RESOLUTION NO. 50-04
CITY OF CENTERVILLE, OHIO

SPONSORED BY COUNCILMEMBER Brooks A. Compton ON THE 20th DAY OF December, 2004.

A RESOLUTION ENDORSING AN APPLICATION TO THE MIAMI VALLEY REGIONAL PLANNING COMMISSION FOR FEDERAL CMAQ FUNDS FOR THE UPGRADING OF THE INTERSECTION OF ALEXANDERSVILLE-BELLBROOK ROAD (SR 725) AND MAIN STREET (SR 48) IN THE CITY OF CENTERVILLE.

WHEREAS, The City of Centerville, committed to maintaining existing thoroughfares in the City of Centerville, recognizes the need for the intersection of Alexandersville-Bellbrook (SR 725) and Main Street (SR 48) to be upgraded, and

WHEREAS, A Federal Fund Application has been submitted to the Miami Valley Regional Planning Commission for Federal CMAQ Funds for the upgrading of the intersection of Alexandersville-Bellbrook Road (SR 725) and Main Street (SR 48) to widen the four approaches, add dual left turn lanes, re-signalize the intersection and increase the reliability of the signalization by implementing back-up power.

NOW THEREFORE, THE MUNICIPALITY OF CENTERVILLE HEREBY RESOLVES:

Section 1. That the Council of the City of Centerville endorses an Application to the Miami Valley Regional Planning Commission for federal CMAQ funds for upgrading the intersection of Alexandersville-Bellbrook Road (SR 725) and Main Street (SR 48) and commits the necessary local funds for the project development and the matching construction funds, a copy of the Project Description is attached hereto, marked as Exhibit "A" and incorporated herein.

PASSED this 20th day of December, 2004.

C. Mark Kuntz
Mayor of the City of Centerville, Ohio

ATTEST:
Clerk of Council, City of Centerville, Ohio

CERTIFICATE

The undersigned, Clerk of the Council of the City of Centerville, Ohio, hereby certifies that the foregoing is a true and correct copy of Resolution Number 50-04, passed by the Council of the City of Centerville, Ohio, on the 20th day of December, 2004.

Clerk of Council

Approved as to form, consistency
with existing Ordinances, the Charter
and Constitutional Provisions.
Department of Law
Scott A. Liberman
Municipal Attorney

EXHIBIT "A"

SR48 & SR725 Intersection Upgrade
Project Description

Project Description The City of Centerville desires to upgrade the intersection of Alex-Bell Road (SR 725) and Main Street (SR 48) to address undesirable levels of service and high accident rates as identified by the Governor's Highway Safety Office in 2003. Specifically, the city desires to widen the four approaches, add dual left turn lanes, re-signalize the intersection and increase the reliability of the signalization by implementing back-up power. Both pedestrian and bicycle traffic will be addressed in the project design. The project aims to get the most improvement possible with the minimal level of construction.

Preliminary engineering conducted by a consultant to the city indicates that the present level of service is F and with the changes proposed in this grant request the level can be elevated to D with construction of dual left turn lanes on all approaches. The project will increase the intersection's efficiency reducing both congestion and emissions and increase the safety of the intersection. The project will also contribute to energy efficiency as the signal head power consumption will be reduced by 90-95% by the use of LED versus incandescent lights.

Project Scope As discussed above, the project will widen the intersection to increase capacity and ease of turning(see attachment 1). Concurrently, the signal system will be improved to address the new intersection configuration and required new infrastructure (poles & utilities).

1. Roadway Widening: The four approaches to this intersection will be widened to accommodate dual left turn lanes. Presently, the north, south, and east approaches to this intersection have single left turn lanes. The west approach currently has two left turn lanes but some widening is required to better align the east and west approaches. It is anticipated that all work will be completed within existing right-of-way.

The left turn phases are required to be protected based upon the quantity of volumes at the intersection. Due to this requirement and the present lane configuration, capacity can only be increased by increasing the left turn phase time. The increased time for the left turn phases has required longer cycle lengths and increased delay for the through phases. By widening the approaches to accommodate dual left turn lanes and increasing capacity, the amount of time required for the left turn phases can be reduced. The increased left turn capacity will allow more time to be allocated to the through phases and a reduction of the delay for those movements, thereby improving traffic flow at the intersection.

Pedestrian movements at this intersection will also be taken into consideration. Due to the already large size of the intersection, any widening will be kept to a minimum to keep pedestrian clearance times to as short as possible.

2. Signal Replacement: The traffic signal at this intersection will be replaced. The existing Peek TS1 traffic signal controller will be replaced with TS2/A2 Traffic Signal Controllers. The existing Peek controllers and associated system control software, SMARTWAYS, are no longer adequately supported. Replacement parts have become scarce in recent years and maintaining the equipment has become more difficult. The SMARTWAYS Closed Loop System Software requires an outdated operating system and compatible modems are no longer manufactured and difficult to replace. The traffic signal will also be interconnected with the surrounding traffic signals to provide better coordination and progression.

Video detection is proposed for this intersection. Video detection is cost effective due to the large number of loops that would be required. Detection zones could also be setup for responsive system operation or counting.

The existing incandescent traffic signal lenses will be replaced with LED traffic signal heads. The use of LED signals will give the city the opportunity to install an Uninterruptible Power Supply System at this

critical intersection. Current technology will provide a traffic signal with adequate operational power for the duration of a typical power outage. This will allow the traffic signal to continue to operate during power outages.

Summary: The project complies with the MVRPC Long Range Transportation Plan and federal program policies and procedures. The proposal meets seven factors required by TEA-21:

- Support the economic vitality of the metropolitan area
- Increase safety and security
- Increase accessibility and mobility options
- Protect quality of the environment, conserve energy, and improve quality of life
- Enhance integration and connectivity of the transportation system
- Promote efficiency
- Emphasize preservation of the existing transportation system