

Glendive MT

Appendix P

REDACTED – FOR PUBLIC INSPECTION

EchoStar will provide local-into-local in advance of DIRECTV

Number of LIL Channels 1

	Year 2	Year 3	Year 4	Year 5	Year 6
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**DIRECTV Does Not Provide Satellite Local-Into-Local Service**

**Customer Profile**

[1] TV HH	5,157	5,209	5,261	5,313	5,366
[2] Beginning Customers	—	—	—	—	—
[3] Gross Adds	—	—	—	—	—
[4] Disconnects	—	—	—	—	—
[5] Ending Customers	—	—	—	—	—
[6] Average Customers (2 pt avg)	—	—	—	—	—
[7] Ending DIRECTV Market Share	—	—	—	—	—
[8] Disconnect Rate	—	—	—	—	—
[9] Average Gross Adds per Month	—	—	—	—	—
[10] Gross Add Rate	—	—	—	—	—

**Profit & Loss (\$k) - No LIL**

**Revenue:**

[11] Base Package Revenue	—	—	—	—	—
[12] LIL Revenue	—	—	—	—	—
[13] Total Revenue	—	—	—	—	—

**Expenses:**

[14] Programming Costs	—	—	—	—	—
[15] Bad Debt	—	—	—	—	—
[16] Customer related	—	—	—	—	—
[17] Total Direct costs	—	—	—	—	—
[18] Total Direct Margin	—	—	—	—	—
[19] Total Direct Margin %	—	—	—	—	—
[20] SAC Costs - No LIL	—	—	—	—	—
[21] Total Expenses:	—	—	—	—	—
[22] Cash Based OPBDA	—	—	—	—	—
[23] Cash Based OPBDA %	—	—	—	—	—

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Number of LIL Channels

1

	Year 2	Year 3	Year 4	Year 5	Year 6
<b>DIRECTV Provides Satellite Local-Into-Local Service</b>					
<b>Customer Profile</b>					
[24] TV HH	5,157	5,209	5,261	5,313	5,366
[25] Beginning Customers	█	█	█	█	█
[26] Gross Adds	█	█	█	█	█
[27] Disconnects	█	█	█	█	█
[28] Ending Customers	█	█	█	█	█
[29] Average Customers (2 pt avg)	█	█	█	█	█
[30] Ending Penetration	█	█	█	█	█
[31] Disconnect Rate	█	█	█	█	█
[32] Average Gross Adds per Month	█	█	█	█	█
[33] Gross Add Rate	█	█	█	█	█
<b>LIL Customers</b>					
<b>LIL Lift (upgrades) from No LIL</b>					
[34] Total Customers + Lift	█	█	█	█	█
[35] LIL Beginning Customers	█	█	█	█	█
[36] LIL Gross Adds	█	█	█	█	█
[37] LIL Disconnects	█	█	█	█	█
[38] Ending Customers	█	█	█	█	█
[39] Average Customers (2 pt avg)	█	█	█	█	█
[40] LIL Penetration	█	█	█	█	█
[41] Disconnect Rate	█	█	█	█	█
<b>LIL Sell-in New Customers No LIL</b>					
[42] Total Customers + Lift	█	█	█	█	█
[43] LIL Beginning Customers	█	█	█	█	█
[44] LIL Gross Adds	█	█	█	█	█
[45] LIL Disconnects	█	█	█	█	█
[46] Ending Customers	█	█	█	█	█
[47] Average Customers (2 pt avg)	█	█	█	█	█
[48] LIL Penetration	█	█	█	█	█
[49] Disconnect Rate	█	█	█	█	█
<b>LIL Sell-in New Customers Lift from No LIL</b>					
[50] Total Customers + Lift	█	█	█	█	█
[51] LIL Beginning Customers	█	█	█	█	█
[52] LIL Gross Adds	█	█	█	█	█
[53] LIL Disconnects	█	█	█	█	█
[54] Ending Customers	█	█	█	█	█
[55] Average Customers (2 pt avg)	█	█	█	█	█
[56] LIL Penetration	█	█	█	█	█
[57] Disconnect Rate	█	█	█	█	█
<b>Total LIL Customers</b>					
[58] Total Customers + Lift	█	█	█	█	█
[59] LIL Beginning Customers	█	█	█	█	█
[60] LIL Gross Adds	█	█	█	█	█
[61] LIL Disconnects	█	█	█	█	█
[62] Ending Customers	█	█	█	█	█
[63] Average Customers (2 pt avg)	█	█	█	█	█
[64] LIL Penetration	█	█	█	█	█
[65] Disconnect Rate	█	█	█	█	█

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Number of LIL Channels 1

	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Profit &amp; Loss (\$k) - With LIL</b>					
<b>Revenue:</b>					
[66] Package Revenue	████	████	████	████	████
<b>LIL Revenue:</b>					
[67] Existing Cutomers Upgrade	██	██	██	██	██
[68] Baseline Gross Adds Sell-in	██	██	██	██	██
[69] Additional to Baseline Gross Adds	██	██	██	██	██
[70] Total LIL Revenue	██	██	██	██	██
[71] <b>Total Revenue</b>	████	████	████	████	████
<b>Expenses:</b>					
[72] Programming Costs	████	████	████	████	████
[73] Bad Debt	██	██	██	██	██
[74] Customer related	██	██	██	██	██
[75] Total Direct costs	████	████	████	████	████
[76] Total Direct Margin	████	████	████	████	████
[77] Total Direct Margin %	████	████	████	████	████
<b>SAC Costs with LIL:</b>					
[78] Standard SAC From No LIL scenario	██	██	██	██	██
[79] Incremental SAC with LIL	██	██	██	██	██
[80] Total SAC Costs	████	████	████	████	████
[81] <b>Backhaul Expenses</b>	████	████	████	████	████
[82] <b>Box replacement costs</b>	██	██	██	██	██
[83] <b>Total Expenses:</b>	████	████	████	████	████
[84] <b>Cash Based OPBDA</b>	████	████	████	████	████
[85] <b>Cash Based OPBDA %</b>	████	████	████	████	████

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Number of LIL Channels 1

	Year 2	Year 3	Year 4	Year 5	Year 6
[86] Market level capital expenditures-outflow					
<b>NPV-Based on var from No LIL to With LIL case</b>					
[87] Cash Flows-With LIL					
[88] Cash Flows-No LIL					
[89] Incr/(Decr) from No LIL					
[90] NPV without Terminal Value					
[91] IRR					
[92] Terminal Value					
[93] Cash Flows with Terminal Value					
[94] NPV with Terminal Value					
[95] IRR					



## Notes to Appendix P: DMA-Specific Worksheets

- [34] Ending Customers for each year assuming DIRECTV offers local-into-local via satellite. Equal to [28].
- [35] Zero for Year 2 because model assumes that DIRECTV begins to offer LIL in Year 2. Beginning customers for subsequent years equals the previous year's ending customers (LIL Lift from No LIL scenario).
- [36] Represents customers who had DIRECTV before LIL is offered and who will add LIL service after it is offered. Equal to the Beginning Customers No LIL for Year 2 multiplied by the Percentage of Existing Customers adding LIL within 2 Years, and is split across Years 2 and 3. This is based on historical information about the number of existing subscribers who took local-into-local within 2 years from DIRECTV. The lift from the original base of customers (DIRECTV subscribers before LIL offered) only occurs in the first year of providing LIL service. The assumption that all of the existing DIRECTV subscriber LIL Gross Adds occur in Years 2 and 3 is consistent with how Conversion Costs are assessed in the model (also split across Years 2 and 3). See [82].
- [37] See [27]:  $[35] * (12 * [41]) + ([36] / 2) * (12 * [41])$ .  $((\text{Beginning Customers} * (12 * \text{Disconnect})) + ((\text{Gross Adds} / 2) * (12 * \text{Disconnect})))$
- [38]  $[35] + [36] - [37]$ . (Beginning Customers + Gross Adds - Disconnects)
- [39]  $([38] + [35]) / 2$ .  $((\text{Beginning Customers} + \text{Ending Customers}) / 2)$
- [40] Number of pre-local-into-local-launch DIRECTV customers taking local-into-local service as a percentage of total DIRECTV subscribers in each year:  $[38] / [34]$ . (Ending Customers / Total Customers + Lift.)
- [41] See [31].
- [42] See [34].
- [43] Zero for Year 2 because model assumes that DIRECTV begins to offer LIL in Year 2. Beginning customers for subsequent years equals the previous year's ending customers (LIL Sell-in New Customers No LIL).
- [44] Represents customers that DIRECTV would have gained regardless of launching LIL. Equal to Average Gross Adds per Month With LIL \* 12 \* LIL sell-in rate new customers once LIL is offered. The value in year 2 is halved because of the assumption that DIRECTV will begin providing the service in the middle of the year.
- [45]  $[43] * (12 * [49]) + ([44] / 2) * (12 * [49])$ .  $((\text{Beginning Customers} * (12 * \text{Disconnect})) + ((\text{Gross Adds} / 2) * (12 * \text{Disconnect})))$
- [46]  $[43] + [44] - [45]$ . (Beginning Customers + Gross Adds - Disconnects)
- [47]  $([43] + [46]) / 2$ .  $((\text{Beginning Customers} + \text{Ending Customers}) / 2)$
- [48] Number of baseline gross adds to DIRECTV taking local-into-local service as a percentage of total DIRECTV subscribers in each year:  $[46] / [42]$ . (Ending Customers / Total Customers + Lift.)
- [49] See [31].
- [50] See [34].
- [51] Zero for Year 2 because model assumes that DIRECTV begins to offer LIL in Year 2. Beginning customers for subsequent years equals the previous year's ending customers (LIL Sell-in New Customers Lift from No LIL).
- [52] Represents the additional customers DIRECTV would gain after offering LIL above and beyond their historical baseline gross adds for each DMA. Equal to LIL sell-in rate to additional customers once LIL is offered \* (Average Gross Adds per Month With LIL - Average Gross Adds per Month No LIL) \* 12. Year 2 is halved because model assumes LIL begins in the middle of Year 2.
- [53]  $[51] * (12 * [57]) + ([52] / 2) * (12 * [57])$ .  $((\text{Beginning Customers} * (12 * \text{Disconnect})) + ((\text{Gross Adds} / 2) * (12 * \text{Disconnect})))$
- [54]  $[51] + [52] - [53]$ . (Beginning Customers + Gross Adds - Disconnects)
- [55]  $([54] + [51]) / 2$ .  $((\text{Beginning Customers} + \text{Ending Customers}) / 2)$
- [56]  $[54] / [50]$ . (Ending Customers / Total Customers + Lift.)
- [57] See [31].
- [58] See [34].
- [59] Equal to  $[35] + [43] + [51]$ . (LIL Beginning Customers (LIL Lift from No LIL) + LIL Beginning Customers (LIL Sell-in New Customers No LIL) + LIL Beginning Customers (LIL Sell-in New Customers Lift from No LIL).)
- [60] Equal to  $[36] + [44] + [52]$ . (LIL Gross Adds (LIL Lift from No LIL) + LIL Gross Adds (LIL Sell-in New Customers No LIL) + LIL Gross Adds (LIL Sell-in New Customers Lift from No LIL).)
- [61] Equal to  $[37] + [45] + [53]$ . (LIL Disconnects (LIL Lift from No LIL) + LIL Disconnects (LIL Sell-in New Customers No LIL) + LIL Disconnects (LIL Sell-in New Customers Lift from No LIL).)
- [62]  $[59] + [60] - [61]$ . (Beginning Customers + Gross Adds - Disconnects)
- [63]  $([59] + [62]) / 2$ .  $((\text{Beginning Customers} + \text{Ending Customers}) / 2)$

## Notes to Appendix P: DMA-Specific Worksheets

- [64] Percentage of DIRECTV subscribers who take local-into-local via satellite: [62] / [58]. (Ending Customers / Total Customers + Lift.)
- [65] See [31].
- [66] Subscriber revenue not including local-into-local subscriber fees: Average Customers With LIL \* Base package ARPU \* 12 months. See [11] for explanation of how ARPU changes over time.
- [67] Local-into-local fee revenue from pre-local-into-local-launch DIRECTV customers: LIL rate \* Average Customers LIL Lift from No LIL \* 12 months. The LIL rate is assumed to be [REDACTED]. See Appendix N [5].
- [68] Local-into-local fee revenue from baseline gross additions who take local-into-local-service (assumed to be 100%): LIL rate \* Average Customers LIL Sell-in New Customers No LIL \* 12 months. The LIL rate is assumed to be [REDACTED].
- [69] Local-into-local fee revenue from additional to baseline gross additions who take local-into-local-service (assumed to be 100%): LIL rate \* Average Customers LIL Sell-in New Customers Lift from No LIL \* 12 months. The LIL rate is assumed to be [REDACTED].
- [70] Equal to [67] + [68] + [69]. (No LIL customers Upgrade + No LIL customers Sell-in + Lift from No LIL Sell-in.)
- [71] Equal to [66] + [70]. (Package Revenue + LIL Revenue)
- [72] Average Customers With LIL \* Base package ARPU \* 12 months \* Programming Costs + Total LIL Revenue \* LIL margin. For a discussion of Base Package ARPU see [11]. For a discussion of Programming Costs see [14]. [REDACTED]
- [REDACTED] The decreasing margin reflects the expectation of somewhat increased license fee pressure from local broadcast stations.
- [73] Average Customers With LIL \* Base package ARPU \* 12 months \* Bad Debt + Total LIL Revenue \* Bad Debt. For a discussion of Base Package ARPU see [11]. For a discussion of Bad Debt see [15].
- [74] Average Customers With LIL \* Base package ARPU \* 12 months \* Customer Related Costs + Total LIL Revenue \* Customer Related Costs. For a discussion of Base Package ARPU see [11]. For a discussion of Customer Related Costs see [16].
- [75] Equal to [72] + [73] + [74]. (Programming Costs + Bad Debt + Customer related.)
- [76] Equal to [71] - [75]. (Total Revenue - Total Direct Costs.)
- [77] Equal to [76] / [71]. (Total Direct Margin / Total Revenue.)
- [78] Standard SAC from no LIL scenario: (SAC \* Average Gross Adds per Month With LIL \* 12 months.) For a discussion of SAC see [20].
- [79] For each Gross Add in the LIL scenario DIRECTV incurs incremental costs related to the technology involved in providing local-into-local-service: Incremental SAC Ka vs Ku \* Average Gross Adds per Month With LIL \* 12 months. See Appendix J and N [8] for a detailed description.
- [80] Total of all Subscriber Acquisition Costs: [78]+[79].
- [81] The Backhaul Network is used by DIRECTV to carry signals from individual local collection facilities (“LCFs”) to RF uplink facilities. Our model assumes \$ [REDACTED] per market for backhaul expense: Recurring backhaul expense per market per month \* 12 Months.
- [82] One time conversion cost to switch existing DIRECTV customers that take LIL from Ku-Band boxes to boxes that are able to receive Ka-Band signals. This includes truck roll, ODU, and multiswitch costs. This cost is split across Years 2 and 3 to reflect that the existing pre-LIL launch DIRECTV subscribers who take local-into-local via satellite over the span of two years.
- [83] Equal to [75] + [80] + [81] + [82]. (Total Direct Costs + Total SAC Costs + Backhaul Expenses + Box Replacement Costs.)
- [84] See [22]: Equal to [71] - [83]. (Total Revenue - Total Expenses.)
- [85] See [23]: Equal to [84] / [71]. (Cash Based OPBDA / Total Revenue.)
- [86] Satellite cost includes the cost of the spacecraft, cost of the launch vehicle, and insurance. Based on interviews with DIRECTV officials, we assume that the cost of purchasing and launching a new satellite that has the capacity to provide local-into-local service to the 60 remaining DMAs [REDACTED]. Payment for the satellite would be made over the course of 30 months. The payment schedule is as follows: End of year zero - \$ [REDACTED] end of year one [REDACTED] million satellite; [REDACTED]
- RF Uplinks transmit the local-into-local signal to the satellite so they can be rebroadcast via satellite into the appropriate DMAs. This cost is incurred in a lump expense amount [REDACTED] for all DMAs and is accounted for separately in the analysis. Local Collection Facilities (LCFs) collect local broadcast signals so they can be transmitted to RF Uplinks via a backhaul network. For markets that have four or more local channels, DIRECTV will have to build a new LCF, the cost of which will depend on the number of local channels in the DMA. See the breakdown of the LCF costs (Appendix K) for a more detailed explanation.

## Notes to Appendix P: DMA-Specific Worksheets

- [87] Cash flows in the scenario where DIRECTV launches local-into-local via satellite, including all additional costs. Equal to [84] + [86]. (Cash Based OPBDA + Market level capital expenditures outflow.)
- [88] Equal to [22]. (Cash Based OPBDA No LIL)
- [89] Equal to [87] - [88]. (Cash Flows with LIL - Cash Flows without LIL.)
- [90] Net Present Value of incremental profit (increase or decrease) from launching local-into-local service via satellite into all 60 remaining DMAs.
- [91] Internal Rate of Return of incremental profit (increase or decrease) based on launching local-into-local service via satellite.
- [92] Terminal value associated with Year 6 incremental profit from launching local-into-local service. (Incr/(Decr) from No LIL in Year 6 \* Terminal Value.)
- [93] Incremental profit from launching local-into-local service adding the terminal value calculated in [92] to Year 6 cash flows. (Equal to [89] + [92].)
- [94] Net Present Value of incremental profit (increase or decrease) from launching local-into-local service via satellite into all 60 remaining DMAs, including Terminal Value for Year 6.
- [95] Internal Rate of Return of incremental profit (increase or decrease) based on launching local-into-local service via satellite, including terminal value for Year 6.