OAA HQ
Walking the Talk
Agenda

• WHY are we doing this?
• WHERE should HQ be located?
• WHAT has been approved?
• WHEN will it happen?
• HOW will we pay for it?
• DISCUSSION
WHY...
The OAA is Focused on Advocacy for the Profession

Our building is a symbol of all Architects. We need it to:

• Function well
• Look great
• Be energy efficient
• Be financially prudent
• Preserve our heritage as a moment in time
WHY
Demonstrate Energy Efficiency?

“Achieve energy performance not less than 25% better than MNECB as demonstrated by energy modeling analysis”
WHY
Demonstrate Energy Efficiency?

“The project shall be demonstrated to use no more that 100 ekWh/m² annually”

“The proponent team shall be responsible for funding any excess energy costs over a 25 year lifecycle”
Why Demonstrate Energy Efficiency?

- OAA HQ before new Curtain Wall: 482 ekWh/m²-yr
- BOMA benchmark 282 ekWh/m²-yr
- Current Ontario Building Code Av.: 259 ekWh/m²-yr
- Infrastructure Ontario Target: 100 ekWh/m²-yr
WHY...
Is the 2030 Challenge OAA Policy?

The 2030 Challenge sets achievable and affordable targets to dramatically reduce the energy consumption of the Building Sector by 2030 and beyond.

Source: ©2010 2030, Inc. / Architecture 2030. All Rights Reserved.
*Using no fossil fuel GHG-emitting energy to operate.
WHY...
Are we doing this now?

• We have already replaced the curtain wall system with Heat Mirror glazing
• The mechanical system is starting to fail and needs to be replaced.
• Codes and performance expectations have changed in 22 years.
WHERE..
Should we be located for member convenience?
WHERE...

Cost - Benefit to move?

From the Cushman Wakefield Lepage report, based reducing area by 3800 sf:

- Net Cost to build an excellent Class A building: $4,774,000
- Net Cost to build a good Class A building: $3,504,000
- Net cost to sell, and lease in a LEED building downtown for 10 years: $3,782,000
WHERE... is the best location environmentally?
WHAT... is proposed to make HQ more functional?
Creating more functional space on 2\textsuperscript{nd} floor
Third Floor Plan
Roof Plan – Solar Panels
WHAT...
Are the proposed lighting upgrades?

• Changes to glazing
• New exterior shading system
• New electric lighting system and controls
• Maximize daylight harvesting
WHAT...
Are the Options for Mechanical Upgrades?

1. Maintain what we have
2. Component upgrades
3. The 2030 Proposal: Demolish and Re-build the mechanical systems
WHAT:
The 2030 proposal is based on displacement ventilation
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SUMMER TEMPERED DISPLACEMENT VENTILATION

October 30, 2013
WHAT... is the cost/benefit of each option?

<table>
<thead>
<tr>
<th></th>
<th>Maintain current System</th>
<th>Component upgrade (TMP/DWA)</th>
<th>Demolish and refurbish (SE/DFA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Capital Cost</td>
<td>$1.24 mil</td>
<td>$2.34 mil</td>
<td>$3.89</td>
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<tr>
<td>Energy Costs over 25 years</td>
<td>$3.10 mil</td>
<td>$2.12 mil</td>
<td>$0</td>
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<td>Maintenance Costs</td>
<td>$.675 mil</td>
<td>$.55 mil</td>
<td>$.375 mil</td>
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<tr>
<td>NVP</td>
<td>-$5.02 mil</td>
<td>-$4.71 mil</td>
<td>-$4.2 mil</td>
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<tr>
<td>Simple Payback</td>
<td>N/A</td>
<td>25 years</td>
<td>17 years</td>
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<tr>
<td>Advocacy Value</td>
<td>Negative</td>
<td>Neutral</td>
<td>High</td>
</tr>
<tr>
<td>Risk</td>
<td>Low</td>
<td>Mid-High</td>
<td>Mid-High</td>
</tr>
</tbody>
</table>

Notes:
1. Interior upgrade estimates are the same for all scenarios
2. Lighting upgrades are the same for all scenarios
3. Payback and NVP includes interior upgrades
WHEN... will it happen?

• Schematic Design approved in April 2014
• Design development should be complete early Fall 2014
• Earliest Construction Start: January 2015
HOW...  
can we pay for it?  
Current reserves +  
planned budgeting/status quo +  
Our increasing membership  
OR  
Borrow  
OR  
Design Build Finance (Toronto Atmospheric Fund)
DISCUSSION