



# **CERTT**

**Round 2**

# **SWYFT**

- March 13** Deadline for Questions
- March 20** Pre-Submittal Conference
- April 10** Deadline for Submittals



North Central Texas  
Council of Governments





The Transportation Policy Body for the North Central Texas Council of Governments  
(Metropolitan Planning Organization for the Dallas-Fort Worth Region)

TO: Regional Transportation Council Members  
Surface Transportation Technical  
Committee Members  
Mayors and City Managers/Administrators  
Over 5,000 Within the Metropolitan Planning Area

DATE: February 17, 2023

FROM: Michael Morris, P.E.  
Director of Transportation

SUBJECT: Certification of Emerging and Reliable Transportation Technology Program: Round Two

In May 2022, the Regional Transportation Council (RTC) initiated a program to attract innovative transportation technologies to the North Central Texas region that require capital-intensive infrastructure needing certification or pilot testing prior to widespread use. This Certification of Emerging and Reliable Transportation Technology (CERTT) Program outlines a transparent process where transportation technology providers focused on moving people and/or goods have the opportunity to connect with interested local governments and to develop a certification facility or pilot project within the region that would be converted for commercial use once its certification phase was complete. The goal of this CERTT Program is to create a level playing field for local governments to have the opportunity to submit suitable locations needing transportation solutions for these technology providers to consider. Further details about this program, its process, and the goals of the RTC can be found in Attachment 1, Policy Support to Develop Process for the Innovative Transportation Technology Infrastructure Certification Program.

On February 9, 2023, the RTC initiated the process for soliciting proposals for potential sites from local government entities for the implementation of **Swyft Cities**, an overhead gondola-style technology suited for first/last-mile connections and local transportation. Additional details on this technology and the vision of the provider are further described in Attachment 3A. While the vision for Swyft Cities may include future expansion opportunities, potential location submittals from local governments should first clearly identify the limits of a certification facility/pilot project and note future expansion opportunities if applicable. Proposed sites will be reviewed by Swyft Cities, who will decide if they wish to pursue further discussions with the proposing local government. Please note, as these are capital-intensive projects, locations submitted must be a part of the region's current long-range transportation plan, Mobility 2045 Update, or qualify for consideration in any future long-range plan amendment or update.

There will be an opportunity for interested local governments to attend a pre-submittal meeting with the technology provider to ask detailed questions. We invite you to review the information that has been provided by Swyft Cities in Attachment 3A to consider whether this technology has potential to meet your city's transportation needs and which locations may best fit the technology provider's vision. We request that you submit your questions by the deadline outlined below in advance of the meeting so that Swyft Cities may have time to prepare

responses for the pre-submittal meeting. Local governments looking for support in identifying locations should contact staff to discuss opportunities that align with current plan recommendations.

This information packet includes the Submittal Requirements that will need to be completed and submitted with a map showing the limits and alignment of your proposal as Attachment 2.

- Deadline for submitting questions and to RSVP (preferred, not required) for the pre-submittal meeting is **Monday, March 13, 2023**.
- Pre-submittal meeting with providers is **Monday, March 20, 2023 at 10:00 AM** and will be held at the NCTCOG offices located at 616 Six Flags Drive, Arlington, TX 76011.
- Deadline to submit proposals is **Monday, April 10, 2023** by 5:00 PM; submittals must be delivered in hand.

We encourage you to RSVP for the pre-submittal meeting to assist us with in-person preparations; please use the link provided to RSVP – <https://forms.office.com/r/Hcz7gj6v08>.

We look forward to working with you and further exploring the potential for partnerships with providers of innovative, emerging technologies that will help solve the long-range transportation needs of the North Central Texas region, as well as your jurisdictions.

If you have questions about CERTT, please contact Brendon Wheeler at [BWheeler@nctcog.org](mailto:BWheeler@nctcog.org) or Martin Bate at [MBate@nctcog.org](mailto:MBate@nctcog.org). If you have questions about submitting proposals, please contact Martin Bate.



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Michael Morris, P.E.

MB/BW:cmg  
Attachments

## **Attachment 1 – RTC Policy**

Policy Support to Develop Process for the  
Innovative Transportation Technology Infrastructure Certification Program  
(P22-02)

The Dallas-Fort Worth region has positioned itself as an innovator in using advancing technology to address transportation issues. The North Central Texas Council of Governments (NCTCOG) continues to receive interest from technology developers on implementing new and innovative infrastructure technology that is not currently in operation for a commercial application anywhere in the United States. As is the case with many new technologies, these transportation infrastructure solutions require certification by the appropriate governing entities (either local, state, or federal). This certification requirement may come in many forms, depending on the application, including safety certification to ensure the safety and welfare of the traveling public, as well as certification for use within the region as required by NCTCOG.

This policy outlines the guiding principles and process by which the Regional Transportation Council (RTC) may choose to coordinate with a technology provider to implement a certification facility in the Dallas-Fort Worth region for commercial application. To ensure flexibility with the various types of infrastructure being developed, the following process is structured in a transparent way for potential technology developers and local governments/transportation entities to express interest and collaborate on implementation opportunities. This process would allow for periodic expressions of interest to be facilitated in a timely manner.

The following are the guiding principles of this Innovative Transportation Technology Infrastructure Certification Program:

- Potential projects must serve a long-range transportation need as identified in the recommendations of the Metropolitan Transportation Plan or be considered for inclusion in a future Metropolitan Transportation Plan.
- The technology developer is solely responsible for navigating any certification process(es) with the appropriate regulating authority(ies) for the developer's specific technology as required.
- If the proposed technology is implemented and fails to perform as intended, or the certification process ends or fails, the project-sponsoring local government must have verifiable assurances that the transportation need identified will still be appropriately addressed. It is encouraged that this contingency be included in any technology infrastructure proposal. Public funds may or may not be used for the certification needs of the emerging infrastructure technology.
- NCTCOG will facilitate mutual cooperation between local governments and transportation entities where potential project limits extend across multiple jurisdictional boundaries.
- When considering locations for proposed technology facilities, local governments and transportation entities should consider the following:
  - Expected timeframes for infrastructure to be operational for public use
  - Public use goals and performance expectations of proposed transportation infrastructure.

Following the guidelines listed above, the RTC directs staff to implement the following transparent process outlined in the steps below once NCTCOG or the RTC is approached by an infrastructure technology provider to enter into this process. This process is structured to allow for periodic solicitation or acceptance of proposed technology infrastructure solutions. The following process outlines how proposals brought to NCTCOG will be handled and does not

preclude local governments and transportation entities from engaging directly with technology entities.

- 1) NCTCOG staff will confirm infrastructure technology solution proposed by provider conforms with this policy and a long-range transportation need as identified in the Metropolitan Transportation Plan.
- 2) NCTCOG staff will provide RTC with a summary of the technology provider's proposal, including any requirements and available details on the proposed operation of the technology. The RTC will take action on whether to initiate the development process for certification of the infrastructure technology.
- 3) Upon RTC action, local governments will submit potential locations of interest that utilize public right-of-way and serve a regional long-range transportation need.
- 4) The technology provider will determine the preferred location and project development opportunity to pursue based on the proposals provided by the local governments through NCTCOG.
- 5) The RTC will initiate project development activities and coordination efforts among the appropriate transportation agencies, local governments, and the technology provider. The RTC will direct NCTCOG staff to provide support in the project development activities and coordination efforts as needed. Project development activities and coordination efforts may include appropriation of public funds for project development and implementation.

The RTC directs staff to provide regular briefings when proposals are received and during project development. The RTC also directs staff to integrate the resulting recommendations from projects that advance into future mobility, air quality, safety, and other regional planning activities as appropriate.

**Attachment 2 – Submittal Requirements**  
**Certification of Emerging and Reliable Transportation Technology (CERTT)**  
**Round 2 Submittal Form**  
**Technology: Swyft Cities**  
**Deadline: Monday, April 10, 2022, 5:00 PM**  
**MUST BE PHYSICALLY DELIVERED IN-HAND TO NCTCOG OFFICES**

Please provide a typed document with the following information, one document per location:

- **Entity Name**
- **Primary Point of Contact (POC)**
- **POC Email**
- **Where would this facility be built? Limits?** Please include a map with your submission – confirm the location is consistent with MTP recommendations.
- **What would be the length of this facility?** Please review Attachment 3 for recommended minimum facility sizes.
- **What is the status/ownership of the right-of-way?**
- **Would this be a pilot for a larger expansion in your jurisdiction, or a stand-alone project?**
- **Please provide a brief description of what transportation issue you are trying to solve with this technology.**
- **Provide any other information pertaining to your submittal as well, if necessary.**

Please deliver your document(s) and map(s) to the NCTCOG offices, addressed as follows:

**ATTN: Martin Bate**  
**616 Six Flags Drive, Centerpoint Two**  
**Arlington TX 76011**

You may also submit a courtesy copy by emailing [MBate@nctcog.org](mailto:MBate@nctcog.org). One submittal document per location. Please attach to your document a high-resolution map showing the proposed location(s) and connection(s), if any, to other transportation facilities.

## Attachment 3A – Swyft Cities Information

<https://www.swyftcities.com/>

Provider and Technology Information	
How does your technology differ from today's technology?	Autonomous, point-to-point, on-demand for first/last mile. Fixed cable gondola system with pods traveling independently, with stations off main lines. 20+ MPH with six passengers per pod.
How does technology meet long-term regional needs?	Last-mile transit connections, local people circulation similar to a people mover/ATS.
Examples of other locations advancing your technology?	Proof-of-concept was deployed in Mountain View, CA at Google offices and since taken down. Proof-of-concept in Christchurch, New Zealand is operational but not running for revenue service, only for testing and demonstration.
Technology development level?	NASA's Technology Readiness Level 6/7 out of 9: Technology demonstrated in relevant environment/system prototypes demonstrated in an operational environment.
Development approach?	Certification facility: 1-2 miles, 2-5 stations connecting to mass transit and/or activity centers. Phased expansion following certification.
Certification progress?	Seeking to meet ASCE APM (automated people mover) standards.

Development and Design Considerations	
What's needed from public sector?	Public ROW franchise agreements and connections to transit centers; site/route selection. Some funding via tax increment financing (TIF) or similar structure may be necessary based on business plan for a given network.
Anticipated costs of construction?	Tower and cable infrastructure: \$5MM/mile Stations: \$1.5MM/mile Vehicles: \$300K/vehicle
Existing or new ROW?	Within existing public ROW (grade separated) using franchise agreement with municipality; can also be deployed in private property areas. Median-running alignment preferred, although parallel facility to roadway is also possible (location dependent).
Estimated timeline?	Estimate 24-32 months for certification: 3-6 months of planning and design, 6-8 months of permitting and procurement, 6-12 months of construction and testing.
Contingency should technology fail to certify or perform as expected?	Removal of structures, funds for removal built into project budget; can investigate other means to address first/last mile needs.

<b>Development and Design Considerations</b>	
Minimum footprints of support poles for cable guideway	Tower diameter: 24"-39" depending on type. Size and depth of footings are specific to site conditions.
Minimum footprints for stations	Elevated station min footprint: 16' (L) x 10' (W). At-grade station minimum footprint: same as elevated station plus clear path for cableway descent/ascent, total length of approximately 90' (L) x 10' (W).
Minimum footprints of support structures for elevated stations	For a 16' x 10' elevated station platform that is 8' high, support column diameter is small. Cantilevering stations off of 2nd or 3rd floors of buildings is also possible.
Minimum and maximum heights of cableway	Minimum of 18' clearance above traffic and activities. Operating height is typically 21'; can vary based on needs and line sag due to span size. Column heights are typically 30' and can go higher than 50'. Clearance may be adjusted to meet local requirements.
Minimum widths/horizontal clearances of cableway	For 2-way service, aerial right-of-way is approximately 38' wide.
Maximum grade	Maximum grade is 35 degrees.
Typical span length for cableway	Typical span length is 325' (325' span produces approximately 10' vertical sag between columns); 100' spans produce minimal vertical sag. Up to 650' spans can also be provided. Longer distances require additional planning and engineering.
Minimum turning radius?	At 30 MPH, the minimum turning radius could be 200' with towers spaced every 10'. Radius will change based on vehicle speed and tower spacing.

Please review the Mobility 2045 Update project recommendations map and map packets for guidance on corridor selection:

<https://nctcog.org/trans/plan/mtp/mobility-2045-2022-update>

NCTCOG staff is available to support connecting recommendations in Mobility 2045 Update with areas of interest identified by local governments.

This technology supports the following Metropolitan Transportation Plan programs:

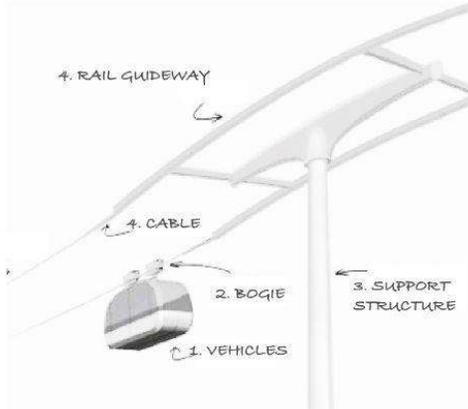
- [TR2-002 Last-Mile Transit Connections](#) (PDF, page 41)

## **Attachment 3B – Swyft Cities Brochure**

# Swyft Cities transforms transportation, cities and the planet

## HOW IT WORKS

Swyft uses a proprietary cable switching technology to transform traditional gondolas. Unlike gondolas, Swyft vehicles move independently and autonomously on fixed cables. The system relies on a simple kit of parts:



- 1 Vehicles
- 2 Bogie
- 3 Support Structure
- 4 Cable or Rail Guideway
- 5 Stations

## KEY FEATURES



**Lightweight.** System requires comparatively minimal infrastructure.



**Easy to Construct.** Modular system is quick to build.



**Point to Point, On Demand Travel.** Vehicles wait for passengers.



**Flexible Application.** Cable switching allows for turns and nimble connections.



**Reduces Parking.** High passenger capacity with less land use.

## BENEFITS



**Sustainable.** Less material used lowers embodied carbon and daily energy use.



**Low Cost.** Reduce infrastructure costs by 20X.



**Enjoyable User Experience.** Faster, better service is more desirable.



**Scalable.** Grow incrementally to reduce risk. Extend existing transit.



**Space Efficient.** Repurpose parking land for higher value use.

## WORK WITH US

Connect Campuses  
Connect Offsite Parking  
Improve Rider Experience  
Operate 24/7  
Provide First and Last Mile Link

## CONTACT

Jeral Poskey  
jeral@swyftcities.com  
Catrine Machi  
catrine@swyftcities.com





# Ride Swyft

Fast, Convenient and Comfortable



1

## ARRIVE AT STATION

Stations are the size of traditional bus stops. They can be at ground level, elevated, or incorporated alongside upper levels of a building.



2

## VEHICLES WAIT FOR YOU

Cabins wait at stations for passengers, not the other way around.



3

## ON YOUR WAY IN SECONDS

The vehicle begins traveling independently along the fixed cable guideways immediately.



4

## ARRIVE AT DESTINATION

The vehicle can navigate through turns, serve multiple routes and bypass stops. Passengers cruise along non-stop to their destination.