



Intergenerational Community Assessment Tool

Instruction to the iCAT toolkit

The iCAT toolkit is designed to provide practical guidance for policymakers and planning/design professionals who are interested in creating or retrofitting community environments to promote social interactions across different age groups and healthy aging in place. It includes four individual instruments that can be used for different purposes, users, and projects. The iCAT-checklist is a checklist of guiding principles for designing “NEW” intergenerational places. The other three tools (i.e. iCAT-community, iCAT-park, iCAT-street) are intended to guide the assessment of “EXISTING” intergenerational communities or sites. The iCAT-community includes items related to third places, housing, walkability, aesthetics, and ambient environment that are broadly relevant to the larger community environment. The two site-level tools, iCAT-park and iCAT-street, include more detailed site-specific items and individual amenities. These tools are not mutually exclusive, and multiple instruments can be used for the same project/place. The current version of the iCAT toolkit is developed for internal assessments. The final version will be developed upon completion of internal assessments and peer-reviewed publications, and it made available to the public via an open study website.

Based on the type and scope of your project, please select the proper iCAT tool(s).

For designing a “NEW” community or site:



For evaluating an “EXISTING” community or site:



General Questions

01 Your name:

02 Your role/profession (landscape architect, urban planner, policy maker, etc.):

03 Community or site location (city, state):

04 Name of the community or site (if it is named):

05 Size of the community or site:

06 Date:

Time:

AM or PM (circle one)



Provide Diverse Housing Options and Locate Major Destinations within Easy Walking Distance.

This community provides diverse housing options (e.g. cohousing, accessory or ancillary dwelling unit, multigenerational home, senior apartment) to support intergenerational living.

This community has affordable housing available to older adults and people with disabilities.

This community includes small residential clusters, such as pocket neighborhoods, with shared outdoor open spaces to support social interactions across different generations.

Generation-specific places (e.g. child care centers and senior housing or nursing home) are located within a walkable distance from each other.

Major destinations in this community (e.g. park, shop, and school) are located within a walkable distance from residences.



Ensure Universal Access to Buildings, Facilities, and Outdoor Spaces.

Buildings, facilities, and outdoor spaces are:

Accessible (e.g. walkable distance from residences, meeting ADA guidelines, following universal design principles)

Easy to navigate (e.g. clear roadway hierarchy, visual cue, landmark, clear and well placed signage)



Build Playful Places for People of All Ages.

This community has an adequate number of the following places available to support social interactions.

Indoor public places (e.g. church, restaurant, coffee shop, ice cream store, grocery store, library, book store, community center)

Outdoor public places (e.g. park, trail, community garden, plaza, playground, school campus, alley, cul-de-sac, bus stop/shelter)

Outdoor semi-private spaces (e.g. common space within an apartment complex, shared courtyard, community garden, community swimming pool)

Outdoor resting places (with shade, bench with armrest and backrest, table, etc.)

This community has places (e.g. park, community center, library, book store, senior center, school, playground, churches) supporting program-based intergenerational interactions (e.g. intergenerational gardening, intergenerational learning, intergenerational exercise).



Make Public Transportation Accessible to All.

This community has adequate transit services (e.g. bus, light rail, bus rapid transit) available for people of all ages and abilities.

All public places are accessible by public transport, with good connection and well-marked routes and vehicles.

Transport stops and stations are conveniently located and accessible.

Transport stops are designed to be safe, clean, well-lit, and well-maintained, with adequate seating and shelter.



Make Streets and Sidewalks Safe, Walkable, and Sociable.

This community has small street blocks.

This community has stop signs, marked crosswalks, and pedestrian signals to ensure safe crossing by people of all ages and abilities.

Street signs are well-placed and accessible for people of all ages and abilities (e.g. large font, visual cue, braille, placement, and height).

There are benches available for resting while walking on most streets.

The street has the following elements to promote safe use and mobility for people of all ages and abilities.

Traffic calming device (e.g. median island, narrow street, curb extension, speed table/hump)

Sidewalks or pedestrian pathways

Smooth and leveled sidewalk surface

Sufficient street trees providing shade

Multi-purpose trails or paths that are off-road and safe from traffic

Landscaped buffers



Enhance a Sense of Place and Aesthetics.

There are a lot of mature trees.

There are many attractive natural sights (e.g. landscape, view).

There are many other interesting things (e.g. historic building, landmark, public art) to look at.

There are many pleasant sensory attractions (e.g. nature sound, fragrant tree/flower).



Promote Outdoor Thermal Comfort.

The community design (e.g. building, amenity, and space layout) contributes to improving thermal comfort of pedestrians, especially children and older adults.

The vegetation and materials used for infrastructure or amenities help mitigate potential negative impacts of local weather conditions (e.g. heat, cold, rain, humidity, snow).



Build Safe Environments through Design.

Pedestrians and cyclists can be easily seen by people:

from front porches or yards of residential properties

inside the building via windows or door

using other public places nearby

There is good visibility which enhances both navigation and safety in this community.

Streets and public places are well lit at night.

OVERALL RATING On a scale of 1-10, how would you rate the overall community characteristics?

		Low	—————▶							High
1	Environmental Support for Intergenerational Interactions									
2	Walkability									
3	Safety									
4	Thermal Comfort									
5	Well-maintained Environment									
6	Aesthetics									

A. THIRD PLACES

		Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1	This community has an adequate number of the following places available to support social interactions.					
1a	Indoor public places (e.g. church, restaurant, coffee shop, ice cream store, grocery store, library, book store, community center)					
1b	Outdoor public places (e.g. park, trail, community garden, plaza, playground, school campus, alley, cul-de-sac, bus stop/shelter)					
1c	Outdoor semi-private spaces (e.g. common space within an apartment complex, shared courtyard, community garden, community swimming pool)					
1d	Outdoor resting places (with shade, bench with armrest and backrest, table, etc.)					
2	Outdoor third places are:					
2a	Safe (e.g. well-lit, easily visible, free from stray dog, hostile stranger, and fall hazard).					
2b	Accessible (e.g. walkable distance from residence, meeting ADA guidelines, following universal design principles).					
2c	Easy to navigate (e.g. clear roadway hierarchy, visual cue, landmark, clear and well placed signage).					
3	Generation-specific places (e.g. child care center and seniors' housing or nursing home) are located within a walkable distance from each other.					
4	This community has places (e.g. park, community center, library, book store, senior center, school, playground, church) that support program-based intergenerational interactions (e.g. intergenerational gardening, intergenerational learning, intergenerational exercise).					

B. HOUSING

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 This community provides diverse housing options (e.g. cohousing, accessory or ancillary dwelling unit, multigenerational home, senior apartment) to support intergenerational living.					
2 This community has affordable housing available to older adults and people with disabilities.					
3 Housing is well-constructed and well-maintained.					
4 This community includes small residential clusters, such as pocket neighborhoods, with shared outdoor open spaces to support social interactions across different generations.					

C. WALKABILITY

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 This community has small street blocks.					
2 This community has stop signs, marked crosswalks, and/or pedestrian signals to ensure safe crossing by people of all ages and abilities.					
3 Street and other signs are well-placed and accessible for people of all ages and abilities (e.g. large font, visual cue, braille, placement, and height).					
4 Most streets have sidewalks.					
5 There are benches available for resting while walking on most streets.					
6 Sidewalks have enough street trees providing shade.					
7 This community has multi-purpose trails or paths that are off-road and safe from traffic.					
8 This community has adequate transit services (e.g. bus, light rail, bus rapid transit) available for people of all ages and abilities.					

D. AESTHETICS

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 There are a lot of mature trees.					
2 There are many attractive natural sights (e.g. landscape, view).					
3 There are many other interesting things (e.g. historic building, landmark, public art) to look at.					
4 There are many pleasant sensory attractions (e.g. nature sound, fragrant tree/flower).					
5 This community is generally free from litter.					
6 This community is well-maintained.					

E. AMBIENT ENVIRONMENT

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 The community design (e.g. building, amenity, and space layout) contributes to improving thermal comfort of pedestrians, especially children and older adults.					
2 The vegetation and materials (e.g. porous pavers, green infrastructure) used for infrastructure or amenities help mitigate potential negative impacts of local weather conditions (e.g. heat, cold, rain, humidity, snow).					
3 This community is generally free from excessive noise.					
4 Pedestrians are NOT exposed to excessive exhaust fumes (from car, bus, industrial land use, etc.).					

OVERALL RATING On a scale of 1-10, how would you rate the overall park characteristics?

	Low									High
1 Environmental Support for Intergenerational Interactions										
2 Walkability										
3 Safety										
4 Thermal Comfort										
5 Well-maintained Environment										
6 Aesthetics										

A. PARK PLACES AND AMENITIES

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 This park has an adequate number of the following available to support social interactions.					
1a Places (e.g. picnic area, playground, community garden, amphitheater, open field)					
1b Resting places (with shade, bench with armrest and backrest, table, etc.)					
1c Other amenities (e.g. picnic table, walking path, multi-purpose trail, exercise station, public toilet)					
2 This park is:					
2a Safe (e.g. well-lit, easily visible, free from stray dog, hostile stranger, and fall hazard).					
2b Accessible (e.g. walkable distance from residence, meeting ADA guidelines, following universal design principles).					
2c Easy to navigate (e.g. clear roadway hierarchy, visual cue, landmark, clear and well placed signage).					
3 Generation-specific places/amenities (e.g. playground, covered seating area, senior-friendly exercise spaces) are located within a walkable distance from each other.					
4 This park has places (e.g. playground, community garden that support program-based intergenerational interactions (e.g. intergenerational gardening, intergenerational learning during outdoor play, intergenerational exercise program).					

B. ACCESSIBILITY

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 This park is well-connected with nearby destinations such as shops and schools.					
2 Nearby streets have pedestrian and bicycle facilities (e.g. sidewalk, bike lane, trail) to provide easy access to this park by people of all ages and abilities.					

C. AESTHETICS

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 There are a lot of mature trees.					
2 There are many attractive natural sights (e.g. landscape, view, flower, wildlife).					
3 There are many other interesting things (e.g. pavilion, landmark, public art) to look at.					
4 There are many pleasant sensory attractions (e.g. nature sound, fragrant tree/flower).					
5 This park is generally free from litter.					
6 This park is well-maintained.					

D. AMBIENT ENVIRONMENT

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 The park design (e.g. building, amenity, and space layout) contributes to improving thermal comfort of park users, especially children and older adults.					
2 The vegetation and materials (e.g. porous paver, green infrastructure) used for park amenities help mitigate potential negative impacts of local weather conditions (e.g. heat, cold, rain, humidity, snow).					
3 This park is generally free from excessive noise.					
4 Park users are NOT exposed to excessive exhaust fumes (from car, bus, etc.).					

OVERALL RATING On a scale of 1-10, how would you rate the overall street characteristics?

	Low								High
1 Environmental Support for Intergenerational Interactions									
2 Walkability									
3 Safety									
4 Thermal Comfort									
5 Well-maintained Environment									
6 Aesthetics									

A. SIDEWALKS AND AMENITIES

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 This street has an adequate number of the following available to support social interactions.					
1a Places (e.g. plaza, street cafe, street vendor)					
1b Resting places (with shade, bench with armrest and backrest, table, etc.)					
1c Other amenities (e.g. sidewalk, walking trail, bike lane, exercise station, transit station)					
2 This street is:					
2a Safe (e.g. well-lit, easily visible, free from stray dog, hostile stranger, and fall hazard).					
2b Accessible (e.g. meeting ADA guidelines, following universal design principles).					
2c Easy to navigate (e.g. clear and well placed signage, visual cue).					
3 Places and amenities (e.g. playground, covered seating area, senior-friendly exercise space) accommodating different generations are closely located along this street.					

B. STREET DESIGN

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 This street has the following to promote safe use and mobility for people of all ages and abilities.					
1a Traffic calming devices (e.g. median island, narrow street, curb extension, speed table/hump)					
1b Marked crosswalks					
1c Sidewalks or pedestrian walkways					
1d Smooth and leveled sidewalk surface					
1e Sufficient street trees providing shade					
1f Multi-purpose trails or paths that are off-road and safe from traffic					
1g Landscaped buffers					

C. AESTHETICS

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 There are a lot of mature trees on this street.					
2 There are many attractive natural sights (e.g. landscape, view) along this street.					
3 There are many other interesting things (e.g. historic building, landmark, public art) to look at.					
4 There are many pleasant sensory attractions (e.g. nature sound, fragrant tree/flower) along this street.					
5 This street is generally free from litter.					
6 This street is well-maintained.					
7 Buildings and amenities along this street are well-maintained.					

D. AMBIENT ENVIRONMENT

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 The street design (e.g. layout, orientation, width) contributes to improving thermal comfort of pedestrians, especially children and older adults.					
2 The vegetation and materials (e.g. porous paver, green infrastructure) used for street amenities help mitigate potential negative impacts of local weather conditions (e.g. heat, cold, rain, humidity, snow).					
3 Pedestrians on this street are NOT exposed to excessive exhaust fumes (from car, bus, etc.).					

E. TRAFFIC SAFETY

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure or N/A
1 Pedestrians are NOT exposed to excessive amounts of vehicular traffic along this street.					
2 The speed of traffic on this street is usually slow (20mph).					
3 Most drivers do NOT exceed the posted speed limit while driving on this street.					



Intergenerational Community Assessment Tool

For questions or comments,
please contact Dr. Sinan Zhong at zsn198838@tamu.edu.

SOURCE AND EVIDENCE FOR EACH ITEM

ITEM	SOURCE	EVIDENCE
iCAT-checklist		
Provide Diverse Housing Options and Locate Major Destinations within Easy Walking Distance.		
1	New item	LAF Expert Interview; LAF Expert Survey
2	New item	LAF Expert Interview
3	New item	LAF Expert Survey
4	New item	LAF Expert Interview
5	New item	LAF Expert Interview
Ensure Universal Access to Buildings, Facilities, and Outdoor Spaces.		
1	New item	LAF Expert Interview
2	New item	LAF Expert Interview
Build Playful Places for People of All Ages.		
1a	New item	LAF Expert Interview; Mehta & Bosson, 2010; Sugiyama et al., 2023
1b	New item	LAF Expert Interview; Sugiyama et al., 2023
1c	New item	LAF Expert Interview
1d	New item	LAF Expert Interview
2	New item	LAF Expert Interview
Make Public Transportation Accessible to All.		
1	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
2	Item directly from WHO	WHO, 2007
3	Item directly from WHO	WHO, 2007
4	Item directly from WHO	WHO, 2007
Make Streets and Sidewalks Safe, Walkable, and Sociable.		
1	New item	LAF Expert Interview
2	New item	Zhong, 2020
3	New item	WHO, 2007
4	New item	Zhong, 2020
5a	New item	LAF Expert Interview; LAF Expert Survey; WHO, 2007
5b	New item	Bardenhagen & Rodiek, 2015; LAF Expert Survey
5d	New item	Bardenhagen & Rodiek, 2015
5d	New item	LAF Expert Interview; LAF Expert Survey
5e	New item	LAF Expert Survey
5f	New item	LAF Expert Survey
Enhance a Sense of Place and Aesthetics.		
1	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
2	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
3	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
4	New item	LAF Expert Interview
Promote Outdoor Thermal Comfort.		
1	New item	LAF Expert Interview
2	New item	LAF Expert Interview

SOURCE AND EVIDENCE FOR EACH ITEM

ITEM	SOURCE	EVIDENCE
Build Safe Environments through Design.		
1a	New item	LAF Expert Interview
1b	New item	LAF Expert Interview
1c	New item	LAF Expert Interview
2	New item	LAF Expert Interview
3	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
iCAT-community		
OVERALL RATING		
1	New item	LAF Expert Interview; LAF Expert Survey
2	New item	Zhong, 2020
3	New item	Zhong, 2020
4	New item	Zhong, 2020
5	New item	LAF Expert Interview
6	New item	Zhong, 2020
A. THIRD PLACES		
1a	New item	LAF Expert Interview; Mehta & Bosson, 2010; Sugiyama et al., 2023
1b	New item	LAF Expert Interview; Sugiyama et al., 2023
1c	New item	LAF Expert Interview
1d	New item	LAF Expert Interview
2a	Item adapted from NEWS	Cerin et al., 2006; LAF Expert Interview; Zhong, 2020
2b	New item	LAF Expert Interview
2c	New item	LAF Expert Interview
3	New item	LAF Expert Interview
4	New item	LAF Expert Interview
B. HOUSING		
1	New item	LAF Expert Interview; LAF Expert Survey
2	New item	LAF Expert Interview
3	Item adapted from WHO	WHO, 2007
4	New item	LAF Expert Survey
C. WALKABILITY		
1	New item	LAF Expert Interview
2	New item	Zhong, 2020
3	New item	WHO, 2007
4	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
5	New item	Zhong, 2020
6	New item	LAF Expert Interview; LAF Expert Survey
7	New item	LAF Expert Survey
8	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020

SOURCE AND EVIDENCE FOR EACH ITEM

ITEM	SOURCE	EVIDENCE
D.AESTHETICS		
1	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
2	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
3	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
4	New item	LAF Expert Interview
5	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
6	New item	LAF Expert Interview
E.AMBIENT ENVIRONMENT		
1	New item	LAF Expert Interview
2	New item	LAF Expert Interview
3	New item	LAF Expert Interview
4	Item directly from NEWS	Cerin et al., 2006; Zhong, 2020
iCAT-park		
OVERALL RATING		
1	New item	LAF Expert Interview; LAF Expert Survey
2	New item	Zhong, 2020
3	New item	Zhong, 2020
4	New item	Zhong, 2020
5	New item	LAF Expert Interview
6	New item	Zhong, 2020
A.PARK PLACES AND AMENITIES		
1a	New item	LAF Expert Interview
1b	New item	LAF Expert Interview
1c	New item	LAF Expert Interview
2a	Item adapted from NEWS	Cerin et al., 2006; LAF Expert Interview
2b	New item	LAF Expert Interview
2c	New item	LAF Expert Interview
3	New item	LAF Expert Interview
4	New item	LAF Expert Interview
B.ACCESSIBILITY		
1	New item	LAF Expert Interview
2	New item	LAF Expert Survey
C.AESTHETICS		
1	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
2	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
3	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
4	New item	LAF Expert Interview
5	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
6	New item	LAF Expert Interview

SOURCE AND EVIDENCE FOR EACH ITEM

ITEM	SOURCE	EVIDENCE
D.AMBIENT ENVIRONMENT		
1	New item	LAF Expert Interview
2	New item	LAF Expert Interview
3	New item	LAF Expert Interview
4	Item directly from NEWS	Cerin et al., 2006; Zhong, 2020
iCAT-street		
OVERALL RATING		
1	New item	LAF Expert Interview; LAF Expert Survey
2	New item	Zhong, 2020
3	New item	Zhong, 2020
4	New item	Zhong, 2020
5	New item	LAF Expert Interview
6	New item	Zhong, 2020
A.SIDEWALKS AND AMENITIES		
1a	New item	LAF Expert Interview
1b	New item	LAF Expert Interview
1c	New item	LAF Expert Interview
2a	Item adapted from NEWS	Cerin et al., 2006; LAF Expert Interview
2b	New item	LAF Expert Interview
2c	New item	LAF Expert Interview
3	New item	LAF Expert Interview
B.STREET DESIGN		
1a	New item	LAF Expert Interview; LAF Expert Survey; WHO, 2007
1b	New item	LAF Expert Survey; WHO, 2007
1c	New item	Bardenhagen & Rodiek, 2015; LAF Expert Survey
1d	New item	Bardenhagen & Rodiek, 2015
1e	New item	LAF Expert Interview; LAF Expert Survey
1f	New item	LAF Expert Survey
1g	New item	LAF Expert Survey
C.AESTHETICS		
1	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
2	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
3	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
4	New item	LAF Expert Interview
5	Item directly from NEWS	Cerin et al., 2006; LAF Expert Survey; Zhong, 2020
6	New item	LAF Expert Interview
7	New item	LAF Expert Interview

SOURCE AND EVIDENCE FOR EACH ITEM

ITEM	SOURCE	EVIDENCE
D.AMBIENT ENVIRONMENT		
1	New item	LAF Expert Interview
2	New item	LAF Expert Interview
3	Item directly from NEWS	Cerin et al., 2006; Zhong, 2020
E.TRAFFIC SAFETY		
1	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
2	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020
3	Item adapted from NEWS	Cerin et al., 2006; Zhong, 2020

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