5	5	5	5	--	--
Nicotine Dependence	144	144	146	146	+2	+2
Packaging and Health Warnings	17	17	25	25	+8	+8
Product Regulation-Modified Risk Tobacco Products	34	34	57	58	+23	+24
Media Use	15	15	10	10	-5	-5
Secondhand Smoke Exposure	10	10	12	12	+2	+2
Social Norms-Peer and Family Influences	4	4	31	31	+27	+27
Health (includes substance use items)	112	154	160	221	+48	+67
Marketing, Advertising and Promotion	23	29	21	21	-2	-8
Additional Demographics	25	25	27	27	+2	+2
Product Barcode Scanning	10	10	26	26	+16	+16
Contact Information	25	25	29	29	+4	+4
<b>Total (Entire Questionnaire)</b>	<b>928</b>	<b>1008</b>	<b>1030</b>	<b>1156</b>	<b>+102</b>	<b>+148</b>

<sup>1</sup>Note: This table reflects total item counts; it does not account for the conditions in which the items are asked. For example, due to skip patterns, every respondent is not asked all items reflected in these counts. Consequently, the average time to complete the Adult interview remains at 60 minutes for both the Wave 2 and Wave 3 Extended instruments, and increases to 68 minutes for the Wave 3 Aged-Up instrument.

<sup>2</sup>The section enables the PATH Study to be responsive to the changing marketplace and can be rapidly deployed. The module collects basic usage information about products that are not currently included in the PATH Study. The module will remain suppressed until such time that emerging products dictate its deployment.

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**TABLE 1b. ADULT QUESTIONNAIRE – Description of Content Changes from Wave 2 to Wave 3**

Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
Introductory Demographics	Added	Adults	On respondent's nativity status, years lived in the US, English proficiency, and other languages spoken in the home.	To assess changes in the demographic profile of the United States due to immigration and acculturation in order to identify disparities in English proficiency and comprehension, particularly as they relate to tobacco communication tools such as graphic health warnings.
Tobacco Use	Added	Adults	On identifying the primary and secondary electronic nicotine product for respondents that use more than one e-product.	To ensure that all electronic nicotine products are being assessed, in addition to e-cigarettes.
	Added	Adults	On non-user's susceptibility to becoming a snus user.	Formerly, questions were asked about "smokeless tobacco" as a collective class of products which included snus; in Wave 3, questions are asked explicitly about a respondent's susceptibility to snus, separately from other smokeless tobacco products.
	Added	Adults	On respondent's use of tobacco products that are not discussed elsewhere in the PATH Study.	To identify new and emerging tobacco products that are not captured in existing PATH survey questions.
	Deleted	Adults	On respondent's detailed use of and susceptibility to dissolvable tobacco products.	Given the low prevalence of dissolvable tobacco use, detailed use and susceptibility questions are removed from Wave 3. Prevalence of ever and past 12 month use is retained.
Cigarette	Added	Adults	On product attributes, detailed use, purchasing, brand, and dual use.	To assess usage patterns for any respondent who has smoked in the past 30 days; previously, questions were limited to those respondents who met the criteria for current established use.
	Added	Adults	On respondent's cigarette type in past 30 days (manufactured vs. roll-your-own).	To assess manufactured and roll-your-own cigarette use in the past 30 days and to inform biospecimen analysis.
	Added	Adults	On assessing sensory experiences associated with smoking.	A question is added to differentiate the nicotine effects from the airway sensory effects of smoking and to enable monitoring/evaluation of the cigarette smoking experience.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Cigarette</b> <i>(continued)</i>	Deleted	Adults	On use of flavored cigarettes (not including menthol/mint) in the past 30 days and among respondents who have recently initiated cigarette use.	Since flavored cigarettes are no longer commercially available in the United States, questions about non-menthol flavors have been deleted from Wave 3.
	Deleted	Adults	On reasons respondent chose their regular brand of cigarettes, including packaging, perceived decrease in health implications, perceived satisfaction, and social norms.	These questions were deleted to make time for new questions that are of higher priority.
<b>Primary Electronic Nicotine Products</b> <i>(formerly the "E-cigarette" and "ENDS" sections)</i>	Added	Adults	On product attributes, detailed use, purchasing, brand, and dual use.	To assess usage patterns for any respondent who has used in the past 30 days; previously, questions were limited to those respondents who met the criteria for current established use.
	Added	Adults	On changing the voltage on electronic nicotine product devices.	To assess whether respondents are changing the voltage on their electronic nicotine product and, therefore, impacting exposure to nicotine and other potentially harmful constituents.
	Added	Adults	On the use of marijuana concentrates, waxes, THC and hash oils in e-products.	To assess whether respondents are using marijuana/marijuana derivatives in e-products to interpret biospecimens.
	Added	Adults	On respondent's use of e-products that use a tank system.	To assess how much e-liquid a given tank system will hold and how frequently it is refilled.
	Added	Adults	On respondent's typical purchase quantity and price paid for disposable e-products.	To account for respondents who purchase disposable e-products in boxes or packs.
	Added	Adults	On motives for using e-products.	To assess the psychosocial motives for using a tobacco product.
	Deleted	Adults	On modifying e-products.	Cycled out for Wave 3; may consider again in a future wave.
	Deleted	Adults	On reasons for using e-products, including media influence and advertising.	These questions were deleted to make time for new questions that are of higher priority.
<b>Secondary Electronic Nicotine Products</b>	Added	Adults	On lifetime use, fairly regular use, initiation flavor, length of time since last use, and use of nicotine in secondary e-products.	To assess respondent use of secondary electronic nicotine product(s), asked of polyusers.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Cigars</b>	Added	Adults	On product attributes, detailed use, purchasing, brand, and dual use.	To assess usage patterns for any respondent who has used in the past 30 days; previously, questions were limited to those respondents who met the criteria for current established use.
	Added	Adults	On comparative harm of cigars and cigarettes.	Questions about comparative harm are expanded to include combustible tobacco products in Wave 3, including cigars.
	Added	Adults	On motives for smoking cigars.	To assess the psychosocial motives for using a tobacco product.
	Deleted	Adults	On reasons for smoking cigars, including media influence and advertising.	These questions were deleted to make time for new questions that are of higher priority.
<b>Pipe</b>	Added	Adults	On comparative harm from pipe smoking and cigarettes.	Questions about comparative harm are expanded to include combustible tobacco products in Wave 3, including pipes.
	Added	Adults	On motives for pipe smoking.	To assess the psychosocial motives for using a tobacco product.
	Deleted	Adults	On reasons for pipe smoking, including media influence and advertising.	These questions were deleted to make time for new questions that are of higher priority.
<b>Hookah</b>	Added	Adults	On product attributes, detailed use, purchasing, brand, and dual use.	To assess usage patterns for any respondent who has used in the past 30 days; previously, questions were limited to those respondents who met the criteria for current established use.
	Added	Adults	On use of shisha made from tobacco, herbal and tobacco-free shisha.	To assess use of conventional and herbal or tobacco-free shisha.
	Added	Adults	On motives for smoking hookah.	To assess for the psychosocial motives for using a tobacco product.
	Added	Adults	On the type of liquid used in the bowl of the hookah.	To assess for the use of liquids other than water to smoke hookah.
	Added	Adults	On product attributes, detailed use, purchasing, brand, and dual use.	To assess usage patterns for any respondent who has used in the past 30 days; previously, questions were limited to those respondents who met the criteria for current established use.
	Deleted	Adults	On using a coupon when purchasing shisha.	These questions were deleted to make time for new questions that are of higher priority.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Hookah</b> <i>(continued)</i>	Deleted	Adults	On reasons for smoking hookah, including media influence and advertising.	These questions were deleted to make time for new questions that are of higher priority.
<b>Snus</b> <i>(formerly embedded in the "Smokeless Tobacco" section)</i>	Added	Adults	On product attributes, detailed use, purchasing, brand, and dual use.	To assess usage patterns for any respondent who has used in the past 30 days; previously, questions were limited to those respondents who met the criteria for current established use.
	Added	Adults	On motives for using snus.	To assess the psychosocial motives for using a tobacco product.
	Deleted	Adults	On reasons for using snus including media influence, advertising, and perceived pleasure experienced compared to cigarettes.	These questions deleted to make time for new questions that are of higher priority.
<b>Smokeless Tobacco</b>	Added	Adults	On product attributes, detailed use, purchasing, brand, and dual use.	To assess usage patterns for any respondent who has used in the past 30 days; previously, questions were limited to those respondents who met the criteria for current established use.
	Added	Adults	On motives for using smokeless tobacco.	To assess the psychosocial motives for using a tobacco product.
	Deleted	Adults	On reasons for using smokeless tobacco including media influence and advertising.	These questions were deleted to make time for new questions that are of higher priority.
<b>New Product - Placeholder</b>	Added	Adults	On basic use patterns.	The module collects basic usage information about products that are not currently included in the PATH Study. The module will remain suppressed until such time that emerging products dictate its deployment.
<b>Nicotine Dependence</b>	Added	Adults	On whether using tobacco or e-products is causing a health problem or exacerbating an existing condition.	Questions were cycled out in a previous wave; they are cycled back in for Wave 3.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Packaging and Health Warnings</b>	Added	Adults	On health warning labels on cigarette packs, smokeless tobacco packages, and packages of snus including how often a respondent looks closely at them; tries to avoid looking at or thinking about them; how believable they are; and how they make a respondent feel about use or the health risks associated with use.	Questions were cycled out in a previous wave; they are cycled back in for Wave 3 for cigarettes and smokeless tobacco. In Wave 3, questions are asked explicitly about snus separately from other smokeless tobacco, to assess respondent exposure to packaging and health warnings on snus packages.
	Deleted	Adults	On noticing health warnings on packages of e-cigarettes, traditional cigars, cigarillos, filtered cigars, pipe tobacco, shisha or hookah tobacco and dissolvable tobacco.	Cycled out for Wave 3; may consider again in a future wave depending on changes to regulatory control for these products.
<b>Product Regulation – Modified Risk Tobacco Products</b>	Added	Adults	On perceived harm in using modified risk tobacco products such as cigarettes with reduced nicotine, and products labeled “organic” or “additive-free”.	To assess respondents’ understanding and perceptions of harm/risk associated with use of modified risk products.
	Added	Adults	On perceived harm of nicotine to health.	To assess respondents’ understanding and perceptions of harm of nicotine.
	Added	Adults	On absolute and comparative perceived harm.	To assess respondents’ understanding and perceptions of harm/risk associated with using various products including e-products, traditional cigars, cigarillos, filtered cigars.
	Added	Adults	On general perceived harm of using snus, perceived harm compared to smoking cigarettes and using other types of smokeless tobacco, and compared to snus products from five years ago.	To assess respondent’s perception of risk/harm as they relate specifically to snus products (separate from smokeless tobacco products, in general).
	Deleted	Adults	On views about tobacco use, in general.	Cycled out for Wave 3; as opinions generally remain stable over time, question is not asked in Wave 3.
	Deleted	Adults	On perceived harm of using dissolvable tobacco products compared to smoking cigarettes.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Adults	On perceived harm/risk in smoking menthol versus non-menthol cigarettes.	Because this was asked of adult respondents in a previous wave, it is not necessary to ask in Wave 3. Question will continue to be asked of respondents who age into the adult cohort.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Media Use</b>	Added	Adults	On platforms used to watch videos.	To assess media use and exposure to tobacco campaign advertising via video streaming websites and other viewing platforms, in addition to television.
	Deleted	Adults	On exposure to and interaction with tobacco brands on various social media.	Cycled out for Wave 3.
	Deleted	Adults	On exposure to tobacco brands in online games.	These questions were deleted to make time for new questions that are of higher priority.
<b>Secondhand Smoke Exposure</b>	Added	Adults	On rules pertaining to the use of electronic nicotine products inside the home.	To assess use of electronic nicotine products inside homes separately from combustible tobacco products.
	Added	Adults	On exposure to secondhand vapor from an e-product.	To assess exposure to secondhand vapor from an e-product.
<b>Social Norms, Peer and Family Influences</b> <i>(formerly the "Peer and Family Influences" section)</i>	Added	Adults	On peer/ family opinion of using cigarettes, e-products, cigars, hookah, pipe tobacco, snus or other smokeless tobacco.	To assess the role of social context in relation to the use of tobacco products.
<b>Health</b>	Added	Adults	On respondents' physical, mental, and overall health, quality of life, and satisfaction with social activities and relationships compared to 12 months ago.	To assess self-reported health status since the previous wave.
	Added	Adults	On previously reported health conditions including pre-cancerous oral lesions, high blood pressure, high cholesterol, stroke, and asthma.	To assess ongoing medical treatment for health conditions that were reported in previous waves, resulting in disability, hospitalization, or use of medication.
	Added	Adults	On cancer remission or reoccurrence.	Will be asked for any respondent who previously reported a cancer diagnosis to assess the relationship between tobacco use and cancer diagnosis/reoccurrence.
	Added	Adults	On COPD Severity.	To assess the severity of diagnosed COPD in respondents.



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<b>Wave 3 Section</b>	<b>Wave 3 Change</b>	<b>Affected Respondent Category</b>	<b>Description of Questions</b>	<b>Rationale for Change</b>
<b>Health</b> <i>(continued)</i>	Added	Adults	On dental health.	Questions were added about dental health, diagnosis with diabetes, and ulcers, because these conditions can be related to tobacco. Questions were also added about macular degeneration, orofacial clefts, and erectile dysfunction per the 2014 Surgeon General's Report which showed a causal relationship between smoking and these conditions. These additions will obtain more granular information on the respondent's health and the health effects associated with use of tobacco products.
	Added	Adults	On diagnosis with Type 1 or Type 2 diabetes.	
	Added	Adults	On ulcers/ H. Pylori infection and medications to treat these conditions.	
	Added	Older adults (40+)	On macular degeneration.	
	Added	Adult males	On erectile dysfunction.	
	Added	Adult females	On orofacial clefts.	
	Added	Adults	Family history of tobacco use, problematic alcohol use, and problematic drug use.	
	Deleted	Younger adults (18-39)	On congestive heart failure, stroke, heart attack or bypass surgery, osteoporosis, fragile bones, and rapid vision loss.	Given the low prevalence of diagnosis for these health conditions among respondents under the age of 40, these questions are removed from the survey for younger adults; the questions will be asked of all respondents who are aging into the adult cohort.
<b>Marketing, Advertising, and Promotion</b>	Added	Continuing Adults	On purchasing a brand of tobacco other than the respondent's usual brand.	Previously, items were asked only for respondents aging into the cohort; for Wave 3, all respondents will be asked. Will assess reasons why respondents switch brands and how frequently they do so.
	Deleted	Adults	On participation in tobacco-sponsored sweepstakes.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Adults	On the manner in which discount coupons or promotions were received.	
	Deleted	Adults	On receiving free samples of tobacco products.	
<b>Additional Demographics</b>	Added	Young adults	On high school enrollment status.	To assess grade level for young adult respondents currently enrolled in high school.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Contact Information</b>	Added	Adults	On best method of contacting respondent.	To inform contacting and tracking efforts for future waves.

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**Table 2a. YOUTH QUESTIONNAIRE - Change in Total Item Counts<sup>1</sup> from Wave 2 to Wave 3**

Youth Questionnaire Section	Total Number of Items per Section				Change in Total Item Count from W2 to W3	
	Wave 2		Wave 3		Extended	Aged-Up
	Extended	Aged-Up	Extended	Aged-Up		
Introductory Demographics	0	3	8	11	+8	+8
Cigarette	47	49	33	41	-14	-8
Primary Electronic Nicotine Products	60	63	57	64	-3	+1
Secondary Electronic Nicotine Products	--	--	5	5	+5	+5
Cigar	66	70	72	79	+6	+9
Pipe	12	13	10	11	-2	-2
Hookah	56	59	46	53	-10	-6
Snus (formerly in "Smokeless Tobacco")	46	51	38	44	-8	-7
Smokeless Tobacco	42	47	34	40	-8	-7
Dissolvable Tobacco	4	5	2	3	-2	-2
Bidis and Kreteks	4	5	2	4	-2	-1
Other Tobacco	--	--	1	1	+1	+1
New Product - Placeholder <sup>2</sup>	--	--	5	5	+5	+5
First Tobacco Product	1	1	1	1	--	--
Nicotine Dependence	12	12	20	20	+8	+8
Cessation / Quitter	8	8	10	10	+2	+2
Packaging and Health Warnings	16	26	26	33	+10	+7
Product Regulation-Modified Risk Tobacco Products (Includes "Harm Perception" questions)	3	3	43	43	+40	+40
Media Use	16	18	11	12	-5	-6
Secondhand Smoke Exposure	4	4	5	5	+1	+1
Health	46	57	40	40	-6	-17
Marketing, Advertising and Promotion	26	26	17	17	-9	-9
Social Norms-Peer and Family Influences	8	8	39	39	+31	+31
Accessibility	3	3	5	5	+2	+2
Psychosocial	12	12	12	15	--	+3
Substance Use	18	29	19	29	+1	--
Additional Demographics	17	17	11	11	-6	-6
Contact Information (Emancipated Youth)	25	25	29	29	+4	+4
<b>Total (Entire Questionnaire)</b>	<b>552</b>	<b>614</b>	<b>601</b>	<b>670</b>	<b>+49</b>	<b>+56</b>

<sup>1</sup>Note: This table reflects total counts of items; it does not account for the conditions in which the items are asked. For example, due to skip patterns, every respondent is not asked all items reflected in these counts. The average time to complete the Youth interview increases from 32 to 35 minutes for the Wave 3 Extended instrument, and increases to 45 minutes for the Wave 3 Aged-Up instrument.

<sup>2</sup>The section enables the PATH Study to be responsive to the changing marketplace and can be rapidly deployed. The module collects basic usage information about products that are not currently included in the PATH Study. The module will remain suppressed until such time that emerging products dictate its deployment.

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**TABLE 2b. YOUTH QUESTIONNAIRE – Description of Content Changes from Wave 2 to Wave 3**

Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Introductory Demographics</b>	Added	Youth	On respondent's nativity status, years lived in the US, English proficiency, and other languages spoken in the home.	To assess changes in the demographic profile of the United States due to immigration and acculturation in order to identify disparities in English proficiency and comprehension, particularly as they relate to tobacco communication tools such as graphic health warnings.
<b>Cigarette</b>	Added	Youth	On respondent's cigarette type in the past 30 days (manufactured versus roll-your own).	To assess manufactured and roll-your own cigarette use in the past 30 days, and prevalence of menthol-flavored roll your own cigarette tobacco among youth.
	Added	Youth	On whether the respondent was able to purchase cigarettes in the past 30 days.	To assess product accessibility for tobacco products.
	Added	Youth	On the likelihood of becoming addicted to cigarettes.	To assess respondent understanding and perception of risk associated with cigarettes.
	Deleted	Youth	On whether respondent chose their particular brand of cigarettes based on the design of the packaging, media influence, the brand's popularity, or ease of purchase.	These questions were deleted to make time for new questions that are of higher priority.
<b>Primary Electronic Nicotine Products</b> <i>(formerly the "Electronic Nicotine Delivery Systems (ENDS)" section)</i>	Added	Youth	On determining the primary and secondary electronic nicotine product for respondents who use more than one device type.	To ensure that all electronic nicotine products are being assessed, in addition to e-cigarettes.
	Added	Youth	On e-product characteristics.	To assess whether respondent is using e-products that contain nicotine and whether they can change the voltage on their product.
	Added	Youth	On the use of marijuana concentrates, waxes, THC and hash oils in e-products.	To assess whether respondents are using e-products to consume marijuana/marijuana derivatives In order to understand e-product use patterns.
	Added	Youth	On whether the respondent was able to purchase electronic nicotine products in the past 30 days.	To assess product accessibility for tobacco products.

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<b>Wave 3 Section</b>	<b>Wave 3 Change</b>	<b>Affected Respondent Category</b>	<b>Description of Questions</b>	<b>Rationale for Change</b>
<b>Primary Electronic Nicotine Products</b> <i>(continued)</i>	Added	Youth	On respondent's typical purchase quantity and price paid for disposable e-products.	To account for respondents who purchase disposable e-products in boxes or packs.
<b>Primary Electronic Nicotine Products</b> <i>(formerly the "Electronic Nicotine Delivery Systems (ENDS)" section)</i> <i>(continued)</i>	Added	Youth	On motives for using e-products.	To assess the psychosocial motives for using a tobacco product.
	Deleted	Youth	On e-product ownership	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On modifying e-products	
	Deleted	Youth	On whether respondent purchased e-products within their own state, in another state, or outside the US.	These questions were deleted to make time for new questions that are of higher priority.
Deleted	Youth	On using e-products as a result of media influence and advertising.	These questions were deleted to make time for new questions that are of higher priority.	
<b>Secondary Electronic Nicotine Product</b>	Added	Youth	On lifetime use, fairly regular use, initiation flavor, length of time since last use, and use of nicotine in secondary e-products.	To assess respondent use of secondary electronic nicotine product(s), asked of polyusers of electronic nicotine products.
<b>Cigar</b>	Added	Youth	On whether the respondent was able to purchase cigars, including for blunts, in the past 30 days.	To assess product accessibility for tobacco products.
	Added	Youth	On motives for smoking cigars.	To assess the psychosocial motives for using a tobacco product.
	Deleted	Youth	On purchasing behaviors, including whether the respondent used coupons and purchased cigars within their own state, in another state or outside the US.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On smoking cigars as a result of media influence and advertising.	
<b>Pipe</b>	Added	Youth	On whether the respondent was able to purchase pipe tobacco in the past 30 days.	To assess product accessibility for tobacco products.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Pipe</b> <i>(continued)</i>	Deleted	Youth	On purchasing behaviors, including whether the respondent used coupons and purchased pipe tobacco within their own state, in another state or outside the US.	These questions were deleted to make time for new questions that are of higher priority.
<b>Hookah</b>	Added	Youth	On whether the respondent was able to purchase shisha, or hookah tobacco, in the past 30 days.	To assess product accessibility for tobacco products.
	Added	Youth	On alternative hookah-smoking methods such as using herbal or tobacco-free shisha and filling the bowl with liquids other than water.	To assess prevalence of emerging products and behaviors.
	Deleted	Youth	On purchasing behaviors, including whether the respondent used coupons and purchased shisha within their own state, in another state or outside the US.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On smoking hookah as a result of media influence and advertising.	
<b>Snus</b> <i>(formerly embedded in "Smokeless Tobacco" section)</i>	Added	Youth	On non-user's susceptibility to becoming a snus user.	Formerly, questions were asked about "smokeless tobacco" as a collective class of products which included snus; in Wave 3, questions are asked explicitly about a respondent's susceptibility to snus, separately from other smokeless tobacco products.
	Added	Youth	On whether the respondent was able to purchase snus in the past 30 days, and whether they used a coupon.	To assess product accessibility for tobacco products.
	Added	Youth	On perceived harm of using snus, perceived harm compared to smoking cigarettes, and likelihood of becoming addicted.	To assess respondent's perception of harm specifically as it relates to snus products (separate from smokeless tobacco products, in general).
	Deleted	Youth	On using snus as a result of media influence or advertising or because the sensations were stronger or more pleasurable than with cigarette smoking.	These questions were deleted to make time for new questions that are of higher priority.
<b>Smokeless Tobacco</b>	Added	Youth	On whether the respondent was able to purchase smokeless tobacco in the past 30 days.	To assess product accessibility for tobacco products.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Smokeless Tobacco</b> <i>(continued)</i>	Deleted	Youth	On purchasing behaviors, including whether the respondent used coupons and purchased smokeless tobacco within their own state, in another state or outside the US.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On using smokeless tobacco as a result of media influence and advertising.	These questions were deleted to make time for new questions that are of higher priority.
<b>Dissolvable Tobacco</b>	Added	Youth	On past 30 day use.	To assess for current use of dissolvable tobacco, and cessation or initiation within persons, across the cohort and over time.
	Deleted	Youth	On use patterns.	Given the low number of dissolvable tobacco users, only questions about prevalence of “ever”, “past 12 month”, and “past 30 day” use are retained for dissolvable tobacco. All other questions are removed from Wave 3.
<b>Bidis and Kreteks</b>	Added	Youth	On past 30 day use.	To assess for current use of bidis or kreteks, and cessation or initiation within persons, across the cohort and over time.
	Deleted	Youth	On use patterns.	Given the low number of bidi/kretek users, only questions about prevalence of “ever”, “past 12 month”, and “past 30 day” use are retained for these products. All other questions are removed from Wave 3.
<b>Other Tobacco</b>	Added	Youth	On respondent’s use of tobacco products that are not discussed elsewhere in the PATH Study.	To identify new and emerging tobacco products that are not captured in existing PATH survey questions.
<b>New Product - Placeholder</b>	Added	Youth	On basic use patterns.	The module collects basic usage information about products that are not currently included in the PATH study. The module will remain suppressed until such time that emerging products dictate its deployment.

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Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Packaging and Health Warnings</b>	Added	Youth	On health warning labels on cigarette packs and smokeless tobacco and snus containers, including how often a respondent looks closely at them; tries to avoid looking at or thinking about them; how believable they are; how they make a respondent feel about use or the health risks associated with use; and if they affect the likelihood a respondent will start using the product.	Because health warning labels on tobacco products did not change, these items were cycled out in a previous wave to make room for other questions; they will be asked again in Wave 3.
	Deleted	Youth	On health warnings on packages of dissolvable tobacco.	Cycled out for Wave 3.
<b>Product Regulation – Modified Risk Tobacco Products</b>	Added	Youth	On perceived harm to health from cigarette smoking.	Measures of absolute harm were added for Wave 3 to complement measures of comparative harm.
	Added	Youth	On the respondent’s perceived likelihood of becoming addicted to cigarettes.	To assess respondents’ understanding and perceptions of harm/risk associated with tobacco.
	Added	Youth	On perceived harm in using modified risk tobacco products such as cigarettes with reduced nicotine, and products labeled “organic” or “additive-free”.	
	Added	Youth	On perceived harm, addictiveness of nicotine.	
	Added	Youth	On perceived harm associated with snus use.	Question was modified to ask explicitly about snus use, separate from other smokeless tobacco, in Wave 3.
	Added	Youth	On perceived harm of secondhand shisha/hookah tobacco.	To assess respondent’s perceived harm to others from exposure to secondhand smoke from a hookah.
	Added	Youth	On whether the respondent has considered switching from a currently used product to an e-product.	To assess the relationship between cessation and uptake of various products.
	Deleted	Youth	On the perceived benefits gained from smoking.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On the length of time bidis/kreteks or dissolvable tobacco can be used before experiencing health consequences.	



**Attachment 5 - Summary of Changes to PATH Study Instruments**

Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Product Regulation – Modified Risk Tobacco Products</b> <i>(continued)</i>	Deleted	Youth	On the likelihood that the respondent will try a modified risk tobacco product.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On perceived harm of intermittent and daily use of cigarettes, smokeless tobacco and snus, and the length of time these products can be used before health consequences occur.	
	Deleted	Youth	On the likelihood of becoming addicted to cigars.	
	Deleted	Youth	On existence of modified risk tobacco products.	
<b>Media Use</b>	Added	Youth	On platforms used to watch videos.	To assess media use and exposure to tobacco campaign advertising via video streaming websites and other viewing platforms, in addition to television.
	Deleted	Youth	On exposure to and interaction with tobacco/tobacco brands on various social media.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On exposure to tobacco brands in online games.	
	Deleted	Youth	On whether scanning a QR code took respondent to a tobacco website.	Previously, item was only asked of those respondents aging into the cohort. Is not asked of any respondent in Wave 3.
<b>Secondhand Smoke Exposure</b>	Added	Youth	On rules pertaining to the use of electronic nicotine products inside the home.	To assess use of electronic nicotine products inside homes separately from combustible tobacco products.
<b>Health</b>	Added	Youth	On respondents' physical, mental, and overall health, compared to 12 months ago.	To assess self-reported health status since the previous wave.
	Added	Youth	On emergency room visits due to an asthma attack.	To distinguish whether respondents are seeking primary medical treatment for asthma at the hospital or seeking care for acute asthma attacks.
	Added	Youth	On overall dental health.	Changes in dental health can be related to tobacco.

### Attachment 5 - Summary of Changes to PATH Study Instruments

Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
<b>Health</b> <i>(continued)</i>	Deleted	Youth	On shortness of breath and self-assessed difficulty with exercise compared to peers.	Questions were deleted to give prominence to asthma measures.
	Deleted	Emancipated Youth	On various health-related conditions (including emergency room visits, physical/mental impairments, high blood pressure, cholesterol, chronic bronchitis, ADHD/ADD, dental health, diabetes).	Questions asked solely of emancipated youth respondents are removed from the survey; removing the questions significantly decreased the complexity of the youth survey and alleviated disproportionate burden on resources. Given the extremely low number of emancipated youths sampled for PATH, the impact on the data is very small, and is offset by the benefits of eliminating the emancipated youth module. The questions in the emancipated youth module will be asked of all respondents when they age into the adult cohort.
<b>Marketing, Advertising, and Promotion</b>	Deleted	Youth	On seeing ads for or participating in tobacco sweepstakes.	Cycled out for Wave 3.
	Deleted	Youth	On specific manner in which respondents received coupons for tobacco products.	These questions were deleted to make time for new questions that are of higher priority.
	Deleted	Youth	On receiving information, other than coupons or promotions, from tobacco companies.	These questions were deleted to make time for new questions that are of higher priority.
<b>Social Norms, Peer and Family Influences</b> <i>(formerly the "Peer and Family Influences" section)</i>	Added	Youth	On peer/ family opinion of using cigarettes, e-products, cigars, pipe tobacco, hookah, snus or other smokeless tobacco.	To assess the role of social context in relation to the use of tobacco products.
	Added	Youth	On whether peer disapproval influences cessation.	
	Added	Youth	On whether the respondent's best friends use snus.	Formerly, question was asked about "smokeless tobacco" as a collective class of products which included snus; in Wave 3, question is asked explicitly about snus, separately from other smokeless tobacco products.
	Added	Youth	On parental boundary setting in regards to electronic nicotine products.	Previously, question was asked about "tobacco in general"; in Wave 3, question is expanded to also ask about e-cigarettes and other electronic nicotine products.

### Attachment 5 - Summary of Changes to PATH Study Instruments

Wave 3 Section	Wave 3 Change	Affected Respondent Category	Description of Questions	Rationale for Change
Accessibility	Added	Youth	On accessibility of e-cigarettes and other electronic nicotine products in stores.	To help inform the process and experience of purchasing e-products among youth.
	Added	Youth	On the likelihood that the respondent will purchase e-cigarettes or other electronic nicotine products in the next 30 days.	
Substance Use	Added	Youth	On sensation-seeking behaviors.	Questions were cycled out in a previous wave and are asked again in Wave 3.
Additional Demographics	Deleted	Emancipated Youth	On school attendance and performance, household income, and home ownership.	Questions asked solely of emancipated youth respondents are removed from the survey; questions in the emancipated youth module will be asked of all respondents when they age into the adult cohort.
Contact Information	Added	Emancipated Youth	On best method of contacting respondent.	To inform tracking efforts for future waves. (Contact information for non-emancipated youth is collected in the Parent interview.)

## Attachment 5 - Summary of Changes to PATH Study Instruments

**Table 3a. PARENT QUESTIONNAIRE - Change in Total Item Counts from Wave 2 to Wave 3**

Parent Questionnaire Section	Total Number of Items per Section				Change in Total Item Count from W2 to W3	
	Wave 2		Wave 3		Extended	Aged-Up
	Extended	Aged-Up	Extended	Aged-Up		
Family Composition	12	19	13	20	+1	+1
School, Home, and Tobacco Use	9	9	9	9	--	--
Health	21	38	21	42	--	+4
Respondent Characteristics	9	9	14	14	+5	+5
Contact Information	27	27	31	31	+4	+4
Total (Entire Questionnaire)	78	102	88	116	+10	+14

*\*Note: This table reflects total counts of items; it does not account for the conditions in which the items are asked. For example, due to skip patterns, every respondent is not asked all items reflected in these counts. The average time to complete the Parent interview increases from 14 to 16 minutes for the Wave 3 Extended instrument, and increases to 19 minutes for the Wave 3 Aged-Up instrument.*

**Attachment 5 - Summary of Changes to PATH Study Instruments**

**TABLE 3b. PARENT QUESTIONNAIRE – Description of Content Changes from Wave 2 to Wave 3**

Wave 3 Section	Wave 3 Status	Affected Respondent Category	Description of Questions	Rationale for Change
Family Composition	Added	Parent	On youth respondent's date of birth.	Will be asked in any parent interview where sampled youth's age is missing (previously, an age range was collected for those youth respondents who did not provide a date of birth).
School, Home and Tobacco Use	Added	Parent	On rules pertaining to the use of electronic nicotine products inside the home.	To assess use of electronic nicotine products inside homes separately from combustible tobacco products.
	Deleted	Parent	On number of days youth missed school.	The question was deleted to make time for new questions that are of higher priority.
Health	Added	Parent	Family history of tobacco use, problematic alcohol use, or problematic drug use.	To assess family history of substance use problems which are often associated with nicotine dependence. The items can provide context on the moderating and mediating factors that may influence the trajectory to nicotine dependence among tobacco users.
	Added	Parent	On child's diagnosis with Type 1 or Type 2 diabetes.	To capture information on diabetes, to obtain more granular information on the respondent's health and the health effects associated with use of tobacco products.
	Deleted	Parent	On number of visits child made to the emergency room.	These questions were deleted to make time for new questions that are of higher priority.
Respondent Characteristics	Added	Parent	On housing type.	To characterize respondent's housing type as an indicator of socio-economic status which can be a factor in tobacco use initiation and in patterns of tobacco use.
	Added	Parent	On respondent's nativity status, years lived in the US, and English proficiency.	To assess changes in the demographic profile of the United States due to immigration and acculturation in order to identify disparities in English proficiency and comprehension, particularly as they relate to tobacco communication tools such as graphic health warnings.
	Added	Parent	On perceived comparative harm of specific tobacco product types.	To assess differences in harm perception among combusted and non-combusted tobacco products and e-cigarettes/electronic nicotine products.
	Deleted	Parent	On perception of absolute harm caused by tobacco use.	To assess respondents' understanding and perceptions of harm/risk associated with tobacco use in general.

**Attachment 5 - Summary of Changes to PATH Study Instruments**

Wave 3 Section	Wave 3 Status	Affected Respondent Category	Description of Questions	Rationale for Change
Contact Information	Added	Parent	On best method of contacting respondent.	To inform contact and tracking efforts for future waves.

**Attachment 5 - Summary of Proposed Changes to PATH Study Instruments**

**Table 4a. NICOTINE EXPOSURE QUESTIONNAIRE - Change in Total Item Counts from Wave 2 to Wave 3**

<b>NEQs</b>	<b>Wave 2</b>	<b>Wave 3</b>	<b>Change since Wave 2</b>
Total (Entire Questionnaire)	28	41	+13

*\*Note: This table reflects total counts of items; it does not account for the conditions in which the items are asked. For example, due to skip patterns, every respondent is not asked all items reflected in these counts. The average time to complete the Nicotine Exposure Questionnaire increases from 4 to 5 minutes in the Wave 3 interview. NEQs are asked of all respondents that consent to bio-specimen collection; there is no distinction made between the extended and aged-up respondent categories.*

**Attachment 5 - Summary of Proposed Changes to PATH Study Instruments**

**TABLE 4b. NICOTINE EXPOSURE QUESTIONNAIRE – Description of Content Changes from Wave 2 to Wave 3**

Wave 3 Section	Wave 3 Status	Affected Respondent Category	Changes from Wave 2	Rationale for Change
NEQs	Added	Adults	Language was added to existing NEQs for electronic nicotine products to clarify that only those electronic nicotine products that contain nicotine should be reported.	To assess whether the respondent has used an electronic nicotine product containing nicotine before collecting the respondent's bio-specimens.
	Added	Adults	Language was added to existing NEQs for cigars to clarify that any cigar use, including those cigars smoked with marijuana (i.e., “blunts”), should be reported.	To assess whether the respondent has smoked any cigar including those smoked with marijuana, before collecting the respondent's bio-specimens.