TO: Personnel Board

FROM: Sarah Olson, Human Resources

DATE: 5 November 2014

SUBJECT: Electrical Operations Leadworker- Traffic Engineering

At the request of City Traffic Engineer/Parking Manager David Dryer and Scott Langer, Assistant City Traffic Engineer, I conducted a position study of the Electrical Operations Leadworker (CG16-20) currently occupied by Mike Christoph in the Traffic Engineering Division. The request for this study was based on an addition in responsibility for the maintenance of a fiber optic network system; increased planning and design work with professional Traffic Engineers for traffic signals, street and bike path lighting, cameras, speed display boards and other related networking; and electrical state law changes effective April, 2014, which requires this position to hold a Master Electrician license. Upon reviewing the position description and meeting with Mr. Langer and the incumbent, I recommend that the Electrical Operations Leadworker classification be deleted and recreated in Range 22 as a Traffic Systems and Networking Specialist, and the incumbent be reallocated to the new position for the reasons outlined in this memo.

The analysis of this position study included a review of the class specification for Electrical Operations Leadworker (see attached) which shows:

> … highly skilled technical, master electrician level leadworker position in the Electrical section of Traffic Engineering. Under limited supervision, this position is responsible for coordinating and overseeing the installation and repair of complex electrical/electronic computerized equipment associated with traffic signals, street lighting, fiber optic network, and other City-maintained equipment and systems.

The field staff within Traffic Engineering is led by the Traffic Operations Manager and has two Supervisors as direct reports: the Traffic Operations Supervisor and the Communications Operations Supervisor. The Electrical Operations Leadworker reports directly to the Traffic Operations Manager and coordinates work of the electrical staff. Currently, Mr. Christoph leads a crew of about 13 staff that includes 10 Traffic Signal Electricians of various levels and 3 Traffic Signal Maintenance Workers.

In 2014, the Electrical section of the Traffic Engineering division took on the maintenance of over 52 miles of fiber optic cables through the acquisition of the MUFN contract. MUFN is a collaborative metro fiber-optic network serving education, health, government, and Non-Profit-Organization anchor institutions in the Madison, Middleton, and Monona, WI area. It unifies and augments existing telecom resources to facilitate enhanced Internet, point-to-point connectivity, and application sharing. This effort improves broadband access, economic development, public safety, education, and community support programs. Maintenance of such a system requires around the clock availability and a higher level of technical ability that the Electrical Operations Leadworker leads and coordinates responses for.

The Electrical Operations Leadworker has also seen changes in the level of involvement in planning and design with professional Traffic Engineers on the networking of traffic signals, street and bike path lighting, cameras and other related networking. They ask him for his feedback on whether the Electrical section can support the new equipment or if they should contract out the work. The changes in technology have made the signals, lighting and cameras more complex and require advanced expertise. One example of the type of planning and design Mr. Christoph works directly with Traffic Engineers on is the bike barometer that was just installed this year. It involved planning and design consultation with the Traffic Engineers as Mr. Christoph was charged with making the idea a reality.

In April of 2014, there was an electrical state law change that required mandatory electrical licensing. The change voided the City of Madison Restricted Master Electrician license and now requires the passing of the State of WI Master Electrician license. Mr. Christoph currently holds this Master Electrician license.

In reviewing the Electrical Operations Leadworker, I also shadowed the Communications Operations Leadworker which is at the same Compensation Group and Range of 16/20 and was created in Range 20 in 2011 as a comparable position to the Electrical Operations Leadworker. The Communications Operations Leadworker is highly skilled lead and advanced technical maintenance, installation, and repair work in the Communications Section of the Traffic Engineering Division. The work involves coordinating and overseeing the planning, installation, maintenance and repair of communication systems and other electronic equipment. This includes the maintenance of the 911 communication center and all radios supporting City of Madison departments. It is highly technical work that also responds to after hour emergencies and provides leadership to a group of about 6 Communication Technicians. However, the Communications section has not seen an addition in providing new technical services that compare to the fiber optic networking maintenance the Electrical section has taken on this year. In addition, the Communications Operations Leadworker does not provide planning and design expertise to high level Traffic Engineers and require a Master Electrician license. Given those three differences, I conclude the Electrical Operations Leadworker is functioning at a higher technical level than the Communications Operations Leadworker.

It should be noted that the current placement of the Electrical Operations Leadworker is in the pay range equivalent to the Traffic Operations Supervisor in CG18, Range 10. In discussions with Mr. Langer regarding whether Mr. Christoph's position is functioning at a higher level than the Traffic Operations Supervisor, Mr. Langer agreed that the technical expertise that is required with the addition of all of the fiber optic maintenance and the new licensure requirement puts the position at a Traffic Engineer 2 level which is in compensation group 18, Range 12, therefore equivalent to compensation group 16, Range 22.

To reflect the large amount of networking and planning and design consultation work this position has taken on, I recommend a title change from Electrical Operations Leadworker to Traffic Systems & Networking Specialist. Mr. Christoph is hands on in the involvement in the electrical, planning and design of the traffic systems in addition now to the maintenance of miles of fiber optic networking. His specialized knowledge is relied upon by the Traffic Engineers, City IT, City Engineering and outside Contractors. The change in title from a Leadworker to a

Specialist more accurately describes his role on a daily basis which is not just to assign work and follow-up on completed assignments. As a Specialist, he completes higher complex assignments and works with others in the City to ensure electrical traffic systems and fiber optic networking is working properly.

Based on the increased technical and specialized knowledge, required licensure, my review of the submitted materials, the interviews I conducted, and evaluation against other positions/classifications in the City, I recommend the the Electrical Operations Leadworker in CG16, Range 20, be deleted and recreated as a Traffic Systems and Networking Specialist in Range 22, and the incubment reallocated to the new position.

The necessary resolution to implement this recommendation have been drafted.

Editor's Note:

Compensation Group/Range	2014 Annual Minimum (Step 1)	2014 Annual Maximum (Step 5)	2014 Annual Maximum +12% longevity
16/20	$59,098	$69,237	$77,558
16/22	$63,779	$75,162	$84,188

cc: David Dryer – City Traffic Engineer/Parking Manager
Scott Langer –Assistant City Traffic Engineer
Greg Leifer – Labor & Employee Relations Manager