NC Department of Transportation
Public Transportation Division
Qualifying for Advanced Technologies Policy
Updated 2/9/2016

The following is the policy for funding advanced technologies with State of North Carolina funds:

Who	• Applies to Urban Systems, Community Transportation Systems, Urban / Community Transportation consolidated systems, Regional Systems
What	• All technology deployments requesting funding from the state technology program OR matching funds for Federal grants OR community transportation administration funding
Expectations	• **NCDOT expects that all technologies purchased under this policy with Memorandums of Understanding that do not specify how long a software must be used after the 'go live' to avoid repayment of 90% of the project cost to NCDOT will be used for a minimum of 8 years. Replacing the technology before the 8 year term is complete will result in full repayment. (updated 2/9/16)** • **NCDOT expects to participate in funding each technology only once per Transit System. If the Transit System decides to replace the technology, the Transit System should use other funding sources and not NCDOT funds. (updated 2/9/16)** • All projects will support NCDOT's Public Transportation Division Regionalization Initiative – it is not the intent of this policy to support more than one implementation of a specific software in a region, as defined in the qualifications section. • All projects will follow the expectations in the Memorandum of Understanding and the State / Local Contract • All projects will be included in the Regional ITS Strategic Deployment Plans or submitted as a plan update (www.ncdot.gov/doh/operations/dp_chief_eng/its/strategic/plandocuments.html) and therefore comply with the National ITS Architecture • All urban projects will be submitted with a plan that includes goals and objectives, identified regional efficiencies, data analysis and assessment of current levels of service, a signed Memorandum of Understanding (see attached sample) and a Systems Engineering Analysis • All Urban / Community Transportation consolidated system projects must apply for funding as it applies to the service it will support. For

	example, in vehicle equipment must be funded separately for the urban and community services provided and the application will delineate the funding of each vehicle. Software costs will also be proportionally divided between the appropriate funding sources. • All community transportation projects must apply through the pre application and application process.

Qualifications	<u>Computers</u>
	• Community Transportation Systems:
	   • Funding for these are provided in other capital budget.
	
	<u>Advanced Paratransit Scheduling and Dispatching System</u>
	• Community Transportation Systems:
	   • The threshold for qualification of paratransit advanced technologies is 300 trips per day. These 300 trips per day per system include <u>ONLY</u> trips that are provided by scheduling individuals and do not include any fixed route transportation services or brokered trips provided. These trips must be scheduled in house and not just referred / brokered to an outside vendor for provision of the service. For example, passing on a list of clients faxed to you to an outside vendor without entering them into the software application.
	   • If a System chooses to purchase the software outside of these expectations, funding for complimentary technologies such as Automatic Vehicle Location (AVL), Mobile Data Computers (MDC) and an Interactive Voice Response (IVR) telephone system will not be available until this trip threshold is met.
	
	• Urban or Urban / Community Transportation consolidated systems scheduling American's with Disabilities (ADA) complementary transportation in –house:
	   • The threshold for qualification of paratransit advanced technologies is 300 trips per day
	   • If a System chooses to purchase the software outside of these expectations, funding for complimentary technologies such as Automatic Vehicle Location (AVL), Mobile Data Computers (MDC) and an Interactive Voice Response (IVR) telephone system will not be available until this trip threshold is met.
	
	• Regional Implementations:
	   • Community Transportation Systems at the adoption of the Regional Transportation Implementation Plan by the local governing bodies may apply for these technologies as a regional implementation. This implementation will follow the organizational structure recommended in the plan. The systems,

as a group, must also meet the qualification threshold of 300 trips per day AND implement as a single agency.

- If a System chooses to purchase the software outside of these expectations, funding for complimentary technologies such as Automatic Vehicle Location (AVL), Mobile Data Computers (MDC) and an Interactive Voice Response (IVR) telephone system will not be available until this trip threshold is met.

In-Vehicle Technologies – qualification for these technologies require that the technologies be installed on vehicles that have yet to met 50% of their useful life OR be moved when new vehicles are purchased. When there are minimum numbers to be purchased, additional units should become part of the specification for a vehicle replacement.

Starting in 2008, all new buses should be equipped with security cameras and automatic voice annunciation technologies and funded with capital funds. Optional technologies include electronic fareboxes, automatic passenger counters and mobile data computers and should also be funded with capital funds if existing software systems support their use are in place.

These technologies can be purchased from a convenience contract with NC Department Of Administration Purchasing and Contracts.

- Security Cameras (per vehicle) (note: anything above this number can be purchased with local or federal funds):
  - Vans – maximum of 3 cameras
  - LTVs – maximum of 4 cameras
  - 30', 35' and 40' buses – maximum of 8 cameras

- Automatic Voice Annunciation System (AVAS):
  - Buses in fixed route transportation services – prefer that this is part of new vehicle purchases but will consider based on regional planning expectations

- Electronic Fareboxes:
  - Buses in fixed route transportation services – encourage purchasing with vehicle replacement but will consider participation in regional implementations

- Automatic Passenger Counters System (APC):
  - Buses in fixed route transportation services – state funding available in initial purchase for up to 10% of the active fleet. Encourage regional implementation of the software.

- Mobile Data Computers:
  - Paratransit vehicles: Eligible for funding based on qualifications stated in the paratransit software section and expectations section.
  - Must have **fully** implemented the software application that will

	receive this data (eg paratransit scheduling and dispatching, fixed route scheduling and dispatching) as well as meet pre implementation requirements for Community Transportation Systems
	
	 Other Technologies (including software) : as identified in the regional technology plans and the 6 year financial plan for the urban systems. Examples of specific technologies that are eligible are:
	• Interactive Voice Response (IVR) System – can be integrated with Real Time Passenger Information System, Trip Planners or paratransit scheduling and dispatching.
	• Automatic Vehicle Location
	• Real Time Passenger Information (RTPI)
	• Trip Planning
	• Computer Aided Dispatch for fixed route systems
	• Maintenance Software
	   • The NCDOT has purchased AssetWorks FleetFocus as a hosted, web-based maintenance application. Additional vehicles and seat licenses will be the only consideration for funding
	• Automatic Vehicle Maintenance (AVM)
	• Information Signs as part of a RPTI system
	• Rideshare matching
	   • Triangle Transit Authority holds a statewide license for ridesharing matching software. Adding systems to this application will be the only consideration for funding.
	• Runcutting software – to be purchased regionally OR for systems with 100 or more vehicles
	• Wireless access on vehicles – internet, hot spots
	• Other technologies as identified in the plan

Non Eligible Items	Community Transportation and Urban Technology Programs – funding for telephone systems, radio systems and computer equipment will not be supported. New Facility Security Cameras and Real Time Arrival/Departure LED Signs – funding for these should be included in the capital budget for the project.
Financial Participation	Subject to available funds, NCDOT Public Transportation will participate in the funding of technologies that have met the qualification section as follows:

	- State Technology funds (Community Transportation and Urban Advanced Technology Programs) – 90% (does not support maintenance, future year hosting and communication costs) - Matching Federal projects – 15% (does not support maintenance, future year hosting and communication costs) - Software and Hardware annual maintenance fees for Community Transportation systems – 85% in administration budgets **as long as the technology was procured according to Federal standards and the vendor is under contract (updated 2/9/16)**. Priority for these funds will be given to systems that purchased their hardware and software with state assistance. - Matching Federal Projects funded with 5310, 5316, 5317 – 10% (does not support maintenance, future year hosting and communication costs) - Data Communication Costs – an operating expense - Voice Communication Costs between base and operators – an operating expense - Training – PTD will participate in the initial training. Refresher and software update training is an eligible employee development expense for Community Transportation Systems. - Custom Reports – is considered an agency expense. Any reports to be used by multiple agencies should be considered on the statewide contract. - Contract Administration – is considered an agency expense.