

# Harmonized Tariff Schedule of the United States (2019) Revision 20

Barcode: 3927422-02 A-351-853 DNV - Investigation -  
Annotated for Statistical Reporting Purposes

IX

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1/ See 9903.88.03.

2/ See 9903.88.18.

3/ See 9903.88.34.

4/ See 9903.88.18 and 9903.88.34.

5/ See 9903.88.15.

6/ See 9903.88.16.

# EXHIBIT I-11

Company Name	Address	E-mail	Phone	Website
Adami S/A Madeiras	Estrada Municipal - CDR 455, S / N   km 1 Castilian Caçador (SC)   Postal Code 89514-899 B	clemente.tavora@adami.com.br	55 49 3561-3248 and 55-49-9184-1887	<a href="http://www.adami.com.br/">http://www.adami.com.br/</a>
Advantage Florestal	Rua Distrito Industrial - Quadra 06 - Lote 03 - Setor D, Ananindeua - PA, 67035-330, Brazil	info@advantageflorestal.com.br	55(91) 3017-5565	<a href="https://advantageflorestal.com.br/contact-us/">https://advantageflorestal.com.br/contact-us/</a>
AFFONSO DITZEL & CIA LTDA	São Josafat, 1850 Street - Clover - Prudentópolis Paraná - Brazil - ZIP Code 84400-000	comercial@affonsoditzel.com.br	55 42 3446-1440	<a href="https://www.affonsoditzel.com/index.php">https://www.affonsoditzel.com/index.php</a>
AG Intertrade		ag@agintertrade.com.br	55 41 3015-5002	<a href="http://www.agintertrade.com.br/en/home-2/">http://www.agintertrade.com.br/en/home-2/</a>
Araupel SA	General Câmara Street, 243/601 90010-230 - Porto Alegre, RS - Brazil	norton.fabris@arupel.com.br	55-51-2217-7344 and 55-51-3254-8900	<a href="http://www.araupe.com.br/">http://www.araupe.com.br/</a>
Braspine Madeiras Ltda.	Rua Félix da Cunha, 1009 – 8º andar CEP: 90570-001 Porto Alegre – RS	braspine@braspine.com.br and armando@braspine.com.br	55 43 3535-8300 and 55-42-3271-3000	<a href="http://www.braspine.com.br/en/home/">http://www.braspine.com.br/en/home/</a>
Brazil South Lumber	R. Mal. Floriano Peixoto, 1811 - 12º andar, Sala 124 - Centro, Guarapuava - PR, 85010-250, Brazil	scottkrueger@uol.com.br	55 42 3622-9185	<a href="http://brazilsouthlumber.com.br/?lang=en">http://brazilsouthlumber.com.br/?lang=en</a>
COMERCIAL EXPORTADORA WK LTDA	Curupaitis Street, 701 - Curitiba - Paraná - Brazil - ZIP Code 80.310-180	igor.kaufeld@wktrading.com.br		<a href="http://wktrading.com.br/">http://wktrading.com.br/</a>
FCC MADEIRAS	24 de Outubro Street, 835 Centro - Itararé / SP - Brazil ZIP Code: 18460-000	fcc@fccmadeiras.com.br	55 15 3531-3178	<a href="http://fccmadeiras.com.br/index.html#box-portfolio">http://fccmadeiras.com.br/index.html#box-portfolio</a>
Industries Caxiense De Molduras Ltda			55 54 3221-3951	
Industries De Madeiras Faqueadas Ipu	Dom Pedro II Street, 476 Ipumirim, State of Santa Catarina, Brazil 89790-000	atendimento@ipumirim.com.br	55 (49) 3438-1210	<a href="https://ipumirim.com.br/">https://ipumirim.com.br/</a>
Ipumirim Portas E Molduras	Faq Pinus, SN Ipumirim, Santa Catarina, Brazil Postal Code: D-31 ZIP Code: 89790-000	ji@ipumirim.com.br atendimento@ipumirim.com.br	55-49-3438-1400	<a href="http://www.ipumirimmouldings.com/home/">http://www.ipumirimmouldings.com/home/</a>
Lavarma S.A.	Rua Amazonas, 572 - Agua Verde - 80.610-30 - Curitiba - PR - Brasil	sales@lavrama.com.br and marcelo@lavrama.com.br	55 (41) 3314-5700 and 55-41-9967-1857	<a href="https://www.lavrama.com.br/en/pine-moulding">https://www.lavrama.com.br/en/pine-moulding</a>
Lavradora Racional de Madeiras Lavrama S/A	Rua Amazonas 572 Curitiba, 80610-030 Brazil		55 41 3314-5757	<a href="https://www.lavrama.com.br/">https://www.lavrama.com.br/</a>
Linea	Rua Vitorio Girardi 100 CEP 84 220 000 220 000 Senges, PR Brazil	eduardo.girardi@linea.com.br	55-43-3567-8300	<a href="http://www.linea.com.br/">http://www.linea.com.br/</a>
Madeira Beira Rio Ltda.	cxp 07 - R. Projetada s/n - Bairro Industrial, Papanduva - SC, 89370-000, Brazil	administrative@mbeirario.com.br	55 47 3653-2012	<a href="http://www.mbeirario.com.br/contact.html">http://www.mbeirario.com.br/contact.html</a>
Madesp	SC-477, 1725, Benedito Novo - SC, 89124-000, Brazil	marvin@maresp.ind.br	55-47-3385-0185	<a href="http://maresp.ind.br/home/">http://maresp.ind.br/home/</a>
Salvaro	Rua Caetano Colombo nº157 - Bairro Poco Um CEP 88819-138 Criciúma/SC	jaime@salvaro.com.br	55-48-9974-4840	<a href="http://www.salvaro.com.br/">http://www.salvaro.com.br/</a>
Solida Brasil Madeiras Ltda	BR-280, 4116 - Industrial Sul, Rio Negrinho - SC, 89295-000, Brazil	info@solidabrasil.com.br daniel.woiski@solidabrasil.com.br	55 47 3646-3006	<a href="https://www.solidabrasil.com.br/">https://www.solidabrasil.com.br/</a>
Sul America Molduras	Rod SC 370, 1868 - Union Side 88750-000 - North Arm - SC	vendas2@sulamericamolduras.com.br	55 (48) 3651-1513	<a href="https://www.sulamericamolduras.com.br/en-us/">https://www.sulamericamolduras.com.br/en-us/</a>
Tebet Lumber Co	R. Viêira dos Santos, 379 - Centro Cívico, Curitiba - PR, 80540-310, Brazil	alysson@tebet.com.br	55 41 3085.7776	<a href="https://www.tebet.com.br/index.html">https://www.tebet.com.br/index.html</a>
Uniforest Wood Products Inc.		sales@uniforestwoodproducts.com	(302) 450 4541	<a href="https://www.uniforestwoodproducts.com/">https://www.uniforestwoodproducts.com/</a>
Randa Indústria e Comércio de Portas Ltda.	Av. Ismael Camargo Dos Santos, 539 Bairro sao Cristovao, Bituruna, Brazil, 84640-000	randa@randa.com.br	+55 (42) 3553-1378	<a href="http://randa.com.br/contato/">http://randa.com.br/contato/</a>
JJ Thomazi	Av. Mal. Castelo Branco, 813 - S Cristóvão, Lages - SC, 88526-600, Brazil		55 49 3223-2186	<a href="http://www.jjthomazi.com.br/en/">http://www.jjthomazi.com.br/en/</a>
Sul Portas	Carlos Giombelli, s/n Ipumirim/SC, Close 89790-000	sulportas@sulportas.com.br	55 049 . 3438 1022	<a href="http://www.sulportas.com.br/contato/">http://www.sulportas.com.br/contato/</a>
Indusflora Produtos Florestais Ltda.	Rod. BR 282, KM 05, Fazenda Chapada, Lages, Santa Catarina, Brazil, 88506-600	www.indusflora.com.br		<a href="https://panjiwa.com/Indusflora-Produtos-Florestais-Ltda/1501184">https://panjiwa.com/Indusflora-Produtos-Florestais-Ltda/1501184</a>
FV de Araujo	RUA AMAZONAS DE SOUZA AZEVEDO, 47 NEIGHBORHOOD BACACHERI CURITIBA   PARANA ZIP CODE: 82.520-620		55 (41) 3218-9100	<a href="http://fvdearaujo.com.br/reflorestamento.php">http://fvdearaujo.com.br/reflorestamento.php</a>

Company Name	Address	Address Line 2	Address Line 3	Address Lin E-mail	Phone
Bel Trade Wood Industrial Co. Ltd.	Xibin Xiadun	Youxi County, Sanming	FUJIAN 365100	P.R. China N/A	N/A
Binzhou City Meiyijia Industry & Trade Co., Ltd.	No. 59, Zhangfu Road, Binzhou Industrial Park	Binzhou	SHANDONG 256651	P.R. China <a href="mailto:admin@mayikea.com">admin@mayikea.com</a>	86-13305430066
Cao County Hengda Wood Products Co., Ltd.	Zhuangzhai Town	Cao County, Heze City	SHANDONG 2774404	P.R. China <a href="mailto:chenfeng8288@163.com">chenfeng8288@163.com</a>	13355408288
Changchun Daming Wood Industry Co., Ltd.	South of Helong Grain Depot	Suncaiyuanzi Village, Changchun	Jilin	P.R. China N/A	86-431-81737544
Changchun WINPROWOOD	4806,north round road	Changchun	Changchun 130052	P.R. China N/A	86-431-2925833
Changzhou First Laminate Molding Company	Zhenbei Industrial Park	Henling Town, Changzhou	Jiangsu 213000	P.R. China N/A	(86 519) 88507159
Changzhou Richwood Decorative Material Co., Ltd.	No. 8, Mushiwei Road, Qingfeng Village	Henglin Town, Changzhou	Jiangsu 213103	P.R. China <a href="mailto:manager@richwood-flooring.com">manager@richwood-flooring.com</a>	86-519-89189599
Changzhou Xiangrong Decorate Material Co., Ltd.	No.20,Cuiheng Road, Henglin Town	Changzhou City	Jiangsu 213103	P.R. China N/A	(86 519) 88721550
Chuzhou Deying International Trading Co., Ltd.	No. 314, Building 6, 99 Yulan Road	Yuhuatai District, Nanjing	JIANGSU 239000	P.R. China <a href="mailto:sales@floor-moulding.com">sales@floor-moulding.com</a>	86-5503616294
Dalian Pinzhi Hardwood Moulding Co., Ltd.	Xi Xing Hai District,	Dalian City	Liaoning	P.R. China <a href="mailto:pinzhimuye@yahoo.com.cn">pinzhimuye@yahoo.com.cn</a>	86 411 84679971
Dalian Wada International Trading Co., Ltd.	1-202, No.131,Shengli Road	Xigang District, Dalian City	LIAONING 116000	P.R. China <a href="mailto:wada@wadatrade.com">wada@wadatrade.com</a>	86-41183773730
Deqing Deke Wood Industry Co., Ltd.	No. 70, Wulipai Road, Wukang Town	Deqing, Huzhou	Zhejiang 313200	P.R. China N/A	86-572-8035828
Dezhou Demax Building Decoration Material Co., Ltd.	East Zone, 7th Floor, Donghai Plaza, No. 66, Changhe Ave.	Dezhou	SHANDONG 253000	P.R. China <a href="mailto:export-1@demaxlt.com">export-1@demaxlt.com</a>	86-534-6026387
Dongguan Hengchang Wood Co., Ltd.	Xintang Ind. Zone	Houjiezheng Dongguan	Guangdong 523949	P.R. China N/A	86 769 5915003
Dongguan Hongfa Woods Co., Ltd.	Jiulian Industrial	Xianxia, Gaobu, Dongguan	GUANGDONG 523000	P.R. China <a href="mailto:bonnie@honfarwoods.com">bonnie@honfarwoods.com</a>	86-15920241961
E&R Wood Co.,Ltd.	Room 1106, Block a, Mingfeng Plaza, Kanglelan Road	Houjie, Dongguan	GUANGDONG 523962	P.R. China <a href="mailto:info@er-wood.com">info@er-wood.com</a>	86-76981696545
Fujian Hongjia Craft Products Co., Ltd.	Mowu Industrial Zone	Shunchang	FUJIAN 353200	P.R. China N/A	N/A
Fujian Huan Longda Wood Industries	No. 21 Ping Hu Rd	HuaAn City	FUJIAN 383800	P.R. China <a href="mailto:chen@longdamy.com">chen@longdamy.com</a>	13799076666
Fujian Nanping Longhua Wood Industry Co., Ltd.	No. 8., Shamen Road	HuaAn City	FUJIAN 383800	P.R. China N/A	N/A
Fujian Nanping Yuanqiao Wood Industry Co., Ltd.	F Block No. 2 Hongyangxincheng Building No. 118	Qili Industrial Zone, Wangtai Town, NanPing	CI FUJIAN 353003	P.R. China <a href="mailto:nplxn802@yahoo.com.cnn">nplxn802@yahoo.com.cnn</a>	13860057998
Fujian Panda Home Furnishings Co., Ltd	NO.1043,Tangbian,Xingtai Development Zone	Changtai, Zhangzhou	Fujian 363900	P.R. China <a href="mailto:mail@pandajaju.com">mail@pandajaju.com</a>	86-596-8366188
Ltd	Industrial Park of Putou Village	Chengguan Town, Youxi County	FUJIAN 365100	P.R. China N/A	N/A
Fujian Sanming City Donglai Wood Co., Ltd.	Telun Building, No. 639, Erhuang North Road	Xinmin Town, Tongan, Xiamen, Samming	FUJIAN 361000	P.R. China <a href="mailto:xgl@donglaiwood.com">xgl@donglaiwood.com</a>	13950999166
Fujian Youxi Baiying Wood Industry Co., Ltd.	Economic Development Zone	Xibin Town, Youxi County	FUJIAN 365104	P.R. China N/A	0598-8769965
Fujian Youxi County Hongshulin Wood Industry Co., Ltd. (D.B.A. f	Youxi Chengxi Economic Development Zone	Youxi City	FUJIAN 365100	P.R. China <a href="mailto:522964916@qq.com">522964916@qq.com</a>	0598-6399536
Design and Installation Co. Ltd.	Fushan Industrial Zone	ZhangPing	FUJIAN 364400	P.R. China <a href="mailto:wzy@merrygardenholdings.com">wzy@merrygardenholdings.com</a>	13799076666
Fuyang Jinmu Arts And Crafts Co., Ltd.	m. A1012,SOHO ZhongShan Plaza, NO.1055 West Zhongshan Rd	Changning District	SHANGHAI 200051	P.R. China <a href="mailto:info@jminindusties.cc">info@jminindusties.cc</a>	86-05582395006
Gosspo Industrial Co., Ltd.	No. 551 Guangcong Jiu Rd.	Zhongluotan Town, Baiyun District, Guangzhou	GUANGDONG 510550	P.R. China N/A	86-2031231592
Guangdong CREATEKING New Materials Technology Co., Ltd.	No. 3 Mingsha South Road, Xiajiao Industry Zone	Danzao Town, Nanhai District, Foshan	Guangdong 528241	P.R. China N/A	86-757-85573683
Guangzhou Haider Building Material Co., Ltd.	No. B16, Street 11, Shiguang Rd.	Panyu, Guangzhou	GUANGDONG 511495	P.R. China N/A	86-13316022886
Haining Longtai Decoration Materials Co., Ltd.	Mingfeng Industrial Park	Shuangfeng Village, Yuanhua Town, Haining	CI ZHEJIANG 314416	P.R. China N/A	86-15958912696
Hangzhou Aisen Furniture Co., Ltd.	Room A-103A, 10th Floor, Office Building No. 1, No. 118, Donggang Road,	Liping Subdistrict, Yuhang District, Hangzhou	Zhejiang 311100	P.R. China <a href="mailto:sales@aisenfurniture.com">sales@aisenfurniture.com</a>	86-18658823511
Hangzhou Fuyang Acme Industrial Co., Ltd.	Block 11,Yinhu Innovation Centre,	Fuyang, Hangzhou	Zhejiang 311400	P.R. China N/A	86-571-85063308
Hangzhou Huahai Wood Co.,Ltd.	Timber Road 555	Wood Industry Zone, Jiashan County	Zhejiang	P.R. China N/A	86-571-8900-2555
Harbin Hengrun Economic-Trade Co.,Ltd.	#106, Zhujiang Road	Xiangfang District	Heilongjiang 150036	P.R. China N/A	8613654528818
Harbin Xinghua Woodworking Co., Ltd.	No.287 Xue Fu Road Harbin	Pingfang Dis	Haerbin 150066	P.R. China N/A	86045186519807
Hebei Shensui Materials Trading co., Ltd.	Rm 1516, Block E, Jinhe Business Building, No. 42 Huan West R	Zhengding County, Shijiahuang City	HEBEI 050800	P.R. China N/A	86-31189199959
Heilongjiang Haojia Wood Co.,Ltd	9F Pufa Building No 209 Changjiang Road,Nangang District	Harbin	Heilongjiang 150090	P.R. China N/A	86-0451-8771-5173
Hengxiang Wood Co., Ltd.	Zhuangzhai Town	Cao County, Heze City	SHANDONG 277400	P.R. China N/A	86-13365305711
Heze Huasheng Wooden Co., Ltd.	No. 8 Industry Zone	Zhuangzhai Town	SHANDONG 274400	P.R. China N/A	86-530-6219566
Homemind Building Material Co., Ltd.	No. 888 Tunheng Road	Huzhou	ZHEJIANG 313009	P.R. China N/A	N/A
Hongkong Drenthe Limited	No. 89, Yushan Rd	Suzhou	Jiangsu 215000	P.R. China N/A	86-18015425619
Honsoar New Building Material Co., Ltd.	678 Fuji Street	678 Fuji Street	Shandong 262705	P.R. China N/A	86-0536-5675882
Jiangsu Chensheng Forestry Development Co., Ltd.	East Bldg. No. 2 Beicejingwu Rd Central Av Port Area Dafeng Dis	Yancheng City	JIANGSU 213103	P.R. China <a href="mailto:aling@chenshenglinye.com">aling@chenshenglinye.com</a>	18762383238
Jiangsu Good Wood Industry Co., Ltd.	No. 6 Huangpu Dadaotdong Rd	Tianhe District, Guangzhou	GUANGDONG 550660	P.R. China N/A	86-15918852285
Juyemin Anxiangtai Machinery Manufacturing Co., Ltd.	Donghuan Road and Beihuan Road	Juye, Heze City	FUJIAN 274900	P.R. China <a href="mailto:wang-qiubo@163.com">wang-qiubo@163.com</a>	5308351700
Liaocheng Queen Eve Import and Export Co., Ltd.	1011 Shunhe Road	Zhenxing District, Liaocheng	SHANDONG 252100	P.R. China N/A	86-19963593678
Linyi Baiyi Wood Co., Ltd.	Yigao Building, Shanghai Street	Linyi City	SHANDONG 276000	P.R. China <a href="mailto:zhenhuamuye@163.com">zhenhuamuye@163.com</a>	13013541966
Linyi Mingsen Wood Co., Ltd.	Zaogoutou Industrial park	Linyi City	SHANDONG 276000	P.R. China <a href="mailto:E-funwayhts@gmail.com">E-funwayhts@gmail.com</a>	86-15265958777
Linyi Yousen Building Material Co., Ltd.	East of Fushan Road	Dongdiezhuang Village, Machanghu Town, Lin	SHANDONG 276000	P.R. China <a href="mailto:136785618@qq.com">136785618@qq.com</a>	13953986708
Longhaida Tongxing		Longhai City, Zhangzhou	FUJIAN 363105	P.R. China <a href="mailto:ljmy889@163.com">ljmy889@163.com</a>	13605018586
Longjian	Jiaomei Industrial Comprehensive Development Zone	Longhai City	FUJIAN 363107	P.R. China N/A	13906959698
Luli Group Co. Ltd.	Luli Industrial Park, Houzhen	Shouguang	Shandong 262724	P.R. China N/A	400-8760-678

Manzhouli Hongli Wood Co. Ltd	Import and Export Processing Zone	Hulunbeier	Nei Mongol, 21400	P.R. China	N/A	(86 470) 3989187
Meilin Wood Products Co., Ltd.	116036 Dong Xiao Mo	Ying Cheng Zi Town, Ganjinzi District, Dailan	LIAONING 118096	P.R. China	N/A	N/A
Ningbo Flying Dragon Art & Craft Product Co., Ltd.	Jianshan Industrial Zone, Ditang Street	Yuyao Town, Ningbo City	ZHEJIANG 315492	P.R. China	fl-gm@flyingdr.com.cn	13805801762
Oppein Home Group Inc.	366 Guanghua 3rd Road Jianggao Town	Baiyun District	Guangzhou, 510450	P.R. China	N/A	86-20-3673-0513
Primewerks Xiamen Industry And Trade Co., Ltd.	Room 410 No.1647 Xinglinwan Road	Jimei, Xiamen	FUJIAN 361002	P.R. China	N/A	N/A
Putian YiHong Wood Industries Co., Ltd.	Xiuyu State-Level Wood Trade Demonstration Area	Zhangzhou City	FUJIAN 363105	P.R. China	ptyhmy@sina.com	5945158055
Qimen County Jianxing Bamboo and Wood Products Co., Ltd.	Huayang Industrial Park	Qimen County Huangshan City	ANHUI 245600	P.R. China	qmxj@163.com	13956266268
Qingdao Sanhe Dacheng International Trade Co., Ltd.	1501, Fuying Mansion, No. 443, Changjiang East Road	Qingdao	SHANDONG 266000	P.R. China	N/A	N/A
Samming Shitong Wood Industry Co., Ltd.	No. 3 Workshop, C Area, Jingu Metal Processing Zone	Sanming City	FUJIAN 313300	P.R. China	beersky@qq.com	13023923003
Shandong Yigao Building & Decoration Material Co., Ltd.	1619 Iec International Building	Linyi	SHANDONG 276000	P.R. China	N/A	86-15653958899
Shanghai Jiraw Building Materials Co., Ltd.	No. 287, Lane 99, Waigian Road, Waigang Town	Jiading District	Shanghai	P.R. China	info@jiraw.com	86-13917165474
Shaxian Hengtong Wood Industry Co., Ltd.	Wood and Bamboo Concentrated Processing Zone	Qiujianghoushi, Shaxian, Sanming City	FUJIAN 365500	P.R. China	htmy350427@sina.com	13507585412
Shaxian Shiyi Wood Bamboo Co., Ltd.	Houti Industrial Park	Sha County, Sanming City	FUJIAN	P.R. China	shiyi@fjsymz.cn	0598-5552586
ShengHui Woodware Co., Ltd	161 Beier Road	Linyi City	SHANDONG	P.R. China	wechat	15269911111
Shenyang Jinuoer Decoration Material Co., Ltd.	No.1-2 Daqing Industrial Zone,Tiexi District, Shenyang City	Liaoning Province	Shenyang 110142	P.R. China	N/A	86-24-89353802
Shenyang Piaoshi Ruilin Decoration Engineering Co., Ltd.	No. 66D-2, Qingzhou Street	Sujiatun District, Shenyang	LIAONING 110108	P.R. China	N/A	86-024-31810787
Shouguang Yusen Wood Products Co., Ltd.	No. 168, Jinguang Street	Shouguang	SHANDONG 262700	P.R. China	N/A	N/A
Sino Performer Industrials Co., Ltd.	No. 408 Wuyi North Road, Lanling Street	Tianning District, Changzhou	JINGSU 213000	P.R. China	N/A	86-13812195373
South China Timber Industry Ltd.	Av.Gongye Dadao,Dist.Xinhui,	Jiangmen	Guangdong 529100	P.R. China	N/A	86-750-6312973
Suzhou Esse Wood Industry Co., Ltd.	Room 1801, Guomao Building, No 168 Ease Shanghai Road	Taicang City, Suzhou	JINGSU 215400	P.R. China	Info@esewood.com	86-51253990896
Wuhan Hongda Anxin Decorative Material Co., Ltd.	No.68, Yinbai Road	East-West Lake District, Wuhan City	Hubei 430040	P.R. China	admin@nicefloor	86-86-27-83232799
Xiamen Dixin Import & Export Co., Ltd.	C-403 Tiandi Garden, 207 Taiwan Street	Huli District, Xiamen	FUJIAN 361000	P.R. China	N/A	86-5925538635
Xiamen Goodwood Industry Co., Ltd.	Room 9e No.4 Hexiang West Road	Siming, Xiamen	FUJIAN 361003	P.R. China	info@chinagoodwood.com	86-5922685185
Xiamen Jinxi Builidng Material Co. Ltd.	Room 503, 15# of Wanghai Rd	Xiamen	FUJIAN 361012	P.R. China	N/A	86-5150007
Xiamen Reshine Wood Industry Co., Ltd.	Rm 504, Building C2, Wanda Plaza, No. 5 Jinzhong Rd.	Huli District, Xiamen	FUJIAN 361007	P.R. China	info@reshinewood.com	13950055982
Xuzhou Hexi Wood Co., Ltd.	Huangqiao Tongshan District	Xuzhou City	Jiangsu 221000	P.R. China	cococheng1006@126.com	0516-83148888
Xuzhou Hongtu Wood Industry Co., Ltd.	No. 4 Huangpu Dadaotdong Rd	Tianhe District, Guangzhou	GUANGDONG 510660	P.R. China	N/A	86-15918852285
Xuzhou ROC International Trading Co., Ltd	TONGCHENG CENTURY SQUARE	Pizhou City	Jiangsu 221300	P.R. China	N/A	86-516-86533386
Xuzhou Sanxing Wood Industry Co., Ltd.	No. 8 East Huangpu Rd	Tianhe District, Guangzhou	GUANGDONG 510660	P.R. China	N/A	86-20-82160769
Yanbian Dalifang Wood Products	NO.16 CHANGSONG RD DANJIANG ST	DUNHUA CITY	JILIN	P.R. China	N/A	N/A
Yiwu Binhao Decorative Material Co., Ltd	No. 3 Xinpan Road	Yiwu City, Jinhua	ZHEJIANG 322006	P.R. China	N/A	86-57985129227
Yongan Yongmind Wood Industry Co., Ltd.	Dataokou Industrial Park	Xiaotao Town, YongAn City	FUJIAN	P.R. China	yaymny@126.com	0598-3705090
Yuchi Guantong Wood Industry Co., Ltd.	Mucal Jiagong Yuanqu (木材加工园区)	Lanshan District, Rizhao City	SHANDONG 276800	P.R. China	www.rzsgtmy@163.com	18663377000
Zhangping Huaxia Wood Industry Co., Ltd.	Fushan Industry Garden	Zhangping	FUJIAN 364400	P.R. China	N/A	86-5962950370
Zhangping Sanchan Industrial & Trade Co., Ltd.	Guilin Street, Gaoming New Village Neighborhood	ZhangPing	FUJIAN 364400	P.R. China	824813760@qq.com	0591 885911809
Industry and Trade Co. Ltd.)	205 #10 Yongxing	Zhangzhou City	FUJIAN 363105	P.R. China	gwgmg@qq.comg	18250593931
Zhangzhou Qunyi Wood Industry Co., Ltd.	No. 58, Damiao Dongkeng Village	Xiangwei Town, Longhai City, Zhangzhou	FUJIAN 363105	P.R. China	wechat	13606951714
Zhangzhou Wang Jia Mei Industrial & Trade Co. Ltd.	319 Federal Highway	Moxi Village, Zhangzhou City	FUJIAN 363105	P.R. China	wechat	18760683946
Zhejiang Huakai Wood Manufactory Co. Ltd.	No. 1 Qianyuan Rd.	Huzhou	ZHEJIANG 313216	P.R. China	wechat	13905300028

# EXHIBIT I-12

## Barcode:3927422-02 A-351-853 INV - Investigation -

Company Name	Address	E-mail	Phone	Website
CHEP USA	7501 Greenbriar Parkway, Orlando, FL 32819	N/A	(800) 243-7872	<a href="https://www.chep.com/us/en/consumer-goods">https://www.chep.com/us/en/consumer-goods</a>
ORDER	N/A	N/A	N/A	N/A
COMPOSITE TECHNOLOGY INTERNATIONAL	1730 I Street, Suite 100, Sacramento, CA 95811	info@cti-mail.com	916-551-1850	<a href="https://cti-web.com/">https://cti-web.com/</a>
EAGLE FOREST PRODUCTS	PO Box 2119, 222 West State Street, Eagle, ID 83616	choladay@eaglefp.net	(800) 309-1845	<a href="http://eaglefp.net/">http://eaglefp.net/</a>
METRIE	9325 Snowden River Pkwy # A, Columbia, MD 21046	privacy@metrie.com	(410) 423-2440	<a href="https://metrie.com/">https://metrie.com/</a>
MATOS FOREST PRODUCTS	162 S Rancho Santa Fe Rd suite b-50, Encinitas, CA 92024	Bill@matosfp.com	(888) 878-8631	<a href="https://www.matosforestproducts.com/">https://www.matosforestproducts.com/</a>
COTTONDALE WOOD PRODUCTS	1616 44th Ave, Tuscaloosa, AL 35401	N/A	(205) 758-2761	<a href="http://www.hintonlumber.com/">http://www.hintonlumber.com/</a>
WHOLESALE MILLWORK	107 Park Ave., Seaford, DE 19973; 31 Vanguard Dr., Reading, PA 19606; 3703 Carolina Ave., Richmond, VA 23222; 16618 Hunters Green Pkwy., Hagerstown, MD 21740; 45 Mill St., Mays Landing, NJ 08330; 6300 Erdman Ave., Baltimore, MD 21205	N/A	DE: (888) 964 8746 PA: (877) 963 6772 VA: (877) 963 6782 Hagerstown, MD: (866) 966 5347 NJ: (866) 727 0023 Baltimore, MD: (866) 964 6534	<a href="https://wholesalemillwork.net/">https://wholesalemillwork.net/</a>
East Coast Mouldings	ECMD, Inc 2 Grandview Street North Wilkesboro, NC 28659-0130	info@ecmd.com	1 (336) 667-5976	<a href="http://ecmd.com/Home/ContactUs">http://ecmd.com/Home/ContactUs</a>
Atlantic Forest Products	1600 Sparrows Point Blvd, Suite D Sparrows Point, MD 21219	n/a	(800) 551-2374	<a href="https://atlanticforest.com/contact/">https://atlanticforest.com/contact/</a>
Woodgrain Millworks	300 NW 16th St, Fruitland, ID 83619	millworksales@woodgrain.com	208-452-3801	<a href="https://www.woodgrain.com/contact/">https://www.woodgrain.com/contact/</a>
CHEP	5897 Windward Pkwy Alpharetta, GA, US	n/a	(800) 243-7872	<a href="https://www.chep.com/us/en/consumer-goods/locations">https://www.chep.com/us/en/consumer-goods/locations</a>
48forty Solutions LLC	13100 Northwest Freeway, #450 Houston, TX 77040	n/a	877-779-8577	<a href="https://www.48forty.com/locations?">https://www.48forty.com/locations?</a>
BMC	8020 Arco Corporate Drive Suite 400 Raleigh, NC 27617	websupport@BuildWithBMC.com	919-431-1000	<a href="https://www.buildwithbmc.com/bmc/store/9901?lat=35.8861371&amp;long=-78.6455475&amp;q=27615">https://www.buildwithbmc.com/bmc/store/9901?lat=35.8861371&amp;long=-78.6455475&amp;q=27615</a>
BlueLinX	1950 Spectrum Circle Suite 300 Marietta, GA 30067	ContactUs@bluelinxco.com	770-953-7000	<a href="http://bluelinxco.com/contact-us/">http://bluelinxco.com/contact-us/</a>
Agility Logistics	11010 NW 30th St #100, Doral, FL 33172	MIQuote@agility.com	1.305.716.2900	<a href="https://www.agility.com/en/world-wide-directory/">https://www.agility.com/en/world-wide-directory/</a>
Wood Brokerage International	5285 Meadows Rd. Suite #130 Lake Oswego, OR 97035	n/a	(503) 906-2501	<a href="http://woodbrokerage.com/contact-us/">http://woodbrokerage.com/contact-us/</a>
Millwork Sales	700 103rd Ave N., Royal Palm Beach, FL 33411	RPB@msifamily.com	561.472.6497	<a href="https://www.millworksales.com/">https://www.millworksales.com/</a>
U.S. LUMBER	2160 SATELLITE BLVD, STE 450, Duluth, GA 30097	uslgjobs@uslumber.com	(678) 474-4577	<a href="https://www.uslumber.com/MainSite/Store1/Content/SiteContent/1/Home/home.aspx">https://www.uslumber.com/MainSite/Store1/Content/SiteContent/1/Home/home.aspx</a>
The Wood Hub	108 MIFFLIN BLVD. READING PA 19607 MIFFLIN PA 17058 UNITED STATES	luiz.alberto@thewoodhubllc.com, jeff.yuhasse@thewoodhubllc.com, stephen.henneman@thewoodhubllc.com	1-908-304-2346, 1-540-692-5370, 1-610-207-5604	<a href="http://www.thewoodhub.net/">http://www.thewoodhub.net/</a>
OrePac Building Products	30170 SW Ore Pac Avenue Wilsonville, OR 97070	Corporate@orepac.com	503-685-5499	<a href="http://orepac.com">orepac.com</a>
D W DISTRIBUTION INC	1200 E. Centre Park Blvd. DeSoto, Texas 75115		214-381-2200	<a href="https://www.dwdistribution.com/">https://www.dwdistribution.com/</a>
TUSON TRADING	PO Box 143 840 Willis Ave Albertson, NY 11507	info@tusontrading.com	516-746-3661	<a href="http://tusontrading.com/home/">http://tusontrading.com/home/</a>
OLATHE MILLWORK	13901 W. 101 Street Lenexa, Kansas 66215		913-738-8074	<a href="https://www.olathemillwork.com/">https://www.olathemillwork.com/</a>
Group and Business Credit				
JELD-WEN Windows & Doors	440 S. Church Street Charlotte, NC 28202, US		1 (800) 535-3936	<a href="https://www.jeld-wen.com/en-us">https://www.jeld-wen.com/en-us</a>
PNC Business Credit	340 MADISON AVE., 11TH FLOOR NEW YORK, NY 10173, USA		1-888-762-2265	<a href="https://www.pnc.com/en/corporate-and-institutional/financing/lending-options/business-credit/business-credit-us.html">https://www.pnc.com/en/corporate-and-institutional/financing/lending-options/business-credit/business-credit-us.html</a>
Form Solutions	840 Division St. Cobourg, ON K9A 5V2, Canada		1-888-706-7709	<a href="http://formsolutions.ca/">http://formsolutions.ca/</a>
GLOBAL PRODUCT SOLUTIONS	600 Union Street, Ashland, OH 44805	N/A	(419) 496-0123	N/A
48FORTY SOLUTIONS	3100 Northwest Freeway, #450, Houston, TX 77040	N/A	877-779-8577	<a href="https://www.48forty.com/">https://www.48forty.com/</a>
DQL GOLD BRIDGE	841 HIGH ST, OAKLAND CA 94601	N/A	N/A	N/A
BLUE LINX HOUSTON CROSS DOCK	1950 Spectrum Circle Suite 300 Marietta, GA 30067	ContactUs@bluelinxco.com	(770)953-7000	<a href="https://www.bluelinxco.com">https://www.bluelinxco.com</a>
LANDSTAR GLOBAL LOGISTICS	13410 Sutton Park Drive South Jacksonville, FL 32224 United States	N/A	(904)398-9400	<a href="https://www.landstar.com">https://www.landstar.com</a>
METRIE BALTIMORE DISTRIBUTION	9325A Snowden River Parkway, Columbia, MD 21046	N/A	(410)423-2440	<a href="https://metrie.com/">https://metrie.com/</a>
AMERICAN RIVIERA	403 E Montecito St, Santa Barbara, CA 93101	N/A	(805)883-1155	N/A
METRIE DALLAS	3801 S. 20th Avenue, Suite 100, Euless, TX 76039	N/A	(972)241-7125	<a href="https://metrie.com/">https://metrie.com/</a>
U S LUMBER GROUP	2160 Satellite Blvd., Suite 450, Duluth, GA 30097	N/A	(678) 474-4577	<a href="https://www.uslumber.com/MainSite/Store1/Content/SiteContent/1/Home/home.aspx">https://www.uslumber.com/MainSite/Store1/Content/SiteContent/1/Home/home.aspx</a>
MIDSTATE LUMBER	200 Industrial Parkway, Branchburg, NJ 08876	N/A	(800)-942-7776	<a href="https://midstatelumber.com/">https://midstatelumber.com/</a>
PACIFIC WHOLESALE SHUTTERS AND BLINDS	4833 Schaefer Ave. Chino, CA 91710	info@shutterblindusa.com	(909) 517-1505	<a href="http://www.shutterblindusa.com/shop/index.php">http://www.shutterblindusa.com/shop/index.php</a>
PLANO MOLDING	431 East South Street Plano, IL 60545	N/A	(1800)226-9868	<a href="https://www.planomolding.com/">https://www.planomolding.com/</a>
SUNCO FLOORS	524 Industrial Dr, Naperville, IL 60563	support@suncofloors.com	(888)559-9918	<a href="http://www.suncofloors.com/">http://www.suncofloors.com/</a>
DW DISTRIBUTION	1200 E. Centre Park Blvd, DeSoto, Texas 75115	N/A	(214)381-2200	<a href="https://www.dwdistribution.com/">https://www.dwdistribution.com/</a>
MP LUMBER	15685 SW 116th Ave, Portland, OR 97224	mplumber@mplumberinc.com	(503) 747-6887	<a href="http://mplumberinc.com/">http://mplumberinc.com/</a>
FERRERIA MADERAS 3C	Cil Bechara, San Juan, 00920, Puerto Rico	N/A	N/A	<a href="http://www.maderas3cpr.com/">http://www.maderas3cpr.com/</a>
BLUE LINX	1950 Spectrum Circle Suite 300 Marietta, GA 30067	ContactUs@bluelinxco.com	770-953-7000	<a href="https://bluelinxco.com/contact-us/">https://bluelinxco.com/contact-us/</a>
MEL RAY INDUSTRIES	2167 S Hwy 17, Crescent City, FL 32112	N/A	(386) 698-4414	<a href="https://www.melray.com/about-us/">https://www.melray.com/about-us/</a>
MERCADO	4645 N.32ND ST, PHOENIX, AZ 85018	N/A	480-423-8111	N/A
METRIE ATLANTA DISTRIBUTION	40 Hopson Dr SE, Acworth, GA 30102	N/A	(770) 975-0223	<a href="https://metrie.com/offices/mouldings-distribution-atlanta-ga?zoom=10&amp;center=34.0859,-84.6662&amp;marker=38.9208,-77.0360">https://metrie.com/offices/mouldings-distribution-atlanta-ga?zoom=10&amp;center=34.0859,-84.6662&amp;marker=38.9208,-77.0360</a>
SMITH MILLWORK	920 Robbins St, Lexington, NC 27292	N/A	(336) 249-8171	<a href="http://smithmillwork.com/">http://smithmillwork.com/</a>

**Barcode:3927422-02 A-351-853 INV - Investigation -**

Company Name	Address	E-mail	Phone	Website
WESTON WOOD SOLUTIONS OR WOOD PRODUCTS INTERNATIONAL	300 Orenda Rd, Brampton, ON L6T 1G2, Canada	info@westonwoodsolutions.com	(905) 677-9120	<a href="http://westonwoodsolutions.com/">http://westonwoodsolutions.com/</a>
WORLDWIDE DOOR COMPONENTS	5017 N. Coolidge Ave. Tampa, FL 33614	jyhapp@worldwidedoor.com	813-870-0003	<a href="http://www.wwp.com.cn/">http://www.wwp.com.cn/</a>
HAMPTON LUMBER SALES	9600 SW Barnes Road - Suite 200 - Portland, OR 97225	N/A	503.203.6517 and 503.203.6547	<a href="https://www.hamptonlumber.com/">https://www.hamptonlumber.com/</a>
MASONITE INTERNATIONAL	One Tampa City Center, 201 N. Franklin St., Suite 300 Tampa, FL 33602	investorrelations@masonite.com	813-877-2726	<a href="https://www.masonite.com/">https://www.masonite.com/</a>
GLOBAL WOOD SOLUTIONS INVESTMENT	17374 DARWIN AVE. HESPERIA CA 92345, Hesperia, CA 92345	N/A	N/A	N/A
Affordable Home Products LLC	4002 Ross Ln Chanute KS 66720	<a href="mailto:info@tufbuilt.com">info@tufbuilt.com</a>	1-877-733-5883	<a href="http://tufbuilt.com/index.php?route=information/contact">http://tufbuilt.com/index.php?route=information/contact</a>
GlobalPointe	1300 North Glenview Place Milwaukee, Wisconsin 53213	n/a	1.877.257.1978	<a href="https://global-pointe.com/contact/">https://global-pointe.com/contact/</a>
Evermark	1050 Northbrook Parkway Suwanee, GA 30024	info@evermark-lnl.com	1-678-455-5188	<a href="https://www.evermark-lnl.com/contact/">https://www.evermark-lnl.com/contact/</a>
Atlantic Forest Products	1600 Sparrows Point Blvd, Suite D Sparrows Point, MD 21219	n/a	(800) 551-2374	<a href="https://atlanticforest.com/contact/">https://atlanticforest.com/contact/</a>
PNC Bank	340 MADISON AVE 1ST FLOOR NEW YORK, NY 10173	n/a	(212) 661-1064	<a href="https://apps.pnc.com/locator/#/result-details/00235060/340-madison-avenue">https://apps.pnc.com/locator/#/result-details/00235060/340-madison-avenue</a>
CFFCO USA Inc.	55 Jericho Turnpike., Ste. 302 Jericho, NY 11753	info@cffco.com	718-747-1118	<a href="http://cffco.com/contactus.html">http://cffco.com/contactus.html</a> <a href="https://www.google.com/search?q=HOME+DEPOT+2455+PACES+FERRY+RD+S E+ATLANTA%2C+GA+30339%2C+UNITED+STATES&amp;rlz=1C1GCEB_enUS876US876&amp;oq=HOME+DEPOT%092455+PACES+FERRY+RD+SE%09ATLANTA%2C+GA+30339%2C+UNITED+STATES&amp;aqs=chrome.69j57.734j0j4&amp;sourceid=chrome&amp;ie=UTF-8">https://www.google.com/search?q=HOME+DEPOT+2455+PACES+FERRY+RD+S E+ATLANTA%2C+GA+30339%2C+UNITED+STATES&amp;rlz=1C1GCEB_enUS876US876&amp;oq=HOME+DEPOT%092455+PACES+FERRY+RD+SE%09ATLANTA%2C+GA+30339%2C+UNITED+STATES&amp;aqs=chrome.69j57.734j0j4&amp;sourceid=chrome&amp;ie=UTF-8</a>
Home Depot Support Center	2455 Paces Ferry Rd SE, Atlanta, GA 30339	n/a	(770) 433-8211	
Southwood Door	1222 Emmanuel Church Rd #106 Conover, NC 28613	sales@southwooddoors.com	(704)-625-2790	<a href="https://www.southwooddoors.com/">https://www.southwooddoors.com/</a>
Wexford Home	707 Skokie Blvd Ste 600 Northbrook, IL 60062	info@wexfords.com	(866) 734-3186	<a href="http://wexford-home.com/index.html">http://wexford-home.com/index.html</a>
L J Smith	35280 Scio-Bowerston Road, Bowerston, Ohio 44695	sales@ljsmith.net	(740) 269-2221	<a href="https://www.ljsmith.com/">https://www.ljsmith.com/</a>
Prime Hardwood Components	9040 Walnut Cove Lane Gainesville, GA 30506	hub@primehardwoodcomponents.com	(678) 371-9191	
Ideal Stair Parts	225 West Main Street Little Falls, NY 13365	sales@idealstairparts.com	1-888-823-1124	<a href="https://www.idealstairparts.com/">https://www.idealstairparts.com/</a>
Chung Ik Sang	1111 West Jefferson St. Suite 300 Boise, Idaho 83702-5389			<a href="https://www.bc.com/">https://www.bc.com/</a>
Boise Building Solutions Distribution	12206 Bell Ranch Drive, Santa Fe Springs, CA 90670, United States	LJConnectCustomerService@Larsonjuhl.ca	1-800-438-5031	<a href="https://www.larsonjuhl.com/en-US/">https://www.larsonjuhl.com/en-US/</a>
Larson-Juhl CA	1130 King Georges Post Rd, Edison, NJ 08837		(732) 372-7668	<a href="https://forevermarkcabinetry.com/">https://forevermarkcabinetry.com/</a>
The Shekia Group LLC	1359 BROADWAY, 18TH FLOOR NEW YORK NY 10018			
Millwork Holdings	United States	MILLWORKHOLDINGSSCM@LFUSA.COM	(646)-839-7000	
Houston Shutters	11320 S Post Oak Rd Ste 212, Houston, TX 77035 and 7052 Grand Blvd, Ste 120, Houston, TX 77054		(713) 723-9719, 713-723-7100	<a href="http://rockwoodshutters.com/">http://rockwoodshutters.com/</a>
Brockway-Smith Company	35 Upton Dr Wilmington, MA 01887	info@broscos.com	978-475-7100	<a href="https://www.broscos.com/">https://www.broscos.com/</a>
Aristree	1060 INDUSTRIAL PARK DRIVE KERNERSVILLE NC. 27284		336-993-5640	
SBIC AMERICA	201 S College St, Charlotte, NC 28244			<a href="https://www.sbicamerica.com/">https://www.sbicamerica.com/</a>
Timbergon Trading	PO Box 1528, Redmond OR, 97756	info@timbergon.com	1-866-548-9330	<a href="https://www.timbergon.com/">https://www.timbergon.com/</a>
MC Imports	70 West Streetsboro Street, Suite 101, Hudson, Ohio 44236		330-748-8460	<a href="https://www.mcimportslc.com/">https://www.mcimportslc.com/</a>
DEZIGN NORTH AMERICA	3376 Carpet Capital Drive, Dalton, GA 30720	pete@designnorthamerica.com	706.370.7673	<a href="http://www.designnorthamerica.com/">http://www.designnorthamerica.com/</a>
COMPOSITE TECHNOLOGY INTERNATIONAL	1730 I Street, Suite 100 Sacramento, CA 95811	info@cti-mail.com	916-551-1850	<a href="https://cti-web.com/">https://cti-web.com/</a>
HOBBY LOBBY STORES	7707 SW 44th St. Oklahoma City, OK 73179		1-855-329-7060	<a href="https://www.hobbylobby.com/">https://www.hobbylobby.com/</a>
ACME FURNITURE INDUSTRY	18895 Arenth Avenue City of Industry, CA 91748 United States	N/A	1-626-964-3456	<a href="https://www.acmecorp.com/warehouse-locations">https://www.acmecorp.com/warehouse-locations</a>
DESIGNERS CHOICE	126 Fayette St #400, Conshohocken, PA 19428	N/A	(610) 828-1875	<a href="https://www.designerschoicelp.com/contact-us/">https://www.designerschoicelp.com/contact-us/</a>
EMSER TILE	8431 CA-2 Los Angeles, CA 90069-4209	marketinginfo@emser.com	323-650-2000	<a href="http://info.emser.com/contactus?utm_referrer=http%3A%2Fwww.emser.com%2Findex.php%3Fid%3Dhome">http://info.emser.com/contactus?utm_referrer=http%3A%2Fwww.emser.com%2Findex.php%3Fid%3Dhome</a>
EXPEDITORS INTERNATIONAL	1015 3rd Ave, Seattle, WA 98104	requests.Seattle@expeditors.com	(206) 674-3400	<a href="https://www.expeditors.com/locations">https://www.expeditors.com/locations</a>
JOHN ROCK	125 Commerce Drive, Raphine, VA 24472	bmoore@johnrock.com	(540) 460-8616	<a href="https://www.johnrock.com/john-rock-companies/#johnrock">https://www.johnrock.com/john-rock-companies/#johnrock</a>
KELLEHER	1543 Fifth Avenue - San Rafael, CA 94901	norcal@kelleher.com		<a href="https://kelleher.com/contact/">https://kelleher.com/contact/</a>
MASONITE	One Tampa City Center 201 North Franklin Street Suite 300 Tampa, Florida 33602	helpline@masonite.com	813-877-2726	<a href="https://www.masonite.com/">https://www.masonite.com/</a>
MASONITE MESQUITE DFS	970 Us Route 11, Kirkwood, NY 13795	helpline@masonite.com	(607) 775-2450	<a href="https://www.masonite.com/">https://www.masonite.com/</a>
METROPOLITAN HARDWOOD FLOORS US	8106 S 216th St, Kent WA 98032 USA	info@metrofloors.com	253 479 3958	<a href="http://www.metrofloors.com/contact-us">http://www.metrofloors.com/contact-us</a>
MMI DOOR	6361 Sterling Drive North Sterling Heights, MI 48312	info@mmdoor.com	800-686-9218	<a href="https://www.mmdoor.com/about-us/locations">https://www.mmdoor.com/about-us/locations</a>
O K CONTAINER SALES	2707 E. Valley Blvd #305, West Covina ,CA 91792	sales@okcontainersales.com	(626) 912-5788	<a href="http://okcontainersales.com/contact-us.html">http://okcontainersales.com/contact-us.html</a>
OMG IMPORT TRANSIT	140 Huron Street, Brooklyn, New York 11222			
SNARELY INTERNATIONAL	1251 New Windsor Road, Westminster, MD 21158	INTERNATIONAL@SFPUSA.COM	410-386-0654	<a href="http://www.snarelyforestproducts.com/sales-locations/snarely-international">http://www.snarelyforestproducts.com/sales-locations/snarely-international</a>
UNITED CARGO MANAGEMENT	19401 S. Main Street #202, Gardena, CA 90248	LAX@ucmargo.com	310-225-3099	<a href="http://www.ucmargo.com/contact.html">http://www.ucmargo.com/contact.html</a>

# EXHIBIT I-13

[https://www.bendbulletin.com/business/woodgrain-millwork-leaving-prineville/article\\_12e60e21-a85f-5a3c-910e-1d3f035da877.html](https://www.bendbulletin.com/business/woodgrain-millwork-leaving-prineville/article_12e60e21-a85f-5a3c-910e-1d3f035da877.html)

Woodgrain Millwork

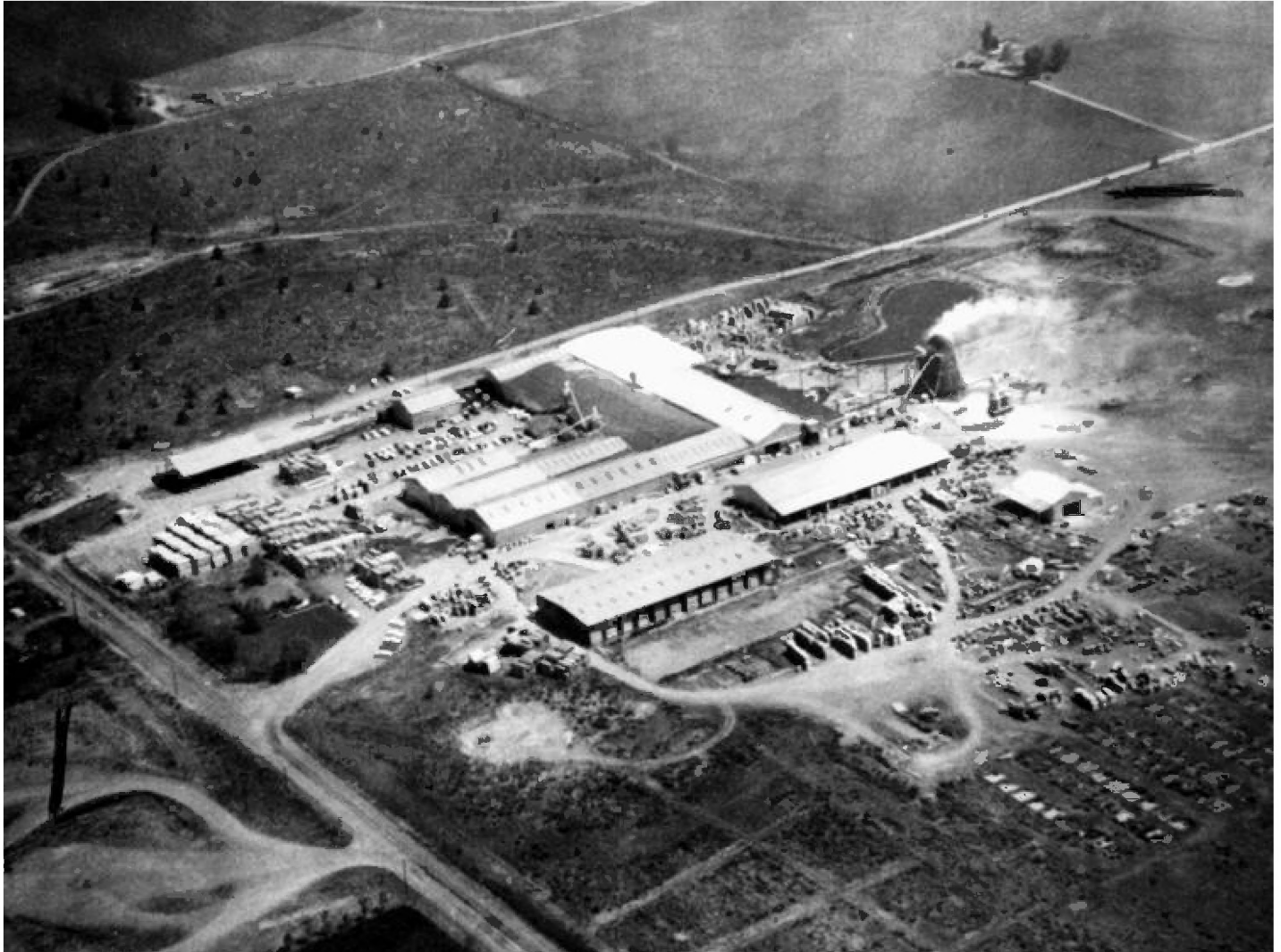
## Woodgrain Millwork leaving Prineville

Company to close remaining operations, eliminating 55 jobs

By Joseph Ditzler

The Bulletin

Oct 28, 2015



Bowman Museum / Submitted photo An aerial view of the COIN Millwork mill in Prineville 1960. The mill eventually became Woodgrain Millwork, which announced Friday that it plans to end operations in Prineville.

Woodgrain Millwork is closing the last of its operations in Prineville, a move that means layoffs or relocation for the remaining 55 employees, a company executive announced today.

Article: 192742-02 Accession: 192742-02  
“Unfortunately, due to the recent loss of significant sales volume, the operation is no longer financially viable and will be closed in the next few months,” wrote Greg Easton, vice president of Woodgrain’s millwork division, in an announcement dated Thursday.

Easton wrote that the Idaho-based company provided the employees a 60-day notice and will offer employment in its other locations, along with relocation assistance.

Easton was not immediately available for further comment. Prineville City Manager Steven Forrester also was unavailable for comment.

Mayor Betty Roppe said, “We’ve had them quite a while and would have loved to have seen them stay, but they’ve made the business decision that it’s not going to be.”

Roppe said Easton told her the plant would be closed by the end of January.

Woodgrain Millwork laid off more than 200 workers from its door and window-frame plant starting in November after a heavy snowfall caused a portion of the factory roof to collapse. The company kept a smaller work force in a pellet mill and interior wood-trim factory, according to The Bulletin archives.

# EXHIBIT I-14

[https://www.bendbulletin.com/business/bidder-owner-at-odds-over-prineville-factory/article\\_966ea777-249b-5cdf-b71d-4857147de604.html](https://www.bendbulletin.com/business/bidder-owner-at-odds-over-prineville-factory/article_966ea777-249b-5cdf-b71d-4857147de604.html)

## Bidder, owner at odds over Prineville factory

Future of Consolidated Pine in the balance

By Joseph Ditzler  
The Bulletin  
Jul 11, 2017



Everything associated with Consolidated Pine, a wood molding manufacturing plant in Prineville, is for sale. (The Tiger Group photo)

The closing of Consolidated Pine in Prineville earlier this year ended a third-generation family operation that started 64 years ago.

Mark Shirvan, president and CEO of Consolidated Companies, the New Jersey-based parent of Consolidated Pine, said surrendering his family's involvement in Central Oregon is tough to do.

“We owned the company for a long time, and we’re passionate about the people that worked for us,” Shirvan said June 30. “It was very difficult for us. The focus of our sales was on our own distribution arm. We sold to others, but not to the level that we wanted.”

Consolidated Companies attempted to keep the doors of its Prineville operation open by taking on investors from the Tzar Investment Group, of Providence, Rhode Island, and New York City, in May 2016. That deal fell apart, and now the plant, which closed in January, is [for sale](#). The real estate broker, Tiger Group, listed no asking price, but instead is seeking offers.

A prospective buyer could resume operations or dispose of the equipment and 23 acres piecemeal. In addition to forklifts, routers, lathes, band saws and molders, the property comes with rail spurs, phone lines and the company name. Shirvan said he could not guarantee a buyer would keep the operation intact, although he said he hoped a local consortium would step up and take it over. Interest in that option appears to be slim. About 30 jobs went away when the plant, which made decorative, finger-joint molding for home interiors, closed.

[Hirak Biswas](#), CEO and principal at Tzar, at the time said he planned to pump fresh capital into the molding manufacturer on Lamonta Road and expand its reach eventually to overseas markets. Thursday, he said he’s still interested in buying not just Consolidated Pine, but its parent company, too.

“We had a strategy on how to turn the company around,” he said. “If I acquired the company today, we can turn it around.”

The two men said they have not recently spoken to one another. Shirvan said he was misled by Biswas, who, in response, said Consolidated Pine was overvalued by its owners and poorly managed. Biswas said his business partner Ravi Gadiraju is still in touch with Shirvan and a deal may yet be struck.

“My interest is only in the whole company,” Biswas said. “I don’t have any bad blood.”

Any attempt to resurrect the molding plant must reckon with a regulatory environment meant to protect the nearby national forests from which raw materials come and with competition from overseas wood-product makers. Crook County Commissioner Jerry Brummer, who has 25 years experience running a sawmill, said the time may soon come in which a smaller-scale version of the forest-products economy is revived. Public pressure to establish forest management practices that sustain local jobs is bearing fruit through organizations like the [Ochoco Forest Restoration Collaborative](#).

“I think we’re going to see some things happen,” he said Thursday. “Now we’re working with the Forest Service and other groups to get another mill in. It’ll never be like the heyday, when we had five mills running.”

Crook County Judge Seth Crawford, in effect the county commission chairman, said that whatever becomes of Consolidated Pine, the bottom line is job creation. The county will work with whoever buys the facility to make it successful. The area is within an Oregon enterprise zone, making businesses there eligible for tax credits in exchange for creating jobs.

“Crook County is open for business,” Crawford said Friday. “We’ll do whatever we need to do to bring manufacturing jobs (to the area). We’re going to get that done.”

In the past, sawmills provided locally sourced raw material to the makers of wood molding, windows and doors in Prineville, Brummer said. Now that lumber is harvested elsewhere and cut at mills in Gilchrist or John Day, he said, which adds insurmountable costs to companies like Consolidated Pine, which used to run its own sawmill.

Consolidated Pine once served as the sole source of finished products that Consolidated Companies marketed from its East Coast distribution point.

Now, cheaper imports from Chile, China and Brazil dominate the market, Biswas said. But, he said, American-made wood products still command a premium price overseas because of their quality. In India, a new condo, for

example, with American-made moldings or doors is as much a status symbol as some American automobiles, he said.

“Marketing is the most critical part,” Biswas said. “But the product sells. And we had one leg up because of having a connection in India.”

However, the plant needs updated equipment, and its owners overvalued the company, he said. When Biswas visited Prineville 1½ years ago and met with employees, they were enthusiastic about bringing the plant back to competitive life.

“The overall idea, the company needs to be overhauled,” Biswas said.

Shirvan expressed a different view. The real value in Consolidated Pine lies in keeping the operation intact, he said, but his agreement with Biswas ends there. Consolidated Pine “is still a viable business,” but not on his companies’ budget, he said. He said Biswas had unreasonable expectations.

“Whether his intent was to follow through on the deal, obviously he didn’t,” Shirvan said. “Mr. Biswas was not earnest. He knew nothing about our business.”

— Reporter: 541-617-7815, 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# EXHIBIT I-15

## Endura Products announces closure of Sparta facility

[spartalive.com/endura-products-announces-closure-of-sparta-facility](https://spartalive.com/endura-products-announces-closure-of-sparta-facility)

April 13,  
2018

Posted By Bobby Lee McCulley | April 13, 2018 8:19 am



A longtime manufacturing facility Endura Products, formally known as Jeld-Wen Products, has announced that due to the loss of a major contract their Sparta facility will be forced to close its doors and place approximately 83 employees out of work.

“With great sadness, Endura Products is left with no choice but to take immediate steps to shut down its Sparta, Tennessee plant permanently. This development was prompted by a decision by Endura’s largest customer to cease its relationship with Endura. That decision was sudden and unexpected,” according to a statement released by Endura Products.

“Without that customer relationship, it simply is not viable or sustainable for the Sparta plant to continue its operations. Endura Products greatly appreciates the loyalty and hard

work that its White County employees have devoted to the company over the last several years. The company is working with the Tennessee Department of Labor to help these employees transition to other jobs.”

According to facility administrators, employees are continuing to work as the plant still has orders to fulfill. However, as soon as those orders have been filled, the remaining employees will be terminated as the plant permanently shuts down.

The future for this facility has yet to be determined, according to Endura Products leaders. Equipment within the facility is expected to be relocated to other Endura plants.

“It’s disappointing to hear a local business is leaving White County. In a global economy there are often circumstances that are beyond local control. Endura has been an asset and valuable community partner for many years; we hate to see them close their doors,” said White County Executive Denny Wayne Robinson. “The Department of Labor is currently mobilizing resources for our citizens that will be effected by the change. I have been in contact with many local employers and they have already expressed interest in hiring displaced workers.”

“White County’s economic future is on a positive path of growth. Industrial development can be seen all across the county. From the expansion of local businesses and industries to the recent announcements of Hormann and Fitzgerald, job opportunities are readily available in our community.”

The Expositor reached out to numerous manufacturing facilities within White County. The following facilities are currently hiring multiple employees for a variety of positions and shifts.

- Hillsman Modular Molding Inc. (HMMI)
- Tri-State Distribution
- Seastar Solutions
- THK Rhythm

“Many of our best relationships are formed at work. There is no way that a manufacturer can close without causing grief. If there is a bright side to this, it might be that in the last year White County has created over six times as many jobs as will be lost with the closing of Endura,” stated Marvin Bullock, president of the Sparta-White County Chamber of Commerce. “If we combine the 500-plus newly-created jobs with the number of long-time employers who are clamoring to hire, then perhaps Endura’s unfortunate closing could not have happened at a better time for the sake of its employees. My heart reaches out to all those affected.”

# EXHIBIT I-16

# Sparta industrial facility closes abruptly

Barcode: 3927422-021-351-858 TNY - Investigation -

April 13, 2018



**By Amye Anderson**

*UCBJ Managing Editor*

**SPARTA** – The loss of a major contract has forced **Endura Products’** Sparta location to close abruptly.

Approximately 75 employees will be affected as a result of the closure; which is slated to occur sometime within the next six to eight weeks, once all existing orders are filled.

“It’s disappointing,” said White County Executive Denny Wayne Robinson. “It’s sad. That company, even though it’s changed names and ownership – that particular business has been here in

White County for a long time; 30-plus years.”

The closure, as addressed in a statement released by company president Bruce Procton, was the result of the sudden and unexpected decision by a “significant customer” to drastically reduce its supply relationship with Endura. That loss reportedly accounted for the majority of the plant’s business.

“With great disappointment and sadness, Endura Products has had to take immediate steps to shut down its Sparta, Tenn. plant on a permanent basis,” a statement from Procton read.

“Endura has been left with no choice but to realign our wood processing and frame production to our other facilities as it simply is not viable or sustainable to continue the operations of the Sparta plant without the aforementioned business,” he added.

Meanwhile, those employees affected by the closure are receiving job seeking assistance from Endura. The company has announced it is actively working with the Tennessee Department of Labor to help affected employees find and transition to other jobs.

Filed By: [tbrightbill@wileyrein.com](mailto:tbrightbill@wileyrein.com), Filed Date: 1/7/20 11:04 PM, Submission Status: Approved

Following the announcement, the following local industries have indicated they have open positions available for those affected by the closure of Endura Products:

- [HMMI](#)
- [Peregrine Steel](#)
- [THK Rhythm North America](#)
- [Tristate Industries](#)

In addition to assisting newly-displaced workers with their job search, Endura is also providing severance packages that recognize accrued unused vacation, personal and sick leave, as well as offering assistance for health care costs.

"We are very thankful for the loyalty and hard work that our White County employees have devoted to the company over the past six years since its acquisition by Endura," Procton said. "Our Sparta team worked hard to support the company's commitment to improving building practices and providing exceptional value to our customers through their devotion to quality and unmatched customer service."

In 2012, Endura Products acquired JELD-WEN, the facility's previous owner and a producer of energy-efficient doors and windows.

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## Amye Anderson

Amye Anderson is the managing editor of the Upper Cumberland Business Journal and can be reached via email. [Send an email.](#)

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### Amye Anderson

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# EXHIBIT I-17

## Jeld-Wen to close Yakima facility

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 [yakimaherald.com/news/business/local/jeld-wen-to-close-yakima-facility/article\\_056ed484-28b1-11e9-9cec-](https://yakimaherald.com/news/business/local/jeld-wen-to-close-yakima-facility/article_056ed484-28b1-11e9-9cec-)

Mai Hoang

February 4,  
2019



YAKIMA, Wash. – Window and door manufacturer Jeld-Wen will close its Yakima facility in April.

The Charlotte, N.C.-based company said in a written statement that it is closing the plant at 1311 N. Sixth Ave. to build efficiencies under a revised business plan. The plant has 179 employees, according to a listing on the state Worker Adjustment and Retraining Notification website.

“The Yakima facility closure will support our value of improving daily by doing everything we can to advance the way we operate and do business,” the company wrote in its statement.

The company said it has notified local and state officials of the closure. It has a program in place to move employees to its other facilities or provide outplacement services for those who will transition to new jobs.

Jeld-Wen, which was based in Klamath Falls, Ore., before relocating to its North Carolina headquarters in 2015, has run a plant in Yakima since 1987. It operated out of its former plant at 1015 E. Lincoln Ave. for nearly two decades before relocating to its current facility.

The company also once ran a fiber plant in White Swan that closed in 2010.

# EXHIBIT I-18

**U.S. Consumption Imports of Wood Moulding Products**

CY 2016 - 2018; Jan. - Oct. 2018, 2019

Source: U.S. International Trade Commission

Country	Year 2016	Year 2017	Year 2018	Jan - Oct. 2018	Jan. - Oct. 2019	12 Months	% Share of Imports
<b>Quantity: Meters</b>							
Brazil	372,705,458	420,297,558	434,040,698	357,020,810	376,176,038	453,195,926	39.36%
Chile	278,052,786	271,865,595	267,585,072	229,871,117	221,232,503	258,946,458	22.49%
China	100,542,792	134,917,605	190,385,535	149,237,995	181,963,144	223,110,684	19.38%
Mexico	143,280,758	148,679,232	144,720,272	123,032,102	118,848,432	140,536,602	12.21%
Argentina	24,892,475	30,574,886	28,425,907	22,974,215	31,601,263	37,052,955	3.22%
Canada	18,659,150	18,278,939	13,385,762	11,738,750	10,120,250	11,767,262	1.02%
Malaysia	10,005,653	9,214,968	8,904,420	7,602,107	7,300,480	8,602,793	0.75%
Indonesia	6,551,405	6,746,822	6,108,041	5,029,681	6,189,487	7,267,847	0.63%
Italy	4,010,159	4,400,250	4,927,408	4,238,092	4,087,446	4,776,762	0.41%
Spain	405,319	568,238	1,521,997	1,167,923	935,641	1,289,715	0.11%
Subtotal:	959,105,955	1,045,544,093	1,100,005,112	911,912,792	958,454,684	1,146,547,004	99.58%
All Others	7,451,663	8,404,972	7,632,148	6,970,154	4,186,514	4,848,508	0.42%
<b>TOTAL:</b>	<b>966,557,618</b>	<b>1,053,949,065</b>	<b>1,107,637,260</b>	<b>918,882,946</b>	<b>962,641,198</b>	<b>1,151,395,512</b>	<b>100.00%</b>
<b>Customs Value: U.S. Dollars</b>							
Brazil	265,787,640	316,186,057	291,760,096	238,355,494	267,589,335	320,993,937	35.10%
Chile	190,164,450	194,570,315	191,927,989	163,630,495	162,852,357	191,149,851	20.90%
China	105,296,803	158,402,017	208,388,081	168,769,810	161,705,393	201,323,664	22.01%
Mexico	75,666,144	85,036,058	84,869,118	71,820,142	73,269,118	86,318,094	9.44%
Argentina	17,835,637	21,164,274	19,663,558	15,661,144	24,098,534	28,100,948	3.07%
Canada	32,119,694	37,583,183	32,005,995	27,907,123	26,476,513	30,575,385	3.34%
Malaysia	17,294,545	14,061,750	14,629,085	12,556,569	12,108,905	14,181,421	1.55%
Indonesia	10,552,565	10,164,554	10,674,257	8,512,054	11,492,029	13,654,232	1.49%
Italy	9,735,455	11,608,816	12,965,319	11,116,018	10,828,912	12,678,213	1.39%
Spain	1,689,006	2,428,295	4,281,408	3,285,128	4,019,023	5,015,303	0.55%
Subtotal:	726,141,939	851,205,319	871,164,906	721,613,977	754,440,119	903,991,048	98.84%
All Others	9,268,162	10,010,675	10,044,572	8,384,864	8,988,110	10,647,818	1.16%
<b>TOTAL:</b>	<b>735,410,101</b>	<b>861,215,994</b>	<b>881,209,478</b>	<b>729,998,841</b>	<b>763,428,229</b>	<b>914,638,866</b>	<b>79.44%</b>
<b>Customs Value: U.S. Dollars</b>							
Brazil	\$ 0.71	\$ 0.75	\$ 0.67	\$ 0.67	\$ 0.71	\$ 0.71	0.00%
Chile	\$ 0.68	\$ 0.72	\$ 0.72	\$ 0.71	\$ 0.74	\$ 0.74	0.00%
China	\$ 1.05	\$ 1.17	\$ 1.09	\$ 1.13	\$ 0.89	\$ 0.90	0.00%
Mexico	\$ 0.53	\$ 0.57	\$ 0.59	\$ 0.58	\$ 0.62	\$ 0.61	0.00%
Argentina	\$ 0.72	\$ 0.69	\$ 0.69	\$ 0.68	\$ 0.76	\$ 0.76	0.00%
Canada	\$ 1.72	\$ 2.06	\$ 2.39	\$ 2.38	\$ 2.62	\$ 2.60	0.00%
Malaysia	\$ 1.73	\$ 1.53	\$ 1.64	\$ 1.65	\$ 1.66	\$ 1.65	0.00%
Indonesia	\$ 1.61	\$ 1.51	\$ 1.75	\$ 1.69	\$ 1.86	\$ 1.88	0.00%
Italy	\$ 2.43	\$ 2.64	\$ 2.63	\$ 2.62	\$ 2.65	\$ 2.65	0.00%
Spain	\$ 4.17	\$ 4.27	\$ 2.81	\$ 2.81	\$ 4.30	\$ 3.89	0.00%
Subtotal:	\$ 0.76	\$ 0.81	\$ 0.79	\$ 0.79	\$ 0.79	\$ 0.79	0.00%
All Others	\$ 1.24	\$ 1.19	\$ 1.32	\$ 1.20	\$ 2.15	\$ 2.20	0.00%
<b>TOTAL:</b>	<b>\$ 0.76</b>	<b>\$ 0.82</b>	<b>\$ 0.80</b>	<b>\$ 0.79</b>	<b>\$ 0.79</b>	<b>\$ 0.79</b>	<b>0.00%</b>

# EXHIBIT I-19

# **ENTIRE EXHIBIT NOT CAPABLE OF PUBLIC SUMMARY**

# EXHIBIT I-20

# U.S. moulding producers struggle with rising imports

 [fridayoffcuts.com/dsp\\_article.cfm](http://fridayoffcuts.com/dsp_article.cfm)

**Friday 28 Oct 2016**

Despite consumption trending higher, U.S. wood moulding producers continue to struggle to defend their market share against offshore imports. **Between 2012 and 2015, it is estimated that domestic share hovered at around 43%.** However, U.S. finger-joint moulding producers have found it increasingly difficult to compete with imported products from South America, due primarily to the sharp devaluation of the Brazilian currency. U.S. MDF moulding producers, on the other hand, have been less affected by the real's devaluation in light of the fact that Brazil does not produce MDF mouldings.

Drawn by the strong U.S. dollar and a recovering U.S. economy, not to mention stagnating/deteriorating demand in alternative markets, offshore producers have been directing more of their production to the U.S. Furthermore, offshore producers continue to upgrade/expand their capacity, exacerbating the increase in imported mouldings.

Leading the way in 2015 were imports from Brazil that held steady at 1.0 billion lineal feet; Chile was up 5% to 957 million lineal feet, followed by Mexico in third place (+9% to 443 million lineal feet; figure 3). **Although still a relatively small import player, Chinese imports continue to increase rapidly, jumping from 150 million lineal feet in 2014 to 250 million in 2015 (a year-over-year increase of 67%).**

Although preliminary, year-to-date import data indicate that China is on pace to achieve 300 million lineal feet for the year. Comments from those travelling in China reveal that the focus of Chinese producers is on supplying the domestic residential home furnishings market first, and then relying on the U.S. as a complementary secondary market. However, in 2015 and into 2016, activity in the Chinese housing market was less robust than in previous years, and it has been speculated that this is motivating Chinese producers to put even more emphasis on the U.S. market.

Prior to the market collapse in 2007, MDF mouldings accounted for some 25% of U.S. consumption. **Since then, they have progressively grown their share to 38% in 2015.** The majority of MDF gains have come at the expense of finger-joint (the alternative substrate typically used in painted moulding applications). From a high of 62% in 2006, finger-joint saw its share contract to 45% in 2010. **Most of this contraction has been at the expense of U.S. producers, and the recent improvement in finger-joint's share (to 48% in 2015) is attributed to the rise in imported product.**

Over the last nine years, MDF mouldings have enjoyed increased acceptance by DIY

consumer and contractors at the expense of finger-joint mouldings. There are several main reasons for this. For one, MDF moulding prices are generally lower and tend to be more stable than those of finger-joint. In addition, the primer coating on MDF mouldings is typically smoother than on finger-joint mouldings, and there is absolutely no telegraphing of seams. Last, the growing fashion trend toward the craftsman/shaker look of flat boards (replacing traditional shaped profiles) has created a major product category for MDF moulding producers, who estimate that more than 25% of their current moulding production is in primed board product.

For finger-joint moulding producers, the percentage of primed boards is much lower due to the cost advantage MDF moulding producers hold over their finger-joint counterparts. i.e., MDF moulding lines need only rip the panel into blanks, profile the edges and touch-dress the face, while the process and cost of making a finger-joint board is no different from producing a shaped moulding product.

**One relative constant over the last nine years has been paint-grade mouldings comprised of both finger-joint and MDF. These have accounted for over 85% of the market; stain-grade solid lineal and plastic mouldings have battled over what is left.** In recent years, seemingly thanks to the support of the big box retailers, plastic has made noticeable gains at the expense of solid lineal mouldings.

With our outlook anticipating further growth in U.S. moulding consumption, the questions become where the volume will originate from and whether the market can absorb further price increases. The most likely determinant will be if/when the Brazilian real begins to recover, and how successful Brazilian producers are in pushing through price increases sufficient to cover the rising cost of labour, energy and logs. Until a major shift occurs in the cost structure in Brazil (or in any of the other competing supply countries), prices are likely to continue trending in their current gradual upward trajectory.

*Source: International WOOD MARKETS Group, [www.woodmarkets.com](http://www.woodmarkets.com)*

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# EXHIBIT I-21

# **ENTIRE EXHIBIT NOT CAPABLE OF PUBLIC SUMMARY**

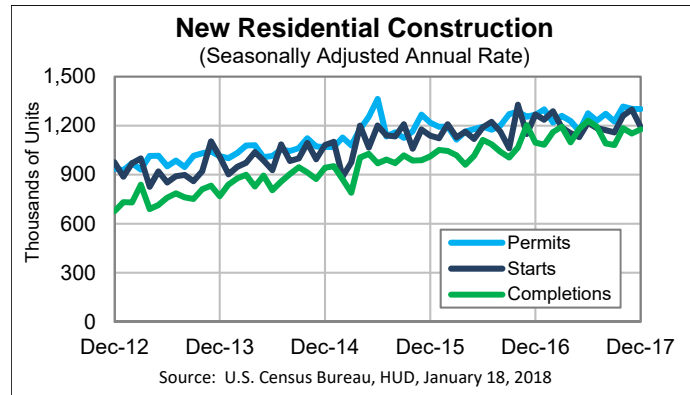
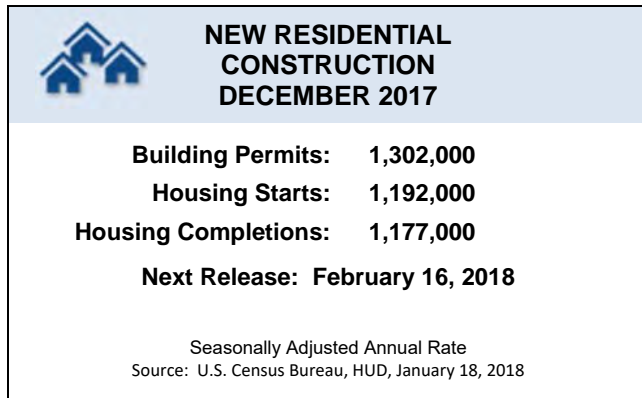
# EXHIBIT I-22

FOR RELEASE AT 8:30 AM EST, THURSDAY, JANUARY 18, 2018

**MONTHLY NEW RESIDENTIAL CONSTRUCTION, DECEMBER 2017**

Release Number: CB18-10

**January 18, 2018** - The U.S. Census Bureau and the U.S. Department of Housing and Urban Development jointly announced the following new residential construction statistics for December 2017:

**Building Permits**

Privately-owned housing units authorized by building permits in December were at a seasonally adjusted annual rate of 1,302,000. This is 0.1 percent ( $\pm 1.4$  percent)\* below the revised November rate of 1,303,000, but is 2.8 percent ( $\pm 1.9$  percent) above the December 2016 rate of 1,266,000. Single-family authorizations in December were at a rate of 881,000; this is 1.8 percent ( $\pm 1.2$  percent) above the revised November figure of 865,000. Authorizations of units in buildings with five units or more were at a rate of 382,000 in December.

An estimated 1,263,400 housing units were authorized by building permits in 2017. This is 4.7 percent ( $\pm 0.6\%$ ) above the 2016 figure of 1,206,600.

**Housing Starts**

Privately-owned housing starts in December were at a seasonally adjusted annual rate of 1,192,000. This is 8.2 percent ( $\pm 7.7$  percent) below the revised November estimate of 1,299,000 and is 6.0 percent ( $\pm 11.7$  percent)\* below the December 2016 rate of 1,268,000. Single-family housing starts in December were at a rate of 836,000; this is 11.8 percent ( $\pm 6.5$  percent) below the revised November figure of 948,000. The December rate for units in buildings with five units or more was 352,000.

An estimated 1,202,100 housing units were started in 2017. This is 2.4 percent ( $\pm 2.3\%$ ) above the 2016 figure of 1,173,800.

**Data Inquiries**

Economic Indicators Division, Residential Construction Branch  
 301-763-5160  
[eid.rcb@census.gov](mailto:eid.rcb@census.gov)

**Media Inquiries**

Public Information Office  
 301-763-3030  
[pio@census.gov](mailto:pio@census.gov)



U.S. Department of Commerce  
 Economics and Statistics Administration  
 U.S. CENSUS BUREAU



## Housing Completions

Privately-owned housing completions in December were at a seasonally adjusted annual rate of 1,177,000. This is 2.2 percent ( $\pm 17.8$  percent)\* above the revised November estimate of 1,152,000 and is 7.4 percent ( $\pm 13.0$  percent)\* above the December 2016 rate of 1,096,000. Single-family housing completions in December were at a rate of 818,000; this is 4.3 percent ( $\pm 20.5$  percent)\* above the revised November rate of 784,000. The December rate for units in buildings with five units or more was 346,000.

An estimated 1,152,300 housing units were completed in 2017. This is 8.7 percent ( $\pm 3.1\%$ ) above the 2016 figure of 1,059,700.

The January report is scheduled for release on February 16, 2018. View the full schedule in the Economic Briefing Room: [www.census.gov/economic-indicators/](http://www.census.gov/economic-indicators/). The full text and tables for this release can be found at [www.census.gov/construction/nrc/](http://www.census.gov/construction/nrc/).

## EXPLANATORY NOTES

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take three months to establish an underlying trend for building permit authorizations, six months for total starts, and five months for total completions. The statistics in this release are estimated from sample surveys and are subject to sampling variability as well as nonsampling error including bias and variance from response, nonreporting, and undercoverage. Estimated relative standard errors of the most recent data are shown in the tables. Whenever a statement such as “2.5 percent ( $\pm 3.2$  percent) above” appears in the text, this indicates the range (-0.7 to +5.7 percent) in which the actual percentage change is likely to have occurred. All ranges given for percentage changes are 90 percent confidence intervals and account only for sampling variability. If a range does not contain zero, the change is statistically significant. If it does contain zero, the change is not statistically significant; that is, it is uncertain whether there was an increase or decrease. The same policies apply to the confidence intervals for percentage changes shown in the tables. On average, the preliminary seasonally adjusted estimates of total building permits, housing starts and housing completions are revised 2 percent or less. Explanations of confidence intervals and sampling variability can be found on our website. [www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/) >

## API

The Census Bureau’s application programming interface lets developers create custom apps to reach new users and makes key demographic, socio-economic and housing statistics more accessible than ever before. [www.census.gov/developers/](http://www.census.gov/developers/)

###

\* The 90 percent confidence interval includes zero. In such cases, there is insufficient statistical evidence to conclude that the actual change is different from zero.

### Data Inquiries

Economic Indicators Division, Residential Construction Branch  
301-763-5160  
[eid.rcb@census.gov](mailto:eid.rcb@census.gov)

### Media Inquiries

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U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU

Released by: thecensus.gov, Filed Date: 1/7/20 11:04 PM, Submission Status: Approved



# New Privately-Owned Housing Units Authorized in Permit-Issuing Places

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 3927422-62 A-351-853 INV - Investigation -

**Table 1a - Seasonally adjusted annual rate**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2016</b>												
December .....	1,266	830	39	397	131	54	187	119	604	452	344	205
<b>2017</b>												
January .....	1,300	806	29	465	153	59	198	124	653	451	296	172
February .....	1,219	834	45	340	117	54	247	136	585	448	270	196
March .....	1,260	826	37	397	136	53	192	128	623	456	309	189
April .....	1,228	794	36	398	120	53	192	124	579	424	337	193
May .....	1,168	779	32	357	122	52	173	108	579	436	294	183
June .....	1,275	811	35	429	104	57	207	120	622	445	342	189
July .....	1,230	812	40	378	123	57	170	117	623	452	314	186
August .....	1,272	800	36	436	109	58	184	114	620	429	359	199
September .....	1,225	823	35	367	121	71	185	122	595	428	324	202
October .....	1,316	850	33	433	122	53	193	127	633	456	368	214
November (r) .....	1,303	865	39	399	114	55	183	130	651	469	355	211
<b>December (p) .....</b>	<b>1,302</b>	<b>881</b>	<b>39</b>	<b>382</b>	<b>163</b>	<b>56</b>	<b>199</b>	<b>133</b>	<b>579</b>	<b>462</b>	<b>361</b>	<b>230</b>
Average RSE (%) <sup>1</sup> .....	2	2	5	2	3	5	4	4	2	2	2	3
Percent Change <sup>2</sup>												
<b>Dec. 2017 from Nov. 2017 .....</b>	<b>-0.1%</b>	<b>1.8%</b>	<b>0.0%</b>	<b>-4.3%</b>	<b>43.0%</b>	<b>1.8%</b>	<b>8.7%</b>	<b>2.3%</b>	<b>-11.1%</b>	<b>-1.5%</b>	<b>1.7%</b>	<b>9.0%</b>
90 percent confidence interval <sup>3</sup> .....	± 1.4	± 1.2	± 4.8	± 3.8	± 3.6	± 4.6	± 6.0	± 6.7	± 2.8	± 0.8	± 1.0	± 1.1
<b>Dec. 2017 from Dec. 2016 .....</b>	<b>2.8%</b>	<b>6.1%</b>	<b>0.0%</b>	<b>-3.8%</b>	<b>24.4%</b>	<b>3.7%</b>	<b>6.4%</b>	<b>11.8%</b>	<b>-4.1%</b>	<b>2.2%</b>	<b>4.9%</b>	<b>12.2%</b>
90 percent confidence interval <sup>3</sup> .....	± 1.9	± 2.1	± 6.1	± 3.5	± 3.6	± 5.5	± 4.1	± 4.6	± 3.2	± 3.3	± 1.6	± 3.0

**Table 1b - Not seasonally adjusted**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
2016 Annual .....	1,206.6	750.8	34.8	421.1	116.4	54.3	186.1	112.4	594.5	406.0	309.6	178.1
2017 Annual (p) .....	1,263.4	817.7	35.4	410.3	126.5	56.8	191.4	122.8	613.0	441.8	332.5	196.4
RSE (%) .....	2	2	4	1	2	4	3	4	1	2	1	2
<b>Year to year percent change <sup>2</sup> .....</b>	<b>4.7%</b>	<b>8.9%</b>	<b>1.8%</b>	<b>-2.6%</b>	<b>8.7%</b>	<b>4.7%</b>	<b>2.8%</b>	<b>9.2%</b>	<b>3.1%</b>	<b>8.8%</b>	<b>7.4%</b>	<b>10.3%</b>
90 percent confidence interval <sup>3</sup> .....	± 0.6	± 0.7	± 6.4	± 1.0	± 2.3	± 3.4	± 2.1	± 2.4	± 0.4	± 0.4	± 1.1	± 2.0
<b>2016</b>												
December .....	94.8	55.5	3.0	36.4	10.5	3.7	11.3	6.5	45.8	31.2	27.2	14.1
<b>2017</b>												
January .....	87.3	53.6	1.9	31.8	9.6	3.5	10.0	5.7	48.6	33.3	19.2	11.2
February .....	84.8	57.8	3.0	24.0	6.4	3.0	12.7	7.1	45.8	34.0	19.9	13.6
March .....	112.5	77.1	3.1	32.3	10.8	4.6	15.9	11.2	57.2	43.9	28.7	17.5
April .....	102.6	69.2	2.6	30.8	9.7	4.6	16.8	11.2	48.2	36.8	28.0	16.7
May .....	113.0	78.3	3.0	31.6	11.7	5.2	18.0	12.0	54.7	42.2	28.6	18.9
June .....	127.9	81.8	3.6	42.5	11.0	5.9	21.3	12.8	59.9	42.9	35.6	20.2
July .....	101.0	69.1	3.2	28.7	10.7	5.0	14.7	10.5	50.4	37.5	25.2	16.1
August .....	119.6	76.6	3.4	39.6	10.1	5.6	18.8	11.9	57.4	40.3	33.2	18.9
September .....	101.4	66.6	3.1	31.7	11.0	6.4	17.6	11.0	46.6	33.5	26.2	15.6
October .....	114.0	70.9	3.0	40.1	10.5	4.8	19.3	12.1	53.9	36.8	30.3	17.2
November (r) .....	97.0	62.0	3.0	31.9	9.3	4.4	14.3	9.6	46.6	33.0	26.8	15.0
<b>December (p) .....</b>	<b>93.2</b>	<b>56.5</b>	<b>2.8</b>	<b>33.9</b>	<b>13.0</b>	<b>3.6</b>	<b>11.7</b>	<b>6.9</b>	<b>41.7</b>	<b>30.7</b>	<b>26.8</b>	<b>15.3</b>
Average RSE (%) <sup>1</sup> .....	2	2	5	2	3	5	4	4	2	2	2	3

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> If the 90 percent confidence interval includes zero, there is insufficient evidence to conclude that the actual change is different from zero

Note: Year-to-date permits estimates reflect revisions not distributed to months.

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, January 18, 2018.

Additional information on the survey methodology may be found at <[www.census.gov/construction/nrc/how the data are collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/)>.

# New Privately-Owned Housing Units Authorized, but Not Started, at End of Period

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 3927422-62 A-351-853 INV - Investigation -

**Table 2a - Seasonally adjusted**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2016</b>												
December .....	139	70	S	66	14	5	20	8	68	39	37	18
<b>2017</b>												
January .....	143	72	S	68	15	6	19	8	69	40	40	18
February .....	135	74	S	60	12	5	21	9	66	41	36	19
March .....	138	77	S	59	13	5	19	9	69	44	37	19
April .....	142	77	S	64	15	6	22	10	67	42	38	19
May .....	146	80	S	65	18	6	21	9	71	46	36	19
June .....	145	78	S	65	12	6	20	9	75	44	38	19
July .....	141	78	S	61	12	5	20	9	71	45	38	19
August .....	148	77	S	69	13	5	20	9	74	43	41	20
September .....	151	78	S	71	14	5	19	10	77	44	41	19
October (r) .....	154	81	S	71	12	5	19	9	77	46	46	21
November (r) .....	152	79	S	71	13	5	20	9	74	44	45	21
<b>December (p) .....</b>	<b>154</b>	<b>83</b>	<b>S</b>	<b>69</b>	<b>15</b>	<b>6</b>	<b>22</b>	<b>9</b>	<b>72</b>	<b>47</b>	<b>45</b>	<b>21</b>
Average RSE (%) <sup>1</sup> .....	6	6	X	9	15	16	16	17	8	8	11	13
Percent Change <sup>2</sup>												
<b>Dec. 2017 from Nov. 2017 .....</b>	<b>1.3%</b>	<b>5.1%</b>	<b>S</b>	<b>-2.8%</b>	<b>15.4%</b>	<b>20.0%</b>	<b>10.0%</b>	<b>0.0%</b>	<b>-2.7%</b>	<b>6.8%</b>	<b>0.0%</b>	<b>0.0%</b>
90 percent confidence interval <sup>3</sup> .....	± 3.7	± 4.6	X	± 6.5	± 27.6	± 18.9	± 8.6	± 14.7	± 5.1	± 6.5	± 7.1	± 8.9
<b>Dec. 2017 from Dec. 2016 .....</b>	<b>10.8%</b>	<b>18.6%</b>	<b>S</b>	<b>4.5%</b>	<b>7.1%</b>	<b>20.0%</b>	<b>10.0%</b>	<b>12.5%</b>	<b>5.9%</b>	<b>20.5%</b>	<b>21.6%</b>	<b>16.7%</b>
90 percent confidence interval <sup>3</sup> .....	± 9.8	± 9.6	X	± 16.4	± 52.2	± 30.7	± 25.0	± 25.9	± 14.1	± 14.0	± 16.0	± 18.7

**Table 2b - Not seasonally adjusted**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2016</b>												
December .....	135.9	66.6	2.7	66.6	13.9	5.3	17.7	7.0	67.3	37.0	37.1	17.4
<b>2017</b>												
January .....	137.3	67.9	2.6	66.8	14.4	5.6	17.0	6.7	67.6	38.1	38.3	17.5
February .....	131.5	69.9	1.4	60.1	12.3	5.2	19.4	7.6	64.7	39.3	35.1	17.8
March .....	144.6	82.8	1.9	59.9	13.3	5.2	21.6	10.8	70.7	46.5	39.0	20.3
April .....	143.7	78.3	1.5	64.0	15.1	5.6	21.7	10.4	67.7	43.2	39.3	19.0
May .....	151.3	83.6	1.2	66.4	18.1	6.6	21.4	9.5	72.1	47.1	39.6	20.5
June .....	155.9	85.3	2.2	68.4	13.9	6.7	20.3	9.9	78.9	47.3	42.7	21.4
July .....	140.6	77.8	2.3	60.4	12.7	5.4	18.9	8.9	72.2	44.5	36.8	19.0
August .....	153.1	81.0	2.5	69.6	12.7	5.3	20.3	10.5	78.2	44.7	41.9	20.5
September .....	151.3	78.4	1.9	71.0	14.0	5.2	19.7	10.1	78.8	44.8	38.9	18.3
October (r) .....	149.5	78.0	1.9	69.5	11.0	4.8	19.6	8.8	75.6	44.1	43.3	20.2
November (r) .....	144.6	74.7	1.7	68.1	11.4	5.1	19.6	7.9	70.7	41.9	42.9	19.9
<b>December (p) .....</b>	<b>149.7</b>	<b>78.1</b>	<b>1.6</b>	<b>70.0</b>	<b>14.9</b>	<b>5.5</b>	<b>19.1</b>	<b>7.8</b>	<b>71.3</b>	<b>44.3</b>	<b>44.4</b>	<b>20.5</b>
Average RSE (%) <sup>1</sup> .....	6	6	57	9	15	16	16	17	8	8	11	13

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Note: These data represent the number of housing units authorized in all months up to and including the last day of the reporting period and not started as of that date without regard to the months of original permit issuance. Cancelled, abandoned, expired, and revoked permits are excluded.

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, January 18, 2018.

Additional information on the survey methodology may be found at <[www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/)>.

# New Privately-Owned Housing Units Started

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 3927422-62 A-351-853 INV - Investigation -

**Table 3a - Seasonally adjusted annual rate**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2016</b>												
December .....	1,268	808	S	449	89	58	222	128	566	418	391	204
<b>2017</b>												
January .....	1,236	815	S	418	125	59	202	137	678	453	231	166
February .....	1,288	877	S	392	111	67	182	163	658	448	337	199
March .....	1,189	824	S	355	116	65	139	105	633	466	301	188
April .....	1,154	823	S	314	85	47	200	124	562	449	307	203
May .....	1,129	795	S	320	85	55	165	140	564	410	315	190
June .....	1,217	857	S	354	158	62	202	134	529	452	328	209
July .....	1,185	841	S	333	120	69	161	116	611	463	293	193
August .....	1,172	871	S	292	108	68	171	117	583	476	310	210
September .....	1,159	832	S	310	101	75	187	127	543	410	328	220
October (r) .....	1,261	887	S	356	145	64	200	145	613	472	303	206
November (r) .....	1,299	948	S	343	92	62	182	142	678	512	347	232
<b>December (p) .....</b>	<b>1,192</b>	<b>836</b>	<b>S</b>	<b>352</b>	<b>88</b>	<b>47</b>	<b>178</b>	<b>130</b>	<b>582</b>	<b>427</b>	<b>344</b>	<b>232</b>
Average RSE (%) <sup>1</sup> .....	4	4	X	12	13	11	14	12	6	6	9	6
Percent Change <sup>2</sup>												
<b>Dec. 2017 from Nov. 2017 .....</b>	<b>-8.2%</b>	<b>-11.8%</b>	<b>S</b>	<b>2.6%</b>	<b>-4.3%</b>	<b>-24.2%</b>	<b>-2.2%</b>	<b>-8.5%</b>	<b>-14.2%</b>	<b>-16.6%</b>	<b>-0.9%</b>	<b>0.0%</b>
90 percent confidence interval <sup>3</sup> .....	± 7.7	± 6.5	X	± 22.4	± 34.5	± 23.7	± 25.9	± 16.2	± 12.2	± 10.7	± 14.2	± 15.9
<b>Dec. 2017 from Dec. 2016 .....</b>	<b>-6.0%</b>	<b>3.5%</b>	<b>S</b>	<b>-21.6%</b>	<b>-1.1%</b>	<b>-19.0%</b>	<b>-19.8%</b>	<b>1.6%</b>	<b>2.8%</b>	<b>2.2%</b>	<b>-12.0%</b>	<b>13.7%</b>
90 percent confidence interval <sup>3</sup> .....	± 11.7	± 10.5	X	± 22.9	± 32.2	± 24.4	± 33.3	± 32.0	± 14.5	± 13.1	± 22.6	± 21.3

**Table 3b - Not seasonally adjusted**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
2016 Annual .....	1,173.8	781.5	11.5	380.8	116.1	60.1	182.3	120.9	584.6	421.1	290.9	179.4
2017 Annual (p) .....	1,202.1	848.3	11.4	342.4	111.4	61.8	180.4	130.8	598.2	451.7	312.1	204.0
RSE (%) .....	2	1	19	6	4	3	3	2	2	2	3	2
<b>Year to year percent change <sup>2</sup> .....</b>	<b>2.4%</b>	<b>8.5%</b>	<b>-1.0%</b>	<b>-10.1%</b>	<b>-4.0%</b>	<b>2.9%</b>	<b>-1.0%</b>	<b>8.1%</b>	<b>2.3%</b>	<b>7.3%</b>	<b>7.3%</b>	<b>13.7%</b>
90 percent confidence interval <sup>3</sup> .....	± 2.3	± 1.8	± 30.9	± 6.3	± 7.2	± 6.6	± 6.4	± 4.9	± 3.6	± 2.8	± 4.7	± 4.2
<b>2016</b>												
December .....	86.5	52.9	0.8	32.8	6.4	4.1	13.9	7.0	39.0	28.2	27.2	13.5
<b>2017</b>												
January .....	82.3	53.1	0.2	29.0	8.0	3.4	10.7	6.2	48.0	32.4	15.6	11.1
February .....	87.8	58.8	1.3	27.7	6.6	3.5	8.9	7.6	48.4	33.6	23.8	14.1
March .....	97.1	69.5	0.7	27.0	8.8	4.9	9.9	7.3	53.8	41.1	24.7	16.1
April .....	105.2	76.9	1.4	26.8	7.7	4.4	18.8	12.3	50.3	40.7	28.4	19.5
May .....	106.0	76.9	1.2	28.0	7.9	5.2	16.8	14.6	52.5	39.1	28.9	18.0
June .....	116.3	83.8	0.5	31.9	14.8	6.1	20.6	14.5	49.5	42.6	31.4	20.6
July .....	112.3	79.4	1.1	31.9	11.5	6.7	16.1	11.8	56.3	42.1	28.4	18.8
August .....	102.6	78.1	0.7	23.8	9.6	6.3	15.4	11.0	50.6	41.9	27.0	18.9
September .....	104.4	72.5	1.6	30.2	9.3	6.8	18.2	12.4	47.9	35.0	28.8	18.3
October (r) .....	109.6	75.7	1.6	32.3	13.5	6.2	19.4	14.4	51.7	39.0	25.0	16.2
November (r) .....	98.1	69.3	0.7	28.1	7.4	4.9	14.9	11.5	49.7	36.1	26.1	16.7
<b>December (p) .....</b>	<b>80.3</b>	<b>54.3</b>	<b>0.3</b>	<b>25.7</b>	<b>6.2</b>	<b>3.3</b>	<b>10.6</b>	<b>7.1</b>	<b>39.5</b>	<b>28.2</b>	<b>23.9</b>	<b>15.7</b>
Average RSE (%) <sup>1</sup> .....	4	4	47	12	13	11	14	12	6	6	9	6

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, January 18, 2018.

Additional information on the survey methodology may be found at <[www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/)>.

# New Privately-Owned Housing Units Under Construction at End of Period

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 3927422-62 A-351-853 INV - Investigation -

**Table 4a - Seasonally adjusted**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2016</b>												
December .....	1,062	449	S	602	191	53	144	73	448	214	279	109
<b>2017</b>												
January .....	1,071	447	S	613	193	52	147	73	449	212	282	110
February .....	1,080	455	S	614	194	54	151	76	452	215	283	110
March .....	1,074	454	S	610	189	52	149	73	452	218	284	111
April .....	1,074	457	S	607	190	51	151	74	445	219	288	113
May .....	1,068	459	S	599	184	51	154	76	442	219	288	113
June .....	1,068	462	S	597	184	50	153	77	442	222	289	113
July .....	1,067	461	S	597	185	50	151	77	441	221	290	113
August .....	1,078	472	S	596	186	51	152	77	448	228	292	116
September .....	1,088	479	S	599	189	53	152	78	445	227	302	121
October (r) .....	1,098	487	S	599	192	53	154	80	445	231	307	123
November (r) .....	1,105	495	S	599	188	53	155	82	446	231	316	129
<b>December (p) .....</b>	<b>1,113</b>	<b>502</b>	<b>S</b>	<b>601</b>	<b>187</b>	<b>53</b>	<b>158</b>	<b>84</b>	<b>447</b>	<b>231</b>	<b>321</b>	<b>134</b>
Average RSE (%) <sup>1</sup> .....	3	3	X	5	7	5	4	5	4	4	5	5
Percent Change <sup>2</sup>												
<b>Dec. 2017 from Nov. 2017 .....</b>	<b>0.7%</b>	<b>1.4%</b>	<b>S</b>	<b>0.3%</b>	<b>-0.5%</b>	<b>0.0%</b>	<b>1.9%</b>	<b>2.4%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>1.6%</b>	<b>3.9%</b>
90 percent confidence interval <sup>3</sup> .....	± 1.1	± 1.7	X	± 1.2	± 1.6	± 2.7	± 1.6	± 1.9	± 2.3	± 3.2	± 1.3	± 1.9
<b>Dec. 2017 from Dec. 2016 .....</b>	<b>4.8%</b>	<b>11.8%</b>	<b>S</b>	<b>-0.2%</b>	<b>-2.1%</b>	<b>0.0%</b>	<b>9.7%</b>	<b>15.1%</b>	<b>-0.2%</b>	<b>7.9%</b>	<b>15.1%</b>	<b>22.9%</b>
90 percent confidence interval <sup>3</sup> .....	± 3.4	± 3.4	X	± 5.2	± 8.6	± 8.2	± 7.3	± 8.4	± 6.3	± 6.0	± 5.0	± 6.2

**Table 4b - Not seasonally adjusted**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2016</b>												
December .....	1,039.0	427.7	10.6	600.7	189.5	51.9	142.1	71.2	435.5	202.3	271.9	102.3
<b>2017</b>												
January .....	1,045.8	424.4	10.5	610.9	191.0	50.7	142.5	68.6	437.4	201.1	275.0	104.0
February .....	1,051.1	430.4	11.2	609.5	190.9	51.6	143.7	69.5	441.0	205.9	275.6	103.5
March .....	1,052.6	435.0	10.4	607.2	187.4	50.7	143.2	67.8	443.1	210.3	278.9	106.1
April .....	1,071.4	450.9	9.9	610.6	189.9	50.4	147.8	70.1	445.1	217.8	288.7	112.5
May .....	1,077.5	461.4	10.0	606.1	185.4	50.7	153.9	75.2	447.2	221.7	291.1	113.8
June .....	1,083.4	473.5	8.9	601.0	185.8	51.0	155.6	79.0	448.0	227.1	294.0	116.5
July .....	1,092.6	482.8	9.1	600.7	187.5	51.4	156.3	81.4	451.7	230.3	297.1	119.7
August .....	1,095.9	493.8	9.5	592.6	186.7	52.3	155.5	81.2	456.2	237.3	297.6	122.9
September .....	1,106.4	498.1	10.3	598.0	189.2	54.0	156.8	82.6	453.4	235.5	306.9	125.9
October (r) .....	1,110.3	500.0	11.5	598.8	193.5	54.5	158.4	84.3	449.1	235.6	309.3	125.6
November (r) .....	1,113.2	500.7	11.1	601.4	190.5	54.7	158.2	85.3	447.7	232.0	316.8	128.8
<b>December (p) .....</b>	<b>1,085.8</b>	<b>478.4</b>	<b>10.0</b>	<b>597.4</b>	<b>185.5</b>	<b>52.3</b>	<b>154.1</b>	<b>81.0</b>	<b>433.6</b>	<b>218.5</b>	<b>312.6</b>	<b>126.7</b>
Average RSE (%) <sup>1</sup> .....	3	3	16	5	7	5	4	5	4	4	5	5

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, January 18, 2018.

Additional information on the survey methodology may be found at <[www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/)>.

# New Privately-Owned Housing Units Completed

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 3927422-62 A-351-853 INV - Investigation -

**Table 5a - Seasonally adjusted annual rate**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2016</b>												
December .....	1,096	765	S	323	102	50	184	120	574	414	236	181
<b>2017</b>												
January .....	1,083	802	S	277	84	67	174	134	611	459	214	142
February .....	1,161	763	S	382	119	40	123	108	575	402	344	213
March .....	1,194	810	S	368	111	60	188	134	629	449	266	167
April .....	1,098	774	S	301	88	60	183	127	591	420	236	167
May .....	1,180	799	S	369	138	54	146	120	600	426	296	199
June .....	1,230	815	S	404	134	61	220	128	541	419	335	207
July .....	1,194	844	S	343	106	75	171	106	637	471	280	192
August .....	1,091	748	S	340	133	56	178	125	528	395	252	172
September .....	1,081	771	S	303	79	53	179	112	593	428	230	178
October (r) .....	1,184	794	S	383	138	60	147	128	628	427	271	179
November (r) .....	1,152	784	S	353	145	55	176	112	602	464	229	153
<b>December (p) .....</b>	<b>1,177</b>	<b>818</b>	<b>S</b>	<b>346</b>	<b>112</b>	<b>62</b>	<b>166</b>	<b>119</b>	<b>601</b>	<b>451</b>	<b>298</b>	<b>186</b>
Average RSE (%) <sup>1</sup> .....	6	6	X	13	18	16	13	10	8	9	9	9
Percent Change <sup>2</sup>												
<b>Dec. 2017 from Nov. 2017 .....</b>	<b>2.2%</b>	<b>4.3%</b>	<b>S</b>	<b>-2.0%</b>	<b>-22.8%</b>	<b>12.7%</b>	<b>-5.7%</b>	<b>6.3%</b>	<b>-0.2%</b>	<b>-2.8%</b>	<b>30.1%</b>	<b>21.6%</b>
90 percent confidence interval <sup>3</sup> .....	± 17.8	± 20.5	X	± 34.5	± 27.2	± 41.2	± 45.2	± 25.8	± 25.1	± 31.1	± 43.2	± 38.4
<b>Dec. 2017 from Dec. 2016 .....</b>	<b>7.4%</b>	<b>6.9%</b>	<b>S</b>	<b>7.1%</b>	<b>9.8%</b>	<b>24.0%</b>	<b>-9.8%</b>	<b>-0.8%</b>	<b>4.7%</b>	<b>8.9%</b>	<b>26.3%</b>	<b>2.8%</b>
90 percent confidence interval <sup>3</sup> .....	± 13.0	± 15.2	X	± 28.2	± 51.5	± 28.8	± 15.5	± 11.5	± 19.6	± 25.5	± 23.6	± 14.7

**Table 5b - Not seasonally adjusted**

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
2016 Annual .....	1,059.7	738.4	10.4	311.0	99.5	55.2	164.0	116.8	551.3	402.9	245.0	163.5
2017 Annual (p) .....	1,152.3	794.0	10.7	347.7	115.8	58.5	171.6	120.6	593.8	434.7	271.1	180.1
RSE (%) .....	2	1	17	5	5	5	4	2	2	2	3	2
<b>Year to year percent change <sup>2</sup> .....</b>	<b>8.7%</b>	<b>7.5%</b>	<b>2.9%</b>	<b>11.8%</b>	<b>16.5%</b>	<b>6.1%</b>	<b>4.6%</b>	<b>3.3%</b>	<b>7.7%</b>	<b>7.9%</b>	<b>10.6%</b>	<b>10.2%</b>
90 percent confidence interval <sup>3</sup> .....	± 3.1	± 3.1	± 26.2	± 8.8	± 10.4	± 8.6	± 7.6	± 4.2	± 4.2	± 4.2	± 5.2	± 6.2
<b>2016</b>												
December .....	103.6	75.0	0.6	28.0	9.5	5.0	17.7	12.2	54.0	40.1	22.4	17.7
<b>2017</b>												
January .....	74.6	55.0	0.3	19.4	5.6	4.4	11.3	8.5	43.5	32.9	14.3	9.2
February .....	78.9	52.7	1.1	25.1	7.5	2.3	7.6	6.6	40.6	29.2	23.1	14.5
March .....	92.0	62.4	1.3	28.3	8.0	4.0	13.3	9.2	50.0	36.1	20.7	13.0
April .....	83.4	60.1	1.6	21.7	6.3	4.3	13.9	9.9	45.3	33.0	17.8	12.8
May .....	98.1	66.9	1.0	30.3	11.6	4.8	11.9	9.8	49.6	35.3	25.0	17.0
June .....	109.9	71.3	1.1	37.5	12.5	5.7	19.2	10.7	48.2	36.9	30.0	18.1
July .....	102.2	69.4	0.6	32.1	9.0	6.2	15.1	8.9	54.0	38.4	24.1	15.8
August .....	102.1	65.6	0.3	36.2	13.1	4.9	16.8	11.2	48.7	34.5	23.6	15.1
September .....	96.2	68.2	0.7	27.3	8.0	5.6	16.7	10.6	51.1	36.3	20.5	15.7
October (r) .....	106.9	73.3	0.6	33.1	12.1	5.4	14.5	12.9	55.9	38.5	24.5	16.5
November (r) .....	96.2	68.5	1.1	26.6	11.7	4.9	15.1	10.3	50.0	39.6	19.4	13.7
<b>December (p) .....</b>	<b>111.7</b>	<b>80.6</b>	<b>1.1</b>	<b>30.0</b>	<b>10.4</b>	<b>6.0</b>	<b>16.2</b>	<b>12.1</b>	<b>56.9</b>	<b>43.9</b>	<b>28.2</b>	<b>18.5</b>
Average RSE (%) <sup>1</sup> .....	6	6	47	13	18	16	13	10	8	9	9	9

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, January 18, 2018.

Additional information on the survey methodology may be found at <[www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/)>.

# EXHIBIT I-23

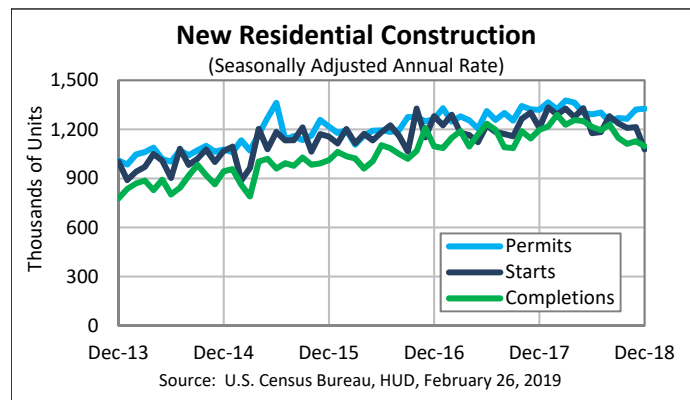
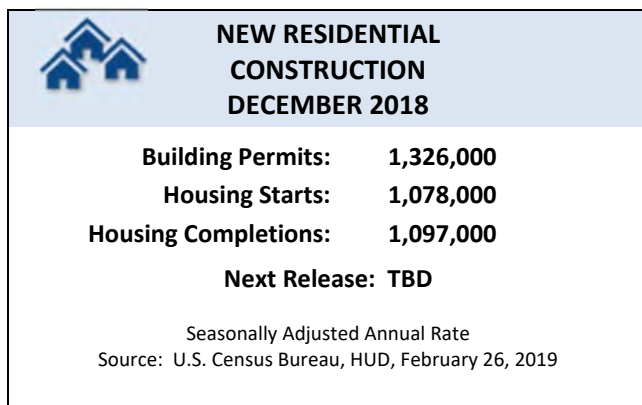
FOR RELEASE AT 8:30 AM EST, TUESDAY, FEBRUARY 26, 2019

**MONTHLY NEW RESIDENTIAL CONSTRUCTION, DECEMBER 2018**

Release Number: CB19-17

*Data collection and processing were delayed for this indicator release due to the lapse in federal funding from December 22, 2018 through January 25, 2019. Although released for the first time this month, the December 2018 estimates of housing units authorized by building permits include late reports and corrections normally associated with the first revision to the estimates. While response rates were consistent with normal levels, delays in data collection could make it more difficult to determine exact start and completion dates. However, processing and data quality were monitored and no significant issues were identified.*

**February 26, 2019** - The U.S. Census Bureau and the U.S. Department of Housing and Urban Development jointly announced the following new residential construction statistics for December 2018:

**Building Permits**

Privately-owned housing units authorized by building permits in December were at a seasonally adjusted annual rate of 1,326,000. This is 0.3 percent ( $\pm 1.2$  percent)\* above the revised November rate of 1,322,000 and is 0.5 percent ( $\pm 1.1$  percent)\* above the December 2017 rate of 1,320,000. Single-family authorizations in December were at a rate of 829,000; this is 2.2 percent ( $\pm 0.7$  percent) below the revised November figure of 848,000. Authorizations of units in buildings with five units or more were at a rate of 460,000 in December.

An estimated 1,310,700 housing units were authorized by building permits in 2018. This is 2.2 percent ( $\pm 0.6$ %) above the 2017 figure of 1,282,000.

**Housing Starts**

Privately-owned housing starts in December were at a seasonally adjusted annual rate of 1,078,000. This is 11.2 percent ( $\pm 14.0$  percent)\* below the revised November estimate of 1,214,000 and is 10.9 percent ( $\pm 16.1$  percent)\* below the December 2017 rate of 1,210,000. Single-family housing starts in December were at a rate of 758,000; this is 6.7 percent ( $\pm 15.3$  percent)\* below the revised November figure of 812,000. The December rate for units in buildings with five units or more was 302,000.

An estimated 1,246,600 housing units were started in 2018. This is 3.6 percent ( $\pm 2.1$ %) above the 2017 figure of 1,203,000.

**Data Inquiries**

Economic Indicators Division, Residential Construction Branch  
301-763-5160  
[eid.rcb.customer.service@census.gov](mailto:eid.rcb.customer.service@census.gov)

**Media Inquiries**

Public Information Office  
301-763-3030  
[pio@census.gov](mailto:pio@census.gov)



U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU

Prepared by: [tsingh11@wileyrein.com](mailto:tsingh11@wileyrein.com), Filed Date: 1/7/20 11:04 PM, Submission Status: Approved



## Housing Completions

Privately-owned housing completions in December were at a seasonally adjusted annual rate of 1,097,000. This is 2.7 percent ( $\pm 10.0$  percent)\* below the revised November estimate of 1,128,000 and is 8.4 percent ( $\pm 12.2$  percent)\* below the December 2017 rate of 1,197,000. Single-family housing completions in December were at a rate of 790,000; this is 0.1 percent ( $\pm 14.0$  percent)\* above the revised November rate of 789,000. The December rate for units in buildings with five units or more was 296,000.

An estimated 1,191,700 housing units were completed in 2018. This is 3.4 percent ( $\pm 3.8\%$ ) above the 2017 figure of 1,152,900.

The U.S. Census Bureau is updating its 2019 economic indicator release calendar in coordination with other agencies and the Office of Management and Budget to address the impacts of the recent lapse in federal funding. Please refer to [www.census.gov/economic-indicators/](http://www.census.gov/economic-indicators/) for the latest information on the rescheduled release dates.

## EXPLANATORY NOTES

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take three months to establish an underlying trend for building permit authorizations, six months for total starts, and six months for total completions. The statistics in this release are estimated from sample surveys and are subject to sampling variability as well as nonsampling error including bias and variance from response, nonreporting, and undercoverage. Estimated relative standard errors of the most recent data are shown in the tables.

Whenever a statement such as "2.5 percent ( $\pm 3.2$  percent) above" appears in the text, this indicates the range (-0.7 to +5.7 percent) in which the actual percentage change is likely to have occurred. All ranges given for percentage changes are 90 percent confidence intervals and account only for sampling variability. If a range does not contain zero, the change is statistically significant. If it does contain zero, the change is not statistically significant; that is, it is uncertain whether there was an increase or decrease. The same policies apply to the confidence intervals for percentage changes shown in the tables. On average, the preliminary seasonally adjusted estimates of total building permits, housing starts and housing completions are revised 2.4 percent or less. Explanations of confidence intervals and sampling variability can be found on our website.

[www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/) >

## API

The Census Bureau's application programming interface lets developers create custom apps to reach new users and makes key demographic, socio-economic and housing statistics more accessible than ever before.

[www.census.gov/developers/](http://www.census.gov/developers/)

## FRED Mobile App



Receive the latest updates on the nation's key economic indicators by downloading the FRED App <https://fred.stlouisfed.org/fred-mobile/> for both Apple and Android devices. FRED, the signature database of the Federal Reserve Bank of St. Louis, now incorporates the Census Bureau's 13 economic indicators.

###

\* The 90 percent confidence interval includes zero. In such cases, there is insufficient statistical evidence to conclude that the actual change is different from zero.

## Data Inquiries

Economic Indicators Division, Residential Construction Branch  
301-763-5160  
[eid.rcb.customer.service@census.gov](mailto:eid.rcb.customer.service@census.gov)

## Media Inquiries

Public Information Office  
301-763-3030  
[pio@census.gov](mailto:pio@census.gov)



U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU

Prepared by: [tsingh11@wileyrein.com](mailto:tsingh11@wileyrein.com), Filed Date: 1/7/20 11:04 PM, Submission Status: Approved



# New Privately-Owned Housing Units Authorized in Permit-Issuing Places

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 9927422-62 A-351-853 INV - Investigation -

Table 1a - Seasonally adjusted annual rate

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2017</b>												
December .....	1,320	877	38	405	144	53	220	133	589	463	367	228
<b>2018</b>												
January .....	1,366	870	45	451	115	48	176	124	697	470	378	228
February .....	1,323	886	46	391	145	63	192	127	617	471	369	225
March .....	1,377	851	40	486	135	51	203	119	652	456	387	225
April .....	1,364	863	41	460	95	51	195	123	727	479	347	210
May .....	1,301	843	34	424	134	57	209	122	625	458	333	206
June .....	1,292	853	36	403	119	56	173	117	670	475	330	205
July .....	1,303	873	28	402	125	56	181	118	665	483	332	216
August .....	1,249	827	35	387	102	51	190	119	650	450	307	207
September .....	1,270	854	40	376	95	57	171	119	664	459	340	219
October .....	1,265	847	36	382	120	62	186	117	641	461	318	207
November (r) .....	1,322	848	39	435	117	53	176	115	702	474	327	206
<b>December (p+)</b> .....	<b>1,326</b>	<b>829</b>	<b>37</b>	<b>460</b>	<b>110</b>	<b>57</b>	<b>145</b>	<b>110</b>	<b>688</b>	<b>455</b>	<b>383</b>	<b>207</b>
Average RSE (%) <sup>1</sup> .....	2	2	6	2	4	5	3	4	1	2	2	3
Percent Change <sup>2</sup>												
<b>Dec. 2018 from Nov. 2018</b> .....	<b>0.3%</b>	<b>-2.2%</b>	<b>-5.1%</b>	<b>5.7%</b>	<b>-6.0%</b>	<b>7.5%</b>	<b>-17.6%</b>	<b>-4.3%</b>	<b>-2.0%</b>	<b>-4.0%</b>	<b>17.1%</b>	<b>0.5%</b>
90 percent confidence interval <sup>3</sup> .....	± 1.2	± 0.7	± 4.3	± 3.1	± 4.1	± 9.6	± 2.7	± 2.5	± 0.5	± 1.2	± 4.8	± 1.4
<b>Dec. 2018 from Dec. 2017</b> .....	<b>0.5%</b>	<b>-5.5%</b>	<b>-2.6%</b>	<b>13.6%</b>	<b>-23.6%</b>	<b>7.5%</b>	<b>-34.1%</b>	<b>-17.3%</b>	<b>16.8%</b>	<b>-1.7%</b>	<b>4.4%</b>	<b>-9.2%</b>
90 percent confidence interval <sup>3</sup> .....	± 1.1	± 1.8	± 5.1	± 2.2	± 3.8	± 13.4	± 1.9	± 3.3	± 2.1	± 1.9	± 1.9	± 2.0

Table 1b - Not seasonally adjusted

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
2017 Annual .....	1,282.0	820.0	37.2	424.8	123.6	54.2	195.1	121.5	626.9	447.6	336.4	196.7
2018 Annual (p) .....	1,310.7	852.7	37.6	420.4	117.0	55.2	184.7	118.8	663.4	466.2	345.5	212.4
RSE (%) .....	1	2	3	1	2	4	3	4	1	2	2	3
<b>Year to year percent change<sup>2</sup></b> .....	<b>2.2%</b>	<b>4.0%</b>	<b>1.1%</b>	<b>-1.0%</b>	<b>-5.3%</b>	<b>1.8%</b>	<b>-5.3%</b>	<b>-2.2%</b>	<b>5.8%</b>	<b>4.2%</b>	<b>2.7%</b>	<b>8.0%</b>
90 percent confidence interval <sup>3</sup> .....	± 0.6	± 0.5	± 3.5	± 1.1	± 2.2	± 3.5	± 2.3	± 1.5	± 0.4	± 0.4	± 1.9	± 2.0
<b>2017</b>												
December .....	94.8	56.5	2.8	35.5	11.7	3.5	13.0	7.0	42.6	30.7	27.4	15.4
<b>2018</b>												
January .....	96.7	61.8	3.2	31.7	7.5	3.0	9.2	6.0	53.7	36.9	26.3	15.9
February .....	92.1	62.2	3.2	26.7	8.2	3.4	9.7	6.9	47.7	35.9	26.4	15.9
March .....	117.6	75.8	3.3	38.4	10.5	4.2	15.9	10.1	57.3	41.7	33.9	19.8
April .....	119.9	79.1	3.3	37.4	7.8	4.6	18.2	11.9	64.0	43.4	29.9	19.2
May .....	125.0	84.4	3.0	37.6	13.5	5.7	21.6	13.3	58.4	44.3	31.5	20.9
June .....	121.6	81.7	3.4	36.6	11.5	5.5	16.5	11.8	61.1	43.8	32.6	20.5
July .....	113.0	77.8	2.4	32.8	11.1	5.1	16.5	11.1	57.9	42.2	27.5	19.4
August .....	116.9	78.5	3.5	35.0	9.0	4.8	19.7	12.1	59.8	42.1	28.5	19.5
September .....	99.4	65.0	3.3	31.1	8.2	4.9	15.2	10.0	50.2	34.0	25.7	16.1
October .....	112.6	73.9	3.2	35.4	10.8	6.0	19.5	11.6	54.7	38.8	27.6	17.5
November (r) .....	101.0	60.9	3.1	37.0	9.5	4.2	13.9	8.5	52.2	33.7	25.5	14.5
<b>December (p+)</b> .....	<b>95.4</b>	<b>53.4</b>	<b>2.6</b>	<b>39.4</b>	<b>9.1</b>	<b>3.7</b>	<b>8.3</b>	<b>5.8</b>	<b>49.3</b>	<b>29.9</b>	<b>28.6</b>	<b>13.9</b>
Average RSE (%) <sup>1</sup> .....	2	2	6	2	4	5	3	4	1	2	2	3

p Preliminary

p+ Although released for the first time this month, data for December 2018 include late reports and corrections normally associated with the first revision.

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> If the 90 percent confidence interval includes zero, there is insufficient evidence to conclude that the actual change is different from zero

Note: Year-to-date permits estimates reflect revisions not distributed to months.

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, February 26, 2019.

Additional information on the survey methodology may be found at [www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/).

# New Privately-Owned Housing Units Authorized, but Not Started, at End of Period

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 3927422-62 A-351-853 INV - Investigation -

Table 2a - Seasonally adjusted

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2017</b>												
December .....	159	87	S	70	15	6	23	10	76	49	45	22
<b>2018</b>												
January .....	163	90	S	70	14	6	23	10	80	51	46	23
February .....	160	89	S	69	13	6	23	11	79	50	45	22
March .....	160	89	S	68	14	7	22	10	81	51	43	21
April .....	164	91	S	71	12	7	26	13	85	50	41	21
May .....	160	87	S	71	14	7	25	12	79	47	42	21
June .....	163	89	S	72	14	7	25	12	83	49	41	21
July .....	170	94	S	74	16	8	25	12	84	52	45	22
August .....	167	92	S	73	15	8	25	11	85	51	42	22
September .....	168	91	S	75	13	7	24	10	89	53	42	21
October (r) .....	168	91	S	75	14	7	23	10	91	57	40	17
November (r) .....	175	97	S	76	13	6	25	11	95	60	42	20
<b>December (p) .....</b>	<b>187</b>	<b>101</b>	<b>S</b>	<b>84</b>	<b>12</b>	<b>6</b>	<b>28</b>	<b>12</b>	<b>97</b>	<b>61</b>	<b>50</b>	<b>22</b>
Average RSE (%) <sup>1</sup> .....	6	6	X	10	13	17	18	16	7	7	10	12
Percent Change <sup>2</sup>												
<b>Dec. 2018 from Nov. 2018 .....</b>	<b>6.9%</b>	<b>4.1%</b>	<b>S</b>	<b>10.5%</b>	<b>-7.7%</b>	<b>0.0%</b>	<b>12.0%</b>	<b>9.1%</b>	<b>2.1%</b>	<b>1.7%</b>	<b>19.0%</b>	<b>10.0%</b>
90 percent confidence interval <sup>3</sup> .....	± 6.6	± 7.2	X	± 8.4	± 11.3	± 11.7	± 8.3	± 14.9	± 10.6	± 10.6	± 9.6	± 9.4
<b>Dec. 2018 from Dec. 2017 .....</b>	<b>17.6%</b>	<b>16.1%</b>	<b>S</b>	<b>20.0%</b>	<b>-20.0%</b>	<b>0.0%</b>	<b>21.7%</b>	<b>20.0%</b>	<b>27.6%</b>	<b>24.5%</b>	<b>11.1%</b>	<b>0.0%</b>
90 percent confidence interval <sup>3</sup> .....	± 9.3	± 9.3	X	± 15.1	± 17.2	± 32.3	± 32.6	± 21.8	± 16.3	± 13.6	± 9.0	± 14.2

Table 2b - Not seasonally adjusted

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2017</b>												
December .....	153.4	80.1	1.9	71.4	15.2	5.2	20.1	8.0	73.8	45.9	44.2	21.0
<b>2018</b>												
January .....	157.5	85.8	2.9	68.7	13.6	5.6	21.5	8.5	77.9	48.9	44.4	22.8
February .....	157.9	86.9	2.4	68.6	13.6	6.5	22.9	10.3	78.0	48.8	43.4	21.3
March .....	164.9	93.9	2.8	68.1	14.0	7.0	24.7	11.8	82.0	53.9	44.2	21.2
April .....	164.7	91.1	2.1	71.4	11.6	6.8	26.9	13.8	83.8	50.0	42.5	20.5
May .....	165.7	92.8	1.9	71.0	14.4	7.5	25.4	12.8	81.8	49.7	44.1	22.8
June .....	173.6	95.4	1.6	76.6	15.0	8.0	26.0	13.2	88.1	51.8	44.5	22.4
July .....	171.2	94.4	2.1	74.8	16.2	8.2	24.0	11.2	86.3	52.9	44.7	22.1
August .....	171.7	95.4	2.2	74.1	15.5	7.6	25.6	12.8	87.2	52.5	43.4	22.6
September .....	165.9	89.2	2.2	74.5	12.4	7.3	24.5	10.4	89.6	52.1	39.4	19.4
October (r) .....	162.4	88.4	1.8	72.2	12.4	6.4	23.8	10.2	90.1	55.0	36.1	16.8
November (r) .....	166.7	92.5	2.0	72.2	11.4	5.9	24.3	9.6	90.7	58.2	40.2	18.8
<b>December (p) .....</b>	<b>183.1</b>	<b>94.5</b>	<b>2.1</b>	<b>86.5</b>	<b>12.5</b>	<b>5.9</b>	<b>24.8</b>	<b>10.0</b>	<b>95.6</b>	<b>57.2</b>	<b>50.2</b>	<b>21.4</b>
Average RSE (%) <sup>1</sup> .....	6	6	26	10	13	17	18	16	7	7	10	12

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Note: These data represent the number of housing units authorized in all months up to and including the last day of the reporting period and not started as of that date without regard to the months of original permit issuance. Cancelled, abandoned, expired, and revoked permits are excluded.

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, February 26, 2019.

Additional information on the survey methodology may be found at [www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/).

# New Privately-Owned Housing Units Started

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 9927422-62 A-351-853 INV - Investigation -

Table 3a - Seasonally adjusted annual rate

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2017</b>												
December .....	1,210	847	S	359	88	49	170	124	594	443	358	231
<b>2018</b>												
January .....	1,334	886	S	435	116	62	145	122	684	474	389	228
February .....	1,290	900	S	372	132	65	154	109	615	476	389	250
March .....	1,327	882	S	431	120	61	182	140	630	440	395	241
April .....	1,276	898	S	357	96	57	160	105	669	516	351	220
May .....	1,329	938	S	379	106	65	239	157	652	496	332	220
June .....	1,177	851	S	316	104	70	164	113	564	446	345	222
July .....	1,184	861	S	317	103	67	178	135	624	456	279	203
August .....	1,280	890	S	373	99	66	187	118	657	477	337	229
September .....	1,237	879	S	349	141	60	171	129	568	444	357	246
October (r) .....	1,209	863	S	327	91	73	186	121	592	426	340	243
November (r) .....	1,214	812	S	387	107	64	144	113	670	446	293	189
<b>December (p) .....</b>	<b>1,078</b>	<b>758</b>	<b>S</b>	<b>302</b>	<b>107</b>	<b>51</b>	<b>125</b>	<b>97</b>	<b>630</b>	<b>456</b>	<b>216</b>	<b>154</b>
Average RSE (%) <sup>1</sup> .....	6	5	X	13	17	16	12	10	8	7	10	9
Percent Change <sup>2</sup>												
<b>Dec. 2018 from Nov. 2018 .....</b>	<b>-11.2%</b>	<b>-6.7%</b>	<b>S</b>	<b>-22.0%</b>	<b>0.0%</b>	<b>-20.3%</b>	<b>-13.2%</b>	<b>-14.2%</b>	<b>-6.0%</b>	<b>2.2%</b>	<b>-26.3%</b>	<b>-18.5%</b>
90 percent confidence interval <sup>3</sup> .....	± 14.0	± 15.3	X	± 18.9	± 28.1	± 23.0	± 26.8	± 22.8	± 23.4	± 26.3	± 15.7	± 14.7
<b>Dec. 2018 from Dec. 2017 .....</b>	<b>-10.9%</b>	<b>-10.5%</b>	<b>S</b>	<b>-15.9%</b>	<b>21.6%</b>	<b>4.1%</b>	<b>-26.5%</b>	<b>-21.8%</b>	<b>6.1%</b>	<b>2.9%</b>	<b>-39.7%</b>	<b>-33.3%</b>
90 percent confidence interval <sup>3</sup> .....	± 16.1	± 14.7	X	± 25.3	± 45.8	± 32.5	± 31.8	± 25.0	± 29.8	± 26.4	± 13.3	± 10.7

Table 3b - Not seasonally adjusted

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
2017 Annual .....	1,203.0	848.9	11.4	342.7	111.4	62.0	179.6	130.2	598.7	453.0	313.2	203.8
2018 Annual (p) .....	1,246.6	872.8	14.0	359.7	110.4	64.1	171.8	123.1	628.9	463.9	335.4	221.8
RSE (%) .....	2	1	22	6	5	6	3	2	2	2	3	2
<b>Year to year percent change<sup>2</sup> .....</b>	<b>3.6%</b>	<b>2.8%</b>	<b>23.5%</b>	<b>5.0%</b>	<b>-0.9%</b>	<b>3.4%</b>	<b>-4.3%</b>	<b>-5.5%</b>	<b>5.0%</b>	<b>2.4%</b>	<b>7.1%</b>	<b>8.8%</b>
90 percent confidence interval <sup>3</sup> .....	± 2.1	± 1.8	± 31.5	± 6.2	± 6.8	± 9.2	± 4.9	± 4.4	± 2.8	± 2.3	± 4.4	± 3.8
<b>2017</b>												
December .....	81.4	55.1	0.3	26.1	6.2	3.4	10.1	6.8	40.4	29.4	24.7	15.5
<b>2018</b>												
January .....	91.6	59.9	0.9	30.8	7.5	3.6	7.2	5.5	50.8	36.0	26.1	14.8
February .....	89.7	62.4	1.2	26.1	8.1	3.4	8.1	5.0	45.6	35.9	27.9	18.1
March .....	107.2	72.5	1.1	33.5	9.2	4.6	12.9	9.6	52.4	37.6	32.7	20.8
April .....	117.5	85.1	1.8	30.6	8.7	5.3	15.1	10.3	61.4	48.3	32.4	21.1
May .....	123.7	88.7	1.0	33.9	9.9	6.2	24.0	16.6	59.0	45.0	30.9	20.9
June .....	112.0	83.5	0.8	27.7	10.2	7.2	16.4	11.9	52.8	42.5	32.6	21.8
July .....	111.9	81.8	0.6	29.5	10.1	6.7	17.9	14.0	57.2	41.5	26.6	19.6
August .....	113.8	80.8	1.4	31.6	8.9	6.1	16.7	10.9	58.4	43.2	29.7	20.5
September .....	109.7	75.0	0.9	33.8	13.2	5.3	16.7	12.7	48.3	36.3	31.5	20.8
October (r) .....	105.7	74.9	1.7	29.1	8.7	7.2	17.9	12.2	50.6	35.8	28.4	19.8
November (r) .....	92.2	59.1	1.3	31.8	8.6	5.0	11.8	9.2	49.8	31.4	22.0	13.4
<b>December (p) .....</b>	<b>71.7</b>	<b>49.0</b>	<b>1.3</b>	<b>21.4</b>	<b>7.4</b>	<b>3.4</b>	<b>7.1</b>	<b>5.0</b>	<b>42.7</b>	<b>30.4</b>	<b>14.6</b>	<b>10.2</b>
Average RSE (%) <sup>1</sup> .....	6	5	45	13	17	16	12	10	8	7	10	9

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, February 26, 2019.

Additional information on the survey methodology may be found at [www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/).

# New Privately-Owned Housing Units Under Construction at End of Period

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 3927422-62 A-351-853 INV - Investigation -

Table 4a - Seasonally adjusted

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2017</b>												
December .....	1,105	497	S	598	185	52	154	82	445	230	321	133
<b>2018</b>												
January .....	1,117	502	S	604	189	53	152	82	452	233	324	134
February .....	1,119	503	S	605	189	52	152	80	451	234	327	137
March .....	1,125	508	S	606	185	53	156	83	450	231	334	141
April .....	1,123	515	S	596	181	53	153	82	454	240	335	140
May .....	1,126	519	S	595	182	54	156	83	453	242	335	140
June .....	1,120	518	S	590	187	57	154	82	448	241	331	138
July .....	1,118	522	S	584	187	59	154	83	450	242	327	138
August .....	1,125	520	S	592	188	60	154	82	450	238	333	140
September .....	1,132	524	S	596	190	60	154	82	451	239	337	143
October (r) .....	1,137	529	S	595	187	61	153	81	458	242	339	145
November (r) .....	1,141	529	S	599	186	62	151	80	465	241	339	146
<b>December (p) .....</b>	<b>1,144</b>	<b>534</b>	<b>S</b>	<b>597</b>	<b>187</b>	<b>63</b>	<b>152</b>	<b>81</b>	<b>473</b>	<b>246</b>	<b>332</b>	<b>144</b>
Average RSE (%) <sup>1</sup> .....	3	3	X	6	8	7	6	6	3	4	6	6
Percent Change <sup>2</sup>												
<b>Dec. 2018 from Nov. 2018 .....</b>	<b>0.3%</b>	<b>0.9%</b>	<b>S</b>	<b>-0.3%</b>	<b>0.5%</b>	<b>1.6%</b>	<b>0.7%</b>	<b>1.3%</b>	<b>1.7%</b>	<b>2.1%</b>	<b>-2.1%</b>	<b>-1.4%</b>
90 percent confidence interval <sup>3</sup> .....	± 1.0	± 1.2	X	± 1.6	± 1.2	± 1.7	± 2.1	± 2.8	± 2.0	± 1.9	± 1.2	± 2.2
<b>Dec. 2018 from Dec. 2017 .....</b>	<b>3.5%</b>	<b>7.4%</b>	<b>S</b>	<b>-0.2%</b>	<b>1.1%</b>	<b>21.2%</b>	<b>-1.3%</b>	<b>-1.2%</b>	<b>6.3%</b>	<b>7.0%</b>	<b>3.4%</b>	<b>8.3%</b>
90 percent confidence interval <sup>3</sup> .....	± 3.5	± 3.9	X	± 5.2	± 9.8	± 14.6	± 7.6	± 7.8	± 5.8	± 5.4	± 5.5	± 6.0

Table 4b - Not seasonally adjusted

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2017</b>												
December .....	1,080.5	476.5	10.4	593.7	184.6	52.1	151.8	80.6	431.0	217.5	313.1	126.3
<b>2018</b>												
January .....	1,088.5	476.2	10.5	601.9	186.8	51.4	146.6	77.3	438.9	220.8	316.3	126.7
February .....	1,090.7	477.5	11.2	602.0	186.2	50.3	146.6	74.7	439.0	223.0	318.9	129.5
March .....	1,102.4	486.6	11.3	604.5	182.5	50.9	150.6	77.4	441.6	223.2	327.6	135.2
April .....	1,119.2	508.3	12.0	598.8	180.5	52.2	148.7	77.6	454.8	239.1	335.1	139.4
May .....	1,135.5	522.9	11.9	600.6	183.1	53.9	156.6	82.4	457.7	244.7	338.1	141.9
June .....	1,135.8	531.2	11.8	592.8	187.7	57.2	157.2	84.7	455.3	247.7	335.7	141.6
July .....	1,143.3	545.7	11.7	585.9	189.3	60.5	158.1	87.5	461.6	253.0	334.3	144.7
August .....	1,141.4	542.6	12.4	586.4	189.3	62.2	156.5	85.2	457.7	248.0	337.9	147.2
September .....	1,150.5	544.9	11.9	593.7	191.5	61.9	156.3	84.9	460.2	248.7	342.5	149.4
October (r) .....	1,151.9	544.1	12.6	595.2	189.5	63.4	157.0	84.7	462.6	247.3	342.8	148.7
November (r) .....	1,149.7	534.1	12.9	602.7	188.0	62.9	155.9	84.1	465.3	240.5	340.5	146.6
<b>December (p) .....</b>	<b>1,117.7</b>	<b>510.2</b>	<b>13.2</b>	<b>594.2</b>	<b>185.8</b>	<b>62.1</b>	<b>150.2</b>	<b>79.3</b>	<b>457.7</b>	<b>232.2</b>	<b>323.9</b>	<b>136.6</b>
Average RSE (%) <sup>1</sup> .....	3	3	16	6	8	7	6	6	3	4	6	6

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, February 26, 2019.

Additional information on the survey methodology may be found at <[www.census.gov/construction/nrc/how the data are collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/)>.

# New Privately-Owned Housing Units Completed

(Thousands of Units. Detail may not add to total because of rounding.)

Barcode: 9927422-62 A-351-853 INV - Investigation -

Table 5a - Seasonally adjusted annual rate

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
<b>2017</b>												
December .....	1,197	837	S	347	115	65	175	120	614	461	293	191
<b>2018</b>												
January .....	1,218	859	S	348	114	60	169	132	596	445	339	222
February .....	1,289	882	S	400	138	69	160	129	655	462	336	222
March .....	1,229	862	S	356	150	65	154	108	595	467	330	222
April .....	1,257	797	S	447	144	53	196	126	613	408	304	210
May .....	1,251	875	S	364	90	49	169	140	673	472	319	214
June .....	1,216	867	S	342	76	47	170	119	610	452	360	249
July .....	1,195	829	S	360	108	49	183	129	594	452	310	199
August .....	1,230	939	S	286	90	48	205	148	649	534	286	209
September .....	1,148	835	S	304	117	59	175	127	560	436	296	213
October (r) .....	1,111	820	S	282	90	53	178	124	542	419	301	224
November (r) .....	1,128	789	S	327	133	62	138	110	545	441	312	176
<b>December (p) .....</b>	<b>1,097</b>	<b>790</b>	<b>S</b>	<b>296</b>	<b>81</b>	<b>49</b>	<b>131</b>	<b>107</b>	<b>555</b>	<b>412</b>	<b>330</b>	<b>222</b>
Average RSE (%) <sup>1</sup> .....	5	5	X	15	20	15	10	9	7	8	9	9
Percent Change <sup>2</sup>												
<b>Dec. 2018 from Nov. 2018 .....</b>	<b>-2.7%</b>	<b>0.1%</b>	<b>S</b>	<b>-9.5%</b>	<b>-39.1%</b>	<b>-21.0%</b>	<b>-5.1%</b>	<b>-2.7%</b>	<b>1.8%</b>	<b>-6.6%</b>	<b>5.8%</b>	<b>26.1%</b>
90 percent confidence interval <sup>3</sup> .....	± 10.0	± 14.0	X	± 25.6	± 20.5	± 22.7	± 22.8	± 16.8	± 17.7	± 20.3	± 23.4	± 32.0
<b>Dec. 2018 from Dec. 2017 .....</b>	<b>-8.4%</b>	<b>-5.6%</b>	<b>S</b>	<b>-14.7%</b>	<b>-29.6%</b>	<b>-24.6%</b>	<b>-25.1%</b>	<b>-10.8%</b>	<b>-9.6%</b>	<b>-10.6%</b>	<b>12.6%</b>	<b>16.2%</b>
90 percent confidence interval <sup>3</sup> .....	± 12.2	± 14.1	X	± 23.0	± 22.1	± 16.2	± 18.7	± 17.7	± 19.9	± 23.2	± 20.9	± 22.9

Table 5b - Not seasonally adjusted

Period	United States				Northeast		Midwest		South		West	
	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
2017 Annual .....	1,152.9	795.3	10.7	346.9	115.7	59.0	172.3	120.5	594.7	435.5	270.3	180.4
2018 Annual (p) .....	1,191.7	844.3	9.1	338.3	108.7	54.5	169.2	124.8	596.7	449.9	317.2	215.1
RSE (%) .....	2	1	24	7	6	4	4	3	3	2	4	2
<b>Year to year percent change <sup>2</sup> .....</b>	<b>3.4%</b>	<b>6.2%</b>	<b>-14.9%</b>	<b>-2.5%</b>	<b>-6.1%</b>	<b>-7.5%</b>	<b>-1.8%</b>	<b>3.6%</b>	<b>0.3%</b>	<b>3.3%</b>	<b>17.4%</b>	<b>19.3%</b>
90 percent confidence interval <sup>3</sup> .....	± 3.8	± 2.5	± 25.3	± 11.5	± 12.9	± 7.8	± 6.1	± 4.5	± 5.1	± 3.6	± 7.2	± 5.5
<b>2017</b>												
December .....	113.4	82.4	1.2	29.8	10.5	6.2	16.9	12.2	58.5	45.3	27.6	18.7
<b>2018</b>												
January .....	84.0	59.8	0.7	23.5	8.0	4.4	11.1	8.6	42.3	32.1	22.6	14.7
February .....	88.6	61.3	0.4	26.9	8.7	4.1	10.0	8.0	46.8	33.8	23.0	15.4
March .....	94.9	67.1	0.8	27.0	11.0	4.6	10.8	7.3	47.6	37.9	25.5	17.3
April .....	94.7	61.0	0.9	32.8	10.2	3.5	15.0	9.9	46.6	31.6	22.9	16.0
May .....	105.7	74.1	1.0	30.6	7.7	4.2	14.2	11.7	56.7	39.9	27.1	18.3
June .....	108.6	75.6	0.7	32.2	7.5	4.8	14.7	9.9	53.6	38.7	32.7	22.2
July .....	101.9	67.6	0.5	33.7	9.5	3.9	15.9	10.8	49.9	36.6	26.7	16.3
August .....	113.9	83.6	0.5	29.9	8.5	4.1	19.5	13.6	59.8	47.8	26.2	18.1
September .....	100.9	72.7	0.8	27.3	11.0	5.8	16.4	12.0	47.3	36.1	26.2	18.7
October (r) .....	100.2	75.5	0.8	23.9	8.4	5.3	17.1	12.5	47.7	37.2	27.1	20.5
November (r) .....	94.7	68.7	1.0	25.0	11.0	5.5	12.0	9.8	46.0	38.0	25.8	15.4
<b>December (p) .....</b>	<b>103.7</b>	<b>77.2</b>	<b>1.0</b>	<b>25.5</b>	<b>7.2</b>	<b>4.5</b>	<b>12.7</b>	<b>10.6</b>	<b>52.4</b>	<b>40.0</b>	<b>31.4</b>	<b>22.1</b>
Average RSE (%) <sup>1</sup> .....	5	5	39	15	20	15	10	9	7	8	9	9

p Preliminary

r Revised

S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards

X Not applicable

<sup>1</sup> Average relative standard error for the latest 6-month period

<sup>2</sup> Computed using unrounded data

<sup>3</sup> See the Explanatory Notes in the accompanying text for an explanation of 90 percent confidence intervals

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, New Residential Construction, February 26, 2019.

Additional information on the survey methodology may be found at <[www.census.gov/construction/nrc/how\\_the\\_data\\_are\\_collected/](http://www.census.gov/construction/nrc/how_the_data_are_collected/)>.

# EXHIBIT I-24

# A Fifth of China's Homes Are Empty. That's 50 Million Apartments

 [bloomberg.com/news/articles/2018-11-08/a-fifth-of-china-s-homes-are-empty-that-s-50-million-apartments](https://www.bloomberg.com/news/articles/2018-11-08/a-fifth-of-china-s-homes-are-empty-that-s-50-million-apartments)

economics

Bloomberg News

November 8, 2018, 4:00 PM EST Updated on November 8, 2018, 8:37 PM EST

- Risk is potential for flood of sales during any property slump
- Xi has said homes are for living in, not for speculation

0:14

Property Policy Is Most Important for China, Nomura's Lu Says

Lu Ting, chief China economist at Nomura International, discusses China's economy and policies.

Chinese President Xi Jinping's mantra that homes should be for living in is falling on deaf ears, with tens of millions of apartments and houses standing empty across the country.

Soon-to-be-published research will show roughly 22 percent of China's urban housing stock is unoccupied, according to Professor Gan Li, who runs the main nationwide study. That adds up to more than 50 million empty homes, he said.

# EXHIBIT I-25

FEDERAL RESERVE BANK OF KANSAS CITY | SEPTEMBER 12, 2018

**kcFED THE Macro BULLETIN**

## How Much Would China's GDP Respond to a Slowdown in Housing Activity?

, *Data Scientist*, , *Senior Economist*, and , *Senior Data Scientist*

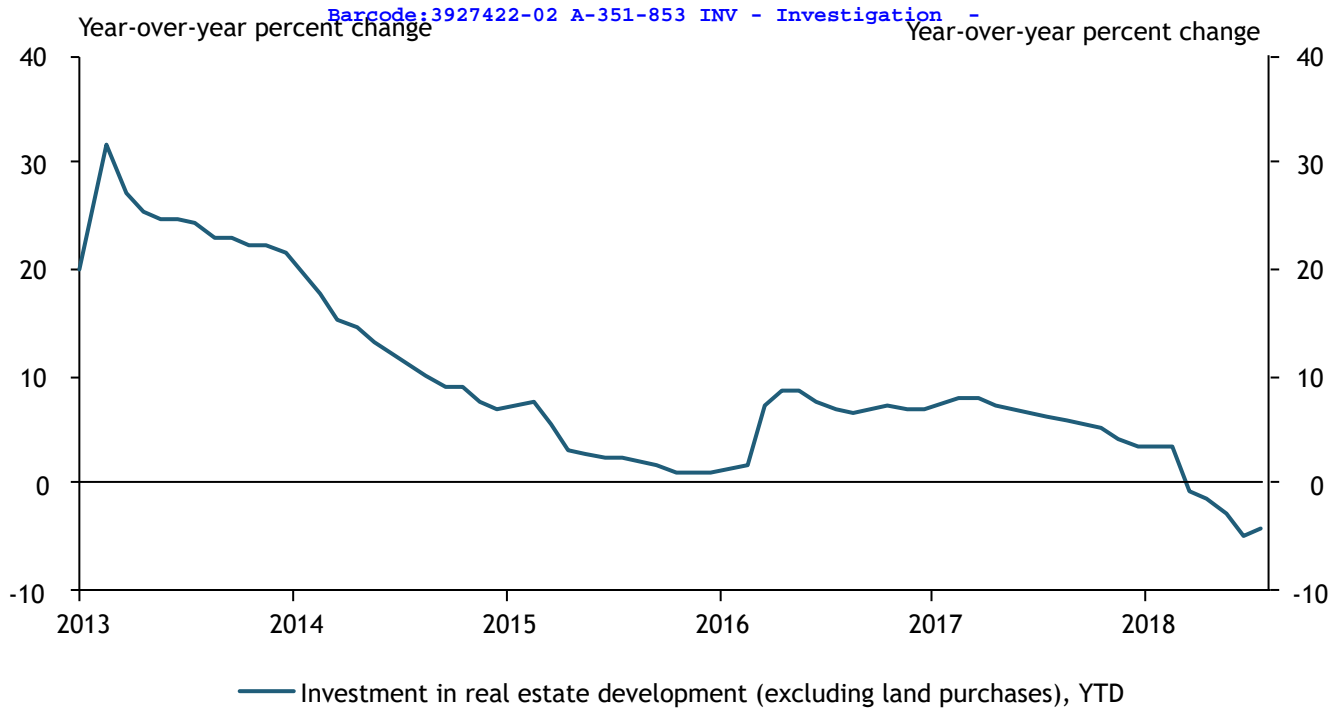
*We analyze China's interindustry connections and show that China's housing activity has become increasingly important to its GDP growth. Our results suggest that a 10 percent decline in final demand for real estate and housing-related construction would lead to a decline in total output of 2.2 percent, an effect more than two times larger than it would have been 10 years ago.*

China's real estate sector has undergone rapid growth over the last two decades. Real estate investment grew at about a 20 percent average annual rate from 1999 to 2018, more than twice the rate of GDP growth over the same period. The strong growth in housing activity was driven by two sources of strong demand. The first source was the housing reform in China in the late 1990s, which gradually moved Chinese households from public housing to private housing, generating huge housing demand (called "rigid demand" or "gang xu" in Chinese). The second source was fast growth in house prices combined with a lack of other financial investment opportunities, which spurred enormous speculative demand in the Chinese housing market.

However, demand from both sources has weakened recently. By 2013, about 20 percent of Chinese households already owned multiple houses.<sup>1</sup> Additionally, the share of Chinese young people age 20 to 29, the main source of new demand for housing, started to decline in 2014. Furthermore, the Chinese government has tightened control on speculative investment in the housing market since 2017 amid growing concerns that high house prices are pushing up the costs of doing business and restricting consumer spending. The recent intense debate in China on introducing a property tax has put further downward pressure on the Chinese housing market.

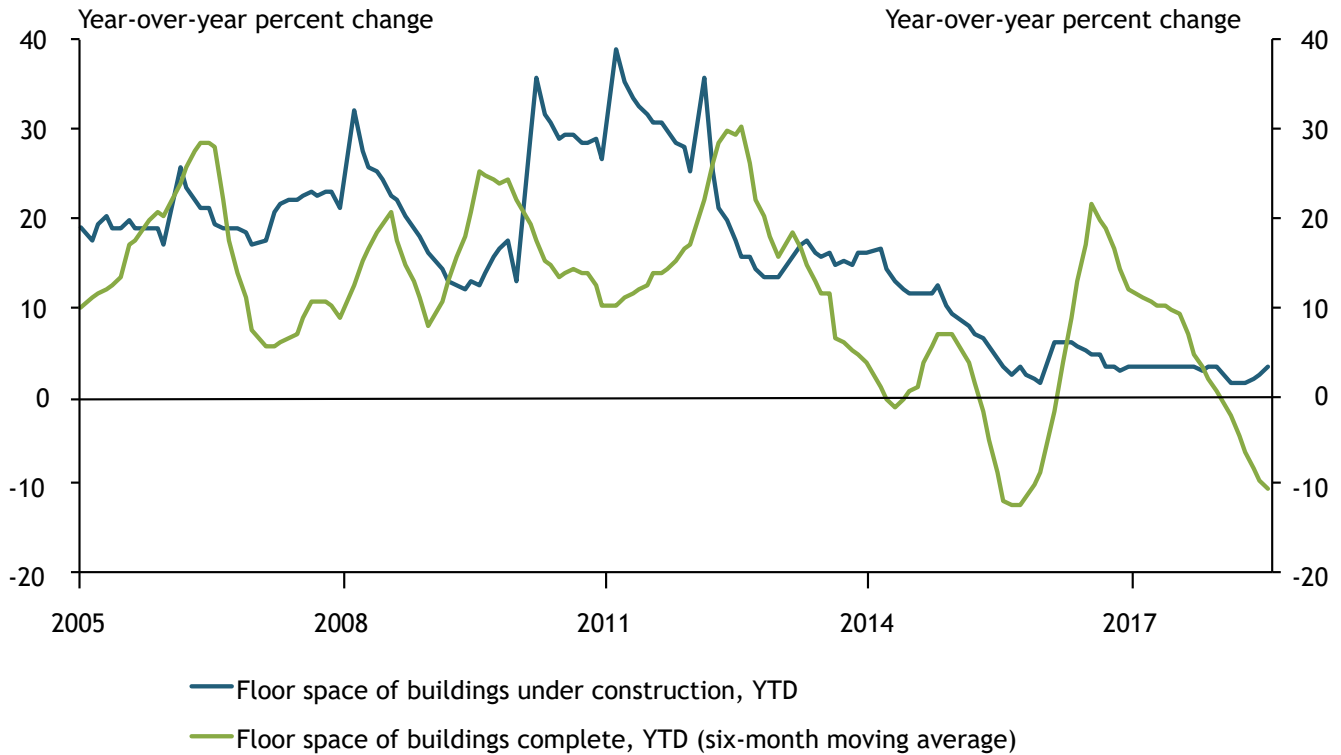
In response to this weakening demand, year-over-year investment growth in real estate development excluding land purchases—a measure that focuses on real estate construction, installation, and equipment purchases—has dropped by more than 10 percentage points from about 8 percent in the middle of 2017 to -4 percent in July 2018 (Chart 1). In addition, housing construction, measured by growth in the floor space of buildings under construction, has dropped from a double-digit pace to a pace close to zero, while growth in the floor space of completed buildings has turned negative (Chart 2).

**Chart 1: Growth in Real Estate Investment (Excluding Land Purchases)**



Source: Wind Information Company, Ltd.

**Chart 2: Growth in Construction Activity**

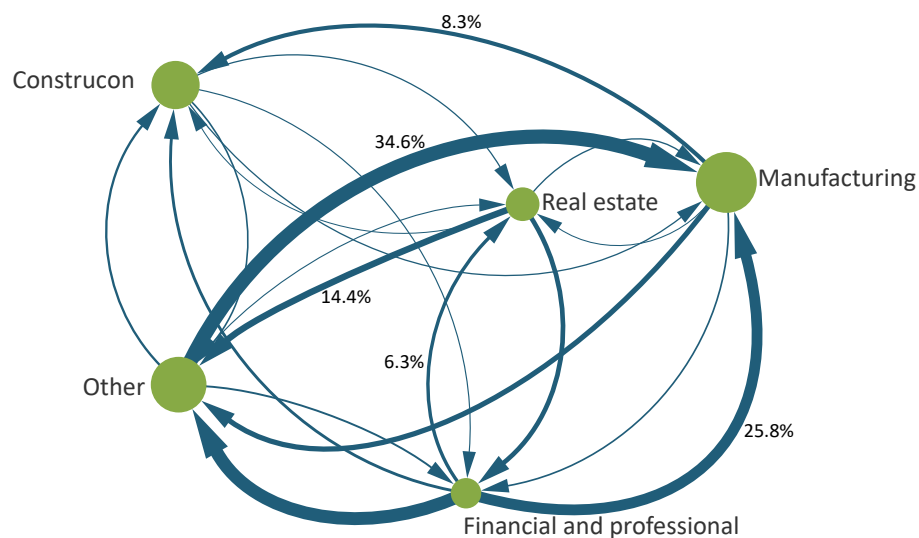


Source: Wind Information Company, Ltd.

With shrinking demand and an oversupply of houses, housing activity is likely to slow further in the longer run. How, then, will China's GDP respond? To answer this question, we examine how different industries are connected to housing activity using an input-output (IO) table, which reports a given industry's total output as well as how much of other industries' output it uses.

Chart 3 illustrates connections between industries based on a simplified version of China's IO table in 2012 (the latest version available). For the purpose of illustration, we group 139 industries into five sectors: construction, real estate, manufacturing, financial and professional, and other. Housing activity is reflected in both the real estate sector and the construction sector.<sup>2</sup> The relative size of each node (green dot) shows the relative size of total output in each sector. The arrows on the blue lines indicate the direction of the flow of output from one sector to another, and the width of the lines shows the relative size of that output. For example, the thin line connecting the manufacturing sector to the construction sector shows that the construction sector used 8.3 percent of the manufacturing sector's output in 2012. In comparison, the thick line connecting the "other" sector to the manufacturing sector shows that the manufacturing sector used 34.6 percent of output in other sectors. Together, these connections suggest that an exogenous decline in construction activity, for example, may lower demand for the manufacturing sector, which, in turn, may cause demand for other sectors to decline.

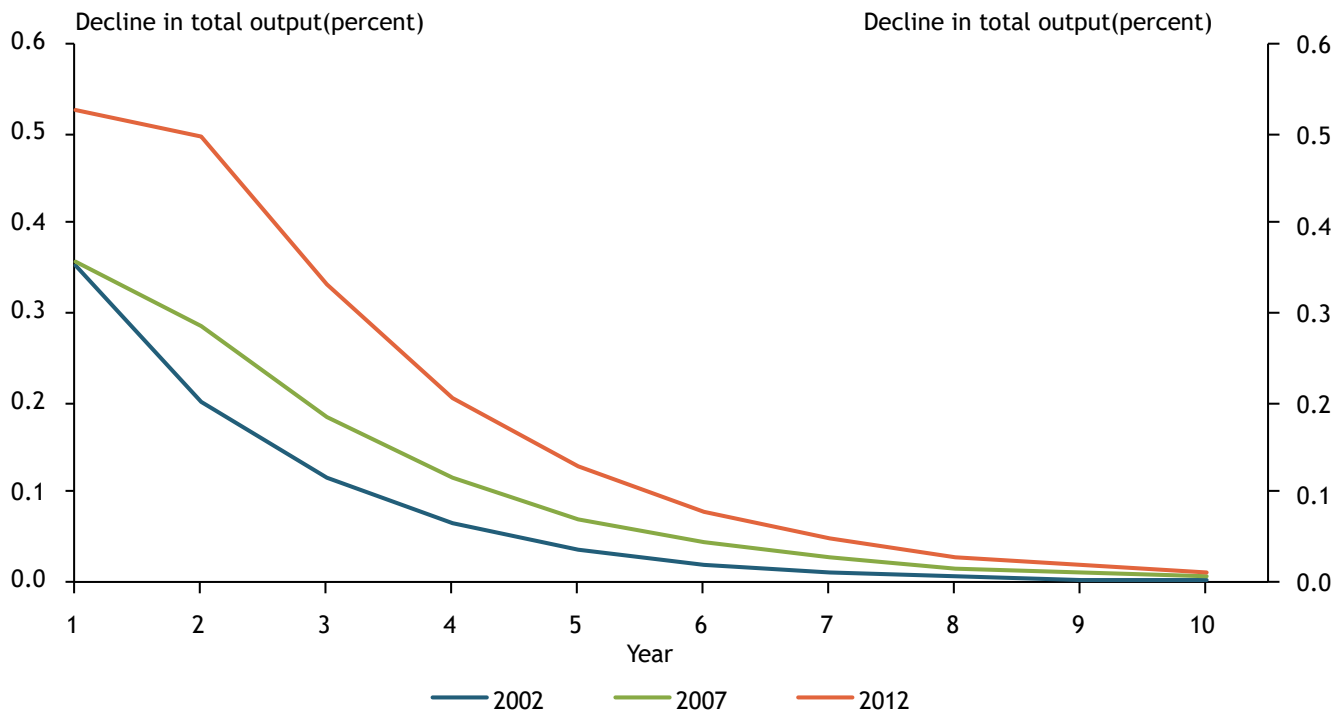
**Chart 3: A Simplified Version of China's Input-Output Table in 2012**



Sources: National Bureau of Statistics of China and authors' calculations.

To estimate the effect of a decline in housing activity on total output, we follow Cook, Nie, and Smalter Hall (forthcoming) and estimate the response of all industries using IO tables. In particular, we map values from an IO table into a system of linear equations and use them to compute the dynamics in all variables due to changes to variables related to housing activity.<sup>3</sup> Chart 4 shows the effect of a 10 percent decline in housing activity on China's total output over a 10-year horizon.<sup>4</sup> The blue line is calculated using the most recent IO table in 2012, and the green and gray lines are calculated using IO tables in 2007 and 2002, respectively. The chart reveals two major findings. First, the negative effect on China's total output is quite persistent and dissipates gradually after 10 years. Second, the effect has become much larger in more recent years, suggesting that the housing market has become more important to China's economic growth over time.

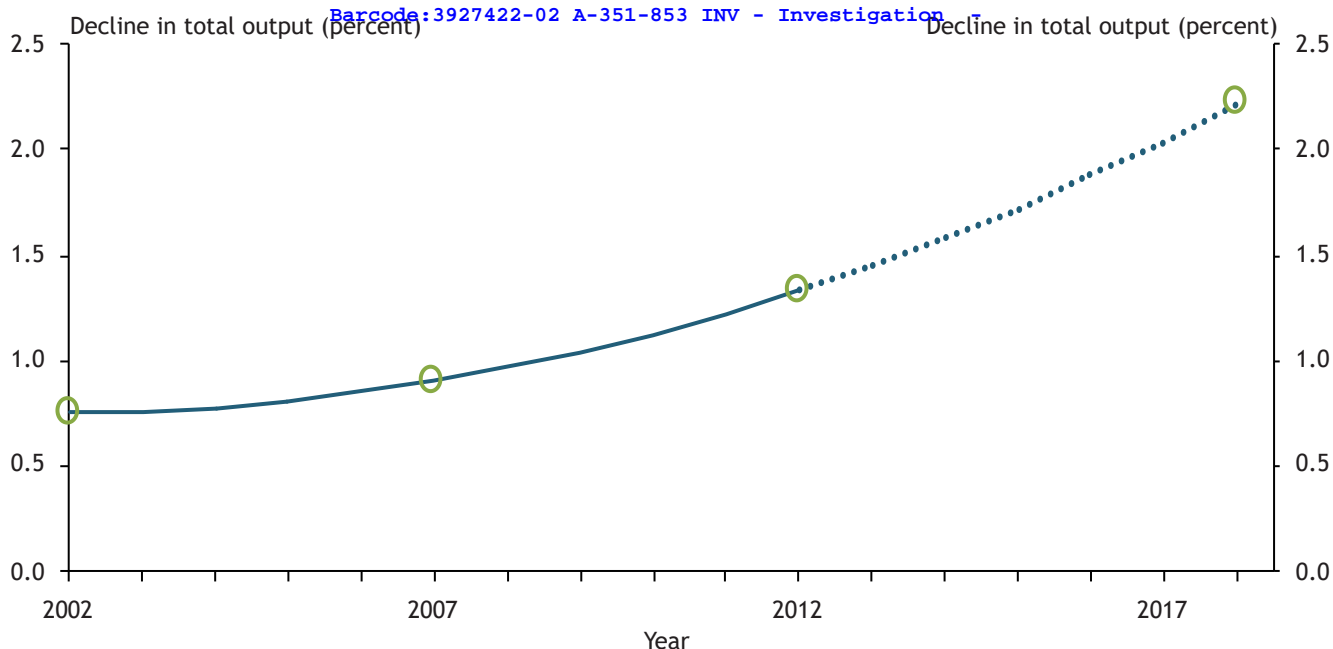
**Chart 4: Response of Total Output Following a 10 Percent Decline in Housing Activity**



Sources: National Bureau of Statistics of China and authors' calculations.

Chart 5 shows the growing effect of the housing sector by summing the yearly estimates from the three IO tables in Chart 4. Each green circle in the chart shows the total effect of a 10 percent decline in housing activity on China's total output based on interindustry relationships within a given year. For example, the green circle for 2012 shows the total effect as 1.33 percent, suggesting the accumulated decline in China's total output over the next 10 years would be around 1.33 percent of the current year's output. A polynomial function that fits all three estimates suggests that by 2018, the total effect could increase to 2.2 percent. In other words, our analysis suggests that if current housing activity declines by 10 percent, the total decline in China's output over the next few years could be around 2.2 percent of 2018 GDP.

**Chart 5: Total Effects of a 10 Percent Decline in Housing Activity**



Sources: National Bureau of Statistics of China and authors' calculations.

Finally, it is important to note that the above estimate assumes a 10 percent decline in housing activity. In reality, the size of the decline will depend on the extent to which the Chinese government acts to stabilize the housing market. Historically, the government has often intervened in the housing market. For example, in response to declines in house prices in 2014, local governments loosened restrictions on home purchases, and the central bank lowered mortgage rates for second-home buyers. In addition, the government-sponsored Shantytown Renovation Program, which offered cash compensation to residents whose homes were demolished, supported home prices in small cities in the last two years, largely explaining why the growth of house prices in these cities has not slowed as much as in big cities in China. Although Chinese authorities have recently attempted to cool the housing market, they are likely to reverse these policies and institute new interventions if the housing market becomes a significant drag on the Chinese economy.

<sup>1</sup>According to the Survey and Research Center for China Household Finance, the vacancy rate of sold residential homes in urban areas reached 22.4 percent in 2013.

<sup>2</sup>In a typical IO table for China, the construction sector includes real estate construction. However, the IO table does not explicitly separate real estate construction from other types of construction. In the analysis, we assume all investment in real estate development excluding land purchases turns into fixed capital, and thus use the share of fixed capital formation related to the real estate sector in total fixed capital formation in the construction sector to approximate for the share of housing-related construction in total construction.

<sup>3</sup>Miller and Blair (2009) provide an excellent review of input-output models.

<sup>4</sup>In general, we can write an IO table in the form of  $x = Z*i + f$ , where  $x$  (a vector) refers to output from different industries,  $Z$  shows the input from one industry to other industries,  $i$  refers to the total intermediate input from different industries, and  $f$  is the final demand representing demand from consumers, governments, and foreign investors. In this exercise, we assume final demand (the components in  $f$  related to real estate and part of construction) declines by 10 percent. The shares of construction we estimate to be related to real estate construction are 46.3 percent, 34.7 percent, and 23.3 percent in 2012, 2007, and 2002, respectively.

## References

- [Barcode:3927422-02 A-351-853 INV - Investigation -](#) Cook, Thomas, Jun Nie, and Aaron Smalter Hall. Forthcoming. "An Inter-industry Analysis of China's Housing Market and the Macroeconomy." Federal Reserve Bank of Kansas City, Research Working Paper.
- Miller, Ronald E., and Peter D. Blair. 2009. Input-Output Analysis: Foundations and Extensions, second edition. Cambridge: Cambridge University Press.

*Thomas Cook is a data scientist, Jun Nie is a senior economist, and Aaron Smalter Hall is a senior data scientist at the Federal Reserve Bank of Kansas City. The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.*

# EXHIBIT I-26



## The World Bank In Brazil

**Brazil's economic and social progress between 2003 and 2014 lifted 29 million people out of poverty and inequality dropped significantly. Restoring fiscal sustainability is the most pressing economic challenge for Brazil.**

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**CONTEXT**

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**RESULTS**

Brazil experienced a period of economic and social progress between 2003 and 2014, when more than 29 million people left poverty and inequality declined significantly. The Gini coefficient dropped 6.6% (from 58.1 to 51.5) during that time. The income level of the poorest 40% of the population increased by an average of 7.1% (in real terms) between 2003 and 2014, compared to a 4.4% increase in income for the population as a whole. Since 2015, however, the pace of poverty and inequality reduction seems to have stagnated.

In the wake of a strong recession, Brazil has been going through a phase of highly depressed economic activity. The country's growth rate has been slowing since the beginning of the decade, from an annual growth rate of 4.5% (between 2006 and 2010) to 2.1% (between 2011 and 2014). There was a significant contraction in economic activity in 2015 and 2016, with the GDP dropping by 3.6%

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and 3.4% (respectively). The economic crisis was a result of falling commodity prices and the country's limited ability to carry out necessary fiscal reforms at all levels of government, thus undermining consumer and investor confidence. 2017 saw the beginning of a slow recovery in Brazil's economic activity, with 1.1% of GDP growth in 2017 and 2018 - largely because of a weak labor market, investments deferred by uncertainties about the elections and the truckers' general strike, which brought economic activities to a halt in May of 2018.

Restoring fiscal sustainability is the most pressing economic challenge for Brazil. To address the dynamics of unsustainable debt, the government has enacted Constitutional Amendment 95/2016, which limits the rise of public spending. This amendment imposes a fiscal adjustment of 4.1% of GDP through 2026 and stabilizes the debt at about 81.7% of GDP in 2023. Implementing this fiscal adjustment requires reducing the rigidity of public spending and revenue-earmarking mechanisms, which make more than 90% of the federal government's primary spending mandatory.

A comprehensive social security reform was sent to the Congress in February and has been approved by the lower house in August. The reform is expected to generate accumulated savings of 9 percent of GDP until 2030 and, combined with the spending rule, it would stabilize the general government gross debt at around 81.7 percent of GDP by 2023. This large-scale fiscal imbalance also affects subnational governments, whose inclusion in the reform is still on discussion. Their capacity to handle increasing wage and pension payments will be limited in the absence of reforms.

Brazil also needs to accelerate productivity growth and infrastructure development. The average income of Brazilian citizens has increased only 0.7% per year since the mid-1990s, which is one tenth of the rate in China and half the OECD average. This can be explained by a lack of Total Factor Productivity (TFP) growth between 1996 and 2015. Brazil's productivity problem can be attributed to the absence of an adequate business environment, distortions created by market fragmentation, several support programs for companies that have yet to yield any results, a market that is relatively closed to foreign trade and little domestic competition.

Brazil also features one of the lowest levels of infrastructure investment (2.1% of GDP) in comparison to its peers, and the quality of these investments is low. Accelerating productivity growth remains one of the country's top priorities, as the demographic transition comes to an end and the fiscal space for expansionary policies remains severely limited. Higher investments in infrastructure will also be required to ensure proper maintenance of existing infrastructure, by eliminating bottlenecks and expanding access to social services. This will require improving the government's planning capacity, improving the regulatory framework and leveraging private resources to finance investments.

A comprehensive diagnosis was produced by the Bank's technical team in July 2018, containing a summary of Brazil's primary challenges in economic and social development and pointing to a possible course of action to overcome them. This material is entitled Public Policy Notes and is available for consultation on the World Bank website. It covers the following topics: stabilization and fiscal adjustment, the tax system, intergovernmental fiscal issues, the pension reform, the State reform, productivity, credit markets, infrastructure, education, logistics & transportation, the labor market, ways to address the violence epidemic, climate change (NDC) and water resources management.

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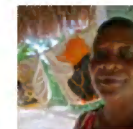
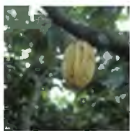
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# EXHIBIT I-27

# Brazil's real to stay soft

By **RECORDER REPORT** on **January 6, 2020**



Brazil's real will trade not far off record lows into the new year, receiving eventual support from a tentative economic recovery after months of unconvincing macro performance that has dragged the currency down, a Reuters poll showed.

The real was seen at 3.97 per dollar in 1 year, implying a 5.5% appreciation from Wednesday but a 1.8% drop compared to the forecast in November's survey, according to the median view of 27 strategists polled Dec. 2-4.

Brazil's currency fell to a record low of 4.26 against the US dollar in late November and is trading not far above that rate now. Economists in the survey pegged it at 4.195 per dollar in one month and 4.10 in three months. "Our models still suggest a fair value for the BRL around 4.00/4.10," said Flavio Serrano, chief economist at Haitong Brasil. "Faster growth should boost investment", he added, which would aid the battered currency "somewhat."

The real rose slightly this week following the announcement of the strongest quarterly gross domestic product (GDP) growth since early last year, driven by a solid performance in agriculture and a sharp rebound in industry.

However, an overall slow economy has hurt the currency as President Jair Bolsonaro's reforms, focused on macroeconomic goals, have so far failed to materialize big capital spending plans, notably in the oil sector.

Tensions over welfare spending cuts and the environment have also weighed. Still, Latin America's top economy looks safe from the ructions that are rippling through other markets in the region.

Policy easing to boost growth has been another source of foreign exchange weakness. Brazil's central bank stands ready to lower its interest rate by another 50 basis points to a fresh record low of 4.50%, its president said this week.

The currency has lost almost 8% in 2019 and is set to close its 8th year in the red since the decade started, a persistent depreciation that aroused US President Donald Trump's anger this week.

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With protectionist worries centered in other places for the time being, the survey reflected a relatively stable prospect for the Mexican peso. The currency's 1-year median forecast was 19.73 per dollar, inside recent ranges.

Lately it has been falling slowly towards 20 per dollar after two months of gains in September-October, amid growing caution about the chances of ratifying a continental trade deal this year due to resistance by some US Democrats.

And, as in Brazil, lower "carry trade" rate differentials are a factor too. "The peso will maintain a weak performance mainly due to erosion of carry and volatility associated with external premiums," Banorte wrote in a report this week.

In line with many emerging market countries, Mexico's central bank is leaving the door open to future rate cuts, resulting from weaker than anticipated economic activity and cooling inflation.

But contrary to the pesos of Argentina, Chile, and Colombia, Mexico's currency is finishing 2019 basically at the same level where it started, the 4th year in a row it will close near 20 per dollar despite some episodes of volatility.

A similar narrative could have applied for Chile's currency, but an outbreak of mass protests in October changed everything and now the peso is forecast to trade at 750 per dollar in 12 months, very close to today's depressed levels.

As Chile descended into chaos, Argentina was enacting strict capital controls to avoid further international reserve losses over political fears. In practice, these emergency steps froze the interbank value of the peso, halting months of depreciation.

Estimates for the currency showed an unusually calm trajectory at the start of 2020. The peso has also kept its composure in parallel markets, where it could be more reactive once a newly-elected Peronist government announces its plans.

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# EXHIBIT I-28



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## Brazilian Lumber Exports Increase to Meet North American Demand

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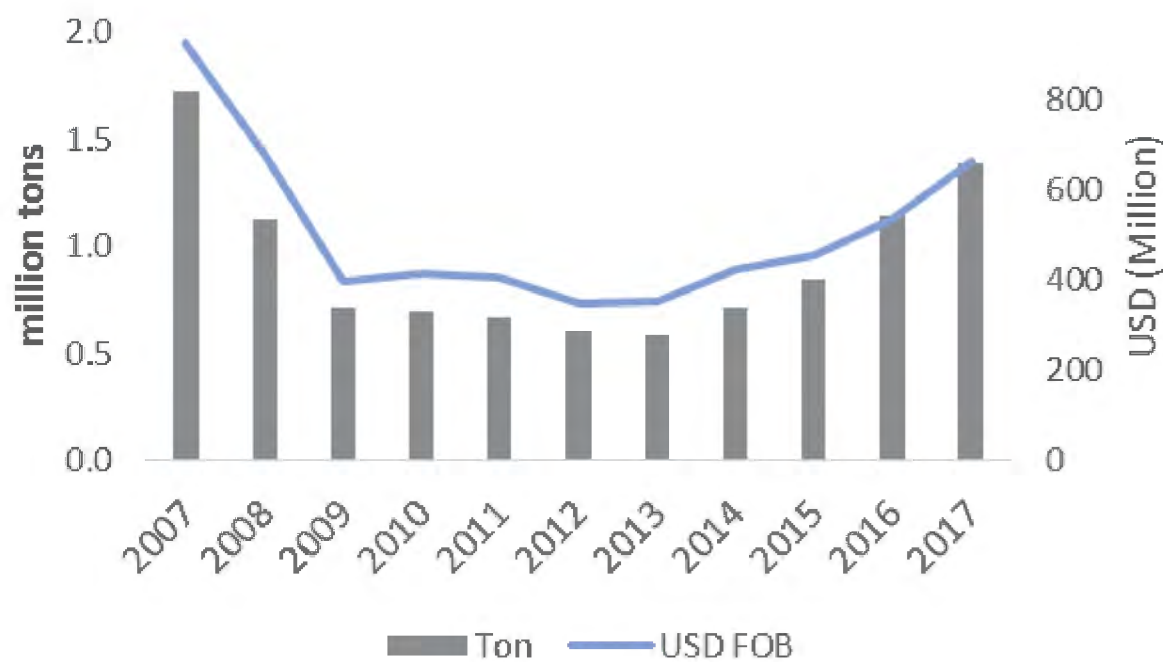
Author: Marcelo Schmid

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Brazilian lumber exports have followed a similar trend as exports from other countries over the last decade, which is to say they have slowly crept back up after tanking in the wake of 2008. The US housing market is the primary driver of global lumber flows, and the Great Recession of 2008 had a lingering, widespread effect on these flows, as well as the local markets where lumber is produced in volume. In many areas, current production remains far below pre-recession levels. In the case of Brazil, however, production has been steadily rising and is on course to return to pre-2008 levels.

capacity and exports have increased 65 percent (6.9 percent annually) in value, and 108 percent (13 percent annually) in volume. The Brazilian lumber sector closed 2017 with shipments of \$665 million, which is still below pre-recession levels.

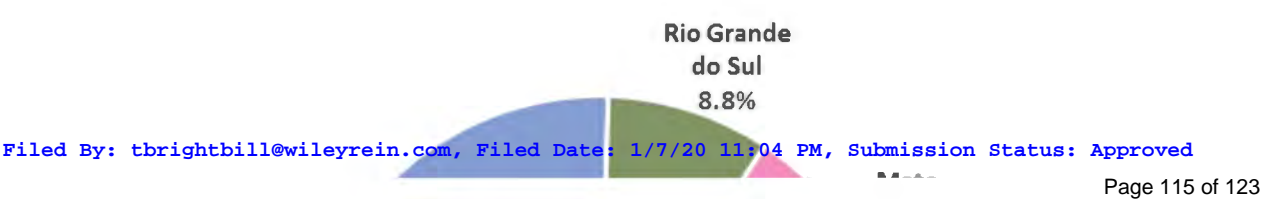
Figure 1 - Brazilian lumber exports, 2007 - 2017

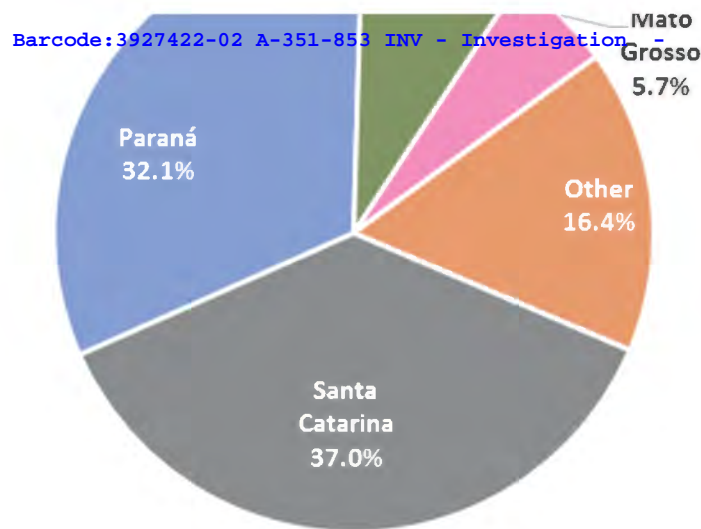


Source: Secretariat of Foreign Trade (SECEX), adapted by Forest2Market do Brasil

The states of Paraná and Santa Catarina are the primary exporters of Brazilian lumber (Figure 2). These states both contain large areas of planted pine and are thus home to a number of sawmills that rely on these dense stands of pine logs as a raw material.

Figure 2 - Main exporting states of Brazilian lumber

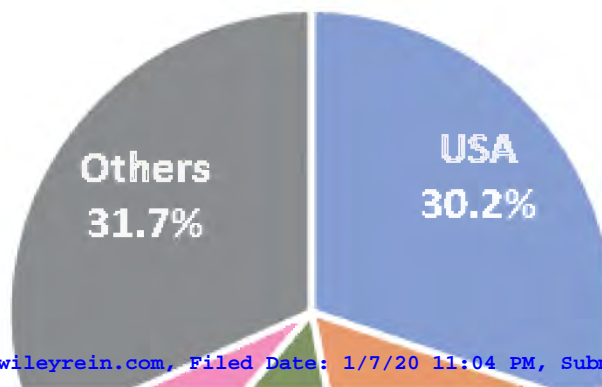


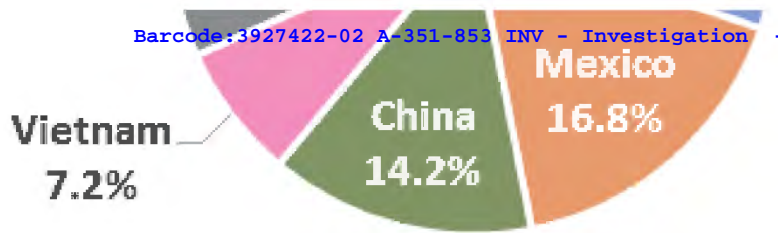


Source: Secretariat of Foreign Trade (SECEX)

The primary single destination for Brazilian lumber in 2017 was the United States, which imported more than 419,000 tons—just over 500 million board feet (MMBF). Unlike the domestic Brazilian market, lumber and other sawn wood products are highly valued by the US construction and homebuilding sectors. For the purposes of comparison, it's worth noting that this Brazilian volume is roughly the same as two modern, high-capacity southern yellow pine (SYP) sawmills, which are capable of producing 250-350 MMBF annually. The overall size and scale of the **US market** is tremendous; it is on pace to consume nearly 50 *billion* board feet in 2018.

Figure 3 - Main export markets for Brazilian lumber





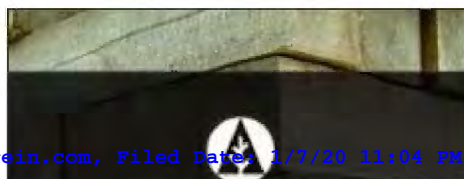
Source: Secretariat of Foreign Trade (SECEX)

The primary drivers of the continued surge in Brazilian lumber exports include:

- Increased foreign demand primarily from North American and Europe directly linked to the construction and homebuilding industries.
- A favorable exchange rate for exporters; current rates as of this writing are R\$4.20/US\$1.
- North American trade policies: The US's imposition of tariffs on Canadian lumber imports (as well as some Chinese wood products, i.e. plywood and panels) has opened up the market to other global suppliers.

With the slow, steady upward performance of both the US and European housing markets and the continuing evolution of global trade disputes, the Brazilian lumber industry is poised to grow by filling gaps in supply. Economists predict that the exchange rate should remain high (above R\$3.8/US\$1), which favors Brazilian exporters. However, Brazil is in an election year and if recent history is to be a guide, it would be wise to maintain a certain level of caution; political discord has a way of impacting everything from economic development to exchange rates.

Continued demand for the pine resource in Paraná and Santa Catarina will cause log prices to **increase** in the near term, especially with the contentious trade negotiations taking place in North America. Brazilian lumber producers in these regions must monitor the political situations both at home and abroad in order to properly time their exports and maximize their profit margins.





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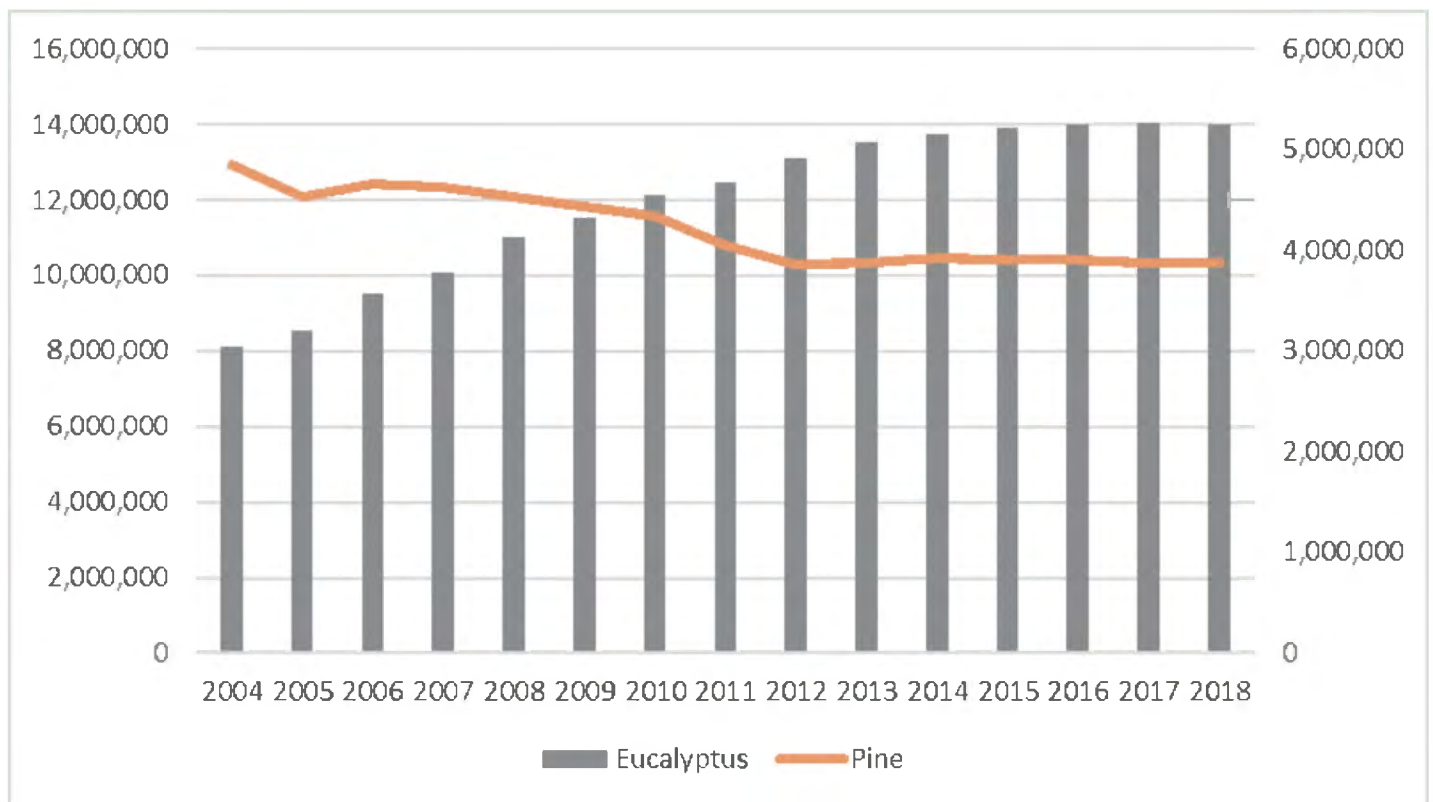
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