Transportation and Housing Alliance Toolkit

CONDUCTING A TRANSIT FEASIBILITY STUDY

What is THA

The Transportation and Housing Alliance was established by the Thomas Jefferson Planning District, with funding from the Virginia Board for People with Disabilities (VBPD), as a way to help meet the housing and transportation needs of people with disabilities. THA is established as a standing committee of the Virginia Association of Planning District Commissions, with the goal of providing information, resources, technical assistance and education on accessibility and the interconnection between housing and transportation.

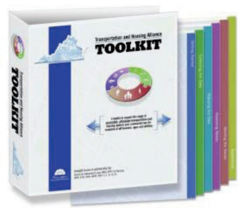
The THA Toolkit provides guidance on

- Mapping
- Transportation
- Employment
- Housing

Elements to Feasibility Studies

There are two main parts to these studies. The first is a Needs Assessment or review of existing conditions. The second part is identifying Service Options, which is based off the information from the needs assessment. Transit services can be the traditional fixed route option or demand response. These services include but are not limited to:

- Fixed Route Buses
- Flexible Route Buses
- Bus Rapid Transit
- Light Rail Systems
- Paratransit
- Ridesharing
- Vanpooling
- Shared-Ride Taxis
- Employer-Sponsored Bus or Van Shuttles



Developing a Transit Feasibility Study with the THA Toolkit

The THA *Toolkit* is a useful resource for communities that are considering new transit services in their areas. The *Toolkit* provides several resources that can help with the first step of that process, conducting a Transit Feasibility Study.

The Toolkit provides guidance on public involvement, data collection and mapping, which are major components of a Transit Feasibility Study's Needs Assessment .

Getting to Know the THA Toolkit

THA developed the *Toolkit* to help provide a better understanding of transportation and housing needs of people with disabilities and others who may otherwise be excluded from the planning process. It is a catalog of tools with instructions and tips on how to collect and analyze information on your community. The *Toolkit* was expanded in 2007, when THA added a section to the *Toolkit* that focuses on providing guidance with employment and economic market conditions.

With references on housing, employment and transportation, the *Toolkit* is a useful resource for many projects, including transit studies. For a Transit Feasibility Study, the *Toolkit* can help with the typical Needs Assessment portion, also known as the Existing Conditions. With these tools and instructions, the *Toolkit* can help applicants complete a Transit Feasibility Study that provides a clear, accurate and comprehensive analysis of needed services and investments.

Typical Challenges with Conducting a Needs Assessment

Conducting a Needs Assessment can be a difficult process, in terms of gathering information and effectively communicating identified gaps. Below are some common challenges in this process and ways the THA *Toolkit* can help:

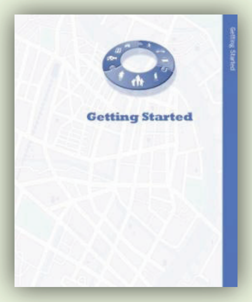
Finding accurate information, with limited time and resources – The THA *Toolkit* will direct you to various websites and resources, where you can find detailed data on your community. The *Toolkit* provides detailed instructions, step by step, on how to extract this information and how to present it in an easily understood format.

Identifying areas of need – Using the references and instructions in the *Toolkit*, you can find detailed information on housing, transportation and employment. The *Toolkit* also provides guidance on how to display these areas together, so you can see where there are gaps or needs.

Visualizing gaps and needs – The *Toolkit* also provides clear instructions on how to map data on your community and provides tips on how to display your information graphically.

About the Transit Feasibility Studies

A Transit Feasibility Study is the first step in identifying whether transit investments are currently needed or will be in the future. The study also explores the types of systems and services that would best serve the community's needs. The goal of this process is to expand mobility options for everyone, particularly people with limited mobility or finances. A Feasibility Study tries to find the most efficient means for providing this service. This means striving for the highest ridership at the lowest capital costs, while meeting the community's needs. A Feasibility Study can also identify gaps in the existing transportation system and which areas lack transportation choices.

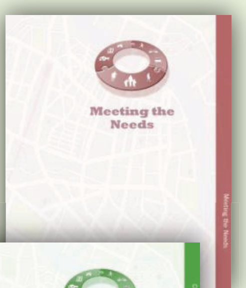


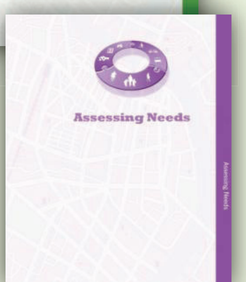
Getting Started:

The *Toolkit* offers several tools that can help with conducting a Transit Feasibility Study. A good place to begin this work is under its first tab, **"Getting Started"**. This section provides further background on the *Toolkit* and its function. Becoming familiar with this basic overview can be helpful in understanding the layout of the *Toolkit* and how it works. The following are typical components of a Transit Feasibility Study, including the *Toolkit*'s resources that can be helpful with completing these tasks.

Public Involvement:

Any proposed transit system will ultimately serve the public, who also pays for part of the implementation and maintenance of those services through their taxes. As a result, the public should have a sense of ownership with this planning process, starting with the initial feasibility study. While the first part of these studies, the Needs Assessment, focuses on existing conditions such as demographics, it can also include public input. There is typically a market study in this section, given the service oriented nature of public transit. An analysis of the current demand will typically make use of surveys or interviews with potential riders. This outreach seeks the public's opinions, attitudes and preferences for transit services. The public's input would be linked to other data in the Needs Assessment, such as socio-economic data and other demographics.

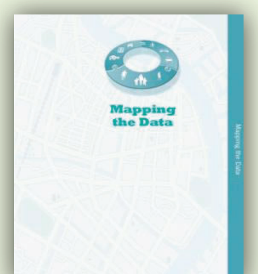




The THA *Toolkit* offers guidance on ways to obtain this input. Under the **"Meeting the Needs"** tab, it discusses how to facilitate community-based charretes, which is another option for interacting with potential transit customers. The *Toolkit* also provides tips for building partnerships and offers some 'Best Practices' for evaluating connections between land use and transportation. The *Audit Form* section, under the **"Collecting the Data"** tab, has a set of several questions that may be useful for getting started with the public. These are basic questions that can be presented directly to citizens or function as ideas for potential surveys. A sample audit form in this section can help build a better understanding of the area, on a block or neighborhood scale. It may also act as an example, to guide in developing a separate survey. Under the **"Assessing Needs"** tab, there are additional questions that may be helpful, once again, to either grasp the public's needs or to serve as questions in a survey.

Mapping:

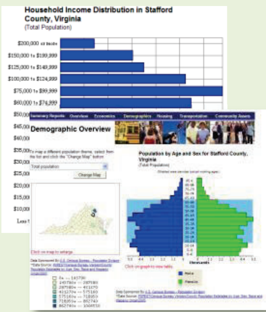
The *Toolkit* has extensive instruction and tips on mapping with Geographic Information Systems (GIS)*. One of the first basic steps in a Transit Feasibility Study is mapping the boundaries of a defined service or study area. This is the area that the potential transit system will serve. This area may simply follow the limits of a town, city or county. If the service area does not follow these clear boundaries, then the *"Collecting and Digitizing Data"* section can show how to depict a study area in a GIS map and how to crop the mapping layers so they are only within that designated area. The *"Economic Market Conditions"* section may also be helpful. In this section, there are directions for OnTheMap, a website maintained by the U.S. Census Bureau. This site will help produce maps, depicting both employment centers and concentrations of housing. This is valuable information for a Transit Feasibility Study, since many trips in a community involve commuting, between work and home. While these two sections are under the **"Collecting the Data"** tab, the rest of the mapping resources are under the **"Mapping the Data"** tab.



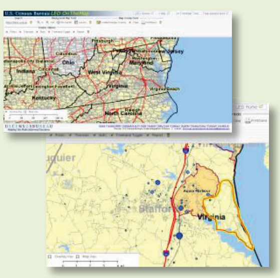
The **"Mapping the Data"** tab provides ideas and guidance on several different kinds of maps. Under the *"Mapping Census Data"* section, the *Toolkit* shows how to extract demographic data from the Census Bureau's website, to be depicted in thematic maps. There is further guidance on importing this information in the *"Collecting US Census Data"* section, under the **"Collecting the Data"** tab. These thematic maps are great tools for creating a clear understanding of the current population and for identifying areas that may have special transportation needs. The next two mapping sections, *"Geocoding Places"* and *"Geocoding Employment Centers"*, show how to illustrate important places on a map. These places may include medical, educational, recreational, civic and employment centers, along with other community amenities deemed relevant to the study. The *"Mapping Residential Growth"* section will help show where housing currently exists and give an understanding of growth trends, both of which are critical to a feasibility study. The section labeled *"Proportion of persons served by transit"* may provide the most important maps for a feasibility study. This section shows how to create maps that illustrate existing transit stops, while highlighting the number of people that are within walking distance to these facilities.

** Please note that special software is needed to compose these maps, except for the OnTheMap tool.*

Data Collection:



The first part of a Transit Feasibility Study, the Needs Assessment or Existing Conditions, is based on raw data. The *Toolkit* has several helpful references and instructions on how to collect and analyze this data. Most of these are found under the **"Collecting the Data"** tab. The *"Introduction"* to this tab lists 'Resources for Data on the Web'. This is a list of websites that have useful information, dealing with demographics, transportation and other data. The next section, *"Collecting US Census Data"*, gives step by step instructions on how to access data from their website and how to prepare that data for mapping. *"Collecting and Digitizing Data"* shows how to collect data on the physical conditions of a neighborhood. This may be helpful for a transit study that is looking at the quality of and access to transit stops. Once again, this section guides you on how to depict this information on maps. The *"Economic Market Conditions"* section directs you to several helpful tools and resources. The first resource is HotReports, a website what provides data on income, age and other detailed workforce characteristics. It also offers a transportation overview and graphs on how people commute to work, which is especially helpful for a Transit Study's Need Assessment. This section also references an Industry Focus website, maintained by the U.S. Census, labeled *"Local Employment Dynamics"*. This site gives a detailed overview of the workforce, by industry. This includes information on employment growth, new hires, job changes and other items.



Next Steps:

Above are references to the *Toolkit*'s resources that can help with conducting a Transit Feasibility Study. Many of these tools focus on the needs of people with disabilities, as was the purpose of the *Toolkit*. This makes the *Toolkit* especially useful for these studies, since people with disabilities frequently use public transit. They are also among those that most depend on those services. The next step of a feasibility study is to determine which service option to pursue. This can be a challenging decision-making process, as communities have many transportation needs and are typically limited in their funding. With accurate and comprehensive data that could be provided by the resources above, a community can better choose efficient options, offering the most needed services for the dollar value, whether that is fixed route buses and light rail or para-transit and ridesharing.