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July 19, 1999

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RECEIVED
JUL 20 1999
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: File No. NSD-L-99-24, CC Docket 92-105

Dear Ms. Salas:

The Metropolitan Transportation Commission (MTC), the regional transportation planning agency for the nine-county San Francisco Bay Area, supports the U.S. Department of Transportation's petition to the Federal Communications Commission (FCC) for assignment of a nationwide standard abbreviated dialing number (N11) for advanced traveler information system purposes. We urge a favorable and timely consideration of the petition by the FCC. MTC, like numerous agencies across the nation, already operates a traveler information phone service. As we stated in our visit to the FCC in April, we are prepared to convert to the N11 number as soon as such a number is made available. It is our belief that the public will derive maximum benefits from as early an implementation as possible.

MTC understands that the N11 numbers are a scarce and valuable public resource. We believe that the allocation of an N11 number for traveler information purposes is an appropriate use of this resource. This number will:

- serve an extremely broad segment of the public: anyone who drives, takes a bus, train, ferry, carpool, vanpool, bicycle, airport shuttle bus, or uses paratransit services;
- benefit this broad segment of the public by enhancing mobility, air quality, and safety;
- ensure ease of use and public convenience;

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- secure uniform, equitable access across jurisdictional boundaries; and
- provide the most attractive features to ensure high awareness, including consistent availability and ease of memory.

The benefit of available traveler information is currently constrained by the lack of public awareness and difficulties of inter-jurisdictional coordination. With a nationwide standard abbreviated dialing number (N11), these traveler information systems can provide a consistent service, build upon each other to leverage a greater overall awareness and provide a new level of convenience to the traveler.

Since MTC already operates a regional traveler information system and has experience in numbering issues, we believe that we may have special insight into the potential benefits of, as well as some questions related to, the referenced petition. In our attached comments, MTC provides background information on our difficulties in maintaining a traveler information number for the past two years. Our experience is relevant to the consideration of this N11 assignment because we have not only validated the value of traveler information, but have gained considerable insight into system characteristics fundamental to success. We also describe our concerns with other potential numbering alternatives for a national network of advanced traveler information systems (ATIS). Lastly, we identify key benefits we associate with the assignment of a national standard abbreviated 3-digit number for traveler information.

A nationwide standard abbreviated three digit traveler information number could provide an important public service. Early sponsors of traveler information systems have received promising feedback on the systems' potential as a transportation management tool: users readily adopt and like them. However, a significant gap continues to exist between potential and actual users. Any successful national traveler information number must be easy to remember, provide an imprimatur signature, and permit a consistent number throughout the country. MTC strongly believes that this petition for an N11 traveler information number accomplishes all these criteria.

Sincerely,

Lawrence D. Dahms
Executive Director

cc: Al McCloud (2 copies), Network Services Division
Helen Schrier Nankin, Common Carrier Bureau

attachment

POSITION OF SUPPORT

for

USDOT'S PETITION FOR THREE-DIGIT NATIONWIDE STANDARD ABBREVIATED DIALING NUMBER (N11)

By

Metropolitan Transportation Commission
File No. NSD-L-99-24, CC Docket 92-105

A nationwide, standard abbreviated dialing number (N11) will provide a signature number for advanced traveler information systems (ATIS) that the public will immediately recognize as a sanctioned, public service. This N11 number will not only provide an important management tool for transportation professionals, but important benefits to a broad segment of the population: the traveling public. Increased traffic and the unlikely prospect of new transportation facilities being built in the next 20 years are issues most, if not all, metropolitan regions across the country are facing. As a nation, we must tackle these trends with congestion management tools such as traveler information.

People need and want traveler information, and will use and recommend such services to others. Survey results from the San Francisco Bay Area's traveler information system (TravInfo™) show that callers appreciate the convenience of a single number for transportation information. MTC has also found that nearly half of our callers change their behavior based on the information they receive. Travelers who modify their trips make more efficient use of the transportation network, resulting in increased mobility, enhanced safety, and improved air quality. MTC realizes that the goals of mobility, safety and air quality can be met at least partially by other telephone numbers. However, it is only an N11 number that will provide the immediate recognition and memorability that would ensure growth in ATIS usage and accordingly, an accelerated rate of benefit accrual.

To be effective, traveler information systems need the prominence of an N11 number. Early pioneers, such as the TravInfo™ 817-1717 information service, have learned that educating our potential constituency about the intricacies of the telephone number, in addition to familiarizing them about the information available on it, is expensive, complex, and time-consuming. Even after nearly three years in operation, overall awareness of the system is low at less than ten percent. Of those who had heard of the service, the ability to recall the number was also low. MTC has concluded that to serve travelers or to have an impact on transportation operations, the ATIS number must be easy to recall and transparent in use.

The two likely alternative options to the N11 number, a 555-prefix or toll-free number, cannot approach the immediate recognition nor the facile memorability that an N11

number would provide. Since MTC has significant experience in operating and marketing its 817-1717 number, our views on alternative numbering solutions represent, at least, an informed perspective. We have included MTC's analysis of the 555 -prefix and the toll-free options in Appendices A-1 and A-2, respectively.

The current implementation of the TravInfo™ number suggests that there is great potential for nationwide benefits from traveler information systems. The discussion set forth in the remainder of our comments represent caller benefits and numbering issues that are derived from, but are not unique to, TravInfo™. The solution to realizing these traveler information benefits and resolving numbering problem issues centers on provision of a consistent, transparent, uniformly available, easy to remember number: a national standard traveler information N11 number.

Background On The San Francisco Bay Area's Traveler Information System (TravInfo™)

The following is a description of MTC's motivation in providing traveler information, how the traveler information system works and is funded, and the benefits that accrue to the general public who uses traveler information. While we specifically discuss the traveler information project MTC manages, the motivations, public benefits, and reasons for traveler information are applicable to all regions across the nation.

Bay Area Transportation Trends MTC is the transportation planning, coordinating, programming and funding allocation agency for the nine-county San Francisco Bay Area as statutorily created under California law[1]. In 1991, the passage of the federal Intermodal Surface Transportation Efficiency Act (ISTEA) provided regional agencies such as MTC new opportunities to handle regional transportation issues. MTC can now more directly address trends such as increased congestion, increased inter-county trips, and limited expansion of transportation facilities:

- **Increased Congestion** The Bay Area is undergoing an acceleration of economic and demographic forces and an attendant increase in traffic. As part of a 1998 Bay Area poll conducted by the Field Research Corporation, Bay Area residents were asked an open-ended question about the most important problems facing the Bay Area: the region's residents rated transportation as the number one problem. Survey results over the past four years alone identify a significant increase in the number of people who are apparently being adversely impacted by the region's transportation problems: 12% in 1994, 33% in 1996, and 40% in 1998[2]. In the past ten years, the nine counties of the San Francisco Bay Area – consisting of 100 cities spread over 6,915 square

[1] Cal. Govt. Code §666500 *et seq.*
[2] Bay Area Council, "Bay Area Poll," December 1998.

miles – experienced an 18% growth in traffic, 13% growth in jobs, and 13% growth in population. Over the next 10 years, it is projected that there will be an additional 17% growth in traffic, 15% growth in jobs, and 8% growth in population, for a year 2010 total of 149,889,000 weekday vehicle miles of travel, 4 million jobs, and 7.4 million residents[3]. Bay Area productivity naturally suffers because of this growing congestion: each driver spends the equivalent of 66 hours, about a week and a half each year, stuck in Bay Area traffic[4].

- **Increased Inter-County Trips** In 1990, residents made 3 million daily inter-county trips in the San Francisco Bay Area. In 2000, daily inter-county trips by Bay Area residents will rise by 8%, for a total of 3.3 million trips; trips will increase another 12% for a total of 3.7 million daily inter-county trips by 2010.

- **Limited Expansion of Transportation Facilities** As identified in MTC's 1998 20-year Regional Transportation Plan (RTP)[5], more than 80% of the $88 billion expected to flow in transportation revenues to the region by 2018 is allocated to the maintenance and operation of the existing Bay Area roadways and transit systems. While new facilities[6] are being considered, MTC expects that expansion of facilities to be built in the Bay Area will be limited for at least the next twenty years.

Traveler Information Objectives Based on the knowledge that traffic continues to grow in the Bay Area and that additional facilities will not be built within the next 20 years, MTC, in collaboration with two public partner agencies, the California Department of Transportation (Caltrans) and the California Highway Patrol (CHP), adopted several operational programs. Many of these programs are elements of the National Intelligent Transportation System (ITS) program, a major national initiative of the USDOT. These programs intend to more efficiently manage the existing transportation network; they include a roving tow truck program and an emergency call box system. Another of these programs, TravInfo™ and its principal feature, the 817-1717 transportation information phone number, also supports the key objectives underlying these partner agencies' collaborations:

- **Efficient Management Of Transportation System** TravInfo™'s up-to-the-minute information about congestion, major incidents, highway construction activity, and transit and carpooling alternatives provides callers with a powerful pre-trip and enroute-trip planning tool. With this information, callers have the opportunity to make choices that make better use of the existing Bay Area transportation network by choosing different routes, times of departure, or modes of travel.

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[3] Sources include U.S. Decennial Census; Association of Bay Area Governments Projections 1998 demographic/economic/land use forecasts; MTC household travel surveys conducted in 1981 and 1990; and MTC travel demand forecasts based on ABAG's Projections 1998 (2000, 2010, 2020).
[4] Texas Transportation Institute, "1998 Urban Mobility Study."
[5] MTC, "Regional Transportation Plan for the San Francisco Bay Area", August 1998.
[6] MTC, "The Bay Area Transportation Blueprint (draft)," 1999.

- **Enhancement Of Driver Safety** By learning about major incidents and/or road closures, callers to TravInfo™ can choose different routes, times, or modes for travel, thereby enhancing safety once on the road. By being better informed, callers can avoid major incidents or hazardous roadway conditions that could lead to additional incidents. With this system, unnecessary calls to 911 for roadway conditions can also be reduced. In fact, during the 1997 El Nino storms, the CHP actively informed the public to call TravInfo™ instead of 911 for information about flooded roads and transportation options.

- **Improved Air Quality** MTC has successfully collaborated with the Bay Area Air Quality Management District, the region's 28 public transit operators, the two major ridesharing organizations, the California Department of Transportation, major Bay Area employers and transportation management associations, and the Bay Area Council on a daily basis to encourage the public about alternatives to driving alone. In addition, during the summer months, TravInfo™ alerts commuters to "Spare the Air" days (i.e., when the ozone levels exceed recommended standards) and offers clean air commute alternatives.

<u>The Bay Area's TravInfo™ Service</u> TravInfo™ at 817-1717 provides comprehensive traveler information 24 hours a day, 7 days a week, 365 days a year to the public in the nine-counties of the San Francisco Bay Area. The project was launched on September 30 1996. Since that time, TravInfo™ has, as of June 30, 1999, served over 2.1 million calls. The monthly average number of calls to the system is 62,000. TravInfo™ is a valuable service to the public on an everyday basis as a means of getting information about local and inter-county public transit and carpooling options, traffic congestion, and highway construction conditions. Specifically, TravInfo™ at 817-1717 provides:

1) current traffic conditions by recording status messages on a continuous basis for 31 Bay Area freeways, 7 expressways, and 8 bridges;

2) highway construction update information for major freeway and bridge projects (e.g., the Western Span of the Bay Bridge Seismic Retrofit Project);

3) 59 direct connections to transportation service providers, including 28 public transit operators, 20 paratransit services for persons with disabilities, ridesharing services, personalized ground transportation information service to S.F. International Airport, Caltrans highway construction offices, Caltrans offices for information about Caltrans-operated Park and Ride and bicycle storage facilities; and

4) information about other transportation services, including: various bicycle programs and organizations, the Commuter Check Program, and Park and Ride lot locations.

TravInfo™ is a valuable service to the public not only on an everyday basis but also during regional transportation emergencies. TravInfo™ is positioned to serve in its transportation information clearinghouse role in the event of any major event disrupting Bay Area traffic, including earthquakes, flooding, or other natural or manmade disasters. Specifically, TravInfo™ served as a clearinghouse during the 1998 winter floods, the December 1998 San Francisco power outage, and law enforcement actions requiring bridge and highway closures. During the first three days of the1997 BART strike, TravInfo™ provided critical, detailed information to over 100,000 callers seeking alternative transbay and inter-county commute options.

Starting in 1998, MTC has elected to use federal funds available under the Congestion Mitigation & Air Quality (CMAQ) Improvement Program to finance TravInfo™ operations. As more and more Intelligent Transportation Systems have come into operation across the nation, funding requirements have adapted to address eligibility concerns for ITS programs. Not only is operation of traveler information systems an eligible use of these funds, but the TravInfo™ program competed well against other CMAQ-eligible projects in the San Francisco Bay region. All other metropolitan regions in non-attainment for air quality goals (and those regions maintaining attainment) can also use CMAQ funds for traveler information purposes.

CMAQ is not the only possible funding source from which TravInfo™ could tap: others include state fund under the Service Authority for Freeways and Expressways (SAFE), based on a California vehicle license surcharge; the California Transportation Development Act (TDA), based on state sales tax revenue; and the State Transit Assistance (STA) fund, based on state gas tax revenue. With the passage of recent state legislation (SB45), California metropolitan planning organizations (MPOs) gained considerable new funding authority, which had previously been centered at the state-level. SB45 did to state fund programming what ISTEA did for federal transportation fund programming. Metropolitan regions, therefore, do have the authority and the resources to finance these systems. MTC is confident that future funding of TravInfo™ operations can be secured.

Project Successes In 1997, TravInfo™ received the "Outstanding Project" award from the Intelligent Transportation Society of America. The service is well-liked by both the public and media. For example, the San Jose Mercury News cited TravInfo™ as #5 in their "Top 10 Bay Area Transportation Pluses of 1999." Those who know about and use the service rank TravInfo™ highly and recommend it to others:

- Most callers (98% of the traffic callers and 88% of the transit callers) said they would use the system in the future because of its "...**easy access to information via a single telephone number** and its up-to-the minute traffic information pertaining to their route.[7]" [emphasis added]

[7] Yim, Y.B., et al., "TravInfo™ Evaluation Traveler Response Element: 817-1717 Caller Study Phase I results," California PATH Working Paper (UCB-ITS-PWP-98-25), September, 1998.

- 91% of our callers recommend TravInfo™ to others[8].

Benefits to the Public Better informed drivers can make decisions resulting in general benefits such as more efficient use of the existing transportation network, greater safety, and improved air quality. Nearly half of existing TravInfo™ callers (47.7%) change their travel behavior (e.g., change in departure time, route, mode of travel, etc.) as compared to 15.2% of radio traffic listeners who change their travel behavior[9]. TravInfo™ callers change their behavior, as follows :

- change in route (27.6%)
- change in departure time (10.5%)
- change in route and departure time (4.8%)
- decided not to travel (3.8%)
- change in mode (1%)

For transportation managers searching for ways to operate their facilities more efficiently and to improve safety, these findings are indeed significant. Individual callers to TravInfo™ also find definite benefits by calling TravInfo™. When asked to report the main benefits gained by calling TravInfo™, users most often cited informed travel decisions (39.3%), travel time savings (35.8%), and reduced stress (17.9%). A majority of the existing callers (86.2%) surveyed are repeat customers and, therefore, continue to accrue these benefits with each call to the service.[10]

Traveler information serves an extremely broad segment of the population: anyone who drives, takes a bus, ferry, carpool, vanpool, bicycle, airport shuttle bus, or uses paratransit services. Traveler information benefits this broad segment both as an everyday trip-planning tool and also during times of regional emergencies. Detailed, up-to-the minute information about closed roads, rerouted transit lines, or hazardous conditions provided through a transportation information service such as TravInfo™ also helps reduce demand on emergency information services.

While the system is well-liked, public awareness is low. A broad area survey found a general awareness of 817-1717 by 9%[11] of the Bay Area population. Since public awareness of TravInfo™ is still limited, improvements in system performance, safety, and air quality are not as high as they ultimately will be once overall awareness increases.

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[8] Yim, Y.B., et al., "TravInfo™ Evaluation Traveler Response Element: 817-1717 Caller Study Phase II (draft)."
[9] Yim, Y.B., et al., September, 1998, *op. cit.*
[10] Ibid.
[11] Yim, Y.B. et al., "Evaluation of TravInfo™ Field Operational Test Final Report (draft)," June, 1999.

TravInfo™ Operating And Marketing Experiences

TravInfo™'s unique design allows callers to make a local, seven-digit phone call to the traveler information system. This design provides comprehensive coverage for the entire nine-county Bay Area, at a reasonable cost to MTC. However, due to numerous area code splits in recent years, MTC has been unable to provide even and reliable service to its constituents. We have found that this unreliable provision of service presents tremendous marketing challenges. Even beyond the complexities of educating the public about the use of the number during various periods of area code splits, marketing of a unique number such as ours presents significant challenges on its own. In this section we describe our attempts to ensure consistent coverage and the difficulties – during either an area code split or during "normal" operation – we have faced in marketing the number. This is relevant to the N11 consideration because 1) it shows how difficult it is for a local agency to provide an effective, comprehensive memorable number and 2) how some of our difficulties can be used to understand the trade-offs of possible nationwide numbers, including but not limited to N11.

Ensuring Consistent Service A calling plan created by the incumbent local exchange carrier (ILEC) in 1994 initially guaranteed MTC rights to use the 817-1717 number in all area codes in California, allowing for consistent coverage and actually future geographic expansion. When TravInfo™ began operations in 1996, the system operated in the four area codes (408, 415, 510, and 707). However, the 1996 Telecommunications Deregulation Act significantly changed the rules for code assignment: shortly thereafter, the ILEC informed MTC that we were no longer assured of obtaining the 817-1717 and 817-1718 numbers in new area codes.

Since 1996, the San Francisco Bay region has gained two additional area codes (650 and 925). In October, 1999, there will be mandatory 11-digit dialing (overlay) in the 408/669 area codes. An additional five area codes (possibly both splits and overlays) will be added in the Bay Area over the next two and a half years[12]. MTC, unsuccessfully, tried to address the code assignment problem by working with the California Public Utilities Commission (CPUC) through both legislative and regulatory approaches to ensure 817-1717 number availability in all new Bay Area area codes:

- In April, 1998, Assemblyman Papan authored AB 554 to directly address the number availability problem faced by MTC. The bill proposed assigning the 817-1717 number to MTC in all new area codes within the Bay Area. AB 554 garnered strong public and private sector support from local and agencies, elected officials, and private companies. However based on input from the CPUC, MTC decided to withdraw the bill in favor of pursuing a CPUC administrative ruling.

[12] Pacific Bell website, Area Code Split Timelines.

- In June, 1998, MTC filed a motion to intervene in the CPUC's combined rulemaking and proceeding (R.95-04-043 and I.95-04-044) on the Commission's Motion into Competition for Local Exchange Services. In this motion, MTC requested the CPUC to establish a policy to reserve 817-1717 and 817-1718 in new area codes established within MTC's jurisdiction for use for traveler information. A draft CPUC decision was issued denying MTC's motion. In January, 1999, the CPUC granted MTC's request for withdrawal of the motion.

Unreliable Service Provision Throughout the duration for which MTC was seeking legislative and regulatory solutions, MTC also endeavored to provide service in the sub-regions with area code changes through the regular code allocation process. MTC worked with the ILEC to successfully secure the 817-1717 (TTY:817-1718) numbers in two new area codes (650 and 925). While the ILEC was able to secure our numbers for us in these new area codes, there is no guarantee of future success based on past successes. In fact, based on these experiences to secure these two numbers in these two area codes, MTC realized that TravInfo™ would continue to face a series of problems with each new code allocation request. Since only telecommunications companies – not MTC – can request codes through the allocation process, MTC must continue to coordinate with a telecommunications provider. Providers have varying and numerous priorities. As such, the timeliness of response to MTC's code request may vary depending on the provider's current priorities. Lastly, once the telecommunications provider has submitted the request and all necessary justification, the code allocation process itself does not offer any guarantees.

The code allocation process in new area codes makes consistent, continuous, and geographically equitable access to TravInfo™ 817-1717 services an impractical proposition. As an example, the 925 area code in central and eastern Contra Costa County was created by splitting the 510 area code on September, 1998 (i.e., beginning of mandatory period). For the six-month mandatory period from September, 1998 to March, 1999, callers in the 925 area code who had previously dialed 817-1717 to reach TravInfo™, instead heard a message, "You must now dial 510/817-1717," thus requiring 925 callers to dial twice before reaching TravInfo™. It was not until February 16, 1999 that the ILEC was granted the 817 prefix from the code allocation process. Due to technical implementation issues, they were not able to open access to 817-1717/1718 from the 925 area code until May 14, 1999. Therefore, for a two month period after mandatory dialing ended, TravInfo™ callers in the 925 area heard, "That number is no longer in service," without any additional directional guidance for callers (e.g., that it was still possible to dial 510/817-1717 until such time access from the 925 area code was available).

This lack of service continuity underscores MTC concerns of uneven access to TravInfo™. Callers in the new area codes are bewildered. The local tranportation journalists are confused. Not only is the service uneven, but MTC has lost the trust of callers in these new area codes.

Ever-Changing Marketing Messages. Whenever the 817-1717 service becomes uneven due to creation of a new area code, our ability to market the number is seriously challenged. MTC has expended considerable resources in terms of marketing and media outreach to inform callers not about the service but about the status of number availability before, during and after an area code split. Marketing messages must be continually amended to describe the status of the new area code:

- permissive period (i.e., when callers in the geographic area of the new area code can still dial TravInfo™ without dialing any area code)

- mandatory period (i.e., when callers in the geographic area of the new area code must dial the 1+ the previous area code + 817-1717 to access TravInfo™)

- the transition period (i.e., before the end of the mandatory period and until such time that the telecommunications carrier has received the 817-prefix in the new area code, and has actually activated the number)

- standard period (i.e., the period after which the number is activated in the new area code until the next area code split (or overlay) enters its permissive phase).

Based on the continuing introduction of new area codes – either from splitting existing or overlaying, our inability to secure assistance from the CPUC, and the difficulties of marketing, MTC has concluded that our current configuration can no longer be sustained.

Marketing a Unique Number MTC has experienced considerable challenges in marketing the 817-1717 number, regardless of area code splits. The problems primarily relate to the fact that the public does not really understand how the number works or has a difficult time recalling it. We were recently contacted by an organization with a toll-free number: 1-800/817-1717. Unbeknownst to us, this organization has been receiving calls intended for TravInfo™. Their representative claimed to have received thousands of these misdirected calls for which, of course, they had to pay. The company has requested that we include an explicit message stating that 817-1717 is not a toll-free number.

While we regret the problem, we have always gone to great lengths to provide the specifics of how to use 817-1717 in our marketing, public relations and media outreach efforts. Certainly, we do not want our potential callers to call an incorrect number. We always included in our campaigns that while the "service is free, local toll charge may apply," or it is local call "available in 510/408/650/415/707/925 area codes." Having to include this kind of information is essential, since the number is so unusual. For example, we know that some callers are concerned when a toll charge appears on their telephone bill when they were not expecting it. However, we also know from our marketing staff that having "fine-print" detracts from the overall marketing message.

Lastly, a regular seven-digit number, such as 817-1717, does not stand out for the public. In a survey of Bay Area residents, "...even if they were aware of the service, most of them did not remember the TravInfo™ number[13]."

Relevance to National Assignment of ATIS N11 MTC's operating experiences suggest that the effectiveness of ATIS can be sharply curtailed if the number is not easy for the possessor to operate and maintain. One of the original intents of 817-1717 was to provide a cost effective tool for marketing. Achievement of this objective has certainly been kept in check. Between educating the public on area code splits and explaining how the system actually operates, the essential product, traveler information, has been given short-shrift in our marketing campaign. MTC's marketing experience then suggests that the number absolutely must be easy to use. We also assert that these are not local implementation issues, but instead translate – or are actually magnified – at the national level.

Direct Benefits Of A Nationwide Standard Abbreviated Number

The TravInfo™ deployment provides promising feedback as to ATIS' potential as a transportation management tool. However, without a telephone number that is easy to recognize, easy to recall, as well as consistent, the gap between potential and actual users will remain.

Enhanced Mobility The assignment of the same 3-digit number across the nation will produce similar mobility benefits to that received by TravInfo™ callers in the Bay Area. However, the potentials benefits would be magnified, as a national number captures additional travel markets outside of those that a regional system can assist. TravInfo™'s two primary functions, providing information for daily commuters and serving as a clearinghouse during regional emergencies could be expanded if we became part of a network of ATIS services linked across the nation. TravInfo™ could have a role in enhancing the mobility for intra- and interstate travelers, including trucking services, transportation services (e.g., Fed Ex), and tourists and vacationers. As MTC has found, TravInfo™ callers react to our information by modifying some part of their trip. It is reasonable to expect that travelers throughout the country could take advantage of better information to improve their trip decisions. These drivers can learn in advance of impacts of severe weather conditions or other significant events and adjust their trips accordingly. Anyone who finds out about congestion in advance of making a trip can minimize adding to the congestion and, correspondingly, enhance their mobility. In a nation where transportation efficiency and productivity are inextricably linked, and where the total cost

[13] Yim, Y.B., et al., September, 1998, *op.cit.*

of congestion annually amounts to more than $74 billion[14], such individual travel time savings can, once fully realized by the maximum number of people across the nation, significantly improve overall productivity.

Enhanced Public Safety The availability of a 3-digit number that is consistent across the entire nation will significantly enhance public safety. An important hypothesis regarding ATIS deployment is that their use will ultimately reduce frivolous calls to 911, allowing emergency dispatchers to attend to their primary mission, and not field calls about congestion and traffic. While it remains to be proven, anecdotal evidence in the Bay Area corroborates this hypothesis. We do know for certain, however, that callers using traveler information services for pre-trip or enroute trip planning are better informed and can therefore avoid major incidents or hazardous roadway conditions that often lead to additional, secondary accidents.

Enhanced Air Quality The availability of an accessible, easy to remember 3-digit number for traveler information will enhance public awareness and use of clean air commute options. As discussed in the Background Section, in a recent survey of TravInfo™ callers, we found that 1 percent of them shifted from a single-occupant vehicle trip to transit and almost 4 percent elected to cancel their trip. While these figures may not sound great to those outside the planning profession, transportation and environmental professionals find them significant and are encouraged. In a nation where we burn an annual equivalent of 670,000[15] gasoline tanker trucks' worth of gas while waiting in traffic, air quality will improve significantly if people across the nation take advantage of traveler information systems. If the penetration of ATIS could grow – and maintain these percentages – traveler information could indeed be an important tool for meeting air quality objectives.

Enhanced Marketability The implementation of a standard, nationwide 3-digit number will dramatically improve the overall success of individual traveler information services. Promotion of the number in one region will benefit overall general public awareness and use of the service anywhere in the country. Each state can leverage each other's marketing, promotion, and public education of the service. Just as 911 brings instant recognition to the public, the ATIS N11 number will represent instant recognition as a publicly sponsored traveler information service.

MTC has found marketing to be the greatest challenge surrounding the deployment of its traveler information number. Establishing a nationwide N11 number will render many of these challenges moot. Explanation of service area or dialing instructions would be unnecessary. While a tariff structure was not proposed in the petition, MTC believes that whatever ultimately is established, it will certainly be less confusing to the public than our current configuration and cost structure.

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[14] Texas Transportation Institute, *op. cit.*
[15] Ibid.

Strong recall of the ATIS telephone number is essential to its effectiveness. The N11 number will increase the number of people who can readily remember and recognize the ATIS number[16]. This is important since traveler information via a phone number is still a new concept. Many people are still learning about it for the first time. If they cannot recall the number, they may have difficult time finding it. The wide range of numbers used by agencies across a region – which would of course be magnified across the nation – can only diminish general public recall of any single number. As mentioned in an earlier section, TravInfo™ provides 59 direct connections to other transportation services. This means we have 59 telephone numbers for transportation services in our region. Our 9 percent awareness ranking becomes much more understandable within the context of what TravInfo is up against in establishing its identity. Compared to any other potential number, an N11 number is easier to remember and will distinguish the ATIS services from all others.

Equitable Solution Some detractors to the petition may argue that the convenience of three-digit dialing will be mitigated by speed-dialing options, cellular provided short-cut codes or voice-recognition technologies. These convenient options will largely be used by middle and upper-income groups. Transportation managers are concerned about providing an equitable solution to all members of the public, which none of these convenience technologies are likely to address. An N11 number will ensure that all members of the public have easy, memorable and convenient access to the same information.

Ability to Implement In California, much of the infrastructure to support a state-wide system is already in place. In addition to the 817-1717 number in the San Francisco Bay region, the Caltrans' operated 1-800/COMMUTE number operates in many other parts of the state. Other programs in the state will provide high quality traveler information and are scheduled to come on-line in the next few years.

This petition does not specify, nor explain how traveler information systems will be supported. MTC feels that while this issue is not one to be under-estimated, it should not present a serious impediment to assignment of an N11. MTC believes that the funding environment has sufficiently adapted to permit full-scale implementation of national traveler information systems. As more and more Intelligent Transportation Systems have come into operation, funding requirements have specifically addressed eligibility concerns for ITS programs. California is particularly well-suited to adopt and finance traveler information systems. In fact, MTC has begun to discuss possible implementation scenarios with the California Department of Transportation. Having a large state like California prepared to be an early implementor will certainly give national implementation of N11 for ATIS an excellent start.

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[16] Frederick Schmitt, Ph.D., Associate Professor of Neurology, Psychiatry, & Psychology, April 1997, Analysis of Memory Processes submitted to the Kentucky Transportation Cabinet for its use in its August 3, 1997 petition to the Public Service Commission of Kentucky for a 211 Number Assignment for traveler information services.

Appendix A-1

555-Prefix Option Analysis

MTC has concluded that the 555-prefix has sufficient intrinsic risk and uncertainty to render it a weak candidate for a national traveler information number. MTC believes that the reason only two regions in the United States have operational 555 prefixes is that a combination of obstacles related to public perception and industry coordination make the 555 prefixes overly-complex to implement. There is also significant potential risk that the rate schemes adopted for the 555-prefix are not viable as a long term solution to the USDOT's national number initiative. The additional problem that all desirable numbers have already been assigned makes the option unattractive for such an important program as national advanced traveler information systems.

Public Perception Educating the public about how the 555 prefix would work would be a significant task, due to its multiple complicating characteristics. The current general public perception of the 555-prefix number is that it serves solely as long distance directory assistance, 555-1212. In the San Francisco Bay region, this perception continues to be reinforced: dialing any combination of 555-xxxx sends the caller to long distance directory assistance. Furthermore, there is the "Hollywood" association attached to the 555-prefix numbers. A block of hundred or so numbers within 555 series are officially reserved for movie use (i.e., the fictitious numbers that used are in movies or TV shows.) MTC has concluded that the 555 prefix does not start with a clean slate of "no public awareness." Instead there will be a mistaken perception of the 555 prefix that will take considerable public education to correct.

MTC believes that significant public education and increased marketing are needed to introduce the public to the use of the 555 prefix. Given the unique operational characteristics of 817-1717, MTC has a good deal of experience in educating and marketing a special number. MTC believes that there is a strong likelihood that ATIS sponsors throughout the country would have to expend considerable public resources 1) explaining how the 555 number worked and 2) that it is indeed a real number. Clearly, MTC would prefer spending our resources informing people about the service, not educating the public on the basic principles of 555 operations and dialing guidelines.

Special Use Identification. The nature of traveler information service merits special recognition. Since there are 9,890 numbers number available under the 555-prefix, if a nation-wide number for traveler information was assigned, a marketing campaign to distinguish our purpose from all the other 555-prefixes uses would be critical. Again, resources would not be expended to build public awareness but for other, more defensive purposes.

Uncertainty of Implementation Implementation of the 555-prefix is problematic in most parts of the country. This special use prefix cannot yet be used in California.[17] While 555-number availability was announced in April 1994, MTC is aware of only two telecommunications carriers in the country (U.S. West in Oregon, and Bell Atlantic in four states and the District of Columbia) who have 555 numbers that are available for purposes other than long-distance information.[18] We have recently heard that Bell South currently is conducting marketing tests.

Currently, there appears to be no directive requiring telecommunications carriers to provide requested 555 services, thereby limiting the attractiveness of this as a solution. Since there is not a federal mandate to implement 555, it is expected that implementation will occur first at the local level: each local dial-tone carrier will have to reprogram their switches to appropriately transfer the call when a 555 number is dialed within each area code. To support a national 555-prefix traveler information number, cooperation amongst all carriers in North America would be essential. Public agencies in each state or region would have to approach the local dial-tone carriers for implementation. In California, the ILEC has indicated that they will not cooperate without CPUC intervention. If other ILECs behave similarly, successfully orchestrating this with the various state PUCs could take years. The telecommunications regulatory environment is sufficiently complex that it could be extraordinarily difficult for local public transportation agencies to each approach their state PUC to solve this problem.

Other competitive local exchange carriers (CLECs) recognize this and are searching for a potential assignee of the 555-prefix willing and able to tackle this complex set of implementation problems. To our knowledge, no assignee has yet assumed the responsibility to coordinate with 50 state regulatory bodies. Based on MTC's prior experience at the state level, CLEC opposition to the USDOT petition may have less to do with concern for an allocation of scarce resources and more to do with a desire to find a party to solve their national 555-prefix implementation problems. MTC experienced similar opposition in our motion to the CPUC, where CLECs were interested in the potential political sway that a public agency could have with regulatory or administrative bodies: opposition comments suggested that we modify our motion to request an inquiry into 555 implementation obstacles.

Inconsistent or Unknown Rate Structure The rate structures for 555 is not regulated at the federal level: as MTC understands it, the rates for the 555 prefix are set in each state. This lack of federal tariff suggests that transportation agencies may have to coordinate with 50 different regulatory agencies about the rate structure. Depending upon the outcome, we could potentially be launching a national number with differing cost structures throughout the country. Or, within a single region, different 555-prefix numbers will likely have different rate structures. All these differing rates will certainly diminish the clarity of the

[17] Internal memorandum, Lockwood. July, 1999.
[18] Telecommunications Magazine. April, 1999.

555-prefix. MTC believes that we need a national number that is easy to understand: 555-prefix will not be so straightforward.

Code Availability. While very few regions have operational 555 prefixes, all of the memorable number sequences have already been assigned. Having an easy-to-remember, easy-to-dial number (e.g., 555-trip, 555-info, 555-1000) is an essential feature of a nation-wide traveler information number. Such code does not seem to be possible with the 555-prefix.

Appendix A-2

Toll-free Option Analysis

MTC has concluded that a toll-free number would not be a viable solution for a national ATIS number. MTC believes that few public agencies across the nation would be able to afford a toll-free number – due in large part, to the need for the agency to pay for the entire costs associated with each call and the nature of costs which can vary by usage as well as geographic service area. There are also concerns about toll-free number availability and memorability. It is unlikely that a toll-free number exists that is both nationally available and appropriate for marketing traveler information. Furthermore, while it is reasonable to note the availability for a number may be increased with the recent availability of 877 and 888 as new toll-free prefixes (in addition to the more established and recognized 800-prefix), there are many people who do not yet recognize either 888 or 877 as a toll-free prefix. Major public education efforts would need to be targeted if an 888 or 877 prefix toll free number was available for use for national ATIS purposes.

Cost Implications for Public Agencies The current TravInfo™ 7-digit number local call design provides a cost-saving compared to a toll-free number. MTC projects that we are currently saving at least $91,000 annually[19]. We estimate an annual savings of at least $448,000 compared to a toll-free number when the system is fully built-out to all of the region's transit operators. The following lists some toll-free cost implications for public agencies:

- **Rates by geographic service area** Toll-free rates vary significantly not only according to the size of the organization carrying the toll-free service but also on a geographic basis. In areas where there are fewer carriers offering toll-free service, costs may be significantly higher that in areas where there is more competition. Local and regional public agencies across the country may not be able to get reasonable toll-free rates, resulting in many cases, in a solution that is cost-prohibitive.

- **Difficulty of estimating and controlling usage-based costs** Toll-free operating costs are based, in a large part, on overall usage--which cannot be predicted or controlled, thereby presenting a major challenge to many public agencies who are tasked with planning for and minimizing operational costs.

- **Possible additional costs for toll-free calls from pay phones** There may be additional charges associated with use of toll-free numbers from pay phones that have

[19] MTC, Internal Memorandum, December 10, 1998. The toll-free rate used to estimate the above cost saving was 4.83 cents/minute.

not yet been factored into MTC's cost estimate projections[20] that would also impact overall cost of service to all public agencies.

While the costs of N11 implementation are not fully known at this time, all petition supporters would endeavor to obtain the most cost-effective N11 rates as possible. However, even if it should turn out that costs for a toll-free service are the same as costs for an N11 number, the fact that an N11 number is a hallmark number would, ultimately, make it the preferred alternative.

Lack of Assurances of a Single, Consistent, and Nationally Available Number A single, consistent, nationally available, and mnemonically suitable toll-free number for traveler information cannot be assured. Many local and regional services and companies have asked for and received toll-free numbers that meet their specific marketing needs, thereby diminishing the possibility of one number being available nationwide for traveler information.

Public Perception of the "Toll-Free" Nature of 888 and 877 Numbers There is a diminishing supply of 800 toll-free numbers. The 888 prefix for toll-free service has been available since April 1998 in the Bay Area and more recently, toll-free numbers with the 877-prefix have also been made available. The public recognizes the "800"prefix as a toll-free number but there is no general recognition yet of either the 888 or 877 prefixes being associated with toll-free numbers. Therefore, any built-in brand equity associated with the more familiar "800" prefix as a toll-free service would be lost if an 888 or 877 toll-free number was obtained for traveler information.

[20] SF Chronicle, December 8, 1997, "Putting the Pay Back in Pay Phone Calls to 800 Lines." MTC is uncertain as to the status of the October 1997 FCC ruling that indicated that owners of toll-free numbers must pay a fee of 28.4 cents a call to owners of pay phones when customers dial a toll-free line from a public pay phone. If this is in effect, these additional costs have not yet been factored into the analysis, but would no doubt, increase overall toll-free operating costs significantly.