

# *MTS and NCTD*

## *Make Something Good Even Better*

### **EXECUTIVE SUMMARY**

The 2018/2019 San Diego County Grand Jury (Grand Jury) commends the overall quality of service provided by two major suppliers of public transportation: the Metropolitan Transit System (MTS) and the North County Transit District (NCTD). These two organizations provide bus, rail and/or trolley services in their respective areas of the County.

The Grand Jury's findings indicate that both organizations, working in conjunction with the San Diego Association of Governments (SANDAG), are providing the San Diego County, its citizens and visitors, with satisfactory, balanced transportation services at a fair value.

The Grand Jury recommends that MTS and NCTD as they plan for the decades ahead, work together to reduce confusion and user anxiety, particularly for new users, seniors, disabled patrons, and non-English speakers, both local residents as well as tourists.

### **BACKGROUND**

In response to a citizen complaint, the Grand Jury started this investigation to assess how easy or difficult it is to use the public transportation systems in San Diego County. On one hand, some features of ridership are difficult for first-time users to understand, including the fare structure and payment methods. Related activities, such as loading and reloading a Compass Card (the fare storage card used by both MTS and NCTD) can be confusing and frustrating. On the other hand, certain facets of these transit systems are positive: overall value provided, frequency of service, and aids such as the "Trip Planner" tool offered both online and in the smart phone apps by MTS and NCTD.

Public transit is a complicated community service due to many intricate and often-competing factors, which include:

- Infrastructure costs: vehicles, tracks and rights-of-way, ticketing machines/software, fuel, and maintenance facilities
- Maintenance and repair costs
- Fixed and ongoing security costs
- Challenging needs of multiple municipalities (trying to provide seamless transportation systems throughout the region)

- Legal complexities (rights-of-way, easements, multiple governing agencies and public priorities)
- Financing and pricing complexities, subsidies (federal, state, regional and local)
- Long planning horizons and lead times for change
- Staffing complexities (multiple unions; partner providers such as security, drivers, etc.)
- Relatively low ridership in some regions
- Affordable and convenient “first mile” and “last mile” options (getting riders to precisely where they need to go from wherever they are)

With the emergence of ride-sharing options in recent years, coupled with the more recent availability of dockless bikes and motorized scooters, and the future arrival of autonomous driving vehicles, San Diegans and the County’s 36 million annual visitors enjoy more transportation options than ever before.

The Grand Jury did not address other important long-term issues such as getting more San Diegans to use public transportation rather than private automobiles (especially to commute to work) or the costs/benefits associated with existing public transportation subsidies. Indeed, these issues confront almost every public transportation system and are the frequent subject of studies by other public and private entities.

## ***METHODOLOGY***

The Grand Jury gathered the information for this report from various sources including:

- Interviews with MTS and NCTD officials
- A review of recent local news stories
- On-line research and website reviews
- Team observations of riders using or attempting to use ticketing machines
- A review of promotional brochures for the systems
- A review of MTS tracking study results of ridership information
- Benchmarking results versus comparable city transportation systems
- Attendance at a public SANDAG meeting on new proposed fare structures

## ***DISCUSSION***

### **Metropolitan Transit System (Bus, Trolley)**

MTS serves a population of 3.34 million people in San Diego County.<sup>1</sup> MTS currently operates 814 buses over 93 routes, along with 177 light rail cars along 54 miles of track

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<sup>1</sup> United States Census Bureau, Quick Facts, July 1, 2017

and 53 light rail stations.<sup>2</sup> In Fiscal Year 2018 (FY 2018), MTS provided 48.4 million bus trips and 37 million rail trips (85.4 million total), down from a peak of 94.9 million total in FY 2015. This decline mirrors national trends and is attributed, in part, to the emergence of ride-sharing companies, increased auto affordability, stabilized gas prices coupled with improved vehicle mileage and other change forces.<sup>3</sup>

Approximately 72% of all MTS bus and trolley riders are considered “regular users” (those who ride three or more days/week). These tend to be younger citizens - those under 25 in particular, with no car and lower discretionary income. According to an October 2017 customer satisfaction survey conducted for MTS by a professional research organization, 92% of both bus and trolley riders indicated they were “very satisfied” or “satisfied” with MTS overall. Three-quarters or more of riders surveyed rated the system favorably on attributes such as “takes me where I need to go”, “has frequent service”, “is comfortable”, “is clean”, and “is a fair value”.<sup>4</sup>

The MTS, in conjunction with SANDAG, displays a solid strategic vision. Some of MTS’ noteworthy initiatives and recognitions are:

- The Mid-Coast trolley extension, which includes 11 miles of new track and nine new stations from Old Town to UTC (under construction and planned to open in 2021)
- The greening of their bus fleet. On October 19, 2017, the MTS Board of Directors unanimously approved a multi-year Zero Emissions Bus (ZEB) Pilot Program<sup>5</sup>
- Earning the 2018 American Public Transportation Association’s Gold Award for rail safety and security
- Free Ride Day, offering free rides on all MTS and NCTD fixed route buses and rail service (held in conjunction with SANDAG’s iCommute program, Free Ride Day is an effort to educate people about the sustainable transportation choices available in the San Diego Region)

### **North County Transit District (Breeze, Sprinter, Coaster)**

The North County Transit District (NCTD) currently operates 166 buses over 34 routes

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<sup>2</sup> Note: MTS and NCTD figures for fleet size and composition, number of routes, etc. vary constantly. For the purposes of this report, these fluctuations are not material.

<sup>3</sup> San Diego Metropolitan Transit System website and fact sheets

<sup>4</sup> Redhill Group, 2017, MTS Customer Satisfaction Surveys, Final Report

<sup>5</sup> inside-mts-current-projects/zero-emissions-bus-pilot-program, retrieved January 16, 2019 from [www.sdmts.com](http://www.sdmts.com)

(BREEZE<sup>6</sup> and FLEX<sup>7</sup> combined), 12 light rail trains (SPRINTER) along 22 miles of track, and 7 locomotives with 28 passenger cars (COASTER). NCTD serves a population of almost 842,000 residents and provides approximately 12 million passenger trips per year. In FY 2018, NCTD had an average weekday ridership of 21,216 passengers for BREEZE and FLEX combined 4,915 passengers for the COASTER, and 8,305 passengers for the SPRINTER.<sup>8</sup>

Some of the NCTD's noteworthy initiatives include:

#### **Safety improvements and plans**

- Installing and using a Positive Train Control (PTC) system for the Orange County to San Diego train corridor. PTC is a federally mandated technology that can prevent train-to-train collisions, derailments due to excessive speeds, and casualties or injuries to railway workers. PTC is particularly important as these tracks are shared by the COASTER, Amtrak, and BNSF freight trains. On December 31, 2018 the Federal Railroad Administration acknowledged completion of the PTC along the Orange County to San Diego corridor, only the fourth complete implementation in the country.<sup>9</sup>
- Actively working towards double tracking the entire rail segment used by both NCTD and Amtrak from Orange County to downtown San Diego. 67 percent of the rail corridor within the County is now double-tracked, up from 49 percent in 2008. Presently, 19.2 miles of double tracks are in design or under construction. Eventually, more than 97 percent of the corridor will be double-tracked. By eliminating the delays for trains operating in the opposite direction, double-tracking decreases travel time and allows for increased usage. Double-tracking, together with the PTC system, essentially eliminates the possibility of head-on collisions.

#### **Environmental Programs**

- Greening its bus fleet. In 2018, more than 80% of BREEZE buses were powered by either CNG (Compressed Natural Gas) or battery/electric and NCTD has projected that the remainder of its bus fleet will be

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<sup>6</sup> The regular bus service

<sup>7</sup> FLEX service offers rides by reservation in specific parts of North County

<sup>8</sup> North Coast Transit District website, <http://www.gonctd.com/>

<sup>9</sup> North County Transit District. (n.d.). NCTD Comments Regarding Management of the Del Mar Bluffs. Retrieved from <http://www.gonctd.com/wp-content/uploads/2018/10/Management-of-the-Bluffs-Sep-2018.pdf>

likewise powered in 2019.<sup>10</sup>

- Solar panels generate energy that helps power administrative facilities and maintenance operations for the agency. NCTD has installed seven electric vehicle (EV) chargers at the Oceanside Transit Center. Power for these chargers comes from solar panels on top of a carport roof built over the charging stations.<sup>11</sup>

### **MTS and NCTD Fare Systems**

MTS and NCTD share the same fare system and will continue to do so for the foreseeable future. A shared fare system allows riders to transfer easily from one transit system to another. For example, one might take the NCTD Coaster from North County to the Santa Fe station in downtown San Diego and then board an MTS trolley or an MTS bus to a final destination.

While a new fare system is currently in the design phase, it may be useful to describe some of the observed shortcomings of the current system, in an effort to contribute to the best possible system for regular users and visitors alike.

For regular riders, the key to both convenience and lowest cost is to use either the Compass Card (a pre-paid smart card that you tap to board any bus, trolley, or train in the system) or the Compass Cloud (a smartphone app that acts like a physical ticket or pass). However, the current Compass Card fare system has some confusing limitations and conflicting details that can discourage riders from using the MTS or NCTD. For example, it is not uncommon for a user to be confronted with three different expiration dates for a Compass Card:

1. One date is printed on the back of all Compass Cards (this is a predicted lifespan for the physical card, not its monetary value, and is strictly a function of when the card was produced).
2. A second date is mentioned on the website stating that a new card will last “up to five years”. This is based on the card’s life expectancy under normal use conditions.
3. A third date, which can be as much as 10 years in the future, is based on the account associated with the card and appears in one’s online account.

Confusion can also arise when a user reloads a card. In certain cases, primarily when a card is reloaded online, there is a several day lag between when a user pays and when this credit is reflected on the card. During this lag, a user checking the online expiration dates may find incomplete information about these dates and the card may

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<sup>10</sup> North Coast Transit District website, <http://www.gonctd.com/>

<sup>11</sup> [www.gonctd.com/sustainability/](http://www.gonctd.com/sustainability/)

be rejected as “invalid” when tapped at the stations. This creates needless anxiety. However, users of the relatively new Compass Cloud app do not face these potentially frustrating experiences, as the technology is more up-to-date.

As confusing as the fare system and machines can be for many local users who speak English or Spanish, this can be even more confusing for some tourists. Thirty-Six million tourists visit San Diego County each year and just over half stay at least one night.<sup>12</sup> This sizable group represents an important target and source of revenue for our public transit systems. According to *Tourism Economics: The Visitor Profile Study* quoted by San Diego Tourism Authority (SDTA), the top foreign visitors (non-English speaking) include those who speak Spanish, Mandarin or Cantonese, German, French and Japanese. In addition, while most Filipinos speak English, it would be helpful to provide travel information in Tagalog as well. Currently, the ticket machines are only bi-lingual (English and Spanish), as is NCTD’s website. In contrast, the MTS website offers information in virtually all languages (through the “Google Translate” feature at the top of their home page).

Multiple language options should also be considered in signage and kiosks at major rail stations, transit centers, bus stops and depots. These would be extremely helpful if they could give anyone a “routing to anywhere” in the County at the touch of a button.

Tourists, and many residents as well, would also benefit from multi-day passes that provide seamless County-wide travel on any and all public transportation alternatives. Currently, MTS/NCTD offer multi-day passes with two, three, four and 30 day options. There is no five or seven day pass. All of these have geographic or service provider restrictions as well.

Ticket machines on platforms are not easy to use, even for English and Spanish speaking users. Over a several month period, Grand Jurors witnessed dozens of foreign visitors struggling to use the machines. In addition, both the physical glare from the sun or accumulated condensation can make some screens unreadable at certain times of day.

Seniors and disabled patrons also face other difficulties using the ticketing machines. For example, there are one-way and roundtrip tickets available for some riders, but only one-way tickets for the trolley are offered for reduced senior fares. After determining that a senior roundtrip ticket cannot be purchased, a new senior user might buy two one-way tickets in order to avoid a second trip to a ticket machine,

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<sup>12</sup> San Diego Tourism Authority, Annual Visitor Industry Summary, 2018, <https://www.sandiego.org/about/industry-research.aspx>

only to discover after the purchase that a ticket for the trolley is only good for two hours from the time of purchase.

Another confusion witnessed was distinguishing between the credit card and cash payment slots; these are not clearly delineated through words or icons. Grand Jurors witnessed one foreign visitor accidentally inserting a credit card into the cash slot, only to see the machine take the card in and hold it.

Ticket machines and “tap readers” periodically provide false readings. One may “tap” a valid card and get a red rejection response (versus a green accepted one), even though the card is still valid. Some of this may be due to machine error.

Finally, both organizations’ websites are aging. According to MTS officials, the MTS website has not been significantly updated in over two years. It is well proven that old, outdated websites hurt business. There are other hidden costs as well like sales inefficiencies, slow website speeds, poor user experience, security vulnerabilities and others that add up to multiple missed opportunities to earn more business.

## ***FINDINGS***

**Finding 01: The MTS and NCTD, working in conjunction with SANDAG, provide the County (its citizens and visitors) with satisfactory, balanced mass transportation services at a fair value.**

**Finding 02: The current Compass card fare system has some confusing elements.**

**Finding 03: Three key potential user groups—seniors, disabled patrons and foreign visitors—are not well served by the current fare machines, transit websites and signage.**

**Finding 04: San Diego mass transit providers do not have multi-day passes that provide seamless travel region-wide.**

**Finding 05: The tap readers generate frequent errors that suggest a valid card is not valid.**

**Finding 06: The current fare system is not instantaneous; time delays between online payment and posting to a Compass card are often several days.**

**Finding 07: The MTS and NCTD websites are aging and require updates.**

## **RECOMMENDATIONS**

The Grand Jury recommends that MTS and NCTD work together toward implementing the following:

- 19-15:** Increase efforts to reduce confusion and user anxiety, particularly for new users, seniors, disabled patrons, and non-English speakers, both local residents as well as tourists, as noted in the report.
- 19-16:** Consider means to update the MTS and NCTD websites, ticket machines and apps to address the needs of tourists as well as residents. Offer information and trip planning advice in more languages and in as many media as necessary.
- 19-17:** Evaluate the possibility of introducing seamless, multi-day passes to anywhere in the County's public transportation.
- 19-18:** Consider updating both the MTS and NCTD websites, not only communicating new routes, fares, and details of using the new (2021) fare collecting system but also to simplify communication, reduce duplication of information, and make it easier for seniors, disabled patrons and tourists to use.
- 19-19:** Consider integrating or linking the two (MTS and NCTD) websites to have the same "touch and feel."

## **REQUIREMENTS AND INSTRUCTIONS**

The California Penal Code §933(c) requires any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the agency. Such comment shall be made *no later than 90 days* after the Grand Jury publishes its report (filed with the Clerk of the Court); except that in the case of a report containing findings and recommendations pertaining to a department or agency headed by an elected County official (e.g. District Attorney, Sheriff, etc.), such comment shall be made *within 60 days* to the Presiding Judge with an information copy sent to the Board of Supervisors.

Furthermore, California Penal Code §933.05(a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:

- (a) As to each grand jury finding, the responding person or entity shall indicate one of the following:
  - (1) The respondent agrees with the finding



- (2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.
- (b) As to each grand jury recommendation, the responding person or entity shall report one of the following actions:
- (1) The recommendation has been implemented, with a summary regarding the implemented action.
  - (2) The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
  - (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the grand jury report.
  - (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.
- (c) If a finding or recommendation of the grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the grand jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some decision making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

Comments to the Presiding Judge of the Superior Court in compliance with the Penal Code §933.05 are required from the:

<b>Responding Agency</b>	<b>Recommendations</b>	<b>Date</b>
<b>Metropolitan Transit System Board of Directors</b>	<b>19-15 through 19-19</b>	<b>8/13/19</b>
<b>North County Transit District Board of Directors</b>	<b>19-15 through 19-19</b>	<b>8/13/19</b>