CITIZENS *for* REGIONAL TRANSIT
617 Main Street, Suite 201, Buffalo, NY 15203

Metro Expansion Comments

By Citizens for Regional Transit
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Citizens for Regional Transit (CRT) is a community-based transit advocacy nonprofit that has worked to promote better public transit in Buffalo-Niagara for over 50 years. We served on the NFTA-Metro advisory committee for this project throughout the alternatives analysis and preliminary environmental assessments and continue to serve on the NFTA-Metro Citizens Advisory Committee that provides inputs to NFTA-Metro project and operational decisions. We submitted detailed comments on NFTA-Metro DEIS on 21 March 2021, which provide recommendations for implementing the proposed Metro Rail extension and comments on the associated environmental analyses. Our website (www.citizenstransit.org) provides additional detail about our work. We look forward to working with the FTA and NFTA-Metro in taking this project to the next level.

Executive Summary

We appreciate the FTA's willingness to serve as sponsoring agency for the Metro Transit Expansion and welcome them to the project and to Buffalo. Here's a summary of our comments as they relate to the identified topics:

- *The proposed scope of the EIS moving forward*. The EIS moving forward should build on work already completed by focusing on the Locally Preferred Alternative, light rail transit (LRT) analyzed in the NFTA-Metro Draft Environmental Impact Statement (DEIS) and previous studies over the last 50 plus years. Expanding this scope to reevaluate Bus Rapid Transit (BRT) will delay progress needlessly, as described below.
- *Metro's purpose and need*. The NFTA-Metro's purpose and need is reflected in their mission statement: "providing the highest level of safe, clean, affordable, responsive, and reliable public transportation." A fast, integrated LRT network, as the spine of the transit network is key to achieving this purpose and need. High volume corridors that require mode shifts, as selecting BRT for the Amherst extension would, work against this goal, as described below.
- *Alternatives to be considered*. We disagree that we should go back and restudy BRT. BRT was eliminated from consideration for the Amherst extension for good reason, as described below.
- *The environmental benefits and impacts to be evaluated*. Buffalo Metro Rail operates on clean electricity from the NY Power Authority's (NYPA) hydro power plant in Niagara Falls. LRT offers the least polluting high capacity solution that builds on prior investments, described below. It offers the cleanest per passenger mile pollution alternative.
- *Many other project-related issues and analyses*. This project has a long planning history that have led to the latest Locally Preferred Alternative (LPA) and DEIS planning documents. There are many local considerations that have informed the decision making process such as: the unique needs of UB, publicly owned available rail ROWs throughout the planned LRT network, and Buffalo's weather to mention a few. These are described below.

The FTA's requirement to restudy the Bus Rapid Transit (BRT) option is unnecessary. As explained in in more detail below, here's why: (1) The NFTA, its consultants, and the community have already spent years selecting, refining, and evaluating the alternatives for this project, a process that included comparison of LRT with BRT along many possible alignments, establishing LRT to be the Locally Preferred Alternative (LPA). (2) Restudying this question will delay the project needlessly, further postponing implementation of desperately needed high-capacity, environmentally clean transit solutions; (3) The BRT alternative was rejected for many good reasons, outlined below; and (4) Selecting BRT fails to leverage the investment already made in building Buffalo's successful, functioning LRT.

1. We already spent many years evaluating project alternatives

The original plan for Buffalo's light rail network was developed in the 1960s and 1970s revisited periodically over the years with the most recent major study completed in 2001 and updated in 2010. Based on these foundational plans, the first in-depth transit expansion evaluation began in for the Amherst extension in 2012. It progressed over the ensuing years and involved extensive stakeholder input and public outreach, resulting in identification of a LPA and a detailed DEIS. The LPA was refined in 2018, resulting in a modified alignment based on further public input. The new alignment better addressed the needs and concerns of key stakeholders and reduced overall costs. The Greater Niagara Regional Transportation Council (GBNRTC) sponsored and led a parallel Transit Oriented Development (TOD) study that found significant economic benefits along the planned LRT deployment. It has now been 10 years developing this latest plan for the Buffalo Metro LRT extension to Amherst. We don't need to go back and reconsider alternatives that have already been rejected and rejected for good reason!

2. Re-examining BRT will only add further delays

Re-examining BRT will prolong the project needlessly. Buffalo deserves support in moving forward with the LPA selected after years of analyses completed in accordance with state and federal requirements and with extensive public and stakeholder input. We ask the FTA to respect the work already completed and support moving forward with the locally selected solution without delay.

3. BRT Will Not Provide the Needed Capacity and Will Require a Mode Shift in the Middle of Key Transit Corridor

The selection of LRT for the Amherst extension is the only approach that will work effectively on this corridor for the following reasons:

Capacity. LRT can handle the UB student load because each train, with a top capacity of 700, can carry hundreds of passengers each trip. Buses can only carry 50 people (100 to 150 people with articulated buses, but these don't work well in snow and are not recommended for Buffalo). In order to carry the number of passengers demanding service between the UB campuses, selection of BRT featuring non-articulated (reduced capacity) buses would require bus departures every 3 to 5 minutes apart. This is not realistic, given the requirement for operation in

mixed traffic on Main Street and Kenmore Avenue and high-traffic cross intersections to navigate – intersections like Sheridan Drive that will need many minutes to clear crossing traffic. The inadequacy of bus-based transit for UB is evident every day on the bus system that UB currently operates ("The Stampede"), which regularly experiences bunching and overloading, even on the shorter, more direct Millersport / Grover Cleveland Highway route the Stampede now takes.

Mode Shift Disruption. The selection of BRT will require a mode shift in the middle of a critical transit corridor. This will significantly lengthen the travel time from Amherst to downtown Buffalo and back. Passengers heading downtown would have to exit BRT buses at University Station, make their way into the station, take the long elevator or escalator to the LRT tunnel, and wait for the next train before completing the trip downtown. This will add 5 to 15 minutes (depending on how long they have to wait for the next train) to an already 50-minute long trip (10% to 30% increase). Also, in the Amherst direction, in addition to the mode shift, the potential for hundreds of passengers exiting the LRT and attempting to board 50-person BRT buses can overwhelm the bus system during peak periods. Commuters who have the choice to drive will not choose this inconvenient and terribly time-consuming option. Having to get up, gather ones belongings, and go out into the weather mid-journey at University Station to wait of another mode negates the important advantage of the one-seat transit ride: being able to read or prepare for one's workday ("Metrotasking") during the commute.

3. BRT Fails to Leverage Prior Investments. Buffalo has already invested in one of the most successful LRT systems in the country, ranked 4th in passengers per mile (pre-recession) and carrying 18% of all NFTA-Metro riders – this on a 6.4 mile LRT compared to over 1,000 miles of NFTA-Metro bus service! This past investment is worth billions in today's dollars that can be cost-effectively expanded to provide a seamless transit connection between Buffalo and Amherst – our largest and most populous suburb – along a corridor containing a large percentage of the current and future jobs, and in the process connecting all 3 UB campuses. Failing to leverage this prior investment would be a huge wasted opportunity and a colossal mistake.

We ask the FTA to please respect Buffalo's LPA selection based on 10 years of work, decades of planning, and extensive stakeholder and public input. Please help us expedite moving forward on this project and leveraging the investments already made to build upon Buffalo's existing light rail.

Background

Buffalo is growing again. The 2020 US Census have revealed that the city of Buffalo especially, and its surrounding communities had substantial growth, reversing a decades-long downward trend. The growth is attributed to Buffalo attracting immigrants from many different countries, as well as from New York City due to Buffalo's low cost of living and good job market.

Thirty percent of Buffalo's households do not own cars and depend on public transit for satisfying their transportation needs. This demand for public transportation will only grow as Buffalo attracts more immigrants. Buffalo's Metro Rail forms the high-speed transit spine that makes transit work for those who depend on it. It needs to be expanded to connect high priority

destinations (e.g., airport, Bill's stadium) starting with UB's Amherst campus as originally planned.

Like many cities in the US, Buffalo experienced extensive suburban sprawl abetted by urban highways like the Kensington Expressway (Rt. 33) that ripped through minority neighborhoods in the city. A robust high-capacity transit system with Park & Rides will be key in eliminating these urban scars. The Amherst extension will help by providing one seat rides from Amherst and serving even further out suburbs to downtown Buffalo.

Buffalo Metro Rail, while only 6.4 miles long compared to 1,075 miles of bus service carries 18% of NFTA-Metro riders. In 2019 (pre-pandemic) Metro Rail carried 4,394,000 riders giving the system a very respectable rider-per-mile value. Because of the UB student load, *Metro Rail ridership will double the day the Amherst extension opens!*

Buffalo was a major rail hub in the early 20th century. While rail business in Buffalo is less today, virtually all of the rail rights-of-way are still available and publicly owned. This makes the build out of Metro Rail very cost effective and achievable without construction disruptions, and resulting in a light rail network on dedicated ROWs that can accommodate fast trains (50MPH between stations). *The Amherst extension is an important first step in building this light rail rapid transit network.*

Since the 1960's, the region's economy has shifted from industry to higher education, high-tech, and government services. Today, the education sector alone makes up for the loss of steel and industry jobs. The largest educational institution is the University at Buffalo (UB). Total enrollment at UB is over 30,000 and has over 6,000 employees. UB is split between three campuses that will be connected by the Amherst extension. UB will continue to an engine for growth in Buffalo. *The importance of connecting the campuses with light rail has been recognized for decades* and within the UB system a key part of UB's 2020 plan.

A lot of research was done on what faculty, staff and students want for transit. Rail was heavily preferred to bus-based systems. Most important was the concept of a "single seat ride" whereby a patron should be able to board at North Campus and travel downtown and back without having to transfer to another conveyance.

Buffalo weather makes transportation difficult in winter, especially for the disabled. A transit system that requires moving on and off and between buses and trains is especially problematic. This is exactly what selecting BRT rather that an integrated light rail system will create; a major mode-shift bottleneck for all in the middle of a major transit corridor.

Comparing the Three Options

Do Nothing Option.

In this case the consequences of "doing nothing" requires knowing what is currently in place, with the assumption that the current set of conditions would continue. We need to describe what we currently have before we can compare it to BRT and LRT.

UB currently runs buses between campuses. The main bus that connects UB's Amherst campus with the Main Street campus runs along Millersport and Grover Cleveland Highway, a very direct route between the campuses. The UB buses are branded as the "Stampede". *The Stampede service adopts may BRT characteristics*:

- Limited stops. There is only one stop off campus at Maynard Drive on Grover Cleveland Highway.
- No payment due at boarding, which reduces dwell time.
- High frequency with average headways of about 3.5 minutes.
- Better than average bus stop accommodations.

However, *the Stampede operates in traffic*, which can be heavy at times, especially at Maple Road, Sheridan Drive, Main Street, and at University Plaza (northbound). Congestion at Main Street and Bailey Avenue, and at Millersport Highway and Maple Road is so bad that northbound buses use the right turn slip to make a "Jersey left" instead of making left turns. Bus bunching is common in both directions. See pictures below.

Figure 1. Three northbound UB Stampede buses bunched.

Citizens for Regional Transit made a brief study of the current service levels of Stampede and NFTA local service bus #44. With minor variations, UB Stampede and Metro bus follow the same alignment between Flint Circle and UB's South Campus, which is depicted as the orange line on NFTA-Metro's map (reproduced below). CRT's study was conducted September 9, 2021 at the corner of Millersport Highway and Sheridan Drive from 3:30pm to 5:10pm. At this time of day most UB classes have ended for the day resulting in less than peak demand. Public school classes are also finished for the day at this time. Due to COVID-19, many people are working

from home, which reduces congestion somewhat. The weather was 77 degrees with clear skies. Conditions were ideal. Traffic will never be better than this.

Figure 2 compares the current Stampede and NFTA #44 bus routes (orange line) with the planned BRT and LRT alignments (blue line). The CRT-added red triangles show major conflict points (heavy crossing traffic, congestion).

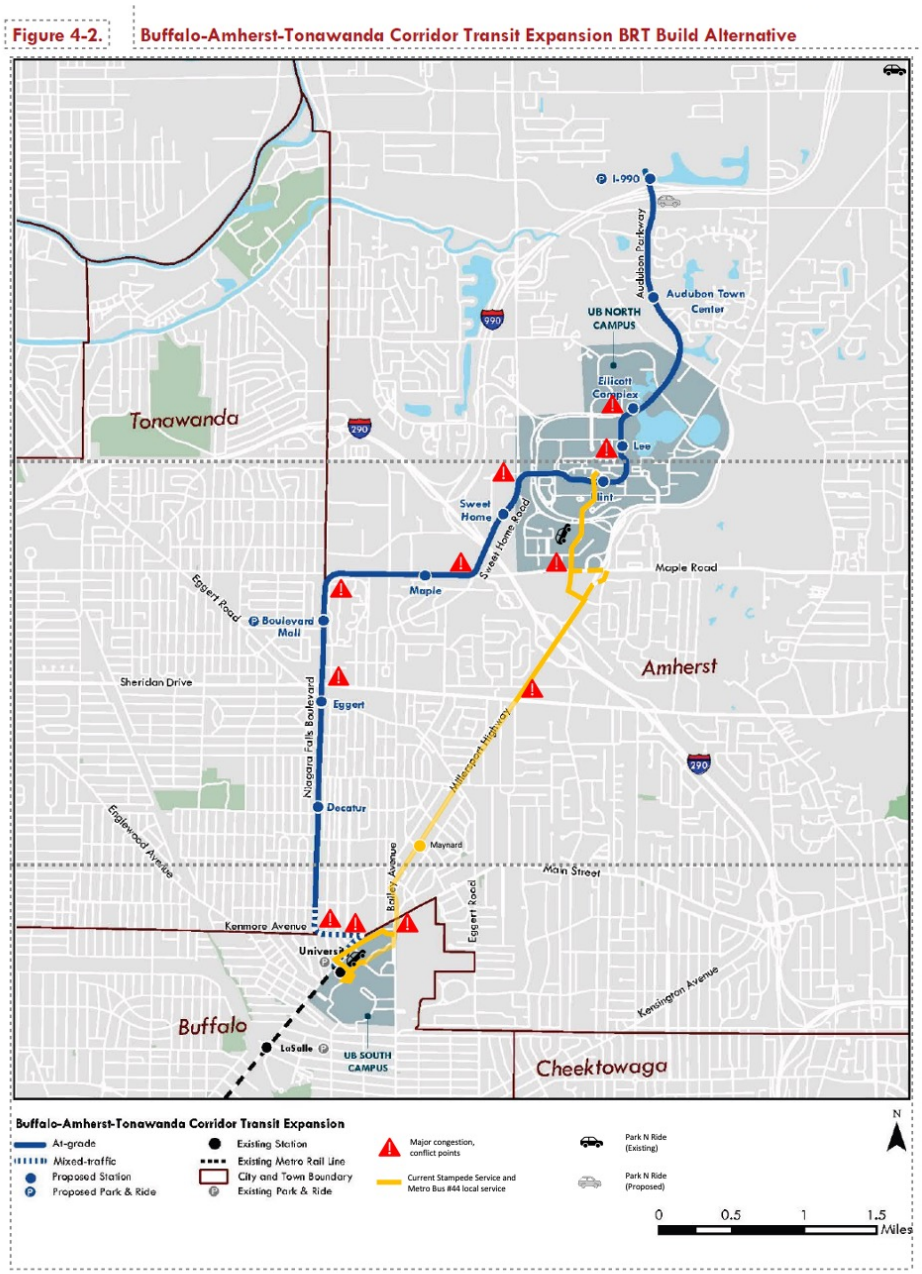

Figure 2. NFTA-Metro map (Figure 4.2) with CRT modifications comparing current and planned alignments and showing conflict points.

UB obviously has a capacity issue with the current arrangement. Our survey shows UB is running extra buses attempting to meet capacity concerns. The data from our survey of Stampede buses is shown in Tables 1 and 2 of Appendix A.

The Stampede drops students at the upper level above the bus loop where NFTA buses connect with the subway. While technically meeting ADA requirements, making connections between the Stampede and subway service is a challenge on a good day and is nearly impossible when the weather is less than ideal. Making this connection adds 10 to 30 minutes to the total trip travel time for Stampede riders who need to make the connection to Buffalo Metro.

Choosing *the "Do Nothing" option saddles UB with a constraint that limits the University's future growth*. Total travel time for passengers desiring to connect Stampede service with subway service will remain abysmal and is a hardship for people with disabilities.

Bus Rapid Transit (BRT) Option

The proposed BRT alignment is shown in Figure 2 above in comparison to the existing Stampede alignment.

The proposed BRT option is a compromise between a true BRT system having dedicated guideways with few conflict points and a basic local bus system. Rather than just one stop of the DO NOTHING option, *the BRT option proposes 5 stops between UB North Campus and South Campus and requires negotiating several major intersections*. With BRT buses running very tight headways along the longer alignment it will be virtually impossible to maintain schedule. With 3.5 minute headways it will not be possible to give all the buses priority and still provide enough time for clearing cross traffic.

From a traffic perspective, BRT will be untenable. With 3½-minute headways, on average, *a bus will approach each already congested intersection every 1 minute and 45 seconds*. Giving BRT buses priority means that traffic on cross streets will have to be stopped longer than the current cycle times of the traffic lights. The only two options are to have BRT buses bunch and go behind schedule or stop traffic on busy cross streets to the point that congestion will clog them causing gridlock. Neither option is an acceptable one. We see no way around this issue. Motor vehicle drivers will be frustrated and angry, as will BRT passengers. Sharing routes and perhaps alignments with NFTA buses (e.g., the #34) will just make matters worse.

The length of the BRT route, which extends through North Campus to I-990, is approximately twice the distance of the DO NOTHING option. *To maintain 3½-minute headways, twice as many buses, drivers and maintenance will be required while still not meeting the capacity needs of UB students*. Future growth of UB will not be accommodated by the BRT alternative.

If carbon-base fueled buses are replaced with electric buses, noise from operations will be significantly reduced and tailpipe emissions transferred to the source of the electricity. However, electric buses are twice as expensive as regular buses adding significant initial and ongoing costs for the system.

When completed, the BRT Niagara Falls Boulevard alignment will add congestion to these already heavily congested roads:

- Niagara Falls Boulevard between Kenmore Avenue and Decatur
- Kenmore Avenue between Main Street and Niagara Falls Boulevard
- Main Street between Kenmore Avenue and Main Circle
- Niagara Falls Boulevard and Sheridan Drive
- Maple Road between Niagara Falls Boulevard and Sweet Home Road
- Sweet Home Road between Maple Road and Rensch Road

Light Rail Option

Citizens for Regional Transit submitted detailed comments to the NFTA DEIS on March 21, 2020. In that document we came out in support of the LRT option with documentation as to the many reasons why. We also made a few recommendations for improving the alignment. Please refer to our earlier submittal for detailed comments.

Both BRT and LRT will have construction impacts, slightly more for LRT. It will be important for all roads to remain open during construction.

Electric trains are the most environmentally sound option. Their tire-free low rolling resistance is the clear winner for every measure of environmentally friendly transportation. Minimal use of plastics, long vehicle life, and no greenhouse gas emissions make LRT the best from an environmental perspective. Since Buffalo Metro LRT uses electricity from the NYPA hydro power plant in Niagara Falls, it is an especially good choice from an environmental perspective here in Buffalo.

From a traffic perspective, LRT is the best option. With 10-minute headways in each direction *a train will approach each already congested intersection only every 5 minutes* providing ample time for cross traffic to clear.

LRT is the only option that allows UB to meet its current capacity needs along with room for future growth.

As we pointed out in our previous submission, the John J Audubon section of the project should use the west (currently southbound) for LRT and the east (currently northbound) lane for motor vehicle traffic. This mitigates noise and vibration in Walton Woods and better accommodates new mixed-use development plans north of I-990. Lastly, it is less safe to force thousands of students to cross John J Audubon parkway to board LRT trains.

CRT continues to enthusiastically support LRT over DO NOTHING and BRT options for the reasons summarized above.

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Appendix A
Current Performance of UB Stampede Buses

See tables below for data on performance of UB Stampede buses with average 3.5 minute headways. However this performance is very variable, ranging from 0 seconds to 18 minutes. Obviously the Stampede is struggling to handle the load. NFTA buses moving along the corridor are also noted.

Table 1. Stampede Performance – Southbound

Bus #	Enter Intersection	Clear intersection	Time to clear	Time between buses (Headway)
BRT Unk	3:43:36 PM	3:46:27 PM	02 min : 51 sec	
NFTA 1105	3:48:58 PM	3:50:05 PM	01 min : 07 sec	03 min : 38 sec
BRT Unk	3:52:43 PM	3:54:27 PM	01 min : 44 sec	04 min : 22 sec
BRT 4132	3:54:49 PM	3:56:58 PM	02 min : 09 sec	02 min : 31 sec
BRT 4117	3:54:49 PM	3:57:09 PM	02 min : 20 sec	00 min : 11 sec
BRT Unk	3:58:41 PM	4:00:20 PM	01 min : 39 sec	03 min : 11 sec
BRT 4118	4:00:02 PM	4:05:57 PM	05 min : 55 sec	05 min : 37 sec
BRT Unk	4:08:11 PM	4:11:07 PM	02 min : 56 sec	05 min : 10 sec
BRT Unk	4:08:11 PM	4:11:07 PM	02 min : 56 sec	00 min : 00 sec
BRT Unk	4:08:11 PM	4:11:07 PM	02 min : 56 sec	00 min : 00 sec
BRT Unk	4:11:35 PM	4:11:46 PM	00 min : 11 sec	00 min : 39 sec
BRT Unk	4:11:35 PM	4:11:46 PM	00 min : 11 sec	00 min : 00 sec
BRT 4132	4:30:14 PM	4:30:26 PM	00 min : 12 sec	18 min : 40 sec
BRT 4129	4:30:14 PM	4:30:26 PM	00 min : 12 sec	00 min : 00 sec
BRT 4111	4:38:24 PM	4:38:56 PM	00 min : 32 sec	08 min : 30 sec
BRT 4128	4:40:17 PM	4:41:42 PM	01 min : 25 sec	02 min : 46 sec
BRT Unk	4:45:58 PM	4:46:15 PM	00 min : 17 sec	04 min : 33 sec
BRT 4131	4:53:55 PM	4:56:47 PM	02 min : 52 sec	10 min : 32 sec
NFTA 1106	4:57:51 PM	5:00:13 PM	02 min : 22 sec	03 min : 26 sec
BRT Unk	4:59:40 PM	5:00:13 PM	00 min : 33 sec	00 min : 00 sec
BRT 4118	5:00:02 PM	5:02:52 PM	02 min : 50 sec	02 min : 39 sec
BRT 4129	5:00:02 PM	5:02:56 PM	02 min : 54 sec	00 min : 04 sec
BRT 4132	5:00:02 PM	5:03:01 PM	02 min : 59 sec	00 min : 05 sec
BRT 4107	5:04:26 PM	5:06:39 PM	02 min : 13 sec	03 min : 38 sec
BRT Unk	5:04:26 PM	5:06:39 PM	02 min : 13 sec	00 min : 00 sec
		Max	05 min : 55 sec	18 min : 40 sec
		Min	00 min : 11 sec	00 min : 00 sec
		Average	01 min : 56 sec	03 min : 21 sec

Table 2. Stampede Performance – Northbound

Bus #	Enter Intersection	Clear intersection	Time to clear	Time between buses (Headway)
BRT 4117	3:35:02 PM	3:36:27 PM	01 min : 25 sec	
BRT 4146?	3:36:37 PM	3:38:45 PM	02 min : 08 sec	02 min : 18 sec
BRT 4118	3:43:21 PM	3:44:40 PM	01 min : 19 sec	05 min : 55 sec
BRT Unk	3:46:40 PM	3:47:50 PM	01 min : 10 sec	03 min : 10 sec
BRT 4112	3:49:26 PM	3:50:38 PM	01 min : 12 sec	02 min : 48 sec
BRT Unk	3:49:28 PM	3:50:40 PM	01 min : 12 sec	00 min : 02 sec
NFTA Unk	3:55:05 PM	3:56:19 PM	01 min : 14 sec	05 min : 39 sec
BRT 4129	4:02:48 PM	4:06:11 PM	03 min : 23 sec	09 min : 52 sec
BRT Unk	4:08:44 PM	4:11:07 PM	02 min : 23 sec	04 min : 56 sec
BRT Unk	4:11:07 PM	4:12:06 PM	00 min : 59 sec	00 min : 59 sec
BRT Unk	4:16:43 PM	4:17:49 PM	01 min : 06 sec	05 min : 43 sec
BRT 4112	4:26:42 PM	4:29:44 PM	03 min : 02 sec	11 min : 55 sec
NFTA 1010	4:30:55 PM	4:32:43 PM	01 min : 48 sec	02 min : 59 sec
BRT 4131	4:30:55 PM	4:32:51 PM	01 min : 56 sec	00 min : 08 sec
BRT 4117	4:37:22 PM	4:38:42 PM	01 min : 20 sec	05 min : 51 sec
BRT Unk	4:42:52 PM	4:43:29 PM	00 min : 37 sec	04 min : 47 sec
BRT 4118	4:43:29 PM	4:44:37 PM	01 min : 08 sec	01 min : 08 sec
BRT 4132	4:44:43 PM	4:44:43 PM	00 min : 00 sec	00 min : 06 sec
BRT 4107	4:45:12 PM	4:45:25 PM	00 min : 13 sec	00 min : 42 sec
BRT 4129	4:45:12 PM	4:45:28 PM	00 min : 16 sec	00 min : 03 sec
BRT 4133	4:47:46 PM	4:47:46 PM	00 min : 00 sec	02 min : 18 sec
BRT 4111	4:53:42 PM	4:53:42 PM	00 min : 00 sec	05 min : 56 sec
BRT Unk	4:54:53 PM	4:55:20 PM	00 min : 27 sec	01 min : 38 sec
BRT 4128	4:56:36 PM	4:56:36 PM	00 min : 00 sec	01 min : 16 sec
BRT 4112	5:00:39 PM	5:02:35 PM	01 min : 56 sec	05 min : 59 sec
NFTA Unk	5:05:19 PM	5:05:54 PM	00 min : 35 sec	03 min : 19 sec
		Max	03 min : 23 sec	11 min : 55 sec
		Min	00 min : 00 sec	00 min : 02 sec
		Average	01 min : 11 sec	03 min : 35 sec