



Jerry Duncan
Councilmember
District 6

January 29, 2008

To: Fresno City Council

A handwritten signature in black ink, appearing to be "Jerry Duncan", written over the "To:" line.

From: Councilmember Jerry Duncan

Subject: Agenda Item: Request that staff prepare a proposal to conduct a pilot project to determine the effectiveness of FAX bus-enabled Wi-Fi as an amenity to our FAX system.

The process of getting people to ride public transportation in our city over alternatives is very challenging.

In Fresno, we have some rather significant issues, that when compared to other municipalities with more successful programs, have been difficult to overcome. These issues include lack of population density, route frequency and route service areas that exclude a large part of the city.

To the credit of our FAX staff, they are trying to deal with these issues the best they can and service is being improved.

But, getting people on our public transportation system and away from their cars can be encouraged if we strive to recognize one key fact--people will choose a bus over their car if it is more convenient and it offers a competitive advantage.

The purpose of this agenda item is to ask our FAX Department to look at adding an amenity that will make riding our bus system more interesting and more convenient.

Wireless internet technology and its availability have come a very long way over the last few years. The notion of offering free citywide Wi-Fi internet is fading as more and more municipalities realize there are no effective business models, while at the same time, the private sector has continued to offer new technologies which have made the internet more available, faster and cheaper.

This has become more evident in businesses that offer free Wi-Fi and the explosion of low-cost home Wi-Fi networks means almost every home with more than one computer has a connected wireless Wi-Fi system.

Mobile phone companies are offering high speed access through their 3G high speed wireless networks which mean that almost everyone with a cell phone can now have DSL speed access to their cell phone anywhere in the city. The success of the Apple iPhone clearly illustrates this now growing market.

Now there is technology that can bring DSL speed internet to your laptop when you're in a moving bus.

This offers us a unique opportunity. What this now means is that we can establish our FAX buses as mobile Wi-Fi hotspots. When customers are on a bus with this service and they have a Wi-Fi capable laptop (virtually all are), they can get their e-mail or surf the net at DSL speed while they are riding our buses around town.



This means that bus riding time is now productive time. Students and business people will find this a real convenience and a tremendous amenity. We can actually give a competitive advantage to our buses over other methods of transportation.

Think of the benefit this would provide to routes that have a heavy student population, such as those going to our community colleges or high schools.

This technology also offers the opportunity to transmit video from the bus so a significant additional safety measure could also be incorporated.

In addition, it is easy to establish our bus stops as Wi-Fi hotspots as well. With this in place, the wait for a bus, which can take up to a half hour becomes much less tiresome as people can again, turn downtime into productive time.

Both AT&T and Sprint have the necessary technology to provide the bus service.

Similar projects are already underway in Seattle, Albuquerque, Cedar Rapids, Iowa and Cerritos, California, and have met with good success.

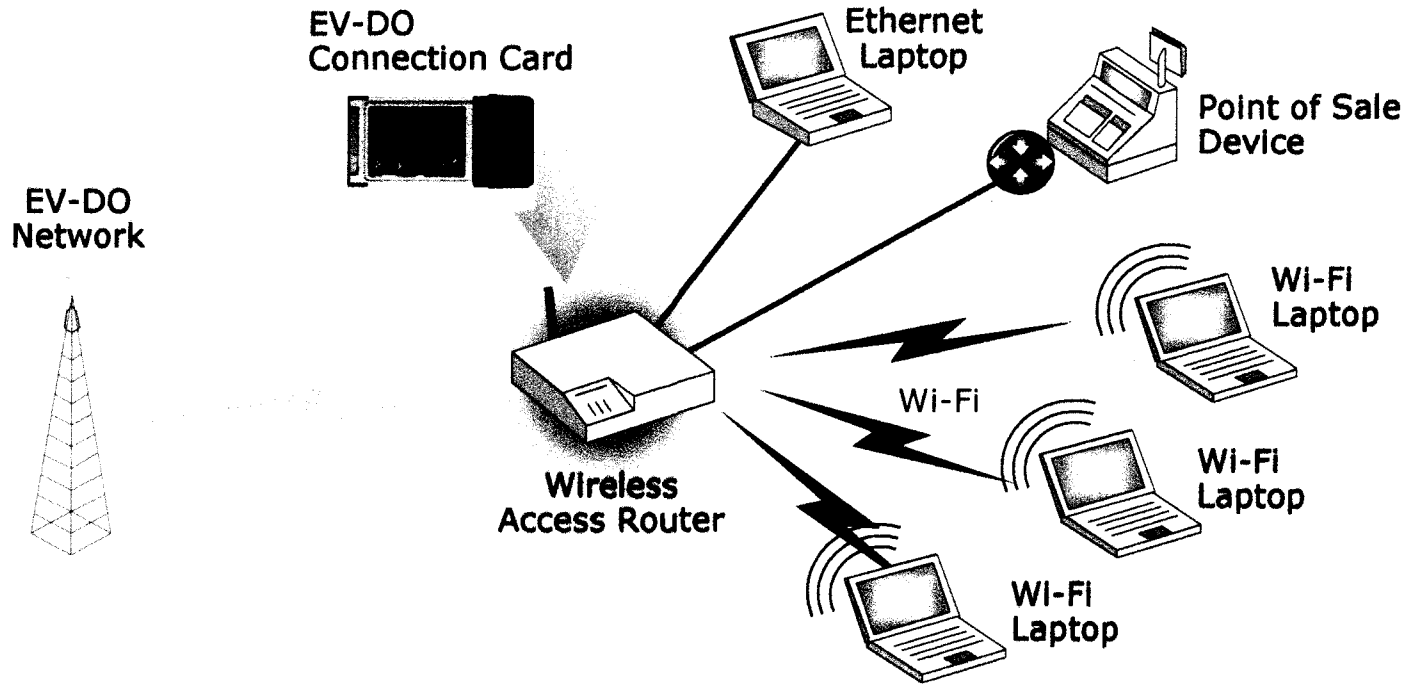
The request today is to ask staff to prepare a pilot project to test the effectiveness, cost and popularity of offering such a system. Upon the completion of this pilot project, it is hoped that enough positive data can be obtained to be able to have staff make a recommendation of offering this amenity at some level on our Fax system.

Staff should also seek ways to fund this project with grants and other new revenues.

The purpose of the pilot project is to determine the best way to offer this service in terms of cost and route availability. Ideally, the use would be at no-additional cost to the rider.

Wireless Access Router Solution

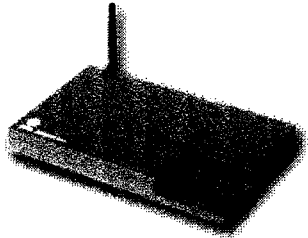
A wireless access router is a piece of equipment that uses a Mobile Broadband connection card to share EV-DO wireless data access via Wi-Fi or Ethernet with multiple users.



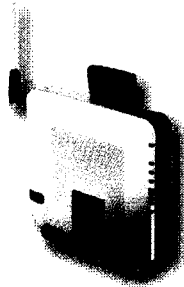
Mobile Broadband Router Solution

Mobile Broadband Router Overview

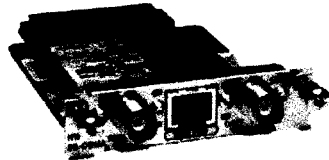
Junxion Box



Linksys WRT54G3G-NA



Cisco 3G Wireless High-Speed WAN Interface Card (HWIC)



- > Uses connection card in PC card slot to access PCS Network
- > Easy to remain current with wireless network capabilities
- > Internet access to a few users at a time with a single connection card
- > Quick and easy set up
- > Works with all Sprint connection cards

Small office deployments • Mobile event internet access • Disaster recovery / emergency response



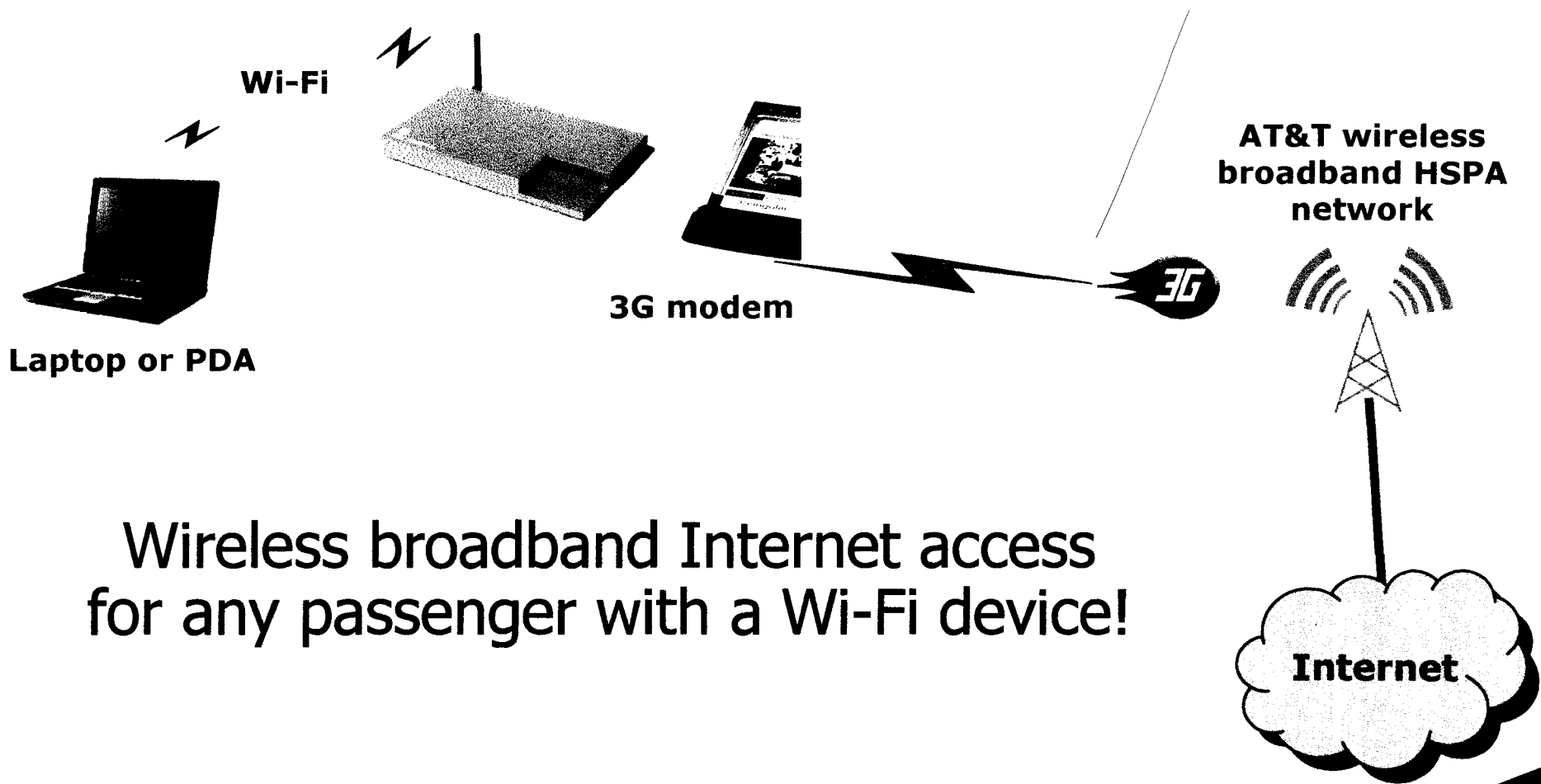
AC Transit and Alameda County Congestion Management Agency

Netbus "Internet for Public Transit"



- **Business Case – Improve the Rapidbus experience by offering High-speed Internet access to AC Transit Passengers**
 - Easy to Deploy
 - Reliable
 - Easy to use
 - Cost Effective
- **ACCMA, ACTransit, and AT&T's wireless unit worked together to bring a solution that exceeds all project criteria, including the following benefits to AC Transit and its customers:**
 - Increased use of Rapidbus service (more passengers)
 - Better service (happier passengers)
 - Decreased traffic congestion
 - Increase in productivity
 - Riders can finish work before arriving home to spend more quality time with family

- AT&T's wireless broadband network has average download speeds between 400-700Kbps with bursts over 1Mbps.
- Hardware
 - AT&T Certified Mobile Access Router
 - Sierra Wireless 875 HSPA Modem
 - Mobile Access Router supplies an IP session to each users device over Wi-Fi
 - Router uses Sierra Wireless modem to connect to the Internet over the AT&T wireless broadband network
- Users need a laptop or PDA with Wi-Fi capability.



Wireless broadband Internet access
for any passenger with a Wi-Fi device!