

DRAFT TECHNOLOGY RECOMMENDATIONS AVAILABLE ONLINE

**COMMENTS DUE
FEBRUARY 10, 2017**

COMMENT ON TECHNOLOGY RECOMMENDATIONS

We want to hear from you!

Draft technology recommendations are available on the **County Express** website for your comments. Comments are due February 10, 2017.

The technology recommendations were developed as part of the San Benito County Local Transportation Authority's Intelligent Transportation Systems (ITS) Plan.



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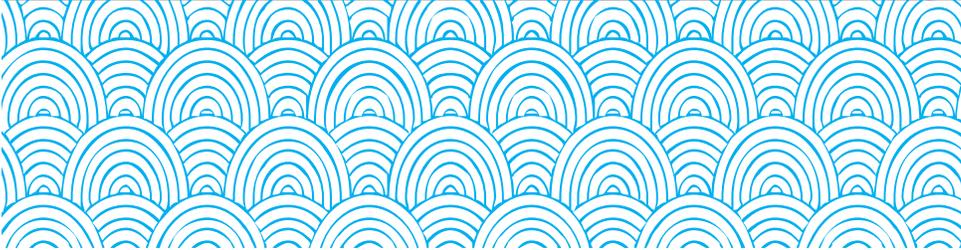
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**SAN BENITO COUNTY
LOCAL TRANSPORTATION
AUTHORITY (LTA)**

330 Tres Pinos Road, C7
Hollister, CA 95023

SanBenitoCountyExpress.org





COMENTARIO SOBRE LAS RECOMENDACIONES TECNOLÓGÍAS

¡Queremos oír de usted!

El proyecto de recomendaciones de tecnología está disponibles en el sitio web de **County Express** para sus comentarios. Comentarios vencen el 10 de febrero de 2017.

Las recomendaciones de tecnología se desarrollaron como parte del Plan de Sistemas de Transporte Inteligente (ITS) de la Autoridad Local de Transporte del Condado de San Benito.

PROYECTO DE RECOMENDACIONES TECNOLÓGICAS DISPONIBLES EN LÍNEA

**DIA FINAL PARA COMENTARIOS
10 DE FEBRERO 2017**



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San Benito County Local Transportation Authority Intelligent Transportation Systems Plan – Recommended Improvements

Short Term Implementation (Within 1-3 Years)

1. Install Mobile Data Tablets on County Express Paratransit & DAR Vehicles

Mobile Data Tablets (MDT's) are rugged designed tablets with cellular capability installed near the driver and connected, via the cloud, to LTA's automated scheduling management system. The MDT's receive daily schedule and client information which is displayed for drivers to access. The MDT's are also built with Automated Vehicle Location (AVL) functionality allowing for real time trip arrival and departure information to be captured and transmitted.

2. Enhance County Express Website

Update the County Express website to improve customer interactive features, add new features, and modified to website format to allow access from mobile devices. The new redesigned website would also be formatted for future website content management allowing for integration with other County Express ITS systems.

3. Enhance County Express Trip Planner

Modify the existing Trip Planner on the County Express website to better take advantage of the tools available through the provider of the Trip Planner, Google Transit. The modifications could be tailored to the specifics of the County Express service, such as trip planning associated with getting to and from schools and colleges throughout the system.

4. Pursue On-Line and/or Mobile Fare Media Sales

Create an option for County Express passengers to purchase fare media (bus passes and tokens) online, in addition to being able to purchase at LTA's administrative office and Operations and Maintenance facility. As an interim solution, LTA could also create a mobile fare media sales option with a vehicle specifically equipped and staffed to sell fare media directly from the vehicle. The vehicle could be dispatched to popular County Express destinations.

Intermediate Term Implementation (Within 3-6 Years)

1. Expand County Express Automated Scheduling Management System

Add more functions to the automated scheduling system used on the Paratransit and DAR services to managing daily trips. The existing system has several integrated software functions but there are other functions not originally purchased that would further improve operations, such as automating and capturing all customer service input received (suggestions, commendations and complaints), monitor the status of the input received, and capture and monitor service incidents.



2. Real Time System Passenger Notification on Local and Intercounty Service

A system of notifying passengers in real time of service or schedule changes, or route detours. Passengers would sign-up for the service and can receive the notifications as a text message on their mobile devices. If AVL functionality is introduced to the Local and Intercounty routes, bus arrival information could also be sent to passengers through this notification system.

3. Wi-Fi on County Express Intercounty Buses

The ability to access the internet via Wi-Fi on the County Express Intercounty routes. Wireless router equipment would be installed and wireless local area network access provided to passengers using mobile devices.

Long Term Implementation (Within 5 + years)

1. Complete Expansion of County Express Automated Scheduling Management System

Add the final necessary functions to the County Express Paratransit and DAR service's automated scheduling management system to take advantage of full capacity of the system. These improvements will allow Paratransit and DAR passengers to request trips, introduce an automated system for passengers calling in to request trips, and a notification system alerting passengers of their trip's anticipated arrival.

2. Automated Route/Scheduling Management for Local and Intercounty Services

Introduce an integrated and automated routing and scheduling capabilities to the Local and Intercounty services as used on the Paratransit and DAR services. The system would allow for automated trip and route assignment, introduction of MDT's for data transmission, and the introduction of real time AVL functionality to the Local and Intercounty routes.

3. Electronic Fare Media on Intercounty Routes

Pursue a pilot project to introduce an electronic fare media product on the Intercounty service. The fare media product would be in the form of a microchip embedded card that can transmit and receive data, similar to a bank debit card. If the pilot proves efficient and affordable to launch on a permanent basis, the product could be expanded to Local service and possibly the Paratransit and DAR services as an alternative to tokens and paper bus passes.

4. Electronic Fare Payment System on Local and Intercounty Routes

Replace the existing manual drop boxes on the Local and Intercounty buses with electronic fareboxes that count and validate currency placed in the farebox. If LTA chooses to introduce electronic fare media, then the electronic fareboxes would complement the shift to reducing cash payment and allowing for a more fully integrated and efficient accounting of revenue.



5. Next Bus Arrival Displays at County Express Bus Stops

If AVL functionality is introduced on the Local and Intercounty services, stationary displays could then be added at select bus stops throughout the system that capture AVL data and display this information. Passengers would see a display of the next scheduled bus expected to arrive at the selected stop.

6. Automated Passenger Counting System

Automated Passenger Counting (APC) counting systems capture detailed daily passenger activity (boarding and alighting) on all buses. They are installed in the entry and exit way of buses and total up all passengers getting on and off a bus at each bus stop. Also, these systems can integrate with an AVL systems and provide complimentary data, such as the total number of passengers on board a bus in real time.

7. Electronic Maintenance Systems

A maintenance software system is designed to ensure that required maintenance is performed in accordance with original equipment manufacturer design and warranty. These systems capture all maintenance activity data, organize the data, automate spare vehicle parts inventory and allow for ongoing monitoring of a transit fleet of buses.

8. Video Surveillance

Onboard video camera systems are designed to ensure the safety and security of passengers, drivers, and the County Express equipment. These systems come with multiple cameras that capture and store video images and, in some systems, also capture an audio feed in support of the video images.

