Secondary Dominants

Primary Dominant
This is V7 (eg G7 in key of C) – the primary cadence chord.

• expect resolution to I chord
• usually found on weak beat, cadencing to tonic at strong beat
• available tensions are diatonic

Secondary Dominants
These are dominants of secondary chords in the key (ie other than I).

• not diatonic, but have diatonically-related function
• create an expectation to resolve to a diatonic chord down a 5th
• roots ARE diatonic, but chords contain one or two non-diatonic pitches
• usually found on weak beat (V7/V doesn’t have to be)

There are 5 secondary dominant chords.

These are built on 1st, 2nd, 3rd, 6th and 7th degrees of major scale:

<table>
<thead>
<tr>
<th>Degree of scale (C major example)</th>
<th>Resolution (target)</th>
<th>Description (V7/target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (C7)</td>
<td>Fmaj7</td>
<td>V7/IV</td>
</tr>
<tr>
<td>2 (D7)</td>
<td>G7</td>
<td>V7/V</td>
</tr>
<tr>
<td>3 (E7)</td>
<td>Am7</td>
<td>V7/VI</td>
</tr>
<tr>
<td>6 (A7)</td>
<td>Dm7</td>
<td>V7/II</td>
</tr>
<tr>
<td>7 (B7)</td>
<td>Em7</td>
<td>V7/III</td>
</tr>
</tbody>
</table>

Notes:
• dominant chord built on degree V of scale (G7) is the primary dominant.
• no sec dom built on degree IV of scale as this would not resolve diatonically (F7 would resolve to Bb). (You do get this chord in the blues, of course).
• nor is there a V7/VII chord as this would have a non-diatonic root (F#7, resolving to Bm7b5)
Examples (arrow shows root movement down a perfect 5th):

I maj7    V7/II    II-7    V7
Cmaj7    A7    D-7    G7

I maj7    V7/IV    IV maj7
Cmaj7    C7    Fmaj7

Available Tensions and Scales for Secondary Dominants

To find the available tensions, write out the chord tones (R, 3, 5, 7) and then carry on building in 3rds (so that you are filling in the gaps with diatonic notes).

The scales for secondary dominants are all some sort of mixolydian scale (ie have maj3 and b7).

Notes that aren’t tensions or chord tones are called avoid notes.

<table>
<thead>
<tr>
<th>Sec Dom</th>
<th>Available tensions</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>V7/II</td>
<td>9, b13</td>
<td>Mixo b13</td>
</tr>
<tr>
<td>V7/III</td>
<td>b9, b13</td>
<td>Altered</td>
</tr>
<tr>
<td>V7/IV</td>
<td>9, 13</td>
<td>Mixo</td>
</tr>
<tr>
<td>V7/V</td>
<td>9, 13</td>
<td>Mixo</td>
</tr>
<tr>
<td>V7/VI</td>
<td>b9, b13</td>
<td>Mixo b9, b13</td>
</tr>
</tbody>
</table>

- when target chord is major, sec dom takes mixolydian (eg V7/IV)
- when target chord is minor, sec dom takes chord scale containing b13 (eg V7/VI)
- Mixo b9, b13 has same notes as harm minor of target (eg A mixob9, b13=D harm minor)

“Available tensions” are non-chord tones that are diatonic and a major 9th above a chord tone. You can never have a tension a half-step above 3rd of the chord (as it destroys the sound of the chord). The 11th always produces an undesired min 9th with the maj 3rd in a dominant chord, which explains why there are no 11th tensions available here. But for sec doms, b9 and b13 are also available if they are diatonic (even though they create min9th intervals with root and 5th respectively).
Related II chords

Every sec dom can be preceded by its related II chord. If that chord is also diatonic it's known as a dual function chord.

I maj7 \( \rightarrow \) V7/II \( \rightarrow \) IV maj7
Bbmaj7 \( \rightarrow \) F-7 \( \rightarrow \) Bb7 \( \rightarrow \) Ebmaj7

I maj7 \( \rightarrow \) III-7 \( \rightarrow \) V7/III \( \rightarrow \) II-7
Bbmaj7 \( \rightarrow \) D-7 \( \rightarrow \) G7 \( \rightarrow \) C-7

In the second example here, the D-7 is diatonic, but sounds like a related II chord (sounds like “key of the moment” is C major) – it’s called a DUAL FUNCTION chord.

Note that available tensions on related II chords are 9 and 11 (in the “key of the moment”).

When sec doms don’t resolve to expected targets, they are said to deceptively resolve.