


# POP *Quarterly Report*

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Q3-2010 (July-September)

HIT  SONGS  
deconstructed



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The Hit Songs Deconstructed Pop Quarterly Recap Report is based on the **21 Hit Pop Songs** that entered the Billboard Pop Top 10 during Q3-2010.

### #1 Hit Pop Songs (6):

PEAK POSITION	Song	Artist
#1	Nothin' On You	B.o.B
#1	Love the Way You Lie	Eminem featuring Rihanna
#1	California Gurls	Katy Perry
#1	Your Love is My Drug	Ke\$ha
#1	Break Your Heart	Taio Cruz
#1	Dynamite	Taio Cruz

### #2 - #10 Pop Songs (15):

PEAK POSITION	Song	Artist
#2	Airplanes	B.o.B
#2	I Like It	Enrique Iglesias
#2	OMG	Usher
#3	Cooler Than Me	Mike Posner
#3	Billionaire	Travis McCoy
#4	Teenage Dream	Katy Perry
#4	Alejandro	Lady Gaga
#5	DJ Got Us Fallin' In Love	Usher
#6	Just The Way You Are	Bruno Mars
#6	Bulletproof	La Roux
#7	Ridin' Solo	Jason Derulo
#7	Take It Off	Ke\$ha
#8	Find Your Love	Drake
#9	Misery	Maroon 5
#9	Impossible	Shontelle



# AT-A-GLANCE: *Structure*

 Longest  Shortest

The chart below provides a snapshot of key structural elements present within the top 10 Pop songs from Q3-2010.

Song	Artist	BB Peak Position	Structure	Song Length	Intro Length	Outro Length	1st Chorus	% Into Song
Nothin' On You	B.o.B	#1	B-A-B-A-B-C-B	4:30	0:04	0:23	0:04	1%
Love the Way You Lie	Eminem ft. Rihanna	#1	B-A-B-A-B-A-B	4:23	n/a	n/a	0:01	0%
California Gurls	Katy Perry	#1	A-B-A-B-C-B	3:56	0:08	0:21	0:54	23%
Your Love is My Drug	Ke\$ha	#1	A-B-A-B-C-B	3:08	0:09	0:15	0:40	21%
Dynamite	Taio Cruz	#1	A-B-A-B-C-B	3:24	0:07	0:09	0:32	16%
Break Your Heart	Taio Cruz	#1	A-B-A-B-C-B	3:08	0:07	0:04	0:38	20%
<b>AVERAGES FOR BILLBOARD #1 HITS</b>				3:44	0:07	0:14	0:28	14%
Airplanes	B.o.B	#2	B-A-B-A-B	3:01	0:08	0:27	0:09	5%
I Like It	Enrique Inglesias	#2	A-B-A-B-C-B	3:50	0:22	0:28	0:52	23%
OMG	Usher	#2	B-A-B-A-B	4:30	0:13	n/a	0:14	5%
Cooler Than Me	Mike Posner	#3	B-A-B-A-C-B	3:35	n/a	0:34	0:01	0%
Billionaire	Travie McCoy	#3	A-B-A-B-A-B	3:31	n/a	0:21	0:21	10%
Teenage Dream	Katy Perry	#4	A-B-A-B-C-B-C	3:48	0:04	n/a	0:52	23%
Alejandro	Lady Gaga	#4	A-B-A-B-C-B	4:34	0:43	0:43	1:13	27%
DJ Got Us Fallin' In Love	Usher	#5	A-B-A-B-C-B	3:42	0:08	n/a	0:40	18%
Just The Way You Are	Bruno Mars	#6	A-B-A-B-C-B	3:41	0:17	n/a	0:53	24%
Bulletproof	La Roux	#6	A-B-A-B-C-Solo-B	3:28	0:15	0:12	0:48	23%
Ridin' Solo	Jason Derulo	#7	B-A-B-A-B-C-B	3:37	0:10	n/a	0:10	5%
Take It Off	Ke\$ha	#7	B-A-B-A-B-C-B	3:35	n/a	n/a	0:01	0%
Find Your Love	Drake	#8	A-B-A-B-A-B-C-B	3:29	0:11	0:19	0:28	13%
Misery	Maroon 5	#9	A-B-A-B-C-B	3:36	0:10	n/a	0:34	16%
Impossible	Shontelle	#9	A-B-A-B-C-B-A	3:44	0:10	0:11	0:43	19%
<b>AVERAGES FOR BILLBOARD NON #1 HITS</b>				3:42	0:14	0:24	0:31	14%
<b>TOTAL AVERAGES</b>				3:43	0:10	0:19	0:30	14%



# AT-A-GLANCE: *Lyrical Theme / Writers / Point of View*

The charts below provide a snapshot of each songs lyrical theme and the perspective in which it's communicated.

## #1 Hits

Song	Artist	# of Writers	Primary P.O.V.	Lyrical Theme
Nothin' on You	B.o.B.	4	1st	Love/Relationships
Love the Way You Lie	Eminem ft. Rihanna	4	1st	Love/Relationships
California Gurls	Katy Perry	5	1st	Props to California Girls
Your Love Is My Drug	Ke\$ha	3	1st	Love/Relationships
Break Your Heart	Taio Cruz	2	1st	Love/Relationships
Dynamite	Taio Cruz	5	1st	Partying/Clubbing

- The majority of #1 hits (67%) have a lyrical theme that deals with love and relationships.
- Each #1 hit was written from a 1st person perspective.
- All were written by more than one songwriter.
- Each song has a credited contribution from the performing artist.
- There were a total of 23 songwriters involved in writing six #1 hit Pop songs.

## #2 - #10 Hits

Song	Artist	# of Writers	Primary P.O.V.	Lyrical Theme
Airplanes	B.o.B	5	1st	Escaping to the old days
I Like It	Enrique Iglesias	4	1st	Clubbing/Hooking Up
OMG	*Usher	1	1st	Love/Relationships
Cooler Than Me	Mike Posner	2	1st	Ego Issues
Billionaire	Travie McCoy	4	1st	What to do if rich
Teenage Dream	Katy Perry	5	1st	Love/Relationships
Alejandro	Lady Gaga	2	1st	Love/Relationships
DJ Got Us Fallin' In Love	Usher	4	1st	Clubbing/Hooking Up
Just The Way You Are	Bruno Mars	5	1st	Love/Relationships
Bulletproof	La Roux	2	1st	Love/Relationships



Song	Artist	# of Writers	Primary P.O.V.	Lyrical Theme
Ridin' Solo	Jason Derulo	3	1st	Post Relationship glee
Take It Off	Ke\$ha	3	1st	Drag Show
Find Your Love	Drake	4	1st	Love/Relationships
Misery	Maroon 5	2	1st	Love/Relationships
Impossible	Shontelle	2	1st	Love/Relationships

- The majority of hits that placed #2 - #10 (53%), deal with love and relationships, (this number was at 54% during the previous quarter).
- The others songs deal with an assortment of themes as detailed above.
- Only one song, “OMG” was credited to a single artist. Interestingly, that is also the only song that uses an outside songwriter with no credited contribution from the main performing artist.
- All of the songs were written from a first person perspective.
- There were a total of 48 songwriters credited in writing the 15 songs in this category.

## SUMMARY RECAP

The information in this section provides a snapshot of the key findings present in songs that entered the Billboard Pop Top 10 during Q3-2010. It is broken down by #1 hits, non #1 hits, and all top 10 hits for comparison purposes.

### #1 Billboard Pop Hits

#### Structure

- Most Popular Song Structure: A-B-A-B-C-B (Occurs in 67% of #1 hit Pop songs)
- Average Song Length: 3:44
- Top Song Length Range: 3:00 – 3:29
- Average Intro Length: 0:07
- Top Intro Length Range: 0:05 – 0:09
- Average Outro\* Length: 0:14
- Top Outro Length Range: 0:20 – 0:24
- 1st Chorus Hit Average: 0:28 into the song
- Top 1st Chorus Hit Range: 0:01 – 0:09 / 0:30 – 0:39 into the song
- 1st Chorus Hit % of Song: On average, the 1st chorus hits 14% into the song
- Top 1st Chorus Hit % of Song Range: 20% - 24% into the song
- Songs with a Pre-Chorus: 67% of the songs have a pre-chorus
- Songs with a Solo: 0% of the songs have a solo
- Songs with a Bridge: 83% of the songs have a bridge

## Attributes

- Most Popular Tempo: Mid & Mid/Up (50/50 split of #1 hit Pop songs)
- Most Popular Tone (Acoustic/Electric): Electric (100% of #1 hit Pop songs)
- Most Popular Primary Instrumentation: Synth (67% of #1 hit Pop songs)
- Most Popular Primary Vocal Gender: 50% Male(followed by 33% Female, 17% Combo)
- Most Popular Lyrical Theme: 67% Love/Relationships
- Most Popular Style: 83% Electro (+ Pop or Hip-hop)
- Heavy use of Auto-Tune on lead vocals: 50% of #1 hit Pop songs.

## Non #1 Billboard Hits (#2 - #10):

### Structure

- Most Popular Song Structure: A-B-A-B-C-B (Occurs in 33% of #1 hit Pop songs)
- Average Song Length: 3:42
- Top Song Length Range: 3:30 – 3:59
- Average Intro Length: 0:14
- Top Intro Length Range: 0:10 – 0:14
- Average Outro\* Length: 0:24
- Top Outro Length Range: 0:10 - 0:14 / 0:25 – 0:29
- 1st Chorus Hit Average: 0:31 into the song
- Top 1st Chorus Hit Range: 0:01 – 0:09 / 0:40 – 0:49 / 0:50 – 0:59 into the song
- 1st Chorus Hit % of Song: On average the 1st chorus hits 14% into the song
- Top 1st Chorus Hit % of Song Range: 20% - 24% into the song
- Songs with a Pre-Chorus: 53% have a pre-chorus
- Songs with a Solo: 7% have a solo
- Songs with a Bridge: 80% have a bridge

## Attributes

- Most Popular Tempo: Mid (73% of the songs)
- Most Popular Tone (Acoustic/Electric): Electric (93% of the songs)
- Most Popular Primary Instrumentation: Synth (67% of the songs)
- Most Popular Primary Vocal Gender: 60% Male (followed by 33% Female and 7% Combo)
- Most Popular Lyrical Theme: 53% Love/Relationships
- Most Popular Style: 67% Electro (+ Pop, Rock, Club or Hip-hop)
- Heavy use of Auto-Tune on lead vocals: 27% of the songs

# All Top 10 Billboard Hit Songs

## Structure

- Most Popular Song Structure: A-B-A-B-C-B (Occurs in 43% of all songs)
- Average Song Length: 3:43
- Top Song Length Range: 3:30 – 3:59
- Average Intro Length: 0:10
- Top Intro Length Range: 0:05 – 0:09
- Average Outro\* Length: 0:19
- Top Outro Length Range: 0:20 – 0:24
- 1st Chorus Hit Average: 0:30 into the song
- Top 1st Chorus Hit Range: 0:01 – 0:09 into the song
- 1st Chorus Hit % of Song: On average the 1st chorus hits 14% into the song
- Top 1st Chorus Hit % of Song Range: 20% - 24% into the song
- Songs with a Pre-Chorus: 57% have a pre-chorus
- Songs with a Solo: 5% have a solo
- Songs with a Bridge: 81% have a bridge

## Attributes

- Most Popular Tempo: Mid (67%)
- Most Popular Tone (Acoustic/Electric): Electric (95% of all top 10 hit Pop songs)
- Most Popular Primary Instrumentation: Synth (62% of all top 10 hit Pop songs)
- Most Popular Primary Vocal Gender: 57% Male, 33% Female, (10% Combo)
- Most Popular Lyrical Theme: 57% Love/Relationships
- Most Popular Style: 71% Electro (+ Pop, Rock, Club or Hip-hop)
- Heavy use of Auto-Tune on lead vocals: 24% of all top 10 hit Pop songs

*\*Note: for purposes in this report, an “outro” is being defined as a section that differs from the last lyrical section of the song (i.e. the chorus).*

## AT-A-GLANCE: Comparison Chart

The chart below provides a side by side comparison of the key findings derived from the Summary Recap section.

CATEGORY	#1 Songs	#2-#10 Songs	All Songs
Most Popular Song Structure	A-B-A-B-C-B	A-B-A-B-C-B	A-B-A-B-C-B





CATEGORY	#1 Songs	#2-#10 Songs	All Songs
Average Song Length	3:44	3:42	3:43
Average Intro Length	0:07	0:14	0:10
Average Outro Length	0:14	0:24	0:19
Average Time For 1st Chorus To Hit	0:28	0:31	0:30
Average % Of Song Where 1st Chorus Hits	14%	14%	14%
Top Occuring Tempos	Mid & Mid/Up	Mid	Mid
Most Popular Tone	Electric	Electric	Electric
Most Popular Primary Instrumentation	Synth	Synth	Synth
Most Popular Primary Vocal Gender	Male	Male	Male
Songs With A Pre-Chorus	67%	53%	57%
Songs With A Solo	0%	7%	5%
Songs With A Bridge	83%	80%	81%
Lyrical Theme	Love/Relationships	Love/Relationships	Love/Relationships
Most Popular Style	Electro +	Electro +	Electro +

## Key Points

- The most popular song structure for all top 10 hits is A-B-A-B-C-B.
- The average song length for both categories is virtually identical.
- The average intro length for #1 hits is 0:07 shorter than #2 - #10 hits. So they're getting to the crux of the song slightly faster in #1's.
- The average outro length is 0:10 shorter in #1's.
- The average % into the song where the first chorus hits in is identical for both #1 and #2 - #10 hits (14%)
- More #1 hits have a pre-chorus than the other top 10 songs.
- The vast majority of all top 10 hits incorporate a bridge into their song structure.
- Overall, solo's are not "in" within current Pop.
- The primary lyrical theme amongst all top 10 songs has to do with love and relationships.
- The most popular song style is still Electro based, incorporating elements of Rock, Pop and Hip-hop.
- Only 5 out of 21 songs (24%) feature a guitar as the primary instrument.

# DETAIL RECAP

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This section provides an in-depth, detailed structural analysis gained from the songs that entered the Billboard Pop top 10 during Q3-2010.

## Song Structure

### #1 Hit Songs

- 4 out of 6 songs (67%) are structured A-B-A-B-C-B.
- 2 songs (Nothin' On You and Love the Way You Lie) begin with the chorus.
- Only one song does not contain a bridge – “Love the Way You Lie”, which is structured B-A-B-A-B-A-B
- All songs feature the chorus as the last section within the songs structure (either ending the song on the chorus or going into a different outro section).
- 67% of #1 hit songs have 6 sections, and 33% have 7 sections within their overall structure (i.e. verse, chorus, bridge, intro, outro, solo).

### #2 - #10 Hit Songs

- 5 out of 15 songs (33%) are structured A-B-A-B-C-B.
- 5 out of 15 songs begin with the chorus (either the proper chorus or some type of variation)
- Only one song contains a solo (“Bulletproof”).
- All songs that contain a bridge have it coming after the chorus, except for “Cooler Than Me”, which has it coming after a verse.
- All songs have the chorus as the last section (before an outro, if applicable) except for “Teenage Dream” (which ends on the bridge) and “Impossible” (which ends on a verse).
- Only 3 songs follow an A-B-A-B type structure (“Airplanes”, “OMG” and “Billionaire”), two of which start with the chorus (“Airplanes” and “OMG”).
- 47% of songs have 6 sections, 33% have 7, 13% have 5, and 7% have 8 within their overall structure.

## Song Length

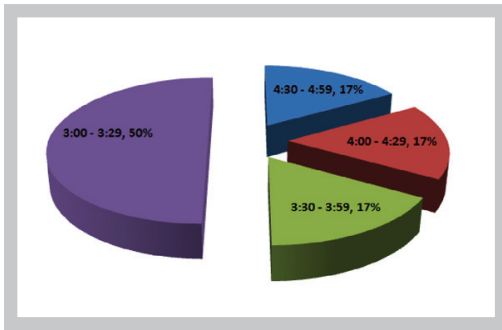
### #1 Hit Songs

- The average song length for #1 hit Pop songs is 3:44
- The longest song is “Nothin' On You” at 4:30.
- The shortest songs are “Your Love Is My Drug” and “Break Your Heart”, both at 3:08.

### #2 - #10 Hit Songs

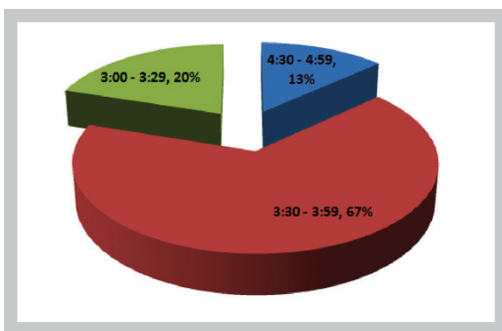
- The average song length for #2 - #10 hit Pop songs is 3:42
- The longest song is “Alejandro” at 4:34.
- The shortest song is “Airplanes” at 3:01.

## Song Length: #1 Hit Pop Songs



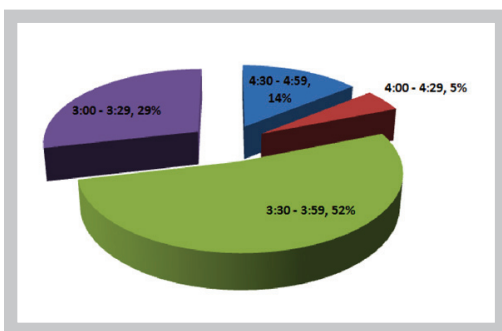
The overwhelming majority of #1 hit Pop songs land in the 3:00 – 3:29 range (50%). This was also the case in Q2-2010.

## Song Length: #2 - #10 Hit Pop Songs



In contrast to the #1 hits, here we see an overwhelming majority of songs land in the 3:30 – 3:59 range (67%), followed by 3:00 – 3:29 at only 20%. This was also the case during Q2-2010, except that the majority then was 31% landing in the 3:30 – 3:59 range.

## Song Length: All Hit Pop Songs



Here we have the vast majority of songs (81%) landing between 3:00 and 3:59. Only 19% land in the 4:30 – 4:59 range – which is quite long for the genre.

## Intro Analysis

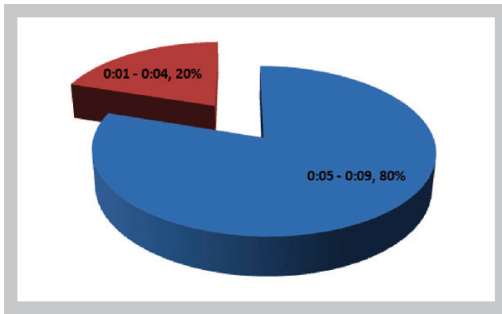
### #1 Hit Songs

- The average intro length is 0:07.
- The longest intro occurs in “Your Love Is My Drug”, at 0:09.
- The shortest intro occurs in “Nothin’ On You”, at 0:04.
- All songs have an intro section with the exception of “Love the Way You Lie” which begins with the chorus.
- Overall, the intro’s are very short in nature – all less than 0:10.

## #2 - #10 Hit Songs

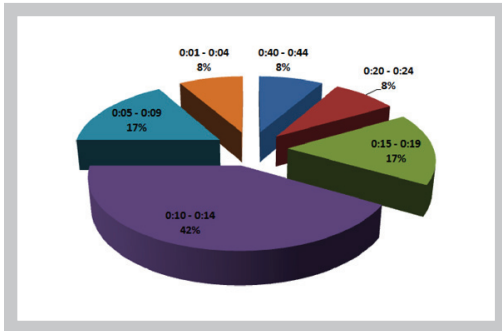
- The average intro length is 0:14.
- The longest intro occurs in “Alejandro”, at 0:43.
- The shortest intro occurs in “Teenage Dream”, at 0:04.
- All songs in the category have an intro section except for “Billionaire”, “Cooler Than Me” and “Take It Off.” Two of them start with the chorus, and one starts with the verse.
- As with the #1 hit songs, the intro’s here are generally short in nature.

## Intro Length of #1 Hit Pop Songs



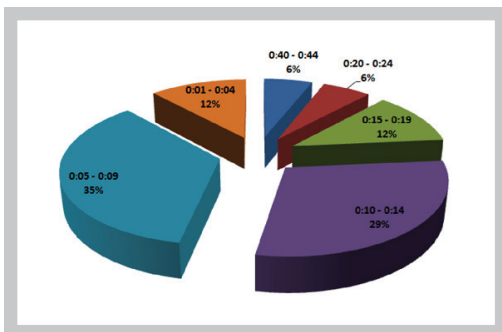
An overwhelming majority of hit Pop songs have an intro section that lands in the 0:05 – 0:09 range (80%). The previous quarter had a majority in this time range as well, except that it was only 43%. 100% of all #1 songs had intro’s 0:09 or less.

## Intro Length of #2 - #10 Hit Pop Songs



Here we have a more diverse representation of intro lengths, with the majority landing in the 0:10 – 0:14 range (42%). This was also the case in Q2-2010, except that the majority was only 25%. Overall, the intro lengths in this section are quite longer than the #1 hits, with the majority (59%) landing in the 0:10 – 0:19 range. Only 25% land under 0:09.

## Intro Length of All Hit Pop Songs



Overall, we still have the majority of songs incorporating relatively short intro lengths into their framework. 76% have intro lengths that are 0:14 or less. The majority (35%), have intro lengths in the 0:05 – 0:09 range.

## Outro Analysis

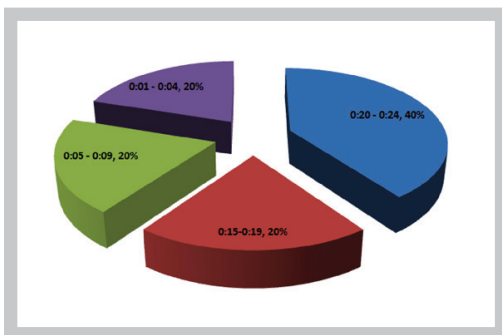
### #1 Hit Songs

- All of the songs within the category have an outro section that is different than any other section within the song except for “Love the Way You Lie,” which ends on the chorus.
- The average outro length is 0:14
- The longest outro occurs in “Nothin’ On You”, at 0:23.
- The shortest outro occurs in “Break Your Heart”, at 0:04.

### #2 - #10 Hit Songs

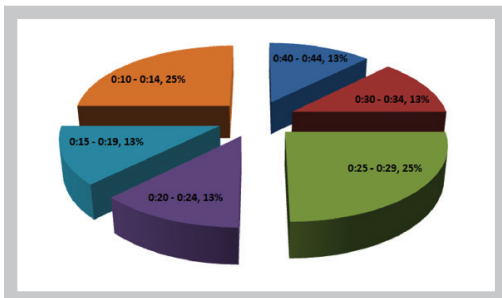
- Only seven (47%) of the songs within the category have an outro section that is different than any other section within the song. All of the others end on the chorus, except for “Teenage Dream”, which ends on the bridge.
- The longest outro occurs in “Alejandro”, at 0:43
- The shortest outro occurs in “Impossible”, at 0:11.

## Outro Length of #1 Hit Pop Songs



When looking at songs that have an outro section that differs from any other pre-existing section within the song (i.e. the chorus), we see the majority landing in the 0:20 – 0:24 range (40% - which is down slightly from the previous quarter at 50%). The other ranges split equally, each at 20%, which is up slightly from the previous quarter – all which were split at 17%. We DON’T see any outro’s longer than 0:24.

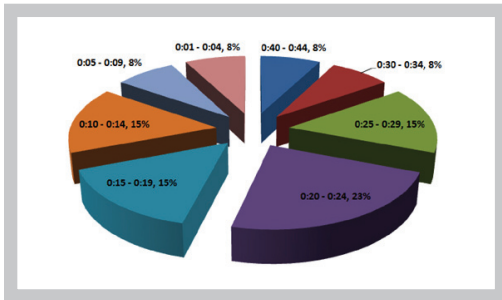
## Outro Length of #2 - #10 Hit Pop Songs



Here we have a split majority. 25% have relatively short outro lengths (0:10 – 0:14 range) and 25% have outro lengths in the middle of the road (0:25 – 0:29).

Overall we see a larger percentage of outro’s being longer in length, with 51% landing 0:25 and up. This is up from 36% in the previous quarter.

## Outro Length of All Hit Pop Songs



As a whole, the majority of outro's are landing in the 0:20 – 0:24 range (23%), which is down from 35% in the previous quarter. The majority of songs (69%) have outro's that are under 0:24.

## 1st Chorus Hit - Timeframe

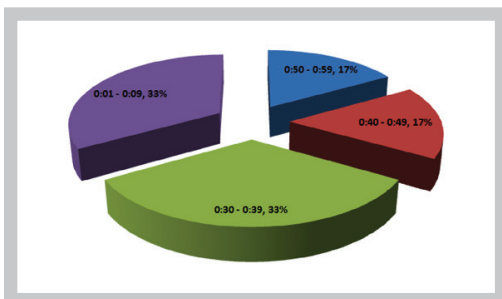
### #1 Hit Songs

- The average time that it took for the first chorus to hit within #1 hit Pop songs was 0:28.
- The longest amount of time that it took for the first chorus to hit occurred in “California Gurls” at 0:54.
- The shortest amount of time that it took for the first chorus to hit occurred in “Love the Way You Lie” at 0:01 (the song kicks off with the chorus).

### #2 - #10 Hit Songs

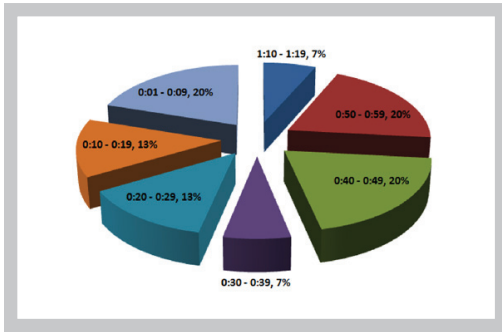
- The average time that it took for the first chorus to hit was 0:31.
- The longest amount of time that it took for the first chorus to hit occurred in “Alejandro” by Lady Gaga at 1:13.
- The shortest amount of time that it took for the first chorus to hit was 0:01, reflected in “Cooler Than Me” and “Take It Off.” Both of those songs begin with the chorus.

## 1st Chorus Hit of #1 Hit Pop Songs



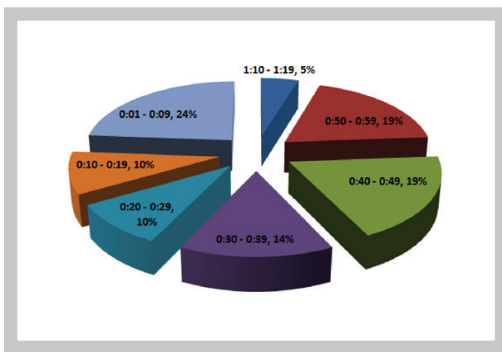
Here we see that the majority (33%) of #1 songs have their first chorus kicking in between 0:01 – 0:09 and 0:30 and 0:39. This differs from the previous quarter, where the majority (38%) kicked in between 0:40 and 0:49).

## 1st Chorus Hit of #2 - #10 Hit Pop Songs



In contrast to #1 hits, here we have a three way split, with the majority (40%) occurring in the 0:40 – 0:59 range. The overall trend is basically split between choruses hitting under 0:39 (53%) and over 0:40 (47%). The previous quarter saw the majority of first choruses occurring in the 1:00 – 1:09 range (31%), followed by 0:50 – 0:59 (23%). So, overall, the trend is toward choruses hitting earlier in the song.

## 1st Chorus Hit of All Hit Pop Songs



Here we don't see any one particular range representing the vast majority of first chorus hits. We have a small majority (24%) falling in the 0:01 – 0:09 range. Overall, it is relatively split between earlier and later choruses, with 57% occurring 0:39 and under, and 43% occurring 0:40 and up. Last quarter we saw the majority landing 0:40 and up, with 43% landing 0:50 and up.

## 1st Chorus Hit - % Into the Total Song

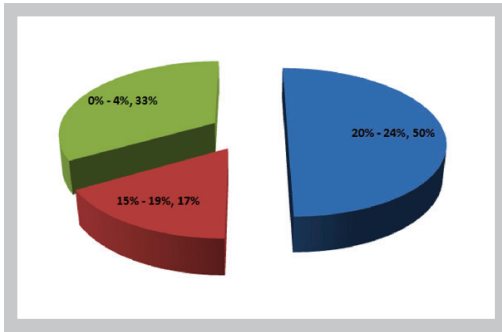
### #1 Hit Songs

- On average, the first chorus kicks in at 14% of the way into the song within #1 hit Pop songs.
- The latest point where the first chorus hits occurs in “California Gurls” at 23% into the song.
- The earliest point where the first chorus hits occurs in “Love the Way You Lie” at less than 1% into the song.

### #2 - #10 Hit Songs

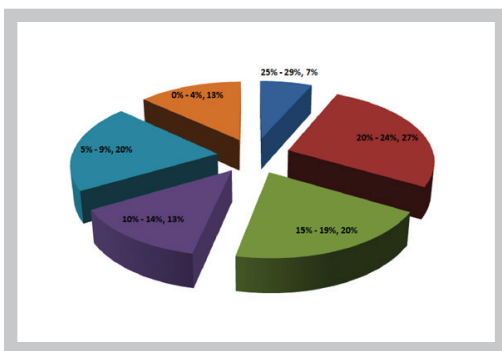
- On average, the first chorus kicks in at 14% of the way into the song within #1 hit Pop songs.
- The latest point where the first chorus hits occurs in “Alejandro”, at 27% into the song.
- The earliest point in a song where the first chorus hits occurs in “Take It Off” and “Cooler Than Me”, both at less than 1% into the song.

### 1st Chorus Hit % into Total Song: #1 Hit Pop Songs



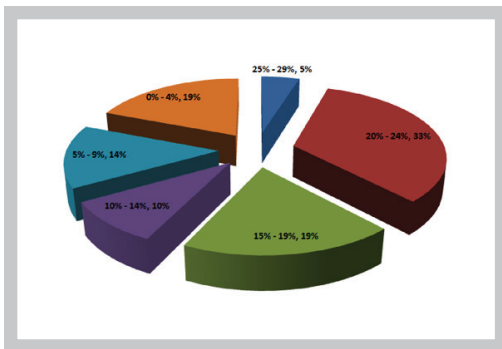
When looking at when the 1st chorus kicks in as a percent of a total songs construction, we see the majority (50%) occurring in the 20% - 24% range. This was also the case during the previous quarter. We also have a good percentage (33%) of 1st choruses kicking in 0% - 4% into the song.

### 1st Chorus Hit % into Total Song: #2 - #10 Hit Pop Songs



Here we have a small majority (27%) landing in the 20% - 24% range, followed by 20% landing in the 15% - 19% and 5% - 9% ranges. Overall, the vast majority (93%) occur 24% into the song and under.

### 1st Chorus Hit % into Total Songs: All Songs



As a whole, again, we see that the majority of songs (33%) have their 1st chorus landing 20% - 24% into the total song. 95% land 25% or under, and 62% under 19% into the song.

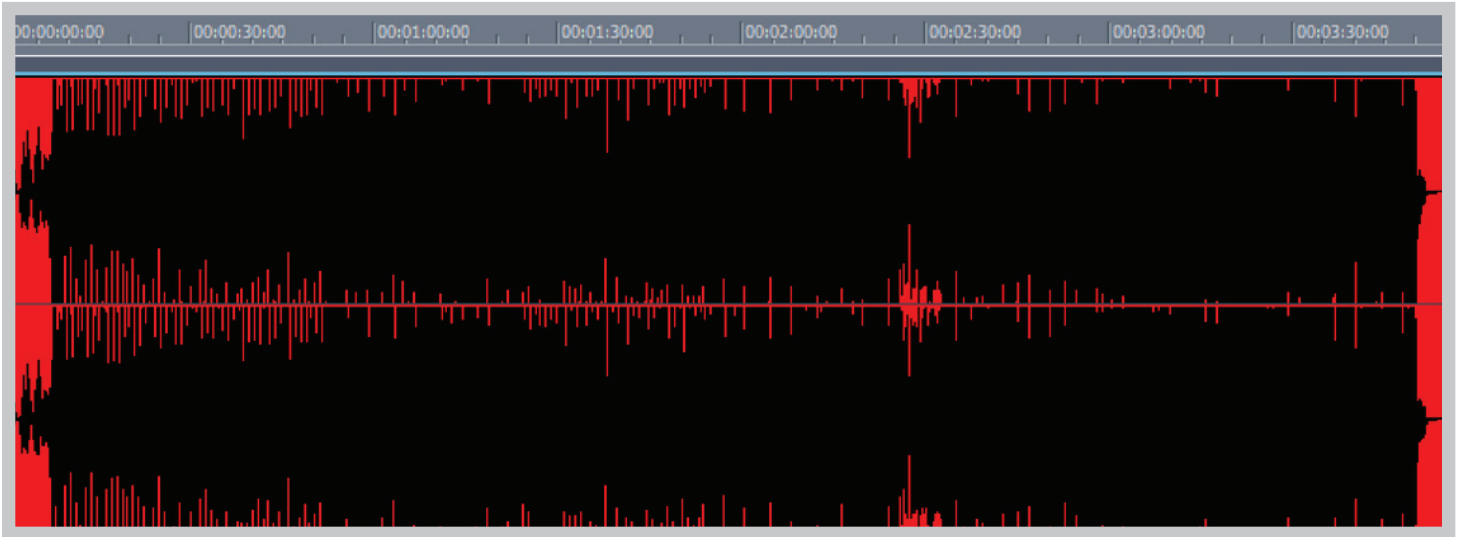


# WAVEFORMS

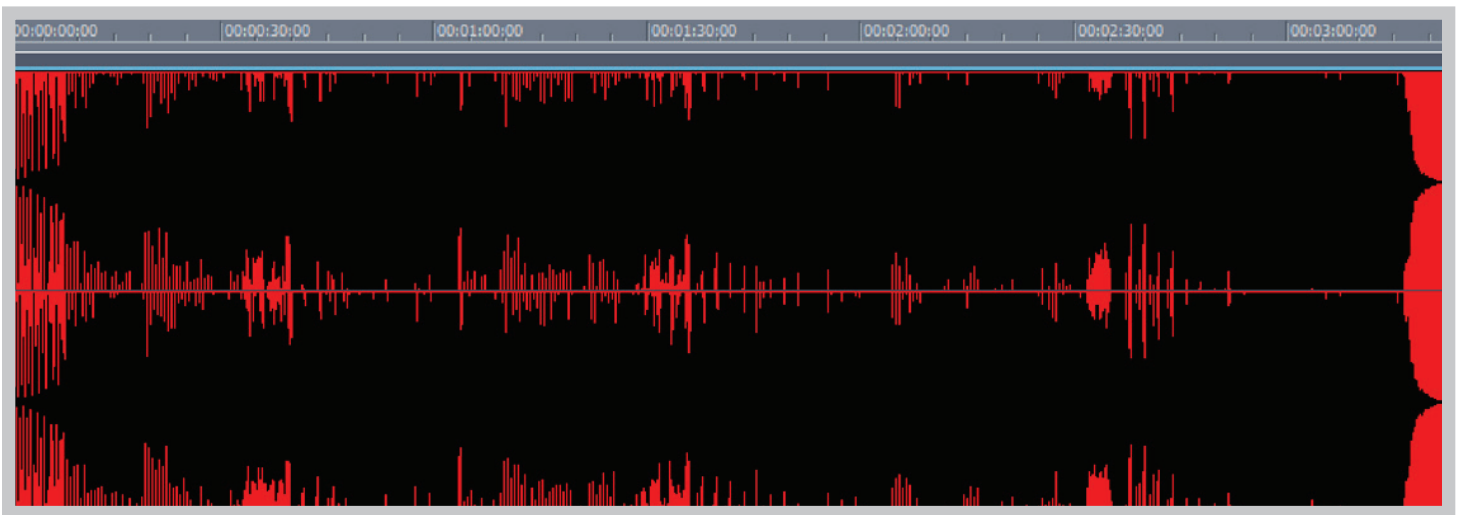
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Below are the waveforms from the #1 hit Pop songs during Q3-2010. Once again, as we saw during the previous quarter, massive amounts of compression is being used to enable the songs to come across as loud as possible, especially during the choruses.

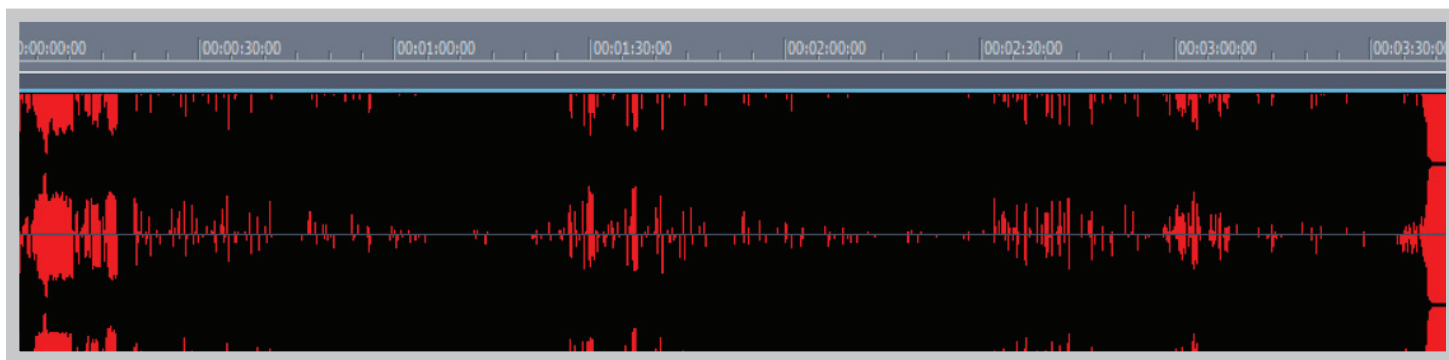
## California Gurls (Katy Perry)



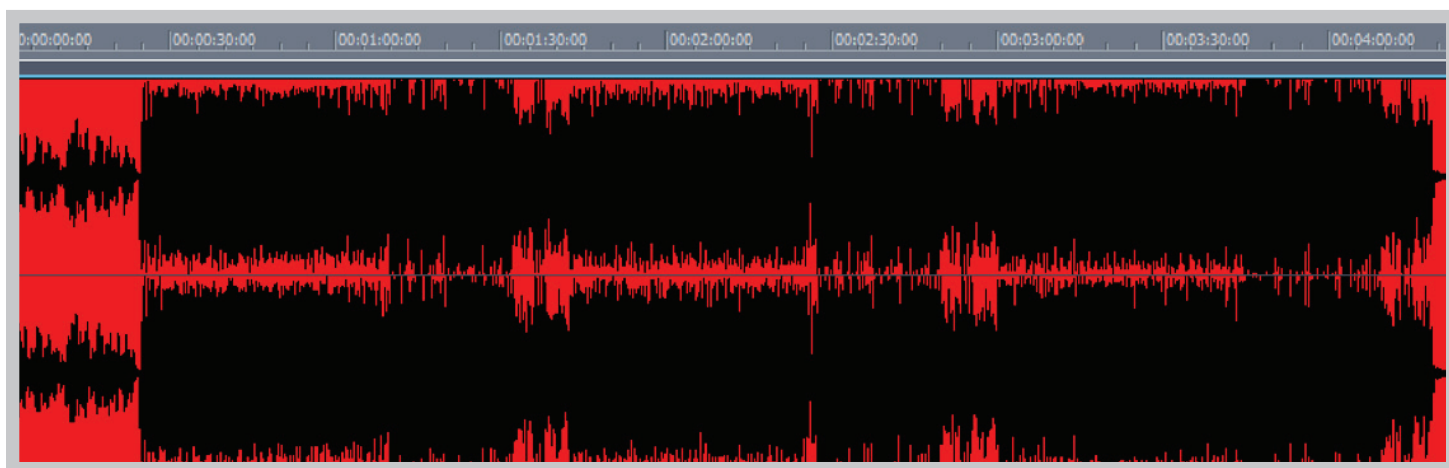
## Dynamite (Taio Cruz)



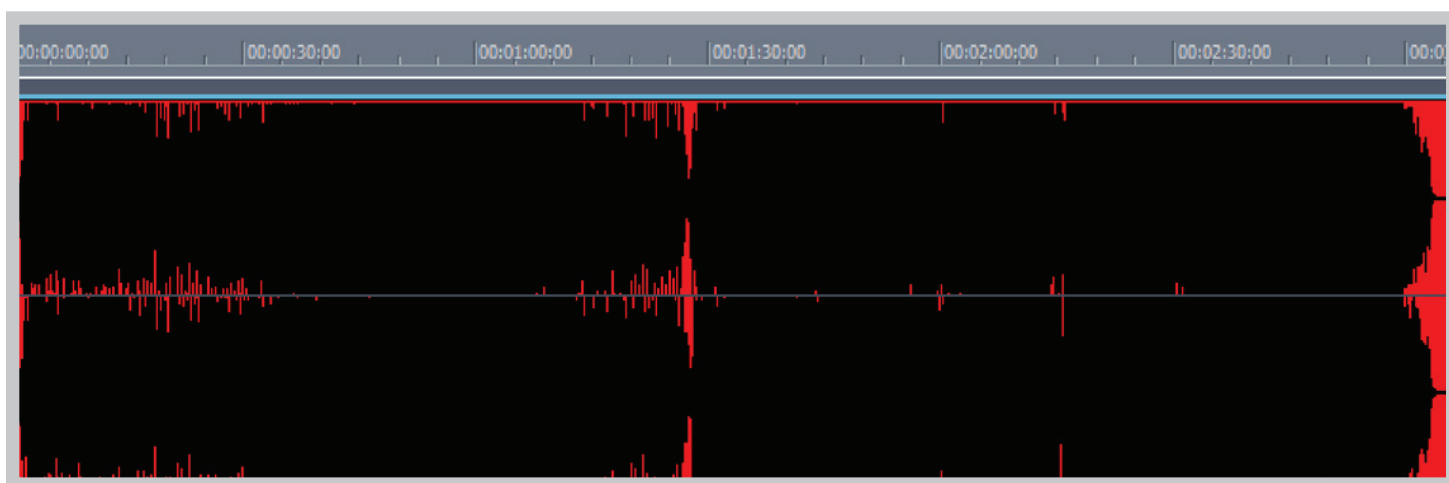
### Nothin' On You (B.o.B)



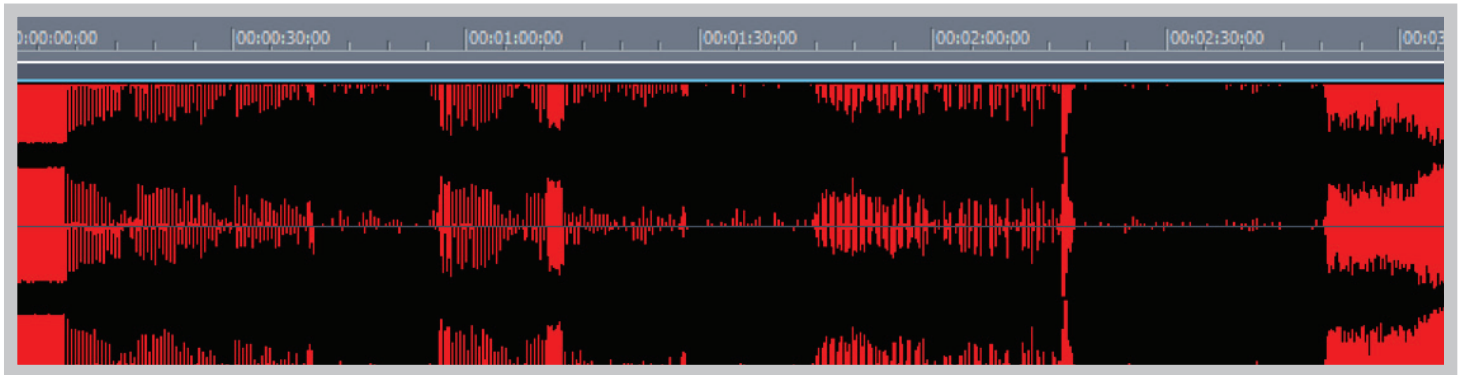
### Love The Way You Lie (Eminem)



### Break Your Heart (Taio Cruz)



## Your Love Is My Drug (Three Days Grace)



## THE IDEAL HIT POP SONG: *Q3-2010*

Based on the analysis and findings in this report, the ideal hit Pop song from Q3-2010 would look like this:

- Style: Electro-Pop, with club or Hip-hop influences
- Song Structure: A-B-A-B-C-B
- Tempo: Mid
- Primary Vocal Gender: The lead vocal would be sung by a male.
- Lyrical Theme: The song would most likely deal with love and relationships
- Instrumentation: The primary instrumentation would be synth based
- Song Length: The song would land between 3:00 and 3:59
- Intro Length: The intro would land in the 0:05 – 0:09 range
- Outro Length: The outro would land in the 0:20 – 0:24 range
- 1st Chorus Hit: The 1st chorus would hit in the 0:01 – 0:09 or 0:40 – 0:59 range
- 1st Chorus % of Song: The 1st chorus would occur 0% - 4% or 15% - 24% into the song
- Pre-Chorus: A pre-chorus is optional
- Solo: The song would not have a solo
- Bridge: The song would have a bridge
- Auto-tune: The song would most likely not feature heavy use of AutoTune.
- Tone: The primary tone would be Electric based
- Production: The song would be immensely compressed for maximum sonic impact



# NEW TOP 10 ARRIVALS: *Q2-2010*

 Longest  Shortest

The chart below shows key structural information exclusive to new songs that entered the Billboard Pop top 10 during Q3-2010

Song	Artist	BB Peak Position	Structure	Song Length	Intro Length	Outro Length	1st Chorus	% Into Song
Nothin' On You	B.o.B	#1	B-A-B-A-B-C-B	4:30	0:04	0:23	0:04	1%
Love the Way You Lie	Eminem ft. Rihanna	#1	B-A-B-A-B-A-B	4:23	n/a	n/a	0:01	0%
Dynamite	Taio Cruz	#1	A-B-A-B-C-B	3:24	0:07	0:09	0:32	16%
Q3 NEW ENTRY SONG AVERAGES: BILLBOARD #1 HITS				4:05	0:05	0:16	0:12	6%
I Like It	Enrique Inglesias	#2	A-B-A-B-C-B	3:50	0:22	0:28	0:52	23%
Cooler Than Me	Mike Posner	#3	B-A-B-A-C-B	3:35	n/a	0:34	0:01	0%
Teenage Dream	Katy Perry	#4	A-B-A-B-C-B-C	3:48	0:04	n/a	0:52	23%
DJ Got Us Fallin' In Love	Usher	#5	A-B-A-B-C-B	3:42	0:08	n/a	0:40	18%
Just The Way You Are	Bruno Mars	#6	A-B-A-B-C-B	3:41	0:17	n/a	0:53	24%
Ridin' Solo	Jason Derulo	#7	B-A-B-A-B-C-B	3:37	0:10	n/a	0:10	5%
Take It Off	Ke\$ha	#7	B-A-B-A-B-C-B	3:35	n/a	n/a	0:01	0%
Find Your Love	Drake	#8	A-B-A-B-A-B-C-B	3:29	0:11	0:19	0:28	13%
Misery	Maroon 5	#9	A-B-A-B-C-B	3:36	0:10	n/a	0:34	16%
Impossible	Shontelle	#9	A-B-A-B-C-B-A	3:44	0:10	0:11	0:43	19%
Q3 NEW ENTRY SONG AVERAGES: BILLBOARD NON #1 HITS				3:39	0:11	0:23	0:31	14%
Q3 NEW ENTRY SONG AVERAGES: ALL TOP 10 HITS				3:52	0:08	0:19	0:21	10%

Q3-2010 saw the addition of 13 new songs to the Billboard top 10 Pop chart. Three hit #1 and ten charted #2 - #10. All of these songs are new to the charts during this period, and did not chart in the top 10 during the previous quarter.



# DE-CHARTED TOP 10 HITS: *Q2-2010*

 Longest  Shortest

The chart below shows key structural information from songs that charted in the Pop top 10 during Q2-2010 but did not chart in the top 10 during Q3-2010.

Song	Artist	BB Peak Position	Structure	Song Length	Intro Length	Outro Length	1st Chorus	% Into Song
In My Head	Jason Derulo	1	A-B-A-B-C-B	3:19	0:10	n/a	0:43	22%
Tik Tok	Ke\$ha	1	A-B-A-B-C-B	3:20	n/a	n/a	0:32	16%
Telephone	Lady Gaga	1	A-B-A-B	3:41	0:08	0:23	0:47	21%
Bad Romance	Lady Gaga	1	A-B-A-B-C-B	4:54	0:33	0:10	1:14	25%
Rude Boy	Rihanna	1	B-A-B-A-B-C-B	3:43	0:10	0:21	0:10	4%
Q2 DE-CHARTED SONG AVERAGES: BILLBOARD #1 HITS				3:47	0:15	0:18	0:41	18%
Need You KNow	Lady Antebellum	2	A-B-A-B-Solo-C-B	4:38	0:37	1:08	1:08	24%
Imma Be	The Black Eyed Peas	2	A-B-A-A-C-A-C	4:16	0:26	0:13	1:08	27%
According To You	Orianthi	3	A-B-A-B-C-Solo-B	3:22	0:02	0:13	0:33	16%
Hey, Soul Sister	Train	3	A-B-A-B-C-B	3:37	0:12	0:24	0:52	24%
Breakeven	The Script	6	A-B-A-B-C-A-B	4:23	0:25	0:40	1:06	25%
Bedrock	Young Money	6	A-B-A-B-A-B	4:48	0:13	n/a	1:06	23%
Carry Out	Timbaland	8	A-B-A-B-C-B	3:53	0:20	0:17	0:58	25%
Q2 DE-CHARTED SONG AVERAGES: BILLBOARD NON #1 HITS				4:08	0:19	0:29	0:58	23%
Q2 DE-CHARTED SONG AVERAGES: ALL TOP 10 HITS				3:57	0:17	0:23	0:49	21%

12 songs that charted in the top 10 during Q2-2010 fell completely off the top 10 charts during Q3-2010. These included five #1 hits and seven songs that placed #2-#10 during Q2-2010.



# NEW Q3 ARRIVALS VS. Q2 DE-CHARTED SONGS: *#1 Hits*

The purpose of this section is to provide a side by side comparison of key elements that are present in #1 hit songs that were new to the spot during Q3-2010 and #1 hit songs that didn't make it from Q2-2010.

CATEGORY	Q3-2010 (New Arrivals)	Q2-2010 (Decharted)	Change Q2-Q3
Most Popular Song Structure	Mixed	A-B-A-B-C-B	n/a
Average Song Length	4:05	3:47	+0:18
Average Intro Length	0:05	0:15	-0:10
Average Outro Length	0:16	0:18	-0:02
Average Time For 1st Chorus To Hit	0:12	0:41	-0:29
Average % Of Song Where 1st Chorus Hits	6%	18%	-12%
Top Occuring Tempos	Mid (67%)	Mid/Up (80%)	n/a
Most Popular Tone	Electric (100%)	Electric (100%)	n/a
Most Popular Primary Instrumentation	Mixed	Synth (100%)	n/a
Most Popular Primary Vocal Gender	Male (67%)	Female (80%)	n/a
Songs With A Pre-Chorus	33%	60%	-27%
Songs With A Solo	0%	0%	Same
Songs With A Bridge	67%	80%	-13%
Lyrical Theme	Love/Relationships (67%)	Partying/Hooking Up (40% each)	n/a
Heavy Use of Auto-Tune	0%	60%	-100%
Most Popular Style	Electro +	Electro +	Same

## Key Points

- The most popular song structure for new arrivals in Q3 was technically A-B-A-B-C-B, although one of the songs did start with the chorus before going into the verse. A-B-A-B-C-B was also the most popular song structure for de-charted hits as well.
- New arrival songs were on average 0:18 longer than de-charted songs.
- New arrival song intro's were on average 0:10 shorter than de-charted song intro's.
- New arrival songs outro's were only 0:02 shorter than de-charted outro's (that differed than any other section within the song – i.e. chorus).
- New arrival choruses hit 0:29 earlier in the song than in de-charted songs. This is primarily due to more

new chart arrivals having their chorus as the first section of the song.

- New arrival choruses hit 12% earlier in the song than in de-charted songs.
- On average, new arrivals had more mid tempo songs than de-charted songs, which were primarily mid/up tempo.
- Most popular tone and primary instrumentation remained constant – Electric and Synth respectively.
- New arrivals saw more males enter as primary vocalists over de-charted songs.
- 27% less new arrivals had a pre-chorus compared to de-charted songs.
- Songs with a solo remained constant at 0%.
- 13% less new arrival songs had a bridge compared to de-charted songs.
- The primary lyrical theme for new arrivals was love/relationships, while the primary lyrical theme for de-charted songs was partying and hooking up, each 40% of the total.
- Both new arrivals and de-charted songs are primarily Electro based, and incorporate elements of Hip-hop, Rock, Dance and Pop.

## NEW Q3 ARRIVALS VS. Q2 DE-CHARTED SONGS: *#All Top 10 Hits*

This section provides a side by side comparison of key elements that are present in all songs that were new to the top 10 during Q3-2010 and songs that didn't make it from Q2-2010.

CATEGORY	Q3-2010 (New Arrivals)	Q2-2010 (Decharted)	Change Q2-Q3
Most Popular Song Structure	A-B-A-B-C-B	A-B-A-B-C-B	n/a
Average Song Length	3:52	3:57	-0:05
Average Intro Length	0:08	0:17	-0:09
Average Outro Length	0:19	0:23	-0:04
Average Time For 1st Chorus To Hit	0:21	0:49	-0:28
Average % Of Song Where 1st Chorus Hits	10%	21%	-11%
Top Occuring Tempos	Mid (69%)	Mid & Mid/Up (50% each)	n/a
Most Popular Tone	Electric (100%)	Electric (83%)	n/a
Most Popular Primary Instrumentation	Synth (62%)	Synth (67%)	n/a
Most Popular Primary Vocal Gender	Male (69%)	Female & Male (50% each)	n/a
Songs With A Pre-Chorus	60%	42%	+18%
Songs With A Solo	0%	17%	-100%

CATEGORY	Q3-2010 (New Arrivals)	Q2-2010 (Decharted)	Change Q2-Q3
Songs With A Bridge	100%	83%	+17%
Lyrical Theme	Love/Relationships (54%)	Hooking Up (50%)	n/a
Heavy Use of Auto-Tune	23%	33%	-10%
Most Popular Style	Electro +	Electro +	Same

## Key Points

- A-B-A-B-C-B remained the most popular song structure for both new arrivals and de-charted hits.
- New arrival songs were 0:05 shorter than de-charted songs.
- New arrival song intro's were on average 0:09 shorter than de-charted song intro's.
- The average length of new arrival outro's was 0:04 shorter than de-charted songs..
- New arrival choruses hit 0:28 earlier in the song than in de-charted songs.
- New arrival choruses hit 11% earlier in the song than in de-charted songs.
- On average, new arrivals had more mid-tempo songs than de-charted songs.
- Most popular tone and primary instrumentation remained constant – Electric and Synth respectively.
- New arrivals feature primarily male lead vocalists compared to de-charted songs.
- 18% more of new arrivals have a pre-chorus compared to de-charted songs.
- None of the new arrival songs contain a solo, compared to 17% of de-charted songs.
- The primary lyrical theme for new arrivals was love/relationships, and the primary lyrical theme for de-charted songs was hooking up, followed closely by love/relationships.
- Both new arrivals and de-charted songs are primarily Electro based, and incorporate elements of Hip-hop, Rock, Dance and Pop.

# TOP 10 ROCK SONG QUARTERLY COMPARISON

(Represents all songs that entered the Billboard Pop top 10 for each quarter)

The chart below provides a side by side comparison of key attributes present in top 10 charting Pop songs for each quarter during the year.

CATEGORY	Q3-2010 (All Songs)	Q2-2010 (All Songs)	Q1-2010 (All Songs)
Most Popular Song Structure	A-B-A-B-C-B	A-B-A-B-C-B	A-B-A-B-C-B
Average Song Length	3:43	3:51	3:51
Average Intro Length	0:10	0:15	0:18



CATEGORY	Q3-2010 (All Songs)	Q2-2010 (All Songs)	Q1-2010 (All Songs)
Average Outro Length	0:19	0:21	0:20
Average Time For 1st Chorus To Hit	<b>0:30</b>	0:42	0:47
Average % Of Song Where 1st Chorus Hits	<b>14%</b>	18%	20%
Top Occuring Tempos	Mid	Mid	Mid & Mid/Up
Most Popular Tone	Electric	Electric	Electric
Most Popular Primary Instrumentation	Synth	Synth	Synth
Most Popular Primary Vocal Gender	Male	Female & Male	Male
Songs With A Pre-Chorus	57%	48%	45%
Songs With A Solo	5%	14%	18%
Songs With A Bridge	81%	76%	77%
Lyrical Theme	Love/Relationships	Love/Relationships	Love/Relationships
Most Popular Style	Electro +	Electro +	Electro-Pop

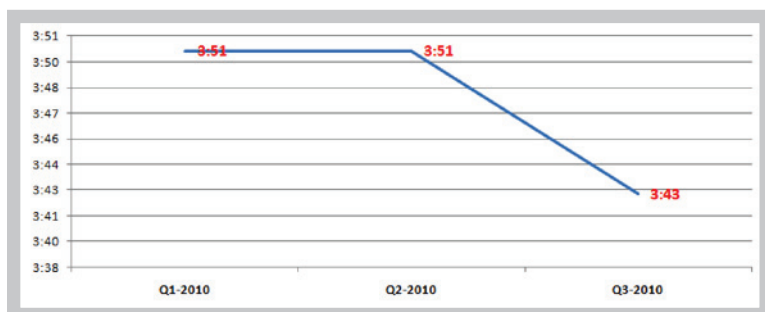
### Q3 – Q2 Comparison Key Points:

- The most popular song structure remained the same from Q2 – Q3: A-B-A-B-C-B.
- The average song length decreased slightly (-0:08) in Q3.
- The average intro length decreased during Q3, from 0:15 to 0:10.
- The average outro length remained virtually the same at 0:19 compared to 0:21 in Q2.
- The average time that it took for the 1st chorus to hit decreased significantly in Q3 to 0:30.
- The average % where the first chorus hits decreased to 14% from 18% in Q2.
- Mid tempo songs remained the most popular in Q3 as they did in Q2.
- Primary vocal gender was predominantly Male in Q3, compared to an equal split during Q2.
- Songs containing a pre-chorus increased in Q3 over Q2..
- In Q3, the number of songs containing a solo dropped to 5% compared to 14% in Q2.
- The number of songs with a bridge increased slightly in Q3, from 76% to 81%.
- The primary lyrical theme remained constant during Q3 and Q2 - Love and Relationships.
- Electro is still the most popular style in Q3 as it was in Q2, infusing elements of Hip-hop and Dance and Rock.

# TREND ANALYSIS: *Q1-Q3*

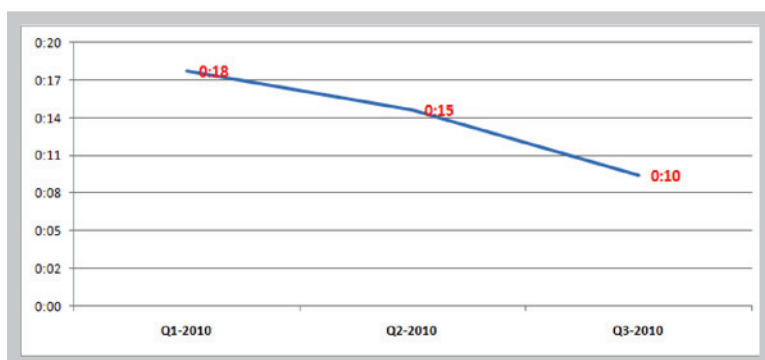
This section provides a graphical representation of how key song elements are trending within top 10 charting Pop songs for each quarter during the year.

## Average Song Length:



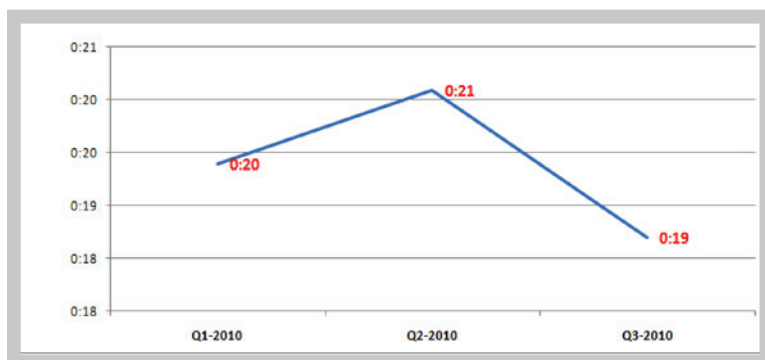
Here we see a slight decline in song length during Q3 after a steady run during Q1 and Q2.

## Average Intro Length:



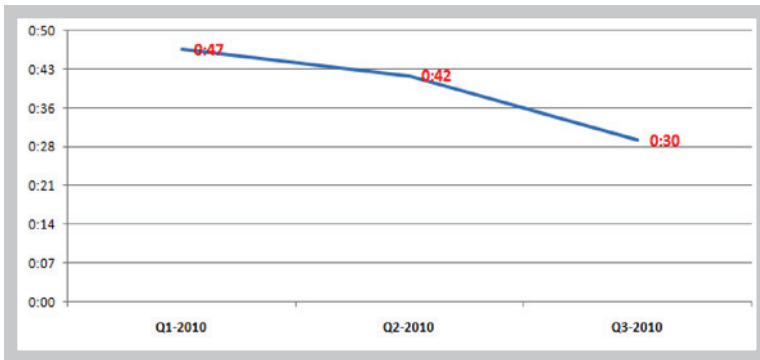
Here we see a steady decline in average intro length from Q1 – Q3. The length has decreased by 44% since Q1.

## Average Outro Length:



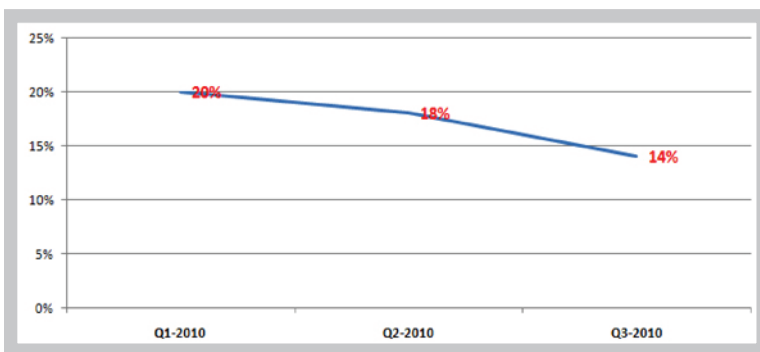
Here we see the average outro length remaining pretty much constant from Q1 through Q3.

### Average Time For 1st Chorus To Hit:



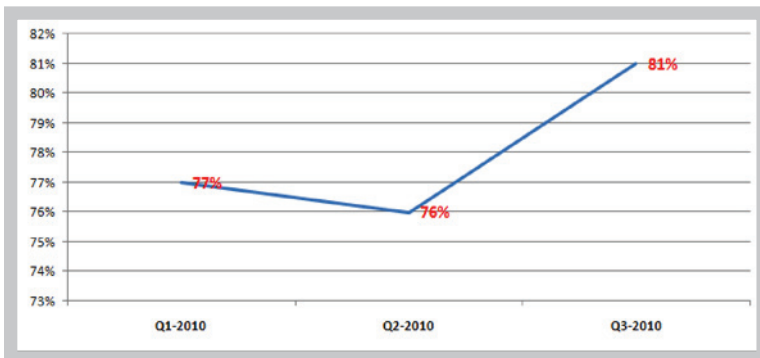
Here we see a pretty significant drop in the average time that it takes for the first chorus to hit within a song from Q1 to Q3. During that time period, the average time decreased by 36% to 0:30.

### Average 1st Chorus Hit - Percent Into Total Song:



As for the total amount of time that it takes for the first chorus to hit, here we also see a decrease in the percentage of the song where the first chorus hits. Compared to the first chorus kicking in 20% into the song during Q1, we see the first chorus now kicking in at 14% into the total song during Q3. This is largely due to the increase of songs kicking the song off with a chorus instead of a proper intro section.

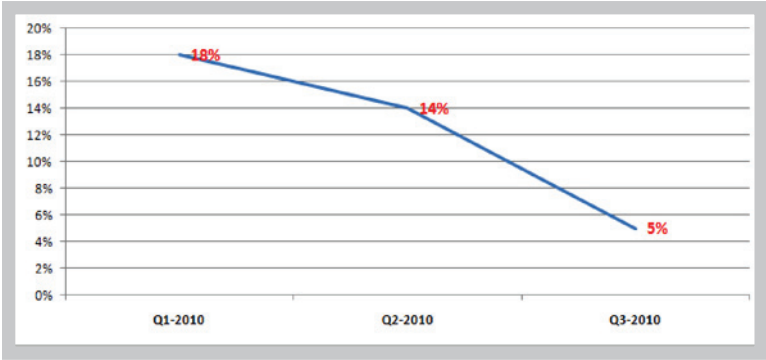
### Songs with a Pre-Chorus:



Here we see that the number of songs that contain a pre-chorus as part of their structure steadily increased from Q1 to Q3, with the largest jump occurring from Q2-Q3.

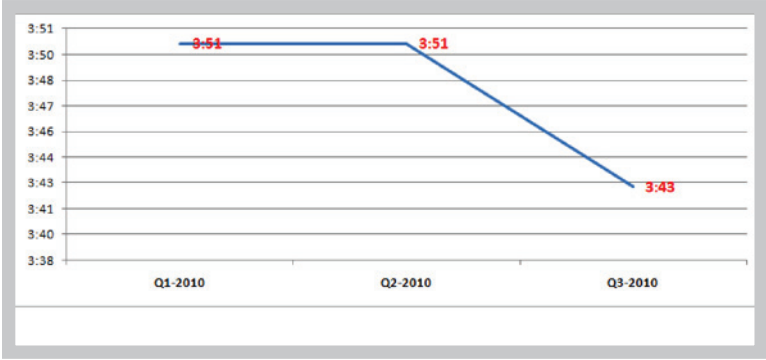


Songs With A Bridge:



Here we see, after a very slight decline from Q1 – Q2, songs containing a bridge increased by 5% during Q3-2010.

Songs With a Solo:



There has been a steady decrease in the amount of songs containing a solo from Q1 – Q3.

