LONG-DISTANCE TTDP WORKPLAN

1. INTRODUCTION

In alignment with the *National Travel & Tourism Infrastructure Strategic Plan*[1] (NTTISP) [USDOT 2024], the U.S. Department of Transportation's (USDOT's) Office of International Transportation and Trade (OST-X20) and the Bureau of Transportation Statistics (BTS) are developing the components of the proposed Long-Distance Travel and Tourism Data Program (TTDP or the "Program"). This Program is critical to USDOT's mission as it will advance U.S. economic strength and global competitiveness through efficient and effective data collection, data compilation, and development of long-distance travel and tourism-centric data products. Many currently available data products are outdated, lack scalability, exist in a silo, cannot be connected to other relevant data, and/or are geographically confined, leaving a gap in understanding the contributions of visitors from outside that area. Through the Program, the travel and tourism products generated can be used as follows:

- To better understand where and how domestic tourists and international visitors contribute to the U.S. economy
- To develop data-driven insights that can inform decision-making, at all levels of government, for improving transportation planning and prioritizing infrastructure improvements
- To increase collaboration and efficiencies among travel and tourism stakeholders through shared data, use of common metrics, and joint research

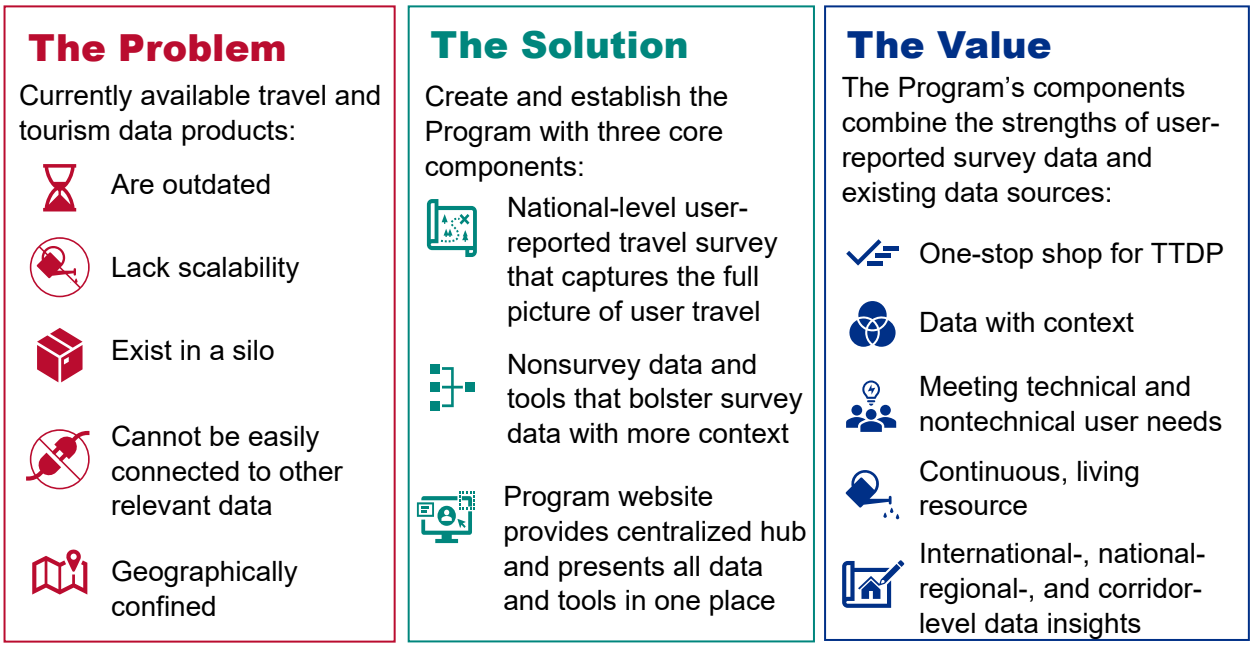
The Program has two current phases: The first phase focuses on planning and scoping, while the second phase focuses on the Program's implementation and maintenance. For the first phase of the Program, the purpose is to gather the requirements of the NTTISP alongside stakeholder needs, compare those requirements to currently available data, identify data gaps, and develop a workplan and roadmap to inform the second phase of the Program. Activities supporting the development of this workplan include extensive stakeholder outreach, in-depth state-of-practice scans, identification of existing data sources, and research into emerging survey methods and data science techniques that USDOT can use to develop relevant surveys, data products, and tools.

This workplan is designed to guide OST-X20 and BTS staff through the initial planning activities in the first year of the Program and then to build upon those foundational activities in future Program years. The following are objectives of this workplan:

- Build on the strategies laid out in the NTTISP [USDOT 2024]
- Incorporate stakeholder needs and state-of-practice research
- Present content in a flexible format that allows OST-X20 and BTS to assemble program components based on the administration's priorities when funding becomes available

[1] Refer to NTTISP Chapter 3 and Appendix E.

The foundation for the Program consists of the requirements set forth in Appendix E of the NTTISP [USDOT 2024]. This section of the workplan summarizes the NTTISP requirements and compares these requirements with the needs expressed by stakeholders (Table 1). The section concludes with a general overview of the activities USDOT plans to conduct over the initial 7 years of the Program.



1.1. Workplan Organization

This workplan is organized into three main sections. The first section recaps stakeholder outreach and the required scope of the Program. The next, section describes each of the three main Program components—the website, survey data, and nonsurvey data—in terms of individual purpose and outcome. The final section summarizes the workplan, including next steps and action items.

1.2. NTTISP Program Requirements

The NTTISP outlines USDOT's need for robust travel and tourism data to support the U.S. transportation system and broader economic goals. Development of this Program can close the current gaps in national travel and tourism data sources. The following Program requirements are listed in Appendix E of the NTTISP [USDOT 2024]:

- Conduct a comprehensive travel survey, akin to a modernized American Travel Survey (ATS), contingent upon funding [BTS 2021]
- Continue to identify ways to obtain data on travel and tourism via existing data-collection efforts to improve planning and forecasting
- Investigate the potential use of commercial or trade association sources of travel and tourism data
- Partner with the Department of Commerce (DOC) National Travel and Tourism Office (NTTO) to:
  - Coordinate data collection on international visitors to the United States
  - Collaborate on building an expanded and robust domestic tourism data program

    - Jointly work with tourism officials and industry to understand the data and analysis challenges they face in informing decision-making processes
- Engage other federal agencies, such as the National Park Service (NPS), and other land and water agencies in data-sharing arrangements
- Seek opportunities to cooperate with industry associations in the development of tourism data and geospatial products

Appendix E also indicates that the Program must include the following aspects of travel, often considered significant elements for informing infrastructure planning, forecasting, and marketing in alphabetical order:

- All transportation modes
- Intercity travel
- Travel origins, destinations, and intermediate stops and connections
- Travel party size
- Travel to, travel between, and the use of national parks and recreation areas
- Traveler satisfaction
- Traveler's sociodemographic and demographic characteristics
- Trip purpose and duration

Table 1 lists these required Program elements. As summarized in the third column of this table, all required elements are also stakeholder needs. This full correspondence is expected, given the outreach done as part of the NTTISP development, and it confirms the validity of the outreach performed to develop this workplan.[2]

Table 1. NTTISP Required Elements

Requirement or priority status	Element	Expressed as stakeholder need
NTTISP required elements for the Program	Conduct modernized ATS	Yes
	Coordinate existing data-collection efforts	Yes
	Develop tourism data and geospatial products	Yes
	Leverage existing data (public and private sources)	Yes
	Involve stakeholders	Yes
	Establish data-sharing arrangements	Yes
Priority data attributes	All transportation modes	Yes
	Trip purpose and duration	Yes
	Travel origins, destinations, and intermediate stops and connections	Yes
	Travel party size	Yes
	Traveler satisfaction	Yes
	Traveler's sociodemographic and demographic characteristics	Yes
	Intercity travel	Yes
	Travel to and between and the use of national parks and recreation areas	Yes

[2] USDOT's outreach efforts include the National Advisory Committee on Travel and Tourism Infrastructure, USDOT's Internal Travel and Tourism Steering Committee (composed of representatives from across its Operating Administrations), and more than 50 responses to a Request for Comment that DOT prepared and published in the Federal Register.

1.3. Government Agency and Other Stakeholder Involvement

The activities identified in this workplan reflect not only the requirements of the NTTISP [USDOT 2024] but also the needs of long-distance travel and tourism's stakeholder community, which comprises government agencies at all levels; private-sector companies that directly serve the tourists and long-distance travelers; and researchers and consultants who collect data, conduct research, and otherwise support the community. These stakeholders offer a wide range of views and approaches that ensure the Program's mission meets and adapts to real-world needs. During the development of this workplan, the contract team made extensive efforts to reach the widest representation of the travel and tourism industry possible,[3] and outreach will continue to be a cornerstone of the Program.

A broad range of participants—including high-level decision-makers with a national perspective, midlevel analysts, and hands-on data users who considered the implications of specific variables and data attributes—provided input. A selection of organizations that contributed as of the time of this workplan include the following:

- **Federal agencies**—DOC (NTTO), Department of the Interior (Fish and Wildlife and NPS), USDOT (BTS, Federal Highway Administration [FHWA], Federal Railroad Administration, Federal Transit Administration, and the Office of the Secretary), and the Government Accountability Office
- **State and local agencies**—State departments of transportation (DOTs) (Colorado, Michigan, North Carolina, and Ohio), regional planning agencies (Boise, ID; Miami, FL; Mobile, AL; and Seattle, WA), the Metropolitan Washington Airports Authority, and the Port Authority of New York and New Jersey
- **Associations**—American Automobile Association, Airlines for America, American Association of State and Highway Transportation Officials, American Bus Association, American Hotel and Lodging Association, American Public Transportation Association, Cruise Lines International Association, Institute of Transportation Engineers, Rail Passengers Association, Travel and Tourism Research Association, Transportation Research Board committees, U.S. Travel Association, and Western Governors Association
- **Academia**—Arizona State University, National Renewable Energy Laboratory, Ohio State University, Penn State University, University of Hawaii, University of Texas at Austin, Karlsruhe Institute of Technology (Germany), and University of Toronto
- **Private sector**—AirSage, BlueDoor Research, Cambridge Systematics, Deutsche Bahn's E.C.O. Group, FuturePlan Consulting, Locus Data, Marketing Systems Group, MMGY Global (formerly DK Shiflett), Resource Systems Group Inc., Streetlight Data, and WSP

[3] The contract team identified and contacted over 100 stakeholder groups representing different facets of the travel and tourism industry. Participation outcomes varied due to scheduling conflicts, attendance requirements, industry overrepresentation, and/or lack of stakeholder response.

Stakeholders provided input during the following outreach activities:

- Ten small-group needs-assessment sessions, held virtually over January 22 to February 7, 2025
- Three small-group virtual workshops, focused on prioritizing possible Program components and activities, held in May 2025
- One-on-one interviews

These outreach activities provided stakeholders with an opportunity to discuss priorities, the current state of practice, gaps in existing data, datasets that may need to be developed, challenges and barriers in the field, and other items for consideration during Program development. Input from the stakeholders is reflected throughout this workplan but can broadly be summarized as follows:

- All stakeholder groups consistently prioritized data on trip purpose, travel modes, origin–destination details, and spending details and noted all should be contextualized against the complete long-distance journey and consider all modes of travel for both domestic and international travelers.[4]
- Stakeholders specifically singled out trip purpose across all travel modes as a high-impact information gap.
- The geospatial precision and temporal specificity needs vary for each stakeholder group.
- Stakeholders want active and passive data sources—including travel surveys, spatial inventories, economic flow data, and travel attraction and generation characteristics—to inform specific needs.
- Stakeholders were interested in opportunities to fuse existing data through summary products or web-based tools.
- Regardless of the data source itself, the definition of “long distance” needs flexibility to account for differing stakeholder needs and geographic contexts.

Most importantly, stakeholders identified previous efforts to collect and report on travel and tourism data. Each effort, however, had a critical data gap. Whether related to travel, economic, temporal, or geographic data, these longstanding gaps have contributed to a disjointed view of the travel and tourism industry and conclusively illustrate that no single data source can be relied upon to provide a full overview of the scope and impact of domestic and international travel and tourism in the United States.

[4] Data on international inbound travelers are available for their U.S. ports of entry, but stakeholders identified the lack of information about onward travel destinations as a major gap.

International Travel Data Priorities and Importance

Stakeholders identified significant information gaps regarding international travel data and recommended expanding the topics captured as part of routine collection efforts to address these gaps. Priorities related to international travel information needs included the following:

- Bettering the understanding of the economic impact of international travel
- Bettering the understanding of the social impact of international travel (international travel, aside from filling hotels and national parks, contributes to better understanding between countries and greater appreciation of our goals and social efforts)
- Increasing interagency collaboration and data sharing, including merging national and international data and publishing reports on overseas visitors
- Enhancing data capture through airline partners (including assessing options to complete surveys while enroute as well as identifying approaches to surveying international travelers upon arrival and/or during their time in the United States, not just in the airport departure lounge as is current practice)
- Capturing trip purposes to understand traveler behavior
- Improving data capture at all border crossings with Mexico and Canada
- Implementing longitudinal data analysis to track behavioral shifts
- Filling the critical data gap of identifying all locations where international visitors travel after their initial port of entry

1.4. Program Development

This workplan presents the activities needed to develop and grow the Program into an essential resource that supports USDOT in ensuring safe and efficient transportation systems for all travelers and tourists, as well as supporting long-term infrastructure planning and investment decisions. The resulting data would provide the necessary insights for the travel and tourism industry to enhance the global competitiveness of the United States.

These development activities are organized by the Program's three main components:

1. Program website
2. Data to be collected by surveys
3. Nonsurvey data and related tools

Each component is presented in full detail along with associated activities and general cost estimates in Section 2. The following outline summarizes work to be accomplished in the first 7 years of the Program:

- The first year of the Program will focus on the initial compilation and analyzation of existing survey data, nonsurvey data, and tools as well as the following foundational elements:
  - Establishing the base program website
  - Identifying appropriate data-collection paths for each required data element via survey plans
  - Initiating formal stakeholder communications
  - Gathering links to existing data and materials to be posted on the website
  - Continued identification of existing data gaps and their extent

- The second year of the Program will focus on conducting basic data work, which might include funding additional questions on existing federal surveys to capture general travel and tourism trends, continued groundwork for dedicated travel and tourism surveys, and developing simple web tools that allow the community to query the data resources and generate metrics or visualize the data. It could also include analyzing the compiled data and issuing reports on trends.
- The third and fourth years of the program are when heavy data work is anticipated—be it from fresh survey data captured from partner surveys or the use of data science techniques to fuse existing data and/or model new data products. The survey plans established in the second year would be fully fleshed out and prepared for deployment.
- As the Program matures, the focus would shift the Program's level of effort from other components to the implementation and stewardship of a comprehensive travel survey (akin to a modernized ATS), more advanced data products, and more advanced data tools for the website.

USDOT anticipates that all these activities will be performed in close collaboration with industry stakeholders.

2. PROGRAM COMPONENTS

This section describes the three main program components. Each component includes an introduction, inputs and requirements, stakeholder priorities, main activity packets (organized by program year), and a general cost estimate for the related activities.

2.1. Website Component

The Program's website will be the most visible and interactive component for most stakeholders: members of industry; scholars; the general public; and federal, state, regional, and local officials. It will host all data and resources described under the other components in this workplan (survey data, nonsurvey data, tools, and resources that are to be compiled). The website will include tools to support users in developing metrics and data summaries needed to make economic, policy, planning, and investment decisions. The website's contents would facilitate communication of long-distance travel and tourism trends and serve as a robust repository for the community with tools, data, and resources.

For the first year of the Program, a basic version of the website would be created to house Program goals, currently available statistics, and the beginnings of a clearinghouse of publicly available travel and tourism data sources and resources. This base offering would be expanded upon each year of the Program as the survey and nonsurvey data components procure and produce fresh data.

At its full implementation, the website would host the following content and services:

- Statistics highlighting major trends, behaviors, and impacts associated with travel and tourism both domestically and internationally
- Publicly available in-house and partner data sources for download or processing
- A backend tool for processing available data quickly, including automatic data fusion and data exploration

- A clearinghouse detailing data structures, attribute elements, and underlying methodology for in-house and partner data sources, including descriptions of data limitations
- A compendium of travel and tourism research using data sources listed within the clearinghouse
- A document library comprising the following:
    - Assessments of data quality, capabilities, and program relevance for various current and historic travel and tourism data sources (i.e., situational uses, access procedures, limitations, timeframe, availability, data granularity coverage, publication cycles, data harmonization procedures, etc.)
    - Resources and metrics to estimate costs, benefits, and challenges for acquiring and developing travel and tourism data, methods, and processes

The remaining subsections outline website design inputs and requirements, activity packets, and estimated costs.

International Travel Data Sources

While there is a gap in available domestic long-distance travel and tourism data, there is an even larger gap for international visitor travel and tourism data. To address this gap, the Program's website is envisioned to host links to several federal and nongovernmental organizations that can provide general insights into existing U.S. international tourism data. As of the time of this workplan, specific sources include NTTO's Survey of International Air Travelers (SIAT), U.S. Customs and Border Protection's Traveler and Conveyance Statistics, World Road Association (PIARC) data, the World Tourism Organization (UNWTO) data, and the Organization for Economic Co-operation and Development (OECD) data.

2.1.1. Website Design Inputs

Overall, technological limitations and agency requirements, rather than NTTISP requirements, will drive the website's design. As such, its inputs remain flexible in comparison to other Program components. However, five major design categories are related to the website:

1. "Minimum BTS design" refers to any style guides and design specifications required of webpages hosted by BTS or USDOT web services.
2. "Minimum required elements" refers to mission-critical information needed to properly present the Program on the website. This category includes, but is not limited to, background information, scope, goals, website capabilities, website contents, and contact information.
3. "Level 1 assets" refers to any website asset required for essential website functions and is easily implemented. This category includes the basic data clearinghouse, top-level travel and tourism statistics, and the basic document library.
4. "Level 2 assets" refers to any website asset that is desired but may be more difficult and/or time consuming to implement. This category includes advanced search functionality, built-in data processing or exploration tools, a compendium of Program data and product usage, a Program help desk, and any data visualization tools.
5. "Workspace behind firewall" refers to necessary security measures. As the website will be hosted on U.S. government servers and may contain sensitive information, network security is a nonnegotiable requirement.

Table 2 outlines the general website categories as they relate to the parties dictating structure.

Table 2. Website Design Components in Relation to Involved Parties

Components	Essential elements	NTTISP requirements	USDOT requirements	Stakeholder priorities	Other requirements
Minimum BTS design	X	X	X	—	—
Minimum required elements	X	—	—	X	X
Level 1 assets	X	—	—	X	X
Level 2 assets	X	—	—	X	X
Workspace behind firewall	X	—	X	—	—

X = This detail is a requirement or priority for the relevant party.
—This detail is not a requirement or priority for the relevant party.

2.1.1.1. NTTISP Requirements

The NTTISP states that the Program's website can be built upon existing BTS information technology infrastructure, capabilities, and approved third-party data visualizer processors. It does not mention specific requirements but does suggest that content be compatible with other BTS and U.S. government data-facing services, easily accessible to a broad audience, and offered data be available in multiple formats. These NTTISP requirements are, by definition, captured in USDOT website requirements and would need to be implemented in year 1 of the Program.

2.1.1.2. USDOT Website Requirements

USDOT web services, including BTS services, must comply with the web design standards and capabilities outlined for DOT Drupal Content Management System websites. These requirements include complying with Section 508, which aligns with Web Content Accessibility Guidelines 2.0 AA standards, of the Rehabilitation Act; the 21st Century Integrated Digital Experience Act guidance; and U.S. Web Design System goals and principles. These standards highlight high levels of accessibility, consistent design, emphasizing relevant content, security, and addressing real user needs—all aspects independently agreed upon by stakeholders. All USDOT requirements need to be implemented in year 1 of the Program.

2.1.1.3. Stakeholder Priorities

Stakeholder feedback indicated interest in the following features:

- Robust search feature (similar to Census)
- Clear menus and filters (and ability to select origin and destination separately where applicable)
- Data that are exportable in widely compatible formats including csv and xlsx (Excel)
- Geospatial data exportable and/or available as a shapefile option
- Help desk and strong user support
- Robust metadata
- Documentation illustrating how different data can be harmonized
- Built-in data visualization and analysis tools

These priorities will be implemented at different points in the website's lifecycle as data availability and program capabilities mature.

For the first 2 years of the Program, setting the groundwork for the data clearinghouse asset with currently available and historical travel and tourism data would begin addressing stakeholder priorities. The structure could be similar to other BTS data programs (e.g., the TranStats data library structure) but, at its basic function, include data name; description; documentation; capabilities, purposes, and/or uses; potential data-fusion opportunities; and options to download in multiple formats. As data sources become available and more user needs are identified, this basic clearinghouse structure would be expanded on a biennial cycle.

Other reasonable actions in years 1 and 2 include developing a compendium of documentation and research on how best to harmonize travel and tourism data and providing examples in current academic literature. These actions would serve as the building blocks for a one-stop-shop of not only data, but also best practices of data application for users. Considering travel and tourism research spans multiple technical and nontechnical fields, the compendium would serve as an indicator to users that USDOT is not limiting data to transportation-only sources and uses. Similar to the data clearinghouse, the compendium could be updated biennially.

Once the data program reaches a critical mass of data, other stakeholder priority features would be implemented, such as data-exploration tools, search features, and strong user support. In terms of level of effort, the search feature would be the easiest to implement in house, while manned user support and exploration-tool development may require contractor support. These additions should be strongly considered as necessary costs for Program success.

2.1.1.4. Other Considerations

Between launching the website and implementing more advanced website resources, USDOT should consider advanced user experience (UX) research to ensure website updates and new assets best fit the needs of users. This UX research should comprise four major steps:

1. Identify users using the 5-W approach (who, what, when, where, and why), which can be completed via user surveys.
2. Using the findings of step 1, identify types of users (e.g., infrequent, occasional, or power user), and then, craft personae (representative user descriptions) to inform likely user scenarios.
3. Using the personae developed in step 2, craft scenario stories to represent common website requests (as a <persona>, I <want to>, <so that>). Desired persona outcomes are then judged by the feasibility of their request—"must have" features to achieve their desired outcomes versus "nice to have" features that would be beneficial but difficult to implement.
4. Once "must have" features are identified, design, build, and prototype these features for beta testing. Iteratively incorporate feedback from beta testing until the market-ready feature is ready for public release.

While this process is suitable for identifying and creating the necessary website tools, it could also help identify gaps in the available data and other website assets—further informing the Program. The recommendation is USDOT conduct this activity in the second year of the Program once website users can be identified.

2.1.2. Website Development Activity Packets

The contract team created activity packets for each program year to outline component goals and operationalize the Program's website component into manageable steps. The following outline describes the activity flow through the first 7 years of the program:

- **Year 1**—One of the Program's first actions should be setting up the base website (similar to the current BTS Vehicle Inventory and Use Survey website [BTS 2025]), establishing the clearinghouse, resources, program information, and basic topline travel and tourism statistics. The initial content for this website is expected to come from pre-existing material and links to partner and stakeholder resources. Most if not all this content could be managed on a single webpage with data and resources linked to other locations rather than locally hosted—allowing for the usage of BTS' current content management system. Plans to enhance the website in future years will be based on details from the survey and nonsurvey data component plans, assessment of content management system capabilities, additional backend setup for more complex webpage functions, and infrastructure procurement plans for website components identified as outside the capabilities of the current content management system.
- **Year 2**—In year 2, USDOT should update the Program's website to add more robust data sources, documentation, and simple web tools. Based on planned survey and nonsurvey data activities, if USDOT decides to move beyond the basic website design, year 2 is when interim activities to build "wanted" website resources should take place (including research and community outreach and developing personae to ensure the expanded website meets user goals).
- **Years 3–7**—If continuing with the basic website, USDOT should complete website updates based on survey and nonsurvey data component activities. If pursuing a more advanced website design, then USDOT should conduct activities related to developing advanced website features.

2.2. Survey Data Component

The next major Program component focuses on survey-related activities, from design and methods to data collection and analysis. The types of surveys to be conducted will include adding questions to existing surveys conducted by partner stakeholders, such as NTTO and FHWA; targeted population surveys to obtain high-priority details about long-distance travel by both domestic and international travelers; and conducting a full-scale, in-depth comprehensive travel and tourism survey akin to the 1995 ATS. These surveys are the only proven and comprehensive data sources that provide information on long-distance travel behavior, choices (including spending patterns, travel counts, and activity choices), and trip purpose and can successfully connect this information to other data sources. These links are critical for understanding how changes in destination investments, activity opportunities, and economic trends can influence traveler spending and travel patterns.

This workplan recommends centering long-distance travel data-collection efforts around a multifaceted survey component that will be complemented by a robust nonsurvey data component. This section presents recommendations for the travel survey collection process. The first year of the program will focus on reviewing the compiled publicly available travel surveys that look into the long-distance travel domain, determining levels of detail suitable for each NTTISP data requirement, and drafting survey plans to execute data collection. These summaries will inform the long-distance travel survey collection effort for years 2–5.

Untangling Long-Distance Travel for Survey Capture

The definition of a long-distance trip varies greatly across the travel and tourism community, based on the policy or planning question to be answered within a specific geographic context. The NTTISP considers a long-distance trip to be one of 50 miles or more one-way, while some experts in the industry consider 100 miles to be the minimum distance threshold. Other definitions include an overnight stay, travel outside a usual community, or typical travel. As of the time of this report, there is not one set definition accepted by the greater community, nor has a minimum standard definition been agreed upon.

For the Program's survey data-collection efforts, it would be advantageous to treat the definition of long-distance travel separately between response collection and data application which would promote Program adaptability, relevance, and usability. Specifically, the survey should use the broadest and simplest definition of long-distance travel possible to capture all travel under the Program's purview such as "trips not routinely taken" or "trips outside of the respondent's immediate community." This approach would offer a greater pool of captured data, lessen response burden, allow the data end user to apply their own definition of long-distance travel, and make the captured data more accessible to nontransportation data users who do not rely on a mileage definition.

2.2.1. The Value of Survey Data and Levels of Design

Prior to detailing the survey component activities, a specific data question must be addressed: Why, in this time of passive data products, do we even need a survey component?

Travel surveys offer invaluable context into the nuances of travel that cannot be gathered from passive data products alone. While passive travel data products can answer the when and where of travel, active travel data components (e.g., travel surveys), add in the travel details of who, what, why, and how. In fact, cases in which a passive data product offers associated demographic and travel details more than likely harnessed survey data, such as Census, the National Household Travel Survey (NHTS), and ATS, to inform and/or validate those details. This is not to say that passive data offers little value to the Program, as nonsurvey and passive data contribute to NTTISP requirements and are discussed separately in this workplan. Specifically, the travel survey component should be designed to capture data gaps, identify the overall behavioral trends of long-distance data, and field policy questions. To see how current data sources contribute to the NTTISP requirements, identified data gaps, how different travel attributes are present in existing data sources, as well as the stakeholder needs, refer to Appendix A.

Travel surveys can be designed to capture as much or as little detail as needed. Ideally, the more detailed the better, but increased levels of detail result in greater fiscal, temporal, and administrative costs. As such, travel surveys should have a focused design that addresses the known gaps in data as well as commonly shared attributes between established data sources to act as validation and data fusion points. For the purposes of this section, this dynamic between costs (e.g., fiscal, temporal, and administrative), captured details, data gaps, and fusion points will focus strictly on costs versus captured detail. Data gaps and possible fusion points are identified in Appendix A, Section 1, and Section 2.3 of this workplan.

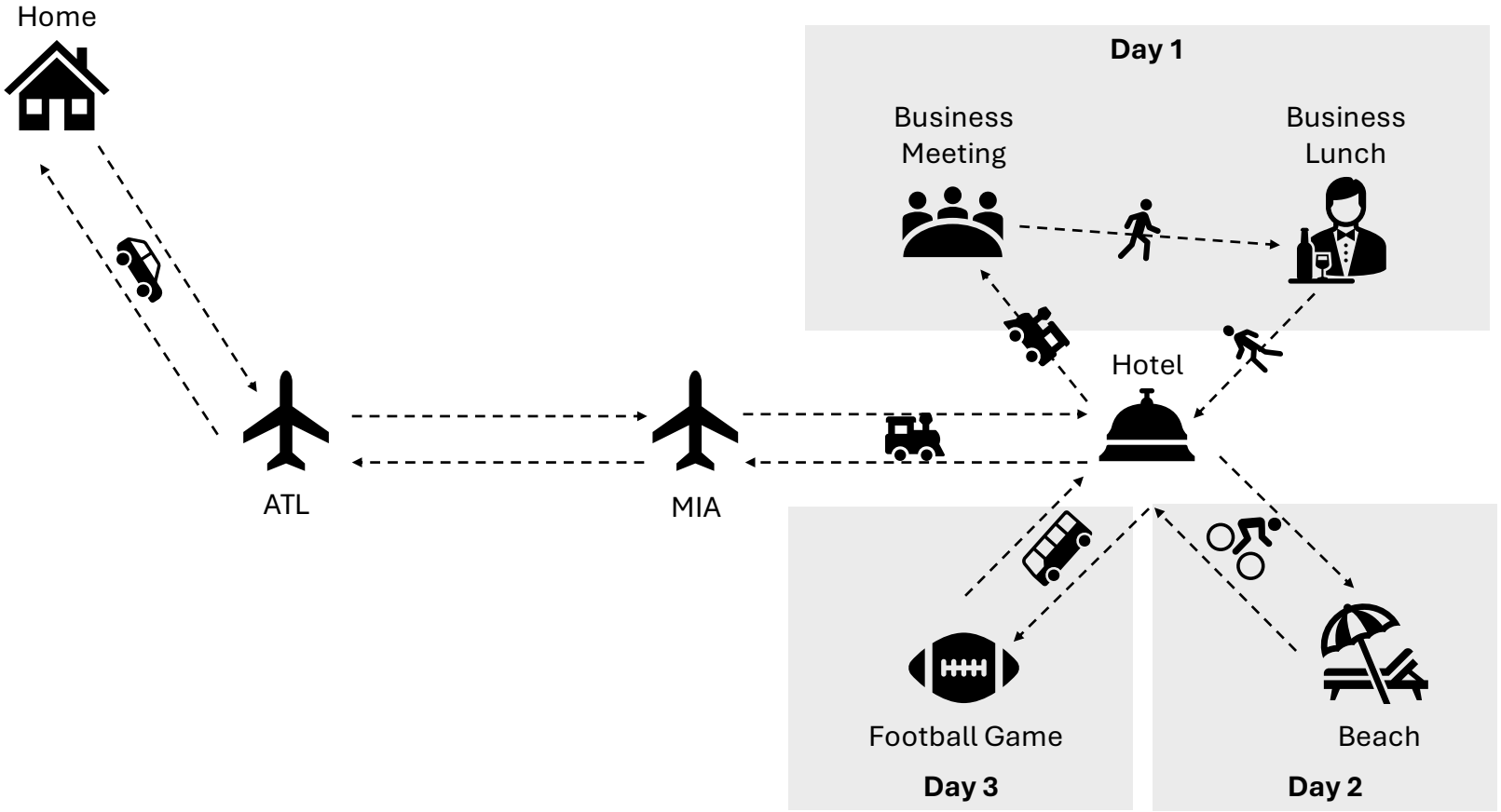
The collection of survey data is an integral part of the Program design, and throughout the life of the Program it is anticipated that these surveys will vary based on changing priorities, investment needs, identified data gaps, NTTISP requirements, and stakeholder needs to be addressed. The workplan is designed to carry out these surveys in the most efficient and effective manner possible. Given that it is not possible to detail each type of survey anticipated across the life of the Program, this portion of the workplan presents three generalized approaches for implementing the Program's survey component. Each of the three approaches are described in detail for illustrative purposes and are considered as being fielded to cover different data gaps and provide a constant stream of data. This is reflected in the Activity Packets and Program Timeline. The three approaches follow:

- **Approach A**—Add questions to existing federal surveys, such as NTTO's airport-departure surveys including the Survey of International Air Travelers (SIAT), and FHWA's NHTSs. This approach is the lowest cost option for collecting travel survey data and, depending on the survey data-collection cycle, may yield fresh survey data in a fairly short period. However, it would also be limited in terms of the data elements collected (so only the highest priority questions could be considered) and, depending on the partner survey design and sample size, the results may only allow for a qualitative assessment of long-distance travel patterns. This approach would be best for targeting specific groups of travelers, including international visitors; addressing high priority policy questions quickly; and providing validation data for the other survey approaches.
- **Approach B**—Conduct Targeted Long-Distance Travel Surveys. This approach presents an intermediate cost option for collecting travel survey data. It offers enough detail to allow for partial quantitative analyses that should meet the minimum goals of stakeholders. This approach is envisioned as fielding two, standalone cross-sectional surveys: one geared toward domestic travelers and one geared toward international visitors. This split is due to the unique fielding considerations required to survey foreign nationals. This approach is envisioned to be collected annually, generating a targeted set of key long-distance journey information. Most likely, this approach would collect data on all journeys completed by a respondent throughout a specific timeframe (either quarter or annual), including destinations, journey purposes, main mode choices, as well as general spending and durations at destinations. This approach would be best for capturing emerging trends in long-distance travel, allowing timely analyses of the impacts of disruptive or major events (e.g., COVID-19, World Cup, Olympics, Paralympics, Women's and Men's Rugby World Cup), and providing a general pulse check on the ebbs and flows of both domestic and international travelers.
- **Approach C**—Conduct a Comprehensive Long-Distance Travel Survey. This approach presents a higher-cost option for collecting in-depth travel survey data and meets the requirements of a modernized full-scale survey as outlined in the NTTISP. It also offers the most complete data to support full quantitative analyses that should meet the widest range of stakeholder goals and applications. This approach would most likely reflect a year-long panel sampling frame building upon the attributes discussed in Approach B. Additional data elements to be captured would include further information on intermediate mode transfers (including access and egress to airports), more detailed satisfaction and spending data, and information on the travel patterns of U.S. residents traveling internationally. It also has the highest cost, both from a fiscal and operational standpoint, so fielding is suggested to be on a 5- to 7-year cycle aligning with Transportation Research Board Special Report 304's general recommendation [National Research Council 2011]. This approach would be best for capturing all other data gaps not addressed in Approaches A and B, offering highly granular detail of travel and

tourism trip-making behavior for sociodemographic analyses, and sufficiently captured details for destination-level analyses.

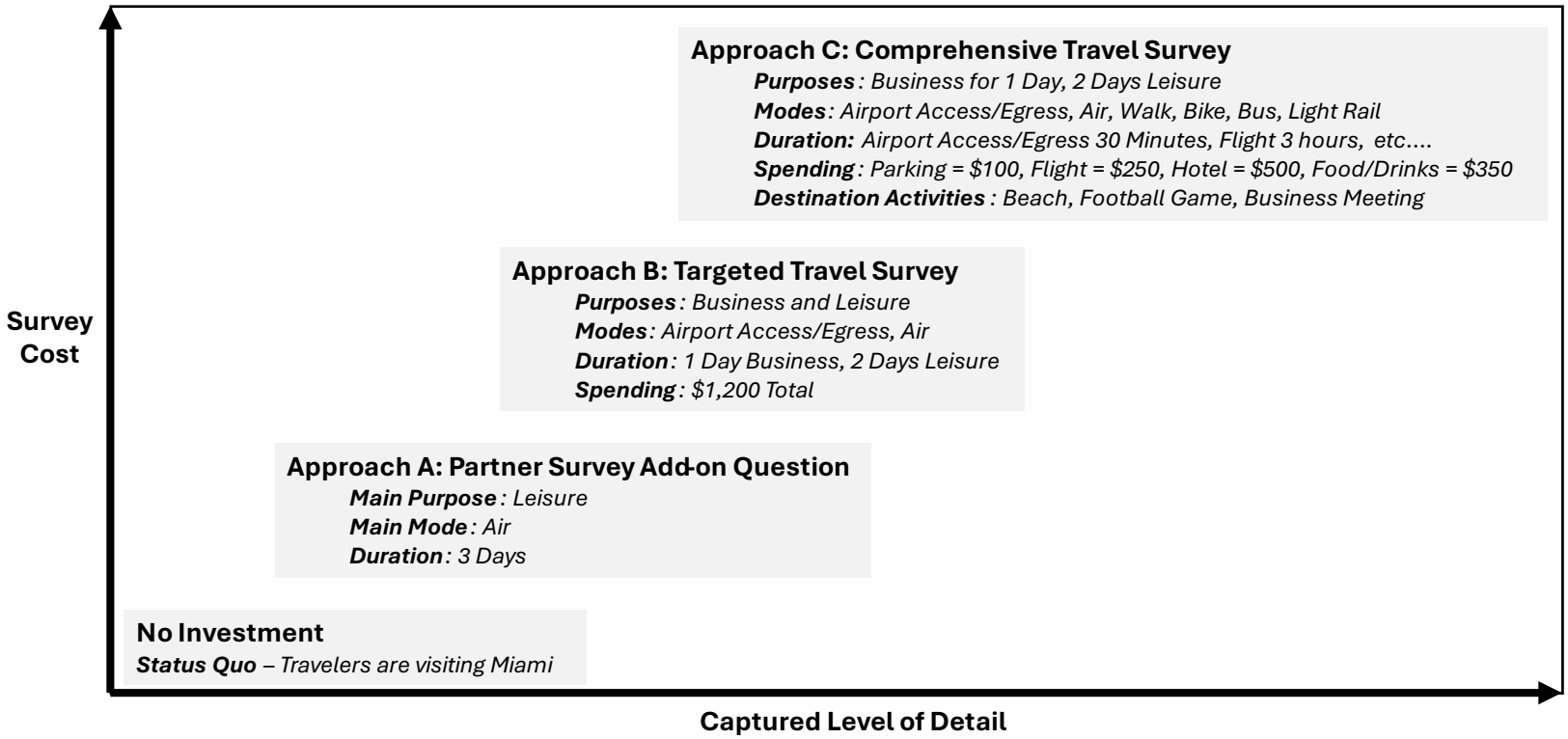
To illustrate these approaches, consider Figure 1, which presents a long-distance journey from a respondent's home to a combined business–leisure trip in Miami, FL. The respondent travels by several modes, for multiple days, and completes several activities at their destination before returning home. Each example survey approach collects different details of the long-distance journey presented in Figure 1, with the cost of collecting those survey details varying. Figure 2 shows the relationship of survey detail to cost, mapping the three example survey approaches as references. Refer to Appendix B to see how other survey approaches capture travel survey details for a similarly complex journey.

Figure 1. Illustration of a Long-Distance Hub-and-Spoke Journey



Source: BTS.

Figure 2. Interaction of Survey Approach Versus Costs and Captured Level of Detail



Source: BTS.

While all three approaches capture the basic characteristics of the journey—main (major) travel purpose, main travel mode, and overall duration—additional details are needed to meet NTTISP requirements and stakeholder needs, and address data gaps, and these details are typically only captured in the higher-cost surveys. As such, the Program structure incorporates multiple survey approaches that build in detail collected the Program is firmly established as a go-to resource and its funding sources mature. As detailed in the Activity Packets, it is envisioned that Approach A (the add-on approach) is implemented by year 2 of the Program. From there, Approach B (the targeted survey) is fielded annually starting in Year 3, and then Approach C (the comprehensive survey) is fielded every other year beginning in year 5 of the Program.

Each approach provides varying levels of information to support long-distance travel decision-making. In terms of how the survey relates to Program needs, Approach B is used to describe the following characteristics of the survey component, while Approaches A and C would, by definition, capture less or more information:

- **Statistics that can be produced**—Approach B allows stakeholders to track and forecast:
  - Changes in economic spending patterns related to journey characteristics, traveler demographics, spending across the journey, destinations visited, and activities completed
  - Changes in air travel volumes
  - Changes in personal vehicle traveler volumes
  - Changes in rail traveler volumes
- **Data sources and ability to acquire the data**—Approach B is envisioned to be a standalone survey with a probability-based panel sample. This sample would emphasize sociodemographic groups that take the most long-distance journeys and/or have the most variability in their journey-making. Data would be acquired passively over the course of a year through app-based survey tools and quarterly check-ins for more detailed information.
- **Data structure and attributes**—Approach B is anticipated to collect data on all journeys completed by a respondent throughout a year, including destinations, joint purposes, main mode choices, as well as spending and durations at destinations.
- **Methods and processes for collecting and compiling the data and developing the statistics**—For the purposes of this workplan, Approach B data are planned to be acquired passively over the course of a year through app-based survey tools and quarterly check-ins for more detailed information. Survey results will be connected to the website's tools to allow stakeholders to generate weighted queries for different spatial scales, demographic groups, travel modes, and trip purposes. Additionally, stakeholders will be able to download data to conduct further forecasting-based analyses.
- **Assessment of data quality**—The data from Approach B would be assessed and weighted quarterly to ensure trends are accurate and consistent with other data sources.
- **Any limitations on the dissemination of the data to the public**—Some Approach B data will likely be limited based on small spatial scales to protect respondent identities.
- **The release or publication cycle of the data (e.g., quarterly, monthly, weekly, continuous)**—The data from Approach B could be released quarterly or annually (recommended).
- **The range of years for which historical data are available for the datasets**—Long-distance travel data (at varying levels of detail) are available from the 1995 ATS and the 2001, 2022, and 2024 NHTSs.

- **Impact assessment of potential benefits and drawbacks to users**—the statistics generated from the travel survey will allow stakeholders to more accurately evaluate network performance, track travel and tourism indicators and issues, and improve infrastructure investments.
- **Potential weaknesses and shortcomings of the data, method, and process**—Data from any travel survey are limited by the size and breadth of the sample.
- **Issues, risks, and potential challenges of using the data, method, and process**—The most significant issue associated with using any travel survey data will be data privacy concerns. Ensuring privacy may limit the level of detail or disaggregation of results.
- **The timeliness granularity (level of detail) that is estimated will result from use of the data source, method, and process**—Data collected using Approach B would be designed to provide travel volumes, expenditures, and choices for special events, holiday periods, and typical travel weeks, available in monthly, quarterly, and annual data releases.

Advantages of a Multisurvey Approach

By offering a multisurvey approach for capturing long-distance travel and tourism data, the Program can trade-off obtaining higher priority data at a lower level of detail (to answer critical policy questions) while continuing to plan for a more detailed higher-cost survey in later years. This allows the Program to not only meet NTTISP requirements of detailed travel data, but also be flexible enough in its offerings to adapt to special administrative requests (potential impact of policy A), emerging trends and modes (e.g., automated vehicle adoption and air taxis), and disruptive or major events (e.g., COVID-19, World Cup, Olympics, Paralympics, Women's and Men's Rugby World Cup) that would be difficult to capture if a single, comprehensive survey was administered. This approach also aligns with the approach recommended in Transportation Research Board Special Report 304 [National Research Council 2011].

2.2.2. Survey Design Inputs

It is recommended that the Program consider more than one survey approach to best meet the stated goals of the NTTISP and stakeholder input in a timely manner dependent on Program resources. This section summarizes each of these Program input sources and what the Program must consider when determining survey approach scenarios.

2.2.2.1. NTTISP Requirements

The NTTISP summarizes data needs that could be met through a modernized ATS—that is, a comprehensive travel survey—including the following:

- The objective of the collected travel surveys would be to collect long-distance travel data. Though the NTTISP defines "long-distance travel" as travel that is 50 miles or more from the home location [USDOT 2024]. This report also discusses the challenges of such a definition for rural and urban areas as well as associated issues with respondents misremembering travel details or entire trips (e.g., recall bias). The report also discusses considering overnight travel in the definition.[5]
- Long-distance travel data would be most appropriately collected through surveys that are conducted on a regular basis with supporting data-collection technology to minimize recall bias.
- The survey should collect origin and destination information, trip purpose, and travel party characteristics.
- The resulting data should be scalable across different geographies and should consider multiple travel modes.

2.2.2.2. Stakeholder Priorities

Workshop participants noted the following items as the requisite minimum data for a long-distance travel survey to collect:

- Origins and destinations
  - Approximate volumes between origin–destination pairs
  - Travel by mode per year for a given route between origin–destination pairs
- Trip purpose
- Travel party size

Participants also identified the following items as core minimum data for a long-distance travel survey to collect:

- Expenditures and time investments in different activities
- Spending at destination(s)
- International incoming travel (Where do international visitors go after their initial port of entry?)
- Mode choice
- Person miles traveled (informs vehicle miles traveled)

These stakeholder priorities comprehensively align with the data needs described in the NTTISP. As such, they can be integrated into any NTTISP required activities.

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[5] The definition of long-distance travel has traditionally reflected both data application and how the source survey worded the question to the respondent (e.g., "describe the last time you traveled 50 or more miles"). This approach limits capture of localized sub-50-mile travel that would fall under the Program's purview (e.g., regional medical visits, "staycations," and some intercity, interstate, and international travel situations) and adds respondent burden by forcing the respondent to visualize 50-miles accurately. It would be advantageous for the Program to treat the definition of long-distance travel separately between response collection and data application by offering a broader response definition of travel such as "trips not routinely taken" or "trips outside of the respondent's immediate community." This approach would offer a greater pool of captured data, lessen response burden, allow the data end user to apply their own definition of long-distance travel, and make the captured data more accessible to non-transportation data users who do not rely on a mileage definition.

Capturing Data on International Travelers

An important component in survey design is identifying the survey universe. Once the survey universe is identified, a sampling frame is selected with the goal of matching the survey universe as close as possible. In the case of virtually all U.S. long-distance travel surveys, the survey universe is defined as U.S. residents. Thus, by definition, international travelers coming to the United States for any purpose (business or leisure) are excluded from these surveys.

The only known exception to this statement is the NTTO SIAT, in which the universe is defined as airline passengers preparing to leave the United States at sampled airport departure gates. The airport gates are sampled without respect to passenger nationality. As a result, the surveys capture data for international travelers.

The NTTISP requirements and the stakeholder needs clearly identify international traveler information as a data gap for the Program to address. To do so will require purposeful attention to survey universe and potentially curation of partnerships with agencies responsible for some aspect of international travelers to ensure the data gap is met. This workplan suggests two approaches for capturing international visitors. The first approach would be an interagency partnership with NTTO to add questions onto the SIAT. This approach would provide the Program with international travel data relatively quickly. The second approach would be to develop and field a targeted travel and tourism survey aimed specifically at international visitors. This second approach could be fielded at natural chokepoints such as land border crossings or U.S. Customs and Border Patrol intakes at airports.

2.2.3. Survey-Development Activity Packets

The contract team created activity packets for each program year to outline component goals and operationalize the Program's survey component into manageable steps. The following outlines the activity flow for the survey data component through the first 7 years of the program:

- Year 1 would focus on analyzing existing long-distance travel surveys and reports and summarizing the methods, limitations, and applications of these datasets. The summary would be uploaded to the Program's website. Of particular focus would be evaluating the methods used to collect the 1995 ATS, identifying the core data to be collected in a comparably comprehensive travel survey, developing a flexible definition of a long-distance trip that fulfills the technical needs of USDOT and the majority of stakeholders yet still can be operationalized without posing a substantial respondent burden, and evaluating survey technologies such as smartphone apps that could be used to passively collect these data in conjunction with quarterly survey instruments. Based on this information, detailed survey plans would be developed that outline how each required data element would be most effectively and efficiently captured at different levels of survey design. These survey plans would serve as foundational paths allowing the Program to implement survey approaches flexibility based on funding with priority placed on a targeted domestic long-distance survey (Approach B). Another important year 1 activity would be to identify and establish interagency partnerships for the purposes of adding funded questions to the partnership agency's next survey cycle (Approach A).

- Year 2 would focus on evaluating any data captured from partnership surveys (if fielded), the design finalization and piloting of the targeted long-distance travel survey of domestic travelers, continued planning and development of the targeted long-distance travel survey of international travelers, and continued planning and development, including scope of work, for the comprehensive long-distance travel survey.
- Year 3 would see the first fielding of the targeted long-distance travel survey of domestic travelers. This would be in addition to the continued fielding of partner surveys. This Program year would also see the design finalization and piloting of the targeted long-distance travel survey of international travelers. For the comprehensive long-distance travel survey, this is when the contracting process might begin.
- Year 4 would see the first fielding of the targeted long-distance travel survey of international travelers. This would be in addition to the continued fielding of partner and targeted domestic surveys. Continuous assessment of survey designs to identify data gaps, address feedback, and meet Program needs will also occur. The comprehensive long-distance travel survey design would be finalized and piloted over this Program year.
- Year 5 would see the first fielding of the comprehensive long-distance travel survey. This would be in addition to the continued fielding of partner, targeted domestic, and targeted international surveys. Continuous assessment of survey designs to identify data gaps, address feedback, and meet Program needs will also occur.
- Years 6 and 7 would focus on processing and assessing the findings of the comprehensive long-distance travel survey fielded in year 5; continued fielding of partner, targeted domestic, and targeted international surveys; and further refinement of methods and data gaps to improve survey collection. At this point, the comprehensive long-distance travel survey would be readied for refielding by the Program at an interval of every 5–7 years thereafter.

2.3. Nonsurvey Data and Tools Component

The final Program component focuses on passive and other secondary nonsurvey data sources and any tools currently used to process travel and tourism data. For purposes of this workplan, nonsurvey data includes all other data not directly collected by the Program. This component might include data published by other federal data programs, passive, or survey-based data products publicly available or purchased, data collected or compiled by regional or state governments, and so on.

These assets offer direct and indirect approaches for describing long-distance travel behavior and patterns and add context to travel survey data sources. From a Program standpoint, these data sources can offer ready-to-use statistics on travel and tourism, bridging the gap between Program inception and travel survey deployment. These data, while robust, do not completely capture travel and tourism behavior. Rather, they work in concert with other Program components to fully contextualize the impacts of U.S. travel and tourism.

Nonsurvey data can be summated into two major camps: directly related to transportation systems (i.e., operators) or indirectly related to transportation systems (i.e., tangentials). Operator data include those describing long-distance travel mode options, such as ridership counts, origin–destination summaries, traffic volumes, and passenger statistics. Stakeholder-identified data sources and state-of-practice research covered all major long-distance travel modes, such as air, vehicle, rail, cruise line, and bus. Data sources gathered from modal hubs,

such as large-volume airports, as well as newer location-based-services (LBS)-based and other specialized data sources were also notable.[6]

Travel and tourism data can also come from more tangential sources. While these sources have been used in transportation planning previously, they may provide even more value for travel and tourism studies. Examples identified by stakeholder discussions of tangential data sources included credit card records revealing purchase locations and movement patterns, tourism studies documenting lodging choices and transportation modes, and electronic toll-collection systems tracking highway usage. As these tangential data sources more than likely come from private firms and require additional data work, specialized tourism data firms, like MMGY Global and Longwoods, provide data products utilizing these data sources for customer usage.

Despite this wealth of nonsurvey data sources, challenges remain in creating a comprehensive picture of long-distance travel behavior. Each of these nonsurvey data sources provides information that partially answers a question about long-distance travel. As such, understanding what data sources are available, their composition, what long-distance questions they can answer, and what they cannot answer either by themselves or after fusion with other data sources is necessary. Nonsurvey data sources cannot provide the richness of contextual information that can be obtained from a well-designed, targeted long-distance travel survey. In addition, most sources are not probability-based, meaning they must be carefully evaluated as to their fit for purpose prior to inclusion in official statistics.

This workplan recommends that the first year of the program focus on compiling publicly available nonsurvey data sources that can provide insight into long-distance travel and tourism activities and devoting years 2–5 to developing the details needed for new data compilations, data tools, data syntheses, and data modeling. Additional Program years would continue incorporating new and emerging data sources and tools.

In terms of Program needs, the nonsurvey sources and tools component can be described under the following characteristics:

- **Identify nonsurvey data sources and tools**—Potential data sources include LBS, connected vehicles (CVs), aggregated Global Positioning System data, NHTS origin–destination products, credit card data, Customs and Border Patrol land crossings, Toll data, NPS vehicle counts, and traffic data.
- **Other secondary data includes the operator and tangential**—These data were listed by the participants in the Task 1 and Task 2 sessions. USDOT cannot rely on just passive data.
- **Determine what statistics they provide**—These nonsurvey sources can produce statistics, including trip-length distribution, travel by time of day and day of week, origin–destination, and modes (some sources). Trip purpose cannot be obtained directly from many of these nonsurvey sources, or if obtainable, they are typically limited to home and work locations.

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[6] Airports generate valuable information about traveler behaviors from customer service–interaction data, parking and concession data, as well as Wi-Fi access points that reveal home zip codes and international origins of visitors. Airports can combine the domestic home zip code data with Census information to obtain demographic insights into the traveling population.

- **Determine their structure and attributes**—The structure and attributes of each of these sources are distinct but minimally they all provide data on when and where travel happens. Some of these sources might have inferred attributes that provide mode and trip purpose information, but without inspecting each source of the data, categorically determining what the exact data structure will be is difficult.
- **Identify data-collection methods**—Methods for collecting these nonsurvey data include data from mobile applications, credit card transactions, CVs, airlines, hotels, and so on. Each of these sources has an approach for compiling and weighting the data and developing the statistics (especially for public sources). Some of these data sources provide the relevant travel behavior statistics, but others provide only the data and leave it to the user to develop the statistics.
- **Assess data quality**—In terms of data quality assessment, for federal sources, such as NHTS' origin–destination data, the government publishes detailed methodology information. Some private LBS vendors provide details about their expansion and how well their data matches public data from the Census and NHTS. Other sources are not as transparent and are limited in the amount of documentation that is shared publicly.
- **Understand data limitations to provide long-distance travel information**—NHTS origin–destination data include trip-distance ranges between and within 583 zones but do not provide detailed, point-based location information. When less aggregated data are available, the passive data vendors anonymize their device identifier and provide data at census block group or tract geographies.
- **Understand data release cadence**—NHTS origin–destination products were produced annually from 2020 to 2023. Private passive data vendors typically release their data on a quarterly basis.
- **Identify historical and archived data**—LBS data are available from 2016 onward. cellphone data products are available from the late 2000s. Other sources' origin dates are not publicly available.
- **Document benefits and drawbacks of these sources**—Using these nonsurvey data sources will help capture some pieces of the long-distance travel puzzle. The drawbacks to users are that data are not released on a regular cadence (especially public data sources) and, if relying on private data, that pricing and the ability to procure the data change.
- **Document issues, risks, weaknesses, shortcomings etc.**—The potential issues include irregular availability, undocumented changes in the source data (especially for private passive data), lack of clear documentation about how the data are gathered, providing only sample data and not expanding it to the population, resource and staff constraints to process large datasets, evolving policy changes by device manufacturers and platforms, and regulatory changes.
- **Document level of detail that can be obtained**—The level of detail that can be obtained from these data depends on the underlying source of these data and what additional measures were implemented to capture contextual information at small temporal and spatial resolutions.

2.3.1. Nonsurvey Data Sources and Tools Inputs

Table 3 shows the details required from nonsurvey data sources and tools and whether each detail is an NTTISP requirement or priority identified by stakeholders during the forums and/or workshops.

Table 3. Nonsurvey Data Requirements and Stakeholder Priorities

Details	NTTISP requirements	Stakeholder priorities
Trip purpose	X	X
Trip modes	X	X
Origin–destination	X	X
Trip frequency	—	X
Intermediate stops (multiple national parks)	X	X
Multipurpose (tourism tied to business trip)	—	X
Travel party size	X	X
Data latency	—	—
Data cadence	—	X
Sample size or sampling rate	—	—
Demographic details	X	—
Weighting details	—	—
Spatial resolution	—	X
Temporal resolution	—	X
Privacy	—	—
Data costs	—	—
Data normalization	—	—
Documentation	—	X

X = This detail is a requirement or priority.
—This detail is not a requirement or priority.

2.3.1.1. NTTISP Requirements

NTTISP Appendix E indicates the data should include demographic composition of visitors along with their travel characteristics—why they are traveling, how they traveled, from where did they come, to where are they going (including stops along the way), and with whom are they traveling [USDOT 2024].

2.3.1.2. Stakeholder Priorities

Similar to the NTTISP requirements and survey component, stakeholders identified the same priorities for the Program. For instance, they wanted to capture more detailed trip purposes beyond the traditional trip purposes captured by NHTS and ATS, including whether travel was for sporting events, medical events, conferences, or joint events (in which a tourist trip is tied to a work-related trip). Additionally, stakeholders wanted to understand how frequently these travel and tourism trips were made, the spatial and temporal resolution of the data, and how frequently the data are released.

2.3.1.3. Other Considerations

Other items USDOT could document from nonsurvey data sources include an understanding of privacy protections, the time between data capture and availability, the costs associated with data collection, and whether and how the data are expanded. Finally, data normalization will help facilitate comparisons across multiple data sources.

As with the survey component, the capture of long-distance travel by non-U.S. residents is not explicitly addressed in the metadata and documentation that accompanies the publicly available secondary datasets that have been reviewed as part of this workplan development. There is the potential that the travel by international visitors is captured (for example, by those who purchase a U.S. SIM card for cell phones while visiting the United States), but to attempt to quantify this behavior would be speculative. Given the importance of understanding international travelers' long-distance travel, it is plausible that the private sector data vendors and survey firms have developed mechanisms and approaches to capture and include such details in their data products. While the purchase of secondary data products is not part of this workplan, a regular scan of available private sector data products will help TTDP program staff monitor such data availability and make appropriate acquisition decisions at that time.

2.3.2. Nonsurvey Development Activity Packets

The contract team created activity packets for each program year to outline component goals and operationalize the Program's nonsurvey component into manageable steps. The following outlines the activity flow for the nonsurvey component through the first 7 years of the Program:

- Year 1 focuses on identifying and documenting nonsurvey data sources and related data tools that will help fulfill NTTISP requirements, starting with the sources and tools identified by stakeholders during the research to develop this workplan. Each identified source or tool would be evaluated to confirm it is fit for purpose, as well as whether the source of the data and its construction might meet BTS standards for use in official statistics. As this information is being curated, datasets and associated metadata will be downloaded and organized, and relevant resources and reports will be inventoried. The year would conclude with the base nonsurvey data sources, relevant tools, and resources posted to the Program website.
- In years 2 and 3, the focus will shift to developing data products and processing the data for use in the website tools. As part of this effort, a plan for analyzing the data and the methods to be used should be developed. Once the methodology is finalized, the data can be analyzed, and data models and data fusion techniques developed. As these steps take place, documentation is crucial for incorporating these nonsurvey data sources and tools into the wider Program activities.
- In year 4, as the nonsurvey data processes, procedures, and tools mature, the focus can shift to developing similar processes, procedures, and tools for the survey data. This shift involves two key aspects: first, the survey data and, second, where and how new products could be developed by leveraging the survey and nonsurvey data.
- From year 5 onward, USDOT should continue developing and maturing the data processes, procedures, and tools; incorporating new data as they become available; updating tools and products as technologies evolve; and so on.

3. SUMMATION

The Program will support USDOT and congressional policymakers in forming and applying national policies and intercity travel opportunities to U.S. citizens and millions of foreign visitors. This support will promote national and international understanding as well as earning national income and support for transportation and visitation investments. Most of all, it will expand opportunities for U.S. citizens and foreigners to see to what America and Americans are like.

This workplan outlines the activities associated with developing survey data, nonsurvey data, tools, and website components that meet the requirements of the NTTISP and address stakeholder needs. The proposed activities were identified through extensive stakeholder outreach, in-depth state-of-practice scans, identification of existing data sources, and research into emerging survey methods and data science techniques. This workplan is designed to guide OST-X20 and BTS staff during the initial planning activities in the first year of the Program, then to build upon those foundational activities in future Program years.

In this section, the key activities of the three main Program components are summarized, followed by the next steps and action items for OST-X20 and BTS to consider. Table 4 offers a shortform component summary by Program year to illustrate the alignment needed between each component.

Table 4. Component Activities by Program Year

Program year	Website	Survey data	Nonsurvey data and tools
1	• Create base website creation • Create initial data clearinghouse • Populate website with content from other Program components	• Identify and establish partnerships (funded addon questions) with other federal agencies • Develop detailed survey plans for capturing data elements • Gather, analyze, and summarize existing long-distance travel survey methods and characteristics	• Assess data availability for international travelers and pursue stronger documentation • Begin compiling metadata for website Assess data availability for international travelers and pursue stronger documentation • Begin compiling metadata for website • Gather, review, and summarize existing travel and tourism nonsurvey data sources • Identify data sources fit for official statistics
2	• Begin website user research for tool(s) development • Continue adding gathered data and documentation	• Pilot and finalize design of targeted long-distance travel survey of domestic travelers • Continue survey planning development for comprehensive long-distance travel survey • Explore additional targeted approaches for capturing travel by international visitors • Field funded addon questions through survey partnerships with other federal agencies as available	• Begin creating data products for website tools • Begin developing data governance principles, standardized data analysis, fusion protocols, and methods • Continue compiling metadata and other documentation • Continue monitoring data on international travel, acquire and incorporate into activities as available

Program year	Website	Survey data	Nonsurvey data and tools
3	• Add requested website tools • Continue adding gathered data and documentation	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Pilot and finalize design of targeted surveys of international travelers • Continue survey planning development for comprehensive long-distance travel survey • Continue partner survey data-collection efforts • Field targeted long-distance travel survey of domestic travelers • Assess and improve survey designs based on identified gaps, feedback, and program needs	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue creating data products for website tools • Continue monitoring data on international travel, acquire and incorporate into activities as available • Finalize data governance principles, standardized data analysis, fusion protocols, and methods
4	• Continue adding requested website tools and assets • Continue adding gathered data and documentation	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Pilot and finalize design of comprehensive long-distance travel survey • Continue partner survey data-collection efforts • Continue targeted long-distance travel survey of domestic travelers • Field targeted long-distance travel survey of international travelers • Assess and improve survey designs based on identified gaps, feedback, and program needs	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue creating data products for website tools • Continue monitoring data on international travel, acquire and incorporate into activities as available • Finalize standardized data analysis, fusion protocols, and methods
5	• Continue adding requested website tools and assets • Continue adding gathered data and documentation	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue partner survey data-collection efforts • Continue targeted long-distance travel survey of domestic travelers • Continue targeted long-distance travel survey of international travelers • Deploy comprehensive long-distance travel survey • Assess and improve survey designs based on identified gaps, feedback, and program needs	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue creating data products for website tools • Continue monitoring data on international travel, acquire and incorporate into activities as available • Monitor new trends, methods, and data sources

Program year	Website	Survey data	Nonsurvey data and tools
6	• Continue adding requested website tools and assets • Continue adding gathered data and documentation	• Assess and improve survey designs based on identified gaps, feedback, and program needs • Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue partner survey data-collection efforts • Continue targeted long-distance travel survey of domestic travelers • Continue targeted long-distance travel survey of international travelers	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue creating data products for website tools • Continue monitoring data on international travel, acquire and incorporate into activities as available • Monitor new trends, methods, and data sources
7	• Continue adding requested website tools and assets • Continue adding gathered data and documentation	• Assess and improve survey designs based on identified gaps, feedback, and program needs • Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue partner survey data-collection efforts • Continue targeted long-distance travel survey of domestic travelers • Continue targeted long-distance travel survey of international travelers	• Assess captured travel survey data for validity, gaps, and data fusion opportunities • Continue creating data products for website tools • Continue monitoring data on international travel, acquire and incorporate into activities as available • Monitor new trends, methods, and data sources

3.1. Website

The Program's website will be the most visible and interactive component for most stakeholders, scholars, officials, and the general public. It will contain all data and resources described under the other components in this workplan (survey data, nonsurvey data, tools, and resources that are to be compiled). Although relatively undefined by the NTTISP, how the website is implemented and designed reflects the needs of stakeholders and departmental requirements while remaining responsive to the functional requirements listed in the NTTISP. In the first year of the Program, the website will serve as a basic hub describing the Program, its goals, purpose, and general program timeline. The website will host links to publicly available travel and tourism data and relevant documentation, including international data sources, such as the NTTO's SIAT and the U.S. Customs and Border Protection's Traveler and Conveyance Statistics as well as data from the World Road Association (PIARC), the World Tourism Organization (UNWTO), and the Organization for Economic Co-operation and Development (OECD). It will contain simple topline statistics to illustrate the Program's importance and scope. It would then evolve and expand with the other Program elements as content becomes available. Updates could include built-in data processing and exploration tools, advanced data search functionality, a help desk, a robust data clearinghouse, and a detailed documentation library.

3.2. Survey

The next major Program component focuses on survey-related activities, from design and methods to data collection and analysis. Travel surveys are the only proven and comprehensive data sources that provide the priority information on long-distance travel behavior, choices (including spending patterns and activity choices), and trip purpose all linked to the same traveler and with the details that allow it to be successfully linked to other data sources. These links are critical for understanding how changes in destination investments, activity opportunities, and economic trends can influence traveler spending and travel patterns. The type of survey to be conducted will range from adding questions to existing surveys conducted by partner stakeholders such as NTTO and FHWA, to conducting targeted surveys to obtain high-priority details about long-distance travel with both domestic and international tourists, to conducting a comprehensive long-distance travel survey akin to the 1995 ATS.

It is critical that the Program offer a variety of survey options to deploy based on the information needs at different stages of Program development and based on the continuously evolving policy needs of USDOT. First, offering a range of survey options allows the Program to take advantage of existing data-collection activities by partner agencies (such as NTTO and FHWA) and explore the cost and time efficiencies of adding questions to those existing surveys. Second, the Program can trade-off obtaining higher priority data at a lower level of detail (to answer critical policy questions), while continuing to plan for a more detailed higher-cost survey in later years.

The first year of the Program would focus on analyzing existing long-distance travel surveys and reports and summarizing the methods, limitations, and applications of these datasets to develop a detailed survey plan; and the identification and establishment of interagency partnerships for addon survey work. Year 2 would focus on any data captured from partnership surveys (if fielded), the design finalization and piloting of the targeted long-distance travel survey of domestic travelers, continued planning and development of the targeted long-distance travel survey of international travelers, and continued planning and development, including scope of work, for the comprehensive long-distance travel survey. Year 3 would see the first fielding of the targeted long-distance travel survey of domestic travelers. This would be in addition to the continued fielding of partner surveys. Year 4 would see the first fielding of the targeted long-distance travel survey of international travelers. This would be in addition to the continued fielding of partner and targeted domestic surveys. Year 5 would see the first fielding of the comprehensive long-distance travel survey. This would be in addition to the continued fielding of partner, targeted domestic, and targeted international surveys. Years 6 and 7 would focus on processing and assessing the findings of the comprehensive long-distance travel survey fielded in year 5; continued fielding of partner, targeted domestic, and targeted international surveys; and further refinement of methods and data gaps to improve survey collection. At this point, the comprehensive long-distance travel survey would be readied for refielding by the Program at an interval of every 5–7 years thereafter.

3.3. Nonsurvey Data and Tools

The final Program component focuses on passive, nonsurvey data sources and any tools currently used to process travel and tourism data. For purposes of this workplan, nonsurvey data considers all other data not directly collected by the Program. This component might include data published by other federal data programs, passive, or survey-based data products publicly available or purchased, data collected or compiled by regional or state governments,

and so on. These assets offer direct and indirect approaches for describing long-distance travel behavior and patterns and add context to travel survey data sources. Over the first 7 years of the Program, the nonsurvey data and tools will be progressively integrated into the Program website. Year 1 would focus on identifying potential nonsurvey data sources to meet NTTISP requirements, including data sources relating to international inbound travel. In years 2 and 3, the focus would shift to developing data products and processing the data for use in the website's tools, culminating in data analysis and the creation of data models and fusion techniques. As the nonsurvey data processes, procedures, and tools are matured, the focus in year 4 would shift to developing similar processes, procedures, and tools for ingesting the survey data (on their own and in new products that combine survey and nonsurvey data). For years 5 onward, the Program would continue to develop and mature the data processes, procedures, and tools, incorporating new data as they become available, updating tools and products as technologies evolve.

4. NEXT STEPS AND ACTION ITEMS

The most critical action to be taken is to pursue funding for the Program. Even as that activity takes place, OST-X20 and BTS can undertake the following interim activities to ensure the smooth launch of the Program:

1. Maintain and build on the stakeholder outreach initiated through this project. Keep stakeholders informed of the progress, attend conferences and meetings, and other outreach activities.
2. Establish and lead an interagency task force on long-distance travel and tourism among agencies already collecting relevant data. A strong and consistent list of data needs was identified through this project, the NTTISP, and stakeholder input. Given the strength of that messaging, it may be possible to begin working toward expanding the scope of current survey efforts now instead of waiting for the Program to receive funding.
3. Build on the initial project description website developed for this project and turn it into a go-to place for information about the Program status, recent research in this area, new data sources, and so on. Use it to keep the industry engaged and use that engagement as further evidence to support the Program funding request when the time is right.
4. Engage decision makers at OST-X20 and BTS from day one to ensure that the Program has champions within and outside USDOT to ensure resources are available to implement the roadmap and achieve the vision of the NTTISP.

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USDOT. 2024. *National Travel & Tourism Infrastructure Strategic Plan*. Washington, DC: U.S. Department of Transportation. https://www.transportation.gov/sites/dot.gov/files/2024-04/NTTISP_2024.pdf. Last accessed July 28, 2025.

APPENDIX A. DATA SOURCE COMPARISON

Table 5–Table 7 describe whether federal surveys, federal data, and private sector products provide certain data and whether these data are required by the NTTISP and/or stakeholder priorities.

Table 5. Federal Surveys

	Design elements		Federal surveys			
Details	NTTISP requirements	Stakeholder priorities	1995 ATS	2022 NHTS	2022 ATUS	NTTO airport surveys
Trip purpose	Yes	Yes	Yes	Yes	Yes	Yes
Trip modes	Yes	Yes	Yes	Yes	No	Yes
Origin–destination	Yes	Yes	Yes	Yes	No	Yes
Trip frequency	No	Yes	Yes	Yes	No	
Intermediate stops (multiple national parks)	Yes	Yes	Yes	Yes	No	Yes
Multipurpose (tourism tied to business trip)	No	Yes	Yes	Yes	No	Yes
Travel party size	Yes	Yes	Yes	Yes	No	Yes
Data latency	No	No	No	1 year	1 year	1 year
Data cadence	No	Yes	1995	Every 2–3 years	Annual	Quarterly
Sample size or sampling rate	No	No	80,000 households	7,500 households	Current population survey	Unknown
Demographic details	Yes	No	Yes	Yes	Yes	Yes
Weighting details	No	No	Yes	Yes	Yes	Yes
Spatial resolution	No	Yes	MSA	Census Division	National	MSA
Temporal resolution	No	Yes	No	Minute	Minute	No
Privacy	No	No	Yes	Yes	Yes	Yes
Data costs	No	No	No Details	$300 add-on survey	No add-on details	No details
Data normalization	No	No	No	No	No	No
Documentation	No	**Yes**	Yes	Yes	Yes	Yes

ATUS = American Time Use Survey; MSA = metropolitan statistical area.

Table 6. Federal Data

Details	Design elements		Federal data		
	NTTISP requirements	Stakeholder priorities	BTS DB1B/T100 air passenger data	NHTS origin–destination passenger products	NPS visitor counts
Trip purpose	Yes	Yes	No	No	No
Trip modes	Yes	Yes	Air	Yes	No
Origin–destination	Yes	Yes	Yes	Yes (zones)	No
Trip frequency	No	Yes	Yes (by OD)	No	No
Intermediate stops (multiple national parks)	Yes	Yes	Yes (at airport)	No	No
Multipurpose (tourism tied to business trip)	No	Yes	No	No	No
Travel party size	Yes	Yes	No	No	No
Data latency	No	No	Quarterly	1 year	1 year
Data cadence	No	Yes	Quarterly	Annual	Annual
Sample size or sampling rate	No	No	10%	Varies	Unknown
Demographic details	Yes	No	No	No	No
Weighting details	No	No	No	Yes	No
Spatial resolution	No	Yes	City	Zones	No
Temporal resolution	No	Yes	No	Monthly and annual	Unknown
Privacy	No	No	Yes	No	Yes
Data costs	No	No	No add-on details	Based on population and geographic resolution	No add-on details
Data normalization	No	No	No	No	No
Documentation	No	Yes	Yes	Yes	Yes

OD = origin–destination

Table 7. Private-Sector Products

Details	Design elements		Private sector products						
	NTTISP requirements	Stakeholder priorities	AirSage	Arrivalist	INRIX	LOCUS	Replica	StreetLight Data	TomTom
Trip purpose	Yes	Yes	Yes (derived)	No	Yes (derived)	Yes (derived)	Yes (derived)	Yes (derived)	Yes (derived)
Trip modes	Yes	Yes	Yes (derived)	No	Auto	Yes (derived)	Yes (derived)	Yes (derived)	Auto
Origin–destination	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Trip frequency	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Intermediate stops (multiple national parks)	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Multipurpose (tourism tied to business trip)	No	Yes	No	No	No	No	No	No	No
Travel party size	Yes	Yes	No	No	No	No	No	No	No
Data latency	No	No	Custom (product dependent)	No	Custom (product dependent)	Custom (product dependent)	Custom (product dependent)	Custom (product dependent)	Custom (product dependent)
Data cadence	No	Yes	Custom	No	Custom	Custom	Custom	Custom	Custom
Sample size or sampling rate	No	No	Unknown	No	Unknown	Unknown	Unknown	Unknown	Unknown
Demographic details	Yes	No	No	No	No	No	Synthetic population	No	No
Weighting details	No	No	Yes	No	Yes	Yes	Yes	Yes	Unknown
Spatial resolution	No	Yes	Census tract	No	Traffic message channel	Census block group	Census block group	Census block	Custom (50 cm smallest)
Temporal resolution	No	Yes	Minute	No	Minute	Minute	Minute	Minute	Minute
Privacy	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Data costs	No	No	Custom	No	Custom	Custom	Custom	Custom	Custom
Data normalization	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Documentation	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

APPENDIX B. COMPARISONS OF TRAVEL SURVEY DESIGNS

Figure 3 demonstrates how different data sources capture the details of a long-distance trip. Such details are critical for economic- and infrastructure-investment decisions. This figure shows an example of a typical long-distance journey: An individual living outside Atlanta, GA, drives to the Atlanta Airport (ATL), flies to Miami International Airport (MIA), and takes the light rail to a downtown hotel. They then make another light rail trip to a business meeting, after which they walk to a business lunch. After lunch, they walk back to the hotel and end their first day of travel. On the second day, they bike from the hotel to the beach to relax and then return to their hotel. On the last day, they take a bus from the hotel to a football game, return via bus to their hotel, take the light rail to MIA, and then fly back to ATL. They then conclude their 3-day journey by driving from ATL back home. This common type of long-distance journey includes multiple purposes, destinations, activities, and spending decisions.

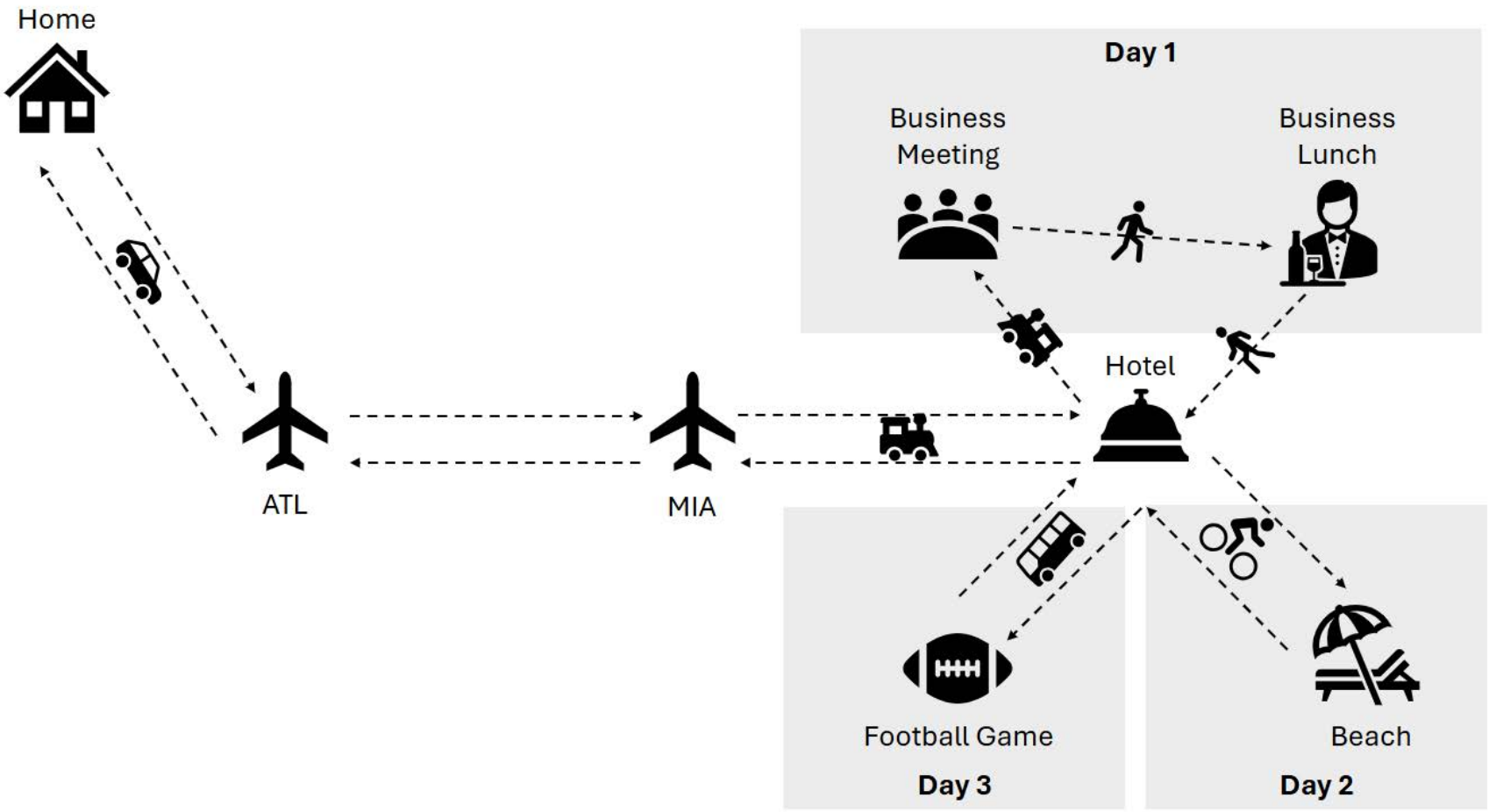
Figure 3 also shows how the following five data sources describe long-distance travel as well as how each data source would describe the example journey:

1. A Partner Survey provides a simplistic summary of a long-distance journey, only recognizing a single mode, destination, and purpose. Some additional information could be derived, such as flying out of ATL, but exact details are unknown.
2. A Targeted Long-Distance Travel Survey provides a clear picture of a long-distance journey with multiple modes, destinations, and purposes. However, this targeted survey does not allow the capture for such minor-level details as specific day-to-day destination activities.
3. A Comprehensive Long-Distance Travel Survey builds on the previous survey to include all those journey characteristics and all possible relevant details that could be used for a wide range of applications.
4. Modal Travel Volumes only capture the number of passengers or vehicles at a given point, whether that is a flight, rail line, or highway marker. No journey details are captured.
5. Destination Visitation Volumes only capture the number of people entering and exiting a location, such as a national park, an arena, or a city center. No journey details are captured.

Finally, Appendix A summarizes how each of these data sources is able to effectively meet the decision-making needs stakeholders identified and specified in the NTTISP. The Targeted Long-Distance Travel Survey and the Comprehensive Long-Distance Travel Survey are the only options that provide the level of detail necessary for decision-making and, therefore, must be the foundation of any long-distance data-collection program. While the other sources provide opportunities for validation, they only work effectively in support of a foundational travel survey.

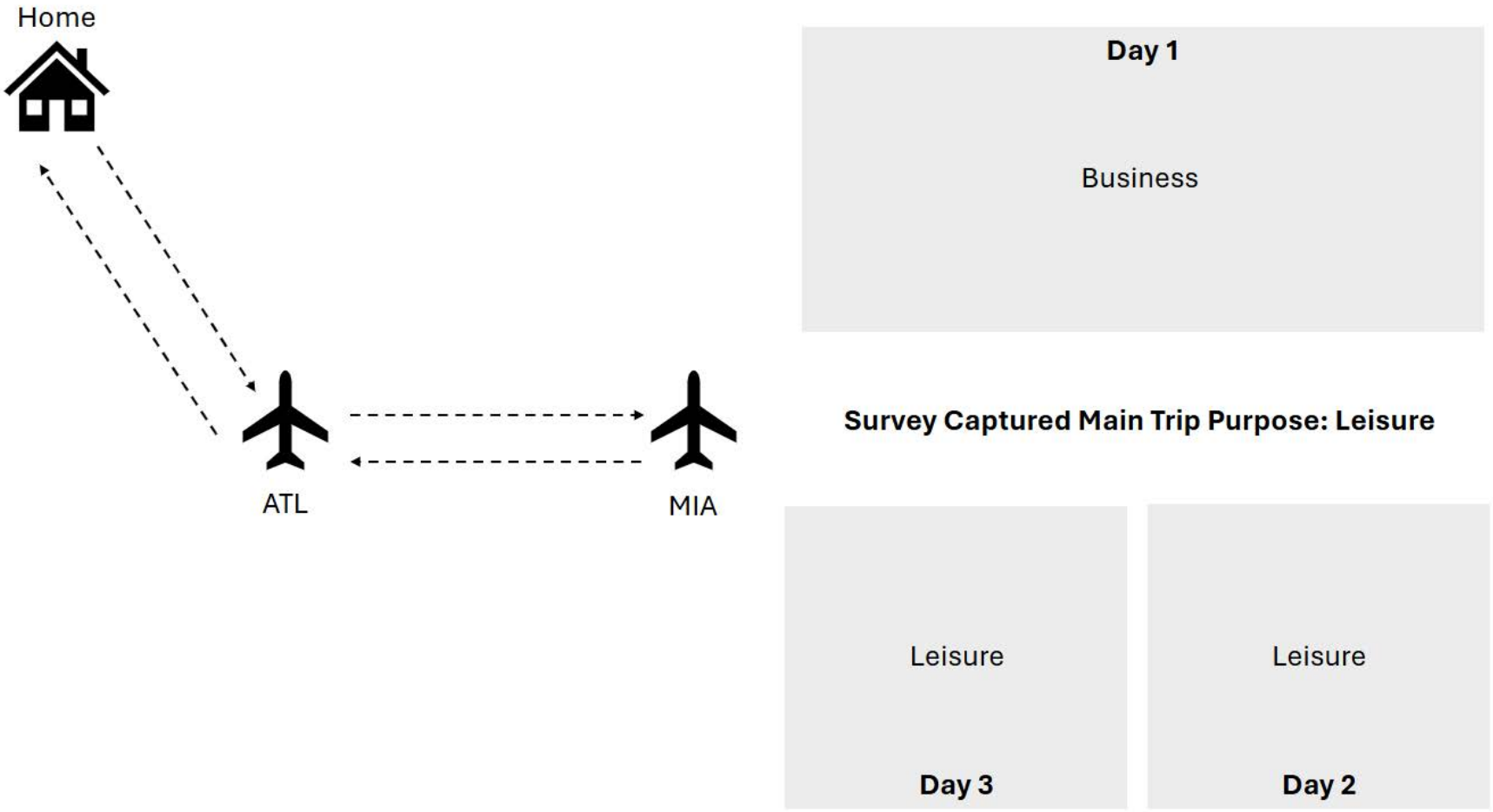
Figure 3. Example Long-Distance Journey as Captured by Different Data Sources

A. Complete Journey



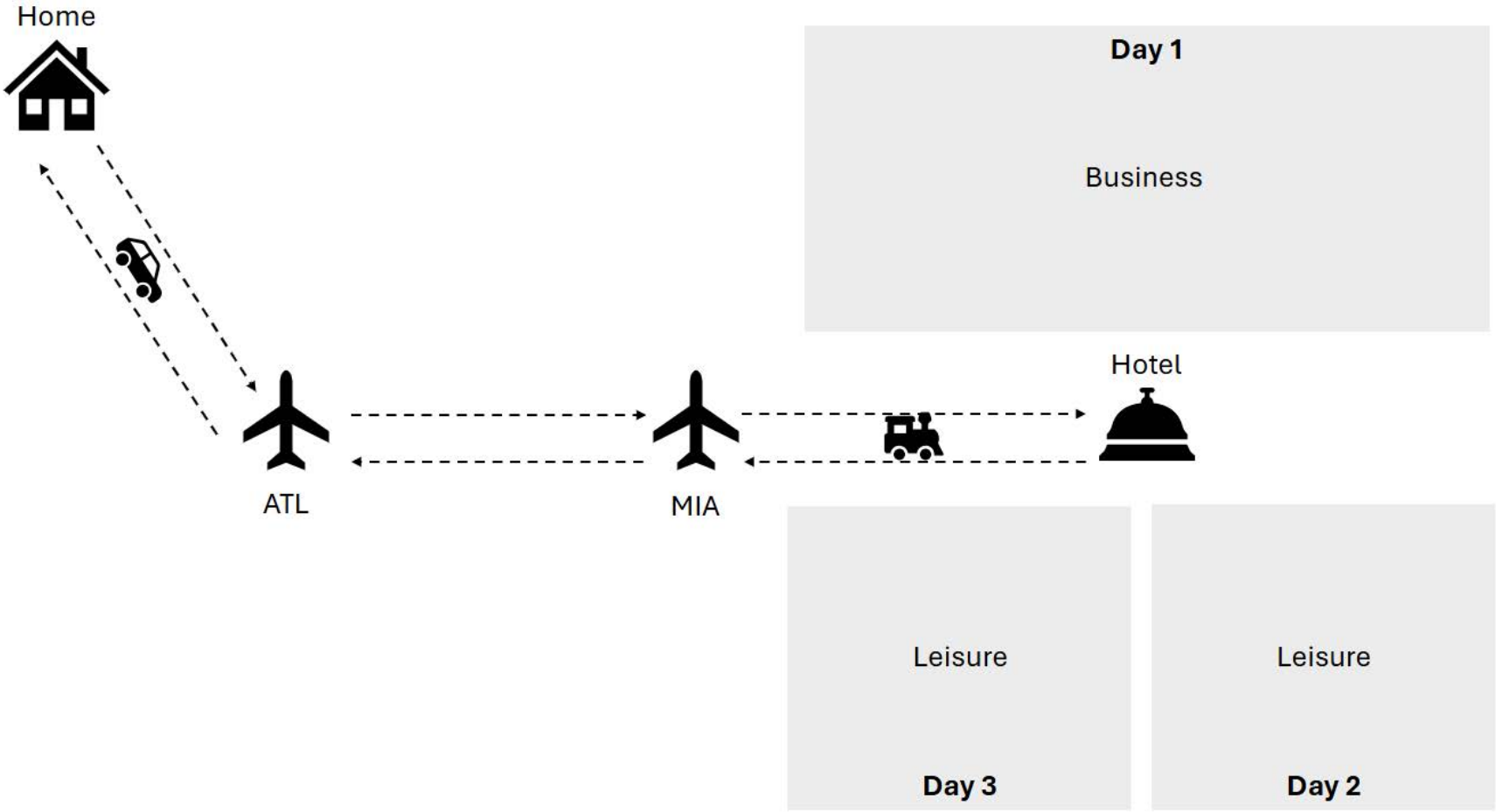
Source: BTS.

B. Partner Surveys



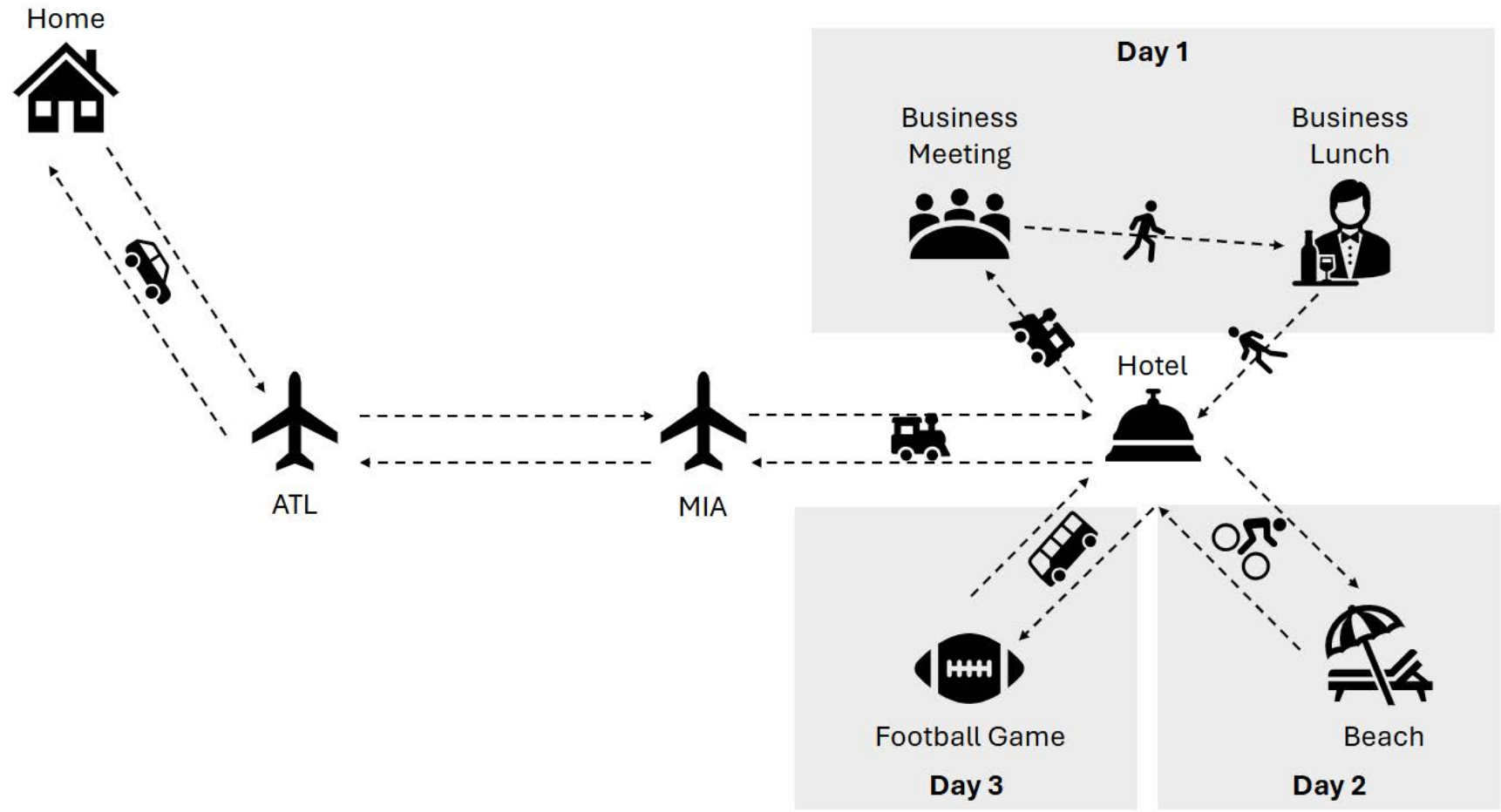
Source: BTS.

C. Targeted Travel Survey



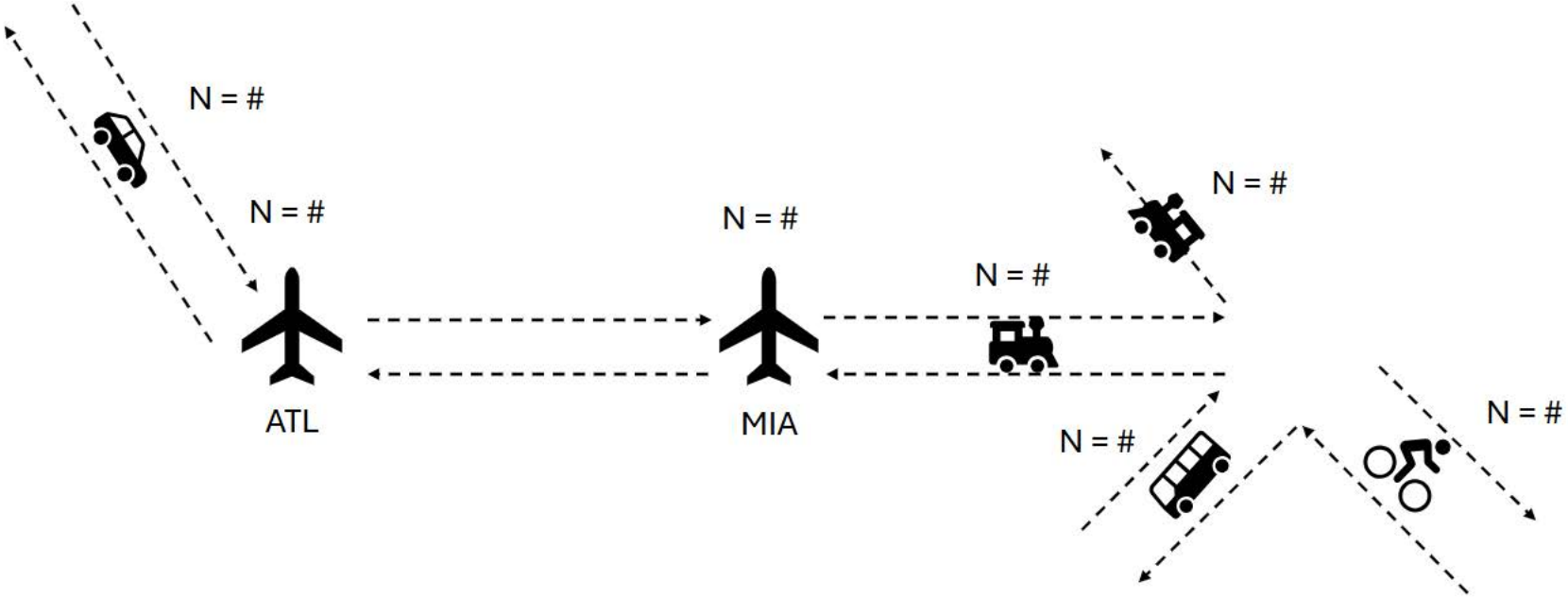
Source: BTS.

D. Comprehensive Travel Survey



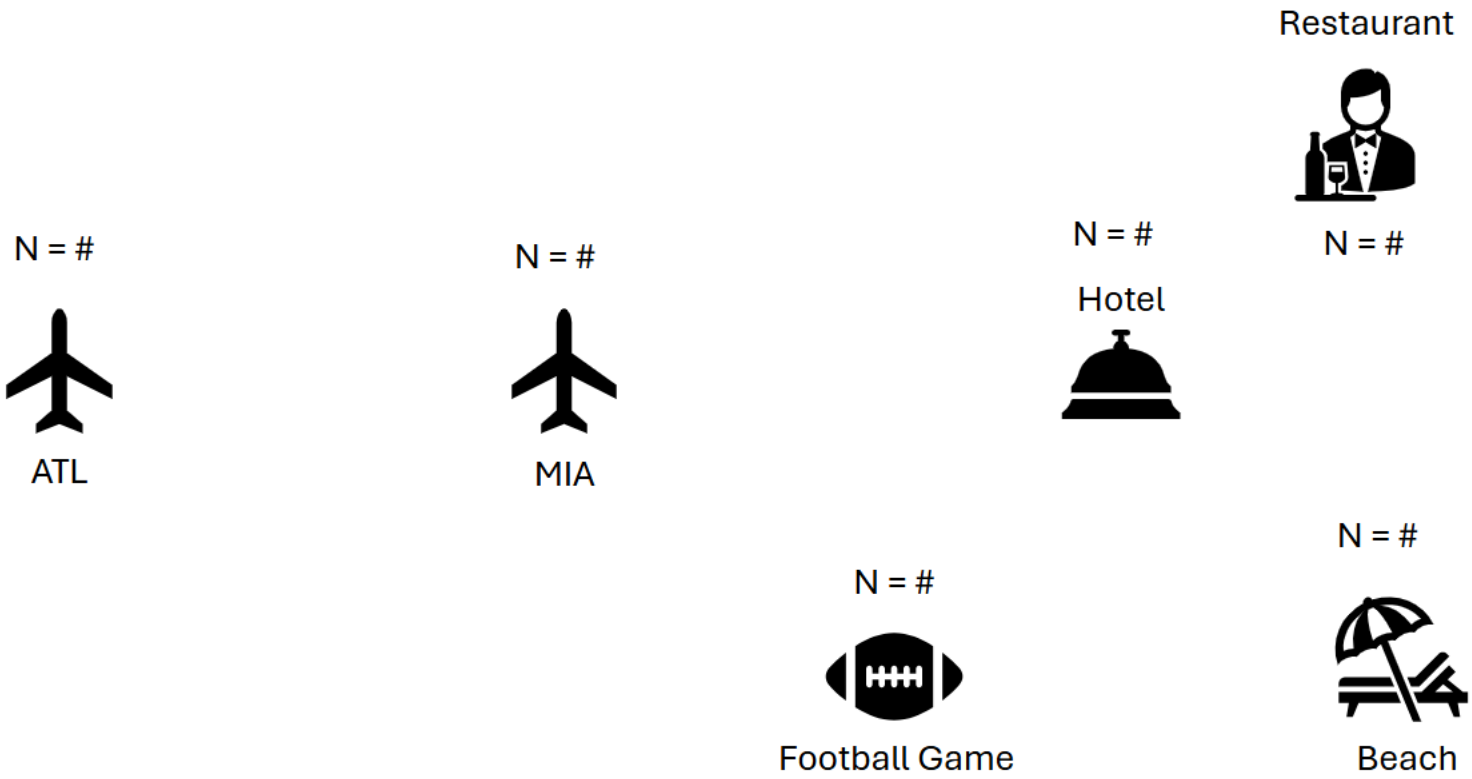
Source: BTS.

E. Modal Travel Volumes



N = Number of passengers and/or vehicles.
Note: Passengers per vehicle would not be captured in this scenario.
Source: BTS.

F. Destination Visitation Volumes



N = Number of visitors.
Source: BTS.

Table 8. Overview of Data Captured by Collection Method

Data stakeholders indicated they need to track and forecast		Figure 3-B. Partner Survey	Figure 3-C. Targeted Survey	Figure 3-D. Comprehensive Survey	Figure 3-E. Modal Volumes	Figure 3-F. Destination Volumes
Changes in economic spending patterns	Journey characteristics	Good	Better	Best	Not collected	Not collected
	Traveler demographics	Good	Better	Best	Not collected	Good
	Spending across the journey	Not collected	Good	Best	Not collected	Not collected
	Destinations visited	Not collected	Not collected	Best	Good	Better
	Activities completed (including joint purposes)	Not collected	Not collected	Best	Not collected	Good
Changes in air traveler volumes		Good	Better	Best	Good	Not collected
Changes in personal vehicle traveler volumes		Good	Better	Best	Good	Not collected
Changes in rail traveler volumes		Good	Better	Best	Good	Not collected

LIST OF ABBREVIATIONS, ACRONYMS, AND INITIALISMS

ATL	Atlanta Airport
ATS	American Travel Survey
ATUS	American Time Use Survey
BTS	Bureau of Transportation Statistics
CV	connected vehicle
DOC	Department of Commerce
DOT	Department of Transportation
FHWA	Federal Highway Administration
LBS	location-based services
MIA	Miami International Airport
MSA	metropolitan statistical area
NHTS	National Household Travel Survey
NPS	National Park Service
NTTO	National Travel and Tourism Office
NTTISP	*National Travel & Tourism Infrastructure Strategic Plan*
OD	origin–destination
OST-X20	Office of International Transportation and Trade
SIAT	Survey of International Air Travelers
TTDP	Long-Distance Travel and Tourism Data Program
USDOT	U.S. Department of Transportation
UX	user experience