Summary:
Philadelphia
Philadelphia International Airport; Airport; Joint Criteria

Primary Credit Analyst:
Kevin R Archer, Chicago (312) 233-7089; Kevin.Archer@spglobal.com

Secondary Contact:
Joseph J Pezzimenti, New York (1) 212-438-2038; joseph.pezzimenti@spglobal.com

Table Of Contents
Rationale
Outlook
Summary:

Philadelphia
Philadelphia International Airport; Airport; Joint Criteria

Credit Profile

| US$577.58 mil arpt rev & rfdg bnds (Philadelphia International Airport) ser 2017B due 07/01/2048 | Long Term Rating | A/ Stable | New |
| US$145.21 mil arpt rev & rfdg bnds (Philadelphia International Airport) ser 2017A due 07/01/2048 | Long Term Rating | A/ Stable | New |

Philadelphia, Pennsylvania
Philadelphia International Airport, Pennsylvania

Philadelphia (Philadelphia Intl Arpt)

| Unenhanced Rating | A(SPUR)/Stable | Affirmed |
| Long Term Rating | AA+/A-1+ | Affirmed |

Philadelphia Auth for Indl Dev, Pennsylvania
Philadelphia International Airport, Pennsylvania

Philadelphia Auth for Indl Dev (Philadelphia Arpt Sys)

| Unenhanced Rating | A(SPUR)/Stable | Affirmed |

Rationale

S&P Global Ratings has assigned its ‘A’ long-term and underlying ratings to Philadelphia's pro forma $145.2 million series 2017A and $577.6 million series 2017B airport revenue and refunding bonds, issued for Philadelphia International Airport (PHL). At the same time, S&P Global Ratings affirmed its 'A' long-term and underlying ratings on PHL's airport revenue bonds. The outlook is stable.

S&P Global Ratings also affirmed its 'AA+/A-1+' rating on the airport's parity variable-rate demand bonds series 2005C, of which approximately $110.7 million is outstanding. The rating reflects the application of joint criteria (assuming low correlation) of S&P Global Ratings' underlying rating (SPUR) on PHL's and the direct-pay, irrevocable letters of credit (LOC) from TD Bank N.A. and by Royal Bank of Canada.

The 'A' SPUR reflects our view of the airport's:

- Relatively large O&D market, with a diverse service area economy that provides a good base for local air travel demand;
- Good level of aeronautical activity, with total enplanements averaging 15.4 million from fiscal years 2011-2016 but declined to 14.8 million for fiscal 2017. We expect enplanements to hover near these levels due to PHL's large O&D base and role as a key transatlantic connecting point for American Airlines Inc.; and
• Debt burden that we expect to increase, but remain manageable, assuming enplanements are generally stable.

We believe offsetting these credit strengths are the airport's:

• Relatively high air carrier concentration with American and its regional affiliates handling an estimated 70% of fiscal 2017 enplaned passengers and nearly all connecting traffic;
• A moderately high exposure to connecting passengers, which accounted for 32.7% of total enplaned passengers in fiscal 2017;
• Historically marginal S&P Global Ratings-adjusted debt service coverage (DSC) levels and fluctuating liquidity position that could continue.

Bond proceeds will refund portions of PHL's commercial paper notes; refund the 2007A, 2007B, and 2009A bonds; finance various capital improvement projects as outlined in the airport's broader capital development plan (CDP); fund the related sinking fund reserve requirement for PHL's outstanding bonds, including the current issuance; fund capitalized interest on a portion of this issuance; and pay the costs off issuance.

Securing the bonds are net project revenues; amounts payable to the city under a qualified swap; and all amounts on deposit in, or credited to, some aviation funds. Project revenues include all revenues from system occupants and users. Net project revenues do not include net operating and maintenance expenses. Net operating and maintenance expenses remove interdepartmental charges, which we include in our adjusted DSC calculations although they are subordinate to debt service under the general airport revenue bond ordinance. A portion of passenger facility charges (PFCs) is pledged to pay debt service for the airport's series, 2010D, and 2011A bonds.

Philadelphia operates PHL and the Northeast Philadelphia Airport, a small general aviation airport that operates at a loss. Together, they constitute the airport system. According to Airports Council International-North America data, in 2017, PHL ranked 19th in terms of total passengers in the U.S. It is a major hub in the northeast for American, which merged with US Airways in December 2013. American, along with their affiliated commuter carriers, accounted for approximately 70% of fiscal 2017 total enplanements, followed by Southwest Airlines Co., at 7.8%, and Delta Air Lines Inc. at 7.0%.

PHL, in our opinion, benefits from serving a large O&D market, supported by a relatively stable economy that spans 11 counties across Pennsylvania, New Jersey, Delaware, and Maryland. We believe it provides a good base for local air travel demand. with 9.9 million O&D enplaned passengers (or approximately 67.3% of the 14.8 million total) at fiscal year-end 2017 (June 30). In addition, the airport has a competitive position we consider good because of limited competition from other major airports and the presence of low-cost carrier service. We believe these factors have contributed to PHL's generally good level of aeronautical activity. Although the airport's total and O&D enplanement levels remain below those before the Great Recession, demand has been relatively stable before increasing recently. More specifically, PHL's fiscal 2017 O&D and total enplanements were nearly 108% and 96% of fiscal 2009 levels, respectively, while connecting enplanements were 79% of fiscal 2009 levels. From fiscal years 2011 to 2016, total enplanements averaged 15.4 million, hovering near 15.6 million to 15.2 million from fiscal years 2011-2016, while O&D enplanements have averaged nearly 9.2 million from 2011-2016 and ranged from about 8.8 million to 10 million from 2011-2016. Estimated total enplanements for fiscal 2017 decreased 5.6% to 14.8 million (96.4% of fiscal 2009 levels) from about 15.7 million in fiscal 2016 with O&D enplanements decreasing less than 1% to 9.9 million (108% of
fiscal 2009 levels), while connecting enplanements decreased 15% to about 5 million (79% of fiscal 2009 levels).

Management attributes the fiscal 2017 decrease in enplanements to American's restructuring of its hub operation at the airport in the first three months of 2017. This restructuring will eliminate two of the airline's eight connecting banks and reduces the number of connecting opportunities in several markets. American's hub restructuring has also resulted in an 8.6% reduction in available airline seat capacity at PHL in fiscal 2017. For 2018, American has announced new routes and Aer Lingus will commence service at the airport. Management has budgeted fiscal 2017 enplanements to increase a 3% to about 15.2 million, which we consider reasonable. We expect demand for the airport will be generally stable.

We consider PHL's carrier concentration high and its exposure to connecting passengers moderately high. Now that the airport is part of the American network, we expect its activity will remain near current levels given its role and importance within the airline's route network as a major transatlantic connecting point and its large O&D market. Within American's route system, PHL ranks as the largest gateway airport to Europe and the Middle East and the fourth-largest international gateway overall behind Miami International Airport, Charlotte International Airport, and Dallas Fort Worth International Airport.

The current residual airline use and lease agreement took effect July 1, 2015. This agreement has a five-year term with two one-year extensions. The agreement's financial terms are consistent with those of the previous one. All the airport's primary airlines are signatories under the current airline use and lease agreement.

PHL maintains a capital plan that addresses airport development needs as well as ongoing repair and maintenance of existing facilities; however, the new 2017 capital plan includes a shift from the long-term capacity enhancement program to the capital development program (CDP). The shift in capital priorities to terminal, landside, and cargo development, along with reprioritized airfield improvements, has resulted in the airport implementing a revised capital plan that incorporates terminal, landside, and cargo projects identified in its master plan in addition to near-term capital facility needs, including ongoing rehabilitation and repair projects.

Under the airline agreement, the airlines have approved approximately $2.4 billion in CDP projects, of which approximately $370.1 million have been completed. The CDP includes approximately $2.0 billion of airline-approved projects to be completed. Anticipated expected funding sources include approximately $1.25 billion from general airport revenue bonds or commercial paper, $341 million from grant or PFC revenues (including PFC supported GARBs), $320 million from customer facility charge (CFC) revenues, and $95 million from existing bonds or direct loans.

We consider PHL's debt burden manageable at recent activity levels at about $101 debt per enplaned passenger after the issuance of the 2017 bonds (based on $1.68 billion in revenue bonds and $141.2 million of CP outstanding and fiscal 2017 enplanement levels). After adding the 2020 revenue bonds of $421 million, the debt per enplanement will increase to approximately $122, which we still view as manageable for the rating.

PHL's DSC levels (S&P Global Ratings-adjusted) are weak for a large-hub residual airport, in our opinion. Adjusted coverage based on historical results has averaged 1.03x from fiscal years 2011-2016. For fiscal 2017, adjusted DSC is about 1.16x based on estimated fiscal 2017 figures and 1.06x based on budgeted fiscal 2018 figures. Our DSC
calculations include the portion of PFC revenues on which the city has pledged to pay debt service on bonds issued to finance PFC-eligible projects and exclude transfers from the previous year or available cash balances. DSC as defined under the airport's general airport revenue bond ordinance (GARBO) has exceeded 1.0x and 1.5x (excluding interdepartmental charges) rate covenants from fiscal years 2011-2017, and we expect this to continue. More specifically, including interdepartmental charges, transfers and previous year or available cash balances, DSC per the GARBO for fiscal 2016 was 1.69x and averaged 1.63x from fiscal years 2011-2016. DSC per GARBO is about 1.88x based on estimated unaudited fiscal 2017 figures, which are close to the DSC ratios based on forecast figures done in connection with the airport's most recent bond issue, which showed S&P Global Ratings-adjusted DSC slightly above 1.0x and no less than 1.6x per GARBO through fiscal 2020. PHL's budgeted airline cost per enplanement for fiscal 2018 decreases to $14.97 from an estimated $15.59, assuming enplanements increase 3% to 15.3 million. This CPE level is above-average compared with that of other large-hub airports we rate in the 'A' category.

The forecast done in connection with this bond issue, assumes modest annual enplanement growth of about 1% from fiscal years 2018 to 2023, shows PHL's airline cost per enplanement (CPE) gradually increase to $18.57 by fiscal 2023. The forecast assumed the airport will fund its near-term capital program with commercial paper up to $350 million capacity, with GARBs replacing them. This forecast CPE assumes added debt service from the current issuance and additional GARBs in 2020 at par of $421 million. Although the airport has committed additional PFCs, the forecast assumes PHL will use PFCs up to $15 million annually to pay a portion of the debt service for the 2017 or future bonds. We think the enplanement forecast could be achievable given that traffic levels have been generally flat historically despite the nearly 6% decline in 2017. As a result, we expect PHL's airline cost structure will remain above-average, unless it experiences notable and sustainable increases in demand and less reliance on airline revenues.

The airport's liquidity position has fluctuated historically, recently trending favorably. As of June 30, 2017, management reported unaudited unrestricted cash and short-term investments balance improved to about $126.6 million (190 days' cash on hand) from $116.3 million (174 days' cash) reported as of June 30, 2016. The June 2016 and 2017 liquidity position return the airport to a level comparable with that at fiscal year ending 2010-2012. Before fiscal 2015, PHL's fiscal year-end unrestricted cash balance declined gradually, to about $58.3 million (about 90 days' cash on hand) in fiscal 2014 from about $118.4 million (245 days) in fiscal 2010. Management is projecting a cash and investment balance of approximately $132 million for 2018, which equates to 179 days' cash based on fiscal 2018 budgeted operating expenses of $269 million. Management is projecting a cash and investment balance of approximately $120 million for 2018, which equates to 163 days' cash based on fiscal 2018 budgeted operating expenses of $269 million. In addition, the forecast shows unrestricted cash reserves ranging from about $140 million (163 days) to $188 million (222 days) from fiscal years 2019 to 2023.

PHL has one floating-to-fixed-rate swap with JPMorgan Chase Bank N.A. The swap synthetically fixes 100% of the airport's 2005C bonds, resulting in a net variable-rate percentage of 0%. The 2005C bonds, with a total principal of $110.7 million, represents the only variable-rate debt PHL has outstanding. As of Nov. 1, 2017 the mark-to-market value for the swap was approximately $8.3 million, not in the airport's favor. We consider the contingent liquidity risk low for the swap given the rating differential between the rating on the swap insurer and rating triggers that would require PHL to post a material amount of collateral or make a termination payment. The airport entered a direct
purchase agreement in April 2017 with PNC Bank on $125.0 million of airport revenue bonds. Proceeds funded certain land acquisition costs. After our review of the direct purchase agreement and the city's bond ordinance, we believe the contingent liquidity risk from this direct purchase is low because it would be unlikely that the direct purchase bonds could be accelerated in less than 180 days.

We consider PHL’s GARBO provisions relatively weak. They include a rate covenant and projected additional bonds test that incorporate unlimited rolling tests, allowing the airport flexibility to achieve rate covenant compliance or incur additional debt, despite producing low coverage based on pledged operating revenues net of all fixed charges.

**Outlook**

The stable outlook reflects our expectation that demand will hover near recent levels, S&P Global Ratings-adjusted DSC will stay near 1x, and liquidity will stay near current levels, despite PHL’s significant additional debt plans. We do not expect to raise or lower the rating in the outlook's two-year timeframe.

**Upside scenario**

A higher rating could result beyond the outlook period if the airport's demand increases notably and sustainably, producing DSC (S&P Global Ratings-adjusted) that is 1x or better and adequate liquidity levels that we believe are both sustainable and consistent with a higher rating.

**Downside scenario**

We could lower the rating if our adjusted DSC is consistently below 1x or PHL’s liquidity position materially erodes.

**Ratings Detail (As Of December 6, 2017)**

<table>
<thead>
<tr>
<th>Philadelphia, Pennsylvania</th>
<th>A(SPUR)/Stable</th>
<th>Affirmed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia International Airport, Pennsylvania</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia (Philadelphia International Airport) arpt (BAM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unenhanced Rating</strong></td>
<td>A(SPUR)/Stable</td>
<td>Affirmed</td>
</tr>
<tr>
<td><strong>Philadelphia (Philadelphia Intl Arpt)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unenhanced Rating</strong></td>
<td>A(SPUR)/Stable</td>
<td>Affirmed</td>
</tr>
<tr>
<td><strong>Long Term Rating</strong></td>
<td>AA+/A-1+</td>
<td>Affirmed</td>
</tr>
</tbody>
</table>

Many issues are enhanced by bond insurance.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on the S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.