



NOLANVILLE SMART STOP

Our mission is to provide Nolanville with a high-quality, **safe**, and integrated **smart** public bus stop that meets the **needs** of all its citizens and visitors, and that will set the **foundation** for a city that embodies smart growth, efficient public transportation, and sustainability.

GOALS

SMART

Integrate smart features such as WI-FI integration, real-time bus feed, and solar energy as well as create adaptable modular hubs to better meet the needs of the community. This will help set the foundation to follow Nolanville's future plan on becoming a smart city.

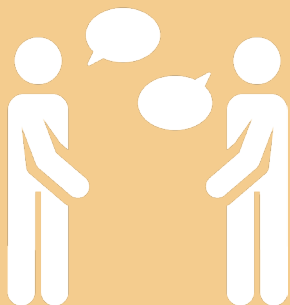


SAFETY

Develop a safe streetscape to enhance connectivity and add safety measures such as bus shelters, drinking stations, and emergency buttons to meet the needs of the community which addresses concerns regarding the heat, children, and accessibility.

ENVIRONMENT

Increase environmentally friendly features such as bio-swales, rain gardens, vegetation strips to reduce the heat island effect as well as create a healthier lifestyle by promoting use of public transportation.



SOCIAL

By creating gathering areas we can increase social interactions and promote the use of public transportation. The bus stop can act as a social hub where information can be easily shared with the community as well as act as a means of wayfinding.



NOLANVILLE BUS HUB

CATALINO DIAZ

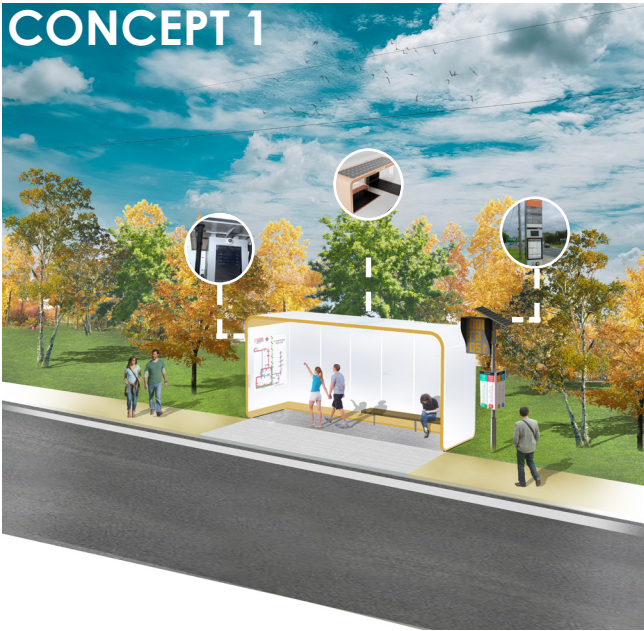
THE GOAL

To successfully implement an adaptable public bus stop network in Nolanville which will serve as a social hub for the community and set the foundation for Nolanville's plan to become a smart city.

THE METHOD

When designing public spaces, the objective is to be people-centric. The goal is to not create a better bus stop, but to activate a neglected space and turn it into a connected space.

CONCEPT 1



FOUNDATION

Concept 1 is the smallest bus hub concept. Shelter, Real-Time info, and bench is the minimum and sets the foundation for potential growth with existing transportation network and activates a 'connected' space.

MATERIALS



- CCTV Camera**
- ~\$300
 - Varies in Model



- Smart Pole**
- ~\$1,200
 - Voice Info
 - Varies in size

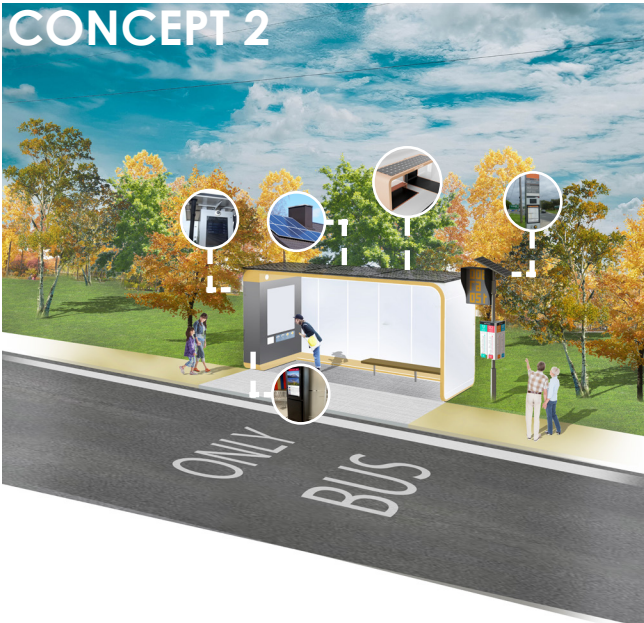


- Shelter**
- ~\$5,000
 - Varies in Model
 - Varies in Material



- Wi-Fi**
- ~\$150 per month
 - One time fees vary

CONCEPT 2



INTEGRATION

Adding to the foundation that Concept 1 set, **Concept 2**, Integrates smart tech, such as solar panels, an interactive kiosk, and smart bus poles which makes accessibility easier for all ages. Concept 2 is a moderate size.

MATERIALS



- CCTV Camera**
- ~\$300
 - Varies in Model



- Smart Pole**
- ~\$1,200
 - Voice Info
 - Varies in size



- Info Kiosk**
- ~\$3,000
 - Varies in Model



- Solar**
- Cost-per-watt
 - \$5 per watt
 - Varies in Model

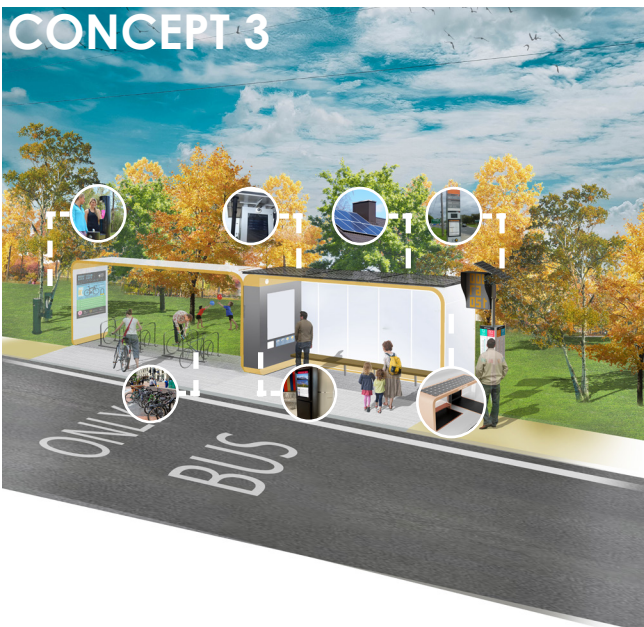


- Shelter**
- ~\$5,000
 - Varies in Model
 - Varies in Material



- Wi-Fi**
- ~\$150 per month
 - One time fees vary

CONCEPT 3



ACTIVATION

Adding to what Concept 2 set, **Concept 3** increases the social and public amenities such as bike hubs, drinking stations, and gathering areas which promote social interactions in unused spaces.

MATERIALS



- CCTV Camera**
- ~\$300
 - Varies in Model



- Smart Pole**
- ~\$1,200
 - Voice Info
 - Varies in size



- Info Kiosk**
- ~\$3,000
 - Varies in Model



- Solar**
- Cost-per-watt
 - \$5 per watt
 - Varies in Model



- Bike Rack**
- ~\$600
 - Varies in Material and size



- Drinking Station**
- ~\$2,500
 - Varies in Model



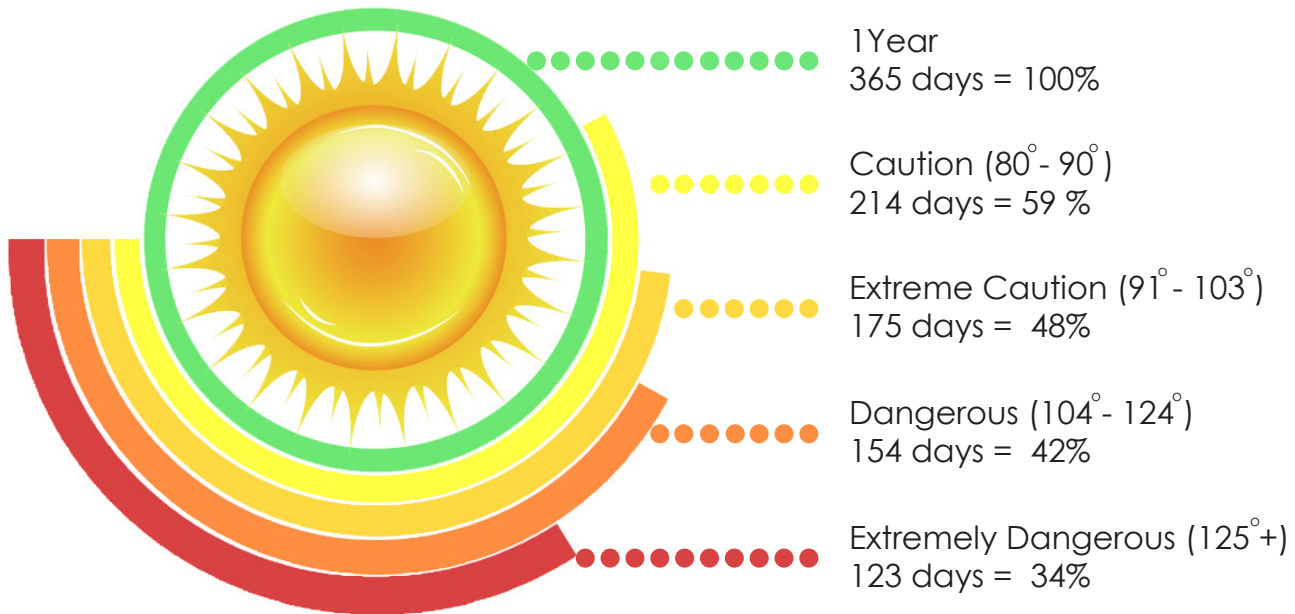
COOL NOLANVILLE

Clifford Schaefer

MISSION STATEMENT

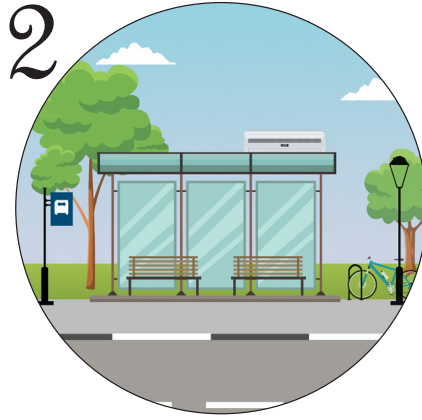
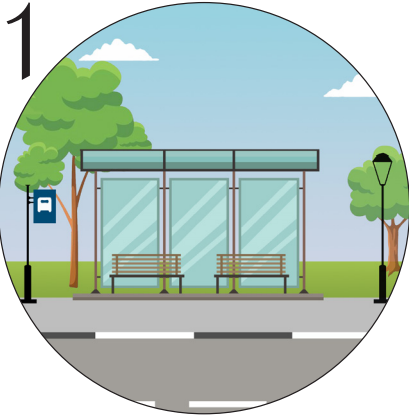
To provide Nolanville with bus stop concepts that will offer relief from the Texas heat, while also introducing smart technologies to expand Nolanville's foundation of building a smart city.

NOLANVILLE HEAT INDEX: 2018



This is the data from Nolanville's heat index last year. According to the National Weather Service there are four levels of high temperatures that increase the chances of heat related illnesses. As you can see from the graphic above, Nolanville had a substantial amount of days in each one of these categories. The concepts I've come up with are to combat high temperatures and mirror our team goals.

PHASES

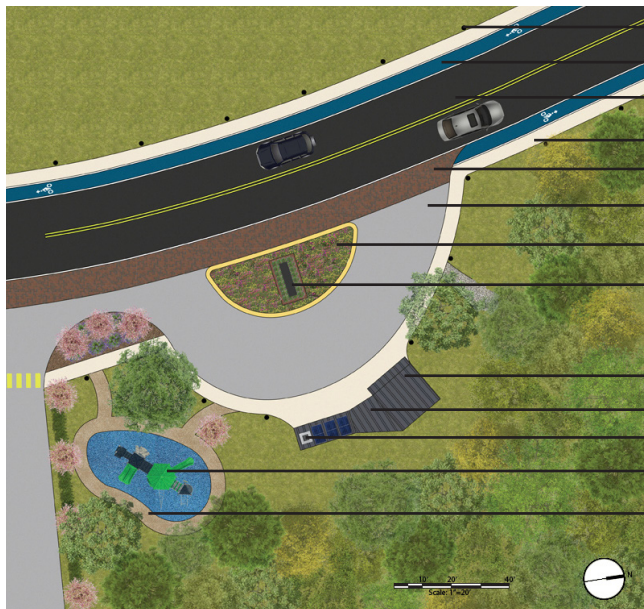


- Shade Structure
- Benches
- Lights
- Signage

- Airbitat Smart Cooler
- Bike Racks
- Planting

- Solar Panels
- Smart Kiosks
- Smart Benches
- Various Amenities

SITE PLAN



- Lamp Posts
- Bike Lanes
- Asphalt
- Sidewalk
- Crosswalk
- Turn Around
- Rain Garden
- Sign
- Public Restroom
- Covered Bike Racks
- Smart Bus Stop
- Playground
- Decomposed Granite

- Environmental:**
Rain Garden
Dry Creek Bed
Increased Vegetation
- Safety:**
Lights
Accessibility
Cooling Materials
- Smart:**
Digital Kiosks
Solar Panels
Charging Stations
- Social:**
Bus Station
Digital Kiosks
Amenities

MATERIALS

Cooling Materials

Smart Materials

- Shade Structure
- Airbitat Smart Cooler
- Cool Seal By GuardTop
- Smart Kiosks
- Smart Benches
- Free Wifi
- Solar Panels

Amenity Materials:

- Vending Machines
- Water Stations
- Public Restrooms
- Bike Racks
- Lamp Posts
- Decomposed Granite
- Playground Structure



THE NOLANVILLE BUS STOP

EUNTAEK YOON

MISSION STATEMENT

To provide Nolanville with a smart bus stop that sets the foundation of establishing a smart city while implementing social and environmental elements to promote safety and accessibility, and water infiltration

GOALS & OBJECTIVES

- 1 SOCIAL HUB
- 2 ENVIRONMENT
- 3 SMART
- 4 SAFETY

SITE PLAN



PERSPECTIVES





Re-Envisioning Nolanville

Damaris Martinez



“People living in Nolanville are currently struggling with freeway and speed limits. Bus stops should be added along access roads. The city should purchase bus stops and add seating and sidewalks.” - Focus Member of Nolanville

GOALS



ENVIRONMENTAL

- Increase vegetation
- Bioswale
- Bike Racks
- Pocket Park



SAFETY

- Shelter
- Accessible to all
- Visibility



SMART

- Solar Panels
- Internet Access
- Pavegen Paving
- Smart Screen



SOCIAL

- Gathering Areas
- Wayfinding
- Interactive smart screen

Concept 1



- For areas with a limited amount of space
- Added shelter to protect the users from weather conditions
- Seating areas for the users
- Bus Route Map
- Community Bulletin Board
- Smart elements could be added later on

Concept 2



- For Areas that are along the bike routes
- Bike racks to promote an active lifestyle
- Added Smart Elements such as a smart screen to keep the community involved in events, bus route updates, and weather forecast
- Added Solar panels to help light up the space at night

Concept 3



- For Areas with open space around them
- Added bike rack shelters for long term users
- Added additional seating and playground elements to promote an active lifestyle
- Added Smart Elements such as a smart screen, solar panels, and pavegen pavers