COSTS AFFECTING THE AUTOMATION DECISION ON BOSTON LIGHT STATION

Cost for Automation Project

$206,607	Project Cost
($75,000)	Work that must be completed no matter what
$131,606	

Annual costs for staffed light

$85,000	Salaries
$40,000	Operating and maintenance costs
$125,000	

$50,000 This year - One time cost for maintenance on 2nd order lens if kept operating. (every 15 years)

Annual costs for unstaffed light

$26,000	Maintenance Costs
$2,250	AtoN Maintenance
$28,250	

Annual savings after unstaffing

$125,000	Staffed Light
($28,250)	Unstaffed Light
$96,750	

First year projected costs

Staffed Light $125,000 + $50,000 = $175,000
Unstaffed Light $131,606 + $28,250 = $159,856

Automation and unstaffing gives us a savings of $15,144 in the first year and $96,750 every year thereafter!!

OPTIONS FOR THE FUTURE OF BOSTON LIGHT STATION

A. *Leave Station Staffed*
Do not install automation equipment
Leave Classical Lens in place and in use

Advantages
- Keeps historic light staffed
- Saves remaining cost of automation
- Keeps historic lens in place and in use

Disadvantages
- Costs the CG approx $97K more per year than unstaffing
- Costs the CG approx $50K for repairs to lens this year
- Retains maintenance intensive, one of a kind optic that would require special training; does not allow us to take advantage of modern reliable aids to navigation equipment to better serve the mariner
- Lessens the amount of public access available to the lantern room (the lens is large and dangerous) and eliminates much of the public from being able to see the historic lens at all
- There will be no emergency signals to operate in the absence of main signals, thereby **not** providing improved service to the mariner

B. *Leave Station Staffed*
Install automation equipment
Leave Classical Lens in place and in use

Advantages
- Keeps historic light staffed
- Allows us to install modern reliable equipment to better serve the mariner
- Allows automatic switching of main signals to emergency signals
- Keeps historic lens in place and in use

Disadvantages
- Costs the CG approx $97K more per year than unstaffing
- Costs the CG approx $132K this year to automate
- Costs the CG approx $50K for repairs to lens this year
- Retains maintenance intensive, one of a kind optic that would require special training
- Lessens the amount of public access available to the lantern room (the lens is large and dangerous) and eliminates much of the public from being able to see the historic lens at all
- Because emergency generator must be retained to support the personnel, signal volume must be squeezed into the generator space
- Must install the emergency light, outside the lantern room on a trolley mast since there will not be room in the lantern room

C. *Leave Station Staffed*
Install automation equipment
Leave Classical Lens in place and not in use

Advantages
- Eliminates the $50K(every 15 years) maintenance needed on the lens
- Keeps historic light staffed
- Allows us to install modern reliable equipment to better serve the mariner
- Allows automatic switching of main signals to emergency signals
- Keeps historic lens in place

Disadvantages
- Costs the CG approx $97K more per year than unstaffing
- Costs the CG approx $132K more this year to automate
- Lessens the amount of public access available to the lantern room (the lens is large and dangerous) and eliminates much of the public from being able to see the historic lens at all
- Because emergency generator must be retained to support the personnel, signal volume must be squeezed into the generator space
- Must install the emergency light, outside the lantern room on a trolley mast since there will not be room in the lantern room

D. *Leave Station Staffed*
Install automation equipment
Remove Classical Lens for display at another location

Advantages
- Eliminates the $50K(every 15 years) maintenance needed on the lens
- Keeps historic light staffed
- Allows us to install modern reliable equipment to better serve the mariner
- Allows automatic switching of main signals to emergency signals
- Allows us to provide more access to the lantern room, and install both main and emergency lights in the lantern room, eliminating the need for a trolley mast outside the lantern room
- Allows a much larger segment of the public to view the historic lens

Disadvantages
- Costs the CG approx $132K more this year to automate
- Costs the CG approx $97K more per year than unstaffing
- Because emergency generator must be retained to support the personnel, signal volume must be squeezed into the generator space

E. *Unstaff Station*(**This is the presently approved project**)
Install automation equipment
Leave Classical Lens in place and not in use(Possible move later by Mass DEM)

Advantages
- Saves the CG approximately $97K per year
- Eliminates the $50K(every 15 years) maintenance needed on the lens
- Allows us to install modern reliable equipment to better serve the mariner
- Allows automatic switching of main signals to emergency signals
- Keeps historic lens in place unless Mass DEM decides to move at a later date
- Allows leasing the station and lens to Mass DEM. Mass DEM is much more experienced at, and is in the business of, running a public attraction and would be able to provide a proper display place for the 2nd order lens

Disadvantages
- Costs the CG approx $132,000 more this year to automate ! doing it anyway
- Lessens the amount of public access available to the lantern room (the lens is large and dangerous) and eliminates much of the public from being able to see the historic lens at all (until DEM moves it)
- Must install the main and emergency lights outside the lantern room on a trolley mast since there will not be room in the lantern room
- End of an era of American History

F. *Unstaff Station*(**Preferred alternative**)
Install automation equipment
Remove Classical Lens for display at another location

Advantages
- Saves the CG approximately $97K per year
- Eliminates the $50K(every 15 years) maintenance needed on the lens
- Allows us to install modern reliable equipment to better serve the mariner
- Allows automatic switching of main signals to emergency signals
- Allows us to provide more access to the lantern room, and install both main and emergency lights in the lantern room, eliminating the need for a trolley mast outside the lantern room
- Allows a much larger segment of the public to view the historic lens
- Allows leasing the station and lens to Mass DEM. Mass DEM is much more experienced at, and is in the business of, running a public attraction and would be able to provide a proper display place for the 2nd order lens.

Disadvantages
- Costs the CG approx $132,000 more this year to automate
- The end of an era of American History