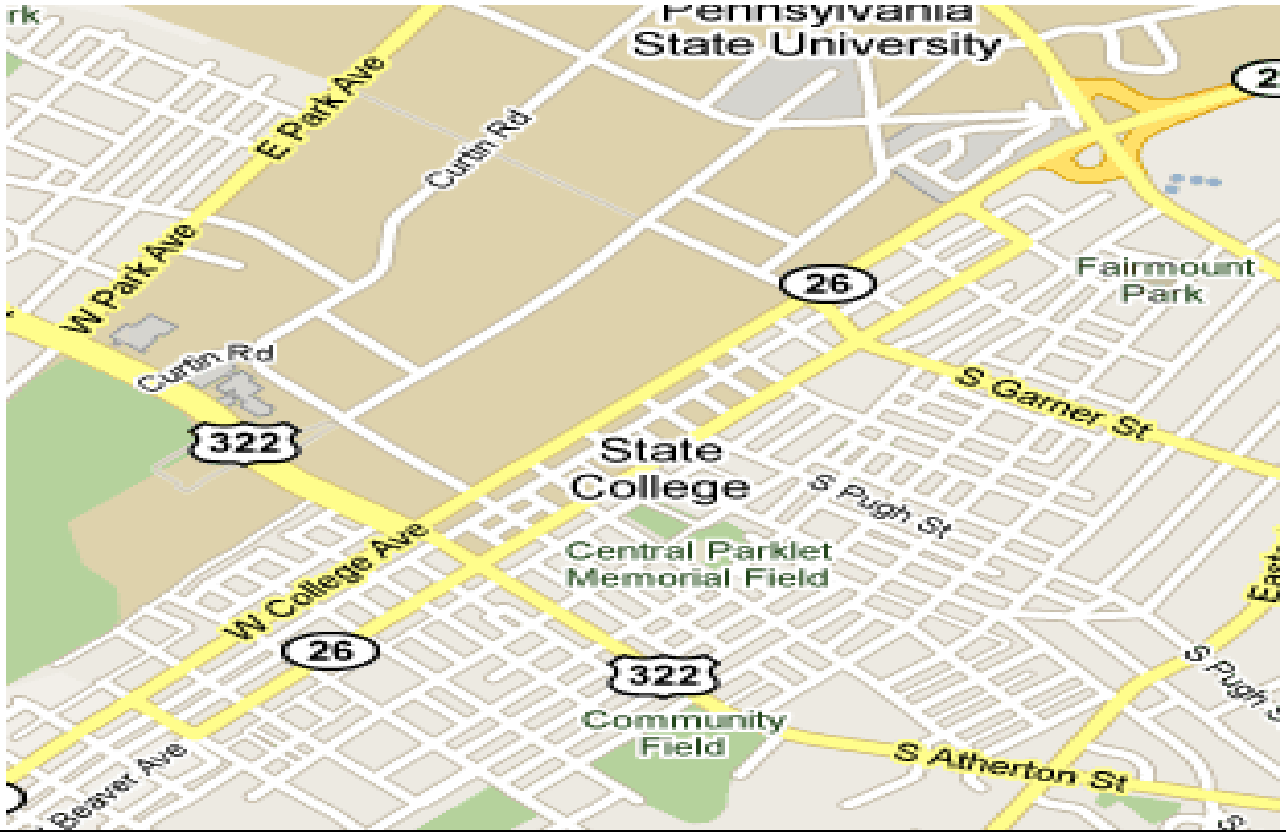
PROJECT REQUEST FORM

1) Project Name:	**College and Beaver Avenue Transit Signal Priority**		
2) Project Location:	**Along College Avenue and Beaver Avenues in State College Borough, from University Drive to Atherton Street**		
3) Applicant:	**Centre Area Transportation Authority (CATA)**		
4) Contact Person:	**Gregory M. Kausch**		
5) Phone:	**(814) 238-2282 x133**		
6) Fax:	**(814) 238-7643**		
7) Email:	**gkausch@crcog.net**		
8) Mailing Address:	**2081 West Whitehall Road**		
9) City:	**State College, PA**	**10)** Zip Code:	**16801**

11) Project Type (please check only one):		
A) Bicycle/Pedestrian Facility		Route #:
B) Bridge – Local System		Route #:
C) Bridge – State System		Route #:
D) Highway		Route #:
E) Public Transportation	**X**	Route: **Various**
F) Rail		Line:
G) Other		

12) Please attach a location map and photo(s).



13) Please provide a brief (one or two sentence) description of the project :

Similar to a project underway along the North Atherton Street and Vairo Boulevard corridors, this project will implement transit signal priority along the College and Beaver Avenue corridors in State College Borough. The project will include intersections at Atherton Street, Burrowes Street/Burrowes Road, Fraser Street, Allen Street, Pugh Street, Garner Street/Shortlidge Road, and the ramp to University Drive.

14) Please describe the project being requested, specifically what issues/problems are present and how this project will improve conditions:

As traffic congestion increases on busy urban arterials such as College and Beaver Avenues, public transit agencies like CATA must continue to explore new and innovative methods to improve operating efficiency so that transit remains a viable alternative to driving single-occupant vehicles. One way to increase transit efficiency, and move more people within existing corridors, is to take steps to reduce the time buses are stopped at signalized intersections.

Several factors have an impact on travel time and delay for buses on urban arterials. These factors include the frequency of buses stopping, number of passengers getting on and off the bus, location of bus stops (near- versus far-side of intersection), traffic congestion, and the time spent waiting at traffic signals. In the case of College and Beaver Avenues, bus frequency, the number of passengers boarding and alighting, and overall traffic congestion are as high as any corridor CATA serves; these levels rise during peak morning and evening travel periods, and during special events on the campus of Penn State University. Moreover, the amount of time buses spend waiting at signalized intersections can represent a significant amount of overall delay time. By reducing the amount of time buses spend waiting at traffic signals, it may be possible to reduce the number of stops, delays, and overall travel time for buses.

CATA has recognized that traffic congestion contributes to their bus delays, erodes the overall efficiency of their transit routes, and prevents the maximum number of persons from moving efficiently within congested corridors, such as College and Beaver Avenues. This project will implement transit signal priority to the existing traffic control system of College and Beaver Avenues and attempt to reduce travel time for buses while increasing the effective person carrying capacity of the congested corridor. Moreover, the project will implement a queue-jump signal along College Avenue at South Allen Street to maximize the efficiency of transit vehicle movements in an area of particularly heavy congestion.

As most or all of the signals along these corridors are already outfitted with the signal controller technology necessary to accommodate transit signal priority, and as all CATA fixed route vehicles are expected to be enhanced with the required on-board equipment as part of a similar project along North Atherton Street and Vairo Boulevard, this project represents a low-cost method for improving transit efficiency and effectiveness in one of CATA's primary service corridors.

SAFETY & SECURITY

Do you believe this project will:

15) Reduce crash rate?	[X] YES	[ ] NO	[ ] N/A

If yes, please explain:

The reduction in single occupant vehicles using the College and Beaver Avenue corridors as a result of additional public transit capacity may have the indirect benefit of reducing the probability of vehicle crashes due to congestion in these corridors.

16) Reduce conflicts between motorized and non-motorized transportation modes (Pedestrian/Bicycle/Buggy)?	[X] YES	[ ] NO	[ ] N/A

If yes, please explain and note if a pedestrian/bicycle/buggy amenity will be maintained or added as part of the project:

Again, the reduction in single occupant vehicles using the College and Beaver Avenue corridors as a result of additional public transit capacity may have the indirect benefit of reducing the conflicts between single-occupant vehicles and non-motorized transportation modes in these corridors.

17) Improve intersection(s) and/or roadway alignment(s)?	[X] YES	[ ] NO	[ ] N/A

If yes, please explain and note the intersection(s) that will affected:

A queue-jump signal for transit vehicles along College Avenue at South Allen Street will contribute to improved conditions at this heavily-congested, transit-intensive intersection. Moreover, transit signal priority at all signalized intersections along the College and Beaver Avenue corridors should improve the function of these secondary intersections as well.

18) Improve the security of the traveling public (Ex. Improves upon incident response, establishes detour/evacuation routes, implements security features on public transportation vehicles and facilities?	[X] YES	[ ] NO	[ ] N/A

If yes, please explain:

By virtue of consolidating an increased number of single-occupant vehicle trips into transit trips, it is expected that increased public transit capacity along College and Beaver Avenues can contribute to increased security of the traveling public, particularly during inclement weather conditions or periods of heavy congestion. Increased transit capacity will provide the same benefits in terms of congestion reduction for detour and evacuation routes as it does for regular daily routing. Moreover, mass transportation plays a documented, vital role in response to, and evacuation from, natural and man-made disasters.

PRESERVATION OF THE EXISTING TRANSPORTATION SYSTEM

Do you believe this project will:

19) Prolong the useful life of the transportation system and infrastructure through reconstruction, rehabilitation and preventative maintenance?	[X] YES	[ ] NO	[ ] N/A
If yes, please explain: By consolidating single-occupant vehicle trips, increased transit capacity would not only enhance and preserve capacity along the surrounding road network, it would also help to optimize the function of the College and Beaver Avenue corridors, as well as surrounding surface streets. Moreover, it would reduce wear-and-tear on road surfaces.			

20) Rehabilitate and modernize public transportation facilities or fleet?	[X] YES	[ ] NO	[ ] N/A
If yes, please explain: This project would serve as a key element in improving the function of existing transit facilities along College and Beaver Avenues. These facilities are some of the most heavily-utilized in the entire CATA fixed route network.			

21) Improve ride quality?	[ ] YES	[ ] NO	[X] N/A
If yes, please explain and provide current International Roughness Index:			

EFFICIENT SYSTEM MANAGEMENT & OPERATION

Do you believe this project will:

22) Reduce congestion, improve Level of Service and reduce travel times within the project area?	☒ YES	☐ NO	☐ N/A

If yes, please explain and note how this project may impact adjacent routes/travel patterns:

As noted earlier on this project request form, by consolidating single-occupant vehicle trips, increased transit frequency and capacity will contribute to reduced congestion and improved Level of Service along the College and Beaver Avenue corridors, as well as along surrounding surface streets. In terms of travel time, we believe that a commute by mass transportation vehicle – though not necessarily shorter – will be competitive with that taken by single occupant vehicle, and signal priority will assist CATA in keeping these travel times competitive. Moreover, reduced congestion and improved Level of Service will provide cascading benefits to all travelers within the project area, not only those who utilize mass transportation.

23) Increase public transportation service frequency and capacity?	☒ YES	☐ NO	☐ N/A

If yes, please explain:

By shortening travel times, transit signal priority would clearly allow CATA to increase frequency and capacity along the College and Beaver Avenue corridors without adding to the actual number of buses and operators on the street. Moreover, it lays the groundwork for better function of additional service going forward.

24) Improve system functionality through improvements such as signal upgrades, Intelligent Transportation System applications and access management approaches?	☒ YES	☐ NO	☐ N/A

If yes, please explain:

This project will, by its definition, improve traffic signal function and apply Intelligent Transportation System (ITS) features throughout the project area. Any transit frequency and capacity added will make full use of CATA's existing Advanced Public Transportation System (APTS) capabilities, including GPS location of vehicles, enhanced dispatch-to-driver and driver-to-dispatch communications, on-time performance reporting, and real-time, web-based customer information with respect to routing and scheduling. Moreover, it will also benefit from additional planned APTS improvements including automatic passenger counters, on-board stop annunciators, on-board video recording capability, and wayside signage.

INTEGRATION & CONNECTIVITY OF THE TRANSPORTATION SYSTEM

Do you believe this project will:

25) Eliminate/overcome barriers (Ex. Closures, detours & delays, weight restrictions) in key corridors?	☒ YES	☐ NO	☐ N/A
If yes, please explain and note official detour distances based on factors such as weight restrictions: This project will clearly allow CATA to better overcome delays in two of Centre County's most critical corridors.			

26) Establish/maintain intermodal connections?	☒ YES	☐ NO	☐ N/A
If yes, please explain: Existing transit facilities along the College and Beaver Avenue corridors already feature connections between the private automobile, mass transportation, bicyclists, and pedestrians, and these connections would not be negatively impacted by this project.			

27) Introduce new connections between existing travel patterns (Ex. Street connectivity, linking bicycle/pedestrian routes, connections between transit routes and providers)?	☒ YES	☐ NO	☐ N/A
If yes, please explain: While this project will not implement new intermodal connections, it will allow existing connections to function more efficiently and effectively.			

28) Align residents with their destinations?	☒ YES	☐ NO	☐ N/A
If yes, please explain: Through reduced travel times and delays, and increased transit frequency and capacity, this project will clearly better align residents with their destinations in downtown State College, on the campus of Penn State University, and throughout the CATA service area.			

ACCESSIBILITY & MOBILITY OPTIONS FOR PEOPLE & FREIGHT

Do you believe this project will:

29) Improve public transportation services: routes, ride share opportunities, vanpools, and park & ride lots?	☒ YES	☐ NO	☐ N/A

If yes, please explain and include projected ridership:

Reduced travel times and delays within the College and Beaver Avenue corridors will clearly accommodate increased transit frequency and capacity within the project area. Existing stops at Heister Street, Allen Street, Schlow Library, and University Club are 4 of the 10 most-utilized stops within the CATA fixed route system.

30) Improve pedestrian and bicycle facilities?	☒ YES	☐ NO	☐ N/A

If yes, please explain:

As noted earlier in this document, existing transit facilities along the College and Beaver Avenue corridors already feature connections between the private automobile, mass transportation, bicyclists, and pedestrians, and these connections would not be negatively impacted by this project.

31) Improve access to airports, freight distribution facilities or major industrial districts?	☒ YES	☐ NO	☐ N/A

If yes, please explain:

Existing stops within the project area – particularly the stop located at College Avenue and Allen Street – serve as primary transfer points between fixed routes within the CATA system. Accordingly, this project would enhance the ability of area residents to access the University Park Airport, as well as industrial districts within the Centre Region, including the Science Park Road and Cato Park areas.

32) Implement Complete Streets principles?	☒ YES	☐ NO	☐ N/A

If yes, please explain:

As noted earlier in this document, existing transit facilities along the College and Beaver Avenue corridors already feature connections between the private automobile, mass transportation, bicyclists, and pedestrians, and these connections would not be negatively impacted by this project. Therefore, the project is expected to play at least a contributing role in implementing Complete Streets principles.

CONSISTENCY WITH PLANNED GROWTH & DEVELOPMENT AREAS

Do you believe this project will:

33) Be consistent with the following documents?			
A) County Comprehensive Plan	[X] YES	[ ] NO	[ ] N/A
B) Regional Comprehensive Plan	[X] YES	[ ] NO	[ ] N/A
C) Municipal Comprehensive Plan	[ ] YES	[ ] NO	[X] N/A
D) Municipal Zoning Ordinance	[X] YES	[ ] NO	[ ] N/A
E) Municipal Official Map	[X] YES	[ ] NO	[ ] N/A

If yes to any of the above, please explain:

This project is fully consistent with the Centre County Comprehensive Plan (Pages E-2 and E-3, Figure 2) and Centre Region Comprehensive Plan (pages 75-76). Moreover, it does not conflict with relevant municipal zoning ordinances or official maps.

34) Improve/support the existing transportation infrastructure in existing & planned growth areas?	[X] YES	[ ] NO	[ ] N/A

If yes, please explain:

This project clearly improves existing transportation infrastructure and prolongs the useful life of other transportation infrastructure components. Moreover, it does not promote new growth areas, but rather links already-existing areas of current and planned development activity.

35) Promotes Smart Growth Principles (Ex. walkable communities, fosters distinct communities & sense of place, supports integration of mixed land uses into communities)?	[X] YES	[ ] NO	[ ] N/A

If yes, please explain:

Through the enhancement of transit service, this project will link existing activity centers of a wide variety of uses through alternative modes that do not require the use of single-occupant vehicles.

36) Avoid negative impacts on communities and the environment?	[X] YES	[ ] NO	[ ] N/A

If no, please explain:

ENVIRONMENT & AIR QUALITY CONFORMITY

Do you believe this project will:

37) Improve air quality	☒ YES	☐ NO	☐ N/A
If yes, please explain: By enabling consolidation of single-occupant vehicle trips into mass transportation trips, and reducing wait times at congested intersections, this project will clearly have a beneficial effect on air quality within the region. As the vehicles that will serve these corridors are consistent with CATA's existing compressed natural gas (CNG) program, these expected benefits will be even further enhanced.			

38) Promote energy conservation?	☒ YES	☐ NO	☐ N/A
If yes, please explain: Again, by enabling consolidation of single-occupant vehicle trips into mass transportation trips, and reducing wait times at congested intersections, this project will clearly have a beneficial effect on energy conservation within the region. As the vehicles that will serve these corridors are consistent with CATA's existing compressed natural gas (CNG) program, these expected benefits will be even further enhanced.			

39) Avoid impacts on endangered or threatened species, key natural habitats, agricultural lands and historic & cultural resources?	☒ YES	☐ NO	☐ N/A
If no, please explain:			

40) Avoid impacts upon water resources (Ex. water recharge areas & exceptional value/high quality streams?	☒ YES	☐ NO	☐ N/A
If no, please explain and note which water resources may be affected:			

ECONOMIC VITALITY

Do you believe this project will:

41) Improve access and/or enhance freight movement to regional & national economic centers?	☐ YES	☐ NO	☒ N/A
If yes, please explain:			

42) Encourage tourism?	☒ YES	☐ NO	☐ N/A

If yes, please explain:

Not only will this project enhance access to major intercity transportation facilities (University Park Airport, State College Intercity Bus Depot) for area residents, it will also make more accessible the natural and historic resources of downtown State College and the greater State College area.

43) Encourage infill development, the redevelopment of brownfield sites within reach of existing infrastructure & the overall redevelopment of core communities?	☒ YES	☐ NO	☐ N/A

If yes, please explain:

As mentioned earlier in this project request form, this project does not promote new growth areas, but rather links already-existing areas of current and planned development activity. Moreover, this project will link existing activity centers of a wide variety of uses through alternative modes that do not require the use of single-occupant vehicles. It would also complement revitalization efforts in downtown State College and throughout the area.

PRIORITY

44) Is this your highest priority (#1) project?	☐ YES	☒ NO	☐ N/A
Highest priority projects will be granted a half-point (0.5) bonus. Entities requesting projects may submit only one highest priority project.			

45) If this is not your #1 priority, what rank did you assign this project?	Undetermined at this time
Municipalities may submit as may projects as they wish. The CCMPO requests that you rank all of your candidate projects.	

COST

46) What is the total estimated cost?	$200,000

47) What is the cost by project phase, if known?	
A) Preliminary Engineering	N/A – Non-construction project
B) Final Design	N/A – Non-construction project
C) Utilities	N/A – Non-construction project
D) Right of Way	N/A – Non-construction project
E) Construction	N/A – Non-construction project