### PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

For Planning Commission Meeting of September 6, 2023

SUBJECT: Amendments to Unified Development Code (Chapter 55 of the Code of the City of Ann Arbor) related to the TC1 Transit Corridor district

## PROPOSED CITY PLANNING COMMISSION MOTION

The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve amendments to Chapter 55, Unified Development Code, Sections 5.10.2 and 5.17 Table 5.17-4:

- To establish Transit Corridor as a Street Type Designation on the Street Type Designation Map referenced and made a part of the chapter in Section 5.10.2
- To provide required front setbacks based on Street Type Designation in the TC1 district (Section 5.17, Table 5.17-4);
- To clarify parameters where such a setback would apply (Section 5.17, Table 5.17-4).

#### **STAFF RECOMMENDATION:**

Staff recommend **approval** of the proposed amendments to the Unified Development Code to establish a Transit Corridor street type designation and provide required front setbacks when fronting a Transit Corridor in the TC1 Transit Corridor district.

#### SUMMARY:

Amendments to Section 5.10.2 and Section 5.17 of the Unified Development Code are proposed in response to City <u>Council Resolution R-22-390</u>, calling for the City Planning Commission to evaluate and recommend amendments to the TC1 district to incorporate limited automobile-related uses and address constraints of existing narrow rights-of-way.

The proposed amendments include establishing Transit Corridor as a Street Type Designation and amending the new minimum and maximum required front setback depending on street type designation in the TC1 district provided in Table 5.17-4, as well as a new footnote to describe the curb line to building measurement which would apply to these setbacks. The current minimum and maximum required front setbacks for parcels not on a Transit Corridor street type remain unchanged.

#### BACKGROUND:

#### **City Council Resolution R-22-390**

City Council directed the Planning Commission to evaluate and recommend amendments to the TC1 (Transit Corridor) district to address constraints of existing narrow rights-of-way by Resolution R-22-390 passed on December 5, 2022 (*excerpt*):

Whereas, The addition of housing near transit corridors increases opportunities for residents to access more destinations through modes and trips that reduce or eliminate vehicular miles traveled;

Whereas, The space between curb and lot line along Stadium/Maple corridor has constrained widths (i.e. 7 feet in many areas) and is currently inadequate for facilitating comfortable nonmotorized and transit travel;

Whereas, Ann Arbor desires to provide safe and comfortable pedestrian environments, as well as supportive public amenities to increase walking and transit use (e.g. bus shelters, bike racks, appropriately sized sidewalks, street trees, benches);

RESOLVED, That the Ann Arbor City Council directs the Planning Commission to evaluate and recommend amendments to the TC1 Zoning District or Unified Development Code (UDC) that:

- Incorporate limited automobile-related uses into the TC1 District, excluding drive throughs and gas stations
- Address constraints of existing narrow rights of way

# Transit Corridor (TC1) District

The TC1 district is the most recently added zoning district to the Unified Development Code, adopted on July 6, 2021 (Ordinance No. ORD-21-19). It was created to address a variety of related goals expressed in the Comprehensive Plan, such as: sustainability; housing access, affordability, and choice; reducing vehicle miles traveled; relieving vehicle congestion; supporting transit service; and supporting and expanding nonmotorized transportation.

The intent of the TC1 district is provided in Section 5.12.9, outlining the geographic characteristics, goals and benefits of the zoning district:

- Located along existing transit corridors with regular fixed service provided by AAATA.
- Intended to realize mixed use developments and achieve mixed use corridors.
- Aimed to support and sustain transit service as well as housing choice and affordability, sustainable development, and reduced resource and energy needs.

The TC1 district is a version of form-based code similar to the base and character overlay zoning districts applied downtown. The design-based controls of the TC1 district were crafted so new buildings and developments, regardless of uses inside the buildings and on the sites, have the density and pedestrian-oriented forms needed and desired by our community to advance our Comprehensive Plan goals.

Please see the following webpages for additional background and archived materials such as staff reports and presentation materials:

Resource	Access Link
Proposed UDC Amendment: TC1	https://www.a2gov.org/departments/planning/Pages/TC1-
Permitted Uses and	District-Amendments.aspx
Development Standards	
Proposed UDC Amendment:	https://www.a2gov.org/departments/planning/Pages/Proposed-
Create TC1 District	Transit-Oriented-Zoning-District.aspx
City-Initiated Rezoning Petition	https://www.a2gov.org/departments/planning/Pages/-City-
in State & Eisenhower Area to	Initiated-TC1-Rezoning.aspx
TC1	
City-Initiated Rezoning Petition	https://www.a2gov.org/departments/planning/Pages/City-
in West Stadium area to TC1	Initiated-TC1-RezoningStadium-Boulevard-Area.aspx
Draft Ann Arbor Downtown	https://www.a2dda.org/wp-
Street Design Manual	content/uploads/2023/01/A2DDA StreetDesignManual 2022 D
	RAFT-Website.pdf

#### **PROBLEM STATEMENT**

City Council identified problematic situations of narrow rights-of-way (ROW) along transit corridors adjacent to TC1 zoning. The immediate issue to be addressed is ensuring that the possibilities and future needs of sidewalk space are not conflicted by new buildings in what could potentially be a future sidewalk.

- <u>Inconsistent Frontages</u>: Property lines can be unpredictable, varying based on historical development patterns, irregular property divisions, and other factors. This can result in inconsistent frontages, leading to a disjointed streetscape. In this scenario, traditional setbacks do not offer predictable outcomes.
- Front Lot Lines Close to Curbs: The status quo fails to resolve scenarios where lot lines are extremely close to or overlapping the curb. Moreover, present guidelines don't adequately address challenges related to easements, ROW permissions, and flexibility for future capital investments. Under proposed regulations, the City's setback desire is clear – 20 to 40 feet is allowed on transit corridors.

#### **PROPOSED SOLUTION**

The Required Setbacks applying to TC1 are modified in this proposal to specify Transit Corridor street type designations require a minimum of 20 feet and maximum of 40 feet, with an additional footnote (D) to clarify how the required front setback is measured. The current minimum and maximum required front setbacks for parcels not on a Transit Corridor street type remain unchanged.

This amendment would appear in the UDC under Table 5.17-4: Mixed Use Zoning District Dimensions as illustrated below (and in attached ordinance language):

	Floor Area and FAR		Open Space and Building Coverage	Required Setbacks		Height	Lot Dim	ensions	
District	Floor Area	FAR	% Lot Area	Front	Side	Rear	Feet and Stories	Area	Width
D2	None	Max: Up to 400% with premiums (Section 5.18.6), otherwise 200%	Open Space Min: 10% Building Coverage Max: 80%	See Tables 5.17-6 and 5.17-7			Min: 24 ft. and 2 Stories (B)	None	None
TC1	See Section 5.17.7	None	None	Min: 0 ft. Max: 15 ft. Transit Corridor Min: 20 ft. (D) Transit Corridor Max: 40 ft. (D) Mixed Use (A), 20 ft. Townhouses/ Apartments (A)	Min: 30 ft. when abutting R district, otherwise 0 ft.		Min: 2 Stories (B) Max: 55 ft. within 80 ft., 75 ft. between 80-300 ft., 120 ft. between 300-1000 ft., 300 ft. more than 1000 ft. from R district.	None	None

## Measuring From Curb Line Instead of Property Line

Using the curb line as a reference provides a measure that ensures there is space for pedestrian amenities at the time of development and in the future.

- <u>Predictability</u>: Measuring from the curb line adds a layer of relative predictability to our regulations, ensuring that setbacks remain consistent across different parcels and developments.
- <u>Only Applies to Transit Streets</u>: By limiting the amendments to the transit streets, the proposal aims to affect only higher activity corridors where pedestrian buffering and safety is most critical. TC1 is designed around responding to the street, and transit access. It requires primary entrances facing the transit corridor. This amendment extends that logic to the spaces in front of the building.
- <u>Improvement Over Current Standards</u>: While proposed setbacks measured from the curb line may not be a comprehensive solution, it addresses limitations inherent in the current TC1 setbacks. It doesn't provide long term capital investment certainty, but it provides the physical space for flexibility.
- <u>Precedence in Urban Planning</u>: Our approach is not without precedent. Gainesville, Florida has adopted the practice of measuring building placement from the curb line, defining desired widths by transect district and allocating space to different Sidewalk Zones.

Table V - 2: Building Form Standards within Transects.										
TRANSECT	U1	U2	U3	U4	U5	U6	U7	U8	U9	DT
E. BUILDING PLACEMENT										
min-max from curb										
min landscape/min sidewalk/min										
building frontage										
Storofront Stroot	15'-20'				15'-	20'			16'-21'	15'-20'
Storenonit Street	5'/5'/5'				5'/5	'/5'			5'/6'/5'	4'/6'/5'
Dringinal Street	17'-37'	17'-27'					17'-27'	17'-27'		
Philicipal Street	6'/6'/5'				6'/6	'/ <b>5</b> '			6'/6'/5'	6'/6'/5'
Thoroughfare	19'-100'				19'-	100'			19'-100'	19'-100'
Street	6'/6'/5'				8'/6	'/5'			8'/6'/5'	8'/6'/5'
Local Street	15'-35'				15'-	20'			16'-21'	15'-20'
Local Street	5'/5'/5'				5'/5	'/5'		,	5'/6'/5'	4'/6'/5'

Zoning code excerpt from Gainesville, Florida, showing setbacks measured as a min or max distance from curb and associated Sidewalk Zone allocations. Accessed May 2023.

### **RATIONALE FOR THE PROPOSED SOLUTION**

The pedestrian-friendly vision for TC1 assumes comfortable street space with room for large street trees, transit infrastructure and other public amenities and infrastructure. The following content discusses staff thought processes in recommending a 20 foot minimum from curb line to building face.

#### Sidewalk Zones Overview

To establish shared vocabulary, below is a description of how many cities and industry organizations conceive of and organize the space between curbs and buildings:

Sidewalk Zone	Description
Landscaping Zone,	This zone serves as a buffer between the pedestrian pathway
Furnishing Zone or	and the roadway. It typically contains street furniture, lighting,
Amenity Zone	trees, and other elements. It serves to enhance the aesthetic
	appeal of the streetscape, provide shade and seating,
	accommodate surface infrastructure, and separate
	pedestrians from moving vehicles for their comfort and safety.
Pedestrian Zone	The core walking area of the sidewalk, the pedestrian zone is
	dedicated exclusively for pedestrian movement. It should be
	free of obstructions to ensure safe passage for all users,
	including those with disabilities.
Frontage Zone	Located adjacent to building fronts, the frontage zone
	accommodates features like building entrances, outdoor
	seating, displays, and other private uses that interface with
	the public sidewalk. It acts as a transitional space between
	private properties and the pedestrian pathway, allowing
	space for door swings and activities that add life to the
	streetscape.

Some cities choose to define additional zones to express design desires, such as .5 to 2 foot Curb Zone, or an Enhancement/Buffer/Extension Zone which may occupy a parking lane for purposes of outdoor dining, bus or pedestrian crossing bulbs.



Example of Sidewalk Zone widths from Eugene, Oregon's Complete Streets Design Standards

#### Adequate Amenity Zone Width for Street Trees

Street trees are more than just a part of the City's stormwater infrastructure, they offer a range of further advantages. They can act as protective barriers, slow traffic, lower temperatures and even correlate to lower mortality and stress levels. Recent research suggests 8-10 feet is a minimum width for medium to large street trees. They need this space for the following reasons:

Objective	Relevance of Tree Objective to Expanded Sidewalk Zone
Stormwater Management	Trees are natural stormwater management systems. Their roots absorb and filter rainwater, reducing runoff and preventing pollutants from entering waterways. Leaves and branches also absorb water and intercept it before it reaches the ground. A mature tree can intercept 30-40% of rainfall <sup>1</sup> . They mitigate flooding risks and reduce costs associated with stormwater infrastructure.
Root Growth and Stability	A tree with ample space can spread its roots wide and deep, ensuring stability, height and enabling larger canopy. These factors enhance the ability of street trees to remain healthy and perform their stormwater management functions at a high level, while maintaining a safe condition for pedestrians.
	Trees with constrained root zones can become hazardous due to their susceptibility to diseases and instability. Tree roots can affect sidewalks without adequate space – causing tripping hazards and frequent concrete replacement, which further damages root health.
Pedestrian Safety and Buffering	Street trees act as natural barriers, shielding pedestrians from vehicles. This buffering provides a sense of security for those walking alongside busy roads. TC1 zoned areas are almost exclusively along large arterials with many lanes of intimidating traffic.
Traffic Calming	Street trees can narrow the perceived width of the road, slowing down drivers and making streets safer. They do this best when they can grow tall and wide. This effect aligns with Ann Arbor's 2021 "Moving Together Toward Vision Zero" plan.
Air Purification	Trees improve air quality by filtering pollutants. With air quality concerns from wildfires, it's our vital trees can grow to maturity and develop a robust canopy.
Urban Cooling and Comfort	Trees provide shade, lower temperatures, and combat the urban heat island effect, making walking more appealing. This natural cooling also contributes to reduced energy expenditures in nearby buildings – a key desire of the Planning Commission, City Council, and our citizens.

A study from the University of Florida<sup>2</sup>, focusing on medium and large trees in Florida cities, suggests 8-10 feet is needed between curb and sidewalk. Notably, many trees in this study are also approved for planting by Ann Arbor Forestry staff. For instance, to enable Red Maple, Sweetgum, or Shumard Oak trees to reach 25% of their genetic potential, a minimum 10-foot width between the curb and sidewalk is recommended. Wider spaces promote broader canopies and optimal growth, while narrower spaces reduce tree benefits and health.

<sup>&</sup>lt;sup>1</sup> Wisconsin DNR: "Forests and water go together in rural and urban Wisconsin"

https://forestrynews.blogs.govdelivery.com/2020/01/14/forests-and-water-go-together-in-rural-and-urban-wisconsin/ <sup>2</sup> How Much Space Does My Shade Tree Need? Planting Space Recommendations for Medium and Large Trees in Florida Cities. 2020. https://journals.flvc.org/edis/article/download/122051/125956

Table 2. Planting space recommendations based on big-tree records and equations from UF/IFAS researchers. The final three sections provide the planting space recommendations for trees if they were to reach 75%, 50%, or 25% of the champion tree diameter.

Botanical Name	Common Name	Max Genetic Potential <sup>w</sup>		75% of Max Genetic Potential		50% of Max Genetic Potential		25% of Max Genetic Potential	
		Planting Distance <sup>x</sup>	Planting Width <sup>y</sup>	Planting Distance	Planting Width	Planting Distance	Planting Width	Planting Distance	Planting Width
Acer rubrum	red maple	8 ft	16 ft	7 ft	14 ft	6 ft	12 ft	5 ft	10 ft
Betula nigra	river birch	6 ft	13 ft	6 ft	12 ft	5 ft	10 ft	5 ft	9 ft
Bursera simaruba	gumbo limbo	6 ft	12 ft	5 ft	11 ft	5 ft	10 ft	4 ft	9 ft
Carpinus caroliniana	American hornbeam	5 ft	10 ft	5 ft	9 ft	4 ft	9 ft	4 ft	8 ft

Table excerpt from "How Much Space Does My Shade Tree Need? Planting Space Recommendations for Medium and Large Trees in Florida Cities showing highlighted overlap with Ann Arbor Approved Street Trees.

### Average Widths for Other Features in the Amenity Zone

For a pedestrian friendly TC1 environment, it's essential to incorporate amenities without obstructing the Pedestrian Zone. Here are the recommended widths for three key amenities singled out by the City Council resolution:

- <u>Benches</u>: Standard benches measure roughly 6 to 8 feet in length and 1.5 to 2 feet in depth. Given the need for pedestrian movement, accessibility, and distance from other amenities and the road, it's reasonable to allocate around 6 feet or more of width, depending on the bench's orientation and surroundings.
- <u>Bus Shelters</u>: Shelters in cold climates typically provide side panels that offer wind and rain protection and generally measure 5 to 6 feet deep and 10 to 15 feet wide. Smaller cantilever-styler shelters are easier to place but offer less protection from the elements. Larger format shelters are desired at locations with very high boarding levels. Access Board<sup>3</sup> requires that boarding and alighting areas provide 8 feet perpendicular to the curb, which can include the sidewalk. With ADA considerations and the need for passengers to wait, board, and alight without encroaching on the Pedestrian Zone, a depth of 7 feet in the Furnishing Zone would be needed to support this infrastructure comfortably.
- <u>Bike Racks</u>: Typical bike racks measure 2 to 3 feet, but additional clearance is needed to park bikes comfortably and avoid conflicts. San Francisco Municipal Transportation Agency<sup>4</sup>, for example, requires 2 feet from curbs and 3 to 10 feet between racks, depending on orientation. Traditional bike rack spacing may be insufficient for cargo bikes, bikes with trailers and accessible tricycles. A Furnishing Zone width of 6 feet wide seems like a suitable minimum to site bike racks.

<sup>&</sup>lt;sup>3</sup> The Access Board is an independent federal agency, created in 1973, that develops and maintains accessibility guidelines and standards under the Americans with Disabilities Act of 1990 (ADA) and other laws. Access Board publishes the Public Rights-of-Way Accessibility Guidelines (PROWAG), which are referenced across the United States by public agencies. PROWAG is a necessary guide for transit stop and sidewalk compliance. <u>https://www.federalregister.gov/d/2023-16149/p-426</u>

<sup>&</sup>lt;sup>4</sup> SFMTA Bicycle Parking: Standards, Guidelines and Recommendations, updated December 3, 2015. Link to pdf: <u>https://www.sfmta.com/sites/default/files/reports-and-documents/2018/06/1\_sfmta\_bicycle\_parking\_guidelines-updated-05-15-2018.pdf</u>

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Amenity	Minimum Space Anticipated
Benches	6 feet
Bus Shelters	7 feet
Bike Racks	6 feet

Summary of minimum Furnishing Zone space to comfortably site key amenities

#### "Appropriately Sized Sidewalks"

Ann Arbor currently lacks citywide street design guidelines that frame Sidewalk Zone goals outside of Downtown. In the absence of such guidelines, Ann Arbor planners turn to industry guides, case studies from other cities, the draft Downtown Street Design Manual, and professional experience. Staff agree with the National Association of City Transportation Officials (NACTO) recommendation for a dedicated 8 to 12 foot Pedestrian Zone for commercial areas to meet the needs of TC1<sup>5</sup>.

- <u>TC1 Corridors Fill Unique Network Roles</u>: Corridors like State, Stadium, Washtenaw, or Plymouth, in certain segments, function as arterials that cater to a wide range of network needs. These needs encompass carrying freight, accommodating heavy commuter traffic, and supporting high ridership transit routes. Washtenaw, for example, is also under State jurisdiction, which limits local ability to modify roadway design (although a study is underway to explore local control). The competing functions of these corridors renders them less pedestrianfriendly, demanding a more significant separation from the roadway than in conventional downtown settings.
- <u>TC1 Corridors Should Match Downtown Minimums</u>: While TC1 corridors differ from downtown Ann Arbor in character, speed, lane count, roadway width, and volume, the draft Downtown Street Design Manual suggests a 19 foot distance from curb to building on blocks without onstreet parking or bike lanes. This includes an 8 foot minimum standard for a Pedestrian Zone. Given the associated broader roadways and faster speeds, staff believe TC1 Sidewalk Zone widths should align with or exceed the downtown draft goal.

An examination of various cities and industry resources highlights standard Sidewalk Zone planning practices. Given that many guidelines weren't written for, and don't address the unique challenges of high-stress infill arterials, our staff finds NACTO's width recommendations most suitable. See the attached table for a comparison of space allocations between curbs and buildings across select cities and industry guides.

<sup>&</sup>lt;sup>5</sup> For greater insight into NACTO's approach to recommended sidewalk and transit stop widths, see: <u>https://nacto.org/publication/urban-street-design-guide/street-design-elements/sidewalks</u> and <u>https://nacto.org/publication/transit-street-design-guide/station-stop-elements/stop-elements</u>

#### POTENTIAL COUNTERARGUMENTS

Adding new setback language will not automatically acquire necessary space for pedestrians and transit users where it is lacking. It does not solve the need for conversations and action on topics like easements, donations, or capital improvements on a property or citywide basis. Below are some additional anticipated counterarguments, and staff rebuttal:

Issue	Argument	Rebuttal
Curbs May Move	Sometimes curbs move, and this will impact the setbacks.	While curbs can indeed move, property lines can also shift under some circumstances. The proposed setback language provides flexibility to accommodate curb changes within the 20 to 40 foot range. Planning staff are informed that capital projects to significantly shift curb lines on major corridors are unlikely.
Presence of Multiple Curbs	Some TC1 corridors have slip lanes that effectively present two curb lines.	In cases with multiple curb interpretations, staff determination will be required.
Relocate Curbs Instead of Buildings	There's a perspective that, rather than setting buildings further back, the City should consider relocating curbs closer to the street's centerline to create additional space and reduce street width.	Relocating the curb is a multifaceted challenge, in part due to utilities situated adjacent to the curb. Major curb shifts can disrupt these utilities, incurring additional costs and complexities. Utilities in the roadway can include elements like water lines, gas lines, stormwater infrastructure, telecommunication lines, street lighting, traffic signals and associated underground wiring. Some of these utilities may already have their own existing easements to access infrastructure, which would have to be contended with. Furthermore, considering bike routes in Ann Arbor's "Moving Together Toward Vision Zero" plan, transit requirements in The Ride's Long- Range Plan, and the essential role of certain streets for urban freight, the space between curbs remains of crucial interest for city planning. Given the traffic volume on specific corridors, a minimum lane requirement often includes two general-purpose lanes and a turn lane, which is roughly 30 feet. Adding two 12 foot transit lanes in each direction, for example, pushes that minimum to 54 feet. Dedicated facilities like cycle paths would also require more road space. The "excess space" in the road quickly evaporates. It's imperative to plan for and anticipate the goals of Ann Arbor's key corridors before accepting to alter their curb-to-curb widths.

Issue	Argument	Rebuttal
Unwilling Property Owners	Not every property owner may be open to collaborating with the City on easements or similar legal instruments for future public use of their property.	Property owner cooperation challenges exist regardless of setback method utilized. The proposed changes ensure that buildings aren't constructed in the Sidewalk Zone, allowing time for negotiations and creative solutions.
Variability of Transit Routes	In the absence of fixed route transit, bus routes are subject to change.	The Unified Development Code (UDC) already contains regulations related to transit stops and streets, with the knowledge that they could change. The proposed setbacks align with this convention. Moreover, the corridors associated with TC1 connect Ann Arbor from various directions over extended distances, making them prime candidates for sustained, and increased transit demand. It's unlikely that The Ride would withdraw service from these corridors.
20 Feet Minimums Are Too Wide	Some believe that a 20-foot setback is excessive, potentially introducing a suburban-style setback into a walkable urban commercial area.	For many reasons outlined in this report, 20 feet seems just right to provide truly healthy trees, buffered and comfortable pedestrian space appropriate for a high volume road.
40 Feet Maximums Are Too Wide	Some argue that a 40-foot setback is excessive, potentially introducing a suburban-style setback into what should be a walkable urban commercial area.	A 40 foot setback, while seemingly generous, would be allowed under TC1's current 0-15' setbacks for many properties based on front lot lines. New setback regulations aim to catch the outliers with front lot lines which are either very close or very far from the street edge. Within the range suggested in this report, an 8 foot future landscaping zone coupled with an 8 foot pedestrian zone means that pedestrians could be even closer to structures than they are currently. The 40 foot provision also offers adaptability for varied urban designs and gives properties anticipating future expansion the necessary space to evolve.

Prepared by Hank Kelley Reviewed by Brett Lenart September 6, 2023

Attachments: 2023-09-06\_Narrow ROW TC1 Amendments Ordinance\_v3.pdf 2023-09-06\_Transit Corridors Designation Map.pdf 2023-05-09\_TC1 ROW Comparison Table.pdf Ann Arbor\_2018\_Street Tree Planting Program.pdf How Much Space - Planting Recs Medium Large Trees - UF 2020.pdf

c: City Attorney's Office