INTERMODAL TRANSPORTATION HUBS FOR COLLEGES AND UNIVERSITIES

Directional Workshop April 14, 2022

NELSON NYGAARD



CAMBRIDGE SYSTEMATICS





North Central Texas
Council of Governments

Agenda

CLOSING AND NEXT STEPS

	WELCOME	10:00-10:10
•	LEVEL SETTING: HISTORY AND OPPORTUNITIES	10:10-10:15
•	MOBILITY HUBS IN THE CONTEXT OF CAMPUSES	10:15-10:25
•	BREAK OUT SESSION: VISIONING & PROBLEM IDENTIFICATION	10:25-11:15
•	BREAK	11:15-11:20
	SWOT/RISK IDENTIFICATION EXERCISE	11:20-12:00

Workshop Objectives

- Identify short-term and long-term project goals
- Discuss success metrics for mobility hub implementation
- Identify broader campus and community connectivity goals towards which mobility hubs can be a tool
- Discuss potential risk factors

Project Objectives

Getting to Regional Mobility Hub Guidance for Campuses

- Provide planning and implementation guidance that responds to the diversity of hub environments at campuses
- Use UNT as an indicator campus
- Identify opportunities for mobility and "town and gown" partnership
- Provide guidance that is sensitive to factors such as equity, accessibility, and regional concerns
- Provide a range of implementation factors to accommodate all campus types

The Team



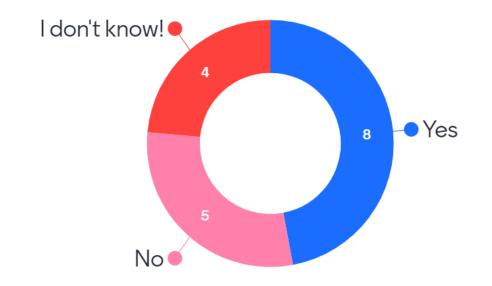








Does your campus or municipality have a mobility hub?





Mentimeter

One component every campus mobility hub should have?







How Did We Get Here?

- Need for mobility hubs identified in NCTCOG FY2020-2021 work program
- Project initially came through request from DCTA and UNT in 2019
- Project delayed due to COVID-19
- In interim, NCTCOG decided to expand the project beyond UNT
- Role of Mobility 2045 and 2022 update in shared mobility and mobility hubs more generally

Overview of Project Phases

Phase 1: **Direction Setting** PAC Directional Workshop PAC Check-in Meetings

Phase 2: Methods and Analysis Phase 3: Guidance and Tools

Stakeholder Engagement

Public Engagement

Project Website

Existing Conditions Report

Campus Mobility Trends

Needs and Market Analysis

Hub Siting and Scenario Evaluation

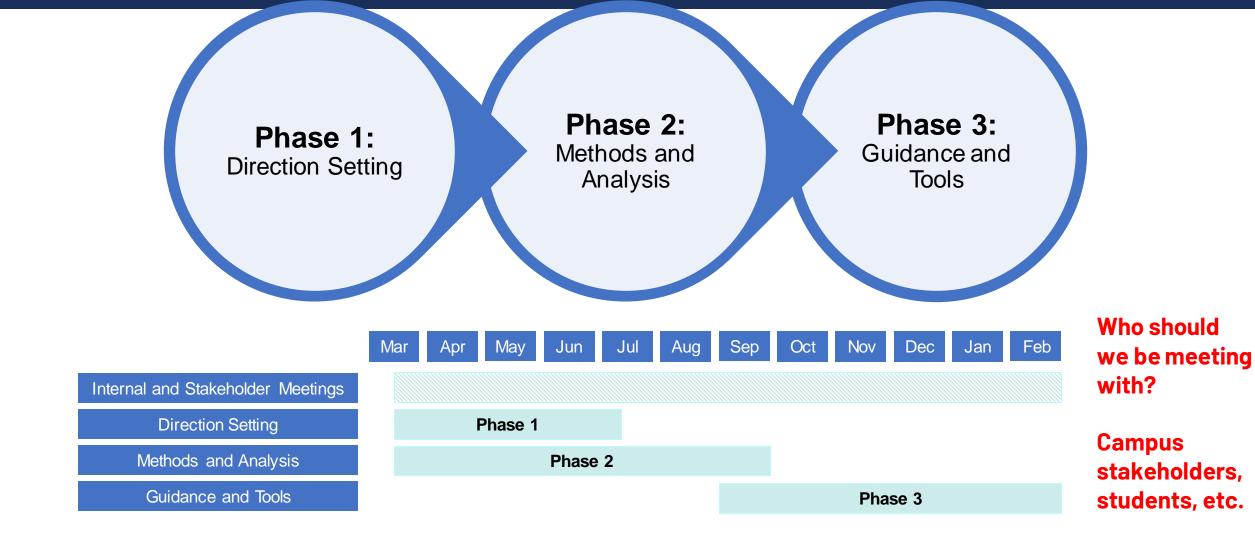
Phasing and Funding

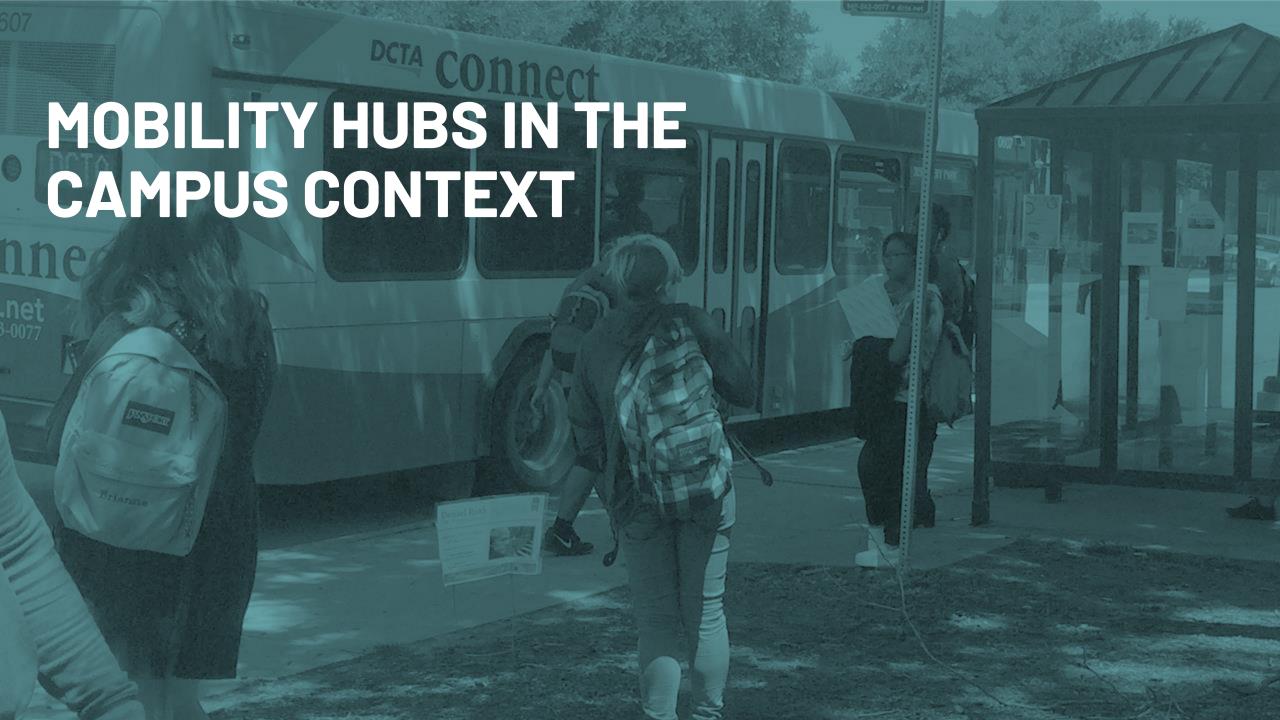
Implementation Strategies

UNT Mobility Hub Report

Mobility Hub Catalog

Overview of Project Phases





What are Mobility Hubs?



The intersection of mobility options, campus life, and information.

At a concentrated point or spread across several blocks.

Dependent on context and use case.

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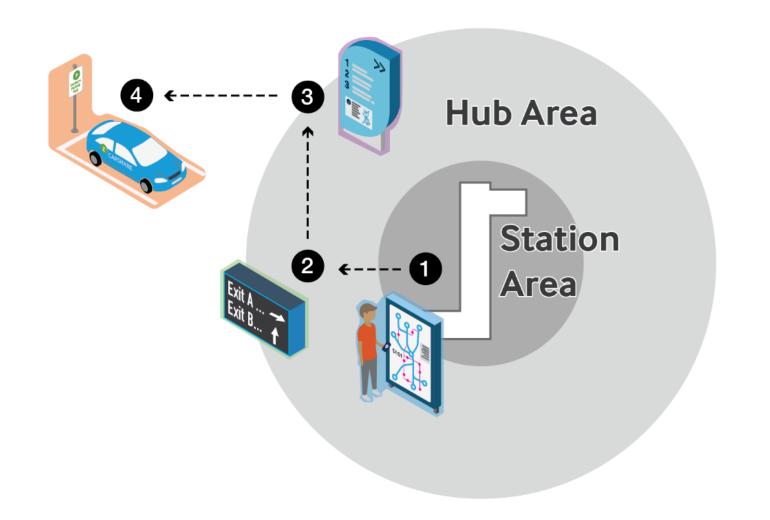
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Mobility Hub Key Components



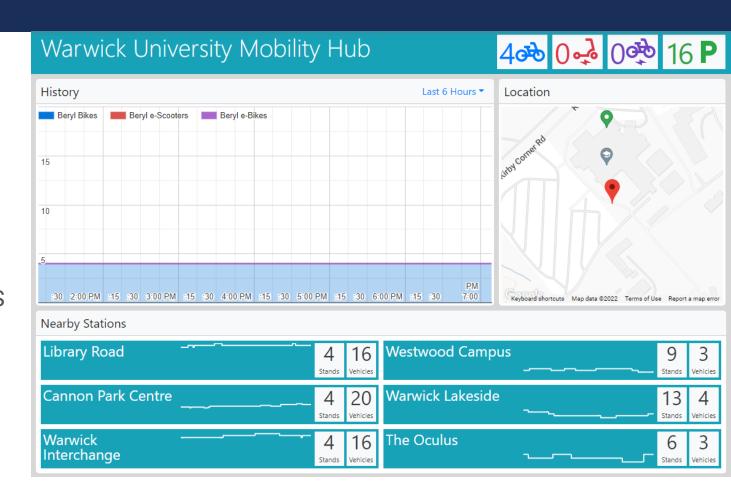
- Transit(bus/rail) as a core component
- 2 Shared mobility: microtransit, micromobility services, car share
- Bicycle parking, preferable covered
- Pedestrian-supportive infrastructure: sidewalks, human-scale lighting, curb ramps, etc.
- 5 Loading zones
- 6 Information kiosks and retail
- 7 Optional: Parking and delivery hubs

Mobility Hub Connections

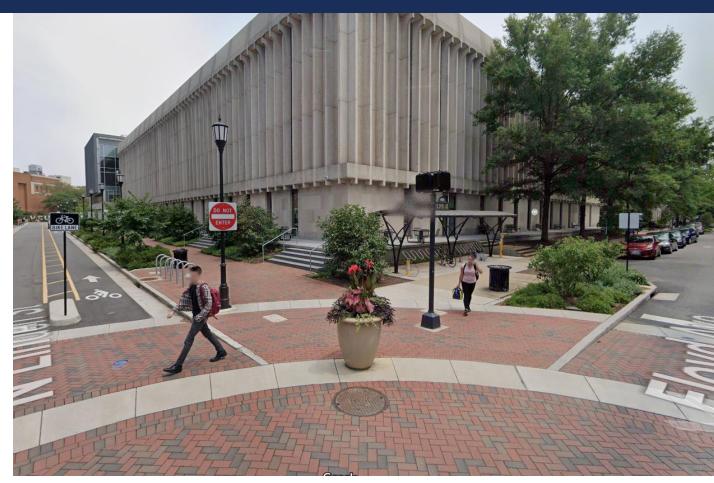


Opportunities for quality connections are crucial for mobility hubs to be effective.

- Warwick University Mobility Hub
- Virginia Commonwealth University:
 Monroe Park Mobility Hub
- University of Utah: Health Sciences
 Campus Mobility Hub
- Cal Poly Pomona: Bronco Mobility
 Hub (in development)



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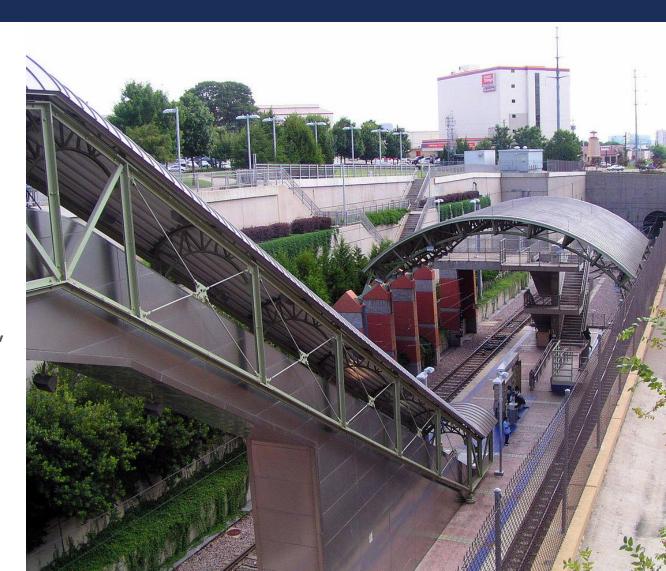
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DFW-Area Mobility Hubs

SMU/Mockingbird Station

- DART Rail: 3 commuter lines
- DART Bus: 7 bus routes
- On-Demand: 2 GoLink Zones
- Protected bicycle parking: 8 "Bike Lids"
- Carshare: 3 ZipCar parking spots
- Park and Ride: 712 parking spaces



DFW-Area Mobility Hubs

Addison Transit Center

- DART Bus: 12 bus routes
- On-Demand: 2 GoLink Zones
- Park and Ride: 300 parking spaces
- Paratransit Bay
- Bicycle Parking
- Pedestrian crosswalks





What are we solving for?

- What are the critical problems and gaps in campus mobility today?
 - How does this differ between commuter vs residential campuses?
- What is the role of campus mobility hubs in solving these problems?
- When thinking about scale, what are the minimum components that all campus mobility hubs should have?
- What are some of the unique campus mobility challenges of affiliates that are low-income, BIPOC, and/or navigating disabilities?

Connecting to Users

- Who are the groups who would benefit the most from campus mobility hubs?Who would benefit the least?
- How might we make campus mobility hubs appealing to those who exclusively drive?
- What are some of the levers that can impact user behavior?

Mobility Hub Vision

- What should the campus mobility hub experience look and feel like? How might it differ from campus to campus?
- How does the vision differ between peripheral campus hubs and hubs embedded within campus?
- How might we tailor the campus mobility hub to best complement the campus experience?

Success Metrics

- What are some metrics that would best measure the success of campus mobility hubs?
- How would these metrics be used?





SWOT Analysis Exercise

Strengths Weaknesses Opportunities Threats Policy/Plan **Politics Funding COVID Alignment Equity Implementation Partnerships**

SWOT Analysis Exercise

- NCTCOG capacity, resources, board and staff buy-in; students are engaged
- COG has learned from past experiences of lack of transit investment
- Existing transit studies can help fill in gaps for expected future service
- Supporting and leveraging UNT/DCTA relationship
- Multiple resources/partners to draw from transit agencies,
- Transit providers and other mode providers don't compete complementary, creates additive effect
- Data tracking through transit providers, others
 - Ability to modify on-demand service based on usage, flexibility, response
- Desire to create multimodal environments
- Buy-in can be created through technology co-opting at hubs (esp. for Gen Z)
- · What else?
- Integration with multiple ongoing efforts and resources:
 - MTP update, microtransit launches, highspeed rail studies, Denton County Regional Transit Study, Infrastructure Investment and Jobs Act (IIJA), etc.
- Population growth generates demand for new mobility solutions
- Integrated payment system for ease of transfers
- Opportunity for agency partnership/collaboration well into the future
 - Look to twin cities area
- Density, or lack thereof at some campuses
 - More land means more transformation opportunities
 - TCU has used available land to satisfy needs like housing, amenities, etc.
- Outward focus: go to where students are (ambassador groups, reps, tabling, events, town halls, etc.) help generate public understanding
- Opportunity to combine services from agencies where possible
 - Universities have funded Via, other options scale this or expand

- MTP update alignment timing
- Lack of public familiarity with mobility hubs
 - And difficulty in educating about hubs (info overload for students)
- Spatial challenges:
 - Metroplex size, lack of walkable access to high frequency transit, only half of population within current transit service areas
- Overabundance of transit providers
- Regional connectivity between modes can be confusing to users
- Funding! There's never enough
- Auto domination in the region land use is central to this
- Density, or lack thereof at some campuses
- What else?



- Ongoing COVID-19 impacts
- Transit leadership vacuums
- Parking: some local parking regulations induce car preference, some universities may depend on parking revenues
- Lack of interest from smaller cities, hostility towards micromobility from larger cities
- Don't overdo approach when creating multimodal environments can hinder success
- Trying to serve everybody can lead to failure be intentional and acknowledge patrons, start with what's most viable, understand users' needs
 - Will differ across populations, across campuses
- Growth -> less parking -> failing to consider this will have greater impact as growth continues
- What will college campuses look like in the future re: switch to virtual, etc.?



Next Steps

- Workshop summary
- Campus Mobility Survey [we need your help!]
- Campus interviews
- Focus groups
- Campus Mobility Trends: Existing
 Conditions/Market Analysis
- Later: PAC check-in workshops

Parting thoughts?

THANK YOU!



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