Transportation and Housing Alliance Toolkit – Second Edition

Assessing the Needs

What do the data and maps mean?

This section consists of a checklist designed to quantify key indicators that measure the extent to which your region or study area meets the needs of persons of all abilities and incomes. The evaluation covers several categories: public access, automobile transportation, transit, pedestrian, bicycling, and housing accessibility and affordability. A printout of all questions is included in this section; an electronic version is provided on the CD.

Is there one checklist, or two?

There are two versions of the checklist, one for the regional level and one for a smaller study area. The regional checklist contains broad questions. The study area version includes most of these overview questions, but primarily consists of questions focusing on programs and services and the condition of physical assets, such as sidewalks. The regional checklist is designed to provide a broad evaluation. The study area checklist is much more specific.

Can we modify the checklist?

Yes. For some projects, particularly in rural areas, many of the questions simply will not apply. The electronic file provided on the disk is an active Excel spreadsheet. First, review the entire checklist, making note of questions that are not applicable for your region or study area. Then tailor the checklist to your project by deleting questions that do not apply.

Who does the scoring?

Some questions can be answered directly from the data or from the results of a mapping exercise. Most questions, however, will require some judgment to answer, and may require fieldwork or detailed knowledge of the area. For these questions, the best approach is to use the collective knowledge of the Project/Technical Team to agree to scores by consensus. Capture the team's scores on a hard copy of the checklist, and then enter the answers into the electronic checklist. Pictures are provided for answers on Transit Stops, Sidewalks and Curb Cuts at the end of this section.

How is the checklist scored?

Each question has a range of answers from 0 to 4, with 0 being the lowest score and 4 being the highest. The electronic checklist will display a numeric score for each question based on your response and the weighting factor. Weights were developed through work with focus groups and take into account the importance of the factor and the scale of its effect. For instance, questions about the completeness of a network of sidewalks are given more weight than questions about the condition of sidewalks. In your area, your team may assign greater importance to other factors than those shown. It is possible to tailor the weights to your area. The checklist will tabulate the total of your responses. You will need to create sub-totals for each section in your modified checklist.

How do we interpret the scores?

The scores will indicate how well your area is doing. Create sub-totals for each category so you can get a sense of the area's strengths and weaknesses across categories. If your region had a high score in automobile transportation, but a low score in the pedestrian category, your team will probably want to look at possible projects to increase pedestrian access and safety.

What can we learn by using the checklist?

The checklist is both an assessment tool and an educational tool. The intent is to give you a mechanism for looking at various aspects of your community in the areas of land use, transportation and housing. It is also meant to raise your sights and to give you ideas on characteristics that make communities livable for people of all abilities.

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|-----------------|----------|--|---|---|---------------------|-------|-------------------|-------------------|
| Physical Access | R-PA01 | For people with disabilities in your study area, how would you rate the accessibility of museums, libraries, parks and recreation facilities? | 0=non-existent 1=poor 2=fair 3=good 4=excellent | Fieldwork THA Accessibility Guidelines | 3 | | 0 | 12 |
| | R-PA02 | How would you rate the availability of affordable health, support and social services in your region? | 0=non-existent 1=poor 2=fair 3=good 4=excellent | Fieldwork THA Accessibility Guidelines | 4 | | 0 | 16 |
| Land Use | R-LU01 | Where is the location of newly constructed (within 2 years) or approved residential development in your region? | 0=outside growth area / don't have a growth area 1=1%-25% within growth area 2=26%-50% within growth area 3=51%-75% within growth area 4=76%-100% within growth area | GIS Planning Department Comprehensive Plan Zoning Ordinance | 4 | | 0 | 16 |
| | R-LU02 | Does the zoning ordinance in your locality allow mixed- use development? | 0=not allowed 1=requires comp plan amendment 2=requires zoning amendment 3=requires SUP / PUD 4=allowed by right | Planning Department Comprehensive Plan Zoning Ordinance | 1 | | 0 | 4 |
| | R-LU03 | Where are your community's public government and commercial buildings currently located, and where are they planned? | 0=outside growth area / don't have a growth area 1=1%-25% within growth area 2=26%-50% within growth area 3=51%-75% within growth area 4=76%-100% within growth area | GIS Planning Department Comprehensive Plan Future Land Use Studies Fieldwork | 3 | | 0 | 12 |
| Transit | R-T01 | How much of your region is served by public transportation? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | GIS Transit Provider Fieldwork | 3 | | 0 | 12 |

| Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|----------|--|---|---|---------------------|-------|-------------------|-------------------|
| R-T02 | Between 7 AM and midnight (17 hours total), how many hours are public transportation services available? | Between 7 AM and midnight (17 hours total), how many hours are public transportation services available? | Transit Provider | 2 | | 0 | 8 |
| R-T03 | How much of your region is served by public para-transit? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | GIS Transit Provider Para-Transit Provider | 3 | | 0 | 12 |
| R-T04 | From 7 AM to midnight (17 hours total), how many hours is public para- transit service available? | 0=no service 1=between 1 and 6 hours 2=between 7 and 12 hours 3=fixed service all hours 4=fixed AND on demand service all hours | Transit Provider Para-Transit Provider | 2 | | 0 | 8 |
| R-T05 | What percentage of non-para-transit public transportation is outfitted for boarding and disembarking by people with disabilities? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | Transit Provider | 2 | | 0 | 8 |
| R-T06 | To what extent does the local para-transit service use computer- assisted scheduling and dispatching (CASD) technology? | 0=none 1=basic CASD system 2=basic mobile data terminal (MDT) 3=advanced mobile data computer (MDC) 4=Automated Vehicle Locator and/or CASD, MDT, MDC | Transit Provider | 1 | | 0 | 4 |
| R-T07 | To what extent is route schedule information available, beyond print schedules? | 0=no alternate form 1=automated phone service 2=website with schedule and map 3=website with interactive route planning 4=multiple alternative forms | Transit Provider | 1 | | 0 | 4 |

Regional Checklist

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|----------------------|----------|---|---|--|---------------------|-------|-------------------|-------------------|
| Auto Transportation | R-A01 | Does your region have a commuter ride matching service? | 0=none 1=informal 2=paper and phone matching service 3=paper, phone, online matching service 4=paper, and phone and online same day matching service | Commuter- Matching Service Department of Transportation (VDOT) Planning District Commission | 3 | | 0 | 12 |
| Bicycling | R-B01 | To what extent is your region covered by a complete and connected bike lane network? | 0=no bike lanes 1=intermittent on major roads - none on minor rds 2=intermittent on most roads 3=complete on major roads - intermittent on minor rds 4=complete on all roads | Fieldwork Department of Transportation (VDOT) | 4 | | 0 | 16 |
| Housing Affordabilty | R-AF01 | What percentage of population under 80% of median income pay 50% or more for housing? | 0=none 1=76% to 100% 2=51% to 75% 3=26% to 50% 4=0% to 25% | Census Data Housing Authority | 4 | | 0 | 16 |
| | R-AF02 | What percentage of applicants in your region received a Housing Choice Voucher (in the last 5 years OR over the lifetime of the program) ? | 0=none 1=1% to 5% 2=6% to 10% 3=11% to 15% 4=16% or greater | Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |
| | R-AC01 | What resources are available to retrofit owner-occupied housing to be accessible? | 0=no resources 1=private funds 2=local public funds 3=state public funds 4=multiple types of funding sources | Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |

Regional Checklist

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|-----------------------|----------|--|---|--|---------------------|-------|-------------------|-------------------|
| Housing Accessibility | R-AC02 | To what extent has your jurisdiction adopted visitability standards for home owner and rental units? | 0=no standards 1=codes on a voluntary basis 2=codes for new development only 3=codes for new development and retrofits 4=codes and enforcement all housing | Housing Authority Housing Non- Profit Organizations Building Code THA Accessibility Guidelines | 1 | | 0 | 4 |
| | R-AC03 | What percentage of applicants have received a Housing Choice Voucher (in the last 5 years OR over the lifetime of the program) ? | 0=none 1=1% to 5% 2=6% to 10% 3=11% to 15% 4=16% or greater | Zoning Department Planning Department Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |
| | R-AC04 | What form of training in ADA and Fair Housing requirement approvals is required of plan reviewers and inspectors in your region? | 0=no training 1=one-time basic certification 2=basic certification and 5 year renewals 3=advanced one-time certification 4=advanced certification and 5 year renewals | Zoning Department Planning Department Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |
| TOTAL | | TOTAL for Regional Checklist | | | | | 0 | 180 |

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|-----------------|----------|--|---|--|---------------------|-------|-------------------|-------------------|
| Physical access | S-PA01 | For people with disabilities in your study area, how would you rate the accessibility of museums, libraries, parks and recreation facilities? | 0=non-existent 1=poor 2=fair 3=good 4=excellent | Fieldwork THA Accessibility Guidelines | 3 | | 0 | 12 |
| | S-PA02 | How would you rate the availability of affordable health, support and social services in this area? | 0=non-existent 1=poor 2=fair 3=good 4=excellent | Fieldwork THA Accessibility Guidelines | 4 | | 0 | 16 |
| | S-PA03 | How would you rate the physical accessibility of shopping and employment centers in your study area? | 0=non-existent 1=poor 2=fair 3=good 4=excellent | Fieldwork Comprehensive Plan Existing Land Use THA Accessibility Guidelines | 4 | | 0 | 16 |
| Transit | S-T01 | Within your study area, what percentage of the population is located within 1/4 mile of bus stops? | 2=26% to 50% | Transit Provider GIS map | 2 | | 0 | 8 |
| | S-T02 | Are people at transit stops protected from inclement weather? | 0=no shelter 1=overhead awning 2=two-sided shelter 3=three-sided shelter 4=fully enclosed shelter | Transit Provider Fieldwork | 2 | | 0 | 8 |
| | S-T03 | What percentage of transit stops in your study area have benches for waiting passengers? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | Transit Provider Fieldwork | 2 | | 0 | 8 |
| | S-T04 | What percentage of transit stops in your study area have posted visible and legible signage? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | Transit Provider Fieldwork | 2 | | 0 | 8 |

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|---------------------|----------|--|--|---|---------------------|-------|-------------------|-------------------|
| | S-T05 | How well is route schedule signage maintained at bus stops and on buses in your study area? | 0=no signage 1=faded at 76% to 100% of stops 2=faded at 51% to 75% of stops 3=faded at 26% to 50% of stops 4=faded at 0% to 25% of stops | Transit Provider Fieldwork | 2 | | 0 | 8 |
| Auto Transportation | S-A01 | In your study area, is there a complete parallel road network adjacent to primary travel corridors? | 0=none 1=intermittent only 2=substantially complete in most congested areas 3=complete network on 50% of corridors 4=complete on all corridors | Department of Transportation (VDOT) Planning Department Planning District Commission | 4 | | 0 | 16 |
| | S-A02 | What is the street grid density (street centerline miles per square mile) of your study area? | 0=1-9 centerline miles per square mile 1=10-19 centerline miles per square mile 2=20-29 centerline miles per square mile 3=30-39 centerline miles per square mile 4=40 or more centerline miles per square mile | GIS Street Centerline Data Department of Transportation (VDOT) Planning Department Planning District Commission | 4 | | 0 | 16 |
| | S-A03 | What types of control options are installed or available on traffic lights in your study area? | 0=none 1=magnetic strip 2=synchronized timer 3=cameras 4=cameras, magnetic strips and timers | Department of Transportation (VDOT) Planning Department Planning District Commission | 3 | | 0 | 12 |
| | S-A04 | What percent of metropolitan average VMT (Vehicle Miles Traveled) per capita is exhibited within the TAZ (Traffic Analysis Zone) that most closely overlaps your study area? | 0=greater than 119% 1=between 100-119% 2=between 80-99% 3=between 60-79% 4=less than 60% | Department of Transportation (VDOT) Planning Department Planning District Commission | 1 | | 0 | 4 |

| Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|----------|---|--|---|---------------------|-------|-------------------|-------------------|
| S-A05 | What percentage of Park and Ride lots in your study area are located at major intersections? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | Commuter- Matching Service Department of Transportation (VDOT) Fieldwork Planning District Commission | 2 | | 0 | 8 |
| S-A06 | What amenities are available at Park and Ride lots in your study area? | 0=none 1=phone 2=phone, benches 3=phone, shelter with benches 4=phone, shelter with benches, bike racks | Commuter- Matching Service Department of Transportation (VDOT) Fieldwork Planning District Commission | 1 | | 0 | 4 |
| S-A07 | What percentage of Park and Ride Lots in your study area have accessible parking for people with disabilities? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | Commuter- Matching Service Department of Transportation (VDOT) Fieldwork Planning District Commission | 4 | | 0 | 16 |
| S-A08 | What is the scope of maintenance of Park and Ride Lots in your study area? | 0=none 1=minor repairs annually 2=moderate repairs annually 3=major repairs annually 4=all repairs annually | Commuter- Matching Service Department of Transportation (VDOT) Fieldwork Planning District Commission | 1 | | 0 | 4 |

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|------------|----------|---|--|--|---------------------|-------|-------------------|-------------------|
| | S-A09 | What is the ratio of Park and Ride Lots to miles of public roads in your study area? | 0=no lots 1=1:400 2=1:300 3=1:200 4=1:100 | GIS Commuter- Matching Service Department of Transportation (VDOT) Fieldwork Planning District Commission | 2 | | 0 | 8 |
| Pedestrian | S-P01 | What percentage of your study area is covered by a complete and connected sidewalk network? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | GIS Transit Provider Fieldwork | 4 | | 0 | 16 |
| | S-P02 | In your study area, what percentage of sidewalks are the following widths? | 0=no sidewalks 1=50% of sidewalks are at least 3 feet wide 2=100% of sidewalks are at least 3 feet wide 3=50% of sidewalks are at least 6 feet wide 4=100% of sidewalks are at least 6 feet wide | Fieldwork | 3 | | 0 | 12 |
| | S-P03 | To what extent are pedestrians on sidewalks protected from automobiles in your study area? | Please refer to Checklist Photos "Sidewalks" | Fieldwork | 2 | | 0 | 8 |
| | S-P04 | What is the condition of the sidewalk network in your study area? | 0=no sidewalks 1=Poor 2=Fair 3=Good 4=Excellent | Fieldwork Department of Public Works Department of Transportation (VDOT) | 3 | | 0 | 12 |
| | S-P05 | In your study area, to what extent are ramps and curb cuts connected to sidewalks? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | Fieldwork Department of Public Works Department of Transportation (VDOT) | 4 | | 0 | 16 |

| Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|----------|--|---|---|---------------------|-------|-------------------|-------------------|
| S-P06 | In your study area, to what extent are curb- cuts and ramps accessible to people with disabilities? | Please refer to Checklist Photos "Curb-Cuts" | Fieldwork Department of Public Works Department of Transportation (VDOT) | 4 | | 0 | 16 |
| S-P07 | What is the frequency of bench locations along the sidewalk network in your study area? | 0=none 1=one per mile 2=one per each 3/4 mile 3=one per each 1/2 mile 4=one per each 1/4 mile | Fieldwork Department of Transportation (VDOT) | 2 | | 0 | 8 |
| S-P08 | In your study area, what level of quality do crosswalks achieve? | See Walking - Level of Quality in the Appendices section: 0=Hall of Shame 1=Poor 2=Fair 3=Good 4=Excellent or Exemplary | Fieldwork Department of Transportation (VDOT) | 4 | | 0 | 16 |
| S-P09 | What percentage of the sidewalk network in your study area is free of obstacles such as road signs, utility poles, mailboxes? | 0=none 1=1% to 25% 2=26% to 50% 3=51% to 75% 4=76% to 100% | Fieldwork Department of Transportation (VDOT) | 3 | | 0 | 12 |
| S-P10 | What type of crosswalk amenities are available at traffic- light intersections in your study area? | 0=none 1=stripped crosswalk 2=standard walk/don't walk signals 3=extended time walk/don't walk signals 4=count-down clock or audible timer signals | Fieldwork Department of Public Works Department of Transportation (VDOT) | 1 | | 0 | 4 |

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|-----------------------|----------|---|--|---|---------------------|-------|-------------------|-------------------|
| | S-P11 | Within your study area, what best describes the urban streetscape? | 0=80% of all bldgs less than 26 feet from front property line 1=50% of all bldgs less than 19 feet from front property line 2=50% of mixed use and non-resid bldgs at property line 3=All non-resid. bldg facades 33% transparent at ground level 4=No blank walls of longer than 50 feet occur along sidewalks | Fieldwork Department of Public Works Department of Transportation (VDOT) | 1 | | 0 | 4 |
| Bicycling | S-B01 | To what extent is your study area covered by a complete and connected bike lane network? | 0=no bike lanes 1=intermittent on major roads – none on minor rds 2=intermittent on most roads 3=complete on major roads–intermittent on minor rds 4=complete on all roads | Fieldwork Bicycling Advocacy Groups Department of Transportation (VDOT) | 3 | | 0 | 12 |
| | S-B02 | To what extent are the bike lanes in your study area free of obstacles such as road signs, grates, manhole covers? | 0=no bike lanes 1=many obstacles, snow and debris not cleared 2=few obstacles, snow and debris not cleared 3=few obstacles, snow and debris cleared 4=grade-separated lanes, snow and debris cleared | Fieldwork Bicycling Advocacy Groups Department of Transportation (VDOT) | 2 | | 0 | 8 |
| Housing Affordability | S-AF01 | How adequate are resources to assist people with down payment and closing costs for home purchase in your study area? | 0=no programs 1=insufficient to meet needs 2=turn away 50% of applicants 3=turn away 25% of applicants 4=can serve all that apply | Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|-----------------------|----------|--|--|---|---------------------|-------|-------------------|-------------------|
| | S-AF02 | What is the ratio of mainstream vouchers to people with disabilities in the study area? | 0=none 1=1:100 2=1:75 3=1:50 4=1:25 or better | Housing Authority Housing Non- Profit Organizations THA Accessibility Guidelines | 1 | | 0 | 4 |
| | S-AF03 | How many people in your study area are currently on the Housing Choice Voucher waiting list? | 0=waiting list is closed 1=0 to 25 2=26 to 50 3=51 to 75 4=76 or more | Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |
| | S-AF04 | How often is the Housing Choice Voucher waiting list open to people in your study area? | 0=waiting list is closed 1=open as new properties open 2=open annual 3=open quarterly 4=always open | Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |
| | S-AF05 | What percentage of applicants received a Housing Choice Voucher (in the last 5 years OR over the lifetime of the program) ? | 0=none 1=1% to 5% 2=6% to 10% 3=11% to 15% 4=16% or greater | Housing Authority Housing Non- Profit Organizations | 1 | | 0 | 4 |
| Housing Accessibility | S-AC01 | Within your study area, what percentage of dwelling units within multi-family housing built in the last 5 years are accessible to people with disabilities? | 2=26% to 50% 3=51% to 75% | Housing Authority Housing Non- Profit Organizations Fieldwork | 1 | | 0 | 4 |
| Housing Diversity | S-D01 | What is the score of your study area, using the Simpson Diversity Index $(1-(n/N)^2)$ where n = total dwellings in a single category, and N = total # dwellings in ALL categories. | 0=0.39 or less 1=0.4-0.49 2=0.5-0.59 3=0.6-0.69 4=0.7 or above | Housing Authority Housing Category Guidelines | 1 | | 0 | 4 |

| | Item No. | Description | Scoring guidance | Resources | Weighting Factor | Score | Weighted Score | Possible Score |
|-------|----------|-----------------------------------|------------------|-----------|---------------------|-------|-------------------|-------------------|
| TOTAL | | TOTAL for Study Area Checklist | | | | | 0 | 316 |

Transit Stops.



4: Stop contains a pull-out for buses, shelter and adequate distance from the curb.



3: Stop contains a shelter, decent distance from the curb



2: Stop contains a pull-out, lack of shelter or bench.



1: Stop contains a bench and a bike lane providing a buffer, lacks shelter or a pull-out.



0: Stop lacks any protection from traffic.

Sidewalks



4: Superb protection from autos; planting strip, and raised curb present.



3: Good protection from autos; above average size planting strip and raised curb.



2: Fair protection from autos; small planting strip, raised curb.



1: Poor protection from autos; lack of planting strip, only contains a raised curb.



0: No protection from autos; lack of curb, planting strip or other buffers.

Curb-Cuts



4: Proper texture for sight impaired, turning radius for mobility impaired.



3: Good texture for sight impaired, good gradient for mobility impaired. Lacks proper turning radius for wheelchairs.



2: Lacks connecting curb ramps for crosswalks. Good texture for sight impaired and decent turning radius.



1: Proper texture for sight impaired. Lacks turning radius for wheelchairs.



0: Lacks curb-cut, texture and turning radius.