



## 2021–2022 Innovative Course Application

### Application request

- Approval of a new innovative course       Renewal of a previously approved innovative course

**Title of proposed innovative course(s):** Community Transportation

### Applicant Information

Name of applying school district, charter school, or organization: Fort Worth ISD

Complete mailing address: 100 N. University Dr., Fort Worth, TX 76107

Contact person: Dr. Dianne Hawkins

Contact person's title: Director, Special Education

Contact person's email address: dianne.hawkins@fwisd.org

Contact person's phone number, area code first: 817-814-2842

County District Number (if applicant is a Texas public school): 220905

Superintendent (if applicant is a Texas public school): Dr. Kent P. Scribner

Date of local board of trustees' approval of this innovative course application (if applicant is a Texas public school): January 26, 2021

### Proposed Course Information

Subject area (choose only one): Other Electives (SBOE approval)

Career cluster (CTE only): Choose an item.

Number of credits per course: 0.5

Grade level(s) (high school only): 9-12

**Brief description of the proposed course (150 words or less):**

The purpose of this course is to introduce knowledge and skills to empower students to research and access public transportation options in their respective communities. Areas to be addressed include pedestrian and rider safety, navigating public transportation systems, use of technology, and general social skills, including self-advocacy, self-assertiveness, and transportation etiquette. This course provides necessary transportation information, resources, and opportunities that will benefit students in secondary and postsecondary environments as they follow their chosen education or career path.

**Brief justification of how/why the proposed course qualifies as “innovative” in terms of student need. (150 words or less):**

One of the keys to independence for students is having reliable transportation. Lack of reliable transportation is often a barrier for students to obtaining and maintaining employment. Students must be able to get to work. This course is the first step at removing that barrier and helping students achieve independence. This course is "innovative" because it is designed for all students to overcome the transportation barrier and reach a new level of independence in preparation for college, career, and community leadership. The goals and objectives of this course are not currently incorporated in any required or elective course at the secondary level. Driver’s education may earn state elective credit but there is not an alternative transportation option for those students that cannot access personal vehicle transportation.

**Data or other evidence that demonstrates successful piloting (new applications) or implementation (renewal applications) of the course. Data and descriptive information should be provided below or in a separate attachment.**

	Pre-test mean scores	Post-test mean scores
Safety	72.7%	90.5%
Communication/Social Skills	77.6%	88.4%

Students participating in the course demonstrated an increase of 18.3% in mean safety scores and an increase of 10.8% in mean communication/social skills scores. 34 students participated in the course and were assessed at the beginning and conclusion of the course on their understanding of safety and communication/social skills as it relates to transportation in the community. The increase in mean scores demonstrates evidence of the need for successful implementation of the course.

### Essential Knowledge and Skills of the proposed course:

- (a) General Requirements. This course is recommended for students in grades 9-12. Students shall be awarded one-half credit for successful completion of this course.
- (b) Introduction.
  - (1) Instruction provides relevant technical knowledge and skills for students to increase knowledge, skills, and competence with accessing various forms of travel within the community setting while exercising safety standards.
  - (2) Instruction focuses on applying skills acquired with authentic community-based experiences in ways that prepare students for post-secondary employment, education, and training.
- (c) Knowledge and Skills.
  - (1) Introduction to Public Transportation. The student applies knowledge of public transportation systems to explain the need for and how to access public transportation, including bike share, personal transporters, demand response, fixed route, and ride hailing services. The student is expected to:
    - (A) describe the components of and the need for public transportation;
    - (B) outline the relationship between the advances in transit technology changes in transportation enterprises, and U.S. urban development;
    - (C) describe the positive and negative impacts of the changes in urban travel methods and patterns during the past 90 years;
    - (D) investigate the historic and current trends impacting public transportation including safety concerns, environmental concerns, customer convenience, and cost-effectiveness;
    - (E) categorize the types of public transportation available in communities, including bike share, personal transporters, demand response, fixed route, and ride hailing;
    - (F) compare public transportation needs and public transportation services in urban, suburban, and rural communities;
    - (G) research public transportation options for a given route; and
    - (H) research and demonstrate the use of technology options available that aid in public transportation.
  - (2) Technology Applications. The student investigates and evaluates technology applications that aid in transportation planning. The student is expected to:

- (A) investigate websites related to local transportation options;
  - (B) compare and contrast websites for accessibility, ease of use, and level of information;
  - (C) propose the most efficient mode of transportation for need based on transportation websites;
  - (D) evaluate transportation and mapping apps for navigation planning;
  - (E) rate various mobile applications based on accessibility, ease of use, and level of information; and
  - (F) design a navigation plan using local transportation websites or transportation and mapping applications.
- (3) Navigational Strategies. The student examines navigational strategies to plan and execute cost- and time-efficient trips within the community. The student is expected to:
- (A) compare and evaluate the advantages and disadvantages of various modes of public transportation;
  - (B) interpret public transportation maps and schedules to determine the cost and time to reach various destinations;
  - (C) calculate transit vehicle and passenger capacity;
  - (D) create a navigation plan comparing cost of transportation options and time allotment to determine the most efficient mode of transportation; and
  - (E) use directional skills, transportation applications, and mapping tools to plan and follow best route to destination.
- (4) Community Awareness. The student will apply travel skills to access points of interest. The student is expected to:
- (A) identify and explain the function for various community offices and agencies that are needed in employment or personal pursuits;
  - (B) research the location of and create a navigation plan to relevant community offices and agencies such as Department of Motor Vehicles (DMV), Social Security Administration, Texas Workforce Commission (TWC), and Mental Health/Mental Retardation (MH/MR); and

- (C) research the location of and create a navigation plan to employment opportunities, education and training locations, and recreational and social activities.
- (5) Pedestrian Safety. The student applies pedestrian safety awareness for independent travel within the community. The student is expected to:
- (A) research the purpose and availability of sidewalks;
  - (B) investigate sidewalk design and Americans with Disabilities Acts (ADA) guidelines;
  - (C) explain the various sidewalk zones and the functions of each;
  - (D) identify various types of intersections being crossed and various types of traffic control at intersections;
  - (E) explain the meaning of street safety signage;
  - (F) judge the distance and speed of moving vehicles;
  - (G) predict needed adaptations to safety precautions during adverse weather and various times of day;
  - (H) compare needed adaptations to safety precautions when traveling in urban, suburban, and rural areas; and
  - (I) compare mapping applications to plan a walking route.
- (6) Rider Safety. The student demonstrates skills for safely riding public transportation. The student is expected to:
- (A) wait for passengers to exit before boarding;
  - (B) stand behind white line at the front of the bus or light rail;
  - (C) hold onto the handrail when standing;
  - (D) leave front seats available for elderly and disabled passengers;
  - (E) keep noise level at a minimum;
  - (F) pay attention to surroundings; and

- (G) keep hands and feet to self.
- (7) Bike Share. The student evaluates bike share as an option for public transportation. The student is expected to:
- (A) define bike share and the need for it as a public transportation option;
  - (B) investigate bicycle safety regulations, including right of way and bike lanes;
  - (C) calculate the cost and time efficiency of using bike share as a transportation option;
  - (D) evaluate applications related to bike share use;
  - (E) demonstrate how to locate and access bike share locations using technology applications;
  - (F) compare mapping applications to plan a route using bike share; and
  - (G) demonstrate use of bike share following safety protocols and regulations.
- (8) Personal Transporters. The student analyzes personal transporters as an option for public transportation. The student is expected to:
- (A) define personal transporter, such as a scooter or Segway, and the need for it as a public transportation option;
  - (B) categorize types of personal transporters and the functions for each;
  - (C) explain safety requirements and sidewalk regulations for personal transporter use;
  - (D) evaluate applications related to personal transporter use;
  - (E) demonstrate how to locate and access personal transporter stations using applications;
  - (F) calculate cost and time efficiency of using a personal transporter as a transportation option;
  - (G) compare mapping applications to plan a route using a personal transporter; and
  - (I) demonstrate use of personal transporters following safety protocols and regulations.

- (9) Demand-Response. The student investigates and evaluate demand-response and paratransit transportation as options for public transportation. The student is expected to:
- (A) define demand-response transportation and the need for it as a public transportation option;
  - (B) explain the types of demand-response transportation, including shuttles, vanpools, and Dial-a-Ride and the functions for each;
  - (C) define paratransit and the need for it as a public transportation option;
  - (D) explain ADA guidelines for paratransit eligibility;
  - (E) calculate cost and time efficiency of using demand-response transportation;
  - (F) compare and contrast demand-response and fixed route transportation;
  - (G) determine and apply communication skills needed to access demand-response transportation; and
  - (H) develop environmental awareness to assess for safety, including personal space and boundaries.
- (10) Fixed Route. The student researches and assesses fixed route transportation as an option for public transportation. The student is expected to:
- (A) define fixed route transportation and the need for it as a public transportation option;
  - (B) compare fixed route and flex route transportation;
  - (C) describe the types of fixed route transportation, including buses, vans, and light rail and the functions for each;
  - (D) explain ADA guidelines for fixed route accessibility;
  - (E) calculate cost and time efficiency of using fixed route transportation;
  - (F) evaluate applications related to fixed route use;
  - (G) demonstrate how to locate and access fixed route stops and stations using applications; and

- (H) compare mapping applications to plan a route using fixed route transportation.
- (11) Ride Hailing. The student investigates and assess ride hailing as an option for transportation. The student is expected to:
- (A) define ride hailing and the need for it as a transportation option;
  - (B) analyze the types of ride hailing services such as Uber and LYFT and the functions for each;
  - (C) assess cost and time efficiency for using a ride hailing service;
  - (D) compare and contrast applications related to ride hailing services; and
  - (E) demonstrate effective use of applications for accessing a ride hailing service.
- (12) Communication. The student demonstrates appropriate social and communication skills in relationship to safe travel skills. The student is expected to:
- (A) ask the driver or operator for help as needed;
  - (B) communicate appropriately with fellow riders;
  - (C) describe how the physical environment can affect communication;
  - (D) identify and apply appropriate communication techniques for specific relationships such as using slang with peers and words that are more formal with adults; and
  - (E) demonstrate safety procedures and communication skills needed while using various types of public transportation.
- (13) Self-Advocacy. The student demonstrates self-advocacy skills necessary when using public transportation. The student is expected to:
- (A) role play effective safety procedures if lost including asking for help;
  - (B) create a resource list of phone numbers, websites, and applications and justify the need for each;
  - (C) identify the procedures for filing positive feedback or a complaint if needed; and
  - (D) explain personal rights and responsibilities.

### Recommended resources, technology, and instructional materials to be used:

- The public transportation department may provide guest speakers relating to specific course topics and continuous overview of changes that may occur through their department.
- Community based transportation resources will be used to enhance the learning experience for all students.
- Online resources will be used to support the curriculum in area of safety, social skills, advocacy, verbiage, and terminology.

The League of American Bicyclists. "Find and Take a Class." Bikeleague.org.

<https://www.bikeleague.org/content/find-take-class> (accessed January 7, 2021).

American Public Transportation Association. "Research and Technical Resources." Apta.com.

<https://www.apta.com/research-technical-resources/> (accessed January 7, 2021).

National Association of City Transportation Officials. "Programs and Initiatives." Nacto.org.

<http://www.nacto.org/programs/#designing-better-streets> (accessed January 7, 2021).

National Transit Institute. "Educational Resources." Ntionline.com.

<http://www.ntionline.com/educational-resources/> (accessed January 7, 2021).

National Highway Traffic Safety Administration. "Road Safety." Nhtsa.gov.

<https://www.nhtsa.gov/road-safety> (accessed January 7, 2021).

Mid-Atlantic ADA Center. "Resources." Adainfo.org. <https://www.adainfo.org/resources>

(accessed January 7, 2021).

Easter Seals Project Action Consulting. "Our Services." Projectaction.com.

<https://www.projectaction.com/our-services-2/> (accessed January 7, 2021).

- Transportation and mapping applications may be used for scheduling, navigating, and determining fare including Uber, Lyft, Google Maps, City Mapper, Transit, Next Bus and Moovit.
- City maps and fixed route schedules will be used by students to enhance navigational strategies.

### Recommended activities:

Activities – Sample lesson topics for each of the following skills:

- Use transportation applications to identify best mode of transportation
- Calculate cost and time efficiency of different modes of transportation
- Create a navigation plan using various applications

- Role play appropriate safety procedures for waiting at the stop or station
- Demonstrate safe boarding procedures observing appropriate wait time for passengers to depart
- Execute payment of fare
- Demonstrate safe riding/operating skills
- Identifies landmarks
- Shows how to signal for a stop
- Demonstrates how to safely de-board
- Demonstrates safety procedures when lost including asking the operator or agent for help
- Demonstrates skills and procedures for utilizing inner city rail systems
- Demonstrates skills and procedures for utilizing public transportation between cities
- Utilize appropriate social skills with peers and adults

### **Recommended assessment methods for evaluating student outcomes:**

- Observation of student safety, travel, and social skills in the community
- Classroom role play (social skills, self-advocacy)
- Student verbal debriefing
- Written reports to include observation of student safety and procedures, self-advocacy, and time-management
- Pre-course and Post-course assessments

### **Recommended educator certifications:**

An assignment for Community Transportation is allowed with a secondary teacher certificate appropriate for the grade-level assignment.

### **Required trainings, including associated costs, if applicable:**